Controlling the Discipline:

Education, Intention, Assumption, Prejudice

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Abstract

This paper explores, from a philosophical and speculative rather than empirical perspective, and within the design disciplines in general, the complex relationships, between practice and education, and their respective assumptions and prejudices. The paper begins by characterising design education from three perspectives: first, education 'about' the discipline, in the sense of providing information that explicates the general disciplinary 'content' and focus; second, education 'for' the discipline, which usually accords to notions of training; and third, education as the 'instilling' of discipline itself, the elucidation and establishment of rigour and control. It then explores the nature of disciplinary 'for practice' education and sets out the extensive range of presumptions which often underlies the relationship between education and practice. Examining the current relationship between disciplinary education and tertiary studies, the paper looks at critical inquiry and disciplinary research, before focusing on competing institutional values and their operational and material consequences. The paper concludes with the example of architectural education's response to the demise of modernism, and at the lessons that might be learned from such educational change.

Keywords

design education; design philosophy; ideology; training; disciplinarity

While the term 'discipline' can carry a variety of meanings, within the context of design its most immediate referent is something akin to 'field' or 'area', such that, at a macro level, the discipline of design can be distinguished from the disciplines of accountancy or of medicine, while, at a 'local' level, product design might be understood as sharing certain generic features with, but without being the same as, fashion design or architectural design. From this starting point other meanings follow, as do a number of significant issues, including that of education, and the often fraught and misunderstood relationships between education and disciplinarity. It is an analysis of such relationships, and the presumptions on which they are based, which is the subject of this paper.

'Education' and 'Discipline'

In a number of important senses disciplines are inevitably reflected in and by education, and are thus, to varying degrees, both affected and effected by educational decisions and assumptions. Conversely, decisions about what is or what should be included within educational curricula may be based on and influenced by certain expectations, preferences, and preconceptions held as self-evident within a given discipline. As a starting point, three obvious connections between design and education might be suggested.

First, education *about* a discipline, i.e. scholarship fostering an understanding of what that discipline 'is' or what it 'comprises'. In this sense education takes on an explanatory-descriptive role whereby persons *outside* a given discipline may come to learn about and to

understand 'what goes on' *inside* it: what constitutes its main subject matter, what its intentions are directed towards, what its expected – and desired – outcomes are, and so on. By these means too may an intending-designer – a *potential* 'insider' – come to know what design *entails* without yet learning *'how to do it'*.

From this follows a second connection, education *for* a discipline, by which is usually meant *training*, i.e. the provision of appropriate knowledge and skills such that the student becomes proficient at what the discipline regards as its practice, albeit initially at the level of a novice. While such education-as-training might be subsumed under the umbrella slogan 'life-long learning', implying, quite properly, an ongoing education throughout one's career, such learning, particularly in respect of the so-called professional disciplines, is most usually associated with tertiary education, i.e. with formalized courses of study specifically directed at that discipline. What such courses should offer, however, is highly contentious, with 'training' at tertiary level often being (somewhat dismissively) suggestive of 'technical education', leaving the universities to provide (or at least to assume that they provide) discipline-specific courses at a significantly higher intellectual – and consequently less 'artisanal' – level: preparing disciplinary thinkers, not 'work-fodder', for the professions! Regardless of which of the above meanings one chooses to adopt such education goes beyond the explanatory-descriptive and embraces the *normative*. Decisions about what is to be taught and learned, and why, are made, and the scope of knowledge deemed necessary is thus codified, circumscribed and 'reduced' such that education both limits and delimits that which will come to be known.

This in turn suggests a third connection, drawing on an alternative meaning of the word discipline: education *to instil discipline*. In this sense the purpose of education within any given field is conspicuously to establish rigour, to inculcate the novice into the particular disciplinary culture, and thus to establish a belief in and a commitment to that culture. Such disciplining, such enculturation, thus goes beyond the 'learning that' and 'learning how to' of the novice, into the 'faith in' and 'agreement to' of the converted. Thus is the normative operationalized, 'discipline' in this sense suggesting not only that the agent is *capable* of carrying something out but also that s/he *will do so*, and will do so in a way that *rigorously conforms to some accepted and previously understood notions of correctness or best practice*.

The consequences of these bi-directional relationships between education and discipline – and the assumptions, intentions, preferences and prejudices upon which they are founded – warrant further examination.

Education for Practice?

Let us begin with teaching. Wherever teaching may be seen to occur – within schools, technical colleges, universities, or via apprenticeship models – it is necessary to ask three obvious but often overlooked questions: *what* is to be taught, *why* is it to be taught, and *on what basis are these decisions made*? The combination of all three answers signals the contentious issues of curriculum and curriculum development, and, given our current context, of relations between educational institutions and professional disciplines. Hence it might be asked – and note the change of term here – what is *supposed* to be *learned* within the institution, and who makes such decisions, questions which, easily but perhaps uncomfortably, can be elided into a single question, what is education *for* within the 'disciplines'?

An immediate response, favoured by many practitioners within the design disciplines – and, perhaps unsurprisingly, by many design educators – is that practice is about *'doing'*, and thus that education is about *'learning to do'*. As a starting point, and within any given discipline, such learning to do might conveniently be subdivided into learning *what* to do and learning

how to do, and is thus suggestive of learning as the acquisition of knowledge, skills, and 'rules' pertinent to the discipline, and of teaching as the imparting of such within a formalised situation.

But while this *might* be accepted not only as a reasonable but also as a *positive* interpretation of disciplinary education, it fails to take due note of an ensemble of key issues which raise significant doubts as to the veracity, to say nothing of the desirability, of such a simple characterisation.

Perhaps we might start with the idea of *training* which, if not suggestive of either low-level learning or low levels of knowledge, does imply both a particular aim (or set of aims) and a particular relation to practice. If training suggests education for the purpose of *learning to do something*, then it assumes (i) that this something is known in advance, i.e. that the learner can be informed, prior to acquiring the skills, what those skills will allow him or her to do; (ii) that the acquisition of such skills is both teachable and learnable within the context of the 'training' environment, i.e. that these are not innate gifts but can be gained by study and practise, and/or that these skills are not culturally 'given' and beyond the training relationship; and (iii) that these skills, and the knowledge attached to them, is predictably valuable for the ongoing conduct of the discipline involved, i.e. that you *need* just such skills and knowledge in order to practice the discipline you have chosen.

Once again, a positive suggestion, but also one that tacitly accepts a number of further assumptions, namely: (iv) that disciplinary education *does and should* equate to skills (and associated knowledge) acquisition; (v) that it is thus the very *purpose* of education about the discipline to provide such skills and knowledge; (vi) that where education is provided within an institutional context, as, for example, in a university, such education self-evidently should be *education for practice* (and thus for and on the behalf of the profession); and hence (vii) that, educationally, the academy is *obliged to provide what the profession 'needs'.*

These realizations raise additional assumptions: (viii) that the profession not only already *knows what it needs*, but can *specify such needs in the familiar form of disciplinary competencies*; and (ix) that, in order to ensure that such competencies are actually imparted, there should exist a close relationship between academy and profession.

This in turn may be the foundation for asserting that the profession should have an input into curriculum development within the institution; and that the profession should, to some degree (typically by means of formal accreditation) oversight the academy; and, to return full circle, that all of the above is both normal and natural because it is surely self-evident that, in respect of practice-based disciplines, this is what institutional education is for, and that, educationally speaking, this is sufficient!

Education and the University

If the above is unashamedly a caricature of the (supposed) wants and needs of practice, then it is useful insofar as it should clearly identify not one but two particular positions: the (invented) position of 'practice' and the (adopted) position of the authors. This notion of position is critical in our understanding of education in that all educational decisions are position-based, i.e. they are determined by, and adopted to conform to, sets of pre-existent values, expectations and aims – sets of established beliefs, preferences, prejudices, and supposedly self-evident truths about the world – which define how educational programs are to be constructed and what they are 'for'. In this way education relates to normativity in two ways: on the one hand education establishes what is to be learned by the student, and, on the other, this education (i.e. what is to be taught to the student) is itself already preconditioned by the viewpoint or position of those determining that education.

In explicating this, let us return to the simple idea of 'training'. Suppose it be accepted that practice is 'doing'; that such doing requires 'training to do'; and that such training constitutes education. Then, we must ask, what does this 'doing' constitute; what does the corresponding education constitute; who is to provide this education; and who does this education benefit? Ignoring here the prosaic detail of the nature and content of training courses for any given discipline or sub-discipline, we might ask: if training is the aim, is it the university's role to provide such training? Or is university education expected to somehow to be 'above' this, such that 'mere' training – learning how to do something at a strictly practical or pragmatic level, at the level of competencies – can be dismissed in favour of a different normativity, a different enculturation, a different form of engagement with the discipline, a quite different attitude to training, and a set of challenges beyond the artisanal level? While it might be assumed that these questions are unequivocally answered in the affirmative, the implications of such a response in terms of the role of the university, and the relation between academy and profession, still need further comment.

First, we might expect – and might presume practice to expect – that disciplinary education within the academy is directed towards fostering critical engagement with that discipline. Hence, the notion of 'simple' or merely pragmatic training is usually derided by universities, to be replaced with the provision of an increasingly refined knowledge of the discipline itself and the development of increased intellectual rigour informing such critical engagement with, and sophisticated analysis of, that discipline.

All well and good, but what, then, is the purpose of such critical engagement and analysis? Two putative answers might be suggested: one, that the intention of such an educational strategy is to impose discipline on both the future 'practitioner' and on the discipline itself; and two, that education is, and should be, proactive, such that it does not merely provide for a more sophisticated understanding of that discipline's current key issues, but that future key issues might well be an outgrowth of such critical interaction between academy and profession. This suggests the necessity of an understanding of and a commitment to research in terms of future development of the discipline, which in turn reinforces the universities' position as the providers of such research.

But this answer itself leads to two further responses to our original question: (i) the further (and largely rhetorical) question 'why would we assume that educational aims are the same for university and practice?'; and (ii) the increasingly frequent assertion that such analysis has somehow overstretched its bounds and thus its usefulness, that it has become not only unnecessary (going beyond what is needed) but esoteric (divorced from, and thus unconnected to, both practice and discipline as conventionally conceived).

A Different Notion of 'Doing'

These two responses are, of course, deeply intertwined, and are dependent on our understanding of what '*doing*' in the university might mean, and the values, aims and requirements that inform and condition such 'doing'. While we might comfortably accept that 'professional' education should be delivered at an appropriately high level, significantly above that of the artisanal, challenging the profession and, as a consequence of this, providing its future leaders, we should note that this does not mean that university education is simply a much elevated version of professional training, nor that they conveniently 'run in parallel'.

All education is based on *values*, and if it may be accepted that professional values are constituted by the established values of designers (and many non-designers), then it might be asserted not only that one role of the academy is to challenge, and thus potentially alter,

these values, but also that it challenges these values not merely for and on behalf of any given profession, but *because one of the values of the university itself is to inculcate its students with just such critical skills and intentions*. In addition, it might reasonably be asserted that the academy has institutional requirements that *go beyond and are significantly different from* any needs or expectations suggested by, or potentially relevant to, external disciplinary practice.

The first of these assertions suggests not only that university education will always be different from professional training; nor simply that (akin to all professional bodies) universities inculcate their acolytes into the value system accepted by – and usually taken for granted by – that body, but more significantly, that the emphasis placed on 'critical engagement with the field' itself *institutionalises* an ongoing and essentially never-ending 'crisis of faith' within that field as presented. Thus, we may say, such criticality induces not just an intellectual *desire to* challenge, but a *need* to challenge, a need, moreover, that *constantly reinvents and reinvigorates itself*.

But again we must be careful, and should ask: is not such criticality – and the curriculum that attends it – in danger of becoming autotelic and insular, with such 'training for critical thinking' being construed as an end in itself, and with the purpose of education being to produce sophisticated thinkers, regardless of what they think about? Furthermore, is not the content of the teaching (and thus, presumably, the learning) merely contingent, and determined solely by what each individual staff member, head of discipline, or university thinks it should be? In terms of synergies between disciplines and universities the latter is a key area of concern, and while, in any given case, the answer to the question self-evidently depends on the decision-making strategy adopted, it is of far more significance to realise that such decisions are in turn conditioned by attitudes, assumptions and preferences. They are thus contingent on belief systems which, in the case of individuals, are highly personalized on the basis of particular (and contingent) theory choices and ideological commitments, and in the case of universities, are institutional and institutionalised, in both cases being based on values that may not be congruent with discipline values, needs and preferences.

While this might suggest a more extended discussion of the issue of professional accreditation for professional courses, and thus the increasing concern for professional oversight of education, for formal accreditation procedures, and for more direct involvement in curriculum development, it might also conveniently signal a return to our earlier point: namely, that universities have interests, obligations and requirements independent of any potential relationships with disciplines.

The Institutional Context

Insofar as universities are institutions in their own right, they are, self-evidently, answerable to their own internal administrative structures and their received statutes. Furthermore, to the extent that they represent individual 'suppliers' within a much larger educational framework, they are controlled by governmental policies and budgets, and are therefore ultimately answerable to governments. And insofar as they must justify themselves to government in respect of what they provide and at what levels of quality or quantity such provisions are made, universities have increasingly become competitive, one with another.

Such competition plays itself out not only in terms of educational curricula, student numbers, 'evidence' of educational quality, and so on, but also, and of increasing significance, in terms of research output, to say nothing of research funding input. And while such research activity is undoubtedly *linked* to discipline areas – academics are, after all, supposedly experts in their respective fields, and presumably conduct their research in relation to such discipline areas – this is in no way to suggest that academic research output necessarily contributes *to*

what the disciplinary body itself might see as useful information with respect to the demands of professional practice. Indeed it might be suggested that not only are tertiary institutions frequently obliged to measure research output against government-determined and university-centred performance criteria, but also that individual discipline areas, as 'pieces' within a larger framework, may be subject to centralised university strategies either unsympathetic or hostile to educational provisions focussed on professional needs, and thus might not benefit the discipline in this regard.

Equally importantly in this institutional context are the discipline teachers, and most significantly the competing expectations and rewards of the educational versus the professional environment. Issues of remuneration aside, while the motivation of both the practicing professional and the professional academic is professional *standing*, the former demonstrates her/his capabilities exclusively through 'made product' while the latter may use either their 'student product' (of real value only within the institution) or, more significantly, their written or drawn 'product' at the level of research and/or critical output. As such the reward mechanism for the practitioner is comparatively simple and self-evident while the comparable system for the academic is often effectively independent of the discipline, i.e. autonomous to the educational institution. In those cases where academic output is to some degree coincident with the discipline, as, for example, in the case of professionally organised design competitions, it is often the case that the normative traditions of the professional design disciplines come into conflict with the academic desire and obligation to 'challenge' the status quo and move the field.

In this sense, then, though the *practice* of a discipline may well be commonly understood to represent one face of a discipline, with that discipline's educational programs representing another, in truth the symbiosis is unavoidably illusory in the face of competing values and expectations at both the institutional and the individual level.

Architectural Education Internationally

The socially-established and lengthy institutional history of architecture as a professional design discipline, and the comparatively long history of architectural education within tertiary institutions, lends itself to examination in the context of our arguments regarding the practice/education dichotomy. In simple terms, the 'demise' of Modernist architecture and the loss of its essentially history-free, 'functionalist' theoretical paradigm, left practitioners with profound doubts concerning their received notions of 'best practice' and, less obviously, the nature and significance of the discipline's inherited culture, and associated cultural norms. Educationally this disciplinary crisis in architecture was first met primarily by a curriculum content readjustment – specifically, by the re-introduction of both architectural history and theory – and, only decades later, by a review of its broad pedagogic intent and its degree structures. Two parallel, but distinct, models have emerged: one (primarily of US origin), which moves all architectural education to a post-graduate level; and a second (primarily of European origin) which divides architectural education into two disciplinary phases – the first focusing on the discipline's normative 'how to do it' aspects, and on efforts to 'instil discipline', and the second on emphasising the educational institution's, and thus the student's, role in encouraging, facilitating and implementing critical investigations of the design discipline. In these respective developments we might see either (i) a return to the perceived values of a liberal education, most particularly its shared cultural awareness; or (ii) an effort to challenge the profession's assumptions and its normative patterns of operation; or even (iii) a desire to focus attention, from both a teaching and a research perspective, on the more academic aspects of the discipline, or its more 'cutting edge' aspects, or to premiate its more 'artistic' or outwardly more 'culturally significant' aspects at the expense of its functional and practical aspects. In this way the gulf between discipline and academy is

inescapably widened into an 'us-and-them' scenario. In each case cherished understandings and procedures within architectural education and the discipline are being, or will be, profoundly altered and the very idea of 'education for practice' severely compromised.

Conclusion

While this example could be explored at much greater length, and while the potential consequences of these significant educational changes within one disciplinary area could be used to suggest and explore the implications for *other* design fields, we must content ourselves by concluding with an observation on design education in general.

Education is the point at which discipline and academic views intersect. And if both are based on a range of potentially conflicting and/or incommensurable acceptances and assumptions, then these must in all cases be recognised, examined and challenged. If not – and they are simply taken as givens, to be accepted thoughtlessly and uncritically – then they represent potentially debilitating constraints on both our understanding of the present, and on our attitudes to the determination of the future; on how we perceive, care for, critically engage with and develop our disciplines, and on the pedagogical structures and curriculum content that we enforce on our students in the name of such disciplines.

In a conference essentially focused on *disciplinarity*, and on the basis of a paper that offers a philosophico-speculative rather than an empirical reading of relations between discipline and academy, it is necessary to end, not with a conclusion *per se*, but with two sets of questions, questions in need of urgent consideration if our discipline is not to be severed from its educational providers.

Rather than taking it as a matter of self-evidence, it is becoming increasingly important that we ask 'what should be the relation(s) between disciplines and educational institutions, and how should each benefit from the relationship?' Should educational providers any longer be expected to meet the needs of industry, or is the very notion of disciplinarity itself something that depends not on effective *training*, but on the development of an extensive and increasingly sophisticated intellectual base? Is, as one of the authors has argued elsewhere, the '*un*discipline' of design a direct result of the absence of such a sustained intellectual base, and thus the absence of fundamental knowledge-questions that inform, unify, legitimise and establish disciplines as something more than guilds of practitioners?

Conversely, it is essential to cast a wary and critical eye over university education, and to ask whether the academy has become, or is in danger of becoming, esoteric and divorced from the disciplines it supposedly informs? Is contemporary education clothed in the essential garb of a different and necessary digital future, or has no one yet told the emperor that the pursuit of the new for its own sake is an educational nakedness that does not serve the disciplines well?

Finally, it must be asked, if the educational relation between discipline and institution is changing, how is this presumed 'gap' or 'absence' in 'appropriate' educational provision to be addressed from a disciplinary standpoint? The future of our discipline lies in the future of its education, and the establishment of a symbiotic relationship both useful to and significant for both parties is the most necessary of the issues facing design today.

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