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Managing, Subjectivities and Desires

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Introduction

We are interested in subjectivity and desire, and in the way in which these are made or unmade in the places between the human and the non-human. But how to think about this?

In an earlier paper, we told stories about disabilities, desires and subjectivities1. In particular, we told stories which suggested that desires and subjectivities are not given, but rather arise in specific material and corporeal relations. We explored some of the ways in which these were produced in performances of disability and the uses of information and communication technologies. As a part of this, we argued that no particular theory – for instance a theory of lack or a theory of intensity – grasped what is most important about desire. Instead, we told stories which tried to show the way in which desire is something that is mobile in character, shifting and displacing itself, never easily pinned down.

In this paper, we extend our previous argument and locate it in the context of a formal organisation. Our concern is thus with organisational, and in particular, managerial subjectivities. It is about the way in which heterogeneous subjectivities, desires and masculinities are made and performed within – and performative for – an organisation.

Performance

The idea that there are performances in organisations – that indeed organisation maybe understood as performance – is scarcely new2. But it is a first and essential step to the

understanding of subjectivity and desire. For the idea that organisations are "rational" and displace embodied or desiring subjects, instead creating neutral, interchangeable and disembodied functions and agents, though a key move in early organisation theory, is one that has been swept away in twenty or more years of work on "organisational sexualities" which derive from a variety of sources, including feminist critiques of organisations, so called 'post-modern' organisational studies, and a newer 'post-feminist' body of work on desires, erotics and sexualities in work and working relations3. Drawing on this tradition – but also partially related work in the field of science and technology studies which similarly insists on materiality, corporeality and enactment – we'll start, as we intend to continue, with some material drawn from an ethnographic study of Daresbury SERC Laboratory4.

The main management committee of Daresbury SERC Laboratory meets on the third floor of the administration building in the office of the Director5. The observer enters the room, either directly off the corridor, or through the adjacent office of the director's secretary. This is a room which tells its own story. We might, if we were to use the language of technoscience studies, say that it has its own script6, a script that tells and performs something about organisational power. Thus it is carpeted and tastefully decorated. At one end of the room there is a large desk appropriate to a managing director. The desk sports various more or less high-tech information and communication technologies: a personal computer, a couple of telephones, a Dictaphone. This then, is where the Director – in this paper we'll call him Andrew – sits. At the other end of the room there is a board room table in tasteful wood with six or eight comfortable upright chairs. This is where the meetings take place. Where Andrew talks with his five most senior managers at their meetings. And then, between the two, there is a coffee table with three easy chairs. This is a less formal place where Andrew receives his visitors – and where the ethnographer is invited to sit. There is a small array of glossy publications on the coffee table: the annual reports of the laboratory and its sections, a selection of literature from the SERC head office in Swindon, and maybe one or two recent scientific publications by members of the laboratory.

We will suggest, following recent work in technoscience studies and post-structuralist feminism7 that all of these materials are involved in *performing* Andrew as a managing director: that they are just as active as he is in constituting him in that way. They help, that is, in their performances, to turn him into a powerful organisational figure. But let's postpone that argument for a moment, and attend instead to a set of actions that is a little closer to a conventional understanding of performance: the kind of conversation that takes place round the table in the course of a board meeting. Here's a conversation about a request from the librarian for money. She wants to put the archives of the Laboratory in order:

Andrew: 'What archives? I didn't know that we had any. Where are they?'

Tim: 'In the basement .... it's full of them, box after box, that people have put down there when they ran out of space in their offices.'

Andrew: 'What's the problem with just chucking them out?'

Tim: 'The law says we can't destroy them. We have to keep organisational records.'

Terry: 'I've often wondered about that. When my filing cabinets get full, I go through my files and take things out, really as I think best. Even my secretary doesn't know what I'm throwing away.'

Andrew: 'Who actually uses these files? I've never looked at them – I didn't know they were there. What use are they?'

Ben: 'They'll be used by someone who wants to write a history of the organisation. Or by a sociologist!' (laughter)

Andrew: 'But what's the system for keeping them? We don't keep everything, do we? What's the system that's used here?

Tim: 'There's never been any system ... that's the problem. In other places, when a file is full, you keep it, and then after five years, you've got a choice. You can decide to carry on keeping it. Or you can weed it. Or you can destroy it. And there are rules about who can weed it, and who can destroy it. Only [senior management] can take the decision to destroy a file.'

Andrew: 'I didn't know anything about this! When I finished my last job I just threw out six filing cabinets of papers. You've no idea what a relief it was – it was like a great weight off my shoulders!'

Giovanni: 'If you want my opinion, we should just put a match to them.'

Terry: 'But it's worrying, if we're supposed to be keeping them.'

Andrew: 'Listen, this is quite a lot of money they are asking for to start organising these files. What's to stop us drawing a line in history [now], and deciding what we should be doing from now on, and doing that? Meanwhile, we'll say "no" [to their request for money] for sorting out the archives that are already there. Okay?'8

Perhaps this isn't great theatre, but it's not without its merits. Indeed, there are various things that we might say about this conversation. For instance, it reveals, as we will shortly suggest, that there are several different conversational logics or discourses at work. For the moment, however, let's simply note two things.

- First, it may indeed be treated as a performance. Different actors are playing different roles. Perhaps, then, this isn't exactly a matter of impression management of the kind so aptly explored by Goffman9, but the performance certainly moves the action along to a more or less satisfactory conclusion. This suggests …
- Second, that the performance of those roles is consequential, that it has effects. That it makes a difference. Accordingly, though we don't want to explore the point in detail here, we might also say, following philosopher J.L. Austin, that this talk is performative10. As Andrew's last speech – and for that matter Tim's account of the law – suggest, to say is also to act, to do something, at least some of the time. In the context of this meeting, Tim, so to speak, enacts and performs the law into some kind of being .

Perhaps this is fairly straightforward. But what of those other materials which we put on one side above? What of the performance of Goffman's 'props'? To talk about these we will conjure up a different scene.

Materialities

We're in the same room, but the members of the management board have disappeared. Andrew is alone, he is sitting at his desk, and he is poring over a computer print out. If we look over his shoulder we'll discover that it is a spread sheet. If we ask him to explain it to us, he will tell us that it summarises what the laboratory vernacular calls the 'manpower' that has been devoted to the different major projects of the laboratory11. Andrew is frowning. And the reason he is frowning is that the largest and most important project, the so called 'Second Wiggler' project, seems to be short of manpower. The issue is: how does Andrew know this? The answer is going to come in two parts.

The first has to do with the projections of project planning. When the building of the Second Wiggler was conceived, an estimate was made of the total cost of the project, and the total amount of manpower that would be needed to build it and its various components. Then the deployment of that manpower – and therefore the different parts of the project – was carefully scheduled. Detailed design, creation of the necessary infrastructure, the work put into building the Wiggler magnet itself, the effort devoted to the different experimental instruments – all these were estimated and carefully orchestrated and scheduled in the original project management document. What this means, is that Andrew and the other managers know not only what should have been completed by various dates, but also the effort or manpower needed to ensure that these various 'milestones' are in fact achieved.

The second part of the answer has to do with the amount of manpower actually used. How does Andrew know about this? The answer is that the laboratory has recently developed an elaborate system for tracking the way that it uses the time of its staff. Scientists, engineers, support staff, and technicians, all have to fill in what they call a 'manpower booking form' at the end of each month: so many half days on this project, and so many half days on that. This has led to some resistance: ironical comments are frequent, and some drag their heels about returning the forms to the finance department which is responsible for collating and checking the returns. And, indeed, the business of checking is also more than a trivial exercise: there

are stories, perhaps apocryphal, that the more bloody-minded tend to report that they worked exclusively on finance and administration. At any rate, the efforts of the finance department eventually turn themselves into a spread sheet, a table which represents the number of manpower hours devoted to each of the major functions or projects of the laboratory. And it is this that forms the second part of the spreadsheet which is causing Andrew so much anxiety.

For the problem that has come into focus, though it would be invisible without the apparatus of reporting and spreadsheets that we have just described, is that there is a large – perhaps even dramatic – difference between the manpower projections for the Second Wiggler project, and the manpower that has actually been devoted to it. In short there is a serious shortfall. Thus, though this isn't visible in any very direct way – no 'milestones' have yet been missed, it looks as if the project is several months behind schedule despite the fact that it is still at an early stage. True, there is quite a bit of slack built into the schedule, contingency time. But this is rapidly being used up. Andrew frowns and reaches a decision: that he needs to call an emergency meeting of the managers involved in directing the project. Otherwise a crisis will face the laboratory – the public inauguration of this crucial 'flagship' project will be delayed. Which will, to put it no higher, be deeply embarrassing.

We earlier suggested that it is not simply people who perform, but the props as well. And now we want to press that point. The issue has to do with agency, with who or what is acting in any given scene. Goffman's division between people and props – which is also one built into much social and organisational analysis as well as common sense – insists that it is people who act rather than objects. But in our way of thinking – and here we are drawing on recent work in technoscience studies but also analogous work on governmentality12 – the division does not work and the division between people and their surroundings has become blurred.

We may approach the question empirically by asking where Andrew ends and his props begin. It is, of course, possible to argue that Andrew ends with his skin. And if we were to attend to Andrew-as-a-body this might, indeed, be a defensible position13. While accepting that the matter is one for debate, we want to press the recently developed technoscience view that if we are concerned with Andrew-as-a-manager, then it turns out that he is an effect of a performance that is distributed not only across his body, but also into a ramified network of other materials.

This, to be sure, is the point of our story about this manpower booking system. Andrew-as-a-manager only knows that the Second Wiggler project is in danger because the different components of the manpower booking system – the people, the accountants, and, we might add, the Daresbury administrative computer, the software, the electricity power supply (the list is endless) – are all in place and operating in the appropriate way. In short, we are saying that Andrew-the-manager is a cyborg, part human, part machine; or that he is materially heterogeneous; or that he is a set of extensions and prostheses, fleshy and otherwise; or that he is an assemblage or a 'hybrid collectif'14. All of which are vocabularies for saying that it is no longer easy to determine the locus of agency, to point to one place and to say with certainty that action emerges from that point rather than from somewhere else.

Orderings

We've suggested that organisations are performances, that people and materials both perform, and that agency is not confined to people but is distributed, shared out. Now we want to make an argument about distribution, about the ways in which agency is heterogeneous both materially and discursively. This is that it is spread between what we might think of as different logics of organisation.

Look again at the conversation about the archives. For this, or so it seems, moves between a series of different 'logics' or 'modes of ordering'15: at least two, and perhaps three. First and most obviously, there is one that is bureaucratic or administrative. This appears in the voice of Tim, the laboratory administrative secretary, when he tells the other managers about the legal requirements for record keeping16. Then there is a second ordering which finds voice in Andrew's pragmatism, his question 'what use are they? We want to suggest that this pragmatic voice is the tip of an entrepreneurial mode of ordering. More on this shortly. Then there are interventions that don't appear to fit either of these ordering logics. For instance, there is Giovanni's throwaway remark: 'I think we should just put a match to them.' To get

ahead of ourselves, we think that this may be understood as an expression of a visionary or charismatic logic – though it is no doubt difficult to be sure in this particular context.

A single conversation is clearly a slight empirical base, but the general argument that we want to make is that managing the laboratory may be understood as an expression and the performance of a determinate and fairly small number of ordering logics. The conversation illustrates two, perhaps three, of these: administration, enterprise and vision. To make our argument we're going to add a fourth: that of vocation. And we'll argue:

- that large parts of (the managing of) the laboratory are distributed across these four modes of ordering;
- that managing is not monological but discursively heterogeneous. And as a part of this …
- that each of these modes of ordering implies a particular kind of subjectivity, and with that subjectivity a particular style of desiring, a particular form of masculinity, and a particular mode of distinguishing the private from the public.

First, however, we will present the important features of each of these modes of ordering.

- Administration: Max Weber is our inspiration here. His theory of bureaucracy indeed catches what is most important about an administrative mode of ordering17. Here organisation is performed as a hierarchical set of offices, each with its own tasks, assigned in conformity with systematic rules which reflect both the need for technical efficiency on the one hand, and legality together with proper conformity to due process on the other. (We see this enactment in the words of the laboratory secretary mentioned above.) Authority derives from office, delegated powers, and more generally, from legality and due process. The proper person – the administrative subject – is one who dutifully fulfils the tasks laid upon him or her by his superiors – provided those tasks are legally and procedurally proper – without regard to personal or emotional considerations. The proper bureaucratic subject is thus responsive to properly constituted demands that are laid upon him or her. He or she may not initiate radically novel action, but the bureaucratic code lays down a wide range of duties that he or she should properly respond to or initiate. A small example: the role of the secretary of a committee is not simply reactive, but also pro-active. If committees are to function properly, they need agendas, minutes, appropriate documentation, and a way of following up decisions and ensuring that they are implemented, all actions which form part of the logic of administration.
- Enterprise: Who is the theorist of enterprise, the equivalent to Max Weber? Despite the triumph of market economics (and its administered versions in the public sector), no particular sociologist comes to mind18. No doubt, the liberal market theorists in some measure fill the gap. At its most abstract the entrepreneurial organisation is a set of risk-taking locations which are allocated resources, and which are then required to utilise those resources in a way that will secure an optimal return.

At Daresbury, as in many other organisations, this was implemented by creating cost centres. Managers, both junior and senior, were set goals and allocated resources – money, manpower, time – with which to achieve them. The Second Wiggler project is a case in point, and it was a logic which depended on specific material arrangements. We have already visited the manpower booking system, and this was accompanied by an equally elaborate materially heterogeneous apparatus for tracing and reporting expenditure – or 'spend' as it was called at Daresbury. This took the form of a management accounting system grafted on to the standard auditing accounting system which secured the payment of salaries, wages, and sums due to suppliers19.

If enterprise suggests a particular mode of organisation, it also generates (and is generated by) particular forms of entrepreneurial subjectivity. In this logic, the person becomes an active, assertive, responsible, strategic, discretionary, resource using, and calculated risk taker who is charged with achieving goals in an optimal manner. Again, this is to be done without regard to personal or emotional considerations.20 The moral charge, here, then, is quite unlike that of the administrator: in enterprise duty or desire has little to do with legality, but a great deal to do with performance and success. The proper person is proactive, responsible, sensitive to opportunities and dangers, and flight of foot. He or she is an

innovator who performs – indeed out-performs – his or her comperes. Authority, at least in the ideal case, thus derives from success – which is also therefore a definition of the good. Again, then, legality or propriety are far removed21.

- Vocation: Since Daresbury's purpose is to run a series of experimental facilities that are too large and expensive for British universities to finance individually, this means that much of its work has to do with experimental science and engineering. Thus although it is used by many visiting scientists, it also employs a large number of 'in-house' scientists. Indeed all the members of the management board were originally practising scientists or engineers, and several were still actively engaged in experimental science. And a logic of science and engineering – we'll call it vocation – was indeed important.

The theorist here is Thomas Kuhn, and the crucial image is that of the skilled technical puzzle solver22. Kuhn's argument is well known. The scientist embodies a set of practices and skills and seeks to deploy these in order to solve specific puzzles or problems defined by what he calls a paradigm. One does not need to commit oneself to all the specificities of the notion of paradigm to find this account of scientific – and in some parts – management practice convincing. This then, is a third account or performance of subjectivity, that of the puzzle solver. It is also a third account of the character of proper action. As Kuhn insists, this is not radically innovatory, it is none the less creative. Thus puzzle solvers are curious about important features of the scientific world. They are driven by the desire to know more about the world. And this is a logic that repeats and performs itself time and time again at Daresbury.

James: 'You learn a lot from the way Ph.D. students tell you things. Having put him on the rails [this student] does not go. You have to bump into him!'

Andy: 'To be a [technician] does not take any initiative. To do science does. If a person does research, the research does not get done by having someone [say] 'Measure this, then measure that….'

James: 'It is not his job. It is his vocation.'23

If puzzle-solving is a third logic for performing agency and subjectivity, then it is also a third account of the origins of authority. On the one hand, the latter is lodged in the body of the scientific expert. On the other, it is located in the expert community of specialist puzzle solvers. Authority, then, derives from qualified expertise, which at least in principle has little to do with organisation. This means that it does not intrinsically map onto the organisational structures performed by either administration or enterprise. Which is not to say that such mapping does not take place in practice. Thus, junior managers are not simply bureaucratic office holders, and sites of small scale entrepreneurial activity. They are also supposed to be particularly gifted vocational puzzle solvers.

Vision: the fourth mode of ordering we need is that of vision. Here, once again, the theorist is Max Weber24. Weber describes a form of authority in which power and ordering derives from grace, insight, and special access to the divine. The origins, then, are religious or spiritual in character, and if in more recent European history the term has been de-sacralised, then the logic of the ordering of vision nevertheless retains the same shape: that of access to a reality and a vision which transcends the mundane. We earlier noted in passing that at Daresbury vision was performed. What we did not say was that is was performed, in particular, around one of the senior managers – Giovanni – who was widely held to be an inspirational leader. We are not saying that everyone in the laboratory performed him as a visionary. But it was certainly the case that many, both men and women, found him to be both scientifically inspiring and personally attractive.

What, then, may be said about vision as a mode of ordering or a performance? No doubt, in the first instance, it is the enactment of a specific form of agency and subjectivity. The charismatic, as we have just noted, has special and privileged access to knowledge, insight and power. This is, so to speak, a state of grace, given rather than achieved. Here is Giovanni, commenting on a school visit to the laboratory, a visit to encourage young people to take up science:

Giovanni: [Sceptically] 'Maybe we can put [these visiting schoolchildren] off science for good, if we do it right!'

Jim: [Laughing] 'Giovanni doesn't believe in training, education, or any of those things. He believes you're born a scientist!'

Access to grace energise the charismatic, and he or she thereby acts as a conduit to those, the disciples, who have not been so singled out. Something which takes the form, so to speak, of a kind of communion. And, as is clear, this is also the enactment of a distinctive form of organisation. For organisation is, precisely, a matter of leadership and discipleship. The resulting structure is flat or fluid, and in the first instance most of what passes for organisation in (for instance) administration or enterprise is unimportant, if not an impediment, to the pursuit of vision. And indeed Giovanni had the reputation at Daresbury of indifference to organisational structure or routines, the chains of command of bureaucracy. Which sometimes, if the stories were to be believed, played havoc with these alternative modes of ordering as he turned up and (to put it sceptically) 'interfered' with matters to do with the Second Wiggler on the shop floor.

Producing and Performing Organisation

In the last section we extended our performative concern with heterogeneity from materials to discourses. We suggested that (the management of) Daresbury laboratory might be understood in terms of (at least) four ordering modes: administration, enterprise, vocation and vision. Now we want to suggest that organisational ordering may be understood as the intersecting performance of multiple discourses or logics. And we want, and here we follow Annemarie Mol, to suggest that those intersections are complex – sometimes leading to the performance of contradictions, but also, and just as often, leading to combinations, and to complex inclusions25.

- Contradictions: It is easy to set such intersections up in a way that renders them incompatible with one another. Indeed, their collisions are a rich source of organisational politics, humour and irritation. For instance, at Daresbury there were at least two versions of the history of the Laboratory in circulation, histories which responded to current problems with limited funding. One – entrepreneurial or possibly visionary in character – said of the recent past (we are talking of the period 1980-1988) that it was a period stifled by bureaucratic inertia and an excessive commitment to perfecting the (necessarily large scale) synchrotron source needed for experimental research. A second (reflecting a more administrative turn of mind) insisted that there is an incremental logic to science and engineering, and that events during those years – perfecting the engineering and adding new experimental stations – simply reflected the unfolding of that logic. The second history went on to add that a change of management in 1988 – the arrival of what were sometimes deprecatingly called 'cowboys' – meant that important values, perhaps in particular to do with administration and due process, were being wrongly forced to take a back seat. By contrast, the first version of the history saw this 'cowboy revolution' as a necessary antidote to the unimaginative routines of bureaucracy that had been stifling initiative during much of the decade.

Contradictions turned up endlessly in other contexts. Here is another clash being acted out at a committee meeting, between administration and vocation on one hand, and the pragmatisms of enterprise on the other:

Stuart: 'The politics dictates which way we will go. The science case has to fit this. And that has meant delay because Andrew thought the case would fall.'

Keith: 'Do you consider that to be good management?'

Stuart: 'What, ignoring the time scale, the terms of reference, of the original … study?'

Keith: 'Is that management?'

Stuart: [Reluctantly?] 'No'.26

And we have cited a number of similar cases above: Giovanni's (visionary?) indifference to the organisational forms of administration and enterprise. His apparent (again visionary?) indifference to the (vocational) training of the young. Then there was the contrast in the exchange about the PhD student between vocation and a logic that may have more to do with

administration. And finally, there was the apparent collision between due process (administration) and enterprise ('What use are they?') in the first example about the archives.

- Combinations: though it is tempting to talk up the contradictions between the ordering modes, in practice their relations often combine together without difficulty. For instance, if we look again at the conversation about the archives, then the final and performative statement of policy by Andrew represents an artful combination of administrative and entrepreneurial orderings: he is responding to legal need, but at the same time to the pragmatisms of enterprise which respond to legal concerns but do not allow these to define the world in toto. And such strategies of combination were found everywhere.

For instance, to take a materially quite different example, the machinery and the instrumentation at Daresbury – such as the Synchrotron Radiation Source – produced intense, indeed lethal, magnetic fields and ionising radiation. In practice this meant that their design and operation needed to reflect not only the vocational logics of engineering or scientific puzzle-solving which were their original rationale, but also legal and administrative concerns with the due processes attached to health and safety. Sometimes this indeed led to collision. For instance, one of the earliest experimental stations was designed in a way which meant that safety depended on human beings correctly following protocols under certain circumstances, instead of mechanical arrangements which automatically cut off radiation in the event of danger27. But most of the time the machines reflected both logics. There was an apparatus of mechanical and electrical interlocking which meant that the power supply to dangerous pieces of equipment was automatically cut off if doors leading to them were opened. And such safety arrangements were built into the design of the machines. And – to extend the point – the design of machines might also reflect commercial logics and needs, while simultaneously embodying vocational and administrative performances. Thus, in a climate of scarce resources, some experimental lines were being developed – with partial funding from such private sources as ICI – because they were relevant to commercially driven research work at such companies. Complaints, then, that 'enterprise' or 'commerce' undermined vocational science, though sometimes no doubt appropriate, represent only one possibility.

- Inclusion: our third point is closely related to the second. It is to note that in practice modes of ordering often enough include one another. And indeed, that inclusion, even mutual inclusion, is a predominant theme. For instance, the management meeting is an organisational arrangement which, like all such formal meetings, is in the first instance a performance of administration. But, as the discussion about the archives shows, it is a framework which includes and indeed facilitates talk from quite other ordering modes. It may be that Andrew's conclusion – to put the archives in order but only in the future – does not fully reflect an administrative concern with due process. But it is also dependent upon administration. And a similar point can be made about the management accounting system. This, as we briefly mentioned earlier, was grafted onto an existing book-keeping system which reflected the administrative concerns of accountancy to ensure the proper and legal handling of payments and receipts. Accordingly, the system of accounting is both (like the scientific machines) a combination of two logics and the inclusion of an administrative structure within one performing enterprise.

We are arguing, then, that organising may here be understood as the simultaneous performance of at least four differing ordering modes – and the intersection of those modes in a continuing process of mutual support, combination, contradiction, and inclusion. Insofar as we have a picture of organisation, it is as a continuing performance in which there is no dominant logic, no single plan, but instead a continual process of slippage or deferral28. One way of putting this, is to point to the productivity of slippage and displacement. Look, again, at the debate about the archives. This works as a conversation – and ultimately as a decision-making location – precisely because it does not get stuck in the logic of one discursive mode. If the meeting – or any individual in it – insisted on pressing a single ordering mode, then the conversation would get stuck, or at least become mono-discursive. As it is, it is the flexibility of ordering deployments which prevents what one might think of as blockage. There is, for instance, no good way of thinking 'entrepreneurial' thoughts within the hermetic orderings of administration – but the converse is no doubt true as well. So to the extent that the

organisation is not caught within a single ordering mode, its processes necessarily depend on such productive slippage29.

Producing and Performing Subjectivities

So far, we have attended to the multiple logics of ordering and some of the ways in which they intersect to produce organisation. Implicit, and frequently also explicit, in what we have been saying there is a theory of subjectivity or the person. We have identified, for instance, a logic of administration and cited several examples where this found expression in the words of senior managers. Tim, as we have noted, was concerned with due process in the case of the archives. In the example cited immediately above, Keith was upset by the fact that a previously agreed plan had been ditched. Subjectivities, we have been saying, contribute to – and indeed derive from – the logics of organisation. This is consistent with our earlier emphasis on material heterogeneity: what we have said about action or organisation applies just as much to persons. In this section, we explore the question of subjectivities more directly.

Let us start by insisting that we are not offering a theory of personality or managerial types. It is tempting to say that some people are 'really' administrators, or charismatics or entrepreneurs. No doubt, this is sometimes a useful shorthand. Some managers indeed tended to play (for instance) entrepreneurial or administrative roles more often than others. Giovanni was, as we have seen, commonly enacted as a charismatic or visionary. However, this is not the main point of our analysis. Indeed, it is to misunderstand what we are trying to say, which is precisely that there is constant interference and overlap between different ordering modes – and it is this overlap that is the basis of organisation. And, we want to add, the person too. We are saying, in other words, that the person – and his or her materially heterogeneous environment – is the performance of a shifting assemblage of differing ordering principles and subjectivities. That competence may be understood as the capacity to shift between different appropriate ordering modes.30 And that managerial competence may be understood as the capacity to shift between a series of gendered subjectivities and ordering modes.

It is often argued that managerialism – indeed wage-labour – is characteristically masculine in many of its most important attributes: that it tends to imply or presuppose masculine or male subject-positions, and male 'freedoms'. Like freedom from domestic responsibilities. The argument, then, is that wage labour is not, as it seeks to present itself, a neutral exchange, but rests upon a (hetero)sexual contract. That work as it was historically constituted in modern capitalist society presupposed and at the same time helped to produce (an often ignored) gendered and hierarchical division of labour between public and private, and between masculine and feminine functions, roles and subjectivities. It is further argued that in this hierarchy everything defined as feminine or female was (and is) devalued. That masculinities were (and are) hierarchically up-valued, but at the same time found (and find) themselves under threat from 'the feminine' – which also, in certain versions, became seen as the repository of certain dangerous but appealing romantic values31.

In what follows we assume this to be the case. Our interest, then, is more specific. It is in how this works in an organisation with multiple subjectivities – and, as we will now suggest, multiple forms of masculine subjectivities.

That enterprise is masculinist in many of its performances is clear. For instance, a recurrent trope which cropped up in conversation between managers at Daresbury was the phrase 'crying on my shoulder'.

'Why', a manager, perhaps Andrew, would ask, 'are you crying on my shoulder?' Or

He came to cry on my shoulder'.

Though it might be mild, the term was almost always used as some kind of put-down. The implication was that it didn't do to cry on someone's shoulder. Not on a manager's shoulder. And not if you were a manager. So what did the phrase mean? The answer is that 'crying on someone's shoulder' was not appropriate within enterprise for several reasons:

- First, it was a substitute for action. It was a way of avoiding the need to go out and tackle the problem at hand. It was, in other words, a form of passivity foreign to the need and desire for agency performed within enterprise with its requirements for activity.
- Second and in a related manner, it was about unwillingness to take 'managerial' responsibility. Enterprise, it will be recalled, is a mode of ordering in which people are, precisely, made responsible for the success (or otherwise) of their actions. As the cliché puts it (a cliché that was sometimes to be heard at Daresbury) 'every problem is an opportunity'. To cry on someone's shoulder was to turn opportunities back into problems: to abrogate proper and competent responsibility.
- Third, and again in a related way, 'to cry on someone's shoulder' was to index an unacceptable pessimism. If every problem is indeed an opportunity, this is because it is possible to think optimistically about circumstances, and so to discover some way in the circumstances of mustering and combining resources in order to achieve success.
- Fourth (another overlapping trope) it performed an inappropriate lack of autonomy, emotional and pragmatic. Proper managers in the entrepreneurial mode are, by contrast, self-sufficient. Emotions which suggest personal (as opposed to instrumental) need, are inconsistent with this self-sufficiency. It is not exactly that the entrepreneurial subject is always bounded: as we have seen with the story about the spreadsheet, and Michel Callon superbly explores in his analysis of the role of writing in management32, he or she is happy to incorporate a ramifying and heterogeneous network of elements. But emotional weakness, dependence, this is not acceptable. It belongs somewhere else – to the private sphere, and/or to the feminine. Which is not, to be sure, consistent with enterprise.
- Fifth (a further overlap) tender or submissive physicalities are inappropriate. We are not, of course, suggesting that enterprise does not co-habit with various forms of erotics (including, in particular, heterosexual and often dominatory sexualities). But the more tender forms of bodily expression and especially bodily submission – these are simply inappropriate for autonomous, optimistic and active subjects. Hence the cruel, domestically-derived irony of the phrase 'crying on my shoulder'.

If enterprise avoids the performance of tenderness, lack of autonomy, passivity and pessimism, this does not mean that emotions are necessarily avoided. On the contrary, enterprise works within an erotics of arousal. Not necessarily sexual arousal, but an embodied sense of intensity in which there are challenges to meet, and that those challenges can only be met if the adrenaline is running.33 If one arrives at work early, leaves late, and if one can express and perform tough emotions. So there are emotions, but they don't have to do with tenderness. Sometime praise. Sometimes – not infrequently – irony. Sometimes, and indeed crucially, to do with homosociality. For instance, one of the reasons that Andrew was a successful boss of Daresbury was the level of his political skills – this was an intensely political post. Which involved daily or weekly trips to London, to Swindon, and to other politically important locations, to lobby other important players and to swap intelligence. These circles were not entirely male – but they were predominantly so. A knowledge of the better straight malt whiskies – and a general sense of ease in smoke-filled rooms – these were also crucial and masculine skills.34

And then there were issues to do with aggression, anger and domination. It was sometimes said that like former Soviet leader Mikhael Gorbachev, Andrew had a nice smile, but iron teeth. Preparing for an important visit to the laboratory by the then current Prime Minister Mrs. Margaret Thatcher, the final rehearsal of the visit involved, in parts, a display of anger at the supposed incompetence of some of those who were to speak to her. Later, when the (successful) visit was reviewed, he apologised:

'I'm sorry I made such a nuisance of myself. But it was absolutely important to get it right.'

Which of course, in the context of enterprise, was indeed the case.

Enterprise, then, as enacted by Andrew but also many of the other senior managers, embodied a range of straightforwardly masculine attributes: emotional self-sufficiency, the capacity to use emotions to dominate, the skills and perhaps the desires and the pleasures of

homosociality. And this embodiment then extended to much more explicit local gendering work. The secretarial arrangements in the laboratory were classic. Andrew had his own private office, staffed by several female secretaries. The women working in this office fed him with a constant supply of paperwork – and provided him with other forms of in-house domestic support including, for instance, tea and coffee making.

We're arguing that enterprise is very much about masculinity, and a form of masculinity that denies, excludes, dislocates – but is also dependent on and benefits from – that which is defined as feminine. It enacts a distinction between the 'private' or the domestic on the one hand, and the 'public' or the world of ('real', 'serious') work on the other, which renders the first largely invisible. These are managers who, as the old phrase puts it, are married to the job. But there is an additional way in which enterprise performs gendering which is less about embodiment than the denial of embodiment. This is its performance of rationality – or rational managerial decision-making. As we have tried to show above, enterprise is about analytical, means/ends methods of problem-solving. It is about creating, abstracting and collating information – about 'drawing things together' in a way that subordinates them to means-ends schemata35. Which is only possible if there is a division between form and content. In circumstances when 'all that is solid melts into air.'

We have just noted that the masculinities of enterprise exclude, dislocate, but are also dependent upon, that which can be defined as feminine. But they also exclude, dislocate and depend upon other (managerial) masculinities – those implied in administration, vocation and vision. If we start with the observation that we made above – that in certain respect enterprise implies the performance of some rather 'macho' forms of masculinity – then this poses problems, or at least tensions, for male subjects caught up in the performance of these alternative orderings. At least if, as was to some extent the case in Daresbury at the time, enterprise also had pretensions to hegemony.36

To take a simple example; it can easily, and no doubt correctly, be argued that administration embodies important features of masculinity. For instance, the denial of emotions, the cultivation of a studied and technical neutrality regardless of personal feelings, the severing of ties between social or family context and the conduct of office, the ordering of work in a rational manner in accordance with norms of legality and due process, the enactment of the perfectly controlled demeanour amounting like *homo clausus* to the denial of the body, and the common provision of female secretarial support, all of these reflect and produce important features of masculinity. To that extent, then, administration represents the further enactment of masculinities that combine in a satisfactory manner with those of enterprise.

However, just as administration with its 'civil servants' were sometimes said to lie at the origins of the problems of the laboratory, so administrative enactments of masculinity might pose problems for those most committed to this role. The conduct of one particular manager, for instance, was sometimes seen as problematic.

'I worry about Keith', said one of his colleagues.

'So do I', said another.

So what was happening here? The answer is that Keith was, we think, being seen as a ritualist, someone too much going through the administrative motions. Insufficiently proactive, unwilling to take the initiative, treating his work as a technical task to be well done, Keith was experiencing what we might think of as 'problems of organisational masculinity'. 'He is a bit of an old woman', they said. Meaning that he showed little capacity to take an overview, concentrate on and drive what was most important, and tended instead to get bogged down in 'detail'. All as seen, of course, through the spectacles of enterprise.

This anecdote illustrates the way in which modes of ordering and masculine subjectivities were dominated and in some measure defined by those of enterprise (and suggests, too, that the perfect masculine Prussian subject in 1890 is not necessarily the masculine managerial subject in 1990!) But the traffic was not all one way. For instance, on one occasion Giovanni read throughout a whole project meeting. He played no part in the proceedings, contributed nothing, and was, or so it seemed, visibly seeking to perform distance from its conduct and its subject matter. Nothing was said during the meeting itself. However, during the tea immediately after the meeting he started passing round photographs from a new experiment.

So it was only at this point that it became clear what he'd been doing throughout – which was correcting the proofs of an article that had just arrived. Andrew who'd been chairing the meeting joked:

'Huh! Now I know what you were doing during the meeting! Remind me to be reading the proofs of one of my articles the next time you come to cry on my shoulder about the size of your budget.'37

What do we make of this? Note the routine performance of enterprise by Andrew – they ironically talk about 'crying on my shoulder'. No sympathy to be expected. But, just as important – or this is the way we read it – is Giovanni's performance of commitment and indifference. Indifference to the 'trivia' implied in the administration and its concern with due process, its meetings, its minutes, its reports to the chairman. Indifference, again, to enterprise with its means and its ends, its strategies, and its self-important goals. All this in the performance of a commitment, to vocation. So what is the form of that commitment?

Our tentative answer: the embodiment of arousal, passion for, perhaps duty to, the processes of science, of the process of puzzle-solving. For there are certain ways in which vocation is not a particularly visible or aggressive form of masculinity compared with that of enterprise. It is not primarily about command. Neither is it necessarily about aggression or personal boundedness. For the process of puzzle-solving is a matter of detail, of embodied techniques, of craft, of interaction with complex and often obdurate materials38. Furthermore (and this seems to us to be particularly important), unlike enterprise it is not a form of masculinity that necessarily leads to or requires large-scale delegation. Indeed, crucially, Giovanni's proof-reading may be read, among other things, as a refusal to delegate, perhaps a performance of its impossibility. The skills – and the ethics – of vocation are embedded, embodied in the person. Others, unless they are properly trained, simply cannot do the work. It is there in the eyes, the finger-tips, the habits of the well-trained vocational body39.

All of which is, also, a form of masculine subjectivity. One which displays an indifference to time. One which, eschewing delegation, poses stresses and strains on the (time available to the) person. Which, in turn, performs a feature of masculinity – and this time one more consistent with enterprise if not administration – that of being married to the job. The need to work long hours – at Daresbury, given the nature of the installation, this often meant nights and weekends – to be on call when science called. All of which is caught quite interestingly in the following scenario.

Giovanni and one of his senior team leaders Emma have been working a Sunday shift setting up and calibrating an experimental station. They have been working together for hours since quite early in the morning, sometimes chatting, sometimes absorbed in their own separate tasks, sometimes co-ordinating their actions in order to get the equipment up and running, sometimes getting each other cups of coffee from the vending machine. The time is seven o'clock. Giovanni is typing into a terminal like mad. He doesn't stop for a moment:

Emma: 'Well, I've got to go home now, or I won't have a marriage to go home to.'

Giovanni: 'That's alright!'

Emma: (jokingly) 'What's alright? That I've got to go home? Or that I won't have a marriage to go home to?!' (general laughter)

Married to the job? Or married to her husband? She's been married to her job – to her vocation – all day. Now it is time to think about being married to her husband, at least for a while. While Giovanni, who continues to type? He does, as it happens, have a home to go to, and even a partner. But for the time being – and indeed for the largest part of his life – he is married to the job. Informal snippets of conversation with the observer, indicative rather than definitive:

Giovanni: 'If I hang around at home, then my wife wants to know what's the matter with me.'

And how much sleep did he need?

Giovanni: 'I usually get by on a short night. And then suddenly, I find that I've crashed out and slept fourteen hours'

All of which could, to be sure, be an expression of enterprise. But is here, we suspect, more to do with the enactment of (one of the masculinities of) vocation.

Vocation as masculine? That is the argument we're making here. Though we need to enter the caution: it is not that masculinities or femininities necessarily map onto men or women, male or female bodies. And, in any case, vocation performs selves that are – at least if viewed from the point of view of enterprise – also less, perhaps even non-masculine in character. As we've seen, it doesn't necessarily require delegation. It is emotionally embodied in ways that – at least sometimes – have something other than to do with control. It is, in some sense, less masculine, more feminine, than enterprise. In danger of being feminised. No doubt it depends on specificities of craft. We're not implying that the local car body-shop is a likely candidate for feminisation of identity40. But in the context of science? It is more ambivalent, less clear cut. Though, of course, it can often be turned into a boy's game too. Another case from the same Sunday: At moments the data was flooding into the local computer. At that point, someone – in this case Giovanni – needed to type it into the terminal attached to the main frame. But the main frame was extremely slow, which meant that he had to stop if he was to see what he was typing. But in a virtuoso display, both of typing ability and of knowledge of the categories and boxes he would have to fill in when the main frame woke up, Giovanni just went on typing anyway. 'Impressive, isn't it!', said Emma to the observer. Giovanni merely grinned. Which was, surely, a display of nonchalant technical expertise akin to that of driving a powerful car very fast. The performance of a form of effortless technical masculinity41.

Three forms of masculine subjectivity. Interferences between them. One, vocation, perhaps less obviously or less unambivalently masculine than enterprise or administration (which however, as we have seen, is also in danger of being feminised). And what of vision? As we noted earlier, this enacts a particular kind of subjectivity: the person in touch with divinity, the power of grace. The charismatic is a conduit of truth and power. This is then, necessarily, an essentially corporeal role. There may be disciples, followers, but (as with vocation) there is much that cannot be delegated. This sense of inspiration implies arousal, corporeal energy, an eroticised touch, which is, at least here, masculine in many of its resonances. It implies flow. It is the other to that which can be managed or planned. Which means that while it is a form of intensity which (at least in management) is characteristically male in the almost erotic character of its enactment, at the same time, its relations with other forms of masculinities are uncertain and difficult. It is at one and the same time too passionate and too positive for enterprise. But if it fits ill with enterprise, then it is in important respects even more antithetical to administration with the denial and displacement of erotics by the latter, and its cultivation of studied neutrality.

Conclusion: Overlaps and Interferences

We've drawn out a number of different managerial subjectivities – and masculinities. We've argued that being a manager, at least at Daresbury Laboratory (but we believe that the argument works, no doubt with variations, elsewhere) involved the performance of those different subjectivities – and the ability to move between them.

So there are multiple masculinities – and the relation between these masculinities is complex. Look, then, at this. Attending another meeting Giovanni again said little – and this time spent the greater part of the meeting staring out of the window. Was this an enactment of the indifference of vision to organisational matters, another version of reading his proofs during a meeting? The observer read it that way, and during a break commented:

The observer: 'You look pretty bored, having to listen to all this.'

Giovanni: 'No. You are quite wrong. I look bored whenever there is something really important being discussed, something vital to the future of the Lab. It is a ploy. That way I don't give anything away. But I am listening to every word like a hawk.'[42]

Perhaps Giovanni was enacting vision here, or possibly a vocational commitment to science, in a performance of antipathy to the processes of administration or the politics or enterprise. But then again, perhaps he was using vocation and vision as a blind for the conduct of an entrepreneurial strategy?

Whatever is going on here, it illustrates the way in which management is an art, or a practice, which involves slipping between different subject-positions. And with this, the art of performing a series of different and partially connected masculinities. We've argued that those masculinities in some measure complement one another. But also imply tensions. Some of these are very real for the managers themselves. Giovanni – but he was not alone in this – practised his science after six o'clock in the evenings or during the weekends. Preserving a space for the pleasures and subjectivities implied in a deep commitment to vocation is a struggle – and a struggle that many find it difficult to sustain, year in, year out. Enterprise subjectivities with their constant and urgent strategic demands tend to occupy the available space.

We are saying, then, that just as managing itself, or organising, is a process filled with tensions rather than a state or a solution, so masculinities are not a stable whole, a fixed point, but a continual and incomplete process, indeed as a set of deferrals. Which is not to say that there are not hegemonic masculinities. Within the world of the organisation, at least for certain purposes, enterprise with its rational, analytical, sometimes aggressive concern with means and ends, its desire for success, this in some measure dominates and poses problems for the alternative masculinities embodied in the other modes of ordering.

Masculinities, then, are processes filled with tensions, interferences, and overlaps. If we attend to this insight then an important question poses itself. It is whether, in their different versions, they tend to undermine one another, or whether, somehow or other, they are better seen as complementing and sustaining one another. No doubt this is largely an empirical question. And it will depend on circumstances. There isn't much doubt that administrative masculinity is under threat as a masculinity given the hegemony of enterprise. But our general sense – indeed our general argument – is that they work on balance to sustain one another, and so to reproduce important, if not entirely coherent, divisions between public and private, masculinity and femininity, and male and female subjectivities and persons.

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Footnotes

[1] See Ingunn Moser and John Law (1999b).

[2] There are many metaphors for organisation. See Gareth Morgan (1986).

[3] See, for instance, Cynthia Cockburn (1983, 1985, 1990, 1993) , Rosabeth Moss Kanter (1993), Judy Wajcman (1991, 1998) , S. Gherardi (1995) , Rosemary Pringle (1998) , David Collinson (1986, 1996), Jeff Hearn et al (1987, 1989) , David Knights and Hugh Wilmott (1986) , and Michael Savage and Anne Witz (1992).

[4] Daresbury is large scientific facility run by the Scientific and Engineering Research Council which was then the major UK funding body for supporting academic research in chemistry.

[5] One of us has described the character of the room and aspects of those meetings elsewhere. The study on which this paper draws, which took place in 1990, is reported more fully in John Law (1994) .

[6] For the term developed see Madeleine Akrich (1992).

[7] See, for instance, Judith Butler (1990), Donna Haraway (1997), John Law (1994) and Annemarie Mol (1999a).

[8] This conversation was reported in John Law (1991), and we are grateful to The Sociological Review for permission to reprint it here.

[9] For Erving Goffman's dramaturgical approach see, inter alia, Goffman (1986, 1971).

[10] See J.L. Austin (1965).

[11] In conformity with that laboratory vernacular we will use the gendered term in what follows.

[12] See Michel Callon (1986), and many of the papers collected in John Law and John Hassard (1999) including especially Michel Callon (1999) , Anni Dugdale (1999) , Émilie Gomart and Antoine Hennion (1999) and Annemarie Mol (1999). The performative approach is also developed by feminists – see Donna Haraway (1997) and Judith Butler (1993), and in Foucault-influenced writing on governmentality by such authors as Michael Power (1991, 1994) , Andrew Barry (1996, 1997, 1999) and Peter Miller and Nikolaus Rose (1990).

[13] Though not, in fact, one without its drawbacks. First, most people, at least in Euro-American societies, embody prostheses of one kind or another, from the mundane to the dramatic. Second, the extent to which 'the body' as a single object is constituted in performance is uncertain. For arguments about the multiplicity of bodies (or body performances) see Annemarie Mol (1999a, 1999c) and Annemarie Mol and John Law (1999).

[14] These different metaphors are all drawn from post-structuralist philosophy, STS and/or feminist theorising. The cyborg is a notion developed by Donna Haraway in her celebrated paper, 'A Cyborg Manifesto ..' (1991) , and further considered by Marilyn Strathern in her (1991). The idea of material heterogeneity has been developed in actor-network theory (Law 1987); the concept of assemblage comes from Gilles Deleuze and Félix Guattari (1998); the term hybrid collectif is to be found in Michel Callon and John Law (1995), and is further developed in Michel Callon and Vololona Rabeharisoa (1998). These different figures and metaphors are further explored for their potential to make a difference to how we conceive of what it takes and means to be a subject, a person, and 'the human' in Ingunn Moser (1999a, 1999b). For consideration of the way in which agency is not easily locatable at any particular site see the exemplary study of connoisseurship developed by Émilie Gomart and Antoine Hennion (1999).

[15] We use the term 'logic' to index a coherent set of discursive moves, and not to signify any link in formal philosophers' logic. The phrase 'mode of ordering' is the term used by one of the present authors in his book Organizing Modernity. See Law (1994).

[16] As it happens he was wrong about these – as he later told John Law.

[17] See Max Weber (1978).

[18] Though see Heelas and Morris (1992), and Michel Callon's recent edited collection, The Laws of the Markets (1998), together with the exemplary paper about the cultivation of economic rationalism by Marie-France Garcia (1986).

[19] This, then, is an argument about material heterogeneity of the kind we have already made above. These two interlocking systems of accounting, respectively performed an entrepreneurial and administrative mode of ordering.

[20] In this respect it is like the logic of administration. With, however, this crucial difference: a part of the logic of enterprise tends to insist, in a very gendered manner, that some people "have it" whereas others do not. (Gendered because women are not "naturally" thought to "have it": and if they do, this is all the more noteworthy – but also erodes their femininity. They are "not really" women. See Judy Wajcman (1998) , p.108ff. Whereas administration, or so we sense it, imagines its subjectivities to be much more widely distributed, at least in principle. But in the man's world of enterprise, only a few have the potential to rise right to the top in the ruthless and rapidly changing world of challenge, opportunity, and risk.

[21] Features of this have been widely noted in Foucauldian work on accountability and governmentality. See, for instance, Peter Miller and Nikolaus Rose (1990).

[22] See Thomas Kuhn (1970).

[23] This is quoted from page 81 of John Law (1994).

[24] See Max Weber (1978).

[25] See the studies in medicine of Annemarie Mol, including her (998, 1999a, 1999b, 1999c; and Berg 1994).

[26] This is quoted from page 74 of John Law (1994).

[27] Health and safety arrangements were embodied, in general, in a combination of administrative due process and in the design of the machines themselves. However, wherever possible, the preference was for purely mechanical arrangements which were thought to be more fail-safe than the performances of people. Thus areas with dangerous radiation or magnetic fields were physically barred to people. Anyone seeking to enter such an area was bound to open a door – but the opening of the door triggered a switch which automatically cut off power. In the section criticised by the health and safety officers such automatic cut-outs did not apply under certain unusual circumstances. Under such conditions safety was entirely dependent on accurate following of the rule book.

[28] Here we restrict our analysis to the case of Daresbury Laboratory. However, in general, we take it that organising, subjectivities, and objectivities may all be treated in similar terms: as processes which produce and arise out of partially connected and endlessly deferred ordering schemes or logics.

[29] There are various points to be made here.

The first is to note that the trope ‘flexibility’ is reminiscent of those approaches to technoscience analysis influenced by interpretive sociology. This is not necessarily a problem – it is a matter of metaphysical commitment – but we would simply note, by contrast, that there is scope for understanding this flexibility in terms of the determinate spaces available within a given organisational and subjective ordering, permitting entry from and (in particular) exit to alternative orderings. It seems that there is, for instance, subordinate room for legal reasoning within entrepreneurial subjectivities. This is because successful enterprise knows that flouting the law is risky, even in its own terms. The suggestion, then, is that administration is <u>included</u> in entrepreneurial subjectivities at least some of the time. And doubtless analogous arguments may be made about other possible slippages and inclusions.

The second is to observe that there is a kind of hubris attached to any ordering mode which imagines that it can, indeed, successfully perform itself into being in a manner that orders all relevant aspects of reality. In practice (or so we firmly suggest) it is not like this. Thus displacement is not simply a matter of facilitating conversation. It also has to do with eliding and deferring the limits of any given ordering arrangement. Any given ordering is, in other words, dependent upon slippage into an Other ordering. To this extent, then, our choice of the term ‘deferral’ is deliberately intended to index the work of Jacques Derrida on différance. See (1978) .

[30] This is a partial explanation of the common observation that certain actors are hoist by the petard of their own inexorable logic – and are hence no longer worthwhile taking seriously. It is clear that deviation from acceptability comes in a variety of shapes and sizes. However, persistent monologic is one of these.

[31] See Cockburn (1991) , Kanter (1993), Pateman (1988) and Wajcman (1998).

[32] See Callon (1999).

[33] For a similar argument, see M. Roper (1994).

[34] For discussion of the importance of homosociality and a review of the literature see Wajcman (1998) , p.125f, and also M. Roper (1994).

[35] We draw the phrase from Bruno Latour. See his (1990).

[36] The study was undertaken towards the end of Mrs. Margaret Thatcher’s radical right-wing administration with its discursive – and to a fair extent performed – commitment to the values of the market. Though the reach of the ‘discipline of the market’ was limited in organisations

such as Daresbury, it was required to try to raise private sector income, and in various ways – some detailed above – was required to account for itself in entrepreneurial terms. Other ordering modes were, in some measure, on the defensive in the logic of enterprise. Hence our choice of the term 'hegemony'

37 Cited on page 69 of Law (1994).

38 See, for instance, Vinciane Despret (1998).

39 We are not, of course, suggesting that delegation is impossible within the craft-work and organisation of science. Quite the contrary – as the numerous multi-authorised papers, not to mention the invisible armies of technicians, students, PhDs, assistants and all the rest witness . The point, rather, is that it is possible to insist on the personally embodied character of vocation – and that personal embodiment of skills is performable within its subjectivities.

[40] See the important work on women and cars by Georgine Clarsen.

41 Interestingly, this task could have been delegated to technical devices. But Giovanni, who could have ordered this, refused on the grounds that experimental scientists needed to get a good sense of their data informally, if they were to maximise the chance of finding serious errors – errors that meant the data were nonsense. Refusal to delegate away from the body. More vocation.

42 Cited on page 68 of Law (1994).

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