Symbolic users

Users and unicorns: a discussion of mythical beasts in interactive science

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The UK Economic and Social Research Council (ESRC) has placed considerable emphasis on the users of the research it supports. Researchers have in turn pointed to the potential uses of the work they do as a means of demonstrating relevance. However, to date, researchers and research funders have succumbed to the temptation of constructing and then believing in users of their own making. The over-reliance on an embodied notion of use and uncritical acceptance of associated pathways of influence is understandable but unnecessary. There are other ways of conceptualising and identifying use, but these require researchers and funders to develop and work with more convincing models of knowledge diffusion and relevance. In short, the challenge is to understand better the process of use even if that means abandoning the comforting fairy-tale of the research user.

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"'Well, now that we have seen each other,' said the Unicorn, 'if you believe in me, I'll believe in you. Is that a bargain?' 'Yes, if you like,' said Alice" (Carroll, 1984).

Since the 1993 White Paper, *Realising Our Potential* (HMSO, 1993), the UK Economic and Social Research Council (ESRC), like other research funding bodies, has placed considerable emphasis on the users of the research it supports. Researchers have in turn pointed to the potential uses of the work they do as a means of demonstrating relevance. This paper considers the concept of the user and the practicalities of involving and identifying the users of ESRC-funded research.

Working with users seems to be an essential element of interactive social science, but what is the nature of this relationship and what constitutes user interaction? Who qualifies as a user and what is their role in the research process? Though users populate the pages of research policy documents and research reports, there has been relatively little systematic discussion of who users are, what they do, how they interact with researchers and what it means to use social science (assuming that this is what users do).

Rather than investigating user–researcher relationships surrounding individual projects (see the paper by Simmons and Walker in this volume), or considering the formation of non-academic linkages in specific research settings (as described by Baldwin, also in this volume), we offer an overview of the symbolic functions that notions of use and the user fulfil, and reflect on the extent to which these rhetorical interpretations mesh with the practice of interactive social science. While our comments may apply to other situations too, we take the case of university-based

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research supported by research council funding as our point of reference.

We begin with a key moment at the interactive social science conference, held in January 1999. The conference included an afternoon panel session at which users were invited to reflect and comment on interactive research from their side of table. This session proved to be extremely instructive but for entirely unanticipated reasons. Despite careful searching of the hall, there were no users to be found. Those who had been invited to contribute simply failed to materialise and others who might have been pressed into that role resisted the label.

Although somewhat embarrassing, particularly given the topic of the conference, the case of the missing user is not especially unusual. Some of the UK Research Assessment Exercise panels are also finding it hard to identify individuals who might qualify and serve as appropriate user representatives (*Times Higher Education Supplement*, 1999, page 64). These intriguing instances of absence provide the spark and the starting point for the discussion which follows.

User interest is increasingly taken as a measure of the value and relevance of research yet it seems that people are reluctant to step forward and identify themselves as the users of social science. This is puzzling. How are we to explain such frequent reference to users and such persistent failure to find them?

One explanation is that the notion of the user is of symbolic importance and that it dominates the rhetoric but not always the reality of research life. Developing this idea, we suggest that users do not simply exist in the world beyond the conference hall or the research department. They have to be defined and constructed, and their characteristics vary depending upon the purposes which they, and the concept of use, are required to fulfil.

Reflecting on this mixture of symbolic significance and practical elusiveness we noticed certain similarities between users and unicorns. Both are easy to imagine and both are difficult to track down in the real world. In this paper we argue that users, like unicorns, fulfil heraldic functions for researchers and their funders. We also suggest that those who invoke abstract concepts of use and user deal in images and ideographs, one purpose of which is to legitimate particular practices either of research or of research management.

That does not mean there are no real users or that use is mythical. Not at all. However, it does remind us of the analytic importance of distinguishing between the process of use (as an everyday feature of interactive social science), the characterisation of potential users, and efforts to embody that potential in real people referred to as users (as required by research funders and non-academic agencies). We argue that it is this mixing of meanings and in particular the slippage between the process of use, on the one hand, and the ascription of user identities, on the other, which explains both the prevalence and absence of users at the interactive social science conference in Brighton, and in the university departments and centres in which social science research is undertaken.

In this paper, we review instances, examples and references to user involvement, first hunting through the fertile territory of official ESRC documents, then considering researchers' aims and aspirations and finally reflecting on retrospective accounts of how social science has been appropriated and used in practice. In the process, we catch sight of different interpretations of use and through this thicket of meanings, glimpse the shadowy outlines of shifting populations of actual, potential and imaginary users.

ESRC's users

As set out in the 1993 White Paper, the ESRC's mission requires it to place "special emphasis on meeting the needs of the users of its research and training output" (HMSO, 1993, page 29), but what does this mean in practice? The Chairman's opening statements to the ESRC's 1995–96 (ESRC, 1996) and 1997–98 (ESRC, 1998) annual reports contain important clues. The first page of the 1995–96 report invokes users no less than nine times, while the rather longer introduction to the 1997–98 version contains six such references. These documents suggest that the ESRC has taken its mission to heart and that responding to users' needs is a central concern. These formal documents also show how the concept of the user has been worked into the fabric of research funding.

The 1997–98 statement begins with an all-encompassing observation. Bruce Smith writes that: "A successful society is one that understands itself — as a nation, as an economy, as users of technology, as a community among many" (ESRC, 1998, page 1). Here "users" is an innocent term incorporated in a broad-brush description of society at large. This neutral vocabulary acquires more

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meaning further down the page. The Chairman's opening statement goes on to identify relevance as the second of three key characteristics of the ESRC's work: the first and most fundamental being quality, the third being independence. In his paragraph on relevance, Bruce Smith makes it clear that there are two kinds of user, each fulfilling a distinctive function for the ESRC.

User-spokespersons

The first category includes users who are prepared to act as spokespersons for the relevance and value of social science research in general. Smith refers to the "network of key senior users from the business, government, voluntary and professional sectors we have built over previous years" (ESRC, 1998, page 1). This statement echoes an interpretation which also figures prominently in the 1995–96 annual report. That earlier document notes that the ESRC's nine thematic priorities were "developed after an extensive consultation exercise involving users and academics" also suggesting that the resulting priorities "represent the issues that users and social scientists believe deserve sustained and detailed research" (ESRC, 1996). The 1997 *Update of the ESRC Thematic Priorities* also claims to draw together academic and scientific priorities and "priorities identified by users in business, government and public services", as well as national agendas set out in the UK Foresight Programme.

The users referred to in these generic statements need not be people who actually use ESRC-funded research themselves. They may not have much to do with social science disciplines, with the wider research community, or even with the production and appropriation of research-based knowledge. Instead, their role is to be senior, to be 'key', to be accepted as spokespersons for the relevance of social science research, and to consult with the ESRC about research priorities.

This role is explicit in the 1995–96 annual report which makes the point that social science research has successfully "won the support of scores of business, government departments and other user groups" (ESRC, 1996). This first category of ESRC users consists of people who are best seen as user-supporters. This group includes friends and allies prepared to vouch for the relevance of social science in necessarily general terms.

User-collaborators

A second kind of user appears when Bruce Smith refers to the efforts the ESRC has made in "assisting all of our Research Programmes and Centres in developing their own strategies for effective working with users" (ESRC, 1998, page 1). By implication, this group includes people who are in fact involved in using research results and interacting with real researchers working on specific projects and problems. They are user-collaborators as opposed to user-supporters.

Quite what is implied by use and collaboration deserves further investigation yet it is clear that the role of generic spokesperson is much less important. While users of this second type may be invited to testify on behalf of researchers or research projects, and while their role is also one of contesting or confirming relevance, they are expected to do so on the basis of first hand knowledge and interaction.

The second category of user-collaborators might, for example, include professionals who have some competence in social science, lay or less expert users, or a loosely defined population including those who coin terms and appropriate ideas from the social sciences. Extending the boundaries further it is perhaps not even necessary for users to define themselves as such. People might, for instance, make use of ideas developed within management science or economics without being aware that this is what they are doing. Though perhaps not collaborators, these people still qualify as users of social science, and still need to be identified as such.

Use of users

What do we learn from the uses of users in these ESRC reports? Two features are especially relevant. First, reference to users is an important means of justifying public funding for social science. The ESRC's ability to interest and involve 'key' people and influential spokespersons is itself taken and offered as evidence of the relevance of the research it funds. The finer points of what it really means to use social science are not terribly important.

In this context user-supporters play a largely symbolic role, lending their name to the cause of social science and, by association, confirming its relevance and value. It is important that the ESRC attracts influential non-academics who are willing to offer time, advice and guidance and who are prepared to act as advocates for the social sciences in the wider world. Though such forms of involvement are indirect (these people are, after all, user representatives not users themselves) the consequences of failing to enlist them are tangible enough. Future credibility and funding really is at stake.

The second point relates to the ESRC's ability to persuade researchers to engage with non-academics in the course of doing research. Recent annual reports emphasise the need for individual researchers to build and foster new forms of user interaction. By implication, researchers' users have both practical and symbolic

parts to play. Again they stand for the concept of use in general (so again it helps if they are well known, influential, and so on) but the assumption is that they should also have a substantive interest in the research itself. We consider researchers' interpretations of users in more detail below but for now the point is that the ESRC tacitly recognises a range of more or less symbolic user functions (including user-supporters, user-collaborators, user-representatives and user-consumers) each with a different role regarding research and research management.

Our brief analysis of a handful of ESRC documents suggests that users are constructed backwards. The outside world is not inhabited by ready-made populations of users waiting to be enlisted. Instead, the ESRC and other research funding institutions define and implicitly classify types of users according to the sort of contribution they are expected to make to shaping, doing or legitimising publicly funded research.

Researchers' users

The ESRC's ambitions have rubbed off on those they fund. The 1995–96 annual report suggests that "the academic community has embraced this 'call to action' with considerable enthusiasm", going on to claim that "our ties with users are now stronger than they have ever been and deepening by the day" (ESRC, 1996). The research application form represents one means by which the ESRC's call has been translated into action. The current form for response-mode funding asks aspiring researchers to:

"… describe any plans there are to engage with potential non-academic users of the research and communicate the results of the research to such users. In addition, please explain the potential value your research has for users outside the research community."

Researchers' responses to this question offer further clues as to the whereabouts and characteristics of what they take to be potential users. Or at least they would do so if researchers interpreted this as a question of itemising specific situations, conditions and circumstances of use. Having reviewed something like 40 such 'user paragraphs', it is clear that this part of the form is commonly interpreted as an invitation to present a persuasive, but typically generalised account of the potential benefits of the proposed work. Although our collection of user paragraphs is not necessarily representative (it has been assembled from research applications we have been invited to review or referee), it does tell us something about how researchers address the challenge of representing user relevance.

Generic users

We identify three broad strategies. One is to make reference to abstract users, including whole reaches of industry or generalised audiences such as "the health service" or "practitioners". To give just a couple of anonymous examples, one aspiring researcher claims that:

"The findings of this study will be of considerable interest to non-academic users. Stress is of considerable concern to employers, employees and employee representatives including trade unions. It is therefore anticipated that there will be widespread interest in the findings of the results."

The importance of the issue is offered as a guarantee of the relevance of work related to it. In the second example, the applicant makes similar moves, also hinting at a chain-reaction of potential influence from policy to public.

"The proposal has been designed to produce results which will hopefully be of direct relevance to non-academic users. Most directly it is relevant to government policy making and the general public. It is important for policy makers to discover how and why we have failed to achieve this target … and what the implications for resources are. The general public have an interest in the effectiveness of public service policy and quality of life. Housing policy makers should also have an interest in this proposal."

In making these plausible but rather unspecific claims academics suggest that their work contributes to self evidently significant goals such as those of sustainability, wealth creation or the quality of life. Having argued that their project addresses current issues of practical and policy significance, researchers imply that there are correspondingly unbounded opportunities for potential use.

Influential users

Research applicants are rarely very clear about how this potential might be realised, or who might be involved. They are, however, keen to nominate 'users' who appear to be influential and who are in a position to act differently as a result of the research. One method is to ensure that users are relatively well known, and that their function and significance is already established. There is little to be gained from naming totally unknown organisations unless the purpose is to present those as representative of, say, the small business sector in general, or some other relevant population.

Again it seems that application-form users are necessarily indicative. The promise is not that the research will be used by precisely these organisations — even if that proves to be the case — rather, the point is to show that it could be used by organisations of the type described, and that the researchers have the

ear of those in a position to make things happen.

Research applicants often emphasise links with influential users. In the next example, claims about user interaction revolve around the chief executive's office:

> "Every effort will be made to encourage the chief executive to use the results to inform policy guidance. It is envisaged that this research will contribute to considerations regarding optimal strategies for reducing inequalities."

A related strategy is to reel off a string of powerful contacts:

> "Both organisations [that is, the applicants' organisations] have regular contacts with senior members of government departments including HM Treasury and the Department of Health, political parties, professional associations such as the public finance foundation and the British Medical Association, pressure groups such as the Child Poverty Action Group and international agencies such as the OECD."

Influence by association and contact with powerful figures is important but it is not always enough. The ability to invoke whole networks of users, or to suggest that knowledge will flow between user groups adds to the impression that the researcher is literally embedded in the non-academic environment.

Intermediate users

Evidence of previous collaboration with NGOs (non-governmental organisations), 'user groups' or trade associations allows researchers to suggest the significance of their work for an entire sector, not just for one or two key players. By referring to intermediary organisations (which are not necessarily end-users themselves but which are assumed to have contact with them) researchers identify the links and contacts needed to advance along the promised route to future use.

This strategy absolves researchers of the need to pin down the practicalities of end-use or to specify the conditions and circumstances of relevance. Instead, they promise to feed the results of their research into a typically hierarchical system of knowledge and influence. Framed in this way, success depends on effective communication with influential gatekeepers and intermediary organisations but not necessarily with end-users further down the supply chain of knowledge production.

In some cases, it is enough to point to a history of effective non-academic interaction, and to demonstrate membership of relevant networks. By identifying well known individuals or quoting previous contact with influential agencies or government departments, applicants suggest that established ties will be put to good use in the future. This example is typical.

> "The applicants have extensive contacts within the Department of Environment, Transport and the Regions, most notably in the form of Professor Smith's work with the Chief Scientist's Office, and Professor Jones' research on public transport. Professor Smith has working relationships with a number of city chief executives and is independent chair of two strategy groups. The research will feed directly into these fora. In addition, both universities have existing collaborative relationships with local authorities in the region, and as findings become available from the study we will be working with these agencies to explore the implications for policy and professional practice. These contacts will be used to explore other potential users of the research findings through alliances with other agencies."

It is one thing to identify user groups or to nominate individual users, but further effort is required to spell out the nature of their interest. What is it about the proposed research that promises to be of use (for example, is it the critique of current practice, the provision of data, the injection of new theoretical perspectives, and so on) and how relevant or urgent might that contribution be? Research applicants rarely go into this sort of detail, for it is, it seems, enough to note that users have expressed 'an interest'. As we observe later, researchers concentrate on nominating potential users but pay much less attention to the process of use.

Users partly real, partly mythical

What can we learn from these application forms? We might take researchers' claims and propositions to be evidence of strategic action on the part of applicants who are, after all, keen to stack the cards in their own favour and to increase their chances of success. On the other hand, proposals and strategies of the sort described above fit rather well with what we know about how scientific research is actually used.

Various authors have, for example, noted the role of gatekeepers in filtering and promoting knowledge and insights, and others have commented on the importance of social and organisational networks in managing and maintaining 'knowledge reservoirs'. Where relatively open-ended scientific research is at stake, potential avenues of appropriation really do

The examples suggest that utility is a function of the non-academic context and that interpretations of relevance come and go as contexts change: moments of recognition and relevance are fleeting and user identities just as fickle

depend on complex supply chains of mediation and interpretation. Our purpose here is not to distinguish between rhetorical manoeuvring and realistic planning but to observe the extent to which they overlap.

As these points suggest, research proposal writers interpret and define users in a particular way to lend legitimacy and credibility to generalised claims about the relevance of the proposed research. What matters is the effective invocation of potential value. In this sense the user rhetoric has an important symbolic function. It is nonetheless necessary to show some connection with the 'real world', and to make credible and plausible claims about avenues of influence and interaction.

This leads us to conclude that the users featured on application forms are hybrid beasts: partly real, but also partly mythical. In the next section we review representations of users provided not by aspiring applicants, but by successful project and programme managers.

Real users

For whatever reason, certain non-academics do agree to become involved in ESRC research programmes and to serve as members of project advisory groups and committees. It must be stressed that these are real people. An investigation of user engagement in programme development provided an opportunity to talk with such individuals and find out more about how they saw their role and what it was like to be a user (Redclift and Shove, 1995).

When asked about what it meant to use social science, and when and how they did so, these respondents quickly backed away. Denying their status as users, they explained that they were mediators and translators. As described, they had a part to play in the process of relating research to practice but could not honestly say they were research users.

The more we talked the more problematic the concept became. Retrospectively, it was sometimes possible to agree that research had been influential, that it had changed paradigms and ways of thinking, influenced the framing of problems, or somehow added to the stock of knowledge. However, it was much more difficult to isolate discrete moments of use or to know that using was going on. So much for the goal of identifying real-life users: the nearer we get the further they seem to slip away.

Fortunately, there were other places to look for signs of use in action. Reflecting on the results of their work, researchers are often able to see how it has been appropriated. The retrospective narratives of participants at two ESRC-funded workshops (Shove, 1998) provide some insight into these processes of use, and the situations and circumstances involved. Three examples are especially revealing.

Being discovered by users

The first case involves a researcher who had been pursuing an entirely academic line of enquiry regarding the commodification of housing, privatisation, the marginalisation of social groups, and patterns of homelessness in Bulgaria and the former USSR. This work was built around a series of theoretical questions and had been developed without any reference to potential use.

It was therefore something of a surprise when the researcher in question fell into conversation with someone who saw, and was keen to exploit, links between this study and the activities of NGOs and charities. From this chance meeting, the research was redefined and repositioned as work which had far reaching policy implications.

In this example, use was something which happened to the research but which was neither anticipated nor deliberately sought. Far from being elusive, the user/unicorn strode out of the woods in broad daylight, saw an opportunity to use research, and simply took it.

Being overlooked by users

The second case concerns a project on innovation in education. This study was designed and developed on the basis of existing knowledge of the education system, and an awareness of government priorities. It engaged with policy questions and sought to make a difference. Despite the researchers' best efforts, this work, that should have been of immediate interest, fell on stony ground. Although it generated messages and lessons potentially significant for the Schools Curriculum and Assessment Authority, OFSTED (Office for Standards in Education) and the DfEE (Department for Education and Employment), it was simply not taken up.

When thinking about why potential users failed to respond, the researcher involved acknowledged the momentary nature of relevance. The ability to take heed of research depends on factors way beyond the researcher's control: on policy makers' capacity for action and on shifting political priorities. There are times when dominant ideologies and methodologies generate really narrow definitions of potential relevance and use, and in which otherwise important ideas fall outside the frame of reference. In other words, the ability to use research is a property not of the people involved, but of the situations and circumstances in which they work.

Being used by users

The third example relates to ethnographic research exploring the use and implications of electronic key fobs on housing estates. This electronic technology allows the concierge to know exactly who is going into and out of each block of flats. A whole range of players, including tenants, managers, the concierge, and the residents' association had an interest in the outcome of the research, for each were potential users.

In this essentially divided situation, the research project was positioned in the midst of conflicting

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interests and power struggles. For example, tenants were primarily concerned about safety. Housing managers wanted to use the new technology to redefine the roles of those they employed. Meanwhile the concierges were subject to new pressures and demands.

So how would the research be used, by whom and to what effect? Like it or not, the researcher found himself enmeshed in a political process and locked into a situation which virtually guaranteed that his work would be exploited to the advantage or the cost of one or another of the parties involved.

These three stories, one of being discovered, the second, of being overlooked, the third of being used, have one thing in common. They all suggest that utility is a function of the non-academic context and that interpretations of relevance come and go as contexts change. Moments of recognition and relevance are fleeting and user identities just as fickle. In other words, an individual may be a user at a particular moment not because they are a user, but because opportunities and possibilities come together in such a way that research is momentarily relevant.

Misusing users

Researchers and research councils are nearly always under pressure to justify their actions and account for what they do. Current reference to users represents an addition to the repertoire of arguments and claims deployed in support of publicly funded social science. It seems that it is no longer enough to make a plausible case for potential relevance. Though that is still a necessary step, researchers and funders are also expected to identify and maybe involve future users.

In this context, the concept of the user, as fabricated by researchers and research councils alike, is a device for invoking potential value. This explains why the users who populate the pages of ESRC documents and research application forms have such distinctive characteristics. This is why references concentrate on well-known, influential, intermediary but typically indicative user representatives and this is why researchers, like research funders, find themselves adopting convenient but sometimes narrowly instrumental interpretations of use.

In effect, researchers are busy inventing and then

believing in users of their own making so keeping their part of a bargain with research funders, and with the funders' funders, all of whom are engaged in much the same form of strategic mythologising. There are parallels with the deal between Alice and the Unicorn, which we quoted at the start of this paper: "if you believe in me, I'll believe in you. Is that a bargain?" "Yes, if you like" said Alice, and "yes" say the ESRC and "yes" say the researchers, "yes, we'll believe in users", "yes if you like".

In this concluding section, we reflect on the practical consequences of embracing the user rhetoric in this way. Three points are especially significant. The first concerns the scarcity of ideal-type users, the second relates to the reification and subsequent power of the user concept, while the third concerns the way in which the process of use is embodied in the figure of an individual or institutional user. All three have immediate implications for the conduct and evaluation of research.

In the real world, characters who match up to the mythical model of the good user (that is, those who are influential, interested, involved and powerful, who represent other users and who can lend support and credibility) are in relatively short supply. Hence the disjunction we have observed all along, and hence the problem of finding people to embody the user role. In subscribing to the user rhetoric, the research system is in danger of creating something of an impasse: users are needed to justify the expenditure of public funds yet the preferred concept of the user, a concept designed to invoke the prospect of utility, may prove to be unworkably exclusive.

These difficulties of definition and identity are real enough but there are further risks in store. It is, for example, rather easy to mistake mythical users, created for rhetorical purposes, for the real thing. When this happens, proposals may be advanced and priorities adjusted according to the 'needs of the user'. The snag here is that the ability to make such arguments and claims depends more on the rhetorical skills of those involved than on any sophisticated understanding of the politics and practicalities of interactive social science. The user can, after all, be invoked in support of very different courses of action.

More troubling still, it is perhaps genuinely impossible to be a user in the sense of being someone who consistently and persistently uses social science. Being a user is not a stable characteristic or quality of a person. Research users are simply not addicted in the way that drug users might depend on heroin and, as we have observed above, the moments when people use social science come and go depending on the context. If someone had dared stand up in the interactive conference hall at Brighton and confess to being a research user that claim would have been somewhat hollow, handy for the occasion but an inadequate label all the same. This implies that efforts to embody the process of use through reference to a handful of people cast in the role of user are essentially misguided.

This brings us to a final paradox. The concept of

the user, and in particular its embodiment in individuals labelled as such, appears to have the unintended consequence of restricting understanding of how social scientific knowledge is co-produced and co-consumed. More than that, it may limit the energies researchers invest in developing multiple contacts and fostering a variety of non-academic relationships. By concentrating on only those who might qualify as users, there is a risk that researchers inadvertently cut themselves off from other highly relevant streams of influence and forms of interaction.

Likewise, although it is sometimes important to build non-academic networks and establish contacts with influential figures, this is only part of the story when it comes to the production and promotion of useful knowledge. More needs to be known about how ideas and insights filter through these webs of influence and how they are transformed along their way. The fact of having good non-academic relationships does not, in itself, reveal much about how social science circulates.

In short, the rhetoric of the user may make it harder to promote the appropriation and actual use of research because it oversimplifies and maybe even disturbs those circuitous networks through which knowledge spreads, creeps and grows. While the unicorn is an innocent beast, the user is, by contrast, part of an immediately convenient, but potentially dangerous, mythology.

With a bit more creativity, and a bit more reflection on the real processes of use, it should be possible to describe, develop and take advantage of research strategies which actively encourage and promote a variety of academic and non-academic interaction. Researchers' expectations of future use need not revolve around the assumed needs of a cast of nominated or imagined users. It is, for example, possible to anticipate the situations in which ideas, insights and information might become useful or to think of ways in which the relevance of social science might be actively promoted. Having extracted the concept of use from the person of the user many more avenues of influence appear.

The political importance of demonstrating relevance is undeniable. However, there are various ways of addressing this issue. To date, researchers and research funders have succumbed to the temptation of constructing and then believing in users of their own making. We argue that the tyranny of the user, by which we mean over-reliance on an embodied notion of use and uncritical acceptance of associated pathways of influence, is understandable but also unnecessary. There are other ways of conceptualising and identifying use, but these require researchers and funders to develop and work with more convincing models of knowledge diffusion and relevance. In short, the challenge is to understand better the process of use even if that means abandoning the comforting fairy-tale of the research user.

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