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Course(s) of Study: MGT2253 Management of information

Title of work: Actor network theory and after

Author(s) of work: Law, John and Hassard, John

Place and name of publisher: Oxford: Blackwell

Year of publication: 1999

Title of extract: Materiality: juggling sameness and differnects

Author(s) of extract: Dugdale, Anniel

Page numbers of extract: 113-1351

Name of visual creator (if appropriate):

Name of designated person authorising scanning: Alison Sharman

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Materiality: juggling sameness and difference

Anni Dugdale

Abstract

Many studies of controversy tell stories of convergence, of movement from difference to sameness, of a narrowing from many competing versions to a single stabilised 'reality'. This paper explores a case of science policymaking about IUDs in Australia. What begins in controversy ends with a single view of the IUD—a view presented in a consumer information leaflet. But surprisingly, what is found is that this stabilisation of a singularity depends on multiplicity. The negotiation of a compromise involves the making of a centred knowing position, an object—the IUD, and a consumer choice. But this is only made possible by the proliferation of difference: the decentring of the knowing subject, the 'doing' of many different IUDs, and the dispersion of choice from the head of the consumer across time and space. Closure then becomes a very different story, a story of oscillation between sameness and difference, of doing singularity and multiplicity together.

A parable

Odo is the security officer of the space station Deep Space 9, a Star Trek TV series. Odo is a shape shifter. His 'people' are the founders. Sent into space as an infant, a changeling, Odo is picked up as a shapeless blob of goo. Gradually, he learns to hold various shapes—a cube, a sphere, a cylinder, eventually that of a humanoid, and to shift between them. There are times when Odo appears as a solid (usually a humanoid). But for some hours each day we see him as fluid, as he regenerates in a special bucket. Sometimes Odo is clearly both solid and fluid, oscillating between liquid and solid, his centred identity as Deep Space 9's security officer trembling as his decentred state threatens. At these times Odo is both solid and

*liquid, simultaneously a singular object and a multiplicity of objects. And when Odo revisits his home planet he becomes part of the great link, poured into the ocean that is the continuum, in which all founders on the planet are merged, having at one and the same time both different individual identities and the same collective identity. Shape shifting is science fiction, or is it?*¹

Introduction

This chapter is about policy-making. Specifically, it is about a committee which was set up in Australia to advise on the health dangers in using intrauterine contraceptive devices (IUDs). The committee was composed of experts—a gynaecologist, a representative of industry, a government scientist, a family planning physician, a public servant, and a consumer representative. One of its major policy recommendations and tasks undertaken was the drafting of a leaflet for women which was to be given to them by their physicians as they considered whether or not it was safe to use the IUD.

There is a way of talking about science policy-making, and so the deliberation of committees such as this, which treats their debates and, more particularly, their outcomes, as effects of different interests and the power of those different interests to influence both what counts as knowledge and the policies such knowledge claims are taken to authorize. This approach is not far from that of the sociology of scientific knowledge (SSK). Truths—or in this case compromises—are hammered out in (more or less concealed) controversy, and the consequence is closure (Jasanoff, 1990; Richards, 1991; Martin, 1991).

There is some evidence that when the Australian government set up the committee it was being guided by some such model of the politics of scientific policy making. Thus the Labor Party (which was in power at the time) sought to broaden the representation on expert committees to include consumer representatives. (This was, indeed, the reason why I know about this committee: I was the chosen consumer representative). In good social-democratic mode, its thinking appears to have been that the biases inevitably brought to policy-making by professionals and representatives of industry might be undone, at least in part, if other stake-holders, and especially consumers, were included in discussion.

No doubt the government was in some measure right. I am sure that my presence on the committee made a difference in certain

ways, both to its deliberations and to its conclusions. The outcome was probably marginally more 'consumer-friendly' than would otherwise have been the case. But in this chapter I want to explore the adequacy of the model of closure—and interest politics—on which such thinking is based. Or, more particularly, I want to consider how it is that 'compromises' such as that embodied in the text of the leaflet, are created. As I've mentioned above, the model appears to look like a version of social constructivism in SSK and SCOT (social construction of technology). Certainly this is a more adequate model than the linear model of science/technology development in which scientific and technical 'facts' are quarantined from social forces. In the SSK/SCOT model the process is imagined as one of negotiation, where bargaining positions are backed up by various forms of power (MacKenzie, 1990; Bijker, 1995). My argument is that whilst this isn't exactly wrong, it begs a number of questions:

- First, it assumes that various interest groups *have* power that is somehow constituted through the social arrangements in which they have participated prior to and outside of the science policy context. That there *is* power is no doubt right. But referring back to such an externalized power distribution as explanatory tends to let the analyst off the hook. This is because it uses as explanatory something that should be explained: *how is power mobilized? How does it show itself? How is it reproduced and organized in the proceedings at hand?* If power is to work, then it has, as Foucault points out, to appear in and be constantly reorganized in the course of negotiations (Foucault, 1979, 1980).
- Second, it implies a particular model of the subject as a centred decision-maker and knower who is, in addition, probably rational. The *representatives* involved in such negotiations, for instance, stand for particular and specific (though possibly moveable) points of view. I don't want to say that representatives are irrational. Neither, do I simply want to say that they are de-centred. But I *do* want to say that they are constituted in part in the course of negotiation. In short, I want to introduce some of the arguments about the decentering of knowing subjects common in post-structuralism to the case of bargaining behaviour in policy-making.
- Third, it makes an analogous series of assumptions about the *objects* being considered in policy-making. Objects, such as the IUD, are generally considered in social constructivist science and

technology studies to be embedded in various heterogeneous systems and thus to generate competing knowledges and technologies (Shapin and Schaffer, 1985; Hughes, 1983). But the object itself is in some senses singular, and in particular the technological system or scientific knowledge claim that is the outcome of negotiation is said to stabilize a particular object. But if the subject is 'decentred', then it may be—and this is what I argue here—that the object is also *and always* decentred (Mol, 1998a; Law, 1998a).

- Finally, and in order to explore how power is mobilized and subjects and objects constituted, I want to explore a further feature of negotiation which is most often conspicuous by its absence: *practical materiality*. For committees of all sorts sit in rooms, drink coffee, and shuffle through paperwork. And it is in and through such material arrangements that decisions are made possible. This, of course, is one of the lessons of actor-network theory (Callon, 1986a, 1986b; Latour, 1987, 1988, 1996; Law, 1987, 1994).

Context

It was the Australian Government's Therapeutic Goods Administration (TGA), as it's now known, which established the subcommittee on IUDs. It met from 1989 to 1991, and then its function was subsumed into a new and more general committee on reproductive medicine.² The IUD subcommittee was formed partly in response to publicity about a U.S. court finding that the manufacturer of the Copper-7 IUD, Searle, had been negligent (ABC TV, 1988). The court awarded \$7 million in punitive damages (Ellis, 1988). The court accepted that Searle was in possession of information about the higher risks of infection for young women using IUDs, and given this and its sales campaign stressing the particular suitability of the Copper-7 for young women who had never been pregnant (because of its smaller size and ease of insertion), it should have issued a warning and tested its product more fully (Federal Supplement, 1989). Prior to this finding Searle had withdrawn the Copper-7 from sale in the U.S. (due, Searle insisted, to insurance problems and not to a product defect), but not in Australia. This led to much lobbying for its withdrawal in Australia by individual women and consumer organizations. During the time the committee met, the Copper-7 was indeed withdrawn and other copper IUDs were subjected to an extended premarket approval process under new therapeutic device legislation.

The committee itself had various tasks but one of them—which followed one of its recommendations—was the production of the consumer information leaflet mentioned above. I will talk more about this leaflet below. But first I want to explore the material workings of the committee itself.

Scene 1

I am still bleary eyed from a 5 am start to catch the Sydney to Melbourne flight booked for me by the TDEC (Therapeutic Devices Evaluation Committee) secretariat. It is the first time I have been flown first-class, been admitted to 'flight-deck' (the international hotel standard business coffee lounge), or used taxi vouchers. I am standing in front of a nondescript building which the taxi-driver had trouble finding. There is only some small writing on the glass door to identify it. It is in a light industrial inner suburb of Melbourne. Inside there is a very small foyer and I wait for someone from behind the counter to take me through to the meeting room. I am clutching a green folder of agenda papers and documents sent to me that will be considered at the IUD subcommittee. The only exit except the door to the street is blocked by a locked door. I get the impression that this is not a place often visited by members of the public. We proceed along corridors, past small laboratories in one of which I am later proudly shown the condom testing machine. We must negotiate several locked doors. Secret codes are deftly punched in to open them. The meeting room is large but unremarkable. It is a working space with neither pictures on the walls nor views from the windows. The cement floor has been hastily covered with dark coloured, nylon carpet squares which seem to have run out before quite reaching one corner. I take my place around the tables pushed together on one side. I take off the jacket carefully purchased for the occasion and roll-up my sleeves blending in with the men in suits and the women in neat doctor garb; power-dressing is conspicuous by its absence. As others arrive we help ourselves to coffee, later sandwiches are brought in and we stand around balancing plates and orange juice.

By then I have been introduced to each of the people listed on one of the documents in my green folder headed 'membership'. Alongside each name the organization of which they are a representative is listed: the Commonwealth of Australia's Health Department, the Family Planning Association (FPA), the Royal Australian College of Obstetricians and Gynaecologists (RACOG), the Women's

Committee of the National Health and Medical Research Council (NHMRC), the MDDPB (Medical Devices and Dental Products Branch), the Consumers' Health Forum of Australia (CHF), and TDEC. The FPA representative, experienced on government committees, kindly checks that I know that I am entitled to travel allowance for being away from home, and discusses how to fill out the expenses form with the Commonwealth of Australia logo in the corner. A young man employed by the MDDPB who has been quietly taking minutes during the morning, tells me that I should be paid a sitting-fee for the day at 'category 2' professional rates. Before the meeting ends we are encouraged to leave our green folders behind and reminded that if we keep them then we must ensure they are secured in a place where their confidentiality is assured. I think of my university office and its filing cabinets shared between several postgraduate students, the door rarely locked, and take my folder with me; I need it to write a report. I am obliged as a consumer representative to report to the CHF, to justify my actions to consumers through a process of public reporting. We have finished early, and whilst the Melbourne people return to their regular jobs, those of us from Sydney and Canberra eagerly depart for a spot of shopping in this retail and clothing capital of Australia.

This scene contains a multitude of *materials*: air tickets, cab charge vouchers, buildings, letterheads, claim forms, arrangements of locked doors, rooms, schedules of reimbursements, the list of subcommittee members. We are prone to treat such materials as background, as essentially unimportant to an analysis of the business of making science policy. But here, in conformity with much work in actor-network theory, and also with feminist work analysing the materiality of the body (Haraway, 1991, 1997; Oudshoorn, 1994; Keller, 1992; Grosz, 1994; Bordo, 1993; Diprose, 1994; Gatens 1996; Franklin, 1997) I want to suggest that such materials are crucial in producing the bodies that are assembled together *as subjects*. It is the mixing together of such materials with bodies that constitutes subjects of a particular kind. For the subjectivities of the participants are already being produced in these material arrangements, even before any verbal performances have occurred.

All of the members of the committee are translated by arrangements of these materials from their identities in other contexts—parent, student, doctor, administrator, shopper—into TGA committee members. All are present as part of a *bureaucratic performance* that constitutes them as subjects of a certain kind. They are

subjects with a set of relationships and trajectories that pertain to government—the government of objects (therapeutic goods), of companies that manufacture those goods, of health professionals who recommend and use them, of consumers whose bodies bear their effects. Before entering the building I am already part of a web of relationships with people and things that constitute me as a government bureaucrat: pre-booked flights, cab-charge vouchers, letter-headed expense claim forms, the knowledge that I will be paid for my time by the Health Department, all catapult me into a particular mode of bureaucratic subjectivity.

And then there is the building. Its architecture encodes a very particular set of relations. This is the Australian Government Health Department—small and weak in relation to the Medicare scheme and the State Health Departments that administer public hospitals. Even the medical profession is strong compared to the Australian Government Health Department, having resisted many attempts to bring the practice of medicine under government organization (Gillespie, 1991). The TGA may be strong in relation to manufacturers who are bound by law to subject certain products for approval, but many pharmaceutical companies resist by simply failing to pursue what is quite a small market for their products.

These relations can be read in the building. In the back streets of a light industrial suburb, it is not the kind of place that is easily found by the general public or by business leaders. This is a work building. It looks unimpressive, barely announces itself to the infrequent passers-by, its foyer is featureless and without a waiting area—no brightly coloured walls or flash receptionist or anything designed to impress such as the vaulted ceilings of Cathedrals and Shopping Malls. It reminds me of the chest-clinic I had been sent to following a positive TB test. There the paint was peeling from the walls and one followed signs along damp and cold corridors to the makeshift reception area. Visitors entered as part of a gulag, there by compulsion. This was a government that worked in the shadows, protecting the health of its citizens, but unused to dealing directly with them as such. It was only later that the TGA would rewrite its architecture, reinventing the public and manufacturers as its 'customers', and itself as a professional and modern service provider.

So my first point is that subjects do not come to the subcommittee ready-made. Instead, bureaucratic subjects are being constituted in such material arrangements. But there are other subjectivities being produced too. For instance, I also find myself being performed as part of a hierarchical system of surveillance, a chain of

command arranged to prevent leaks, a set of arrangements designed to ensure privacy. Here participants are being produced not only as agents of the state, but also as commercial agents. Thus to enter the building was to encounter not the security arrangements of a prison, but rather those of industry—designed to prevent sabotage. Overlooking a back-lane and far from the public eye, we eat in. There is no danger of careless conversations being overheard. One of the papers in my green folder declares that 'in respect of commercial matters' papers are to be 'held in a secure place, or returned to the secretariat for disposal' and that discussions are 'not to be revealed to other persons without the consent of the chairperson'. Such technologies of secrecy are crucial to the contract between government and industry. Public scrutiny designed to prevent another thalidomide or heart-valve tragedy is to be done behind closed doors. In fact very little testing is done by the government regulator of therapeutic devices. The regulator relies on company-supplied documents. The companies only comply when they have ensured that the TGA space is an extension of their manufacturing plants, with the same security arrangements to stop the stealing of secrets. We become embedded in a security apparatus that constitutes us as commercial agents.

So we are carefully inserted into *bureaucratic* and *commercial* performative arrangements which confer certain limited agencies on us. These agencies neither precede their 'doing' in such arrangements (a mind inside a body), nor do the materials provide a substrate which determines them (Butler, 1990; Law, 1994; Mol, 1998a, 1998b). Indeed the story is more complicated. For we are also being constituted as *scientific 'experts'* and *democratic 'representatives'*. I have been flown to the meeting first-class, accompanied by consulting professionals, senior public servants and high-ranking business people. The subcommittee has been established under the TDEC terms of reference which are in my green folder and tell me that our task is to make 'medical and scientific evaluations of such devices for therapeutic use as the Minister refers' to us. Payment is set at 'Professional Rate' and the 'flight-deck' lounge whilst simply being the icing on the cake, marks our status and rank as experts through material markers of prestige and exclusion.

The building constitutes us as experts somewhat differently. It is fitted out as a scientific place. As I have noted, priority is given to laboratory space and fittings, rather than to the kind of fittings that generate a sense of importance and occasion in other settings, such as board rooms, courts and university senates. Here the TGA is

competing with medicine's claims to scientific expertise, and a past marked in Australia by the vigorous defence of the autonomy of the medical practitioner. So we are to meet in a building where the claims to professionalism by the MDDPB are writ large in the design of its laboratories, in devices like the condom testing machine, and in the 'experts' recruited to committees. And while less attention is lavished on its conference rooms than on its laboratories, these are also important because they work to insert us into a specific *scientific* professional order in which openness and lack of deferral to rank are markers. Hence the unadorned room hails us as equals. A shared training in the scientific method and thus a privileged access to objectivity are performed as levellers. Rank, occupational positions, or years of experience are irrelevant. The very drabness of the room underlines the openness of science that is the basis for its bid as a privileged place of knowing.

So we are bureaucrats, commercial agents, experts, but alongside these 'modes of ordering' (Law, 1994) we are also being pulled into a political (small p) performative arrangement operating with a democratic logic. The list of subcommittee members orders our names under the heading 'representatives'. The organizations that have nominated us are listed alongside our names. Inside the green folder are the agenda and related papers for the meeting, carefully separated by coloured dividers. Next to each divider is a sheet of paper nominating the agenda item together with 'Recommendations' and a 'Draft Resolution'. We rarely vote, but the consensus decision making procedure by which we progress through the agenda is no less a marker of a political process. Disagreements over knowledge of IUD effectiveness and safety are expected. This democratic ordering performs a different logic of knowing than that performing us as experts, a logic of sharing perspectives and accommodating difference.

Perhaps, then, we are dealing with pluralism? Bureaucrat, industrial employee, scientific expert, and democratic representative. Some 'postmodern stories' might celebrate this multiplicity. Others might link it to stories of negotiation and compromise, ideally as a function of the legitimacy of the power of each position. But I'm suggesting that something more complicated is going on:

- First I'm saying that *the subject positions are being constituted in the committee in its material arrangements*. They are put into play by those arrangements. This, to be sure, is a lesson that we learn from actor-network theory.

- Second I'm saying that *all the members of the committee are being constituted in all of these logics*. That, for instance, I am (nearly) as much an industrial employee as the representative of industry. Which means that we have much more in common than might otherwise appear to be the case.
- Third, as a result of this, I'm saying that the struggles between the different positions *reproduce themselves in our individual, and multiple, subjectivities*. This is not a retreat to the 'micro'. Nor is it to deny the 'macro'. It is, however, to raise questions about the nature of this division. It is to follow how the 'macro' flows because of the 'micro', and to explore how the 'micro' reproduces itself and thus becomes the 'macro'. (See Latour, 1998) Note that the 'macro' is not merely *expressed* in the 'micro'; there is movement for *all* of us between different subject-positions and this is performed through local and very specific arrangements.
- Finally, I want to suggest that despite the movements and the multiple subject-positions, we are also, both as individuals and as a committee, *being constituted as a single body*. Meeting in one room, we will make one decision, one set of recommendations, draft a single leaflet. Bureaucratic, commercial, scientific and democratic orders will work together to produce the subcommittee and each member of the subcommittee as a single subject, as speaking with one voice.

So something interesting is happening. It is that the material arrangements of the process of bargaining co-produce both multiplicity and singularity. As with Odo, there is something like an oscillation between centred and decentred subjects (Law, 1998a, 1998b). It turns out to be necessary to hold both difference (multiplicity) and sameness (singularity) together if a compromise is to be reached. But what is the compromise about? And what form does it take?

Scene 2

Here is a conversation of the kind that occurred early in the history of the IUD-Advisory Panel. The discussion went something like this:³

Garth (government scientist): *We cannot recall a device without positive proof that it is dangerous!*

Me (consumer representative): *We have received over 300 letters telling the government of troubles with this device. 300 consumers,*

many more than ever before, have taken the trouble to write to you. TDEC needs to take action to restore people's faith in the Health Department's ability to maintain public health and prevent unscrupulous manufacturers from dumping devices, condemned in other countries, on the Australian market.

Gretal (gynaecologist): But there is no evidence that this IUD is harmful. Just because the manufacturer has had to pay-out punitive damages does not mean a thing. You'll always get lawyers conspiring with people who might even genuinely believe that they have been injured if there is the possibility of making so much money—especially in the U.S. where medical litigation is out of control. There is nothing wrong with any of the IUDs currently available here. Read the medical literature.

Bob (bioengineer employed in industry): We all represent different agencies that must work together if we want to ensure best practice across the whole system. We have to make sure that doctors get it right but maybe this should come from the profession, not from the health department. Perhaps it would be useful to have the various companies prepare an information pamphlet for women, to ensure that women decide carefully. It is the companies who should provide the information specific to their products. The government's role is to approve this. But the important thing is to work together—to get it right across the whole system.

Fiona (Family Planning physician): There are many women who prefer IUDs to other contraceptives. As long as doctors advise women carefully and ensure that only women not at risk from STDs (sexually transmitted diseases) get them there is no problem. The NHMRC (National Health and Medical Research Council) have just issued new guidelines that will help ensure this.

Me (Consumer representative): These guidelines are for doctors. Surely one thing TDEC could do is ensure that a consumer information pamphlet was given to every woman thinking of using this or any IUD that informed her of the real risks involved.

Gretal: For once I would agree with you there. We need to counter all this ill-informed media coverage with the facts.

Cal (Chairperson, Senior employee of the Health Department): OK let's see if we can draw things to a close here. Do we have a consensus that we should produce a consumer information leaflet? Yes.

There are many things going on here, including the performance of the various subject logics discussed above. But I want to switch tack and attend to the way in which the talk constitutes the IUD as an object. For everybody is telling stories about IUDs. These stories, like the things in Scene 1, participate in multiple arrangements that perform different realities which contain different subjects and objects. But how is this done in practice? My (ANT) suggestion is that we need to attend to each snippet of talk as an arrangement of words and silences which performs an IUD as a particular kind of object. And, if we do this, we begin to notice difference. We discover that the IUD is being performed as multiple objects, just as 'I' was 'being done' as multiple subjects.

Bob's talk is enacting the IUD as a 'system' that can be analysed in terms of its parts, human and non-human, to ensure that all parts are working efficiently. The talk of the government scientist performs the IUD as just one of many devices that have to be managed through a series of processes—listing on a register, calling for pre-marketing approval applications to be lodged, responding to complaints about adverse reactions, or issuing product recalls. And for all of these there are procedures to be followed. Gretal's talk presents the committee with an IUD that is an array of expert knowledge to be read 'in the medical literature'. This is an IUD with calculable risks and benefits—'The facts'. Fiona's talk embeds an IUD in a range of contraceptives, each of which offers a unique combination of risks and benefits that need to be matched with the varying desires, life-styles, values and practices of patients. In my talk the IUD is different yet again, one that is linked to '300 letters' of complaint and a negligent manufacturer.

Are these performances of a single IUD? One tends to want to say: of course. But I want to dissent from this. If we attend seriously to the specificities of the talk, then it turns out that we are dealing not simply with one, but also with half-a-dozen different IUDs. This is a semiotic move implicit, and sometimes explicit, in the ANT programme. It is a semiotic move because semiotics insists that entities are created relationally. That, for instance, subjects are made in relations (which is what I was exploring in the section above, and is generally conceded in post-structuralism). But also, and this is more novel, that *objects are made in relations* too. That they are, as Law and Mol point out in this volume, performed into being. This can be done in talk, as I have shown in Scene 2, but it is also done in other material orderings. What I am suggesting is that rather than thinking of this 'talk' as describing different perspec-

tives on the same object, we approach it as 'ontological politics', as 'doing' different IUDs. (Mol, 1998b) In which case, we need to say that the talk, in just a few minutes, constitutes not just a series of subject-positions (which are embedded, no doubt, in the different logics that I discussed above) but also a series of *different IUDs*.

But perhaps, in dissolving the identity of the object into multiplicity, we have done away with singularity too quickly. Because the talk is also predicated on the assumption that all its participants are talking about a single IUD. Indeed the same IUD. This shows itself in a series of specificities. Bob talks of a device (singular) being either dangerous or not. And he assumes that we recognize that it is manufactured to a certain standard and design, specified on a patent, and that its trial data is summed together. I also talk of *this device* as a single object. Fiona presupposes a single IUD by differentiating between it as an object on the one hand, and the way that object is used on the other. This makes her IUD that has sometimes been unsafe (for women at risk of STDs) and requires new practices to ensure that injuries are minimized, the same as Greta's IUD—*this IUD*—of known properties (effectiveness and safety measures) from clinical trials.

To summarize, I am saying that the conversation performs a kind of oscillation, an oscillation between the (presupposition) that there is a single object on the one hand, and the performance of *different objects on the other*. Indeed, though I will stick with it since I lack a better term, perhaps the term 'oscillation' gives too much away, for both, I am saying, are being performed simultaneously. Indeed, more strongly, I want to say that the conversation and the agreement that is struck by Cal, is only possible at all because of this oscillation. For it is something like this: at least in this conversation, the enactment of a single IUD demands or depends on the mobilization of several different IUDs. If we all had to agree on the nature of the IUD, then the conversation would come to an abrupt halt.

This, then, suggests something about negotiation and compromise. That it is oscillatory in character rather than being convergent and that the objects mobilized and then secured in negotiation are *always* both singular and multiple, rather than converging from multiplicity to singularity. I am saying, then, that compromise is a continued oscillation between singularity and multiplicity rather than a movement from oscillation to a resting-place. This, however, is something that I would now like to test by attending to the materialities of the leaflet drafted by the committee.

Scene 3

After a long process of drafting, the IUD consumer information leaflet was finally approved on 27 July, 1992—and it is still issued to all women in Australia who are contemplating the implantation of an IUD. Here are some excerpts from it (Commonwealth Department of Human Services and Health, 1992):

What about Pelvic Infection?

If you use an IUD you have a small increase in risk of developing a serious infection called pelvic inflammatory disease (PID). PID is an infection of the womb, fallopian tubes and ovaries, most often caused by an organism (bug) that is transmitted through sexual intercourse.

However, the latest evidence suggests that the main increase in risk of PID with an IUD is in the first three weeks following insertion. If you only have one sexual partner and he also has no other sexual partner, your chance of getting PID following this first three-week period is low.

PID is a serious infection which can cause infertility (inability to have a baby) by blocking the tubes, make you more likely to have an ectopic pregnancy (pregnancy in the tube) or cause you much pain. The symptoms of PID are easy to miss and sometimes there may be no symptoms.

You should see your doctor immediately if you have any of the things on this list:

- ◆ increased temperature;
- ◆ tenderness or pain in your pelvis (lower abdomen);

- ◆ abdominal cramps or lower back pain;
- ◆ bleeding between periods;
- ◆ more painful and heavier periods;
- ◆ pain with deep thrusting during sex;
- ◆ unpleasant or heavy discharge from the vagina;
- ◆ feeling unwell, weak or tired.

What about Ectopic Pregnancy?

This is a condition where the fertilised egg grows outside the womb, usually in the tube. If it is not detected early it can cause serious bleeding which can result in death. If you become pregnant whilst using an IUD it is more likely to be ectopic but remember the risk of pregnancy with an IUD is very low. If you miss a period or think you could be pregnant, see your doctor immediately and make sure you are checked for ectopic pregnancy.

Both of these serious conditions can cause infertility.

- ◆ It is important that if you or your partner ever have casual sex or if you have a new partner that you use a condom every time even though you have an IUD until you have both had a check for sexually transmissible diseases.

What are the other side-effects of an IUD?

Some women find that whilst using an IUD:

- ◆ periods are heavier and longer;
- ◆ sometimes periods are more painful;
- ◆ Often the amount of vaginal secretions is increased;
- ◆ the IUD is sometimes pushed out of the womb into the vagina. This is more likely to happen in the first few weeks after the IUD is placed in the womb. It is important to check your vagina for the string every month at the end of a period to make sure it is still in place;
- ◆ very rarely—about six out of 1000 insertions—an IUD can pass into the wall of the womb or, even more rarely, into the abdominal cavity during insertion.

If any of these things happen you should have a check by your doctor.

What happens if a pregnancy occurs with the IUD still in the womb?

Occasionally a pregnancy can happen even if the IUD is still in the womb. If you have a positive pregnancy test soon after you miss a period the IUD can easily be removed. You will then have about a 30 per cent chance of having a miscarriage.

If the IUD cannot be removed, because the string has been drawn up into the womb as it enlarges with the pregnancy, the miscarriage risk is higher—about 50 per cent. If carried to term, healthy babies have been born to women where the IUD was left in the womb during the pregnancy. It does not cause abnormalities in the baby.

It is standard procedure of semiotic analysis to explore how it is that readers are constituted by textual moves of one kind or another. It is therefore not breaking new ground to argue that this text is performing its reader in a particular way—and specifically, to argue that it is constituting the potential IUD user as an informed consumer, as a chooser, a centred subject, and then as an agent that will give her informed consent to the insertion of an IUD at a particular moment. As is obvious, the text presents itself as neutral 'information' and a 'you' is made into a centred decision-maker in command of the facts. It is 'to help *you* decide if an IUD is the best method of birth control for you.' (emphasis added)

The 'you' in the leaflet is a woman. Coincidentally, it is printed on lavender paper—a colour that stands between—neither the primary colours used to indicate a masculine terrain of decisiveness and action (check any toy store), nor the pink indicative of the

feminine but carrying the connotation of a restricted women's role. It constitutes the woman as the decision-making agent in the domain of medicine. This means that medicine is flattened. In particular, the traces of medicine as a professional domain in which the decision-maker is the doctor are lost. And then again, for the choice to be located in the women's head, the leaflet performs itself as both information and everyday knowledge. This is partly achieved through translations: infertility (inability to have a baby), pelvis (lower abdomen), ectopic pregnancy (pregnancy in the tube). And partly by situating the women decider as a reflexive self, a self making a rational decision about costs and benefits, a decision that constitutes her as a subject that weighs up opportunities to advance her interests. Risk data are presented as if they can be plugged into such a calculus: 'The IUD is 95–99 percent effective'; 'If you use an IUD you have a small increase in risk of developing a serious infection . . .'; '[in] about 6 out of 100 insertions [Ö] an IUD can pass into the wall of the womb'.

The leaflet is organized in a question and answer format that sets up the woman's agency as a tree of choices, a series of 'if this then that' decisions. In an earlier section women have decided which category they fall into—'Who could use an IUD?' they are asked (eg, 'Women wanting a reliable . . . method of contraception after having their children'), and 'Who should not use an IUD' (eg, 'Women who have more than one sexual partner'). In the section cited above their decisions are being channelled through a series of choice points. 'What about Pelvic Infection?'; 'What happens if pregnancy occurs with the IUD still in the womb?'; 'Who can use an IUD for birth control?'. 'Choice' is systematic. The leaflet is a machine that produces the reader's decision as a flow to a single temporal point and as an origin that can be referred back to and judged when things go wrong. Did you adequately weigh the risks, 'the possible problems'? With no method of birth control 'absolutely safe' did you make the right choice to fit your lifestyle, your values?

So far so good. The leaflet is a compromise engineered in the committee. And it has made a single and centred subject. But just as the compromises of the committee are better understood as 'oscillations' between singularity and multiplicity—between single and multiple logics, and single and multiple IUDs—so it also turns out that the subject performed in the materiality of the leaflet is oscillatory too (Law, 1998a, 1998b). Centred she is—I have just shown that. But she is also, and at the same time, being inserted into multiple logics. And (I make the argument in the same form as

I did in the previous section) *the centred and the decentred subjects are mutually dependent*. Which means, in a move that is of some importance to all the debates about informed consent, that the success of the leaflet in constituting that informed consent also relies on the production of different subjectivities that disperse the head of the woman and the instant of choice across time and space. (Berg, 1997, 135–136)

For the 'you' of the leaflet is barraged with instructions: 'It is important to check your vagina for the string every month to make sure it (the IUD) is still in place'; 'You should see your doctor if you have any of the things on this list: increased temperature; tenderness or pain in your pelvis . . . [and so through 5 further points to] feeling unwell, weak or tired'; 'If you miss a period or think you could be pregnant, see your doctor immediately and make sure you are checked for an ectopic pregnancy'; 'If you or your partner have casual sex or you have a new sex partner use a condom every time until you both have a check for sexually transmissible diseases.' Here, then the user is being addressed as a subject involved in complex and continuing routines of self-surveillance and self-protection. Which means that the leaflet is performing a future normative body as well as a present disembodied mind.

But in addition to the decentered logics of bodily training, dispersal operates in other ways too. For instance, the leaflet also dissolves the singularity of the chooser by building a future patient-subject. This subject is produced 'in partnership' with medical doctors. The woman and her doctors will together manage her fertility and sexuality. The leaflet is full of exhortations to 'see your doctor immediately' and to 'discuss this with your doctor'. The leaflet puts a doctors-as-carer-and-advisor model of medical practice into play. This disrupts an expert decision-maker model in which the patient is a body to be read and interpreted with interventions being decided by the medical expert. Agency is partially distributed to the patient who must look for signs and symptoms, even if there may be none, and go to the doctor. But the leaflet also builds in a future context of medical care, in which any problems arising from IUD use can be attended to and solved without major medical consequences. It performs a doctor who can bridge an excess, the contingencies that of necessity lie beyond the specifiable (Berg, 1997, 147)

The point location of the consumer-decision-maker also dissolves into the past. The 'information' is framed between the logo of the Commonwealth Department of Human Services and Health on the front, and the logo of the TGA on the back. Under the latter we

learn, in small print, that the leaflet was approved by the Reproductive Devices Panel of TDEC on 27 July 1992, and that it is available from Organon Australia and Medical Industries Australia. These peripheral elements perform a different order and a different logic of decision-making. The decision to use an IUD is dislodged from its instant, and re-located across many sites. We learn, then, that the moment of informed consent implies the existence of a bureaucratic order which approved and registered the IUD. And this is an order in which decisions are distributed elsewhere, and in which the decision of the woman—or even her doctor—is no more than an afterthought.⁴

Again moving backwards from the point location performed in the leaflet, we also find that a commercial ordering is at work. The 'consumer' can only decide to use an IUD because two companies that make such devices went through the TDEC approval process and market them in Australia. The consumer is thus part of a commercial arrangement in which Organon Australia, its multiload IUD, Medical Industries of Australia, its Copper T 380A IUD, the medical profession, and the IUD consumer information leaflet have organized IUD insertion and made it a consumer choice. The leaflet also embeds the changing legal context for manufacturers. Until very recently in Euro-American countries many people relied on their physicians to make choices about which drugs and devices to prescribe, and this is still largely the case. But IUD and other therapeutic device litigation has overturned the 'learned intermediary' defence. This differentiated between medical products and other products precisely by holding the manufacturer responsible only for informing the 'learned intermediary' of any hazards or risks. This person, the doctor, was then considered to have a discretionary responsibility for informing the product user of these, as she judged appropriate (Castleberry, 1990). The overturning of this doctrine is visible in the leaflet which performs the decision-maker as the receiver of information from the manufacturers.

So the decision-making subject is rendered singular—turned into a specific location. But at the same time it is also distributed across time and space into future bodies, future conversations, and into past points of choice or procedure. There is, as it were, continual slippage between presence and absence (Law, 1998a, 1998b). The subject is both centred and decentred. And the possibility of a centred, informed, consenting subject *depends* upon this slippage. It is constituted and made possible by virtue of the fact that decisions have been or will be taken elsewhere, and that these are inserted

within, or produce different logics. The consumer information leaflet is not merely a transmitter of information, a reflection of knowledge made elsewhere—in the clinical trials for instance—that will empower the consumer by transforming her into a knower. Rather than simply putting control into the hands of the user, it is a device for distributing control, not once and for all, but as part of many 'modes of ordering' in which it becomes a site for on-going negotiation, a site for articulating the work of manufacturers, regulators, physicians and users (Berg, 1997, 137–8). The strength of the leaflet is that it is a single object but one that intervenes in all of these IUD orders. All of which suggests that *the working of the leaflet and the subject that it produces is no more convergent than the working of the committee, or the object, the IUD*. That the committee's compromises produce, in turn, an oscillatory outcome.⁵

Conclusion

In this paper I have taken a topic that is standard in the literature on policy-making and decision-making: how it is that negotiations, bargains and compromises are hammered out. This is a topic which is also modelled in the literature on science studies as they attend to technical decision-making, scientific closure, and the democratization of technology policy-making. It has not been my object to criticise these literatures: there is much to learn from the ways in which they analyse bargaining and its outcomes. Instead my object has been to explore the specificities and materialities of decision-making, and how it is that settlements are reached. This focus helps us to rethink both the notions of negotiation and closure. Implicit in most of the ways in which they are modelled is that, at least in successful negotiations and compromises (and indeed the imposition of solutions by force) there is a process of (possibly enforced) convergence. That multiple possibilities are progressively narrowed down until a single outcome is achieved. The model thus implies a progressive shift from instability to stability, or from movement to immobility. Of course it is also understood that decisions that have been made may also be unmade. But for the time being at least, this way of thinking about outcomes implies that stasis or stability has been achieved.

Drawing on a particular case-study, and informed by the semiotics of actor-network theory and related feminist approaches, I have proposed an alternative. This is that *compromise or closure does*

not imply the stability of a single outcome. There are theoretical ways of glossing this that make this suggestion rather straightforward. For instance, it may be seen as an application of the arguments from feminist and other post-structuralist approaches against the possibility—and indeed the desirability—of ‘humanist’ collapse into self-identity. Nothing reaches stasis. Nothing holds, so to speak, in an internally consistent manner. Which is not, however, to suggest that relatively durable connections are not possible. However, what is unsurprising in the context of non-humanist versions of feminism or such approaches as the actor-network theory, turns out to look a little more surprising when it is applied to bargaining, decision-making, or closure. For the logic tells us that outcomes are not centred either. Which is not to say that they are decentred. Instead the model suggests that we need to avoid polarities such as these, and explore the character of outcomes as oscillatory—or as a simultaneous propensity to centre. To make single and to make multiple. The conclusion is that if decisions, subjects, or indeed objects, cohere, then this is because they are both singular and multiple.

Acknowledgements

This chapter would not exist without the assistance of a University of Melbourne small grant, the hospitality of the National Centre for Epidemiology and Population Health, ANU, and the Centre for Social Theory and Technology, Keele University in 1996, and of course the openness and professionalism of the members of ‘the committee’ discussed. It owes a great deal to many conversations and intensive collaboration with John Law. I am also much indebted to the Sociology Program, RSSS at ANU, for providing me with the privilege of a full-time research position, and for exemplary collegiality. Judy Wajcman, Lisa Adkins and Dorothy Broom provided useful comments on earlier drafts. Thanks to John Law for his patience and detailed comments on more than one draft.

Notes

- 1 I would like to thank Suzanne Eastwood for introducing me to the Star Trek series and the salience of Odo to this article. See Paramount Pictures, Star Trek: Deep Space Nine (1996) ‘broken link’ (story by George A. Brozak) 49962–4.
- 2 In this paper ‘the subcommittee’ or ‘the committee’ is a convenient device that

collapses this change. These terms refer to the operation and work of the two committees on IUDs from 1989 to 1992.

- 3 For reasons of confidentiality this conversation is fiction. However, in constructing it I have drawn on interviews with two other panel members, my own notes of interventions as a consumer representative, and the minutes of meetings. It is not an accurate record of any part of a particular meeting. Rather, it is a composite sketch that, whilst fictitious, captures the flavour of some of the interactions. All names have been changed. Moreover, the characterizations of any of the persons represented are not based on characteristics and comments of single individuals. As in any work of fiction representations of people are only broadly based on my experience—of diverse members from each committee—and cannot be mapped onto particular individuals. They are also partial and not fully representative of the full character of any person.
- 4 This is a point explored in some detail by Annemarie Mol in her work on decision-making and normativities in medicine. See her inaugural lecture *Wat is Kiezen? Een Empirisch-Filosofische Verkenning* (Mol, 1997). For related work see the collection edited by Marc Berg and Annemarie Mol (1998).
- 5 With greater space it would be possible to show that the IUD performed in the leaflet is similarly oscillatory, involving the simultaneous performance of single and multiple objects of the kind discussed in the previous section.

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