

Technological Time and Infertility

BY HEATHER MENZIES

Marshall McLuhan's provocative notion of technology as simultaneously extensions and auto-amputations of human faculties has largely been understood in material terms, along the dimension of space. For example, the extension of the human foot in the form of the wheel (McLuhan 165); the extension of some people's minds through management information systems, and the effective amputation of others' (Menzies 1998, 82). However, the concept can be fruitfully applied along the time dimension as well, suggesting for example the over-extension of people in technological time and the amputation or, as Ursula Franklin would put it, the atrophy of personally embodied time.

I'd like to explore the implications of this using my own experience of becoming infertile, and sketching out what I'll daringly call a midwifery model of reproductive practice, communication, and related knowledge creation. It is a model I would associate with an embodied sense of time, and that I think might offer useful insights extending Ursula Franklin's "holistic technological practices" (18), Geraldine Finn's "politics of contingency" (136), and Barbara Adam's theorizing about a reformed social science—as an "embedded" way of knowing informed by the "implicated participant" (141). I offer this as my own way of paying tribute to Mary O'Brien's legacy as both a respected theorist and a dedicated practitioner of midwifery.

Knowing that the medium is indeed integral to the message, I will be conscious in the language I use in this essay, alternating between the kind of

objectifying, disembodied language associated with conventional social science, and the living, breathing language of the implicated participant—the language of experience.

Since I want you to be conscious of this too, I invite you to pause for a moment right now, lean back in your chair, close your eyes perhaps and breathe. Now, join the knowledge-sharing circle as an implicated participant too.

It began as an entry in my daybook and another in my doctor's schedule. Two isolated moments that came together in the bland interior of my doctor's office. As always, I hated spreading my legs, and inserting my feet in the rigid obstetrical stirrups. I hated laying myself open, making myself inert; hated being handled by remote medical technology. The doctor put on her gloves.

I concentrated on the perforated ceiling tiles while my doctor inserted the speculum, opening me up inside. She'd already explained that the IUD worked by setting up a low-level toxicity in the uterus which would kill any sperm coming in. I could see it lying there on the metal dispensing table: a slender shaft of copper sheathed in sterile plastic, it represented the safest and easiest way of keeping myself from getting pregnant until children fit my plans. The doctor picked up the cellophane package and while she opened it, I studied the eye chart on the wall: E, G, H, descending to indecipherability. I willed the doctor to get on with it.

She picked up her tongs and positioned the tiny contraceptive.

"This might hurt a little now," she

said. I focussed on the ceiling tiles, as if to disappear into their tiny holes. "Toxicity" slipped out. But that was a good thing. I stuffed it back in.

Done. Over. My doctor handed me a pad. You might bleed for a bit, she said. She suggested Midol or some Tylenol for the pain.

"You might have cramps until your body gets used to it."

I did, have cramps. And it did, get used to it. Meanwhile, I'd disappeared through the holes in the ceiling tiles, getting on with my busy life.

Years passed. I had two tubal pregnancies and was classified as "infertile." No longer able to bear a child without the aid of more medical technology.

When I think of it, that moment on the table dates a long way back, perhaps even to the beginnings of social time and its progressive disassociation from natural time.

My doctor had already explained that the IUD worked by setting up a low-level toxicity in the uterus which would kill any sperm coming in. . . . It represented the safest and easiest way of keeping myself from getting pregnant until children fit my plans.

A brief history of social time

The invention of social time has a complex history—its removal from the circle of life in its lived context, then its domestication through instruments to measure and frame it, and its re-ordering into what I refer to as technological time, a product of the infrastructures plus the tools of time management and control.

As feminists have noted, time in the pre-patriarchal period was synchronized to women's monthly cycles. Time was also understood as a cyclical spiral, from birth to maturity, downward in decay, then out through death and back upward into rebirth.

As feminists have noted, time in the pre-patriarchal period was synchronized to women's monthly cycles (the lunar cycle which was the basis of calendars then). Time was also understood as a cyclical spiral, from birth to maturity, downward in decay, then out through death and back upward into rebirth (Gottner-Abendroth 110).

The Romans separated time from nature with the creation of the Julian calendar, and linked the beginning of time to the founding of Rome. This introduced historical time, with continuity no longer a cyclical but linear: a sequence of single moments (Innis 69).

When the word *computus* was first used, in 562, for the calculation of Easter time (Borst 29), the term meant both the method for reckoning time so that the faithful could celebrate Easter, and a frame for organizing and giving meaning to social life within the cycle of Christ's

death and resurrection. Some 200 years later, the Monk Bede developed a whole approach to history, or historiography, framed by the cycle of 114 Saint days in the Ecclesiastical year, and greatly improved the techniques of time reckoning so that people's lives could be synchronized with this spiritual time, this Martyrology as it was called (Borst 40). At the end of the eighth century, the word *Glocke* (German for clock today) was used in Germany to describe the bell that was rung to summon the masses to mass, and the clergy to their canonical prayers (Borst 42).

With the coming of modernity, history (and related time reckoning) became separated from the spiritual frame of personal salvation and applied increasingly to material ends—forecasting weather for harvest, calculating interest on loans. When the mechanical clock came on the scene in the fourteenth century, the transformation of time was well advanced. Not only were craftspeople's work timed by the clock, clock hours of standardized equal length gradually replaced the horary prayers as the unit of social time (Borst 94).

Until well into the nineteenth century, however, clock time remained anchored to the rhythms of daily life; synchronized still to bodily time. William Morris described the craftspeople of that period working at a leisurely pace, taking their time to do their work "duly" (Morris 29). Partly, this reflected the world view of the age, which was still strongly spiritual, and when commerce was still a means to an end, not an end in itself (Morris 30). But the paradigm shifted during Morris' lifetime, with time—as lived experience—transformed increasingly into a function of space—that is, material property and property relations (Innis 103). With this, new abstract categories of time came into existence: labour time, free time, down time, wasted time. As Arno Borst pithily put it: "the difference between human beings and their instruments disappeared when saved time was valued more highly

than given time" (Borst 121).

Having become successively alienated from the biological body and the body of a sacred living earth, social time then evolved from a framing device for social organization into an instrument of social conditioning. As E.P. Thompson has written, the "methodical disciplines" of the Methodist religion conditioned the new working class to the mechanical rhythms of the factory (406). Then work became paced to the speed of the assembly line, in the car factory, and the disassembly line, in the slaughterhouse.

But tempo as distinct from temporality (Adam 23) didn't become a significant force of social conditioning until the advent of post-modern time: the time of instant global connectivity made possible by computers. In 1974, the reckoning of time was radically unhinged from history, geography, and the calendar and reattached to the atom, whose vibrations occur in billionths of nano-seconds. Far faster than the blink of the eye—the German word for moment is "*augenblink*" or blink of the eyes—it's a time that can only be measured by the computer (Borst 126).

This is significant, because it marks a point of closure inside a new context of time which is entirely named and engineered outside the frame of living tissue, in the physics of micro-processors. This context is manifested socially through the global digital networks within which more of us live out more and more of our lives. In short, technological time has permeated more and more "domains" of human experience. (McLean 11). In other words, it's central to our everyday lives.

At this point, observations about the "greying of time" between day and night and the 24-hour world of modern merchandising (Campbell 25) take on a fuller significance. The significance is that, enclosed in this atomic clockwork universe, we lose touch with the old time zones. We lose the capacity to regroup ourselves meaningfully in bodily time, and this consciousness atrophies like

unused muscles in the same way social skills do (Franklin 51).

And so more and more North American women live like I have, as an extension of an overflowing appointment book, using contraceptives to freeze-frame childbearing time, weaning children at the end of maternity leave, hiring nannies or finding child care centres open until six and seven o'clock at night, slotting in "quality time" with our children, and with aging parents on weekends. Satellite communications cinches the globe into a single present moment, and we're all subtly hectored by its fastforward pace of instant global connectivity.

Equally, we've lost much of what would help us reorient ourselves to our own particular time—be that traditional social times such as Sundays, the Sabbath, Ramadan, and the annual caribou hunt, or personal and biological time such as puberty rites and monthly menstrual retreats (Richards 28) and birthing through midwifery. Some are making a comeback, it's true. But for more and more women, technological time is the dominant pulse of our lives and consciousness. We're all plugged into it, paced to its pacing, driven by its pulse and everything technology empowers us to do in a world without end. It's not that there is no other time. But we experience the world so much through the temporality and tempo of technological time that it's hard to slow down enough to leave its orbit. Indeed, with global digital networks, the clock is no longer outside us. It's all around us, informing what we do and how we know. We live in the clock. Or rather, we've internalized it, and in turn internalized its disciplining, regulating powers. Certainly I did, and as it made my personal voice "subject" to its disembodied, remote-control rationality (Foucault 1982, 781) it anaesthetized the voice of my body and my sense of bodily time.

That day I had the IUD put in, I followed the doctor's suggestions. The bleached white pad soaked up my blood. The bleached white tab-

lets took away my pain. I opened my day book, and focused on my next appointment. I carried on with my seemingly fruitful career writing and speaking about computerization in the workplace: technology displacing people from the workforce, disembodiment from engaged communities into isolated silicon workcells.

It's tellingly ironic that the suppression of my own embodied voice should have been paralleled in my professional work: where I suppressed the voice of experience (including my own as a participant empathetically engaged with my research subjects) in reporting on developments. I not only adopted the objectifying voice of conventional social science in order to qualify myself as an expert. I removed myself from the embodied time zones of the urgent present into the never-never land of "long-term" futures. I scarcely noticed this though, because I'd already removed myself from the women and the particulars of the injustice they felt at being arbitrarily declared redundant. I'd disassociated myself through the compressed time frames of statistical extrapolation. Through it, the few individual women whose stories I'd heard became "nearly a million women without employment ..." (Menziez 1981, 75). The statistic was big enough for banner headlines which launched me into the jet stream of the conference circuit.

I woke up in the hospital, to the news that an ovary and fallopian tube had been ruptured beyond repair, and that I'd probably lost my pregnancy. The test results would come through in the morning. A doctor stood at the end of my bed, fingering the waxed tip of an immaculate golden moustache. He explained that I had endometriosis and possible scarring of my fallopian tubes. He said I could never hope to have another child except through in-vitro fertilization. He would give me a referral, he said; I was a good candidate.

I turned on my side facing the wall,

and the doctor left the room. I asked the nurse to draw the pale curtains around my bed. I listened to her soft-soled shoes receding down the hall. Then I slipped my hand under my hospital gown, and ran it up the side of my body. I slid my fingers under my breast, took in its flaccid texture, and I knew: I wasn't pregnant anymore. Nor would I ever be pregnant ever again—not without the in-vitro technology this doctor had tried to sign me up for. Yet I hadn't known about endometriosis, pelvic scarring, and the danger of infertility. I hadn't known a thing.

I kept my face to the wall, refusing to communicate. I stopped time, shut down completely. In a sense I became an hysterical female—willfully irrational.

What shocked me the most—what woke me up in a way—was that I hadn't known. I hadn't been aware as my body slipped from health into disease, from equilibrium to disastrous dis-equilibrium. I was so out of touch with the voice of my body, so out of sync with the tempo required to hear and heed the body, that I participated in destroying my own power to bear and bring forth life without technological intervention (in-vitro fertilization). Certainly I was an accomplice. I'd been so out of

For more and more women, technological time is the dominant pulse of our lives and consciousness. We're all plugged into it, paced to its pacing, driven by its pulse and everything technology empowers us to do in a world without end.

my body, so over-extended in my fastforward speaking and writing career. I'd lost touch with my own biological sense of time, and what Mary O'Brien has called my women's reproductive consciousness (22), which she described as continuous, integrative and historically involuntary. As O'Brien also argued, contraceptives have fundamentally altered women's reproductive consciousness,

least, I might have heeded the symptoms of my body's distress when I had the IUD put in. Instead, I toed the then-orthodox feminist line on the neatest, easiest contraceptive, and contraception as the rational expression of women's sexual liberation.

Meanwhile, the silenced, suppressed, abandoned part of me, the part of me ill-used if not actively abused by this mechanism to foil my

natural life-bearing time and power, had wandered off. Unknown to me, it was mutely flinging itself down the corridors of my anatomy, blindly slopping itself along my fallopian tubes, and against the inside wall of my belly. Every month it bled, bloody stigmata. The sign was truly

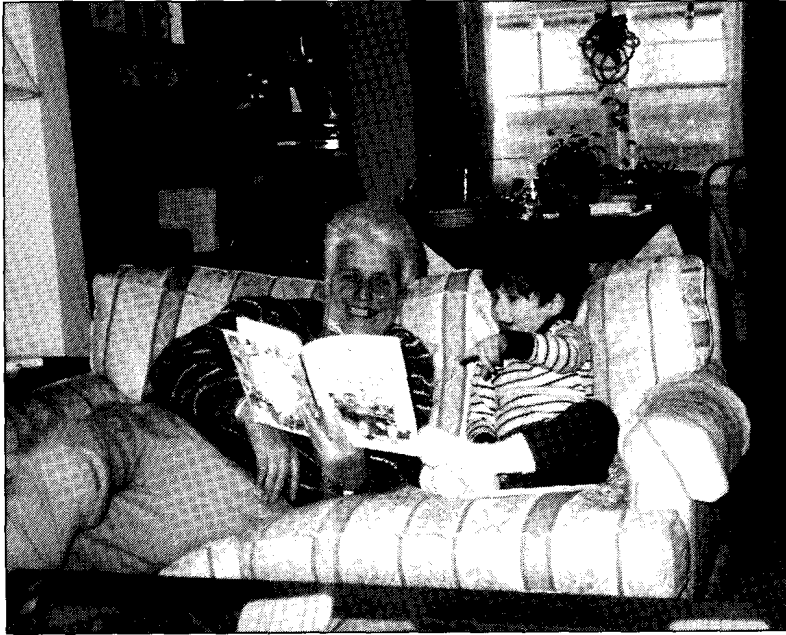
a curse, doubly so for being hidden away inside of me. Inscrutable.

The metaphor of hysteria to suggest some of the more negative effects of assimilation into technological space and time can perhaps be taken further. It can suggest what's happening to society and even the living planet as the medium we use for knowing and articulating our consciousness is more informed by technological time and space, and as this way of knowing informs our doing and being. We become the creatures of our abstracting, objectifying production-model minds (Franklin 27). We become the extensions of digital networks and global information systems, so removed from matter that we hardly realize that the matter we're controlling includes our own bodies, the communities where we live and even the earth which sustains life in general.

But as Somer Brodribb argues in her passionate indictment of post-modernism, matter does matter. Equally, when matter is ignored and abandoned, real bodies, real people in real communities and real ecosystems associated with the planet as a whole suffer for being abandoned. They are the walking disappeared, without the tools of consciousness to speak their (our) needs and desires in ways that are credited as actionable. That is, as the embodied voice of direct experience. Furthermore, with the over-extended, out-of-body tempo of our existence, we have amputated the voice of our bodies, silenced our ability to know and articulate these realities even in ourselves. Nevertheless they exist, and they manifest their reality. They do this in hysterical ways we are only beginning to apprehend: chronic fatigue, road rage, and other random acts of stressed-out violence, violent weather patterns around the world.

The hard part for me was trying to recover, and re-connect myself to something of this lost sense of "natural time" and to do this with integrity—not as a purely rhetorical gesture. It doesn't just happen because we will it to, as Sharon Butala has written so eloquently about trying to live in harmony with the land of southwestern Saskatchewan. It took time to re-cultivate that consciousness, to bring my mind back to the temporality and tempo of my body, and resync with them. I did things that would slow me down, put me back in touch with natural time and its seasonal and circadian rhythms. I spent time every day in the garden, with my hands in the dirt, nurturing seeds into seedlings and seedlings into flourishing plants, and turning over the compost heap. I went for walks, especially on the beach. I sat on a rock and opened my senses to the time of the tide ebbing and flowing through the seaweed at my feet. And out of that embedded sense of time, my embodied voice returned.

I used it first to recover the experience of that experience in my doctor's office. I returned to that well-



rupturing its integrity by introducing rational choice and, I would add, disassociating the body from an embedded biological sense of time into the seemingly limitless domain of technological time.

In a sense, I betrayed that consciousness. I anaesthetized my bodily utterances with pills and pads and, from the outset, so quickly and readily embracing the IUD as the expression of reproductive freedom. I didn't think it through for myself. I didn't consider what it might mean to my body, this technological intervention putting my body's sense of time on indefinite hold. I didn't dwell on myself, in my self. My thinking mind didn't stay in touch with my body—my "mindful body" as Barbara Adam puts it (7). If I had been more mindful, perhaps I would have chosen a less invasive contraceptive such as the diaphragm. Or at

conditioned body lying there inert on the examining table, opened myself up to what happened that day, owned up to my participation.

I feel the IUD going in. Sharp, hot, it hurts. It's being driven deep, deep inside of me. Like a nail into a wall. The wall of my womb. Pinning me down, holding me there, under its control. Its control, not mine.

Since then, I have thought a lot about the connection, the resonance, between the dialectics of time (technological versus more embodied forms of nature-centred time) and those of our communication practices. Indeed, I think the resonances extend throughout what Ursula Franklin inclusively refers to as the technological practices through which we constitute (and are constituted in) the real world of our existence. Face-to-face oral communication, for example, tends to slow us down. It takes place in the context of a lived relationship. And if that relationship is a healthy one, be that in a personal conversation or a talking circle associated with many of Canada's First Peoples, the conversation proceeds according to the time it takes for one person to speak her heart and mind, and others to listen empathetically. Similarly, many activities slow us down either individually as in gardening or making bread by hand, or collectively in quilting circles or, more intentionally, weekend retreats.

It occurs to me now that the traditional practice of midwifery, with its embodied time (of natural delivery) and its related oral communication and holistic hands-on knowledge practices, offers a model that feminists can build on even as women's actual sense of reproductive time necessarily diminishes in one-child families or childless lives. Furthermore, it's a model of communication and knowledge creation that

resonates with ecofeminists' call to "resuscitate and nurture the impulse and determination to survive" personally and as a society and a living planet (Mies and Shiva 3). It's both a symbol and an historical example of "an engagement with the subject matter from the standpoint of the implicated participant" (Adam 127) because it requires an engagement within the living body of felt and shared experience.

But there are no short-cuts. We must take our time, to speak, to listen, and to fully feel. As individuals, we need to know what it feels like when we're living in harmony with our bodily rhythms as well as when we're spinning toward disease and environmental breakdown (Prior 19). We need to know these things so we can defend our bodily environments where necessary. We also need to reform educational institutions so that this kind of knowing, embedded in the cadences of the body, can flourish as part of everyday culture—for instance, through women's health clinics such as already exist in Winnipeg and Vancouver.

I haven't recovered some essentialist biological sense of time, and I have little desire to do so. It's enough to have found activities that slow me down and reconnect me with an embedded living sense of time, and to have used my own experience as a reference for rethinking the media I use to articulate my own perceptions. It's presumptuous to call it a midwifery model of communication, but it feels a bit like a birthing into a more grounded consciousness and world view. In it, the living environment, including the social environment of the community, is no longer the other, out there in time and space—an externality. It's in here, inside me, alive and present now. Returning to my body and lived bodily time has brought me back to earth or brought earth and its time to life within me. Having confronted the contradictions between technological time and space and organic time and space inside the micro-environment of my body, I now have a

grounded point of reference for confronting the contradictions elsewhere. If I can use my experience of infertility as a marker for disequilibrium and a starting point for knowing and championing the requirements for reproductive health and well-being, I can follow the same trajectory, and make the links outward between local unemployment and social breakdown in the here and now, and globalization in the virtual realities of cyber space and time. Similarly, the links between real people in cancer clusters and dioxins and organo-chlorines in an environment policed by abstract, long-range emission-reduction targets. Not only can I make the intellectual connection. I can feel it and, in voicing my feelings, both bear witness to what must change and take action in the here and now.

It strikes me too that if I cannot bear personal witness to environmental degradation within myself and the communities where I live and work, if I can't do this in a language that brings it urgently alive as actionable, I can hardly expect to do this for the larger environment—except through the rituals of protest.

An earlier version of this article was published in Alternatives in 1995 (Volume 21, Number 2).

Heather Menzies is the author of seven books including Whose Brave New World? and Canada in the Global Village. She is a mother, a gardener, a peace and social-justice activist, and is currently a guest lecturer at Simon Fraser University.

I have what is called "secondary infertility," having had a perfect, healthy child before all this trouble began.

References

- Adam, Barbara. *Timewatch: The Social Analysis of Time*. Cambridge: Polity Press, 1995.
- Borst, Arno. *The Ordering of Time: From the Ancient Computus to the*

- Modern Computer*. Chicago: University of Chicago Press, 1993.
- Brodribb, Somer. *Nothing Ma(t)ters: A Feminist Critique of Postmodernism*. North Melbourne: Spinifex Press, 1992.
- Brossard, Nicole. *The Aerial Letter*. Trans. Marlene Wildeman. Toronto: The Women's Press, 1988.
- Butala, Sharon. *The Perfection of the Morning*. Toronto: HarperCollins, 1994.
- Campbell, Mora. "Time Waits for No Beast: Temporality and the Disintegration of Nature." *Alternatives* 19.4 (1993): 25.
- Finn, Geraldine. *Why Althusser Killed His Wife: Essays on Discourse and Violence*. New Jersey: Humanities Press, 1996.
- Foucault, Michel. "Disciplinary Power and Subjection." *Power*. Ed. S. Lukes. Oxford: Basil Blackwell, 1986. 229-242.
- Foucault, Michel. "The Subject and Power." *Critical Inquiry* 8 (1982): 777-795.
- Franklin, Ursula M. *The Real World of Technology*. Toronto: House of Anansi, 1990.
- Gottner-Abendroth, Heide. "Urania: Time and Space of the Stars. The Matriarchal Cosmos through the Lens of Modern Physics." *Taking Our Time: Feminist Perspectives on Temporality*. Ed. Frieda J. Forman with C. Sowton. New York: Pergamon Press, 1989. 108-120.
- Haraway, Donna. "A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980s." *Socialist Review* 80 (1985): 65-107.
- Harvey, David. *The Condition of Postmodernity*. Oxford: Blackwell Publishers, 1992.
- Innis, Harold. *The Bias of Communication*. Toronto: University of Toronto Press, 1984.
- Kern, Stephen. *The Culture of Time and Space*. Cambridge: Harvard University Press, 1983.
- Lorde, Audre. "Uses of the Erotic: The Erotic as Power." *Sister Outsider: Essays and Speeches by Audre Lorde*. Freedom, CA: The Crossing Press, 1984.
- McLean, Scott. "Continuing Education and the Postmodern Arts of Power." *Canadian Journal of University Continuing Education* 22.2 (Fall 1997): 7-26.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man*. New York: McGraw-Hill, 1964.
- Menzies, Heather. *Women and the Chip: Case Studies of the Effects of Informatics on Employment in Canada*. Montreal: The Institute for Research on Public Policy, 1981.
- Menzies, Heather. *Whose Brave New World? The Information Highway and the New Economy*. Toronto: Between the Lines Press, 1996.
- Menzies, Heather. "Telework, Shadow Work: The Privatization of Work in the New Digital Economy." *Studies in Political Economy* 53 (1997): 103-125.
- Menzies, Heather. *Canada in the Global Village*. Ottawa: Carleton University Press, 1998.
- Mies, Maria, and Vandana Shiva. Introduction. *Ecofeminism*. Halifax: Fernwood, 1993. 1-21.
- Morris, William. *Art and Society: Lectures and Essays by William Morris*. Boston: George's Hill Publications, 1993.
- O'Brien, Mary. *The Politics of Reproduction*. London: Routledge and Kegan Paul, 1981.
- Prior, Jerilynn. "The Cultural Causes of Osteoporosis for Women." *Women, Stress, and Coping: An Inter-disciplinary Research Workshop*. Eds. Kahn, Long, and deLong. Vancouver: University of British Columbia Press, 1989.
- Richards, Beth. "Blood of the Moon." *Herizons* (Winter 1994): 28-32.
- Shields, Rob. "Introduction: Virtual Space, Real Histories, and Living Bodies." *Cultures of Internet*. Ed. Rob Shields. London: Sage, 1996. 1-15.
- Sowton, Caoran, trans. "Women's Time, Women and Time: Proceedings from the Agape Feminist Conference, Prali, Italy." *Taking Our Time: Feminist Perspectives on Temporality*. Ed. Frieda J. Forman. New York: Pergamon Press, 1989. 184-199.
- Stone, Allucquere Rosanne. "Will the Real Body Please Stand Up?: Boundary Stories About Virtual Cultures." *Cyberspace: First Steps*. Ed. Michael Benedikt. Cambridge: MIT Press, 1991. 81-118.
- Thompson, E. P. *The Making of the English Working Class*. Harmondsworth: Penguin, 1968.
- Yoshimura, Takesumi. "Research Activities of Epidemiology in Japan." *Journal of Epidemiology* 6.3 Supplement (August 1996): S115-119.

MARY O'BRIEN

George Elliot said
I am in love with dampness
Trees and water
Mills and floss
Floss on water
Mills so silent
Trees so dead
Alive but lost

I too say
I am in love with dampness
Yours and mine
How became it
Woman's passion
Looks like floss
Woman's way
Alive but lost?