The Helen Hamlyn Centre for Design is based at the Royal College of Art, London, the world’s most influential postgraduate school of art and design. Our design research and projects with industry have one simple aim: to help improve people’s lives. Our work is organised in three research labs: Health & Patient Safety, Work & City and Age & Ability. Each lab takes an approach that is inclusive and interdisciplinary. We develop innovative and empathic research methods – and we exchange knowledge via industrial collaboration, executive education, events and publications. This Yearbook describes our activities in 2011/12.

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This year marks the 175th anniversary of the Royal College of Art, an institution that began life in 1837 as the Government School of Design. Throughout its long and distinguished history, the RCA has always been prominent in design for the public realm and for social value – from creating Britain's first Royal Mail pillar box in 1856, and the corporate identity for London's Underground in 1916, to the 1951 Festival of Britain and the King's Fund NHS hospital bed of 1962.

Within this context, the Helen Hamlyn Centre for Design holds a special place at the heart of the College. Its research and collaboration with industry, focus on design for social need, public realm, health and wellbeing, connecting to a rich RCA tradition while updating it in new, sophisticated and exciting ways.

This yearbook reports on key projects and initiatives in the academic year 2011/12. It covers a period in which the Helen Hamlyn Centre for Design won prestigious international awards for its work in healthcare, played a key role in establishing a new centre for knowledge exchange in the digital economy, advanced its credentials in age and autism-friendly design, and prepared the ground to admit its own PhD students for the first time in autumn 2012.

Altogether it has been an absorbing and rewarding year, climaxing with an exhibition of the work of the Helen Hamlyn Research Associates that pays homage in its title, Design for the Real World, to the 40th anniversary of the English-language publication of Victor Papanek's seminal text.

Papanek was a fearless advocate for inclusive and sustainable design, who visited the RCA in 1992 and influenced design education worldwide. The causes he espoused are the ones pursued today by Centre’s energetic and resourceful research team comprising mainly College graduates. In its 175th anniversary year, the RCA is all the better for its unbroken connection to design for social value.
The Helen Hamlyn Trust which continues to support the Centre for Design at the Royal College of Art is dedicated to improving quality of life through a wide range of charitable projects that span from medical, arts and culture, education and welfare to healthy ageing and international humanitarian affairs.

Within this broad-based portfolio, the RCA’s Helen Hamlyn Centre for Design makes a distinctive and valuable contribution.

Good design enhances the quality of people’s lives – bad or unthinking design does the opposite. That is why I have always supported – and will continue to support – the centre for design research at the RCA which has the expertise to develop the new creative ideas our ageing society needs, in partnership with business and industry.

This publication describes key events in 2011/12, the first full year of a new operational structure for the Helen Hamlyn Centre for Design with all projects arranged within three clearly defined research labs. To judge by the contents of this yearbook, all three labs are doing good things.

I am pleased to see in the Health & Patient Safety lab, for example, that our award-winning new design for the ambulance has been followed up by innovative concepts designed for other critical challenges in emergency healthcare, most notably a safer neck brace and a less intimidating Accident & Emergency department.

In the Work & City Lab, I note that an ingenious new approach to lighting the Boundary Estate in East London has won the support of Tower Hamlets Council and the Police. And in the Age & Ability lab, several projects address the important subject of digital inclusion, by making new technology easier for older people to use. Real-world projects of this type, supported by industry and with the involvement of proactive communities, can help to make our lives better at a time of real pressure on living standards.

I wish the entire Helen Hamlyn Centre for Design team at the College every success with the Design for the Real World exhibition.
The physical barriers to making our cities, neighbourhoods, homes and workplaces better by design and more inclusive of our needs are today clearly understood. Indeed the Helen Hamlyn Centre for Design, in common with other design research centres around the world, has put a lot of effort into studying how these physical barriers might be dismantled.

Less well appreciated are digital barriers to inclusion. The introduction of new technology is fast reshaping the world we live in, but until recently its impact has been under-estimated by the international design-for-all movement. Now it seems that a virtual line has been crossed and everybody is facing up to the challenge of the digital.

We are no exception. The Helen Hamlyn Centre for Design Yearbook 2012 not only documents our key projects and initiatives over the past year but also acts as a showcase for the effect that digital technology is having on people of all ages and abilities. There are now precious few areas of our work in which a digital dimension is absent.

Some of our studies this year address the subject head-on, exploring how new touchscreen, social networking, solid-state lighting and smartphone technologies can enhance the lives of individuals and communities. But even where our industrial collaborations are focused on developing a physical product – a smarter stairlift, a better doctor’s bag or a more effective way to guide visually impaired people through streetworks, for example – there is also a digital layer which manifests itself in a smartphone app or some other technology fix.

When our redesign of the emergency ambulance, which won several awards this year, was modelled at full scale, the interior space of the vehicle competed for attention with a digital diagnostic system that promises improved communication flow between paramedics and the hospital in the era of electronic patient records.

When we studied the provision of public toilets as part of the New Dynamics of Ageing research programme, we developed a website called The Great British Toilet Map driven by open data from local authorities instead of a new design for a portable loo. Its impact in terms of directing people in need to publicly accessible toilets will be far greater. Against this background, it is perhaps not surprising that the Helen Hamlyn Centre for Design should be playing a leading role in the development of The Creative Exchange, a new national centre for knowledge exchange in the digital economy. This initiative will enable us to supervise our own cohort of PhD students for the first time within the Royal College of Art, an
important milestone as we mature as a research centre.

Many people fret that digital service providers are in danger of making the same errors and omissions with regard to the needs of older and disabled people that house builders and urban planners made 30 years ago. The point about the digital environment, however, is that software-driven systems and services are infinitely more flexible than the built environment, which is difficult and expensive to change once bad decisions have been made. Therein lies the central opportunity of the digital age and it is one that our research associates have enjoyed exploring this year in collaboration with an impressive list of industry partners.

None of the dizzying potential of digital technology existed 40 years ago, when Victor Papanek’s famous book on human-centred design, *Design for The Real World*, was first published in the English language (so incendiary was its message that it was initially published only in Swedish in 1971).

Nevertheless we have chosen Papanek’s landmark text as the theme for our Helen Hamlyn Research Associates show and symposium 2012 (see exhibition logo above left). His diatribe on how commercial, market-driven design was damaging the interests of the elderly, disabled, women, children, the developing world and ecology, was a catalyst for change across design education and practice around the world.

Many of the ideas and principles that we hold most dear today in the Helen Hamlyn Centre for Design, Victor Papanek articulated first. Physical barriers were the main target for his polemic but if he was still around today, I’m sure he’d be warning us about digital barriers to participation too.
The Health & Patient Safety Lab explores how designers can collaborate with clinicians and patients to meet healthcare challenges for the 21st century. This year we worked with the Medical Defence Union to redesign the doctor’s bag and with Clearblue to create services to support a healthy pregnancy. We followed up our award-winning redesign of the emergency ambulance with other emergency care projects to develop better neck support for spinal injury patients and ways to reduce violence in A&E Departments. Our DOME project with Imperial College to reduce medical error on surgical wards concluded with an exhibition that visited the Hunterian Museum at the Royal College of Surgeons.

Ed Matthews, Lab Leader
JUST IN CASE
REDESIGNING THE DOCTOR’S BAG

A project to redesign the doctor’s bag for home visits has resulted in a novel and efficient workstation concept that can be used in the surgery as well as in the patient’s home.

Just in Case is a project to design, produce and evaluate a proof-of-concept doctor’s medical bag, fit for 21st century practice. In partnership with the Medical Defence Union, the research team is developing a new bag that will aid doctors in the delivery of efficient, consistent clinical care in the patient’s home.

Set in the context of changing demands on healthcare, owing to an ageing population, increased complexity and financial constraints, the project aims to support a healthcare service that is focused towards more consistent and coordinated professional help.

There is no UK standard that regulates the contents, shape or materials of the home visit doctor’s bag. Treating a patient in their own home, away from an ideal clinical environment, presents its own logistic and hygiene complications. These may affect the doctor’s ability to deliver care and could also jeopardise patient safety.

SHADOWING DOCTORS
By shadowing GPs during home visits and engaging in conversations with clinicians and patients across a variety of environments, the design team analysed and mapped the typical cycle of several patient home visits.
focusing on the different tasks and equipment used.

An intricate map of the home visit was produced, showing every small step in the process, along with potential ways in which it could go wrong. A group of GPs analysed this map and scored the potential risk at each step. By looking at every step in the whole process, this analysis revealed particular points where errors are likely, or potentially serious.

The areas of focus centred on hygiene (of the hands, equipment and bag), information (written and verbal communication), equipment failure, security and clinical expertise. Together with clinicians, the design team generated ideas around these focus areas. Concepts were sketched out to define the form and function, and then developed further into functional cardboard models. An extended feedback session was held with GPs, where each idea, sketch and model was analysed in detail, and the concepts were refined further.

**SCENARIO OF USE**
The research has led to a clear understanding of the GP home visit cycle as a whole, set within the broader context of a GP’s typical working week. Much of the time is spent at the surgery, examining patients within the consultation room, and the bag also has a role to play in this scenario. The concept is to provide a suitable working station for the GP for use both in the surgery and in the patient’s home. This will contain all the typical equipment needed during a consultation, as well as a working surface to prepare drugs and display information (such as a doctors’ handbook or tablet computer).

This working station will be used daily in the surgery, and can be easily packed up and taken to the patient’s home, replicating a familiar layout in unfamiliar surroundings. This project has developed a series of bag prototypes in year one for evaluation and will now go into a second year of development to bring the 21st century doctor’s bag into clinical practice.
EMERGENCY AMBULANCE
WINS AWARDS

Since its launch at the London Design Festival in September 2011, our flagship redesign of the emergency ambulance has received a number of prestigious international awards and been exhibited in the UK, Austria and the United States.

The project aims to create a new ambulance interior fit for 21st century healthcare. Developed by bringing together frontline paramedics, clinicians, patients, academic researchers, engineers and designers in a co-design process, the ambulance redesign has reconfigured the layout of the patient treatment space to achieve 360 degree access to the patient. This not only improves the clinical efficiency but also enhances patient safety.

The new interior is also designed to be easy to clean and modular. Equipment packs containing specific treatment consumables have been incorporated to aid in clinical performance, infection control and stock control.

All of these innovative features were incorporated in a full-size mobile demonstrator unit that was formally launched by Professor Ara Darzi of Imperial College London and exhibited at the RCA in autumn 2011. The design was then immediately selected by the Victor J Papanek Foundation as a finalist in the Design for the Real World Redux International Design Competition and exhibited in Vienna at the University of Applied Arts and in New York at the White Box Gallery.

In spring 2012, the emergency ambulance won the Transport category of the 2012 Design of the Year Awards organised by the Design Museum and was exhibited from February to July in the Design Museum’s galleries. And, to cap a remarkable year for the ambulance, the project also won a Silver Award for research in the IDEA Awards run by the Industrial Designers Society of America.

Meanwhile the design team continued on the path to commercialising the project – by developing an expert support network to evaluate the design proposal and progress it to a working prototype, and by working with Peter Bradley, Chief Executive of London Ambulance Service, to plan a workshop that will bring these key influencers together to present both the clinical and the business cases for adoption.

Senior Associate: Gianpaolo Fusari
Lead researcher: Ed Matthews
Research partners: Imperial College St Mary’s NHS Trust; Vehicle Design Department, RCA; Department of Emergency Medicine, University of West of England; London Ambulance Service
Funded by: London NHS (Regional Innovation Fund) and Helen Hamlyn Trust
VIOLENCE IN A&E
IMPROVING THE PATIENT EXPERIENCE BY DESIGN

A visit to Accident & Emergency can often lead to frustration and confrontation – this demonstration project developed new ways to humanise the patient experience.
Violence and aggression towards staff and patients in the emergency department is a common, growing problem in many hospitals around the UK. Healthcare providers are among the most likely groups to experience hostility in the workplace, surpassed only by police and prison officers. The estimated costs of violent episodes in the NHS is over £69m annually, affecting staff, patients and other service users by decreasing patient satisfaction, increasing staff absence, loss of productivity and additional security measures that need to be put in place.

Arriving at the emergency department can be a stressful event for patients and relatives in a heightened state of anxiety or pain. Some people will be experiencing the A&E process for the first time and there is little around to help them understand or navigate it. In addition, people may have to wait for long periods of time in uncomfortable spaces with little direct communication on what is happening.

A&E staff are under constant pressure, with limited time to attend a diverse mix of patients. The nature of the work makes the emergency environment inherently unpredictable; it’s common to hear staff say that no two days in A&E are ever the same.

The intricate interactions between staff, NHS organisational goals, clinical needs and patient needs are likely to trigger unexpected behaviour.

The Helen Hamlyn Centre for Design joined a multidisciplinary team to respond to the national initiative launched by the Department of Health and the Design Council to reduce violence and aggression in the A&E department by designing a better experience. Working with three different NHS Trusts across England, this team researched, developed, prototyped and evaluated interventions responding to six original briefs launched by the Design Council.

THREE MAIN OUTPUTS
The propositions were distilled across three main outputs: ‘Guidance’, ‘People’ and ‘A&E Toolkit’. The Guidance project is a modular information system designed to be always present across different scales and media (see illustrations). This system is designed to empower patients with key information about their visit and reduce anxiety levels. It provides information about current waiting times, processes and treatment practices through signage, printed leaflets, live information screens, interactive digital media and touch screen applications.

In addition to addressing the patient perspective, the team focused on providing better ways to support staff in managing and learning from incidents of violence and aggression. The People project centres on cognitive learning through reflective practice and helps staff better deal with potentially aggressive and violent patients. The proposals promote staff engagement, boosting morale and reducing staff absence through learning and development tools. The aim is to help staff develop or regain their ability to empathise in difficult situations via in-house reflective sessions.

Finally, all the learning and outputs from the project are compiled in a web toolkit to help NHS commissioners and decision makers improve the patient experience. The toolkit provides guidelines on the built environment relevant to each area of the emergency department. The toolkit and more information are accessible by logging in to www.aetoolkit.org.uk.

Since the results of the project were unveiled in an exhibition at the Design Council last November, the new system has been implemented in the A&E departments of University Hospital Southampton NHS Trust, Newham General Hospital and St George’s Healthcare NHS Trust, London.
NECKSAFE
DESIGNING BETTER SUPPORT FOR SPINAL INJURY PATIENTS

This multidisciplinary project team is designing a neck brace that provides more comfort and safety for people with spinal injuries.

Current methods of stabilising a patient’s neck after a suspected spinal injury do not provide adequate safety and comfort for the patient. Around 440,000 people in the UK each year require head and neck immobilisation by ambulance services following trauma. This usually involves fitting a disposable semi-rigid cervical collar, known as a neck brace.

This project brings together designers, engineers and clinicians to redesign this critical medical product to improve its functionality. An extensive programme of user research has involved ambulance ride-outs, following the patient journey, and collaborative workshops with doctors, nurses, paramedics and physiotherapists.

After intensive concept development and experimentation, prototype versions are now undergoing clinical trials. Preliminary testing has indicated that compared with existing products, the new neck brace provides more effective neck immobilisation, a better fit over variations in patient sizes, better access for clinical interventions, improved blood flow from the brain and enhanced comfort to the trauma patient.

ADDED FUNCTIONALITY
The new design works by bracing between the head and shoulders, instead of simply gripping around the neck. It provides much of the functionality of a surgical ‘Halo’ brace, considered the ‘gold standard’ of cervical immobilisation, without using invasive screws into the bones of the skull. It is manufactured in a single adult size: the paramedic makes one simple adjustment to a moulded front piece to accommodate the patient’s specific forehead-to-chest distance, and straps in place a rear piece to complete the stabilisation of the head.

The new neck brace may be readily fitted to the patient regardless of whether they are seated or lying down. Despite outperforming the conventional products on the market, initial indications are that NeckSafe’s manufacturing costs will be essentially the same. A patent has been filed for unique features of the design. The next stage of the work will be to carry out a more formal evaluation prior to approaching potential manufacturing partners.

1 Accident scene where a neck brace would typically be deployed
2 In situ user testing
3 Prototype development explores enhanced functionality

Senior Associate:
Karina Torlei, RCA Graduate 2008
Innovation Design Engineering

Research partners: Bath Institute of Medical Engineering, Royal National Hospital for Rheumatic Diseases, University of the West of England Bristol (Academic Department of Emergency Care), Great Western Ambulance Service NHS Trust, i2R Medical

Funded by: National Institute for Health Research

Project duration: Feb 2011-Jan 2013
HEALTHY PREGNANCY
REDEFINING THE EXPERIENCE

This design exploration of a healthy pregnancy has resulted in a website concept for women that weaves together their experiences and provides emotional support.
Pregnancy is a complex condition; during its course, women can experience huge disruptions to their lives that are not only physical and medical, but also social and emotional. The healthcare that pregnant women currently receive is usually focused on the physical health of the foetus and mother-to-be but takes little account of her broader wellbeing.

Clearblue, maker of home pregnancy test kits, currently interacts with women for a few minutes – the time it takes to do the pregnancy test. This project looks at how Clearblue could extend that relationship by investigating how expectant mothers can be supported more holistically throughout their pregnancy.

The first year of the study conducted in-depth research with 14 women to understand their experiences, fears and aspirations. This led to the development of six profiles of pregnant women, defined by the way they manage their pregnancy, their needs and their expectations.

The second year developed opportunities for women to obtain better social support. A key focus was the first trimester during which women are typically discouraged from telling people about their pregnancy, due to the high risk of miscarriage. This can pose a personal conflict for many women – whilst their whole life is about to radically change, they are unable to communicate with their social circle.

Whilst online social support tools exist, many women are dissatisfied with them. Not everyone feels comfortable online especially when dealing with personal challenges such as pregnancy acceptance or negative emotions. It is also often difficult to find someone to relate to specifically, as a wide variety of conditions exist.

SHARING EXPERIENCES

A website concept, woven-stories.com, has been developed that could support Clearblue’s medical products. It is designed to facilitate the sharing of emotional, social and physical experiences of pregnancy among women. It enables them to record their experiences and weaves them together to form a repository of thoughts, questions, answers and ideas. Women use it through interfaces such as timelines and research systems that are inclusive of a wide variety of situations, and accessible to different profiles of online users.

This web tool asks women to self-assess, enabling them to visualise their emotional and physical state within their journey through pregnancy. It allows them to express themselves without being judged, to get appropriate information and advice, and to find support from women going through similar experiences. After birth, a woman can look back on her journey and use her knowledge to help others. The website has a human rather than technical emphasis, using scenarios to demonstrate the range of possibilities offered.

By addressing personal and emotional needs, Clearblue is positioned through the study to nurture a meaningful, trusting and ongoing conversation with expectant mothers, in addition to supplying medical devices.

1 Research associate Florie Salnot (left) leads a workshop on pregnancy
2 Images from the Woven Stories concept website to support women during pregnancy
DESIGNING OUT MEDICAL ERROR

The Designing Out Medical Error (DOME) project with Imperial College London reached its conclusion in 2012 with a travelling exhibition of design interventions, the market introduction of one of its key proposals and a top international award for research.

DOME was a three-year multidisciplinary collaboration between designers from the Helen Hamlyn Centre for Design, clinicians and psychologists from Imperial, and management experts from Imperial College Business School.

The aim was to investigate how design could help to reduce typical medical errors that occur on surgical hospital wards. The designers learnt from in-depth clinical research and frontline clinicians and patients were involved in the design phase. The project culminated in five designs, each targeting a specific brief based on an identified hazard in the typical hospital bed space.

An exhibition of outputs from the project, entitled Make It Better, went on show at the Royal College of Surgeons (RCS) Hunterian Museum in February 2012. RCS President Norman Baker spoke at the private view for the exhibition, which attracted extensive media coverage in New Scientist, The Lancet and on the BBC website.

The Make It Better exhibits then travelled to North Wales in March for a bilingual showing at the Management Centre, University of Bangor, as part of the Bangor Science Festival 2012. The Welsh show was funded by the European Commission. Helen Hamlyn

Professor of Design Jeremy Myerson, who was Principal Investigator on the DOME project, delivered a public lecture on the research to a Welsh audience.

In another encouraging development, one of the main DOME innovations, the CareCentre, was taken up by leading UK manufacturer and NHS supplier Bristol Maid and is now commercially available. This new piece of equipment has been designed to stand at the end of the standard hospital bed, providing all the equipment commonly needed for safer care at the bedside.

The DOME project was featured at the Swiss Patient Safety Congress in Basel and at the Institute for Healthcare Improvement Annual Conference in Orlando.

Finally, the value of study was recognised and rewarded in two international award schemes. DOME was the overall winner for healthcare research at the International Design & Health Academy Awards, announced in Kuala Lumpur in July 2012. The project was also honoured for strategy and research in the Core77 Design Awards, a New York-based peer review scheme for design professionals.

Senior Associate: Jonathan West
Project Manager: Ed Matthews
Principal Investigator: Jeremy Myerson
Research Partners: Department of Surgery and Cancer, Imperial College London; Imperial College Business School
Funded by: EPSRC

1 Royal College of Surgeons President Norman Baker (second left) is shown a DOME project exhibit
2 Exhibition installation at the Royal College of Surgeons Hunterian Museum, London
3 Publication describing the DOME design interventions
4 The CareCentre, now commercially manufactured by Bristol Maid
5 Exhibition at the University of Bangor, North Wales
The Work & City Lab investigates how designers can make living and working in our cities more inclusive and sustainable. Our work this year focused on work and life blend with a pan-European study of mobile workers for Samsung, and on workspace, with a number of projects looking at new ways to create greener, smarter and more expressive office environments. We continued to collaborate with Megaman on the Boundary Estate in London to create a better urban lighting infrastructure for local communities. And we advanced our research into digital communities by starting two significant projects: the Creative Exchange, a new knowledge hub for the digital economy; and Creative Citizens, which explores the use of media in community-led design.

Jeremy Myerson, Lab Leader
LIVING STAGES
WHAT CAN WORKPLACES LEARN FROM THEATRE DESIGN?

This architectural study looks at how the scenographic techniques of stage design can improve the psychological experience of working in an office.

The drive for management efficiency in modern office design has tended to overlook the importance of individual psychological comfort in the workplace. As a result, many workplace environments are designed as psychologically impoverished ‘lean’ spaces, which do nothing to enhance company culture. When more psychologically enriched settings are attempted, these are often highly customised and expensive one-offs that are difficult to build and replicate.

This study explores how theatre design can provide inspiration to create more expressive and effective office environments for people, using a simple ‘kit of parts’ approach. Drawing on the idea of ‘maximum effect through minimal means’, the project began with archival research into the pioneers of modernist stage design, among them Edward Gordon Craig and Adolphe Appia.

A set of six scenographic techniques used to create mood and atmosphere was identified, based on the application of light and shadow, projection, screens, levels, colour and vista.

These fundamental techniques were then developed into a ‘vocabulary’ of effects that could be adapted to the office environment to investigate how we might be able to create emotional landscapes at work to respond to people’s psychological needs. In addition to archival work, expert interviews and a review of literature on the environmental psychology of the workplace, the project shadowed theatre and workplace designers through the course of a commission in order to map their different decision-making processes. This resulted in some intriguing comparative insights into the nature of the design process, highlighting the difficulties often faced by workplace designers in overcoming the structural inflexibility of the commercial design and procurement process.

DEEPENING THE IDEAS

In the next stage of the project the research team visited Haworth’s R&D facility in the USA to deepen the ideas behind the research and to share concepts with designers and architects in Michigan and New York. This was followed by a series of presentations and workshops in Haworth’s London showroom over the course of Clerkenwell Design Week in May 2012, which provided a valuable opportunity to test the clarity and appeal of the proposals within the design community.

The research has been aimed at exploring how particular cultures of performance at work can be enhanced with a modular set of stage componentry akin to systems furniture. The feedback gathered from the various sessions has informed the development of a series of ‘scenes’ investigating the application of the theatre design vocabulary to a range of workplace conditions, focusing on the ways in which one space might become a stage for multiple settings.

The proposals explore the ways in which we might move from workspaces that are lean, static and fixed to ones that are enriched, dynamic and flexible. Living Stages, which is part of a long-term research collaboration with global furniture company Haworth, provides a new framework for office designers and their clients to think about the psychological wellbeing of the work-force and not just their physical comfort.
1. Four types of stage screen adapted for office use
2. Exercise in colour, vista and screening within office environment
3. Research tool for workshop envisages the workplace as stage set
MOBILE WORKING LIVES
ON THE MOVE IN FOUR
EUROPEAN CITIES

This project looked for insight into how new
digital technology is changing the traditional
patterns of mobile workers across Europe

Laptops, smartphones and tablets have enabled us all to be much
more flexible and mobile in the way we work, but mobile working is
not a new phenomenon. Plumbers, salesmen, paramedics and builders are
all professionals who rely on mobility for their work and have always done so.
For these people, new digital technology has liberated them in the way they
work. Where once a plumber needed to go to different locations to make
appointments and order parts, all this can now be done remotely from a
smartphone while on the job.

This project looks at this group of ever-present mobile workers to
understand how they utilise technology in their daily life both for work and
social purposes. A pan-European field study was conducted in the UK, Turkey,
Poland, and Norway, involving 30 different mobile workers – from a nurse
in Oslo, a musician in Warsaw and a plumber in London to a deliveryman in Istanbul.

As the study took place in four countries, each speaking a different
language, the research team had to design research methods that would
cross language barriers and allow them to get beyond a surface level of
information. A mapping exercise was devised to act as a conversational
prompt during interviews, allowing them to build up, in stages, a picture of
the participant’s working day. A select number of participants were also
shadowed in their jobs providing a further layer of insight into their
working patterns.

OPPORTUNITIES EMBRACED

In all, 32 people participated in the study, ranging from the ages of 21 to 62 and
representing 29 different professions. The study encountered some fascinating
people and gathered many insights into how mobile workers are embracing
technology but also the new challenges that they face because of it.

In Oslo, a TV producer described how her colleagues who are a very
social group, relied on Facebook for their workplace banter because silence
was required on set. In London, a Thatcher explained that while his
smartphone has helped his business in many ways, he feels he has to hide it if
he is meeting clients as it does not fit with their mental model of a craftsman
and they trust him less if they can see it.

These insights, and many more,
were grouped into five different themes.
‘Work/life’ looks at how people deal with the variety and volume of information and
correspondence they receive every day. ‘Learning’ covers insights relating to the
new demands technology has placed on people to learn new skills, such as how
to market themselves online.

‘Transitions’ focuses on how mobile workers use their journey time.
‘Networks’ looks at how people use and maintain their networks of friends,
colleagues and customers.

These themes were adopted as the basis for several workshops with
Samsung Design Europe in which new design concepts were generated. These
explore how technology can better support mobile workers in their daily
activities and will be turned into user experience propositions that can make
a difference for those who are always on the move.

1, 2, 3 Mobile workers in different European locations
4 Mapping exercise visualises daily routines and communication networks
IN THE SHADE
LIGHTING LOCAL URBAN COMMUNITIES

This project proposes a more sustainable lighting strategy for under-lit pockets of the city and tests a new system on a London estate.
This project proposes a fundamental rethink of how we light urban public spaces at night. City lighting is unevenly distributed; while well-heeled business districts and busy tourist areas are brightly lit, many pockets of the city are under-lit after dark. This limits local trade and use of public space, undermining economic activity and social cohesion, and leaving many local urban communities literally and metaphorically in the dark.

In the first year of the study, architect Megan Charnley worked with local communities on the historic Boundary Estate in London to explore how an alternative lighting strategy could revitalise overlooked pockets of the city. Her research led to the proposal of a ‘night-time neighbourhood network’ of brightly lit ‘nodes’ that would encourage social activity around a connected chain of illuminated community facilities, creating safe and inclusive areas that are well-lit within a darkened streetscape.

PRACTICAL SYSTEM
For the second year of the study, industrial designer Tom Jarvis joined the project to develop this hypothesis into a practical lighting system and test the concept with local people on the Boundary Estate. In his research Jarvis observed the construction methods already used by councils to construct local infrastructure on housing estates often used a combination of steel tubes and tube clamps. He designed a tubular LED lighting system that enables existing public objects such as benches, fences, handrails and bike racks to become luminaires themselves.

PERMANENT SET UP
Following a series of temporary user tests to explore light levels and positioning, the study negotiated a permanent lighting set-up on an underused sports pitch on the Boundary Estate. Two self-illuminating football goalposts were developed for a group of local boys who live on the estate and have nowhere to play after dark.

The project worked closely with a local youth club to develop and install the goalposts in order to assess the practical performance and social benefit of the new system. The newly lit pitch was inaugurated in July 2012 with small football tournaments organised by the youth club throughout the summer.

Tower Hamlets, the local authority that manages the estate, Mears, the estate’s contractors and the local police force all welcomed the new lighting system. Following the success of the first permanent light tube installation on the sports pitch, a number of new requests were made by local residents for the system to be introduced in other parts of the estate.

The intention is that the LED light tube system will be developed into a commercial product with applications in other boroughs across the UK. The story of the research has been published in a large-format book in order to share knowledge and experience gathered during the project. This publication was formally launched at a lighting seminar at the Royal College of Art in September 2012 on the theme of ‘The Urban Spirit of Light’.

1 Illuminated goalposts on Boundary Estate playground
2 LED technology built into steel tubular infrastructure
3 Research associate Tom Jarvis demonstrates the new system
The way we work is having a major effect on our environment. Even a company with the most well designed building is going to waste energy if the blinds in the office are left down and the lighting on, or the windows are left open with the heating on. Human behaviour is simply fundamental to how much energy a building consumes.

While businesses are looking for ways to develop a more sustainable culture at work, they are struggling to define the right approach. There has been growing emphasis on investment in energy-efficient technologies, but far less attention has been paid to changing the way people work to create more sustainable working lives.

This two-year communication project in partnership with global facilities company Johnson Controls set out to find new ways for companies to better support employees in making more sustainable choices at work. The research team identified four different workplace cultures towards sustainability. The Housekeeper culture puts the responsibility of sustainability on the employee without the company bearing any costs itself – its attitude is ‘waste not, want not’ to cut down on the use of resources.

From the outset it was clear that people had a wide variety of views on what sustainability in the workplace should mean. These were based on people’s perceptions of the various costs and benefits to both company and employee of being sustainable.

FOUR DIFFERENT CULTURES

The research team identified four different workplace cultures towards sustainability. The Housekeeper culture puts the responsibility of sustainability on the employee without the company bearing any costs itself – its attitude is ‘waste not, want not’ to cut down on the use of resources. The Pragmatist believes that sustainability should not pose a cost to the employee or the company – its motto is ‘it has to work for everyone’.

The Libertarian believes sustainability is the responsibility of the company and not employees – its message is ‘free will should prevail’. The fourth cultural model, the Campaigner, advocates that both the company and employees should shoulder the burden – ‘we all need to take urgent action’.

These ideas were tested in a further set of workshops with experts in the field and organisations from a range of other sectors (pharmaceuticals, consumer electronics and non governmental).

The framework of four cultures was then developed into an online toolkit for use by company managers responsible for sustainability, facilities and communications.

The toolkit shows how companies can improve their approach to sustainability and develop an appropriate strategy for their internal communications that fits with their organisational culture. In a step-by-step guide, the toolkit contains workshop templates and a diagnostic tool to help companies evaluate their current approach to sustainability and plan what they want to do in the future.

The toolkit contains recommendations on how to create a communications strategy and presents examples of how different initiatives – for example, saving energy – might be tailored to Pragmatist, Housekeeper, Libertarian and Campaigner cultures, providing practical guidelines on how to roll out a campaign.
1 Employees give their views on sustainability
2 Framework outlines four sustainable cultures
3 Research associate Lottie Crumbleholme leads a workshop
WORKSCAPES
EXPLORING NEW DIRECTIONS IN OFFICE SPACE

This architectural study looks at the future of the office building by analysing space use in three organisations working at different scales across the city.

Research Associate: Benjamin Koslowski
RCA Graduate 2011 Architecture

Research partners: Bossons Group, GlaxoSmithKline, Herman Miller, Plantronics

Project duration: Oct 2011-Sept 2012
People at work are no longer tethered to a desk due to new technology. They can now work anywhere and, as a result, occupancy rates in offices are falling. This study looks at what organisations can do to re-purpose the office building by exploring future scenarios of space use and assessing the implications of providing a wider range of work settings.

Supported by a consortium of industry partners, the project is set in the context of a rapid shift in workplace practice: not only is technological change creating more flexible use of office space, but economic change is also driving up property costs and encouraging more efficient use of space.

To explore how different office buildings have evolved over time and how they might adapt in the future, the project looked in particular at the three types of workplace: the urban historic office in a converted warehouse, the post-war purpose-built office close to city-centre transport links, and the newer out-of-town business campus.

**RESEARCH WITH USERS**

The study began with an extensive literature review, expert interviews and the analysis of architectural information. This was followed by in-depth user research with 20 individuals in three organisations operating at different scales within the new media industry: a creative agency with 60-70 staff (converted warehouse), a business consulting organisation with around 1,800 people in the building at any one time (purpose-built office), and a global communications company with up to 4,000 employees (out-of-town campus).

The three organisations work in buildings that are typical in terms of the size, character and function of the tenants. What the study sought to define was how individual workers use the office building within its local context. A user research toolkit was created to help focus a series of interviews and observations – this comprised of diagrams of the individual buildings and their urban settings with stickers denoting activities.

The researcher worked with each participant to build a ‘space map’. This method was used to collect and compare user data between the three organisational types in six categories: communication, collaboration, patterns of work, variety of settings, mobility and social interaction.

These findings – in particular the relationship between the variety of work settings and employees’ mobility – were then used to map opportunities for more effective use of office space. An architectural framework borrowing from two design concepts for the Parc de la Villette in Paris was developed as a vehicle for communicating the scenarios of space use. This highlights four key elements of office space: surfaces, points, objects and circulation.

By deploying this framework as a tool for analysis, the study aims to find new ways to make more effective use of office space for each of the different organisations and provide direction on the settings and environments that might accompany the three generic building types. It also scrutinises the relationship between building type, location and the use of various work settings, as well as working cultures that encourage more effective use of workspace.

The ultimate aim is to illustrate how workspace can be redesigned over time to suit people’s needs and make sure they have a productive experience whenever they choose to go to the office.
THE CREATIVE EXCHANGE
A HUB FOR INNOVATION IN DIGITAL PUBLIC SPACE

This four-year project aims to support the growth of the creative economy in Britain by bringing academics and companies together to share knowledge in the digital domain.

The Helen Hamlyn Centre for Design is playing a leading role alongside the RCA’s School of Communication in The Creative Exchange, one of four knowledge exchange hubs funded by the Arts and Humanities Research Council (AHRC) that aim to develop the creative economy in Britain over the next four years.

The Creative Exchange, also known as the CX Hub, brings the RCA together with Lancaster University’s Imagination Lab and Newcastle University’s Culture Lab to explore new opportunities for the creative and media based industries.

The aim of The Creative Exchange will be to expand the creative economy through new forms of citizen participation in a concept known as the Digital Public Space, which enables anyone anywhere to access, explore and create with digitised cultural content.

The initiative will explore new models of engagement and exchange in the broadcast, performing and visual arts, digital media, design and gaming sectors – and bring together relevant arts and humanities academics, practitioners and companies with a cohort of PhD researchers around six themes related to the Digital Public Space (see above right).

The three participating universities will act as local test beds for the...
DIGITAL PUBLIC SPACE – KEY THEMES

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<th>Personalisation</th>
<th>Experience</th>
<th>Participation</th>
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<td>The personalisation of media for different viewers and contexts</td>
<td>New forms of ‘mass experience’ events and media with the quality of ‘liveness’</td>
<td>Different forms of user-generated content supporting participatory media</td>
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<th>Connectivity</th>
<th>Narrative</th>
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<td>Exploring ‘pervasive transmedia’: the increasing digital connectivity between people and things</td>
<td>Exploring storytelling in all its forms, existing and emergent</td>
<td>The individual within digital public space; ethical, privacy and security issues, IP rights and ownership</td>
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Within the RCA, PhD candidates will be jointly supervised by the Helen Hamlyn Centre for Design and the School of Communication, led by Professor Neville Brody and Bronac Ferran. This approach combines skills and know-how in citizen participation and user engagement with communication and digital design expertise. The first four digital innovation PhD studentships begin in October 2012, marking a new chapter for the Helen Hamlyn Centre for Design with the admission of its first PhD students.

Leader of The Creative Exchange is Rachel Cooper, Professor of Design Management at Lancaster and a member of the advisory board of the Helen Hamlyn Centre for Design. Cooper says: ‘This hub is a unique opportunity to address the changing digital landscape.’

http://thecreativeexchange.org

1 Professor Neville Brody, RCA Dean of the School of Communication, speaks at the launch of The Creative Exchange in May 2012

development of products, services, interfaces and experiences in London, Lancaster and Newcastle prior to larger public facing field trials around MediaCity UK in the north-west, home of the BBC, which is the primary geographic focus for the project.

The Creative Exchange will support the north-west regional strategy for growth in digital and creative media industries, whilst generating comparative research and development locally, nationally and internationally.

SETTING OUT VISION

The Creative Exchange was formally launched in May 2012 at the Manchester Museum of Science and Industry with a special event for academics, practitioners and the public as part of the Future Everything festival. Guest speaker Tony Ageh, controller of archive development at the BBC, a strategic partner in the initiative, set out his vision for a Digital Public Space.

‘I see it as an open, digital environment that would put the needs of the public first,’ explained Ageh. ‘It would make the vast wealth of our nation accessible. It would permit, encourage and even require contributions from the whole of our society. It will be a place where the national conversation thrives, where all contributions are welcomed, where every story, no matter who tells it, has value. The fact is, the UK is currently sitting on a rich seam of raw material in the form of publicly-owned or publicly-controlled assets, principally archived media and its associated rights and metadata. I believe that exploiting this resource could power a whole new economy and assure the UK of a leading role in the digital world of the future.’

A cohort of 20 Doctoral researchers will be recruited in the first two years of the project in the three participating universities. They will be based in a dynamic series of CX clusters, developing projects with industry partners and contributing to new knowledge exchange practices.

The RCA will run two of these clusters, one looking at the impact of the Digital Public Space on rethinking the workplace and the other investigating new models of social and communal behaviour in relation to its development. Lancaster is meanwhile looking at making the digital physical and at public service innovation and democracy. Newcastle’s clusters focus in two areas: performance, liveness and participation; and stories, archives and living heritage.
CREATIVE CITIZENS
EXPLORING NEW MEDIA IN COMMUNITY-LED DESIGN

How can we use new media to generate creative engagement in community-led design? This project is working with two national partners to unlock local potential.

Community-led design, or participatory design, is where local people come together to redesign spaces and services in their neighbourhood, such as starting an allotment, providing services for young people, or opening up old buildings as hubs for the community.

Social media and web tools could offer new opportunities for community-led design. For example, can new media help reach an audience that is more representative of the community? Currently there is little research to show whether these technologies actually help.

The Creative Citizens study is funded through the AHRC (Arts and Humanities Research Council), Connected Communities and the EPSRC (Engineering and Physical Sciences Research Council) Digital Economy programmes. The Helen Hamlyn Centre for Design and the Open University are collaborating with two professional partners. The Glass-House is a national charity that works with local people and regeneration professionals to develop skills for inclusive design and neighbourhood planning. NESTA (National Endowment for Science, Technology and the Arts) has developed, through its Neighbourhood Challenge programme, new ways to support community-led innovation by unlocking the assets and creative potential that exist in all communities.

The research will focus on community-led design projects that are tied to a neighbourhood, whether this involves the refurbishment of a building, the development of a space, or the design of a new local service. The study will explore how these projects can involve the wider community, so that anyone with an idea can participate, in order to create more inclusive environments.

Ideas based around media and co-designed with communities will be tested to see whether new media can add value to community-led design projects. These interventions could look at ways in which media can improve communication, collaboration, information and creativity.

The Creative Citizens research project as a whole is led by Cardiff University.
Everyone can relate to the struggle to find a toilet when out and about. But for some, such as older people, pregnant women, those with children or people who experience incontinence as a side effect or symptom of a medical condition, this is more than an inconvenience.

Researchers at the Helen Hamlyn Centre for Design spoke to more than 100 people of all ages about their experiences of needing, finding and using toilets when away from home, as well as to professionals about the problems of providing toilet facilities.

The output of this work was The Great British Public Toilet, a website that uses local councils’ own data to tell people where public toilets are, when they’re open and to whom they are accessible.

The website was launched in October 2011 for the London area, using data provided by six of the 33 London boroughs. Not many local authorities publish ‘open data’ about their public toilets. Open data is data that is machine-readable and free for anyone to use, making it easy to include in maps and apps. The UK Government has committed to providing more open data throughout the public sector, to improve transparency and encourage innovation in public services.

With no central database of public toilet locations, their opening hours and accessibility, it is up to local councils to provide open data on public toilets. In comparison with the expense of a new toilet facility, this is an extremely low cost way for a council to improve an existing public service for the public’s benefit.

This is why The Great British Public Toilet Map also provides a way for residents and visitors to contact a London borough to ask for their participation. Since the launch of the map, half the London boroughs have published data or been contacted by the public to ask that they do so.

In July 2012 the map was relaunched with an improved interface so that it works well on smartphones, making it easy to find a toilet when out and about. Open data from Transport for London about Tube station toilets was also included. The research team aims to find the means to extend the website across the UK – and to demonstrate a fundamental and important use of open data.

http://greatbritishpublictoiletmap.rca.ac.uk

Research Associate: Gail Ramster
Co-Investigator: Jo-Anne Bichard
Project: TACT3 (Tackling Ageing Continence through Theory, Tools and Technology)
Funder: New Dynamics of Ageing
The Age & Ability Lab looks at how designers can shape a future that includes all ages and abilities. This year a key theme for our work was People & Technology: studies with Sony, Swiss academic partner Epfl+ Ecal Lab and Research In Motion, maker of the BlackBerry®, explored digital inclusion of older people from different angles. Everyday Living was another prominent focus with projects for Stannah and Royal London Society for Blind People promoting independence and mobility. We continued our research into design for adults with autism by looking at sensory gardens in partnership with Kingwood, and we advanced the Business of Inclusive Design through a series of executive education workshops in Hong Kong, Korea, Norway and the UK.

Rama Gheerawo, Lab Leader
SIGHTLINE
SAFER STREETWORKS
FOR ALL

This project proposes an accessible new system with physical and digital elements to make streetworks less disruptive to blind and partially sighted people.
Memory is an important navigational resource for blind and partially sighted people who rely on having predictability in the urban environment. However, temporary obstructions and diversions can easily disrupt a person’s mental map and leave them disorientated. Streetworks are the largest and most significant cause of these disruptions.

The current system of pedestrian signs and barriers and the way they are deployed have changed very little since the New Roads and Streetworks Act in 1991. They usually perform the function of preventing people falling in holes during excavations. However they fail to effectively communicate to visually impaired people what is happening and what is expected of them as pedestrians. This project proposes changes to the design and deployment of this equipment to make it easier to understand for all street users, particularly those with visual impairments.

Background research included: a survey of 100 streetwork sites across London; a comprehensive review of relevant legislation, manuals and codes of practice; observational research with people with visual impairments as they negotiate streetworks; and operative training and shadowing of a streetworks crew.

Initial design concepts were prototyped, tested and evolved by a panel of visually impaired people as well as reviewed by Transport for London, the Department for Transport, The London Rehabilitation Officers Forum and streetworks operatives.

**TESTING A PROTOTYPE**

A second design iteration was prototyped and tested by 13 visually impaired people with sight loss on Vauxhall Bridge Road in London and compared to existing streetworks; 85 per cent of participants found the physical parts of the new system useful and those with the lowest levels of vision found it most helpful.

The system has both physical and digital elements. The physical changes comprise a new pedestrian sign and retrofit tactile and graphic markings on the barriers. Together these provide a new tactile language, confirming to visually impaired pedestrians that they are on the correct side of the barriers, providing a safe line to follow and letting people know when they have reached the end of the works.

A digital application for smartphones allows operatives to log details of new streetworks when they set up the equipment. This also provides audio descriptions of works to blind and partially sighted pedestrians. Outputs have been captured in a film based on the user test as well as a specification document explaining the system, its benefits and operation. These are being disseminated in both the highways and visual impairment sectors, enabling further evaluation and potential pilot implementation.
This project looks at how we use touchscreen technology and at novel concepts that might improve the user experience in the future.

Touchscreen devices such as tablet computers and smartphones occupy a new space in our lives and new etiquettes and behaviours are constantly evolving in how we use them. Their portability, connectivity, high levels of computing power and easy-access interfaces mean that they are now used in different ways and for different purposes from preceding technologies.

This project sponsored by Sony has applied design ethnography techniques to understand the ways in which touchscreen devices can benefit people of all ages, creating a body of knowledge that has informed design ideas that aim to better integrate this new technology into our lives.

The research began with ‘deep-dive’ user interviews to explore the needs of two groups of people at different ends of the age spectrum: over 60 and under 25. Sony tablet computers were then given to six lead users to see how the devices were integrated into daily life over a longer period. This field study also helped to focus conversations on the functions and features that people were most interested in.

Two concept areas emerged from the research: ‘Living Interfaces’ and the ‘Smart Pen’. The ‘Living Interfaces’ group of ideas animates the screen in a way that is more representative of the real...
world. Better contrast between text and background is achieved through differences in texture as well as colour; digital text is given a glossy finish, showing a ‘shine’ that moves as the user tilts the screen.

A LIVING INTERFACE
Three-dimensional elements are rendered so that highlights and shadows shift with the screen, turning the interface from a static, graphical layout into a living, moving interface. Buttons look more realistic, 2D maps become 3D with the addition of shadows and highlights showing the contours, and touchscreens become more intuitive to read and understand.

The ‘Smart Pen’ concept emerged from direct user observation as people often preferred to write, draw and notate using pen and paper. The pen adds functionality to the touchscreen, allowing written communication to be captured digitally so handwritten notes are archived immediately and become searchable using the pen’s function.

Emails and social networking messages can be written using real pen and paper, then digitally sent by ticking a printed box. Meeting notes, online banking and music notation feature among the many other potential applications.

Functional prototypes have been generated around both concept areas, representing a more people-centred approach to future touchscreen capability and use.

1. Research participant tests crossword application of Smart Pen concept
2. Screen shots from Living Interfaces concept work demonstrate three-dimensional effect of buttons, text and images. Maps, for example, are shown in contoured relief
GREEN SPACES
OUTDOOR ENVIRONMENTS
FOR ADULTS WITH AUTISM

This project extends research into the sensory living needs of adults with autism to the design of outdoor spaces, giving guidance on how to create a positive sensory experience.
The restorative qualities of gardens and the benefits of interacting with nature are widely documented. However, there is a lack of guiding principles within the context of design for autism.

This study is the third in a series of design research projects with the Kingwood Trust, aiming to improve living for adults with autism spectrum disorders (ASDs) through a better understanding of their needs, aspirations and physical environment. This year, research concentrated on the design of outdoor green spaces and on the special interests of adults with autism that can be addressed within them.

Outdoor spaces are often under-utilised areas in residential housing yet hold great potential for both active and passive pursuits. Gardens provide a rich sensory experience but their dynamic and changing nature can present challenges for a person with autism. Difficulties in processing sensory information and distinguishing between foreground and background need to be considered when planning the layout and flow of a garden.

Special interests are one of the defining characteristics of autism, and can range from an interest in spinning objects to a fascination with drawing maps or organising objects. Research explored ways of identifying and nurturing these special interests, looking at how they might be turned into opportunities for social, emotional, educational and vocational growth within the garden.

**VARIETY OF METHODS**

The researchers used a variety of methods to understand the needs of residents and support staff. These included examining the existing timetable of activities at two Kingwood homes, spending time with autistic adults to identify their special interests using interactive profiling tools developed as part of the research, putting research ‘probes’ in the environment to uncover interests, and following these up with home visits.

The study also conducted co-design workshops with family members and support staff, shadowed a horticulturist working with adults with autism, visited best practice schemes, interviewed experts on sensory gardens, and conducted a staff development workshop entitled ‘Ready Steady Make’ to enable staff to create stimulating garden activities and props.

The research has been compiled into a new publication, the third in the Kingwood design series, entitled *Green Spaces: Outdoor Environments for Adults with Autism*. This documents the process, methods and findings. The book relates guidance on garden design to three areas of activity for autistic adults – leisure, occupation and exercise. Differently designed spaces allow a range of activities from the social to the private to take place.

To make outdoor environments more comfortable and secure, the ideas build order and structure into the space, showing how to manage predictable elements, such as pathways and planting, alongside changeable conditions, such as weather patterns or seasons.

Design ideas have also been realised in the garden of the new Kingwood College, due to open later this year, demonstrating best practice and acting as a showcase for the research.

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1. A Kingwood resident enjoys planting flowers in a hanging basket
2. Ready Steady Make garden development workshop with Kingwood staff
3. Parent of adult with autism participates in co-design workshop looking at garden features and layout
EXECUTIVE EDUCATION PROGRAMME GROWS

The Helen Hamlyn Centre for Design stepped up its offer in Executive Education in 2011/12, providing courses and workshops for international business audiences on the commercial benefits and innovation methods of inclusive and people centred-design.

Led by Deputy Director Rama Gheerawo, the Executive Education initiative revolves around the Business of Inclusive Design – a key theme of the Age & Ability Research Lab.

The centre partnered with the Norwegian Design Council (NDC) for the European Business Workshops in Inclusive Design (EBID), which took place in Oslo in June 2012. This professional practice programme, part of the NDC’s Innovation for All Programme, focused on three main areas: products and services, digital solutions and communication and marketing, with lectures and practical workshops led by experts drawn from industry and academia.

Guest speakers included Todd Wood, Senior Vice President of Design, Research In Motion, and Kevin Lavery, founder of the International Mature Marketing Network.

The Helen Hamlyn Centre for Design worked with the Hong Kong Design Centre to deliver a conference entitled Ageing and Design: Global Business Perspectives and two Executive Education workshops as part of its Knowledge of Design Week (KODW) in June 2012. Sean Donahue from ArtCenter College of Design (USA), Onny Eikhaug from the Norwegian Design Council and Keiji Kawahara from KIDstudio (Japan) joined Rama Gheerawo to give an international experience to participants.

Executive education and professional development courses were also created for Samsung, Procter & Gamble, the Qatar Foundation and the International Network of Design Managers, as demand grew for professional guidance and training on the Business of Inclusive Design.
1 Workshop participants in Oslo
2 Rama Gheerawo, Deputy Director of the Helen Hamlyn Centre for Design, shows the NDC’s book Innovating with People from the stage in Oslo
3 Todd Wood, Research In Motion, delivers keynote address in Oslo
4 Participants and workshop leaders in the executive session in Hong Kong
5,6 Hong Kong designers in inclusive design workshop

Images © KODW2012/HKDC
YOU, ME & EVERYONE WE KNOW
SOCIAL NETWORKING
FOR OLDER PEOPLE

This project explores the user interfaces and experiences that might encourage older people to spend more time on social networking sites.
This design study looks at how social networking technology can better support older people in maintaining connections to the individuals and groups that mean the most to them. People over 60 tend to use the internet in different ways to younger people and most current social networking sites offer little incentive for them to engage. An older person is more likely to use the internet for information rather than social communication or entertainment, currently the primary focus of many sites.

The research is part of a larger project with the Epfl+Ecal Lab, Ecole Polytechnique Fédérale de Lausanne, looking at our relationship to the digital world. The study aims to create new social networking experiences that use technology to respond to human need and aspirations, instead of ‘dumbing down’ the digital experience for older people.

Research involved 33 short interviews with a spread of 60-90 year olds to capture current attitudes to networking sites, as well as more long-term engagement with eight individuals across a socio-economic spectrum. Taking on the role of a ‘technology therapist’ the designer conducted in-depth client and group sessions to better understand how older people want to communicate, as well as their desires and anxieties about being online.

STRENGTHEN LINKS
The research revealed three important findings. First, older people require interfaces that make it easier and more rewarding to begin social networking online; second, they want to strengthen existing relationships rather than reach out to new acquaintances with texts or tweets; and third, people in this age group want their online lives to support and even mirror their offline lives, whereas younger people tend to have separate online social lives.

In each opportunity area, design concepts were created using three distinct processes – working with RCA Visual Communication students to develop new creative approaches, running co-design workshops with older people enabling them to describe their ideal experience, and using the research to inspire the designer’s own ideas.

Ideas spanned interactive, technological and visual propositions. These looked at different types of interfaces that go beyond a keyboard and mouse, such as using a person’s most defining feature, their face, to log into their account, or saying the name of a person to a digital device and it immediately brings up their online profile. Some concepts address privacy issues, for example, having the computer draw a portrait of the person sitting in front of it, abstracting a real and recognisable photograph into something more artistic and abstract.

By putting people first and technology second, this project presents alternative interfaces and applications, resulting in new and alternative social networking experiences for people of all ages.
MAINTAINING mobility in the home becomes more important as we get older, especially the challenge of moving between floors when stairs become too difficult to use. However, older people constitute a vast and varied group. People currently in their late 60s and early 70s – the so-called boomer generation – can differ greatly in their attitudes and abilities to those in their 80s and 90s.

These differences are evident in the way they relate to technology, their attitude as consumers and in their tastes and preferences in the home. There are also differences in the way different older age groups manage their social networks.

This project with stairlift manufacturer Stannah set out to create a portrait of ageing in the home, so that the company might understand more deeply the needs and expectations of its future customers and meet those aspirations through a process of innovative design thinking.

**AREAS OF INNOVATION**

Research was conducted with two cohorts of older people. Current customers described the reality of living every day with a stairlift installed in their home. The second group, drawn...
from baby boomers aged 67 to 73, who do not need a stairlift at present but helped to articulate the future expectations of their generation.

This research identified a number of areas for innovation, and the project has focused on exploring how to support older people to manage their networks of care through smart technology in the stairlift. A series of prototype electronic devices were created, programmed, manufactured and installed on stairlifts in three houses. These allow the homeowner’s family or friends to see the stairlift’s activity on Twitter and take action accordingly. After leaving the devices running for a few months, follow-up interviews were conducted to see how they have affected people’s lives.

Scenarios were created to demonstrate the benefits of these technology systems. These bring together insights from the research participants about their personal care networks with knowledge from Stannah’s engineers about what is technically feasible.

All this will feed into another round of design and testing in the second year of the project, with the aim to bring the ideas to a market-ready conclusion in autumn 2013.
BELONGING AND BECOMING
OLDER PEOPLE, TECHNOLOGY
AND COMMUNITY

This project looks at how digital technology can enable older people to become a more vibrant, visible and vital part of their community

Research Associate: Lisa Johansson
RCA Graduate 2010 Design Products

Senior Research Associate: Gianpaolo Fusari
RCA Graduate 2009 Innovation
Design Engineering

Research Partner: Research In Motion

Project duration: Oct 2011-Sept 2012
Active ageing, according to the World Health Organisation, has three components: being, belonging and becoming. Most current design research focuses on the physical and physiological state of being, overlooking the other two components. Physical changes might begin to decrease people’s abilities but knowledge, experience and the will to express oneself does not fade with age.

This project with Research In Motion, part of an on-going series of studies with the maker of the BlackBerry® smartphone, set out to look more broadly at older people’s social connections in the community (belonging) and their personal aspirations (becoming) with the aim of enhancing their daily life through digital technology.

Set in the context of a rapidly ageing population which will see more than half of the world’s population aged 50 or over by 2030, the study explores how senior citizens can move from being passive recipients of care and support to active participants in their local communities, using their knowledge and experience to express themselves and benefit others in today’s networked digital society.

The project began with a literature search and interviews with experts in the field of ageing and technology as well as a scouting effort across London to identify older citizens with distinct social and cultural backgrounds. We identified this group of collaborators as ‘life experts’ who acted as a sounding board throughout the project.

CO-CREATIVE CONCEPTS
A student design project was set up early in 2012 involving 16 RCA Masters students from the Design Products and Visual Communications programmes. Five teams of designers were each paired to a ‘life expert’ connected to a particular local community in London. The teams were asked to co-create digitally-based design concepts that enhance older people’s presence and contribution in that community (see results overleaf).

The findings and implications from these student design projects were analysed and built into the next phase of the project – a workshop with older people to further understand their aspirations and connections through a series of exercises and concept explorations. A framework was then developed which looks at balancing the ‘need for change’ with managing ‘the pace of change’ – and at maintaining individual identity in the face of a drive towards commonality and community.

The concepts developed are aimed at giving older people confidence and transforming them from passive to active individuals in their local communities. For example, could technology be introduced in such a way that it takes them step by step through the hurdles and encourages them to be assertive and explore further?

The research and concepts arising from the project will feed into an insight bank for Research In Motion, demonstrating how technology can support older people in maintaining an active community role.

1 Older people participating in workshop at Royal College of Art to map aspirations and connections
Shown here: images of work completed as part of the Belonging and Becoming research project (see previous spread). Five groups of MA students from RCA Visual Communication and RCA Design Products looked at how digital technology could help older people become more vibrant, visible and active members of their communities. Five older people joined the student teams to help guide and shape the ideas. An awards ceremony and exhibition of the outputs, entitled Design for our Future Selves, was held at the RCA in London in June 2012. The exhibition, curated by Gianpaolo Fusari and Lisa Johansson, was given a repeat showing at the London Design Festival in September 2012.
Land Care pairs families with older residents to grow food in the local care home. Digital animations in public spaces communicate the scheme to the neighbourhood.

The first prize winners with Dr Nafeesa Dajda and Dr Chris Jones (on left) from Research In Motion.

Five older ‘life experts’ on the project receive Blackberry PlayBooks as a thank-you for their involvement in the project.

Day Tripper looks at how people can continue to meet after the community centre has closed down. It co-opts buses, parks and trains to hold meetings.

Radio+ uses the traditional radio form to enable older people to record, upload and broadcast up to 30 minutes about anything that interests them.

Memory Capsule digitally records and stores treasured family objects, which can then be reproduced using 3D printing techniques years after the real object has disappeared or been destroyed.

Story Walk brings local neighbourhoods to life using the stories of its inhabitants – internet-based maps show the story locations, allowing you to select the ones you want to hear.

Exhibition of the work in the RCA’s Senior Common Room in June 2012.
THE INGENUITY OF AGEING

What can a remarkable community of 6,000 retired academics living on the campus of Tsinghua University, Beijing, tell us about strategies for ‘ageing well’ in societies around the world?

Dr Yanki Lee of the Helen Hamlyn Centre for Design spent a year in China investigating new approaches to design for ageing, supported by a UK-China Fellowship of Excellence funded by the Department of Business, Innovation and Skills (BIS).

The Fellowship is given to postdoctoral researchers to conduct cutting-edge research in a Chinese research institution. Dr Lee chose to collaborate with retired academics at one of China’s elite educational institutions, Tsinghua University.

Her post-Doctoral study not only engaged a core group of retired Tsinghua scientists but also involved many more through a series of design events planned to coincide with five traditional Chinese festivals. It explored an alternative cultural approach to design for ageing by combining the techniques of reflexive ethnography with action research.

The project resulted in a publication, *The Ingenuity of Ageing*, which presents a range of discursive ideas to emerge from a piece of experimental design research that deliberately confronts conventional thinking about design for older people. The publication, designed by research associate Lottie Crumbleholme, was formally launched with a reception at the RCA in February 2012.
DESIGNING FOR SUDDEN DEPENDENCY

The Helen Hamlyn Centre for Design set a social design brief in this year’s D&AD Student Design Awards to encourage colleges all over the UK and Europe to think about designing for people of all ages and abilities.

The brief, entitled ‘Help! I need somebody! Designing for Sudden Dependency’, asked students to design a product, service, communication or environment to help someone who has suddenly become dependent on help for everyday tasks in their own home, through an accident or illness.

Students were encouraged to consult the centre’s website www.designingwithpeople.org in developing their ideas. This provides guidance on human capability, everyday activities, design methods and the ethical framework for research.

Judges of the social design award included US designer Patricia Moore, Nokia head of design Marko Ahtisaari and centre director Jeremy Myerson.

The two stand-out projects were both walking aids. Sebastian Reichel of Weissensee School of Art, Berlin, won a Yellow Pencil with Agil, a flexible walking stick developed with the Department of Gerontology at Berlin’s Charité Hospital; Tal Goren of Winchester School of Art was nominated for Palms, a new-style crutch.

1 Flexible walking stick by Sebastian Reichel (winner)
2 Crutch by Tal Goren (nominated)
The Helen Hamlyn Centre for Design Yearbook 2012

CHALLENGE WORKSHOPS
FOSTERING A SPIRIT OF SOCIAL ENTERPRISE

Julia Cassim describes how a new model of social innovation has breathed fresh business life into sheltered workshops for disabled people in the Balkans

There is today a growing emphasis on the role that inclusive design can play in fostering social innovation. Such an approach switches the spotlight onto the broader spectrum of inclusive design activism, away from the development of products, services and environments alone to initiatives involving social enterprises – a growth area given the parlous state of the world economy.

The link between inclusive design and social innovation was the subject of the Include conference, organised by the Helen Hamlyn Centre for Design in April 2011, and it has also formed a new context in the former Yugoslavia for the Challenge Workshops, the centre’s international knowledge transfer programme for designers.

Our focus in the region is on working directly with sheltered workshops for disabled people, which have long been a feature of the employment scene in many countries. In Western Europe, many have been transformed into social enterprises or subsidised not-for-profit organisations where they involve people with learning disabilities or those deemed unable to take up mainstream employment.

In the countries of the former Socialist bloc however, this has not happened. State-run sheltered workshops continue to operate but with increasing difficulty as their subsidies are cut or removed wholesale in the switch from a controlled to a market-led economy. Increasingly they are being required to operate as commercially viable enterprises or risk closure.

The disabled or socially marginalised people working there often have high levels of traditional manufacturing skills but lack business know-how, design training or the ability to produce attractive goods that can be sold in the mainstream market. As a result many are struggling. Nowhere is this more evident than in the countries of the former Yugoslavia where the impact of the Bosnian conflict endures at every level.

SOCIAL OUTCOMES

This is the context that the Challenge Workshops has been addressing through the development of a new model funded by local offices of the British Council, and rolled out in Sarajevo (2009), Zagreb (2011), Osijek and Skopje (both 2012). Each interaction has resulted in a new product range and a new visual identity for a sheltered workshop for disabled people under threat.

The four workshops demonstrate how inclusive design and its participatory methodologies can transform attitudes, help rebuild cultural networks destroyed by civil conflict, and importantly create ongoing local and national partnerships between makers and designers where none had existed before.

For the employees or beneficiaries of these workshops it has been a chance to understand how to use design strategically in product development and marketing so that what they make, they can actually sell. For the designer participants, the workshops have offered an opportunity to brainstorm, co-design and manufacture in a short five-day event and to learn key making skills that are not always part of a design education.

As a result, many of the designers from the UK, Bosnia, Serbia and Croatia who first worked together in Sarajevo have gone on to continue working with the organisations and initiate or participate in the workshops in Zagreb, Osijek and Skopje, thus creating a new cross-national network.

The specific context for each workshop has differed greatly but the central question has been the same. How can we harness an inclusive process to co-design methods and to use mainstream design strategically to transform these organisations conceptually and economically?
1-3 Outputs and participants in the Osijek workshop, Croatia
4-7 Outputs and participants in the Skopje workshop, Macedonia
The participating organisations ranged from a five-man print and wood workshop run by recovering addicts in Osijek, Croatia, and a vocational school for hearing impaired students in Skopje to a small NGO running a day centre for adults with learning difficulties in Zagreb and its counterpart in Belisce, close to the Croatian border with Serbia and Hungary.

Similarly the design skills and equipment on offer varied widely. In Osijek it was close to zero while in Zagreb and Sarajevo the workshops had highly skilled ceramists, machinists and metalworkers working at the large-scale URIHO factory. For the designers who had to work with these variables in the workshops, it was a sharp learning curve, but the results are a tribute to the power of good design to transform seemingly intractable situations.

Indeed the striking design and social outcomes cast the Challenge Workshops programme in a new light, presenting a vital chance to develop a new model of participatory design practice that can be applied equally to social enterprises and small businesses that are struggling to compete in an unforgiving commercial world.

Each workshop held its own local exhibition but the entire project has also been showcased internationally. It was seen in Japan as part of the Shared Innovation exhibition at the Gallery Amu in Tokyo in October 2011 followed by a showing at the Kyoto University Museum in November 2011, which drew more than 5,000 visitors during its two-week run.

OTHER CHALLENGES
Alongside this significant new strand of work, the Challenge Workshops was also been active in other parts of the world during 2011/12, running three 24 Hour Inclusive Design Challenges in Ireland, Norway and Portugal, and a five-day workshop at Hadassah College in Jerusalem where third year industrial design students worked with Shekel, a manufacturing facility employing adults with learning disabilities.
### 24 HOUR INCLUSIVE DESIGN CHALLENGES

**TULLAMORE, IRELAND**  
3-4 Nov 2011  
Organised by the Centre for Excellence in Universal Design, National Disability Authority (NDA), Dublin, Ireland

**OSLO, NORWAY**  
7-8 June 2012  
European Business Workshops in Inclusive Design – Innovation for All  
Organised by the Norwegian Design Council

**LISBON, PORTUGAL**  
21-23 June 2012  
Organised by: Design Includes You, the British Council, Portugal and the CIIAUD (Centro Investigação em Arquitetura, Urbanismo e Design)  
Supported by: Câmara Municipal de Lisboa, Departamento de Planeamento de Mobilidade e Transportes and Museum Nacional de História Natural e da Ciência, Lisboa

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In Tullamore, the third Challenge organised by Ireland’s National Disability Authority, the focus shifted from professional designers to design students and recent graduates from design schools across Ireland. The theme was ‘everyday products’ but restricted to those that employed no technology and did not rely on apps to be functional. The winner was an ingenious new mechanism to enable anyone to effectively change a light bulb or ceiling fixture.

In Oslo, it was their third Challenge too, organised again with the Norwegian Design Council as part of its biannual conference on the business of inclusive design. An international cohort of designers joined their Norwegian counterparts to make up four multi-disciplinary teams and the theme centred on how design can promote social inclusion in an era of cultural diversity. The winner was a service that builds on existing information systems and channels them into an accessible and enjoyable digital interface.

The Lisbon Challenge was held in the ornate 19th Century Palacio Menino de Ouro, the headquarters of The British Council, Portugal, which commissioned the event. The brief centred on information and service design for three key cultural venues in the city. The four teams were asked to consider how inclusive design could increase the physical, cognitive and cultural accessibility of an area or a building with a complex identity or history. The winning idea was Sharexp, a device that allows people to share their experiences of the spectacular view from São Pedro de Alcântara Belvedere at the top of the Gloria Funicular.

Julia Cassim is a Visiting Senior Fellow at the RCA and leads the Helen Hamlyn Centre for Design’s Challenge Workshops programme. She is based in Kyoto, Japan.
THE HELEN HAMLYN DESIGN AWARDS
IMPROVING LIFE THROUGH DESIGN INNOVATIONS

The Centre’s annual award scheme for Royal College of Art design students is a catalyst for social activism and user research.

Architectural schemes to improve end-of-life care in the community and improve the sustainability of office buildings in the City of London were among the award-winning projects created by graduating Masters students at the Royal College of Art in the Helen Hamlyn Design Awards 2012.

These awards recognise outstanding student design projects that contribute to improving quality of life. RCA professors and heads of programme nominate the entries, which are judged by an external panel of judges during the RCA’s summer show (see below).

In a big year for the RCA’s newly formed School of Architecture, other winning work in 2012 included a radical rethink of the plaster cast to treat fractures and a telephone-based network to combat loneliness in the elderly. The four main award categories were sponsored by Age UK, Clearblue, GMW Architects and the Technology Strategy Board.

Representatives from each organisation handed over the prizes at an awards ceremony on 26 June 2012 at Royal College of Art. There was a total prize fund of £10,000.

Helen Hamlyn, founder of the Helen Hamlyn Trust, gave her own personal award for creativity. This was shared by two projects, one exploring a new system to support diabetics and the other a car interior to suit older drivers.

There was also a special award for alumni of the Helen Hamlyn Research Associates, given this year to industrial designer Guy Robinson of Sprout Design.

Some of the entries to the Helen Hamlyn Design Awards came from participants in The Methods Lab, an interdisciplinary workshop for RCA students, which was organised by Visiting Research Fellow Yanki Lee from 31 October to 3 November 2011 as part of AcrossRCA, an initiative encouraging interdisciplinary collaboration in art and design.

Thirty-seven students from the RCA and from the Media, Art & Design Faculty at Genk, Belgium, were formed into four teams to participate in a four-day creative workshop on design for ageing – a subject chosen to explore the concept of ageing as a culture rather than as a problem in our society. Each team worked with a local older resident to develop a creative response relevant to the area.

The Helen Hamlyn Design Awards and the annual Methods Lab work in tandem to introduce RCA students across the disciplines to the principles of inclusive and people-centred design.
SMART TOUCH
SmartTouch is a blood glucose monitor for insulin dependent diabetics who use a smartphone and Care Trade is a social enterprise that transforms looking after oneself into care for another person in need. This project provides a dual solution to tackle limited healthcare access in developing countries and lifestyle pressures in developed countries.

Judge’s comment:
“I was very impressed with the in-depth research that has gone into producing a useful product and system for people with diabetes. I have personal experience of this condition – any help in this direction is much appreciated.”
Helen Hamlyn

INCLUSIVE DESIGN INTERIOR CONCEPT
This inclusively designed car interior can be used by many different people, especially older people. The ergonomics have been refined to suit driver needs and demands. Adjustable within the basic design at the dealer, its inclusive approach crosses barriers of age, physique and gender.

Judge’s comment:
“I was delighted and relieved to at last see an intelligent design that will make driving a car easier for older people – and for all of us. Careful thought has gone into researching this first prototype.”
Helen Hamlyn

REQUIEM FOR A DIGNIFIED LIFE
This project proposes an urban architecture that enables a network of residential end-of-life care in the Deptford area of London and facilitates a person’s right to determine the manner and location of their death. Combining existing forms of elderly care to create a new health architecture, it aims to invert the trend for natural geriatric death in hospital by exploring new forms of the hospice and community centre.

Judge’s comment:
“It was inspiring to see a young architect raising the taboo subject of dignity in dying and end-of-life care. The approach was inclusive and intergenerational. It provides an excellent platform for innovation.”

TECHNOLOGY STRATEGY BOARD AWARD FOR INDEPENDENT LIVING
Winner: Thomas Gibson
RCA Department: Architecture

HELEN HAMLYN DESIGN AWARD FOR CREATIVITY
Joint Winners: Luc Fusaro, Ruby Steel, Kevin Bickham, Ho-Tzu Cheng
RCA Department: Innovation Design Engineering

Joint Winner: Niels van Roij
RCA Department: Vehicle Design

Winner: Thomas Gibson
RCA Department: Architecture
**AGE UK AWARD FOR INCLUSIVE DESIGN**

**INCLUSIVE DESIGN INTERIOR CONCEPT**
This inclusively designed car interior can be used by many different people, especially older people. The ergonomics have been refined to suit driver needs and demands. Adjustable within the basic design at the dealer, its inclusive approach crosses barriers of age, physique and gender.

Judge’s comment:
“The designer is to be congratulated for developing a concept with high mainstream potential. It addresses the needs of older drivers for whom this activity of daily living is indispensible.”
Prof James Goodwin, Age UK

**Judge’s comment:**
“Dial Log is a social network that helps tackle social isolation in our ageing population. It brings old and young people together through conversation. It connects with its older users using their telephone along with Dial Guide, a simple e-paper display that guides them through the audio interface, eliminating the need for internet access.”
Prof James Goodwin, Age UK

**DIAL LOG**
Dial Log is a social network that helps tackle social isolation in our ageing population. It brings old and young people together through conversation. It connects with its older users using their telephone along with Dial Guide, a simple e-paper display that guides them through the audio interface, eliminating the need for internet access.

**CLEARBLUE DESIGN AWARD FOR HEALTH AND PATIENT SAFETY**

**Winner:** David Stevens
RCA Department: Innovation Design Engineering

**MUSCLECAST**
MuscleCast is a novel treatment system for broken bones that radically rethinks the plaster cast. It utilises expanding resin to produce a conforming cast that spans the entire treatment duration. Integrated muscle stimulation technology then helps to reduce the muscle loss caused by immobilisation, improve circulation and shorten the overall recovery time for the patient.

Judge’s comment:
“A product design close to execution that builds on a thorough understanding of current medical practice while delivering additional benefits. Solid use of material science.”
Stewart Wilson, Clearblue
LONDON’S ETERNAL SUMMER
In a culture where we expect all foods to be available at all times of the year, this scheme explores whether the urban heat island effect of the City of London can be used to create a constant summertime. Using the excess heat from financial trading servers to create tropical climates and fertile growing spaces, the project asks if the ubiquitous office block can grow more than its profit.

Judge’s comment:
“Threws the gauntlet down to commercial developers to deliver office buildings that go beyond current ideas about sustainability.”
Tim Hardingham, GMW Architects

ESOURCE
Seventy per cent of Europe’s electronic waste is exported to Africa where cables are burnt to recover copper, causing health and environmental consequences. Esource provides a sustainable bicycle-powered cable recycling system for informal recyclers in developing countries. It creates a sustainable process and healthier working conditions, greater social mobility and economic growth.

Judge’s comment:
“Beautifully simple, ingenious, low-tech solution to clearly identified social, health and economic problems.”
Tim Hardingham, GMW Architects

INCLUSIVE DESIGN WITH SPROUT DESIGN
Guy Robinson co-founded Sprout Design in 2004 with fellow RCA graduate and former Helen Hamlyn Research Associate Robert Brown. He went on to develop a series of groundbreaking inclusive and sustainable design projects in partnership with industry - from ballet shoes to eco-showers.

Judge’s comment:
“Guy Robinson has been an active and energetic champion of inclusive and sustainable design over the last decade, using Sprout Design as a creative vehicle for his ideas.”
Jeremy Myerson, Director, Helen Hamlyn Centre for Design
PEOPLE, PARTNERS AND PUBLICATIONS

1 Helen Hamlyn presents her personal award for creativity to RCA Innovation Design Engineering students Kevin Bickham (left), Ho-Tzu Cheng and Ruby Steel at the Helen Hamlyn Design Awards, June 2012

2 Special publication produced in October 2011 for a dinner to mark the 25th anniversary of Helen Hamlyn’s landmark exhibition, New Design for Old, at the V&A and 20 years of support by the Helen Hamlyn Trust for design research at the RCA
PEOPLE

THE HELEN HAMLYN CENTRE FOR DESIGN TEAM

Jeremy Myerson  
Director and Chair

Rama Gheerawo  
Deputy Director

Ed Matthews  
Senior Research Fellow

Jo-Anne Bichard  
Research Fellow

Kay Sandford  
Operations and Finance Manager

Margaret Durkan  
Communication Manager

Mark Byrne  
Administrator

Gianpaolo Fusari  
Senior Associate

Catherine Greene  
Senior Associate

Chris McGinley  
Senior Associate

Karina Torlei  
Senior Associate

Jonathan West  
Senior Associate

BOARD OF ADVISERS

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Professor Emeritus, RCA

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Helen Hamlyn Trust

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University of Lancaster

Prof Jeremy Aynsley  
Director of Research, RCA

AGE & ABILITY  
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Michael Wolff

HEALTH & PATIENT SAFETY  
Professor Ara Darzi  
Dr Raj Aggarwal

Imperial College London

WORK & CITY  
Dr Frank Duffy  
Tim Fendley, AIG

RESEARCH MENTORS  
Adrian Berry  
Factory Design

Marie Lenclos  
Pigeon Films

Matthew White  
Design Consultant
ROSS ATKIN
Ross graduated from the RCA in Industrial Design Engineering in 2009. His first degree is in Mechanical Engineering from the University of Nottingham. Ross’s interest in public space developed when he worked as a designer of street furniture and on the Sight Line project with CABE Space. He is fascinated by technology, having worked at Dyson, but also its relationship to people which is a major focus of his work.
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LOTTIE CRUMBLEHOLME
Lottie graduated from RCA Communication Art and Design in 2009. She is a graphic designer with a range of commercial experience in design for print, publishing, exhibitions and corporate communications. She has a long-standing interest in sustainability, particularly in how better communications can aid the understanding of and engagement with this complex issue.
c.crumbleholme@network.rca.ac.uk

KATIE GAUDION
Katie holds a Master in Philosophy in Textiles from the Royal College of Art and she has presented her research at conferences in China and USA. Katie’s specialist research is in co-designing with adults and children with learning disabilities and neurological conditions. Katie is the founding member of Angles between Curves, a design research practice and a winner of the Helen Hamlyn Award for Creativity.
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TOM JARVIS
Tom graduated from Design Products at the Royal College of Art in 2011. His final projects – Tools to Service an Orchestra and Inflatable Double Bass Case – were awarded the Conran Award for Design and featured in Terence Conran’s exhibition at the Design Museum, The Way We Live Now. Before starting his Masters course, Tom studied Fine Art at the University of Wales Institute Cardiff and worked for a London-based landscape design firm. In his freelance practice, he develops tools for professions that have high injury rates.
tom.jarvis@network.rca.ac.uk

SAM JEWELL
Sam graduated from Innovation Design Engineering at the Royal College of Art in 2011. His final project AudioWeb won the Inclusive Design prize in the Helen Hamlyn Design Awards and an award from the James Dyson Foundation. Before starting his Masters course he gained a First Class degree at Cambridge University, and spent two years working with a large engineering consultancy practice. Sam recently won the Imperial College Business School Entrepreneurship Prize, and is a founding member of a start-up called Matopy.
sam.jewell@cantab.net

LISA JOHANSSON
Lisa graduated from the Royal College of Art’s Design Products course in 2010. Born in Sweden she moved to London to do her first degree in Product Design at Central Saint Martins College of Art & Design, after which she spent two years designing furniture and products for the nursery industry. She is passionate about design research and is particularly interested in sociology, sustainability and system design. Lisa is a co-founder of the design consultancy INTO.
lisa.johansson@network.rca.ac.uk
BENJAMIN KOSLOWSKI
Benjamin completed his undergraduate studies in Architecture at the University of Greenwich in 2008. His work takes a great interest in how technology changes our cities and the way we live and relate to one another. He graduated from the RCA in Architecture in 2011. He has several years of experience working in architectural practices on projects ranging from furniture to urban design. benjamin.koslowski@network.rca.ac.uk

GAIL RAMSTER
Gail graduated from RCA Industrial Design Engineering in 2007. Her first degree was Mechanical Engineering at Imperial College, with a year studying in Lyon, France. She enjoys projects that focus on communities and urban design, and has worked in consumer electronics and wayfinding. Her previous research project at the Helen Hamlyn Centre for Design at looked at ways to improve public toilets for those with continence concerns. gail.ramster@network.rca.ac.uk

IMOGEN PRIVETT
Imogen graduated from the Architecture Department at the Royal College of Art in 2011. Before starting her Masters course she gained a degree in History from the University of Cambridge and a first class degree in Architecture from the University of Westminster. She also spent several years working in architectural practice in London across a range of sectors. She has a particular interest in the relationship between people and place, and currently works as a freelance architectural designer. imogen.privett@network.rca.ac.uk

FLORIE SALNOT
Florie Salnot completed her undergraduate studies at La Sorbonne, Paris in History of Arts & Anthropology. After obtaining a BA in Cabinet Making at the Ecole Boulle, Paris, she graduated from the MA Design Products course at the Royal College of Art in 2010. She is passionate about designing with people. She has been working for a few years on a design project with the Saharawi refugees in the Algerian desert, a project that is still ongoing and for which she won the Coca Cola design award for Sustainability. florie.salnot@network.rca.ac.uk

TOM STABLES
Tom graduated from BA Product Design at Central Saint Martins College of Art and Design in 2006. Setting up studio he completed interior, lighting and product design projects for a range of clients including Paul Smith, LVMH, Vtech and Hulger. He graduated from the RCA with MA Design Products in 2010. His work has always been driven by an interest in people, which led to an inclusive design emphasis on his graduation show. tom.stables@network.rca.ac.uk

PETER ZEIGLER
Peter completed his BSc in Industrial Design from the University of Cincinnati in 2003 and graduated from the RCA Design Products course in 2011. He has accumulated experience in design from endoscopic surgical procedures to articulating ethical retail experiences for mobile phone service providers. His professional life has largely been shaped by his time spent at design research and strategy firm Gravitytank Inc in Chicago Illinois, where he got his feet wet in ethnography and product and service definition. peter.ziegler@network.rca.ac.uk
PARTNERS

HELEN HAMLYN RESEARCH ASSOCIATE PARTNERS 2012

BATH INSTITUTE OF MEDICAL ENGINEERING

BIME (Bath Institute of Medical Engineering) is a design and development charity working in the fields of medicine, healthcare and assistive technology. Its projects range from practical items for daily living to harnessing technologies for people living with dementia.

www.bath.ac.uk/bime

BEING

BEING is a specialist business consultancy that helps organisations in the public, private or charitable sectors achieve their goals through the effective application and management of design. BEING was commissioned by the Kingwood Trust to shape and manage a ground breaking project with the Helen Hamlyn Centre for Design.

www.beingdesign.co.uk

BIS

Department for Business, Innovation and Skills (BIS) is a ministerial department of the UK Government. It has responsibility for enterprise, business relations, regional development and fair markets, along with responsibility for science and innovation, further and higher education and skills.

www.bis.gov.uk

BOSSONS GROUP

The Bossons Group, a new family based firm, was formed after the sale of Colebrook Bosson and Saunders. Initially trained in architecture, Peter Bosson has 30 years of experience designing innovative, ergonomic, award-winning products for the workplace. This experience is now taken forward to continue to research and develop products and spaces within the world of work as it changes and develops.

CLEARBLUE

Clearblue is the brand name of Swiss Precision Diagnostics, which was formed in 2007 as a joint venture between Alere (formally Inverness Medical Innovations) and Procter & Gamble to create, using its parent companies’ complementary strengths, one of the world’s foremost organisations in consumer diagnostics.

www.clearblue.com

DEPARTMENT OF HEALTH

The Department of Health exists to improve the health and wellbeing of people in England. It provides health and social care policy, guidance and publications for the NHS and social care professionals.

www.dh.gov.uk

DESIGN COUNCIL

The Design Council enables people to use design to transform communities, business and the environment for the better. As an enterprising charity, their work places design at the heart of creating value by stimulating innovation in business and public services, improving our built environment and tackling complex social issues.

www.designcouncil.org.uk

EPFL+ECAL LAB

The Epfl+Ecal Lab is a unit of the EPFL (Ecole Polytechnique Fédérale de Lausanne) in cooperation with ECAL (University of Art and Design Lausanne). Its mission is to foster innovation between technology, design and architecture.

www.epfl-ecal-lab.ch

GLAXOSMITHKLINE

GlaxoSmithKline is one of the leading global pharmaceuticals organisations with the mission to improve the quality of human life by enabling people to do more, feel better and live longer. This mission drives the development of innovative medicines and products that help millions of people around the world.

www.gsk.com
GREAT WESTERN AMBULANCE SERVICE
Great Western Ambulance Service NHS Trust provides emergency and urgent care, and patient transport services across Wiltshire, Gloucestershire and the former Avon.
www.gwas.nhs.uk

HAWORTH
Haworth is a global leader in the design and production of office worlds that can be easily integrated into all environments. With its head office in Holland, Michigan, the owner-managed company is represented in more than 120 countries.
www.haworth.com

HERMAN MILLER
Herman Miller is a 100-year-old-plus company specialising in workplace furniture solutions, which places great importance on design, the environment, community service, and the health and wellbeing of users. Its inventive designs, technologies, and related services aim to improve the human experience wherever people work, heal, learn and live.
www.hermanmiller.com

IMPERIAL COLLEGE HEALTHCARE NHS TRUST
Imperial College Healthcare NHS Trust was created by merging St Mary’s NHS Trust and Hammersmith Hospitals NHS Trust and integrating with the Faculty of Medicine at Imperial College London. Now one of the largest NHS trusts in England, the Trusts have joined up with the College to establish one of the UK’s first academic health science centres.
www.imperial.nhs.uk

JOHNSON CONTROLS
Johnson Controls Global WorkPlace Solutions creates workplaces that help people and businesses achieve. It has partnered with some of the world’s largest companies for more than 20 years and manages more than 1.8 billion square feet of real estate.
www.johnsoncontrols.com

KINGWOOD TRUST
Kingwood Trust is a registered charity providing support for adults and young people with autism. Its mission is to pioneer best practice which acknowledges and promotes the potential of people with autism and to disseminate this practice and influence the national agenda. Kingwood is an independent charity and company limited by guarantee.
www.kingwood.org.uk

MEDICAL DEFENCE UNION
The Medical Defence Union (MDU) is the UK’s leading mutual defence organisation for doctors, offering members expert guidance, personal support, and uncompromising defence. MDU’s services include legal assistance, indemnity, training, support and risk management advice.
www.the-mdu.com

MEGAMAN
Megaman Charity Trust Fund was established in 2008 in recognition of the role played by the private sector in meeting the social needs of the community. It shows its support in two areas: education and environmental protection. It is funded by Neonlite International Holding Ltd, the parent company and owner of the Megaman trademark. It is dedicated to innovating in energy-efficient lighting products.
www.megamanlighting.com/en

NATIONAL INSTITUTE FOR HEALTH RESEARCH
The goal of the National Institute for Health Research (NIHR) is to create a health research system in which the NHS supports outstanding individuals working in world class facilities, conducting leading-edge research focused on patients needs.
www.nihr.ac.uk
PAVIOM
Paviom, founded in 2009, is a young architectural lighting company which specialises in external lighting and takes a holistic approach to sustainable lighting design. It commissions independent designers to develop ecologically responsible lamps and fittings.
www.paviom.com

PEARSONLLOYD
PearsonLloyd offers design knowledge and strategic thinking in industries that have demanding spatial, ergonomic and social needs such as healthcare, airlines, and the workplace. The studio has a history of implementing strategic change within these areas through exploring the relationship between people and the complex built environments they inhabit.
www.pearsonlloyd.com

PLANTRONICS
Plantronics is a global leader in audio communications for businesses and consumers alike, pioneering new trends in audio technology for over 50 years and creating innovative products that allow people to simply communicate. From unified communication solutions to Bluetooth headsets, Plantronics delivers uncompromising quality backed by extraordinary service.
www.plantronics.com/uk

RESEARCH IN MOTION
Research In Motion (RIM), a global leader in wireless innovation, revolutionised the mobile industry with the introduction of the BlackBerry® in 1999. The BlackBerry product line includes the BlackBerry® PlayBook™ tablet, the BlackBerry smartphone, software for businesses and accessories. BlackBerry products and services are used by millions of customers around the world to stay connected.
www.rim.com  www.blackberry.com

RLSB
RLSB (Royal London Society for Blind People) exists to empower blind and partially sighted young people to live life without limits. Through an expert blend of education, sport, creative and developmental services RLSB helps the people they work with to live and learn for the life they want.
www.rlsb.org.uk

SAMSUNG
Samsung Electronics is a global market leader dedicated to the creation of innovative products and services. Samsung aims to provide compelling experiences which enrich peoples lives through its commitment to exceptional design, embodied in its extensive range of products.
www.samsung.com/uk

SONY
Sony is a large multinational corporation, and one of the leading manufacturers of electronics products for the consumer and professional markets. Headquartered in Tokyo, Japan, Sony has more than 150,000 employees. Sony has a long history of being at the cutting edge of technology.
www.sony.co.uk

STANNAH
A family company founded over 140 years ago and based in the UK, Stannah is the world’s largest manufacturer of stairlifts which give people invaluable freedom, independence and safer enjoyment of their own homes. It is also the UK’s largest independent supplier of passenger and vertical platform lifts.
www.stannah.com

UWE
The University of the West of England (UWE) and the University Hospitals Bristol NHS Foundation Trust have formed the Bristol Academic Department of Emergency Care as a joint venture. Medical, nursing, physiotherapy and paramedic disciplines deliver applied and clinical research relevant to emergency care.
www.uwe.ac.uk
**PUBLICATIONS**

**SELECTED PRESENTATIONS, PUBLICATIONS AND CONFERENCES**

**KEYNOTE & INVITED PRESENTATIONS**
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Illuminated goalposts on Boundary Estate playground designed by Tom Jarvis, In The Shade project

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