

Worthy of Gordius: The knotty problem of configuring creative practice as research, or indeed research for creative practice

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An Edit

I am writing this some days after the conference at the Iceland Arts Academy where the 'ideas' that are in this paper were presented. This is an opportunity to edit the paper, present what I didn't have time to in the forty minute slot and connect the themes of the paper to all else that occurred at the conference – other papers, questions and informal conversations that were had during the days of the conference.

What I hope to do with this edited paper is present a trimmer and fitter (more fitted to the way it is practically useful) version of the paper presented.

First, academe!

The medieval institutions we call universities are shaped in a strange, at times rather awkward relationship between what has been instituted as 'academic', produced over time and encysted there (an atavistic and invisible force governs what is thought to be 'academic') and, the procedures and practices of individuals in the universities, which interpenetrate the institutional at every point. There are those individuals that insist that what is within the perimeter be guarded, fearful and mindful that what is academic – carrying the weight of history – will be lost. They police the academic perimeter, allowing only what is determined as academic through. Others, tactically negotiate the academic space, while, yet others produce resistance; their, as yet-un-academic or maybe never-to-be-academic activity, their words and actions, planned or unplanned, penetrating the perimeter and breaking up the 'regular' pattern in the interior spaces of academic practice.

In the network of exchanges of an international academic community – symposia, colloquia, conferences and other formal and informal conversations (like this research conference) – what constitutes an 'academic' practice is debated and good academic practice promoted. At this meta-level – international 'academe' – working across national boundaries and, in a good deal of instances, across disciplinary boundaries, delineations of what constitutes acceptable and unacceptable practice are rehearsed and mooted. National characteristics are contrasted, disciplinary distinctions made but I also sense a course of 'thinking' that seeks to smooth out the differences and invoke a homogenized standard, affirming and asserting 'regularities'¹ for 'academic activity; an international agreement of what is expected and also excepted (kept outside the perimeter) as academic practice for design (at least this is what I sense in the programmes of design research organisations).

Practices are orientated in this pass to the requirements of academe – its demands - what is encysted in the idea of the academic) – and not orientated to what academia can supply and effect at the local level; the play of difference, across cultures and local contexts is disregarded and the requirements and standards of academic practice are insinuated into institutions regardless of the geography and histories that give the institution its shape.

PART 1: RESEARCH PRACTICE: The constraints of validation

¹ *'Regularities is a word that Foucault coined for the "fixing of norms for the elaboration of concepts and theories" (Scheurich 1997 :84) which claim to transgress differences ostensibly moving beyond questions of ideology; thereby professing to be neutral and natural', but are not.*

Knowledge: a production

In Britain, 1960s, William Coldstream was instrumental in bringing art and design into the academic fold. This move greatly benefited art and design practices re-shaping them in interesting ways – their intersection with other (academic) subjects presented them with intellectual ballast; it presented them with the opportunity to develop new critical and, consequently, creative perspectives with which to explore and thus build the intellectual substrate of practice.

The move also tied creative practice into the business end of academe - to produce knowledge and create theory. And, in this tie it all became awkward. In strict measure, creative practices are currently required to produce 'knowledge' even though, and, here is the rub, I assert that they are not essentially directed towards knowledge production (in the way knowledge is considered in academe – robust and certain). Creative practice, design practice, at least, is onto-generative – it brings something into being – but this is not often new knowledge. It is new and knowledge has gone into producing the design but in and of itself a 'design' doesn't necessarily try to establish new knowledge (it sometimes can do but it need not necessarily). Unlike other academic areas the thrust of creative practice is not to know or interpret but to express, provoke and in the case of design make or remake a little part of the world anew. Design is infused with knowledge (knowing), knowing of different kinds but also what is not knowledge.

Paradoxically, the introduction of 'creative practices' into academe produced changes in many of the other academic subjects (epistemological practices), who understood how creative practice could reshape their practices (in that it is not hidebound to knowledge production). They have realized that creative practice moves into the not-yet-known and maybe never-to-be-known space and may do so in advance or, instead of, 'explanatory theory'. So they are advancing the idea of 'practice-led' theory while the creative practices oftentimes try to contain practice within theory. Please don't get me wrong I believe that theory is important to practice (very) – this is one of the important gains in Coldstream's deal (and very much a part of Goldsmiths educational programme in design) – but I think that practice should not be wholly bound by, or to, the strictures of theory; it is also necessary for practice to engage with the un-theorised – not yet theorised or the un-theorisable.

Design Knowledge

There is, generally, a recognition that design cannot be bedded down in the epistemological models of the sciences or the humanities easily. The design theorist, Clive Dilnot in a paper titled the *'Science of Uncertainty: The Potential Contribution of Design to Knowledge'* writes:

'...it is precisely because design cannot be accommodated satisfactorily within these models that a problem occurs. Design does not simply lie there passive, vis-à-vis the existing modes of knowledge.'

Dilnot proposes the idea that there is a distinct epistemology viz. 'design knowledge' - a different kind of knowledge altogether than that of the sciences and the humanities: not a conjunction of the two, nor an integrative operation, but different; and, in this difference, presenting an alternative epistemological paradigm.

I quote Dilnot: *'It is obviously not that design disposes or renders invalid these modes of knowing, but design does disturb their self placement, the relation with one another and the total claim that is collectively made that together these modes somehow circumscribe in their potentiality all possible forms of knowledge. What design marks, as a mode of knowledge is not simply a form or technique or a mode of human action that could be contained within existing forms of knowledge (though it is also both of these things) but a different disposition towards Being than that reflected by other modes of knowledge.'*

Dilnot acknowledges design's link to sciences in the technologic but distinguishes

between the two by marking technology as performative and design as mediative – in other words, through design ‘one understands and advances practical applications that create interfaces between technologies and people’. Science, in Dilnot’s eyes, is what ‘enables the *techne*’ and design is ‘what realizes and humanizes it’. Dilnot also points out that although the humanities and design are ‘both concerned with how self, life-world and meaning are created and known – they are so again differently – the one essentially narratively, the other artefactually’.

He goes on to say that ‘the sciences and humanities are essentially concerned with *what is* (the former numbers and the latter narrates the world’ – rather glib (he acknowledges this) but with some grain of truth). ‘So both are essentially retrospective’². They are ‘disciplines dealing with the world already made and characterized by a fixed plane of facts, upon which they operate analytically rather than praxiologically’; whereas, design operates as a praxis focused on transforming the world or at the least a part of it.

Extraction

What Dilnot is promoting is a praxiological knowledge – knowledge gained in the practice of what he calls world-making. This is knowledge gained through designing itself. But, he suggests that this praxiological knowledge – knowledge-through-design – needs to be articulated in a reflection on praxis - interpolated as knowledge-about-design. There is a reduction in this. Practice is boiled down until it reduces to that which is knowledge and this is extracted and then examined and understood retrospectively: the praxiological is operated on analytically.

Extraction coupled to reflection is one of the ways we adequate, and make practice presentable to the epistemological court of academe. Famously (although may be not originally – I believe the Canadian academic, Alain Findelli said it first) Sir Christopher Frayling, Rector at the RCA London talked of research into, for, about and through practice. In the diagram below I have illustrated the relationship of knowledge to the practice (remaindered) in each of these research possibilities. I have added to the Findelli/Frayling list, research as practice (practice as research) and research around practice (into the wider contexts of practice (e.g the cultures that surround practices).

See figure below.

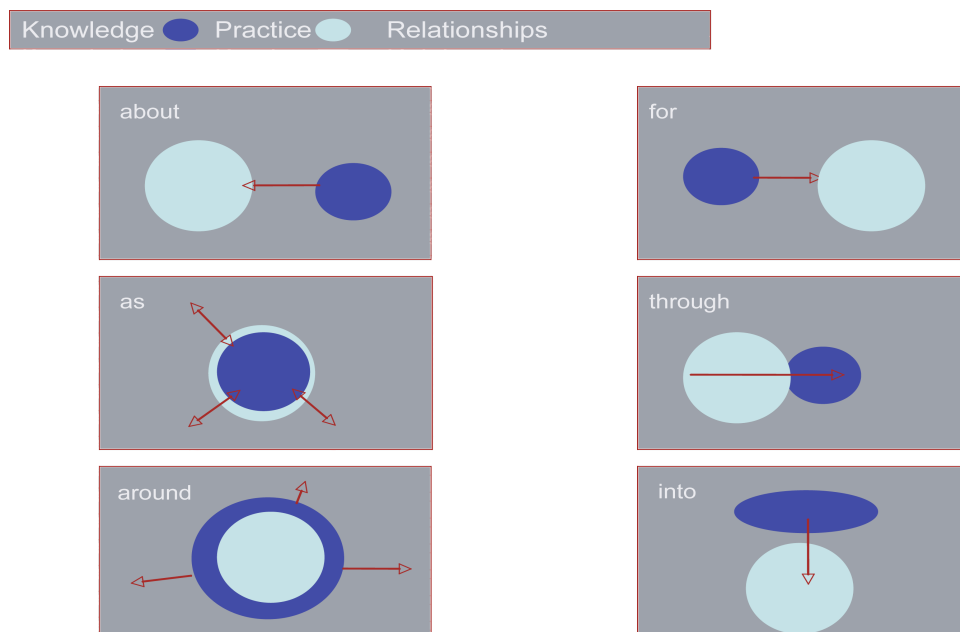


fig. 1.

² One may argue that with ‘action research’ the human sciences are looking to establish knowledge in collaborations to instrument change (very much like design).

The 'research' that is proposed in each diagram cell, boils down and extracts knowledge and/or asks that knowledge be produced as a 'reflection' on practice. In the diagrams above I have indicated that there is something beyond what is extracted. This, I suggest, is both the knowing of practice that is not part of the extract and that bit of practice that is non-knowledge (not yet known or unknowable).

The Spectre of the Western Knowledge Project

What is extracted as knowledge from design practice, is extracted so that practice may be validated as a 'research practice'; so that it may be cooked up and presented so it is the same as other academic subjects, or at least does the same thing. It has to remainder the not knowing – uncertainty, ambiguity and inconclusiveness – of practice. It also has to give up on 'ways of knowing' that are other to the practices of academia – all of this in order that it may belong.

It needs to offer up only that knowing that fits with the dominant epistemological paradigm in order to be considered academically valid.

JJ Scheurich in his essay 'Masks of Validity: A Deconstructive Investigation' (Scheurich (1997) p80-93) writes that *'the power function of validity serves as a boundary line or as a policing practice..... separating inclusion from exclusion. What is excluded is what is other, what is not understood – not knowable in the way academic epistemological models frame 'knowledge'.*

Scheurich, referencing many others (Trin Minh Ha, Lather, Mischler, Foucault (see *ibid.*) to name a few), goes on to write that the project to make knowable, to have 'knowledge of ...', at least in the west, is one of dominion; to know is to have authority over. The volition of western academe is to render what is different and unfamiliar – what is different to what is already known (different knowledge and its objects) – as the same and familiar; in the sense that one trusts what and how one already knows and therefore knowledge needs to be the same and in the same way that one knows other things, in a sense familiar (a comfortable knowing). The academic community needs to trust what is known – trustworthiness being a 'regular' criteria for validity. What is 'other' needs to be the same.... the threat of alterity is nullified in 'knowing' and the multiplicity, the polyvocality is unified in the 'knowledge' articulated (in *'the'* way of knowing); this dissolution of difference, homogenization through knowing, is at the root of what is called the Western Knowledge Project.

Validity is thus an *either/or bifurcation line that separates the privileged Same from the as yet untheorized Other, that establishes the 'valid' domination of the Same over the Other, that delineates the conditions under which the Other can be validly incorporated as the Same' (ibid. p.)*

Nietzsche says of this Western Knowledge Project that it is a *'will to power'* and that *'all knowledge rests upon injustice... thus the instinct for knowledge is malicious'* (Foucault quoting Nietzsche, referenced by Scheurich (*ibid.*p86)

In knowledge production (Western) this 'injustice' is perpetrated unknowingly. This instinct for knowledge is a 'regularity' set in the sedimentary base of the design (acting to discipline it). It works out of sight and is set so deep it is nigh impossible to disembed.

In spite of the fact that most academics recognise that 'scientia', the kind of knowledge produced by scientific enquiry, although at times useful, is limited and does not provide an adequate model for all research, including much of that happening in the sciences, it is a 'regularity' of design research.

Academic Validity

Although there have been commendable attempts by peers who set up criteria for assessing research proposals (e.g. AHRC funding applications (UK)) and research itself (RAE (UK)) in the creative practices to make space for the 'otherness' of creative practice, and the way that creative practices engages the 'Other' differently to traditional research practices, there is still an insistence to 'regularise' creative practice – dissect, section and give acceptable academic shape to it (much in the way I have described in the section 'extraction' above); criteria are shaped by a calculus, operating in the habitus of academe (perpetuated by those that assert the 'regularities' of academe). Creative practices are, literally and figuratively, disciplined by validating models – inscribed in assessment criteria – that are instituted to monitor and assay academic research practice – doctoral, post-doctoral and academic.

I haven't the space, nor do I have the inclination at present (although it may be interesting in the future), to do a full deconstructive analysis of validation/assessment across the different bodies to which we ask for support for, and those we give account of, our 'research' activities. In the space of this paper all I can do is give an example and make general comment.

RAE

In the UK, every so often, research of academics is scrutinized and assayed in a Research Assessment Exercise (RAE). The primary purpose of the RAE is to examine research submitted to a panel, and then produce quality profiles of each research submission and ultimately score the research quality of a discipline in an institution. *'The four higher education funding bodies in the UK (the Higher Education Funding Council for England (HEFCE), the Scottish Funding Council (SFC), the Higher Education Funding Council for Wales (HEFCW) and the Department for Employment and Learning, Northern Ireland (DEL)) use the quality profiles to determine their grant for research to each institution. Any higher education institution (HEI) in the UK that is eligible to receive research funding from one of these bodies is eligible to participate in the exercise'*. There is a good deal of money (QR (Quality Research money)) that is gained from a good 'grade' in the assessment. *'The first RAE was undertaken in 1986. The 1986 RAE introduced an explicit and formalised assessment process of the quality of research. Further exercises held in 1989, 1992 and 1996 became gradually more transparent, comprehensive and systematic'* (RAE Panel O guidance notes (<http://www.rae.ac.uk/panels/main/o/art/>)).

The RAE Panel O (art and design) Guidance notes state that they will *'without privileging one type of research over any other, judge how such research embodies new knowledge, or enhances understanding/appreciation, or enriches the intellectual/creative infrastructure in which such work is conducted'*. (ibid.)

One can see in the statement an attempt to make space for 'research' that is not motivated to 'knowledge production' traditionally conceived (in the sciences and neo-sciences – scientia, 'the hauntology of academic research'). Not only does the statement include the possibility for *'appreciation'* (instead of knowledge) but there is also an allowance in the statement for research that *'enriches the intellectual/creative infrastructure in which such work is conducted'*. Here the RAE panel is interested in orientating assessment to the effect of practice rather than insisting on assessment that looks at knowledge (in practice) qua knowledge. This is to be applauded. It implies that there is tolerance for practices that move out beyond the 'academic perimeter' or indeed are conducted beyond it. There is a promotion of practices that act as exemplars for others working in academia or for those working in the same or a related field beyond the academic border – advancing academic and/or professional practice.

But there is a move in other parts of the RAE guidance notes - definitions and criteria – to draw the notion of research back to knowledge production.

The RAE distinguishes five different kinds of research viz. scholarly research, basic

research, strategic research, practice-based research and applied research.

For 'practice-based-research' the RAE 2008 guidance notes say that it will accept all forms of practice as long as they adhere to the overall definition of research applied to all disciplines – sciences, social sciences, humanities and arts.

'Research' for the purpose of the RAE is to be understood as original investigation undertaken in order to gain knowledge and understanding..... It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques'. (ibid.)

The RAE again draws the practitioner-researcher to evidence the epistemological in practice, rather than its 'resonance' in different communities. The criteria also work to exclude what may be deemed routine method even though it may be required to advance what may be an exemplary 'design'. Rather, it tries to locate and tie the practice to an original 'analytical technique'. This original 'analytical technique' then of course will need to be identified and extracted so that it may be the determining axis of assessment - remaindering the rest of practice.

The RAE panel defines 'applied research' (extremely relevant to design) as: *'a process of systematic investigation within a specific context in order to solve an identified problem or achieve a specific goal in that context'*. It goes on to say that *'the aims of applied research may include the creation of new or improved systems (of thought or production), artefacts, events, products, processes, materials, devices, or services for economic and/or social and/or cultural benefit. Applied research should be informed by the intellectual infrastructure of scholarly research in the field – applying or transferring enhanced knowledge, methods, tools and resources from other types of research, and contributing to scholarly research through systematic dissemination of its results'* (ibid.).

Applied research is, thus, informed by scholarly research and is then through dissemination required to contribute to scholarly research. *'Scholarship for the RAE is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases'*. The 'praxis' is here considered as either a proof of or contribution to scholarship, and in both of these instances practice is again dissected and pertinent knowledge (pertinent to the assessment criteria) is extracted as described above (Fig. 1).

Research Practice – Mere Practice

One of the reasons to tie design in knots, or at least tie knots to tether design to 'knowledge', is to establish a design 'research practice', comparable in its efforts and achievements to other disciplines (as previously mentioned). In trying to establish (understand and put in place) a research practice, those that police the boundary of design academia, are eager to delineate it and distinguish design research from other practice (including art research).

Within design practices this is to make research distinct from what I have rather derogatorily heard called 'mere' practice. If one is to make distinction, in nature and performance, between a special category of practice called research and anything else, I don't believe it should be based on the 'epistemological product' it produces, but rather on its motivation and effect.

Let us take as a starting point that all research is motivated by inquisitiveness - by a question that provokes an exploration of some kind (an inquiry through practice). I suggest that in the case of design that this inquiry-led practice may lead to new knowledge, but, equally, it may not. It may not be conclusive – in the sense that knowing may be conclusive - or indeed wish to be. The 'research' may instead, re-articulate the 'question', it may be propositional (multiply), evidencing the 'potential' of the not yet

known and perhaps suggesting options/possibilities to be considered in the still to be decided. I believe that design research may produce critical provocation (much like research through an art practice may do) that ruffles what one may know.

Maybe research can be distinguished from other design practice in that its 'outcomes' are deictic (pointing directly to the way it addresses the 'inquiry') whereas the 'outcomes' of other design practices are perhaps elenctic (indirect) (this is how we distinguish between our research masters and our critical practice masters at Goldsmiths). It may be that 'research' practice elevates the 'discursive programme' in design where, although there may be a discursivity that works through other design practices, this 'discourse' is not the primary driver of non-research practice.

I am not convinced that this 'boundary' between 'research practice' and other practice is easily maintained and its binarial validity map, either research or not, is easy or desirable to enforce. I definitely think that while there is this binary –research/non-research - that there should be a thickening of current definitions of research and, perhaps, knowledge too (a little further on I will make a case for uncertain or tentative knowledge) to accommodate the fullness of the contribution design practice can make.

In the last two part of this paper, I wish to bracket these questions of what constitutes a 'research practice' and consider the way that design practices may be broadened and deepened in academia. Almost as an endnote, I also wish to briefly mention how we at Goldsmiths support 'research' for practice (of whatever kind) (I didn't get to this in the talk on the day).

PART 2: CRITICAL PRACTICE: Creating alternatives, Making a difference

Dumb Practice

I believe it is important to develop practices in academia that expand and make more substantial design discourse and practice (discourses on practice and practice that is discursive).

Design is well due academic attention. At a time where design has become increasingly significant to local and global economies and the significance of its impact on social process, cultural formation, and the lead it has taken in addressing environmental issues is, I believe, self evident, it is still not considered as a subject worthy of academic attention. This dereliction is a '*gross deficiency*' (Tony Fry) in academic practice.

This is to a large extent to be blamed on 'design' itself. Design has failed, doubly. Practitioners and theorists, design academics especially, have disappointed by failing to build the intellectual substrate of their practices from within design (which I have said earlier that academia affords us the opportunity to do), and secondly, but, intrinsically linked to the first 'failure', design hasn't enticed other academic disciplines to engage with 'design' outcomes, processes and discourses to build an intellectual programme from without (yet). The exception is architecture (if one includes architecture in the concourse of activities called design), which has done so.

These failings I suggest are due to the peculiar nature of design. Design is addressed to and eventually dissolved in the ordinary – the everyday fabric of our lives. It is in some ways rendered dumb (in both senses, mute (dictionary) and stupid (slang)) because it hasn't the extra-ordinariness of other creative practices. Because architecture is able to advance speculative or propositional work through 'paper architecture', and this 'paper architecture' is exhibited and discussed in various forums, it has a voice that can be heard above the hubbub of the quotidian – the practical and material realities of everyday life.

In addition, design is future focused (in fairness, so is architecture). It does not have the certainty of what is – of focusing on what has, or, is happening... of addressing what existed, or, still exists. The future is not certain, not really predictable, certainly not knowable with any certainty – it is to be produced (designed).

In ways different to horoscopy and forecasting, there is opportunity to speak of the future through design. Design may materialise the possibilities (potential) rather than pronounce the likely future.

Critical practice

Design has until very recently almost exclusively figured its practices to produce 'design solutions' that unquestioningly meet the insistence of demands shaped by contemporary markets, commissions and needs; shaping products for the (near) future that are an unruffled consequence of what exists currently.

This disposition is, in a sense, 'reflectionist'; the practice reflects and is deferential to what is 'given'. A reflectionist practice seeks to improve or gain advantage through advancing designs that try to better current 'solutions' (problem-solving being the drive) without having a critical purchase on the factors (Social, Technological, Economic, Environmental, Political (STEEP)) that act on and form the 'given' of the contemporary landscape. Practice, is, in this case, produced by this 'calculus of the given' fitting into it and reproducing it. Reflectionist practice, unknowingly in most instances, reflects and therefore affirms dominant ideologies, discourses and ways of being and doing things. This reflectionist practice produces '*a novelty [and affirmation] of the same*' (my brackets) Rajchman J. (2000)

In order to be more than 'merely' (sic) a practice (reflectionist) that, with little questioning, adds features back into the material landscape at the behest of others (the 'programme' for design being organized in advance in areas beyond its practices) design needs to both overcome the indifference that inhabits its practice (resigned and working in deference to direction from without) and use its practices to overcome indifference (to the way we make and re-make the world and the way we live our lives).

This practice of 'critical design' has begun to emerge in contemporary design practice (mainly within research and academic contexts). This practice is produced through a critical engagement with the 'agency' (network of actors and actants) that shapes the contemporary landscape of the 'artificial' (man-made). The outcomes (designs) of the critical practice, themselves, have critical agency - proposing alternatives that put under review the history (future) that is inscribed in what is 'given'. Designs and designing, in this instance of practice, become a critical apparatus producing questions concerning contemporary forms and practices and forming critical propositions about future ones.

Iain Mackenzie in his book 'The Idea of Pure Critique' writes:
*'Indifference, the product of philosophies and ways of life based on opinionated ideas of the given, is overcome by 'making a difference'
if [critique] is to meet the challenge of eradicating indifference then it must be creative, it must subtract all overarching regimes of justification and judgement from within itself to unleash critique as the construction of an idea of critique that posits a criticized and critical agent in the one gesture of 'creating an alternative' or 'making a difference'*. Mackenzie, I. (2004) p90 - 92.

As Mackenzie says, critique is essentially produced in a creative action with the gesture of '*creating an alternative*' or '*making a difference*'. I prefer an 'and' to the 'or' ...I think it is about '*creating an alternative*' and, in so doing, '*making a difference*'. These two aspects to the gesture are crucial aspects in the dynamic of a 'critical practice' in design.

Knowing and Not-knowing

In order to appreciate how this 'critical gesture' works in practice it is important to appreciate the dynamics in thinking that are at work in design practice (and here I must acknowledge a point raised by one of the conference attendees... there may be a

creative tactic (perhaps unconscious) where not-thinking is incorporated within this thinking).

I have recourse to quote Trin Minh Ha (I do so regularly) who writes:

'A creative event does not grasp, it does not take possession, it is an excursion. More often than not, it requires that one leaves the realms of the known, and takes oneself there where one does not expect, is not expected to be.'

I concur with what Trin Minh Ha expresses in this quote; creative practice is not about possessing the world in knowing but is rather a digression that takes one away from the comfort of the known and familiar and allows one to find a different and unfamiliar place.

The word *'excursion'* is most pertinent in this quote: it suggests a journey, a detour, a movement away from equilibrium, and, familiarity; but, as with all excursions, there is also a return. I therefore read into this quote a relationship between knowing and not-knowing. The excursion departs from 'the realm of the known' to bring one to a not-known, at least, not-yet-known but perhaps unknowable place. But the approach to this not-known place is made from 'knowing' (even though, especially since, it is released from 'grasp'). And further, at the end of the excursion one returns to what one knows, perhaps – no, definitely - unsettled by not-knowing.

For Heidegger there are two inclinations in thinking – forward and backward. In his lecture 'What calls for Thinking' (delivered for the first time in 1951) he proposes that what calls for us to think is simply that which has not been thought. He then goes on to say that what has not been thought turns away and withdraws from us, producing a draft into which our thinking is drawn.

'What withdraws from us draws us along by its very withdrawal, whether or not we become aware of it immediately, or not at all. Once we are drawn into the withdrawal, we are- albeit in a way quite differently from migratory birds – caught in the draft of what withdraws, attracted by its withdrawal... Once we are so related and drawn to what withdraws, we are drawing into what withdraws, into the enigmatic and therefore mutable nearness of its appeal. Whenever man is properly drawing that way, he is thinking – even though he may be far away from what withdraws, even though the withdrawal may remain as veiled as ever.' Heidegger M. (1999) p.369-391

Heidegger also writes of a poesy - a *'Memory (that) thinks back to something thought'* - a return to something already 'known'.

'Poesy is the water that at times flows backward toward the source, toward thinking as a thinking back, a recollection'.

He thus, makes a coupling of reflective and speculative thinking – thinking back and forward. In one, one recollects in the other one disconnects.

Taking a cue from Heidegger, in a previous paper, I describe two synchronous forces in creative practice, one that pulls one back to what one knows (recollection) – 'knowing tendency' (centripetal force) and the other, away from what one knows to not-known space (withdrawal) – 'not-knowing tendency' (centrifugal force) (Rosenberg (2000).

'The centripetal force pulls inwards trying to make coherent and urges to make compossible with a body of knowledge (ground); drawing connections to established research practice and established knowledge. It works in constant reference to what adheres or to what is ordained within boundaries of an established doxy. The programme of the centripetal is to make fast, secure and stabilize. Its tendency is to ground or establish a grounding for design research'

'The centrifugal force pulls away from the ground ... [knowing, the given], its movement is counter to the process of grounding. It pulls into open water. Centrifugally driven practice/research explores possibilities beyond, and creates deviations from programmes

to normalise. Its aim is to expand and develop opportunities. It relies on the substantiations of the centripetal, but it moves in the opposite direction and in this movement it rattles the movement to substantiate. The impulse is not towards certainty but to escape from it.... it aims to rupture the normal and the normalising programme'. (ibid.) (adapted from Bakhtin's ideas of the centripetal and the centrifugal in language)

These two forces work with, and, at each other, diacritically, changing and modifying each other constantly through the course of designing.

Design practitioners engage the 'given' (in recollection/reflection) only to dislocate and disconnect their knowing from what is given so that they may move to speculate. I propose that knowing and not-knowing are two complementary dynamics in creative practice, bound together inextricably (this is why 'extraction' is for me problematic in making 'design knowledge' ready for inspection). Not-knowing aerates knowing, forming an uncertain knowing; reciprocally we may have knowing drawn into not-knowing thus, a knowing uncertainty.

Perhaps, Tentative knowledge

So, if there is 'knowledge' in practice it is uncertain and tentative. The 'tentative knowledge' of practice is not knowledge that tries to take possession (to know authoritatively) – with certainty and disambiguity – but is rather, ambiguous, uncertain; propositional rather than declarative.

The knowledge that 'grasps' (takes possession of its object) is called *potestas* (Deleuze in Rajchman, J. (2000) p.73-75). *Potestas* grasps, in order to gain '...clear and distinct knowledge, scientific unity, [and] the triumph of reason' (Bingham N. and Thrift N. (2000) p.281-302).

It assumes 'a transparent space in which a single law reign(s), that of light or the sun's power'. (ibid.)

'Potestas' enlightens in an intense directional lighting. What is given, the landscape of the given, is lit in a hard chiaroscuro lighting. What is lit is revealed with an almost brutal clarity while what is in the shadows is consumed by darkness and one sees in that space only that there is no light – it is merely, and absolutely, shadow. In this kind of light, one produces 'clear and distinct knowledge, scientific unity [and can proclaim] the triumph of reason' (Bingham N. and Thrift N. (2000) p.292)). The edge between what is lit (and known) and what isn't (and therefore unknown) is sharply defined. One knows definitely or one doesn't. The process by which one constructs knowledge of this kind is one where disambiguity is at its core.

But illumination may be experienced in a different way:

A fairly soft and filtered light that allows us better to see things in relief the effect of [subtle] contrast[s] produced by rays and shadows that melt together, that are mixed, nuanced... This is the way we see ordinarily, really, daily... (Serres and Latour in Bingham and Thrift 2000:292).

In this idea of illumination, scintillation, knowing and un-knowing meld, edges blur and the landscape 'pulsates, dances, trembles, vibrates [and] scintillates like a curtain of flames' (Michel Serres quoted in Carter (2004) p.8). The world is not petrified by the light, but 'dances' – in a 'jouissance', a carnival in which 'actors' (objects and subjects) swirl in extravagant juxtapositions, space and time fold and gather in new arrangements and the world is topsy-turvy – [a] 'carnival of possibility' (Kearney (2001)). This knowledge is 'potentia' (Rosenberg (2008) p.113)

Poetico–Ethical

Potentia affords opportunity for the 'critical gesture' that Mackenzie describes.

For it is through knowing-as-potential that one intuits a way to change the world (a bit of it anyway) and in so doing create an alternative to what is given. With the critical gesture (critical practice) one tries to overcome the *'tyranny of the given'* (Rajchman (2000) in order to actualise something other than what is given to us as inevitable in *'the history of the spaces we find ourselves in'*; creating an alternative history –another course of events as a critical possibility.

Intrinsic to design practice is this idea of making the world 'other' to what is – 'creating an alternative'. But, design practice is also directed towards the 'Other' - the others for whom we design... and we are concerned for the others (beyond those for whom we design) who are implicated and effected by what we design - 'making a difference'. Design needs to engage with both 'othering' ('creating an alternative'...making other – poetics) and how this effects an 'Other' ('making a difference' ethics) through a criticality in practice and/or through a practice that performs critically.

The 'critical gesture' is both poetic and ethical. It is poetic inasmuch as it *'creates an alternative'* and ethical in that it is concerned as to its responsibilities for *'making a difference'*.

This criticality in practice is an act of 'fact' - 'religare' (tying together) of the poetic and the ethical gesture (de Certeau,(1984) p.74). This idea of a poetico-ethical practice expresses a particular imaginary of practice.

Richard Kearney in his marvelous book 'Wake of the Imagination' writes that an imagination*'.....responsive to the ethical dimension of things would be critical. But it would also be poetical'* (Kearney R (2001) p.368).

It is poetical in..*'In the broad sense of inventive making and creating carried by the word poiesis. ... [in which there is].... a creative letting go of the drive for possession, of the calculus of means and ends. It allows the rose – in the words of the mystic Silesius – to exist without why. Poetics is the carnival of possibilities'* (ibid.).

He warns that *'The ethical imagination .. [if it is not].. to degenerate into censorious Puritanism or nostalgic lamentation... must also give full expression to its poetical potential. The imagination no matter how ethical needs to play. Indeed one might even say that it needs play because it is ethical – to ensure it is ethical in a liberating way, in a way which animates and enlarges our response to the other rather than cloistering us off in a dour moralism of resentment and recrimination'* (ibid.).

M.M. Bakhtin in "Towards a Philosophy of the Act" proposes that an ethical programme is never prescribed but gained in a judicial (not analytical) bridging of the gap between deed (practico-material) and word (discursive).

'..... the unity of an act and its account, a deed and its meaning, if you will, is something that is never a priori but which must always and everywhere be achieved. The act is a deed and not a mere happening (as in "one damned thing after another") only if the subject of such a postupok [act], from within his own radical uniqueness, weaves a relation to it in his accounting for it. Responsibility then is the ground of moral action, the way in which we overcome the guilt of the gap between our words and deeds...' (Michael Holquist in Bakhtin (1993); pxii)

In order to 'gain' the ethical, the critical practitioner needs to 'contextualise' design and in so doing bring word to deed. Context is understood in two regards: firstly, that which addresses the practicalities and materialities of the world - (the space of 'doing' (savoir faire (knowing how to do) - the 'project') and secondly, that which draws more discourses into design and design into these discourses (the space of 'saying' (savoir dire (knowing how to say) – the 'programme'). (de Certeau (1984) p61-76).

Project

It is a *knowing or a moving to know* in the practico-material fabric of design's concerns defined in physical and concrete terms (*knowing how to*). It is gained in, and addresses, primary experience; working in the situatedness of everyday practice.

Programme

Programme is a *knowing* in/of a meta-context i.e. an abstracted and conceptual space beyond the immediacy of the practico-material context. It is engaged with through 'reflection' (De Certeau, 1984:61-76). Through *reflection*, in *programme* one can gain a critical purchase on that which influences *project*; on concerns, themes and theories - socio-cultural, environmental, philosophic, political and so on- siting design in a wider discursive field. (taken from, Rosenberg, T.E. (2003)

A critical practice needs to connect and test programme and project in the dynamics of designing.

PART 3: RESEARCH FOR PRACTICE: Critically Attuned

Research Methods

One of the questions that arose during the conference was: what, if any, 'research methods' is it important to teach students in design. The question was particularly addressed to consideration of the development of a Masters curriculum.

Design rather than being a discipline with a 'bracketed' (disciplined) set of operations (research methods), it is instead, thankfully, un-disciplined (although there are those that wish to discipline it). Designers are magpies using methods from any number of disciplines in regular and irregular ways to know and unlock the potential for designing in all its circumstances. Designers will use what is 'useful' from a range of fields - from the sciences (e.g. materials research, technology research) and from the soft sciences, like psychology (human response), from the social sciences (e.g. social research incl. ethnographic, phenomenological) humanities (e.g. philosophy, literature) and arts. Designers engage these different fields and references at the same time, making connection across different strands of thought/investigation.

At Goldsmiths a Methods and Processes courses forms a spine running through all of our educational programmes, at all levels. The courses are evolved in regard for the 'critical' in practice. The research methods (reflection) are coupled with ideational processes (speculation) and both of these are prepared in relation to different representational modes – representation used to research, ideate and present findings and propositions. We couple reflection and speculation (look at how we may grasp and ungrasp the given... transforming *potestas* to *potentia* in the process) in deriving methods.

The curriculum for methods and processes are oriented to a consideration of the nexus of actors and actants (human and non-human) that form the agency of design. We rather than focus on knowing how we may know, instead, organize it so that we start by appreciating where it is pertinent to act to reflect/speculate. So we consider the nodes in the nexus that we need to work with. We use diagrams of the nexus like the one below to orient the 'research' (fig 2.).

Design Nexus

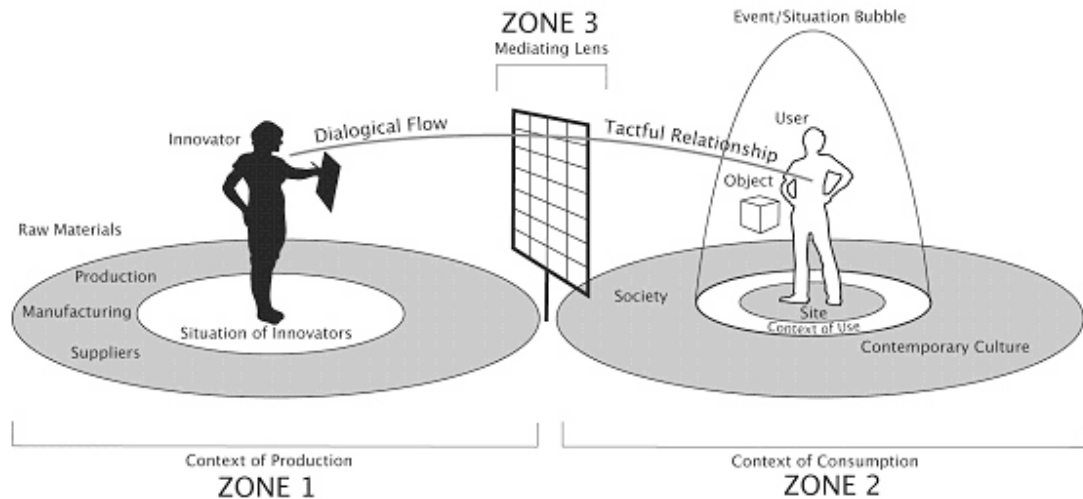


fig. 2.

I cannot unpick the diagram fully in the remaining space of the paper.

But, considering the context of consumption: Students on the Methods and processes course will be introduced to different ways across different disciplines that they may research the 'user' – e.g. user (group) as consumer (market research in various forms), user as individual 'subject' (philosophy, biography), user as social or cultural group (social research/social probes) and so on... They will also be introduced to ways to speculate as to the future of the user – build scenarios or anticipate user engagement with the emerging design and work them through in processes like bodystorming. The student will also be asked to design methods/processes appropriate to the feature or node they wish to know/not-know.

On architectural programmes students will inevitably at some point research site. A site may be understood topographically, archeologically, historically, and as a social process (any or all of these and others as well). The student may engage these multiply, building an understanding of current and past conditions of site in many ways.

A strategy employed at the Architectural Association in London is to get students to have readings of two sites and then overlay the readings of one site on another to disrupt the first reading. This adds other considerations and concerns to the original site so that they have to find and evolve other more voluptuous programme of designing.

Students are asked to consider and design disruptive strategies like the one given above in projects they are working on.

Although there is a need to identify and cut out the node or nodes (in plural) in the nexus to isolate them so as to research/innovate it is important to understand that the reflection/speculation is tied into the nexus.

Conclusion

Aeroplanes don't fly. At least they don't fly by themselves. To fly aeroplanes one needs runways, pilots, air traffic controllers, fuel supply and so on and so on. To design an aeroplane one needs to appreciate the nexus of actors and actants that afford flight.

But one also needs to approach the problematic of the aeroplane critically, appreciating that one alters the world through one's design and because of this one can make a difference.

It behooves us working in academia to evolve educational programmes that produce thoughtful designers - designers who think through the ramifications of their 'designing' - its repercussions in the world at large. In order to do this we need to introduce criticality into our curricula in design.

I also believe it is important to make space for 'critical practice' – a practice where designs are made that can act to work as criticism of the worlds past and present but also act as prop for a questioning of possible futures. Design has opportunity to produce critical/discursive objects that perform in different ways to other critical object using 'everyday' objects (sometimes future objects) to focus critical attention on past, current and future worlds.

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