'The stalest windbag'? Teaching by the 'Year System' at the Mackintosh School of Architecture

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ABSTRACT Until the late 1970s most architecture schools in the UK higher education system organised their studio teaching around the so-called 'year-system'. Since then, a majority of architecture schools have followed the example of the Architectural Association in London and adopted a different type of studio teaching, known as the 'unit-system'. This essay compares and contrasts the methodology of the two systems, examines the ethos behind each system, their effectiveness in educating architecture students and their respective ramifications for the architectural profession. The Mackintosh School of Architecture at the Glasgow School of Art is studied as a prominent user of the 'year system'.

KEYWORDS Architectural education, Studio, Year system, Unit system, Democratic Intellect, Common Sense Philosophy.

Introduction

This essay examines the 'year system' of teaching in use at the Mackintosh School of Architecture in Glasgow School of Art. It contrasts that system with the 'unit system' currently in use at many other UK architecture schools. It investigates why the Mackintosh School of Architecture (MSA) has persisted with the year system when the majority of schools have switched from that to the unit system, and speculates on how the year system might be considered to work with a particular affinity for the Scottish educational ethos of the 'democratic intellect'. Finally, the essay assesses the appropriateness and efficacy

of the year system as a pedagogical tool viewed within that tradition, and its fitness to deal with likely future developments in academia, the architectural profession, and society at large.

The Year System

The 'year system' refers to an organisation of the studio-based architectural education at MSA whereby the five years of study i.e. three undergraduate years, the honours (or diploma) year, and the final thesis year, are each led by one overall Year Leader who sets a project-led programme of work for all students of the year in a common studio. There is also a

simultaneous and parallel integration of teaching and assessment from technical, professional and historical disciplines into that main studio for each year. Like all studio-based architectural education it has its roots in the 19th century French Beaux Arts tradition.[1] This particular variant, however, of a large studio with one common project set by a master, had developed out of the consensual yet dirigiste atmosphere of post-war British modernism with its state-led general rebuilding programme in housing, industry and the welfare system. The practice was consolidated in 1958 with the RIBA Conference on Architectural Education, which set the standard for a seven year educational course and institutionalised the move away from the apprenticeship system to incorporate all architectural education within universities.[2] As Jenkins et al. write

Increasingly the objective was not to train architects for individual or private practice, but for government employment in the massive reconstruction and modernising state programmes in housing, education, health and so on.[3]

The advantages associated with this type of teaching system are that it is typically seen to have a democratic ethos, in that all students have access to the same studio, pedagogic, material and institutional resources.[4] It makes for a teaching which is non-elitist and generalist in approach as it has to cater for a broad range of aptitudes, abilities, needs and interests across the student body; and it generally promotes an atmosphere which is collaborative rather than competitive. The system has not been without its problems, however, not least of which has been the crowding of studios caused by the evident growing popularity of an architectural education. In MSA there were typically around 20-30 students in each year in the 1960-70s, by the early 1990s this had grown to around 50 students per year, and at the current moment (2014-15) there are between 70-95 students each year.

The Unit System

It was, *inter alia,* in response to problems such as growth in the number of students, to problems in obtaining state funding, and to a perceived lack of 'freedom of choice' for students, that Alvin Boyarski, who was

chairman of the Architectural Association from 1971 until his death in 1990, set up the unit system of teaching.[5] This refers to a system whereby instead of a standard curriculum followed by a whole year as described above, a plurality of tutors are appointed to construct their own separate units which are taught in parallel, and even in competition, inasmuch as the students get to choose which unit they should join. At the Architectural Association in the 1970s the units were led by many architect tutors who were already or have since become well known in the field of architecture. Eric Parry gives an example of the studio unit options by tutor available to the students in the diploma year of 1978-9 as:

- Unit 1 Dalibor Vesely, Peter Carl, Mohsen Mostafavi
- Unit 2 Tom Woolley, Hugo Hinsley
- Unit 3 Jeremy Dixon, Sven Rindl
- Unit 4 Rodrigo Perez de Arce, Rene Davids
- Unit 5 Mike Gold, Paul Shepheard, Jeanne Sillet
- Unit 6 Peter Cook , Ron Herron, Christine Hawley
- Unit 7 David Shalev
- Unit 8 Terry Farrell, Isi Metzstein, Piers Gough, Stephen Gage
- Unit 9 Rem Koolhaas, Elia Zenghelis, Zaha Hadid, Demitri Porphyrios
- Unit 10 Bernard Tschumi, Nigel Coates
- Unit 11 Nigel Greenhill, John Jenner.
- Open Atelier Brian Anson[6]

This unit system of teaching had, as Parry goes on to say, 'a profound effect' on architectural education,[7] such that in the current day it could be said that 'it is now almost everywhere in UK schools'.[8] The unit system has thus clearly been perceived by many UK architectural educators as having certain advantages over the year system still in use at the MSA. Boyarski's lead in establishing this system was inspirational in his vision of architecture as not just a professional practice which demands a set curriculum in its education, but as a wide ranging practice, and an artistic engagement which is nurtured by openness, experimentation, plurality, 'a process of ideological friction' and 'freedom of choice' for the students. [9] He thus allowed tutors to build their own educational structures, and follow their own interests and artistic engagements. Indeed Boyarski contended that the curriculum –the dominant element in the

common year system – is 'tyrannical' and 'paternalistic':

Paternalistic in the sense that its obsolescence is inevitable in the face of unrelenting social and technological developments, and tyrannical in the sense that its prescriptions would nullify the cultural and intellectual differences of those engaged with it.[10]

A further advantage of the unit system, according to Parry, is its forging of a relationship between experimentation, research and practice, in that it facilitates specialism and the development of a 'school of thought'. Parry considers that close working together on projects developed in common 'is the basis of the studio as a laboratory of architectural design research'[11].. He offers as evidence for this the fact that many of the architects teaching on the Architects Association diploma programme cited above were unknown to the wider public then in the 1970s but went on through those studios to develop and articulate theoretical positions which led to such works of international reputation and influence as Zaha Hadid's Hong Kong project, Bernard Tschumi's Parc de la Villette, and Rem Koolhaas's Euralille Masterplan.[12] The list of staff attracted to the AA is remarkable in its quality and achievement in the profession as theorists and practitioners, and the unit system clearly allowed for a transmission across the generations of that achievement as Hadid had been student of Koolhaas, who in turn was a student of Zanghelis. Parry believes that the year system 'precludes the possibility of development of a school of thought'.[13]

The downside of this aspect of freedom for the tutor to develop their ideas and practice through their teaching is however that the units at the AA may have encouraged elitism and personality cults through dependence on the force of the individual tutor's character, rather than on any consistent or coherent pedagogical method. One writer points out that Boyarski faced specific problems with this type of star-system of teaching, for example

...how to isolate and control the 'big beasts' who were teaching in the school in his time, which included, inter alia, figures like Elia Zenghelis, Rem Koolhaas, Zaha Hadid and Bernard Tschumi.[14]

Yet consistency was indeed something that Boyarski seemed to be set on avoiding, as he said:

I don't think the problem of architectural education is to teach people to be almost proto-professional operators because that's for them to work out as they go out into life. The problem is to actually produce witty people who've got lots of conversations echoing in their ears when they leave, they've heard a lot of conversations, they've seen a lot, they've met people who are on their way up into the world.[15]

If the unit system works optimally as led by a witty elite then one might wonder, in view of the widespread use of the system in British - and worldwide - architecture schools, just how much of such powerful wit there is to go around –which 'big beasts' will be leading the units in the provinces?

Many critics indeed (see Pawlett Jackson and Murray Fraser below) go further than seeing elitism as some type of incidental symptom which may only be problematic inasmuch as it is in limited supply, and see an 'ideological'[16] change in the teaching of architecture with the instigation of the unit system. It is notable that the 'freedom to choose', which Boyarski trumpeted for students, was also the clarion call that heralded the neo-liberal policies of the Margaret Thatcher era in 1980s Britain –like competitive tendering and Right to Buy. Hence Pawlett Jackson comments on the unit system that it 'offers both marvellous complexity and a strange theatre of Thatcherite egotism.'[17]

Murray Fraser writes of Boyarksi that:

What he did was to map the unit system onto a neo-liberal, free-market economic model that encouraged tutors who were on precarious and poorly paid short-term contracts to fight among each other like proverbial ferrets in a sack. In this regard, the fulsome introduction of the design unit system at the AA by the 1980s was part of the more general ideological change in British architecture from the ideal of architecture schools as the trainers of standardised servants who could fuel the post-war Welfare State, to a situation of differentiated market choice wherein students were encouraged to display a more distinctive, individual take on design.[18]

The fact that 'almost everywhere'[19], schools in the UK have switched to operate with the unit system of teaching does however point to a complex reality which reflects cultural factors much deeper than mere economics.[20] This in turn leads us to the question of why the Mackintosh School of Architecture is one of the few schools which has not made that switch from a year system of teaching that is very much associated with the bygone age of post war social democratic consensus? Is it simply the case that the MSA has missed the pedagogical boat, and is stranded with an out-of-date teaching model which, unlike the AA where Boyarski claimed all students and teachers were 'predators'[21], does not prepare students for the individualistic and competitive realities of the modern day world? Or are there specific factors unique to the aims with which or environment within which the Mac operates that ensure the year system gives optimal results in a particular kind of architectural education? Unlike the AA with its experimental, theoretical and research basis the MSA is known for preparing students and teaching them how to design buildings. It also has a very strong identification with its own location, the city of Glasgow; and projects, especially those in housing and institutional buildings in the fourth (honours or diploma) year, engage with that urban realm. The most up-to-date RIBA validation report on the School states:

The tradition of the school is clearly embedded in the art and craft of architecture: there is a strong motivation to make and build.[22]

That notion of the architect's role as unproblematically 'making and building', free from the pricks of conscience of Parry's 'schools of thought', could of course be said to belong to those bygone years of collective endeavour, where large public sector studios of 'standardised servants … could fuel the post-war Welfare State', but is that necessarily so? And is there not indeed something to be said for sticking to your own tried and tested pedagogical guns and not 'just blindly following the AA'[23] and indeed the vagaries of architectural fashion? In the same RIBA report the Head of School, Professor Christopher Platt, makes the case for the strength of a tradition.

Throughout a 40 year period under three previous successive Heads, it has maintained

an impressive and consistent output and reputation. This is due to the collective purpose and quality of its staff as well as a shared ethos focussed on the art and craft of contemporary architecture. The Mac has not lurched from one vision to another, nor has it stagnated. In this respect, it could be described as a mature school of architecture. Its intellectual conviction gives it a secure position from which to address a changing landscape of external forces in agile and innovative ways.[24]

The Democratic Intellect

In order to examine the question of the continuing pedagogical tradition of the MSA; to what extent it is maintained here by 'intellectual conviction'; and how 'securely' its position is maintained, some purchase might be gained by viewing the MSA through the lens of the analysis of the historical trend of Scottish education known as 'the Democratic Intellect'. In his book *The Democratic Intellect*[25], George Davie examines and discusses the system and philosophy of 19th century Scottish University education leading to an outline of a pedagogical tradition of which some little remains and much has been forgotten. The book studies what Davie calls '*The Democratic Intellect*' in terms of open access, progress, breadth of curriculum, and assessment method in the Universities at that period, and brings some unexpected and surprising facts into view. The current day much vaunted breadth of Scottish education, with high school pupils taking five subjects to 'Higher' level in order to qualify for University, and up to five subjects being studied in the first year at University, is in fact but one small final remaining feature of what Davie dubbed this 'democratic' tradition[26]. Its desired 'democratic' effect is in producing a citizenship with broad areas of interest and knowledge, avoiding social 'atomisation' into experts and a docile untutored public.

But this enduring breadth of curriculum was originally, from the 17th up until the 19th century, part of an integrated educational system with, according to Davie, such 'democratic' aims in mind. In the space given here only a sketch of some of those other parts of the system, as described at length by Davie, can be drawn. Very basically some important features of the 19th century 'democratic' system were that:

- Classes were taught by the professors in a species of Socratic method, where learning often proceeded by discussion on leading questions set by the professor in order to stimulate critical thinking and illuminate ideas;
- There were no limits on access i.e. via entrance exams or qualifications, to University classes;
- There were no class examinations. Marks were awarded to the individual students for their work in class by the whole class i.e. the students themselves; and
- All students studied a general class: philosophy, before doing any specialisation

No doubt there were some troubling aspects to the University system at that time: aspects and circumstances which nowadays we would consider to be deficient in their democratic contribution to society, namely, that although there were allegedly no limits on access to such education, no women attended these Universities, and the ability of many of the poorest young men in 19th century society to be able to support themselves through a University education must, despite the cliché of the 19th century lad o' pairts, be doubted too.[27] In that sense the best that can be said is that these Universities operated then very much with the prejudices and within the limits of the social mores of their time. Thus while philosopher Alasdair Macintyre recommends that all new university teachers should read Davie's book,[28] Jean Barr, Professor of Adult and Continuing Education at Glasgow University points out that there are 'peculiar blindspots' in Davie's notion of democracy, and she draws attention to Lindsay Paterson's[29] criticism that Davie was 'wrong about access but more interesting on matters of curriculum'.[30]

It is debateable to what extent, if at all, we can assert that the 'year system' has been maintained at MSA because it is a Scottish institution, and because that system is congenial if not exactly conforming to the traditional aims and indeed forms of Scottish education as detailed in the 'democratic intellect'. A high proportion of both students and staff (including 3 out of 4 Heads of school over that 40 year period described above by the current Head) have come through the Scottish school system with its broad general curriculum, where students usually study five subjects to 'Higher' level, while in England usually only 3 subjects are studied to the more deeply specialised 'A level'. In British

elections Scotland also consistently voted largely in favour of parties other than the Conservatives during the period of Thatcherite neo-liberal change (a majority of MPs returned from Scotland in all the elections, 1979, 83, and 87 were Labour), and in the post-Thatcher period the size of the public sector has remained larger in Scotland than that in England.[31] While these specific historical, cultural, social and educational factors of the MSA's environment may appear to create a congenial atmosphere, it is not clear if the 'year system' has been maintained there for other reasons perhaps more specifically to do with the teaching and infrastructural resources available, or certain other pedagogical or architectural preferences or beliefs.

What is clear however, is that the model of the democratic intellect raises certain important issues, and imposes a conception of education which is useful in framing the comparison of the year and unit systems. In the 'democratic intellect' model the questions of access and democracy are shown not only in relationship to one another, but also in their relationship to the fraught debate between 'generalist' and 'specialist' which is always to the fore in the 'year' or 'unit' question. Davie's claim for democratic access in Scottish Universities may, as Barr points out, be flawed because of certain nineteenth century practices and prejudices (e.g. sexism), but democratic access to all intellectual, pedagogical and material resources is an important feature of the common studio in the year system at the MSA. A generalist approach is a necessary part of this studio system, and Davie also sees repercussions of this generalist/specialist question in wider society:

A society split between over-specialised boffins on the one hand and unthinking proles on the other is not merely repellent from a moral point of view, because of its tolerating or even encouraging the intellectual backwardness of the masses, but at the same time is also inherently an unstable basis for the material progress it seeks to sustain [and] the stultification of the majority [will] affect the mental balance of society as a whole ...[32]
This 'democratic' view from Davie has a long pedigree in Scottish culture from John Knox's Reformation which aimed to create a literate peasantry in the sixteenth century. Central to Davie's generalist ethos in Scottish higher education, however, is the Scottish Common

Sense philosophy, and Euclidean mathematics. Common Sense philosophy, as founded by Thomas Reid in the 18th century: an attempt to put philosophical investigations on the same firm footing as scientific investigations meaning that universally accepted first principles (on the model of Euclid's axioms) in terms of human belief can be established (i.e. the actual existence of the external world), and then rational progress in philosophy can proceed from there.[33] Thus there is no time spent on ontological problems of existence or otherwise, the evidence of the senses is trusted and every person who has common sense is a competent judge. The spatial method of geometry inherited with the Euclid was also favoured in Scottish universities, as opposed to the algebraic Cartesian method adopted in Oxbridge with its abstract specialisation of adopting symbols for objects of discovery (lines, planes, solids etc.), and was treated as a metaphysical meditation on actual spatial relations, meaning that mathematics - geometry in particular - was thus approached by Scottish intellectuals as a branch of liberal education and a part of the European humanist legacy.[34] While as mentioned above, it is not clear that the MSA modelled its pedagogy on the Scottish democratic intellectual tradition or makes any claim to belong to it, nonetheless the year system at the school can be seen to favour and nourish a similar set of values, not only because of its claims to be democratic and generalist, but in that it favours working with real world and 3D objects and spaces as a route to understanding, and directly drawing, designing and building actual objects rather than engaging in abstracted or ontological inquiry around them.

Critique and Conclusion

In his short critique of architectural education published in the *Architects Journal* Murray Fraser gives quite a bit of space to a spirited deconstruction of the 'unit system', as sampled above, but dismisses the 'year system', which he himself studied under at the Bartlett, with only one word 'boring'.[35] That one word may speak critical volumes though, when in the light of the discussion of the relationship of the Common Sense philosophy to the generalist and democratic ethos of the 'year system', we note that Immanuel Kant famously dismissed the Common Sense school as a likely refuge for the 'stalest windbag'.[36] The blunt rejection seems, in both cases, to

contain an implicit criticism of the species summed so memorably in Socrates' adage that the unexamined life is not worth living. For while there may be a difference between the everyday meaning of common sense as simply widespread conviction (such conviction can, of course, be wrong, as in the well-known Jane Jacobs' discussion of bloodletting as cure), and Reid's philosophical concept of it as the basic first principles at work in human reasoning, Kant's criticism is that nonetheless because it is a logical procedure which relies on concrete experience rather than finding abstract a priori rules, so any speculative understanding is beyond its horizon. This criticism could equally apply to the 'year system', where its generalist and practical ethos could be seen to be unquestioning of the resources to hand, and conservative and conventional in its mere manipulation of the given situation with a discrete range of techniques, rather than speculative and innovative like the 'unit system' which, as Parry asserts, leads to serious research.

Another related problem with the 'year system' concerns the notion of the relationship between the generalist approach and democracy. While Davie's fear for a society riven by overspecialisation is admirable, one has to wonder whether, in the current age of advanced and globalised capitalism and ubiquitous digital technology, a truly generalist approach to education is useful or even achievable? What proportion of smartphone users today would have any idea about the principles at work in that technology which they use on an hourly basis? And would it not defeat the ends of the invention of such a technology if time could even realistically be spent educating all users in its working principles? Davie cites from the nineteenth century philosopher, William Hamilton, an interesting extended simile to illustrate the difference between the Euclidean geometry of the democratic intellect and the Cartesian algebra of the Oxbridge tradition, which could also say something about the 'art and craft' and 'making and building' approach to projects in the MSA studios. To pass beyond a mountain range on long distance travel, he writes, you can either climb over the mountain and down the other side, appreciating its material, its extent, its relation to other topological features, or you can enter a railway tunnel travel in 'darkness and torpidity' and emerge out of the dark at the same point as the

climber, having solved the problem perhaps in shorter time than them. The first solution to overcoming the obstacle is like Euclidean geometry in the solving of a mathematical problem where all the planes, shapes and forms are invoked in the work, says Davie, the second is when you solve the problem using the abstract symbols of algebra.[37] It is a picturesque and charming image, and as such it is convincing within its own frame of historical and cultural reference. Yet would it be plausible to expect the computer and smartphone users of today to learn exactly what are all the electronic and soft- and hardware processes put into function when they press every button with a symbol on it on their keyboard? A specific acknowledgement of this dilemma in architectural education and in the profession at large is made by Paul Jenkins et al. in the *Architectural Research Quarterly*:

The argument is that generalism, through the coverage of all criteria by all students in higher education institutions, is neither desirable nor possible. Professional practice is becoming increasingly diverse and specialised ... it should be reflected in architectural education.[38]

Yet if the generalism of the democratic intellect has been a particular Scottish tradition, then its relevance has been much questioned in modern Scottish society and culture recently, and not just in the field of architectural education. In his posthumous published book in the lead up to the Scottish Independence Referendum, the late Stephen Maxwell, academic and political commentator, wrote asking whether democratic intellectualism had produced any positive results in Scottish society since the discovery of north sea oil, and whether it can 'be extended beyond the bourgeois perspectives of Scottish Enlightenment thinkers, 19th century metaphysicians and inter-war innovators '?[39]

Such questioning is also necessary for the architectural profession and its methods of evolving the discipline through teaching. The architectural profession has recently suffered heavily because of the global economic crisis, with construction output falling faster than GDP between 2008-12, while in the meantime the number of architects across Europe increased by 13% over the same period. This has not only meant falling salaries and a greater threat of unemployment for those in the profession, and pressure in terms of working for no fee and delaying retirement age, but it has contributed to a lack of confidence and fall in esteem for the profession.[40] Beside those professional dilemmas, crisis plays out in the notion of architecture as a discipline too, for the relationship between a broad education, specialism and research has been unsettled by the exigencies of the Research Assessment Exercises carried out every five years in the UK higher education sector. A suggested approach to deal with these problems is made by Jenkins et al. who propose allowing schools to develop in their own individual direction as they have done in the USA to give an in-depth specialist and research profile, while encouraging cross-institutional collaboration which 'could provide the breadth necessary to ensure the evolution of the discipline'.[41] There are possibilities then, for harnessing the advantages of pedagogical systems so seemingly irreconcilable as the 'year system' and the 'unit system' to the benefit of both the discipline and the profession. The suggestion here is that a full analysis of the historical and cultural roots of the individual systems, as well as their effects, can and should be carried out in order to find that best form of collaboration and way forward to an architectural education, which can encompass the full breadth of the discipline while nourishing a range of specialist researches to keep driving it forward.

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