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DESIGN RESEARCH AND PUBLIC POLICY

Current practice working to intersect with government

Design research is an academic and practical field of study that seeks to explore the ways in which design in any discipline area is produced, understood, and used. This paper presents some case studies of designers working both at the heart of the government as well as making use of new opportunities in procurement processes to undertake design research and offer creative solutions to long-standing policy 'problems'.

Design research is carried out in many UK universities, mainly in schools of design, but also in business schools, the social sciences, and schools of architecture and planning. A key feature of design research is its inter-disciplinary and integrative nature, connecting disciplines under a design rubric. Design research also goes far beyond traditional disciplines of design – such as product design, graphic design, fashion, architecture and planning – to other disciplines that display design characteristics – for example, business, engineering, science and innovation.

How is design research relevant to policy making?

Design research focuses specifically on particular objects, systems, people, and practices. Recent work has concentrated on growing an evidence-base in order to determine how best to change damaging behaviours or alter working practices. The focus here is on both understanding complex social problems and suggesting a coherent strategy for change. The Policy Lab, formed at the beginning of year by the Cabinet Office, acts as a space for designers to look critically at areas of difficulty across government departments and use their skills in system design to solve them.

Design history is also an important discipline for thinking about public policy, with its researchers looking to understand both material and visual evidence. Design historians possess an acute awareness of the politics and process of making, materials and use. They use objectivity and a critical awareness to question narratives of how people interact with objects and environments. For example, an evidence-based study of the decline of the Japanese traditional furniture industry by Dr Sarah Teasley allows for a more granular understanding of government policy – what worked, and lessons that could be learnt.

Design research is at its most powerful when there is a tangible outcome, such as Dr Alison Black's work with carers of people with dementia. Through a process of iteration and a series of prototypes, the Centre for Information Design at Reading University helped to create highly localised and targeted support literature for this group.

- Professor Sue Walker (University of Reading) and Professor Peter Lloyd (University of Brighton)

Case Studies

- Policy Lab, Cabinet Office
- Mapping the growing field of 'Social Design' – does it represent an evolution in future government?
- Design History and Industrial Policy
- Design Research and improving information for sufferers of dementia and their carers
- Introduction to *Design Star* Design Research Doctoral Training Centre

Essay One
Introduction to the Policy Lab

Dr Andrea Siodmok, Head of the Policy Lab, Cabinet Office

The role of design as a transformational tool for Government has been gaining prominence in recent years. Across the world a number of 'Labs' have been set up to bring an experimental approach to building knowledge and creating system-change to address the challenges facing governments and citizens.

In 2012, The European Design Leadership Board's _Design for Growth and Prosperity_ report called for designers in residence for EU institutions and Member States to build the capacity of public sector administrators to design for effective policy-making using design methods.

Whilst in the UK, The Civil Service Reform Plan (2012) recognised the value of Lab methods of working, citing MindLab in Denmark as an example of the approach. The APDIG / Design Commission's _Restarting Britain: Design and Public Services_ report (2013) recommended that the Cabinet Office take responsibility for developing design capacity across government, specifically trialing a multi-disciplinary design studio method for originating policy - and for a wider drive to equip policy-makers with design skills. In response, the UK's first Policy Lab was launched at the beginning of April 2014.

The Lab puts the user at the centre: using design principles to make policy that makes sense to people affected by it… its existence is born of a recognition that government needs to get better at policy-making – open it up, make it quicker, more digital and more connected with the people who are affected by it.

….Within government for all departments

As a start-up in government we are based at the Cabinet Office, in the Government Innovation Group (GIG) - central government's internal innovation hub. GIG acts as an incubator, pulling in the best new tools and techniques from the outside world into the government mainstream. It has a wide portfolio including, activating businesses, charities and individuals to bring about social innovation. That position in the heart of government is a clear message that the UK is taking design in policy-making seriously. It also means we are well placed to identify both the policy areas and the people that we can work with to make this a reality.

However, the Policy Lab is resourced and supported by all central government departments and currently report to a board of directors of policy in those departments. This gives us a direct link to a community of 18,000 policy-makers across government. We know that to effect change, we need to raise the levels of ambition amongst the wider policy making community. We need the people who are in the system to try things out, so they understand and they can talk (hopefully with some enthusiasm) to others.

….Learning by doing

We are already working on a range of different demonstration projects, plus a number of smaller, 'Lab light' activities. Through working intensively over the year, we hope to build the evidence of what works. To both persuade others of the need for change and explain in practical terms what it means; and telling the stories to and creating learning opportunities for the policy community as a whole. This is about teaching the teachers – giving enthusiastic civil servants new skills and the confidence to use them.

Our principle research method is action research – allowing for real time reflection on practice through taking part in projects. We are rolling up our sleeves and trying things out to learn what works. For the Lab, this means learning through our projects: trying different tools and techniques, working with different partners, building new networks and knowledge. The projects we run are in partnership with departments, engaging policy-makers and getting them working alongside design ethnographers, data scientists and other experts to get practical, hands on experience of new ways of working.

…User centred, practical, creative approach

In our first project joint with Home Office about crime reporting, we have looked at the experience of victims, witnesses and the police themselves, using 'double ethnography'. A striking finding was that whilst the reporting system made sense to the police, who knew the steps and why certain things had to happen, it made very little sense to victims. They were left confused by the range of different officers they spoke to, even when each individual had been helpful, and unclear about what should happen when and why.

We expect to use ethnographic research to give us new insights on most of the policy challenges we work on this year. We think combining this small data with 'big data', or data science, has the potential to transform the way problems are understood and addressed.

We will also be prototyping solutions quickly and testing them - a key feature of the Lab, and perhaps a test of our influence if the word, rarely heard in government at the moment, starts being used. We know there are barriers - real or imagined – that stop policy-makers trying things. Our hypothesis is that trialling at a small scale and testing ideas in the real world is an effective way to establish what works and identifying any risk of failure early.

….Measuring success

The Lab's theory of change is that using design principles to approach complex problems can result in better outcomes, and that training policy makers in design research methods, including using or commissioning ethnographic research, has the potential to transform the way that policy is made in government.

This is a huge opportunity to embed design into the policy making process, but we must not be tempted to over-claim. We still need to find ways to measure the changes we want to effect, both at project level and at system level. We are delighted to be working with the Arts and Humanities Research Council whom are funding a Research Fellow to provide academic rigour, independence and position the Lab within a wider body of knowledge both in design and across other disciplines we work with.

Lab or studio models are not new – there is already a strong global network of Labs, sitting within and outside. DESIS, the global design network, is one such example. We want to collaborate with other Labs and other designers and innovators to build a strong case for the value of design. Nesta has reviewed 20 others government innovation teams in its recent i-teams report, where Geoff Mulgan argued that *all* governments need institutions to drive innovation – because the very design of public services is about embedding predictability and eliminating risk.

That's partly why sharing learning and building on the work others have already done, is so important. We have much to learn from MindLab's ability to be at once within and outside the system: challenging and raising ambition, but supporting civil servants on the journey and learning together. In fact, we are borrowing much from those who have come before. Both in terms of techniques: like behavioural insights and design ethnography, but also in terms of approach – the 'showing by doing' that the Behavioural Insights Team and the Government Digital Service have brought directly into government. But we also want to be open and share our thinking with others, both through the forthcoming *Design for Policy* book (edited by Christian Bason) and through our Open Policy making blog on Gov.UK and our @policylabUK twitter account, so tune in. The Policy Lab is after all an experimental space – this is its first year, during which in effect we are prototyping the Lab itself.

Essay Two
Design research: political evolution?

Jocelyn Bailey, Research Fellow, V&A, and Consultant, BOP Consulting

Recent years have seen a proliferation of what we might call 'social' design practices, in the UK and across the world, and in part this is attributable to increased interplay between designers and governments. We have seen designers *working for* governments (e.g. design agencies contractually engaged by local authorities to redevelop certain services); governments explicitly *adopting* design methods (e.g. Denmark's MindLab, the UK Government Digital Service); and designers working *with communities* to find ways of replacing eroded public services (e.g. Participle in the UK, TACSI in Australia).

In the UK, this kind of work blossomed under New Labour, but has necessarily taken on a different flavour under the Coalition Government, where there is less money in the system, and a very different reigning ideology. Simultaneously, there have been parallel developments across the world involving the strategic use of design at a high level in central government, and a wave of 'innovation labs', many of which are heavily informed by design practice. As well as the long established MindLab, we have had the 'Helsinki Design Lab' in Finland, 'DesignGov' in Australia, 'Policy Lab' in the UK Cabinet Office, 'Future Publique' in the French Prime Minister's Office.

Despite the absence of professional framework for an emerging class of practitioners of social designers, the general trend seems to be that it is moving from the margins towards the mainstream. Therefore, the question of what is happening in the engagements between social design and politics (and how that might be understood within longer trends in design and political cultures) is a very live one. The APDIG and Design Commission have already entered into this debate with publications on design in public life. The ongoing *Mapping Social Design* project for AHRC has tried to understand the future territory for design research, but it seems that this current phenomenon is relatively under-discussed in design research and theory.

Design has of course sought to tackle political questions in the past, but these have largely been confined to design activism rather than design as a tool. In the case of design that is moving closer to, even inside, the systems, institutions and rhetorics of government, or of design working effectively in the service of politics, the literature is rare. The gap is particularly evident around the trend, mentioned in the introduction, of design moving into the upper echelons of governments across the world as a strategic tool.

What is a government doing in adopting design? (As it is not immediately clear if this a project of the left or the right, it makes it susceptible to projections of political value.) And how does this relate to theories of how the state should conduct relations with citizens? Is this just about building new methods into an existing system - or is the system itself being redesigned?

Is design following in the footsteps of other ideas that have made such a transition (such as behavioural economics), or is it qualitatively different? What might we learn from the experiences of other types of knowledge and expertise when fed into the machine of government?

And as for the field of design itself, how have the concerns of government put a particular spin on design (as an emergent discipline), and modified what we understand as social design by the kinds of projects that get commissioned? How has the political intent of institutions coloured or predetermined the potential of social design? Is social design often merely perpetuating unsustainable or inequitable systems? Or might there be new kinds of politics being forged through design-driven community activism?

Christian Bason (director of MindLab) has observed that there is a real opportunity for design in challenging existing models of governing. But if it's going to be taken seriously it has a lot of growing up to do. Design research - and critically, research that engages with other disciplines, including political theory and public policy - will have an important role to play in this necessary process of maturation, helping to ground the practice of those pioneers who are leading the charge.

Essay Three
History as design research and implications for policymakers

Dr Sarah Teasley, Reader in Design History and Theory, Royal College of Art

History may include the grand stories but it's small ones as well, and sometimes, they're the same thing: toothbrushes can teach us much about political development and socio-economic conditions. History of design (as taught at the V&A/ Royal College of Art as well as at other institutions) as a discipline has brought an artefact-based approach to 'big' historical questions: identifying and understanding key drivers in change and stasis through object analysis, and by tracing the relationships between people, things, ideas and their environment. Take also the V&A's Rapid Response Collecting project, which flags environmental, political and social issues by collecting and displaying objects. And history, generally, is like any research discipline - a way of asking critical questions effectively, and of gathering, assessing and analysing the relevant evidence to begin to answer them.

Seen in this light, history like ethnography and engineering approaches can be a method for design research, employed to understand a system - its materials, opportunities, constraints and users - and to optimise design results.

For the past decade, I've studied industrial policy's effectiveness and impact on communities, particularly in times of political and economic transition. This might seem a surprising area for a historian of society, design and technology, but what is policy-making if not design practice, and what are policies if not designed artefacts, themselves intended to redesign communities? Employed as part of the design process, history's perspectives and approaches can also debug prototypes during testing and initial roll-out, and communicating past experiences can inspire and provoke unexpected innovations.

Case Study: Furniture Manufacturing in Shizuoka

Funded in 2012 by the Arts and Humanities Research Council, I assessed policy's impact on furniture manufacturing in Shizuoka, a major manufacturing centre in eastern Japan's industrial belt. In the 1960s, hundreds of SMEs produced mirrored dressing tables and storage chests for the Japanese market, from mass-produced pieces and OEM to bespoke handmade products. But from 1980 to 2012, profit fell by 70%, and the number of firms by 80%. By the time I began the Shizuoka study, local and regional government industry sections were keen for insights that might help them support a sustainable industry – and its communities.

Interviews and archival research mapped key factors in the industry's decline: Japan's post-1990 economic stagnation, competition from Chinese and South-East Asian manufacturers, changing consumer tastes, an ageing workforce, industry complacency, a rigid and expensive distribution system and social attitudes that privilege university and white-collar work over apprenticeships and making. Research confirmed that policy takes some of the blame as well: a 1960s scheme to raise productivity through consolidation and relocation to suburban industrial estates did increase efficiency, but also dismantled the close-knit community, weakening informal communication that had happened previously in pubs and on street corners.

Arguably, Shizuoka's manufacturers should thrive without public support. But since the 1990s, public schemes for training, design consultancy, quality testing and access to advanced technology have lost funding as national, regional and local governments prioritise growth industries like food and beverage, pharmaceuticals and photonics. Crafts industries receive support through tourism promotion and 'Cool Japan', the Ministry of Economy, Trade and Industry project to leverage global taste for Japanese popular culture, but Shizuoka's manufacturers have shown little recent appetite to engage.

Regardless, interviews and site visits confirm that some firms thrive within difficult conditions. These family firms have identified a specific domestic market and sales strategy and, by pitching their products at a higher quality and price point, found markets unswayed by cheaper imports. Other common elements identified include bespoke work, personalised communication that reframes the purchase as a narrative experience and the use of domestic materials, solid woods and luxury veneers rather than imported wood, foam cores and particleboard. Active engagement with the remaining local and regional government design consultancy and promotion schemes, an embrace of unconventional, often mid-career apprentices and online platform use are also noticeable.

Research also compares current conditions with the history of Shizuoka's furniture industry, taking into account earlier industry challenges and assessing how previous manufacturers and policy-makers responded to them. The industry has already rebounded several times since 1900, first from a reputation for poor quality, then from the devastation of the Second World War. In both cases, local and regional government research institutes, part of a national network, worked with manufacturers to improve skills and product quality; in the 1950s, industry associations facilitated more efficient distribution and supply chains.

Perhaps most significantly, the historical comparison indicates that successful firms – past and present alike - embody an innovative sense of tradition, in which a pragmatic relationship to tools, materials, technologies and products is itself a 'traditional' way of working. Rather than offering clichéd, visually 'traditional' furniture, successful Shizuoka manufacturers demonstrate flexibility: an openness to new markets, products and materials without jettisoning existing ones that continue to serve them well. Local and corporate heritage can be a rich source of ideas, especially if heritage is interpreted as key values or practices, rather than hackneyed style.

Ultimately, the Shizuoka case study isn't about Japan or furniture, it's about local industry composed of SMEs and deeply rooted in its community despite ongoing decline, and about a way of asking questions, working with data and compiling insights. This kind of historical study should, then, help local and regional policy-makers understand the impact of internal and external conditions on local industry and translate this knowledge to support local industry and its community.

Of course, it's not that simple. The Shizuoka project is ongoing and would ideally be embedded in local government or the manufacturers' association, so that it could contribute directly to designing and 'debugging' of new initiatives rather than offering advice from time to time, and at arms-length. Professional historians wishing to work within design and policy face a challenge, here, since university jobs and research funding have traditionally preferred teaching and academic 'research outputs' over more entrepreneurial, applied projects. Increasing emphasis on research impact may better enable professional historians to participate in design projects and policy initiatives, while better communication of historical methods' affinities to design research could encourage its adoption amongst designers and others who use design research methods already.

As an element of design research, history can offer new perspectives and methods for thoughtfully assessing local conditions then designing an intervention into them. As design research itself finds new users and uses, history, too, deserves a fresh look.

Essay Four
Designing resources for and with carers of people with dementia

Professor Alison Black, Director, Centre for Information Design, University of Reading

Many designers see their role as problem solving, working from known, often complex, requirements and constraints to create new approaches and solutions. Information designers focus their problem-solving on design to help people understand and use information so that they are empowered to make choices and decisions.

This case study focuses on the design of post-diagnosis information for carers of people with dementia. It's an area where there is plenty of information available, but where carers often look for authoritative guidance as they struggle with new circumstances and an unpredictable future. Working with Berkshire Healthcare NHS Foundation Trust and funded by the Prime Minister's Dementia Challenge 2012, University of Reading's Centre for Information Design Research applied user-centred design methods to develop an information pack, with the flexibility to guide carers of people with dementia of different kinds and with symptoms of varying levels of severity.

A hallmark of user-centred design is that designers base their work on a detailed understanding of the everyday experience of the people they're designing for. Our project team interviewed carers of people with dementia in West Berkshire, as well as professionals (psychiatrists, GPs, psychologists, speech and language therapists, occupational therapists and dementia support professionals) to understand how information was passed on to carers. Many carers had amassed collections of leaflets and recommendations for web sites to consult. But, time-pressured and lacking access to the web, many had not used the information they had been given. The Trust runs highly successful six-week carer education courses but these have a long waiting list and carers who were working or looking after family had found it difficult to get to them.

The input we received from carers suggested that, even though high quality information is available from the NHS and national charities, they needed localised information. They struggled, particularly, to find out about the range of support available and how health and social services provided complementary support. They needed accessible, bite-sized information that could be shared with other family members. The professionals' perspective mirrored carers' emphasis on information access. Professionals were also concerned that information should support forward planning of care and legal financial arrangements that might be needed as a patient's capacity for decision-making diminished. Professionals described the difficulty some carers experienced in adjusting to their new responsibilities. They sought ways of keeping information readily available and integrated into interactions between carers and support services.

In a traditional publishing model, professionals and writers would create content for a carer handbook, which a designer would then package into a formatted publication for distribution. We reversed this process, using the output of our initial consultations as a basis for developing physical prototypes of potential information packs, with indications of content type. Using carers' and professionals' feedback on the fit of these prototypes with carers' information needs we then refined content and format iteratively.

We proposed a modular set of information booklets, bound either in a ring binder or box file, to which carers could add additional information, as needed. Each modular booklet was to be short and self-contained to avoid overwhelming its readers and to encourage information sharing. Input from carers and professionals was enthusiastic (although not uncritical). Reassuringly, during our

second wave of feedback we lost a couple of our prototypes, as carers asked if they could keep them to use immediately.

While the commitment to a user-centred approach and the design decisions that stem from it add both time and cost to a project, these can be set against potential benefit; in this case, providing high quality, localised information for carers of the 4,000 people with dementia across Berkshire. Preventing just a couple of emergency hospital admissions because a carer has picked up and knows how to respond to the early signs of an infection in the person they care for would justify the project, without factoring in the reduction in requests for information from dementia services. **The cost of information provision may be reduced in the future, when web only publication is appropriate, but the current generation of carers are served best by print.**

As the handbook goes to press (July 2014) and into trial we are extending the project, working within the Oxford Academic Health Sciences Network, which is developing digital record-keeping tools for people with dementia and their carers. The content we have developed will be tailored to create a 'knowledge bank' for people using those tools.

The positive impact of patient involvement in health information development has been recognised in the Cochrane review. However _how_ that involvement is achieved is open. Our starting point has been that the development of solutions in healthcare and other services is enhanced by building on end-users' experience. We have been fortunate in West Berkshire in having been able to draw on the input of so many different users – carers and a range of professionals – to create solutions for information provision that advance current practice.

Design Star: Providing inspirational training for future design researchers

**Professor Sue Walker, University of Reading
Director, Design Star Doctoral Training Centre**

Design Star is a new Doctoral Training Centre funded by a £2.2 million grant from the Arts and Humanities Research Council. Five leading UK universities are collaborating to provide world-class expertise in design research. The consortium aims to equip design research leaders of the future with skills to engage with and make a difference to contemporary social concerns as well as creating new and valuable knowledge.

The universities of Reading, Brighton, Loughborough, Goldsmiths and The Open University are passionate about the underlying value of design research and how it can contribute to understanding and debate in areas such as the environment, transport, democratic participation, science and technology, healthcare and creative production. Design research as a truly inter-disciplinary 'glue', in other words.

The Design Star consortium also works with partners in industry, museums and local government to provide development and placement opportunities for students, as well as access to resources and archives their research.[1] This provides real-world relevance and helps to communicate the value of design research and the contribution it can make to society, economy, government and business.

Design Star is also an example of international best practice for doctoral training naturally connecting with similar programmes in Sweden, Portugal, and the US to provide students with international experience and training opportunities.

The first Design Star cohort suggests ground-breaking projects to be carried out by top class students. Dementia, digital transformation, big data, social change and multi-lingual communication are just some of the inter-disciplinary areas in which they have framed their research. They will receive world-class training and supervision and we fully expect Design Star graduates to become leaders in a broad range of real-world contexts, as well as in Universities worldwide.

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[1] 'Design Star' non-academic partners are Microsoft Research, Intel Labs, V&A, Policy Connect, Design Museum, Maybourne Projects Ltd, Milton Keynes Development Council, Monotype, Spy Design and Berkshire Healthcare NHS Foundation Trust.

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The All-Party Parliamentary Design and Innovation Group is a forum for open debate between Parliament and the UK's design and innovation communities. To find out more visit
www.policyconnect.org.uk/apdig

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