

Institution: University of Dundee
Unit of Assessment: 16: Architecture, Planning, & the Built Environment
<p>a. Overview</p> <p>In 2012, Architecture and Planning merged to form an integrated research unit with a shared ethos based upon Geddesian dialogues between theory and practice, localism and the international, the synoptic view and specialism. The thinking behind this merger was instrumental in the plan to form a new School of the Environment with Architecture, Planning, and Geography, within the College of Arts and Social Sciences (CASS). The new School realised a possibility anticipated by the Geddes Institute for Urban Research, a research forum with tripartite participation by Architecture, Planning, and Geography. The new Architecture and Planning unit (hereafter AP) acknowledges synergies between the central concerns of Architecture and Planning, which have made it possible to build a more focused REF submission. The merger was supported by appointments at lecturer level and 2 professorial appointments plus expansion of our MSc and PhD programmes.</p> <p>The Geddes Institute is our principal collegiate forum for research. It contributes to a research environment that includes the Centre for Environmental Change and Human Resilience (CECHR) and other forums in the University, which provide research programmes for staff and PhD students.</p> <p>b. Research strategy</p> <p><i>RAE 2008 and direction of travel</i></p> <p>In RAE 2008 (Architecture), it was noted that with 40% of outputs rated at 3* or above, and 30% at 1* or below, the quality spectrum was too broad. It was also noted that the strength of the research environment lay in the activities of individuals rather than in focused supported research groups. In RAE 2008 (Planning), two staff were submitted with Geography in a submission in which 60% of outputs were rated 3* and above. Since 2012, when the AP unit was formalised, the strategic aims of the unit have been:</p> <ul style="list-style-type: none"> • to forge an identity for the AP unit that reflects its diversity of interests and commonality of aims; • to focus research interests into cognate groupings; • to raise the level of excellence of outputs of staff through mentoring and dialogue; and • to strengthen the environment across the AP unit including support, infrastructure, and funding. <p><i>Current research objectives and activities</i></p> <p>Geddes' concern with the synoptic view encompassing 'land work folk' defines a form of latter day humanism (an update on a renaissance ideal) by which we orient our research interests. We note that University research priorities in sustainability, design, and well-being (published 2012) map onto this humanist position. Starting from current research interests and competencies, our overarching aim is to build collective, outwardly directed research trajectories around the following three interrelated areas:</p> <p>1. Spatial Governance includes policy and practice-oriented research, centred on land use planning, public policy, and community engagement [Alwaer, Cumming, Gado, Gopinath, Illsley, Kirk, Peel, Onyango, Radfar]. Research is concerned with developing appropriate planning theory and practice in the formulation and realisation of policy outcomes in the context of changing state-market-civil relations at international, national, and local scales. The focus is on the design and evaluation of new methodologies (homelessness data collection, participatory poverty mapping), policy instruments (sustainability tools and environmental assessment), and territorial management (policy development, Business Improvement Districts and community-led initiatives).</p> <p>Developing new approaches and building capacity for data collection on homelessness and housing exclusion was central to MPHASIS (Mutual Progress on Homelessness through Advancing and Strengthening Information Systems), a £500K EU project lead by Edgar and Illsley funded under the PROGRESS Programme. The project involved action-oriented research and transnational exchange in 20 European countries, creating the first European partnership on homelessness monitoring systems. Gopinath's British Academy funded Poverty Study and Poverty Mapping Workshop in Kerala, India sought to develop a place-based understanding of poverty. This project had collaborators in the USA and was covered in the local media.</p> <p>The SuBETool (Sustainable Built Environment Tool) designed by Alwaer is a framework for</p>

sustainable master-planning. SuBETool has extended the environmental assessment methods in use today for buildings, like LEED and BREEAM, by providing a broader palette of performance indicators that measure the sustainability of buildings, master-plans, and communities. The tool was developed with Hilson Moran Partnership (a multi-disciplinary built environment consultancy with offices worldwide), and is used by them on master-planning projects. Strategic Environmental Assessment (SEA) research has been expanded with **Onyango's** recent appointment (2012) as lecturer and **Peel's** at professorial level (2013). Other staff in this area work on the field measurement and testing of buildings for environmental performance, primarily focusing on buildings in hot climates, correlating environmental comfort with use patterns [**Gado**]. **Gado** also runs the School's environmental lab, a resource that supports design-based researchers. Staff working in this area share synergies with CECHR (e.g. **Peel's** work on social-ecological resilience).

Echoing Geddes' focus on regional planning, **Illsley** recently led a team working with stakeholders of [TAYplan](#), one of the four Scottish regional planning authorities, to progress thinking on long-term strategic planning policy. Other policy development includes research for Scottish Government on wind farm separation distances [**Onyango, Illsley, Radfar**] and analysis and critique of governance and policy [**Peel**]. The changing nature of institutional and community relationships at different scales has been a recurrent interest, from the unit led by **Illsley** that monitored and evaluated the Dundee Community Partnership, to research into the sustainability of resource-based communities [**Jackson, Illsley**] and a joint Geddes/ Architecture + Design Scotland [A+DS] symposium series on new forms of community-led planning and place-making, with participation by local authorities, Scottish Government, and other stakeholders, organised by **Alwaer**.

2. Design and the Environment includes practice-led research in buildings and spaces in the urban and rural environment [**Adam, Burford, Hutton, Ingleby, Thurrott**]. The recognition of **Hutton's** Drummond House (the Shed) with an RIBA Design Award in 2009 was a key impetus to expand research through architectural design. The aim of his research is to develop appropriate contemporary architectural languages for rural and urban environments. Through his portfolio of houses, Hutton has developed a spatial and material language for building in sensitive rural environments, incorporating ideas about landscape, serial production, tradition and invention. This work has received design awards, is regularly exhibited at the RSA, and has been disseminated in the professional and popular press. With **Ratray, Hutton** is developing an architectural language for the Dundee waterfront development. **Hutton** has also worked with **Gopinath** in a consultation for the Highland Council to develop a planning language for the town of Tornagrain. **Hutton's** research is part of a cluster of practice-based outputs that include **Ingleby's** urban pavilions which develop a formal language for semi-permanent buildings in social contexts and **Purdie's** houses and Cairngorm visitor centre that update Geddesian ideas about man and his relation to the land, also exhibited at the RSA. **Purdie** and **Hutton** also contributed to [Landworker](#) [2009], a public exhibition/symposium of art and architecture projects in the landscape.

The [macromicro](#) studio led by **Burford** with inputs by **Thurrott** and **Robertson**, is focused on architectural design solutions to problems of sustainability. The **macromicro** studio is a development of Burford's Lightweight Structures Unit [cf. RAE 2008 outputs], which has extended its focus from tensile structures to zero energy, without losing its grounding in the innovative application of technology to the building industry, its collaborative base between architecture, engineering, and the construction industry, its practice-based research methods, or its ethos based on working with manufacturers and suppliers on real buildings. The **macromicro** studio is nearing completion of an off-grid prototype live-work unit at the Dundee Botanical Gardens [2014]. This project has built a network of collaborators across the building industry, and academe, including civil engineering [Concrete Technology Unit] and physics [the Renewable Energy Unit] at Dundee and Napier University's Timber Research Unit. It has led to the commissioning of two new projects by the Forestry Commission and Historic Scotland using innovative timber and rammed earth technologies respectively. It has developed a heterogeneous procurement and funding model, based on in-kind funding by construction contractors, building materials suppliers, and environmental equipment manufacturers [cf. section d]. We are now in a position to consolidate **Burford's** direction in environmental research by applying for research grants. This would fund follow-up research to monitor energy use and performance of the project, extend this research into larger aggregates of

Environment template (REF5)

off-grid units, and include funding for PhDs and post-doctoral researchers. The **macromicro** studio is part of a cluster of staff [**Adam, Thurrott**] who use the design and procurement of houses as vehicles for testing the application of Passivhaus standard (i.e. ultra-low energy) housing in the Scottish landscape context and in the context of UK commercial housing procurement conditions. **Thurrott** has built work at the [Highland Housing Expo](#). With its concern for energy use in the environment, this research speaks directly to environmental research in Spatial Governance [**Gado, Onyango**] and Geography. AP staff [**Alwaer, Hutton, Rattray**] are contributing to a Leverhulme Programme (Sustainable Living) bid led by Geography, on adaption and resilience called 'Living with change' that integrates Planning, Architecture, and Geography.

3. Intellectual Culture aims to clarify thought about the built environment through text-led research in history, theory, and aesthetics of architecture and urbanism. Intellectual Culture treats the built environment as a human artefact with the capacity to reflect the social and psychical condition of its subjects. With its approach to the artefact as an object of reflection, humanities research has affinities to design research in contemporary architectural languages [**Hutton**]. Its outputs include peer-reviewed journal papers, book chapters, and monographs, which focus on problems in modern and contemporary architectural thought. Research methods include the close critical reading of texts and buildings, and juxtaposition of text, images, and diagrams. One of the central concerns of **Holm's** work is to articulate the concept of the human subject for architecture; his work links theories of space with theories of the self in the disciplines of architecture, art, philosophy and psychoanalysis. His monograph on modern architecture and psychoanalysis (2010) was supported by an AHRC research leave [2007], and received strong reviews in the fine art press (*Studio International*) and the professional and academic architecture presses (*RIBA Journal, Architectural Research Quarterly*). This work is embedded in a grouping of texts that include **Rattray's** publications on contemporary Dutch architecture, **Spens'** publications on contemporary landscape, and **Deckker's** publications on Brasilia and modern cities. The profile of this work is becoming more visible. An AHRC [Connected Communities grant](#) in 2011 [**Burford, Deckker, Holm, Rattray**] set an agenda for humanities informed architectural research into the well-being of communities. We are now building outwardly focused research projects that incorporate history and theory approaches and methods in collaboration with other disciplines. To this end, AP staff [**Holm and Hutton**] are leading a Leverhulme Programme (Knots) bid with Philosophy that will bring humanities thinking to bear on sustainability, called 'Untying the knots of environmental desire'.

The three groupings – social scientists working on policy and environmental governance, designers working on architectural language, and writers in intellectual culture – represent an interdisciplinary core of social and humanist thinking in the environment that embraces practical and theoretical concerns, and that can engage collaboratively with other disciplines. We are pursuing collaborations within and outwith the unit. In addition to the two Leverhulme Programme grant applications, we have 3 projects in the planning stages: two Scottish Universities Insight Institute (SUII) bids on the home [**Peel**] and on master-planning [**Alwaer**], and one on health care space [**Hutton**] with the Social Dimensions of Health Institute (St. Andrews and Dundee).

New initiatives and Priority research and funding areas

In addition to the projects and funding described above which are driving each research area forward and expanding its reach through collaborations outwith the unit, we have 3 overarching initiatives that evidence commitment to our strategic aims:

- We are building a more finely tessellated mosaic of research competencies across urban and environmental governance and policy [**Gopinath, Illsley, Peel**], Strategic Environmental Assessment (SEA) [**Onyango**], sustainability assessment of the master-planning, community planning, and building design processes [**Alwaer**], and environmental assessment of buildings [**Gado**]. This has been aided by the recent appointments of **Onyango** and **Peel**, and the recent promotion of **Alwaer**; and by deploying **Alwaer's** research (SuBETool) and networking skills (the Geddes/A+DS symposia) in a bridging role across these competencies.
- We are promoting design-led research, with 4 staff submitting a total of 7 building portfolios (up from one portfolio each by **Burford** and **Hutton** in RAE 2008). This has been reinforced by **Burford's** shift to zero/low carbon design, which has allowed us to consolidate research around problems of habitation, thus enabling designers to share knowledge, methods, and strategies.

Environment template (REF5)

- We are expanding history theory research through collaboration with the arts, humanities, and social and physical geography, in order to augment the exploration of transcendental problems internal to its theoretical and aesthetic discourses with outward-looking problem-solving research central to policy and practice and design.

c. People, including:**i. Staffing strategy and staff development**

Architecture and Planning currently have 13 Category A Teaching & Research staff (8 architects and 5 planners), out of a total programme staff of almost three dozen. 10 have been selected for submission to the REF on the basis of an internal and external peer-review process. The current submission is smaller than RAE 2008, when Architecture had a stand-alone submission of 9 staff, and Planning submitted 2 staff with Geography, but the standards for selection are higher, and selection is from a larger, more focused group.

The University has invested in the AP unit with the appointment of 2 Professors, 1 Senior Lecturer, and 5 Lecturers. The keystone in the formation of the new unit has been the appointment of **Peel** to the newly created Chair (Research) in Planning and Architecture who took up post in August 2013, with a remit to expand our grant application capacity. **Hutton** was promoted to Professor of Architecture [May 2013] to lead design research through the Geddes Institute. **Alwaer** was recently promoted to Senior Lecturer in recognition of his master-planning work with the Geddes Institute. Staffing strategy has been based on research priorities and availability. The 2 new lectureships in planning have built capacity in strategic resource assessment [**Onyango**], spatial and social culture [**Radfar**]. The 3 lectureships in Architecture were promotions of history/theory [**Deckker**] and design [**Ingleby, Thurrott**] teaching staff to Teaching & Research contracts, in recognition of their contributions to research. There has also been one recent Teaching lecturer appointment in each of Planning and Architecture, which has had impact on workforce planning.

We used our REF selection process (commenced in 2010) to identify 5 early career staff whose work we expect will be submitted in the next REF exercise, including 3 staff on Teaching contracts [**Moyo, Adam, Purdie**]. This constitutes an increasingly proactive staff development policy involving mentoring and a fluid review and management of contracts. This strategy has built a strong design submission, built strong research links with the professions (enabling knowledge transfer and impact), and raised the level of research thinking across the unit.

The University supports Teaching & Research staff with 200 hours of research per year. Within this tight funding environment, we maximise excellent research, and make time for the speculative and creative thought that underpins excellent research, by monitoring the research/ teaching/ administration balance through the workforce planning, and objective setting and review (OSAR), processes. This includes creating teaching opportunities that support the research specialisms of our staff [see below]. We are committed to staff development, mentoring, and career opportunities at all levels. This includes supporting research staff in the completion of their PhDs. We are committed to diversity and equality for all staff and to the programmes (e.g. Athena Swan, the Concordat to Support the Career Development of Researchers) that ensure diversity, equality and opportunity. The University is recognised by the European Commission for its "HR Excellence in Research" as an environment that supports excellence and increases focus and impact. Its Organisational and Professional Development team provide an extensive range of training opportunities for staff and postgraduates covering areas such as project management, presentation skills, research funding and career development.

ii. Research students**1. The MArch programme**

The Architecture programme supports research staff with 5th year architectural design units (RIBA part 2), in which the students complete design research theses within the research interests and specialisms of the staff who teach them. These Masters units have proved to be research resources for our staff, as well as feeders into our MSc and PhD programmes, by creating a clear trajectory for students wishing to continue their studies. This has worked most successfully with **Burford's macromicro studio**, which designed and built the Botanic project. The waterfront studio has extended **Hutton's** and **Ratray's** design research on architectural language to urban contexts, developing a language for the Dundee city centre waterfront in consultation with the local authority.

The rooms+cities unit has extended **Holm's** text-based work on spatial subjectivities into design practice and urban environments.

2. The MSc and PhD programmes

We support research staff with MSc courses that lie within their specialisms. We have recently expanded our post-graduate provision with the development of 4 taught MSc courses jointly between Architecture and Planning that focus on low energy buildings, environmental sustainability, and sustainable urbanism. We currently have 15 PhD students with 5 completions during the REF period, which is an increase on the PhD programme from RAE 2008. Most staff are supported by at least one PhD student; and staff are encouraged to include PhDs in their grant applications. PhD research topics extend across governance, planning and health care, architectural theory and philosophy, urban culture, low carbon design, and building performance. Our practice-based PhDs (currently 3) are critical for building links between practice- and theory-based research. We encourage co-supervision outside the unit as a way to build interdisciplinary approaches to problems (currently with Civil Engineering, Computing, and Art & Design). The expansion of our post graduate programmes has strengthened our research environment by drawing in staff who, through their practices, Masters level teaching (MArch, MSc), and PhD supervision, contribute to the AP unit's research environment.

PhD students are supported by research skills modules offered to all PhDs by the University, supplemented by a targeted research methods lecture series offered through the MSc programme. Each PhD student is expected to present their work at least once per year in the student run PhD seminar programme. In addition to the Architecture and Planning programme, our students regularly also attend and present at the PhD seminar programmes in Geography and in Art & Design. There is strong attendance by PhD students at Geddes Institute and CECHR events. Each PhD student is supported to present their work at at least one international conference, and students are regularly supported to present at national conferences, in order to build their networks and competences, and establish parities between institutions.

We monitor the career paths of our students to assess our post graduate programmes. Our MSc students regularly return to industry or go on to higher degrees. Of 3 recent PhDs, **Elfeturi** (2012) is a Libyan Government architect, **McIntyre** (2011) is an RA for a £1.5m research project in computing at Dundee, and **Jacobsen** (2011) is an economist with the Luebeck local authority.

d. Income, infrastructure and facilities

Income

The AP unit had £474k in research income during the REF period. Our largest research projects have been **Illsley's** MPHASIS project (European Commission, 2008-10, £384k of £500k) and **Burford's** current Botany project (see below). We regard this as significant but modest, in terms of the size, type, and frequency of grant applications, in comparison to other units. We also note the dip in income for this year, with several small awards not yet spent. We are continuing to explore funding sources and strategies. AP staff are expected to submit at least one grant application per year, with AP as a whole submitting one major FEC grant application per year, in line with School of the Environment policy. Other grants in the REF period include a £25k Connected Communities grant [**Holm**, the role of architecture in building place-based communities], travel grants (£10k), and charitable trust awards (£40k). Grant funding has been supplemented with consultancy, including the Tornagrain study [**Gopinath, Hutton**, £15k]. We currently have grant applications submitted for: two Scottish Universities Insight Institute networks [**Alwaer, Peel**]; and two Leverhulme Programmes [**Alwaer, Holm, Hutton, Rattray**] totalling over £2.5m. We have had several unsuccessful large applications (AHRC £500K, in 2008 and 2010; ESRC £150k in 2012). We are aware that we need to approach this funding horizon from a track record of smaller grants and by partnering on larger ones. Our early career researchers [**Gopinath, Ingleby, Onyango**] are encouraged to apply for small grants, like British Academy and Carnegie grants. **Gopinath** has had both. Our strategy for building capacity in all three areas - humanities (AHRC), planning/social (ESRC), and environmental research (EPSRC) - is to form or join larger collaborative research bids. Staff are aware of the importance of developing a track record with the Research Councils and familiarity with their funding process. Staff are aware of the peer review process for applications. Staff are encouraged to participate in Geddes Institute and CECHR forums and University programmes like Pollinate,

convened for developing interdisciplinary applications.

Other funding models

With our Research and Innovation Services (RIS) team and the University legal team, we are developing research funding models that support practice-based research. New knowledge is generated by staff practices whose expenditures do not appear on University accounts. Areas under consideration include ways to quantify professional practice as in-kind funding, to develop institutional mechanisms (the University Project Registration Form) for costing fee income through the University, and to corporatise intellectual property. **Burford's** funding model for the Botanic project complements these approaches. Typically funding for design-based research is through the building procurement process, with staff time funded internally. The Botanic project is supported by a business plan that will repay University start-up investment (£30k) through rental income; it is also supported by Forestry Commission and Scottish Funding Council Innovation Awards (£10k), charitable trusts (£30k) and by approximately £150k of in-kind funding by construction contractors, building materials suppliers, and environmental equipment manufacturers (over £200k total), not including student and staff time. This contributory model is a mechanism for funding a building that creates a community of stakeholders and that enables future RCUK grants.

Infrastructure and Governance

The Architecture and Planning research leader [**Holm**] oversees research activity and research staff mentoring, advises on grant applications, advises the Dean on research appointments, and articulates programme research aims and objectives. He is responsible for the Unit's REF submission process. He chairs the Architecture Planning Research Committee, is co-director of the Geddes Institute with **Illsley**, and reports to the Dean and the School of the Environment Research Committee alongside the Geography research leader. All research staff and a PhD student representative sit on the AP Research Committee. We use it to report our research upwards, respond to directives from the School and College level, and pool funding knowledge. This reporting structure is complemented by the collegiate format of the Geddes Institute (below). In addition to the University OSAR programme for setting teaching and research goals, a peer review and mentoring scheme is in place to discuss individual staff research plans and advise on grant applications and programmes, outputs, journals, and the like.

The Geddes Institute for Urban Research

Founded by Town & Regional Planning during RAE 2001, the [Geddes Institute](#) has evolved as the collective platform for research for staff and PhDs. AP staff convene Geddes Institute forums to host problem forming and project planning meetings, which, typically, bring diverse disciplines together around a common topic, with a view to writing grant applications and developing projects. Geddes recently hosted the collaborative forums 'Care Space' and 'Research after REF', both of which have led to funding applications. These forums are internally funded, attract staff from disciplines outside the School, and are briefed by RIS on funding opportunities. Where appropriate they are outwardly focused on stakeholders in the built environment. In 2009, we held the symposium, [The Task Force on Cities & their Regions](#), [**Holm, Martinez**] that included participation from local and central government, the planning and architecture professions, developers, and the building industry. Many of the same players – including representatives from Architecture + Design Scotland and Scottish Government architects and planners – are now participating in **Alwaer's** Geddes/A+DS symposia programme on [Planning and Place-making](#) (2010-present). The Geddes Institute hosts public events including gallery installations (in partnership with the School of Art & Design) exploring urban and digital culture, which are part of our impact strategy. Gallery installations include AHRC sponsored [laser|net](#) (2007), RIAS sponsored [Landworkers](#) (2009), and [The city that thinks](#) (2011). The Institute website is a storefront for interdisciplinary research and events relating to cities and their regions. It has a [Working Papers](#) page that publishes research and conference reports, conference papers, and papers in the peer review process. The Institute has a [Geddes Fellows](#) programme with a 3 year tenure, populated by academics and practitioners outwith the University. Fellows contribute to the Unit by bringing research projects, exhibitions, and/or symposia to Dundee. Current fellows are a planner at Plymouth [**Martinez**], an economist in Luebeck local authority [**Jacobsen**], an independent media activist in America [**Guzzardo**], and an urbanist with A+DS [**Lawlor**].

There are 4 other research groups within the School of Environment open to AP staff and PhDs: the Space & Society Research Group in Human Geography with strong ties to Planning staff; the Physical Geography Research Group, the Scottish Institute for Policing Research (SIPR), and the Centre of Climate Change and Human Resilience (CECHR), which is an inter-institutional initiative between the University and the James Hutton Institute (crop research).

Facilities and Support

Research facilities include networked offices, Art & Architecture library, main library (Planning), interlibrary loan services, subscriptions to online resources including research information and funding portals, GIS and OS maps, and other databases; and the University art collections and archives with materials on Geddes. MSc and PhD students enjoy a dedicated, networked research base. Practice-based research is supported by our environmental lab, the use of printing presses and darkrooms in the College of Art & Design, our wood, metal and plastics workshop with fulltime support, laser-cutter, and full time graphics and reprographics support in our computer drafting room. We have research support staff and infrastructure for funding opportunities, grant applications, and grant administration (RIS), two web support staff; and two administrative staff in attendance at committees and for assisting in conferences, catering, publicity, etc.

e. Collaboration and contribution to the discipline or research base

We aim to contribute to our disciplines by making real changes to the environment and to the ways we think about the environment. Interdisciplinary collaboration and collaboration with environment stakeholders is central to the AP research environment. Practice-led research in Architecture and Planning regularly informs professional practice and government policy. The esteem of individuals, the excellent reviews of monographs and design projects; the invitations to keynote conferences, to examine PhDs, and invitations to sit on boards and advisory panels, all attest to this fact. Staff in *Spatial Governance* are called upon to advise local and national government and civic bodies, and to present their work at workshops and conferences. Staff in *Design in the Environment* receive design awards, invitations to exhibit work, and are involved in knowledge transfer into the profession and government. Staff in *Intellectual Culture* are invited to discipline-shaping colloquia and joint writing projects in the UK, Europe, and USA.

Alwaer – Geddes symposia and outreach events to bring international researchers in master planning and sustainability to Dundee; collaboration with Hilson-Moran and other professionals.

Burford – his work is a model for collaboration and knowledge transfer with industry; his **macromicro** studio is the centre of a network of industry and practitioner stakeholders.

Holm – invitations to keynote symposia (Copenhagen), to address the American philosopher Graham Harman at a symposium on his work, to chair conferences (Cambridge, SAH Austin), to referee book manuscripts, and to participate in writing projects (London, Leicester, Lincoln, RISD).

Hutton – Drummond House (the Shed) has been cited as a best practice exemplar in Scottish Government policy on architecture and place-making. He is on the advisory board for the new waterfront development and the procurement committee for the V&A in Dundee, key positions in determining the urban future of Dundee.

Illsley – conference speaker and workshop leader on homelessness and environmental assessment, at events in Perth Australia, Prague, Budapest, the University of British Columbia and University of Wollongong, New South Wales.

Onyango – inducted into the European Spatial Development Planning Network (ESDP).

Peel – longstanding engagement with practitioner communities in Northern Ireland, including leadership at public seminars to RTPI Northern Ireland and Belfast City Council. Peel is a member of the steering group for CroSPLaN; facilitator for the Shared Services Working Group for the Irish Central Border Area (ICBAN); a partner in the work of the International Centre for Local and Regional Development (ICLRD); and a recently appointed Patron of Planning Aid for Scotland.

Staff are encouraged to take up editorships as indicators of esteem and avenues for outreach.

Alwaer, Peel and **Rattray** are editors of *Intelligent Buildings International*, *Journal for Education in the Built Environment*, and *Architecture Research Quarterly*, respectively. Most staff are fully qualified architects, planners, and environmentalists, and maintain their professional memberships (RIBA, RIAS, RTPI, IEMA). **Hutton** and **Peel** are Fellows, respectively, of RIAS and RTPI.