



The imagined user in projects: Articulating competing discourses of space and knowledge work*

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abstract

This paper articulates the role of the imagined user in the design choices of a higher education client with respect to a project to provide new workspaces for one of its divisions. The case study centres on the disagreements that occurred between different factions within the client organisation regarding the type of office space that was appropriate for its workforce. The paper examines the ways in which competing images of academic knowledge work and knowledge workers were conjured up in differently imagined users and deployed as persuasive user-stories in the design process. The analysis of the case uses the narratives of key project actors to identify the underlying discourses that were articulated to support particular imaginings of the user. The case shows how the successful deployment of discourses was tied up with the power wielded by particular actors at different times during the project. The paper suggests that the articulation of an imagined user implies that project actualities may be presumed as well as real and that discourse analysis provides a useful mechanism for understanding these imagined actualities.

Introduction

This paper focuses on the role of the imagined user in the design choices of a higher education (HE) client with respect to a project to provide new workspaces for one of its divisions. Although open-plan has come to be regarded as the dominant solution for the provision of office space (Edenius and Yakhlef, 2007) at the level of the project and individual organisation, the issue of workspace design remains as contentious as ever – there is no consensus as to the sort of workspaces that best suit knowledge workers and knowledge work. The conduit for this conflict into the design process is provided, we suggest, by the imagined user. The imagined user reflects and expresses discourses that construct the knowledge worker and knowledge work in particular ways within the design process and in so doing shapes design choices.

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The paper uses a case study of a specific project in an academic setting to examine the way in which competing images of academic knowledge work and knowledge workers were conjured up in differently imagined users and deployed as persuasive user-stories in the design process. In so doing, we seek to contribute to an emerging body of theory on the design process as a social, interactive and discursive practice (Bucciarelli, 1988; Lloyd and Deasley, 1998; Lloyd, 2000; McDonnell et al., 2004 and Mathews, 2006) and bring a critical perspective to studies of the user in the innovation process and in projects.

The paper builds a case for the role of the imagined user as a rhetorical device in the expression and enactment of discourses within projects. Our position stems from observations that, despite the rise and rise of user-centred and participative design, the user is most notable for his or her physical absence from the design process and that interaction with users is not one of simple knowledge-transfer, but one in which knowledge about users is constructed both with and *without* input from users. The creation and referencing of 'imagined users' is part of a persuasive process (cf. Suchman, 2000) – imagined users are simplified caricatures that conveniently fit (or do not fit) the sorts of design solutions (in this case particular configurations of space) under discussion. This suggests the need to go beyond knowledge-transfer accounts of the role of the user in the design and project process and to acknowledge the social construction of imagined users in project interactions.

The user

Users figure prominently in the design and innovation literature. Users are viewed as a key force in innovation and successful design (von Hippel, 1976, 1988; 2005; Woolgar, 1992). User involvement is considered key to project success, particularly where success is linked to improved organisational performance (Duffy, 1992; Mathiassen and Puroo; 2002), subsequent user satisfaction (Ferguson et al., 1997), and for preventing design failures (Ivory, 2004).

Interest in user input as a corrective to poor design has led to a research focus on how best to expedite the interaction between users and designers; what might be termed a 'knowledge transfer' focus. This emphasises finding better ways of getting to know users' contexts and encouraging users to maximise their understanding of what is technically and financially possible. Mechanisms identified for doing this include: user groups, usability trials, user surveys, direct user observation and, latterly, various web-based forums. (See Woolgar, 1992; Gardiner and Rothwell, 1985; von Hippel, 1976, 1988, 2005 for discussions of user-producer forums.)

There are, however, two problems with the 'knowledge transfer' model of user-producer interactions. Firstly, there is no guarantee that those involved in the design process will actually view user input as useful or desirable. Indeed, there is plenty of evidence to suggest that designers and others habitually resist user input for a variety of political and professional reasons (Ivory, 2004; Woolgar, 1992; Suchman, 2000). This resistance may not be openly stated and there are many subtle means of managing the interaction with users to reduce its impact on design decisions (Ivory, 2004).

Secondly, there is a tendency in the knowledge transfer model to underestimate the complexity of generating and capturing useful user knowledge. Gaining useful knowledge about any aspect of the social world, including that of users, is difficult and time consuming (cf. Boland and Tenaski, 1995; Hislop, 2002). Knowledge is invariably socially mediated and negotiated (Weick and Roberts, 1993). Its precise meaning is also difficult to control as language is fluid and without fixed or unambiguous meaning (Boland and Tenaski, 1995). Moreover, knowledge is imbued with the values and assumptions of those who produce it (Brown and Duguid, 1998) and is interpreted in accordance with the values and assumptions of those who receive it (Baumard, 1999; Bolisani and Scarso, 2000). In other words, the knowledge emerging from the interaction between users and designers/managers is a product of that interaction and does not necessarily reflect 'user wishes' in any objective sense.

In the absence of reliable and accessible knowledge of user needs, and given the tendency of designers and managers to protect their own autonomy in decision making by excluding users, it is unsurprising that our own observations find designers and managers constructing 'imagined users' to fill, and take advantage of, the gap left by their absence.

Imagined users

The imagined user is a discursive construct, depending for its existence on the dialogue of those involved in the design process. Imagined users are conjured up in the form of vignettes and anecdotes based on personal and second-hand experience, assumptions and more or less reliable research data. The key role of the imagined user in design dialogue is to give substance and rhetorical force to competing discourses relevant to the design issues in question. Creating and drawing on imagined users effectively translates broader discourses into persuasive context-specific accounts of users and use. The design process is not just an exercise in trying to 'get it right'; it is a forum for the expression of potentially conflicting cultural, economic, political, ideological and professional preferences (McDonnell et al., 2004).

In the light of criticism of the vagueness in the definition of discourse (Alvesson and Kärreman, 2000) in much discourse analysis, we are careful to spell out our position here with respect to the relationship between discourse and imagined users. Alvesson and Kärreman talk about discourses ranging from micro and meso to grand and mega discourses. Generally speaking, grand and mega discourses are long-term articulations of ideas, expressed through multiple outlets, with potentially strong determining effects on behaviour, institutions and organisations (see, for example, Glass (1997) on Nazism, Atkinson (1999) on Thatcherism, or Fairclough (2002) on globalisation). We reserve the term discourse for phenomena such as these, durable shared ideas that have the potential for shaping thinking, behaviour, organisation and institutions. We do not apply the term discourse to those articulations that are emergent, transient and with only localised or negligible effects (the micro and meso discourses described by Alvesson and Kärreman, 2000). In this formulation the imagined user is not a discourse in its own right, but a referent to, and an articulation of, a discourse. The distinction here is

between meaning (i.e. discourse) and its vehicle, the articulation of discourse, in this case in the form of an 'imagined user'.

Our view is informed by critical assumptions about the role of discourse in shaping subjects and constituting them in power relations (cf. Heracleous and Barrett; 2005, Philips and Hardy, 2002). In the context of projects, we view discourses as playing a vital constituting and stabilising role, but also as closely bound up in the exercise of power. Discourses enable progress, but also constrain it to particular trajectories. They do so by constraining and directing thinking; delimiting what is discussable and how it can be discussed (Doolin, 2002; Grant and Hardy, 2003; Atkinson, 1999). In the context of inchoate and complex realities, such as those often presented by design dilemmas, discourses create much needed, but very particular, 'road maps' (cf. Deuten and Rip, 2000). Discourses are actively evoked and promoted in order to produce *particular* desired effects (Hardy, 2004). Rhetorical strategies play a key role here (Mueller, et al., 2003), as do such factors as the receptivity to particular arguments of an audience and their particular take on the credibility of the speaker, but perhaps ultimately it is access to resources (physical or symbolic) that is key in determining who is heard loudest, clearest and most often (see, for example, Rhodes, 2000 and Fairclough, 2005.).

Re-thinking projects and projects research

The focus of our research is upon the early design and planning stages of the project. These are the occasions when customer requirements are translated into physical drawings, contractual agreements and ultimately agreed project plans. However, project studies tend to ignore these early phases. 'The project' is typically defined as starting once major requirements have been established. This is recognised, to some degree, by attempts to broaden the scope of mainstream project management to encompass project definition as well as implementation (Morris, 1998). As Lundin and Söderholm (1998) suggest, the narrow view of project management tends to 'black box' the context of the project and disregards, 'the phases before and after implementation' and the possible 'impacts' these may have on the project, e.g. with regard to the creation of momentum for the project (Lundin and Söderholm, 1998: 41- 46).

We respond to this critique by focusing on the interactions that occurred in the early planning and design phases of the project studied; the period when there was a commitment within the organisation to begin a capital project, but no firm or detailed decisions as to the precise form the project should take. While client requirements are not set in stone during this early phase (Koskela and Howell, 2002) it remains the case that the early planning stages are vital for giving the project its initial focus and trajectory.

Traditional views of projects and project management interpret outcomes as a result of a rationalistic application of appropriate tools and techniques predicated on notions of command and control. In particular, conventional perspectives view power as just another tool or technique that project managers need to master to achieve outcomes (Lovell, 1993), while power struggles relate to mastery of the resources required to do

this (Marshall, 2006). According to Magenau and Pinto (2004: 1033) ‘successful project managers understand the constructive uses of power’.

In common with a growing body of literature that questions the universality of this perspective (Hodgson, 2002; Hodgson and Cicmil, 2006; Thomas, 2006) and calls for a ‘rethinking’ of project management (Winter et al., 2006), we take a more critical stance by considering the outcomes of projects to reflect political processes and power struggles between stakeholders as much as the physical design decisions and actions of project managers. As Newcombe (1996) identifies in the context of construction, there is often a gap between the power granted by the contract and the power needed to bring things about. This suggests that the political manoeuvring of project managers and other project actors will be central in project actions. Adopting a Foucauldian position, Clegg et al. (2002: 319) suggest that under more liberal notions of governance ‘the personal projects and ambitions of individual actors become enmeshed with, and form alliances with, those of organisation authorities and dominant organisations’. In the early stages of major projects, this jostling for power and influence over project definition is, we surmise, likely to be a key determinant of design outcomes. In projects that involve changes to the design of the working environment, the user of that environment (the worker) has a strong vested interest in the design outcomes, but little authority and resource to influence outcomes in their favour.

Nevertheless, the creation of power vested in one set of project actors is likely to engender spaces and forms of resistance in others (Knights and Vurdubakis, 1994), particularly the user, when the proposed design solution threatens current arrangements. In academia, such projects need to be observed in the context of a wider trend towards what has been termed the new public management (Chandler et al., 2002) and the resultant phenomenon of academic resistance to it (Barry et al., 2001). This suggests a need to focus on the ‘lived experience’ of project actors (Cicmil et al., 2006) and to identify what happens in the ‘white spaces’ between the conventional objects of project management enquiry (Thomas and Buckle-Henning, 2007), in other words to investigate the ‘actuality of projects’ (Winter et al., 2006) as project actors struggle to assert their own preferences in shaping the emerging direction of the project.

Our approach to analysing the ‘lived experience’ of project actors will be to re-construct the imagined users and related discourses that have been articulated by them through the design process and to examine their roles in the light of uneven but shifting power relations.

The case study

The case study focuses upon conflict within a large University client over the choice between open plan and cellular office space that was to be provided for staff in a proposed new departmental building. It focuses on the discourses that were drawn on by the project actors as they sought to support particular space preferences. At the heart of the case for an open-plan solution lay a particular (though contestable) characterisation (through allusion to particular dominant social discourses) of how academic work (or more generally, knowledge work) is done.

The case study is constructed from five in-depth interviews with senior members of the organisation (labelled A-E in the text) conducted as part of a wider investigation of staff attitudes and opinions. Respondents were asked to comment on the key arguments surrounding the decisions at senior management level first to adopt open-plan and then later to modify it. We focus on the way in which the user was constructed in the arguments deployed by these actors.

Our analytical approach involved a close reading of the interview texts produced in order to identify and then group the competing themes and arguments made as they related to users. We then linked these themes and arguments (mainly in the form of short articulations about the nature of work and organisation) to broader social and organisational discourses about work and organisations. The analysis paid close attention to the project context, in relation to which individual accounts had been created (Philips and Hardy, 2002). This is by no means an objective process and readers must reach their own conclusions as to the validity of the analysis. In analysing our case study material we considered both the apparent discourses shaping the debate and the politicking that occurred as participants deployed their authority in support of their preferences.

The history of the project was long and convoluted, but centred around the perceived need to bring a split site department onto a single site, whilst improving the facilities for the teaching of its students. At an early stage, a key objective imposed by senior management of the University was for a substantial amount of open plan space to form the core of the design. Negative reaction and lobbying by user groups within the department led to an agreement for a limited number of cellular offices to be included, but nowhere near enough to guarantee each academic their own office.

The initial project proposal failed on planning grounds and the project was reconstituted through a proposal to lease commercial office space, with some re-configuration to suit educational use. This was attractive to senior management in that it enabled the project to be funded primarily out of fee revenue rather than appearing on the balance sheet as a capital expenditure.

The project sponsor drove the choice of a commercial lease and insisted on increasing the use of open plan space. He was supported by other members of the senior management team and the Estates department, which viewed the high cost of existing space as a major problem for the University. These actors had positive views of previous projects to create open plan working spaces, both for administrative functions and for research units. The case study project was the first to propose the same solution for a conventional teaching department.

The solution being pursued by the project sponsor was not universally supported amongst senior management and neither was their insistence on an open plan design. When they left the institution, just prior to the signing of contracts, the new project sponsor successfully sought additional funding to allow for an increase in the provision of cellular offices. The to-ing and fro-ing of the project process and the shifts in power within the project form the backdrop to our investigation of the discourses about academics as space users and knowledge workers.

The case for open plan

The supporting case for open plan articulated by the senior management team consisted of two major themes. One framed open plan as an essentially 'rational choice' for the organisation and the other constructed academic knowledge work in such a way as to create a high degree of fit with open plan.

The rational choice argument

This argument focused on the objective implications of cost and resource for the organisation. The case for support was linked to a more or less 'taken for granted' discourse about organisations that stresses the primacy of the needs of the organisation over the needs of its employees. Subscribing to this particular discourse has particular implications for how users are imagined in the design process:

The economic ones [benefits] are absolutely straightforward, you know, it's very, very clear and we've seen it with the new [] building where the cost of installing even some cellular offices, which is now what's going on, is considerable. It's adding £400,000 or £500,000 to the cost [of the new building]. (A)

... if you wanted to achieve the same sort of building with cellular offices the footprint would have to be 120 – 130% bigger and into that it becomes cost. If you are thinking of buying the building, we're talking 3 grand, 3.5 grand if you include all fees, per square metre; that's the build cost plus all fees, probably a bit higher than that. And so every extra square metre you either are paying extra for nothing or, you know, you could put more activity in a particular building from a purely economic perspective. (B)

It's about housing activity in a way that's optimum to the business while trying to aim for some efficiency of cost and space which makes your business competitive, because it obviously doesn't help you to waste money on space you don't actually need... (C)

The rational choice argument is presented as 'self evident' – making it a powerful and persuasive one. However, the 'rational choice' discourse also affects how users are positioned with respect to the decision making process and the project. This discourse frames the issue of space solely in organisational terms. In effect the organisation assumes a priority over, and becomes a proxy for, all users. Consequently, any need for further discussion about the user is negated – the user effectively disappears (is unimagined). Notice, for example, how the issue of providing appropriate space for the multitude of different staff in the organisation becomes one of 'housing activity'. Not only has a homogeneous set of users become reduced to the singular, but also their existence in the project is reduced to 'activity'. This is a classically 'modern' discourse in which the material and the social are treated as separate concerns.

The inevitability of change discourse

Another largely 'taken for granted' discourse characterising modern Western economies is the widespread acceptance of the inevitability of technological and organisational change. Hooking into this discourse provides a useful underpinning for promoters of any sort of change (organisational or technological) and a handy means by which to encourage the unquestioning acceptance of it:

Who makes non-open plan buildings anymore, apart from us? The market wants open-plan. It's flexible and cheap etc. etc. People generally accept it improves working practices. They wouldn't be doing it if it didn't make sense. (A)

The commercial world has been in open plan for 30 years, presumably they don't think it's dragging down their performance. Or why would they do it? (C)

If you were Boots [a national retailer] or something you'd just be interested in minimising the total footprint. (B)

The appeal here is both to the inevitability of progress and to another entrenched, but related, discourse in HE – the idea that it lags the private sector and needs to catch up. The project is presented in the same light as a private sector endeavour where the effect on the bottom line is the driving consideration. Users are again dealt with indirectly and by proxy, this time by drawing on the presumed successes of open plan for knowledge workers in other sectors. Any detailed consideration of the specific needs of users (i.e. the academics) is negated again.

Constructing the fit between users and space

Whilst discourses that focus on the organisation and/or that foreground the inevitability of change are perhaps the clearest means of dealing with users, users can also be articulated (imagined) in ways that fit preferred space solutions. The following extracts describe the personal observations of A and B of the positive impact of open plan environments on their own experience of work.

I could immediately see the advantages of this. You could talk to people and my PA was sitting next to me more or less. And for the first time I could see there was an incredibly efficient way of getting things done. You can see people, you can walk over, you can get access to people, you get a lot more communication. (A)

I found the social network within the office changed dramatically. ...In the [open plan] office you see whether people are there and go and have a conversation. So I found it pretty effective in a way. (B)

I recognised that you get spontaneous things going. Where normally if you want something to happen you have to say 'can the three of you get together and do something about this'? What I observed was that if something came up people would spontaneously get together. You could actually see it happening in front of your eyes. You can actually see the interactions happening. This made me aware that this can work in a really positive way. (A)

(A) and (B) are actually talking here about high level administrative work rather than academic work. The blurring of categories of work, the creation of a single homogeneous user, is typical of designers who do not wish to respond to input from real users (Woolgar, 1992). This homogenisation also allows users to be lumped into a single discourse about use and work without the dangers of making distinctions and, therefore, having to talk in detail about how various groups actually do work. This account conceives of work as what might be termed 'observable action' (e.g. spontaneous meetings, ongoing interactions, unplanned discussions) all of which, it is suggested, are facilitated by open plan spaces. This notion of work, as something inherently visible and observable, is a recurrent theme amongst supporters of open plan and its key effect in design discourses is to focus attention away from the sort of work

that does not involve interaction, talking or meeting others; that is activities such as thinking, planning, concentrating – the sort of work activity that is arguably *not* well supported by open plan spaces (cf. Banbury and Berry, 2005, for example).

The following extracts achieve the same ends (constructing users and their work in particular ways) but by describing academic work in terms of perceived problems. As Latour (1996), has noted, good engineers must also be good sociologists, to be successful they must blend social questions with technological solutions into a single discourse. In the context of planning activity, Throgmorton (1996) has referred to this as persuasive story telling. The problems proposed do not have to be real, merely plausible in the eyes of potential sponsors.

One of the big problems I think you have with academic communities is we are always are talking about silos, we are always talking about people not talking to each other enough, we are always talking about the way in which people don't interact and we find work-arounds for this all the time. We want to set up seminars, we have networks and we have groups and those all address the fact we sit in our cells and spend a lot of time at home actually. These are things that open plan working could really address. (A)

... 'cos the interesting issue is all around the whole discourse of what they come to work [for] and what they value around it; and they like their little office, but then they bemoan the fact they can't get any kind of social contact. (B)

These extracts reinforce the very particular claims for how work is done, focusing on interaction and the problem being a cellular solution. So again, open plan is a solution, but only to a very specific characterisation of the problems of academic work and in some minds the solution can be transferred from different work contexts, such as administration:

In what kind of milieu do you get academics working and cross-fertilising? OK the [administrative] office is not the best example, but it stops a lot of emails being sent. If you see someone is there you can walk across and you can have a conversation. (B)

The problem of real users

Input from imagined users, such as the ones constructed in the above accounts, is always welcome in rhetorical and persuasive accounts. Real users, however, can present thorny problems to the creators of such persuasive but partisan discourses. Real users may disagree, resist, seek to re-edit management discourses and articulate counter narratives alluding to counter discourses. It is important then, from the perspective of those bringing new projects into entrenched contexts, that they neutralise difficult 'real user' input where it does not support their case. The weakness of real users, as opposed to imagined ones, is that their intentionality can much more easily be accessed and alluded to by their detractors (imaginary actors are more slippery in this respect, they can be quickly re-imagined in order to deflect or side step criticism). Six reasons are brought forward:

1. The resistant user lacks self-knowledge

Most objections to open plan working centre around a lack of privacy (Sundstrom et al., 1980):

... noisy environment... actually anyone can adapt, and the mind does start tuning things out. (A);

'It's just getting used to a modern building really. (C);

in other words academics have grown used to out of date, inappropriate office space and need to adjust to the commercial realities of the 21st century.

At the end of the day you are up against people's natural visceral response to something, a response to 'the other'. (B);

resistance as a knee-jerk reaction against the unknown (Mokyr, 2002: 252).

2. The resistant users are simply wrong:

The argument then that people have is that either you can't do research or it wouldn't work in an academic department, because you need to see students. There's various things like that. First of all, I have done plenty of research here. The meeting I had before was with my RA. We just come in here [a private meeting room] and have our meetings. I have written more than one article sitting at an open plan desk. (A)

...why is it an academic doing research, you know, has to have a protected office space whereas [...] someone working at high level in Boots or a lawyer doesn't have an [office]? (B)

I am assured by people that have never done it, never tried it, that it can't be done. [said with some irritation] (A)

What causes the problem is actually a kind of mind set and a culture change; because if people don't want to do something they will find reasons why it can't work. That is the key issue. (A)

3. The resistant user is falsely claiming a special case:

One of the reasons people want cellular offices is because people want to do everything in their own office space. (C)

There are some interesting discourses around, you know, what is open plan, how do people actually use the current space they're in, and what is it about the academic job that really...is it that different from any other job? (B)

There is no difference doing research and concentrating on your other work. PAs need to be able to concentrate. I think there is a sense that, you know, oh we are so special to do our work we have to have total peace and quite in our own room, whereas PAs don't need that, administrators don't need that. (A);

and therefore, by implication, neither do academics even though the nature of the task might be considered radically different:

I think the greatest issue with most academics is not the space per se, it's actually what to do with their private libraries. I think... that is probably the biggest problem you face in any kind of open plan with academics is people's private libraries and they like having them on the shelves like: 'I like having access to my reference papers' and stuff like that and then you do begin to ask, well, how often do you use them or is it just nice to have – as a kind of comfort blanket around you? Looks impressive when you've got students coming in – this defines you as a proper academic or not... (B)

... and its not a coincidence that most organisations do this and cognate firms such as firms of lawyers where you get people making exactly the same arguments, they feel they need privacy, they feel they need a space to themselves and they've got to a certain [stops self] you know they do the same sort of things that we do. And yet they have gone open plan ... I hate to use the word common sense but frankly if it wasn't a productive way of doing it why would lawyers be doing it? And what is the real difference between what lawyers do and what we do? (A)

Noteworthy in this set of extracts is the recurring reference to other presumed similar workers for whom open plan has also been adopted, although, ultimately, the similarities are questionable and the mere fact of adoption in this other context is hardly a guarantee of appropriateness in either context.

4. Resistant users are themselves a barrier to success:

... if you look at what [two of the administrators] have created, you know they've used the filing systems to actually create semi-cellular offices. They have tall partitions and they place themselves right at the far end in terms of approachability and accessibility. And so people will subvert the open plan concept in order to maintain some sense of ...[what they had before]... You go in there without them [dividers] and you think what a marvellous space, but people subvert them, then they complain, but because it was left to them, their little decision about trying to maintain their own little world then permeates absolutely everything. And then they blame the space for creating the problem in the first place. (B)

We are a long way from a user-centric design paradigm here. The suggestion is that users themselves are the barriers to the success of open plan, indeed that they actively subvert it, subsequently blaming failure on the design, whereas if only they had gone along with the design as proposed the project would have worked.

5. Resistant users are self-interested (and immoral):

... that is real money that has to be earned out of our activities, has to come out of the student experience, has to come out of jobs. (A)

Why academics should have offices is because they are poorly paid and it's the only kind of prestige that an academic gets and it is linked to notions of prestige and status and hierarchy... It is another argument that is often deployed. (B)

Why should we be putting large amounts of resource that the university is earning –largely through its teaching, which therefore comes in via the students – why should that be going into creating an environment, which staff particularly want for reasons they might have but which is costing a vast amount of money? (A)

These extracts are in effect articulations that causally link up the consequences of bad and selfish user choices for the organisation and its stakeholders. The 'bad choices' narrative also links to discourse about the service 'obligations' of the organisation to create a moral position. Alternatively, objections are simply framed as a front for some other personal agenda:

Now I do find it interesting that the academics say it's not for us. What is it about the nature of academic work that says it's different? I'm willing to accept some of it that it's different, but you know, people start saying 'privacy, I have lots of confidential conversations with students', well, bollocks they do. They might have that for about 10% of the week, 5% of the week if they're lucky, but if you had a quiet room you'd negate that. The telephone thing is another one that I often hear. And I wonder if in terms of that discourse they substitute things like that for what they

really want, what the whole thing is really about, which is about their personal space and their library and the things they have round them. (B)

6. The cellular offices provided are not used anyway

I don't know if you have some technique for finding out the real secret reasons why people don't want to go into open plan. One of them might be that people will know if they are there or not. It would be very hard to get people to admit to that. You know what it's like, if you go round now, it's an ordinary working day, it happens to be in July, if you knock on doors you will not find people in most of the rooms. People actually do not use offices, that is the reality... I haven't got the research to prove it but I have got a strong instinct that if we went round and checked... (A)

... and I think it is quite interesting if you walked around and observed your colleagues' work patterns, most academic offices are not used for what, 70, 75% of the working week, I suspect. (B)

So the users' preferred solution, which in this case admittedly represents the status quo, is really just a front, because the assumption is the cellular space is not being used fully anyway.

The arguments against open plan

Dismissing the claims of pro-open plan supporters

Unlike pro-open plan supporters, its detractors did not have to attack the perceived users of the space, because users' preferences were well known to be predominantly for cellular offices. However, they did make efforts to undermine the evidence of those supporting it. This is of course pure politics. It was observed, for example, that much of the enthusiasm for open plan had been generated by a visit to the offices of the University's legal team.

They took the senior management team around their office. They were largely solicitors, professionals. You know, most solicitors are autonomous, do their own thing, they were raving about it, they had just moved into this building, how their performance had been improved. So it was quite a good sell on to the senior management. We [University senior management] were wined and dined there as their clients. One or two of the senior management team went down there and saw how well they were working. (E)

This visit, it was suggested:

conditioned the minds of the senior management team that this could work. Whether they had in their minds that this was for the administration or academic side I don't know. It was impressive to the people who went there. (E)

[And that as a result] ... the whole idea of open plan had got into the mentality. (E)

So its detractors frame the open plan solution, less as a reasoned strategy for the organisation and more simply as a conditioning of the minds of senior people. Moreover, the supporters of open plan were perceived to lack evidence for their case:

There was not much evidence around so people were arguing for and against on the basis of all kinds of arguments, you know, my mother used to work in open plan and she hated it, all this kind of stuff. (D)

'I had seen the evidence. It just wasn't worth a bloody candle' (E).

There was also a strong suggestion of very personal agendas:

[The project sponsor] was absolutely adamant that open plan should be applied to the [department] come what may. Partly because of his experience for the open plan for the [administrative] office, that was in his head, he says 'I'm going to', and he's the sort of manager who says 'come what may', regardless of what every one else wants. You were going to have open plan whether you liked it or not. And that was a matter of principle on his part. I was not a party to it, I objected to it. But I was out voted. (E)

The fact that the ownership of the project had been devolved from the University's Executive Board to the project sponsor's division effectively legitimised their power and authority and the 'powerlessness' of others to deflect them from this course of action reflects this.

Creating alternative discourses about how work is done

One of the most obvious ways of mounting a defence against entrenched support for open plan would have been to construct, through discourse, counter images of how academic work is done. Yet despite widely expressed objections to open plan by many academics and a number of senior staff, alternative discourses were not evident in the research data. We were unable to identify a discourse that constructed academic work as, say, reliant upon a quiet, secluded environment. Given the research evidence against the efficacy of open plan for such work, this was surprising.

What we did find was more attention to the differences between types of work that were carried out within the university – in contrast to the accounts of those supporting open plan who tended to lump all activities together. In the case against open plan, for example, a clear distinction was made between academics who were research active and those who were becoming more administration focused. Strangely, contract researchers (i.e. those without permanent lectureships) were also identified as a group who could go into open plan: 'They are not your typical core academic, that is the point' (D). The notion of a 'core academic' seems to suggest that contract researchers were viewed as both transitory and more compliant and hence less powerful within the organisation.

Administrators were also identified as groups who could usefully go into open plan:

With regards to administration, it's a fair hypothesis to say that it would work more effectively in open plan. So to that degree, given there is an institutional requirement that you have more open plan, given that you can see there is an argument, and you know your support system is working as well, as effectively, as it could do, then it seems a reasonable enough proposition to put the support into that environment to start with. To that argument I am favourably disposed. (D)

This position allowed the project to go forward on the basis that open plan was okay for some as long as there was some concession to the academics' desire for cellular space.

The people are the organisation

The one clear argument that was mobilised against open plan was the argument that staff morale was a critical issue for the organisation and that open plan risked damaging

it. Moreover, the experiences and stories reported widely in the press of other projects that had attempted to create open plan workspaces in other similar institutions were mobilised as part of this counter-argument. Other such projects were seen to have failed (in this discourse a collapse of morale is a problem for the organisation) so this one risked failure as well.

... as a result of people saying they were going to take their bat home, they were going to work at home it just wasn't worth it. I had read all the stuff about SPRU [Science Policy Research Unit at Sussex University] and so on, so I was aware of it. The issue of academic leadership, this is the academic community. This place is nothing without the academic community, you can't run things like that. (E)

This position was a reversal of the pro-open plan lobby's position, which focused on the needs of the organisation. In this counter discourse, the academics *are* the organisation. Ultimately, this take on the organisation, and the interpretation of the SPRU experience as meaningful (not just a slight blip on the march of progress) served to point the project away from open plan.

Discussion

The fact that we struggled to find clear discourses about academic work that would support a case for cellular offices was instructive. The lack of an imagined pro-cellular office academic user in the minds of senior management (most of whom were academics themselves) was indicative, we believe, of the dominance of discourses that stress images of work as interactive and social. This connects the design decisions in this project directly to what have been termed post-bureaucratic discourses on work organisation (Gee et al., 1996). We suspect that it was the unfettered dominance of this, and related discourses, that made it extremely difficult to make a case for workspace design that supported isolated, quiet, contemplative work. The case for cellular offices emerged instead out of *not* talking about academic work and by giving ground on 'other' activities such as administration. There was no clear discussion of what academic work actually is.

Without a credible academic user rooted in a persuasive discourse about how academic work is done, the case against open plan was difficult, but not impossible to sustain. The case against it settled ultimately on re-defining the organisation as inseparable from and dependent upon, its work force. In this way it became possible to focus on 'people issues' *as* organisation issues. The idea that morale would be damaged in an organisation dependent upon academic support made the appropriateness of open plan or cellular offices irrelevant – the organisation would cease to function effectively if its staff withdrew their support. In this way we see how resistance to the perceived threat of open plan office accommodation on the part of academic staff was manifested through the threat 'to take their bat home'. The possibility of staff choosing to work at home, rather than occupy the new open plan space, represented too much of a risk for the project in the eyes of some senior managers: 'yes, open plan might be the best thing in the world, but not if it involves 30 years of struggle to change academics' mind sets' (D). Our findings in this respect chime with the observations of Anderson (2008) that academic resistance is often articulated through such discursive positions.

Would this argument have been enough to sustain resistance to the open-plan discourse? Perhaps not in itself, but it did provide the grounds, the road map, for a coup when the opportunity for one presented itself. For contractual reasons the project stalled for a time and this breathing space coincided with some changes in senior management, which shifted the project's power base and a coup became possible:

The change in leadership created the opportunity for others to seize back the reins if you like... People moving around loosens up some of the decisions. You know, if we want to change that decision we have to go back and confront someone in an existing role, with an existing power base...loads of political energy to change it. (D)

This should not, we feel, imply the primacy of political manoeuvring over discourse, but rather an interdependence between the two. 'The power balance shifted at a point and it was possible to ride the surf going in another direction' (D), so while material changes loosened things up, the availability of an alternative discourse directly shaped the possibilities that emerged from that material change. 'I would like to think we had up our sleeve things that would help when the opportunity came along. It came along a bit quicker than we thought it would come along so we took the opportunity' (D).

Conclusion

What the analysis of this case suggests to us is that discourses around the imagined user are not unitary. There are many discourses that are mobilised in support of particular pro- or anti- project interests. Noticeable in this case was the fact that the discourses mobilised by the project advocates outnumbered those arrayed by actors opposing the proposed project, notably by the users themselves. Discourses that imagine the user may well fly in the face of empirical evidence or be based largely on hearsay or anecdote, rather than the results of rigorous research, but are no less effective for all that. Such discourses seemed harder to resist when promoted by those in positions of relative power within the project.

The implications for users affected by projects to redesign or reconfigure the working environment, and hence working practices, include the importance of articulating an imagining of the user in a way that accurately reflects the way that their work is done. In arenas such as academia and in other forms of knowledge work, the invisibility of the work process, dependent as it is on mental processes of thought, reflection, creativity and concentrated effort, in contrast to physical and therefore observable tasks, means that discourses that present users imagined in particular ways are easier to manipulate to support specific positions and by the same token, harder to refute or resist.

Project managers and sponsors should note that strong discourses create paths along which projects and project participants can move in unison. The route is clear even if not all of the project participants feel it is heading in the right direction. However, 'alternative', but less strongly articulated or previously rejected or suppressed paths, have a habit of retaining their existence until such time as the opportunity for re-articulation presents itself. It becomes possible then, to see apparently singular projects as carrying with them the traces of 'dormant' alternative projects informed by suppressed discourses and with that, the potential for a coup. This draws attention to the

fractal nature of projects (cf. Law, 2002) and the threats implied by this. It should also alert those who wish to resist particular project directions to the fact that drawing on persuasive well-connected discourses is key to achieving those ends.

The use of discourse in this way is an illustration of the actuality of projects that needs to be better understood if we are to improve our management of them. The notion of the imagined user suggests that there are also imagined actualities that inform and influence project design decisions. Discourse analysis appears to be a useful tool for identifying and interpreting these imagined actualities.

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Chris and Neil have collaborated extensively in research, the concept of the imagined user being the latest of their ideas, and are currently seeking funding to pursue this further.