

Shaping the Future of Architectural Education in Scotland

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ABSTRACT In recent years there has been a strong focus on the impact of research on policy and practice within the UK. The devolved government in Scotland has been particularly supportive of innovation and change relating to environmental improvement and this has been seen for example in the creation of Architecture & Design Scotland (A&DS) to champion good practice in architecture and design. The 2016, year-long 'Festival of Architecture' provides a plethora of opportunities to celebrate and reflect on the richness of Scottish architecture, as part of the Year of Innovation, Architecture and Design, and a catalyst to generate a discourse on architecture and design pedagogy.

It is argued that no other profession has undergone as dramatic a transformation in the past two decades as architecture.

Contemporary societies are witnessing dramatic transformations resulting in economic, environmental, and social and cultural changes. This means that the role of the 21st century architect has become ever more demanding, likewise the attributes required of graduates entering the profession. Additionally, EU directives are demanding change throughout Europe and UK architectural education is not an exception. Debates about its change to become shorter and more affordable while addressing the practical realities of contemporary societies are underway. Similarly, architectural education in Scotland has its unique richness in terms of the nature of degrees awarded as well as issues

related to its contextual particularities, evolution, and identity.

Scotland has a long tradition of excellence in architectural education that go back to more than 150 years. The five Architecture Schools are set in cities of differing character and each offers particular specializations within a broad-based curriculum. The Architecture Scottish Schools of Architecture (ASSA) was formed by the then six Schools / Departments of Architecture in Scotland in 1982. A primary objective of the Association has been to foster collaboration between the Schools and improve the education provision. The Architecture Academy provides a lens independent of the demands of the profession and the potential to advance the field in extraordinary ways, and yet pedagogy has not always lived up to this potential: teaching

methodologies and the predominant model of studio teaching has remained virtually unchanged for over 100 years!

Van Schaik has argued that spatial (visual) intelligence - one of the seven human capabilities along with linguistic, mathematical, kinetic, natural, musical and inter-personal intelligences - has been underplayed, lacking a theoretical underpinning within the discipline. The development of spatial intelligence is not accounted for in architectural education creating a discontinuity between architectural practice and everyday life. Van Schaik calls for a more collectively motivated profession with a more inter-disciplinary approach. His work draws on previous research of approximately fifty architects and examination of their own mastery.¹ That research revealed things that every practitioner should know about their creative practice, things that most architects are only aware of at an intuitive level. Reflecting some of the graduate attributes identified above, Van Schaik flagged up personal attributes, such as stamina, creative energy and intellectual capital, central to dynamic practice.

Underlying the theme of “Models and Approaches” and reacting to the question of *how does contemporary education of architects shape the future of the built environment in Scotland* the call for papers for the 2016 spring issue of Charrette address and coalesce around the topics a) shaping new places, b) re-shaping old places, and c) shaping pedagogical methods. While these topics were not fully or explicitly addressed in the contributions, this issue of Charrette provides an ideal platform for Scottish Architecture Academy to be involved in an experimental and critical debate that is intrinsically linked to the current interests in urban traditions, modernity, and policy debate on the quality of urban life.

The 2014 referendum on Scotland’s independence is generating vibrant discourse about increasing equality and realizing human potential in Post Referendum Scotland, which have strong urban implications. Scotland and its large cities in particular, house large portions of population in poverty, whereby poverty derives from concomitant and recurrent combinations of spatial, socio, economic deprivation; the relevance to

Scotland is therefore strong, in relation to long term social and environmental sustainability, and made even greater by the manifested Post-Referendum demand for a just and fair society for all. The theme of social responsibility in post-referendum Scotland, and the role of Academy can play in delivering widening access to architecture among the country’s disadvantaged groups, and as an *enabler* for socio-spatial justice through the delivery of people-centred design pedagogy is examined by contributors to this issue. However, while professional practice in architecture is in continuous and dynamic process of change the pace of change in education is slow and less dynamic. In the midst of this context it is often emphasized that design education is the cornerstone of the learning process of future architects. The skills, knowledge, and attitudes developed within this process are those that young graduates take to the profession. Consequently, the approach to and the content of that education are the backbone of profession of architecture.

In essence, the preceding discussion suggests three important points: a) architectural education operates within and is influenced by a multitude of socio-economic, socio-cultural, and political milieus, b) the educational process of future architects must respond to the demands placed on it by the profession and society, and as a consequence c) education in architecture has to be encountered and to be dealt with as a rich field of pedagogical discourse whose foundations, underlying theories, contents, and methods are questioned and critically analyzed. Additionally, there is a tremendous diversity of these contents, approaches and methods. These points go along the eloquent statement made by Thomas Fisher (2006, p.30):

*To remain silent about the values represented in what we do, either out of mistaken belief that professionals must remain ethically neutral or out of a romantic dismissal of all normative values, is to eliminate one of the main reasons for the profession’s very existence.*²

Reaching across the boundaries of their university campuses and studio settings contributions in this issue address a wide spectrum of aspects that influence architectural education and its relationship to practice. In

the main section of this edition, we present seven essays characterized by rigorous focus on key issues that present themselves on the map of pedagogical discourse as challenges facing the education of future architects. In the free articles section we present short, less formal interventions of in-depth thoughts on contextualizing architectural education within its cultural and professional domains. The contributions combined exemplify conscious efforts and reflections on shaping the future of architectural education in Scotland.

While the essays present concerns, notions, and cases unique to context of Scotland, they have universal applicability to the wider context of the United Kingdom and the global academic community. Discussing the topic of widening access of disadvantaged communities to higher education as an important government undertaking David McClean, Neil Lamb, and Libby Curtis offer an analysis of ACES project which was carried out jointly by staff of both architecture and art & design schools at Robert Gordon University (RGU). They interrogate a number of elements of a framework that includes various types of support to individual learners while introducing architecture, art, and design to pre-university pupils through design sessions. The paper maintains that after four years of implementation of such a framework it now acts as an enabler for striking a balance between learner's' artistic ability and the drive for learning and personal development. While the work of McClean, Lamb, and Curtis is developed and implemented in the context of Scotland and RGU, it has universal applicability in the sense that it raises important questions relevant to rethinking the processes that govern entry to architecture education and admission policies.

The design studio brief has been discussed in contemporary literature in design pedagogy through various perspectives highlighting its value to design and design learning processes and outcomes. While some place the brief into a reflective learning process³ or as part of design thinking paradigm⁴ others debates the brief as a generator for shaping studio objectives or as a process much of which occurs within society.⁵ Suzanne Ewing advances the scope of the discussion and further presents a critical research on the merits and tools instigated by the design studio brief in the context of Edinburgh School of

Architecture and Landscape Architecture. Premised on a sampling procedure of design studio briefs the paper offers a series of tales categorized based their significance in Scotland's contemporary constitutional history. The tales generate a discussion about the contribution of briefs to rigorous practices, ends and means and the tools involved. The work of Ewing manifests a departure from viewing the design studio brief as part of a linear problem-solving process to a plurality of perspectives that range from structured instruction to trans-disciplinary collaborative processes. The lesson conveyed by Ewing's work is twofold. The first is that design studio briefs can have the capacity to achieve the desired balance between logical reasoning and imaginative-intuitive understanding. The second is that architectural educators need to continuously question the nature, scope, and content of design studio briefs and the processes and outcomes that ensue from them.

The practice of "learning about the everyday environment" appears to be the focus of four essays in various forms that range from community engagement and live projects to addressing a specific type of user population and live-build experiments. This seems to materialize the statement made by John Habraken:

*Teaching architectural design without teaching how everyday environment works is like teaching medical students the art of healing without telling them how the human body functions. You would not trust a medical doctor who does not know the human body. Knowledge of everyday environment must legitimize our profession...*⁶

Alex Maclaren's essay on civic fabrication examines social responsibility in the architectural design studio at Edinburgh School of Architecture and Landscape Architecture. Utilizing the area of Dalmarnock, Glasgow, he juxtaposes, in one hand, community needs and academic and professional requirements and on the other hand, his work places emphasis on key pedagogical aspects and contrasts the role of the tutor as pedagogue and as 'facilitator' or 'enabler' of learning. The work advances the discourse on live projects and the roles future architects could and should be able to play through long-term engagement in and commitments to a specific community. The

message of Maclaren's article emphasizes a dramatic departure from the role of the architect as someone who solves people problems to someone who creates a process that enables people to solve their own problems. Along the same line of Maclaren's exploration, David McClean, Raju Noor, Gokay Deveci present another case of community engagement in the city of Aberdeen as part of the educational process at Robert Gordon University. Yet, their focus appears to place emphasis on structure, content, and context. Their work is based on the assumption that a paradigm shift to a more sustainable future requires the development of thinking skills in the realm of urban development within a zero carbon context. They offer an introduction to the structure of the Masters programme while contextualizing the work of one of the units into an exploration of urban resilience in a post-hydrocarbon economy.

Advocating the introduction of real problems, the essay of Neil Verrow of the University of Dundee presents a brief discussion on designing housing for autistic adults. A user-centered design approaches are utilized as part of the studio thrust. A condensed version of the students report is outlines and a series of project samples are presented. The essay calls for studio proactivity by engaging students in the development of new models for living while learning through a user-centred approach to design. Here, the design studio brief is dealt by involving the students in establishing objective criteria that guide the design process and against which proposals are assessed, thereby having control over their learning.

In the context of architectural education at the University of Strathclyde and through a series of explorations within design studio settings Derek Hill argues for instilling in students the sense of being contextually analytical. In a structured format he presents these explorations at various year and scale levels utilizing the built environment as both an open textbook and an analytical tool as an experiential learning mechanism. Hill's approach emphasizes local responsiveness, social engagements by applying techniques such as mapping, recording, and coding, while developing stories and narratives about the city. Such techniques act as enablers for developing critical minds that comprehend

how to dissect the socio-spatial context and anatomise its settings.

Johnny Rodger at The Glasgow School of Art offers juxtapositions of two systems of education that characterize higher education in architecture in the UK; the 'year system' and the 'unit system.' Exploring the ethos, merits, and effectiveness of each system he explains what each offers to the profession. By mapping the notion or trend of 'democratic intellect' that calls for open access, progress, curriculum extensiveness, and assessment methods Rodger discusses the way in which the pedagogical tradition of the year system at *Mackintosh School of Architecture* has sustained its position over many decades.

The free articles reflect on personal positions coupled with in-depth thoughts representing various voices. With the voice of an experienced educator and intellectual critic at the University of Strathclyde, Jonathan Charley attempts to set out a future of architectural education that does not sit at ease within higher education institutions in the UK, which can be seen as implicit call to refocus the discipline within the larger perspective of other built-environment related disciplines. With a pure Scottish voice, linguistically and professionally, Chris Stewart, an engaged thinker and professional at the University of Strathclyde, offers a critical view on the relationship between professional practice and traditional or egoistic pedagogy. He presents thoughts that outline the Scottish position from a socio-entrepreneurial architectural perspective.

Corresponding with the mission of Charrette this edition brings discussion on education and design pedagogy out of its marginalized seat in the academic theatre to the forefront of academic and theoretical performances on its nature, essence, and evolution in the context of Scotland. The cases, deliberations, reflections, and voices presented in this issue of Charrette come from committed educators who operate in the Scottish context and whose concern emphasizes that the mission of a school of architecture or a design program should foster an environment that nurtures exploration, critical and trans-disciplinary thinking, and social / community engagement. Implicitly and explicitly they pave the road to strengthening design pedagogy, to enhancing the role of the academy in shaping the urban environment and the society within, and to

fostering a more engaged approach to design in the real world or at least simulating it efficiently and effectively.

REFERENCES

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2 Thomas Fisher, *In the scheme of things: Alternative thinking on the practice of architecture* (Minneapolis, MN: University of Minnesota Press, 2006) p. 30.

3 Donald Schön, 'Toward a marriage of artistry and applied science in the architectural design studio', *Journal of Architectural Education*, 41(4) (1988), 16-24.

4 Bryan Lawson, *Design in mind* (Oxford, UK: Butterworth Architecture, 1994),

5 Ashraf Salama, *Spatial Design Education: New Directions for Pedagogy in Architecture and Beyond*. (Farnham: Ashgate, 2015).

6 John Habraken, 'Questions that will not go away: Some remarks on long-term trends in architecture and their impact on architectural education'. *Open House International*, 32(2) (2006), 12-19.