STUDENT RSA DESIGN AWARDS

DESIGN FOR GOOD

NINETY YEARS OF THE RSA STUDENT DESIGN AWARDS

'The RSA Student Design Awards are always operating at the front edges of the profession – exploring a huge breadth of issues and where design may have influence, and this is really valuable for the next generation.

'For educational institutions, the programme is a benchmark and the briefs are always so well-resourced that they provide really rich contextual content for students.'

– Mark Bailey, Northumbria University

The RSA Student Design
Awards have always asked
students to apply their design
skills to a wide range
of issues.

This diagram illustrates the
range of themes that have
been explored since 2000,
including those that ran over
several years.

2015
2014
2013
2012
2011
2010
2009
2008
2007
2006
2005
2004
2003
2002
2001
2000

COLLABORATIVE CONSUMPTION
IMPROVE WATER ENVIRONMENTS
MID-LIFE MOMENT

EVERYDAY WELLBEING
WATER, WATER, EVERYWHERE
CHANGE MAKERS
THE WHOLE PACKAGE
MINE FOR LIFE

CREATIVE CONDITIONS
HUMAN BY NATURE
THE DAILY DIET
FAIR PLAY
WATER FOR ALL

HUMAN BY NATURE
MOBILITY CITY
REINVENT THE TOILET
IMPROVE HYGIENE, IMPROVE LIVES

WORKPLACE 2030
CHANGE MAKERS
CIRCULAR CITY

MINE FOR LIFE
TOMORROW'S WORKPLACE
MODERN AGE
MOBILE MEDICINE

ACTION FOR AGE 2: MIND THE GAP
DOUBLE DUTY DEVICES
MAKING SOMETHING DISAPPEAR
BODY AND MIND
LATER LIFE WELLBEING
A CHANGING WORLD
INDEPENDENCE DAYS
DESIGN FOR SOCIAL INCLUSION

THE VISIT
DESIGNING TO QUIT
ACTION FOR AGE
PUBLIC SPACES SAFER PLACES
WHILE YOU WERE SLEEPING

DESIGN AGAINST BICYCLE THEFT
DESIGNING OUT SHOPLIFTING
WATER, WATER

RE-DESIGNING STATES OF MIND

CAMPAIGNING BY DESIGN
DESIGN FOR DEBATE

DESIGN FOR PATIENT SAFETY
GREENCLEAN
SUSTAINABLE PACKAGING
DESIGN FOR ORAL HEALTH

SAFETY AND SECURITY IN SCHOOLS
HORIZON SCANNING
VOTING BY DESIGN

DESIGN FOR HEALTHY EATING

GERONTECHNOLOGY

DESIGN FOR LIVING
LESS CRIME THROUGH DESIGN
DESIGNING FOR ELEGANT FRUGALITY

SUSTAINABLE METALS

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Foreword

Sevra Davis
Associate Director of Design
RSA

The RSA Student Design Awards (SDA) is a global curriculum and competition that challenges emerging designers to tackle real-world social, economic and environmental issues through design thinking.

The goal is to empower a generation of savvy, employable designers who understand the potential of design to benefit society, and are able to use their design skills to do so.

We achieve this aim by setting project briefs that inspire and challenge students to think differently about the boundaries and purpose of design. We work closely with industry partners to develop the briefs, ensuring that students are setting their minds to pressing real world problems. And we help colleges and universities embed the projects into their curricula, supporting participants further with workshops and mentoring. We believe it is important that the briefs complement existing student work, not only building on skills that young designers have learned already, but also capturing imagination.

This report takes the opportunity of the Awards' 90th birthday to reflect on the history of the Student Design Awards from 1924 to the present. Over that time we have seen the design industry transform from a community of arts and crafts artisans in the early 20th century to today's generation of creative problem solvers, capable of tackling global social and commercial challenges. However throughout the Awards have maintained a focus on social responsiveness, and innovation – pushing society, the design industry, governments, and business, to think more openly about what design can do.

The RSA Student Design Awards today reflect exciting changes and developments at the RSA as we define a new worldview that will guide the organisation into the next few years. We have termed this new approach the Power to Create: the notion that by unleashing the capacity and creativity of individuals and communities to turn their ideas into reality, society will not only stand a better chance of solving our biggest problems but will also become more fulfilled and happier in the process. The RSA and the RSA Student Design Awards aim to lead, foster and support the Power to Create by helping people to use their innate creativity. We want to empower people to be capable, active citizens, revealing and enabling vast resources of creative potential.

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Introduction

Today, the RSA Student Design Awards programme encourages young designers to apply their skills to a wide range of challenges. In particular, those large scale complex and systemic challenges relevant and pressing for society, businesses and governments: climate change, demographic change, and economic instability.

This open-ended application of design is a direct consequence of the RSA's history of innovation in design. Its organisational mission to constantly seek out new challenges has often put it at the frontier of the development of design practice – and it continues to be so in the 21st century.

2014 RSA Student Design Award winners

The challenge

The RSA Student Design Awards is the world's longest-standing, most pioneering student competition, and 2014 saw its 90th birthday. When it was inaugurated in 1924, its concern was to nurture talented young designers for the purpose of producing well-crafted items for British homes. Today, the horizons of design, and consequently the Student Design Awards, are more far-reaching.

In the 2014 Reith lectures, Dr Atul Gawande, surgeon, author and public health researcher, argued that we are now in 'the century of the system'. In the 20th century we investigated the world at a micro-level, making huge breakthroughs in science and technology because of an ability to understand and manipulate at an atomic scale. However we are now facing challenges which are ones not of microbes, but of entire interconnected systems. We are still very much learning how to problem-solve in this context, but new practices are emerging all the time. In the UK we are seeing new public innovation labs and open innovation challenges, the coordination of global jams on social and sustainability challenges, and hackathons on almost every subject under the sun. Many of these practices draw on the culture and attitude, if not explicitly the tools and techniques, of design.

Design, as Sir George Cox (Chair, Design Council 2004-7) definitively put it in 2005, is a means of channelling creativity to deliver innovation. However, we must now think more openly about what might constitute that innovation. In recent years the term 'innovation' has predominantly been used within the context of the need to constantly drive economic competitiveness and growth, which, in fact, is a very narrow interpretation. If innovation is about adaptability for the purposes of survival, many of the ends to which it has been deployed in the 20th century begin to look rather short-sighted. On a global scale we now need to innovate to survive in a very fundamental way.

But it is increasingly clear that traditional approaches to problem-solving and innovation – in government, in business and in society – are failing to adequately respond to complex problems. In this situation, the iterative, experimental, context-sensitive and, above all, faster ways of working inherent to design are increasingly attractive and necessary.

The Student Design Awards

The RSA Student Design Awards has been an innovator and agitator within the design community since its inception, although the target of its change agenda has evolved. Its mission in 2015 is to prompt design students to think about their design skills, and role in society, in a different way. Rather than passively responding to a prescriptive brief, students must identify and define a problem – within a wider social, economic or environmental problem area – that they really believe needs solving, and then apply their design skills to do so. It asks student to think of themselves as the instigators of change.
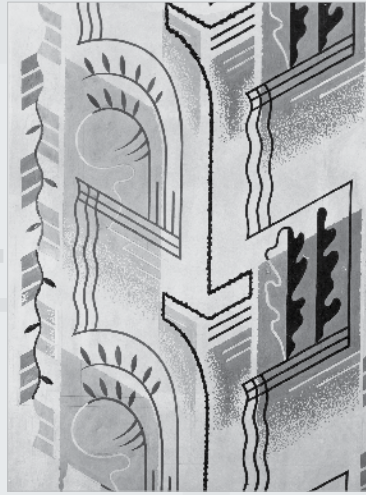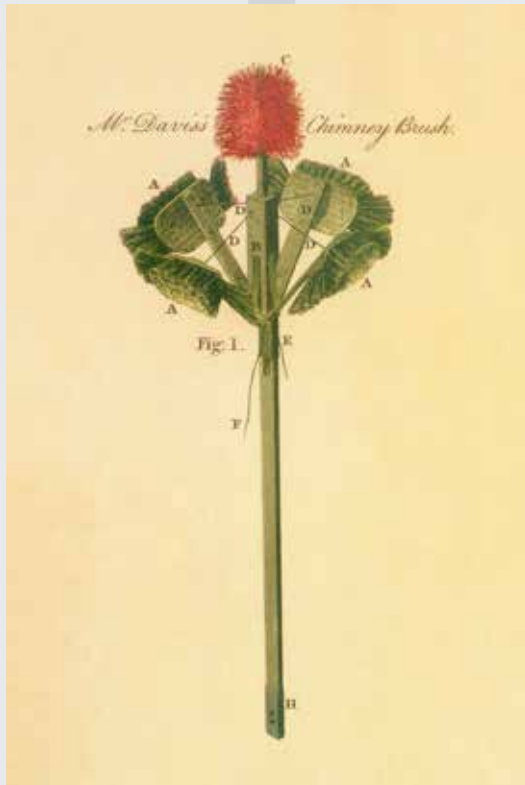
The briefs take young designers out of their comfort zone, challenge them to think about future scenarios, and ask them to engage with emerging ideas from other subject areas. In 2014 prizes were awarded for projects that addressed water scarcity, the changing nature of work, and mental wellbeing. In 2015 students are asked to propose – among other briefs – a means of encouraging people to take care of their own human microbiome; a context that prompts and fosters creative thinking; and a way for people and communities to better connect to and celebrate heritage.

The RSA is the only organisation in the world that runs this kind of independent competition for students, and so it has a substantial international profile. Far from previous eras of Student Design Awards (where the agenda was firmly that of an international industrial competition), the Awards now have an increasingly global and collaborative outlook. In 2014 entries came from Ireland, Finland, India, China, the United Arab Emirates, Turkey, Malaysia, the United States and more. No longer simply a pre-professional awards scheme, the Student Design Awards see in their 90th birthday in a new role: raising young designers' awareness of the significant challenges of the future contexts in which they will work, and preparing their ability to deal with them.

The RSA's history of innovation

The Student Design Awards draws on a very long heritage: even before its initiation in 1924, there had been nearly 200 years of drawing prizes and competitions for young artists and craftsmen. But looking back to the beginnings of the RSA, with its ground-breaking 'premiums', we can see that design and innovation is very much in the DNA of the organisation as a whole. The RSA was established on the basis of eliciting 'designs for the publick good', and in its early years invited ideas for inventions across the fields of manufacturing, agriculture, trade, the 'polite' arts, chemistry and mechanics. Since then its portfolio of work has hugely diversified, but looking back over its history of competitions and prizes, social and public improvement initiatives, education and professional training, furthering of the arts, and lobbying of government, we can see that all the RSA's work is characterised by a 'designerly' mode of operation: identify a problem, encourage and steward solutions, move on to the next pressing challenge area.

The practice of 'design', as a professional activity, is predominantly a product of the history and events of the 20th century: of technological change and social change, global trade, politics, war, competition and collaboration, cultural policy and soft power. But in the context of these global drivers, the RSA and the Student Design Awards have played no small part in shepherding design practice. The RSA has been at the forefront of promoting design, raising the profession up

From left clockwise: Chimney brush by Joseph Davis, 1807; Furnishing Textiles by Harry Booth, 1939; Chelsea Flower Show poster by Eric A. Thomas, 1947

The many iterations of the RSA Student Design Awards

1924	Competition of Industrial Designs established
1934	Competition stopped due to increasing cost of running the scheme
1938	Competition recommenced before a hiatus during the war. An essay competition ran instead
1946	Competition re-established as the Industrial Art Bursaries Competition
1968	Name changed to Industrial Design Bursaries
1977	Name changed to Design Bursaries
1990	Name changed to RSA Student Design Awards
2003	Name changed to Design Directions
2011	Name reverted to RSA Student Design Awards
2012	First country-specific competitions launched under RSA Student Design Awards brand in the United States and Malaysia

from artisan status, establishing the Royal Designers for Industry, encouraging trade through festivals and exhibitions (such as 1951's Festival of Britain), and challenging and leading design practice and design education.

Informing the RSA's philosophy about creativity and innovation throughout its lifetime has been its pro-social, enlightenment thinking perspective. During the 19th century it worried about the negative social impact of industrial change, '*endeavouring to keep alive an element of genuine humanitarianism in the hard-headed, materialistic world of the Industrial Revolution*'.[1] Early examples of thoughtful improvements to human life include the chimney brush – which ended the dangerous practice of sending small children up chimneys – a self-righting carriage, and a device for saving people from drowning in the Thames. In the early 20th century those social concerns manifested themselves through design in an interest in producing quality products befitting a progressive nation, and later again the focus moved to supporting social and systemic innovation in a largely post-industrial society.

Today the RSA's approach is 'the Power to Create'. This articulates the belief that the creative potential of populations is a resource that could help solve many of the big systemic problems we are facing. It is a more democratic account of creativity, which sees it as not solely the preserve of designated 'creative' people and organisations, but as a human capacity, one that is too often underused. As an idea, the Power to Create can be deployed to reframe problems and solutions in many contexts. For example, in the context of government, it means recognising that citizens – rather than simply being bundles of needs that must be handed the right solution – must be recognised as having capabilities, and in the first instance be enabled to solve their own problems. A number of new conditions have made this approach to problem solving a genuine possibility, rather than simply an ideal: an increasingly educated population that sees self-expression and autonomy as desirable, and new technologies that afford easy access to the tools of creativity (knowledge, communication, collaboration).

Accordingly the RSA's account of design is now less about specific solutions, and more about the capacity of students and designers to respond to a difficult world. The Student Design Awards embodies this philosophy about human capability, and design more than ever sits at the heart of the RSA's future.

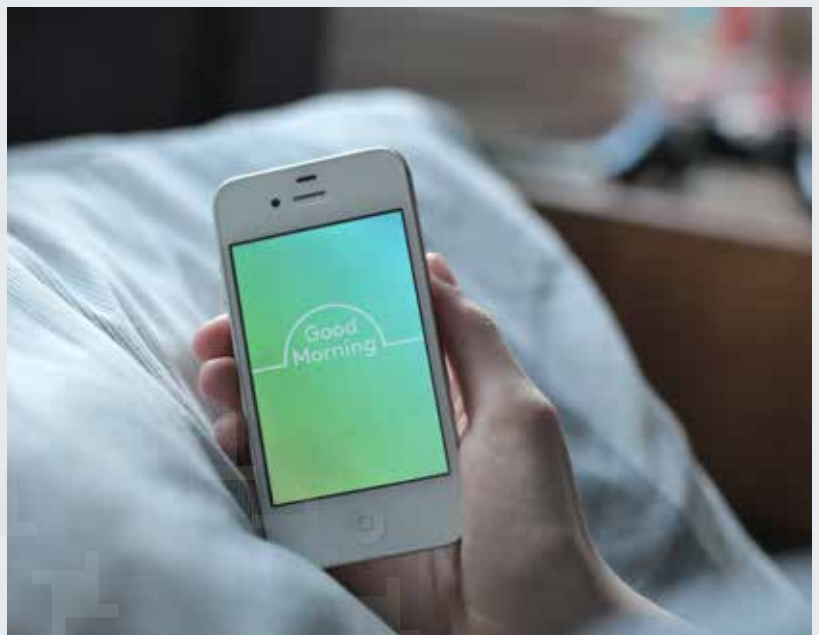### This report: 90 years of innovating design

Design has developed and changed almost beyond recognition over the time of the Awards. Once concerned with domestic furnishings, it has turned its attention to industrial applications, new technologies, social and environmental systems, and open challenges. Taking the example of healthcare, we can see how the role of design, as expressed through Student Design Awards briefs, has evolved as students have been asked to think about hospital furniture, then medical devices, and more recently largescale wellbeing initiatives. The practitioners, skills and processes have changed too: from lone artist to multi-disciplinary team, from drawing to ethnography. All of these changes have been prefigured and reflected in the constantly evolving Student Design Awards briefs. The rest of this report sets out the history of that evolution: from a time when design was circumscribed by craft, empire, and taste, to the current era of global complexity and systemic challenges.

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1   D. Hudson and K.W. Luckhurst (1954), The Royal Society of Arts 1754-1954, London: John Murray

'We have a new approach at the RSA – 'the Power to Create' – that's about tapping into the creativity of the population as a whole. These design awards are a fantastic example of the creativity which exists, particularly in young people, if you give them an interesting question to answer.'

– Matthew Taylor, Chief Executive of the RSA

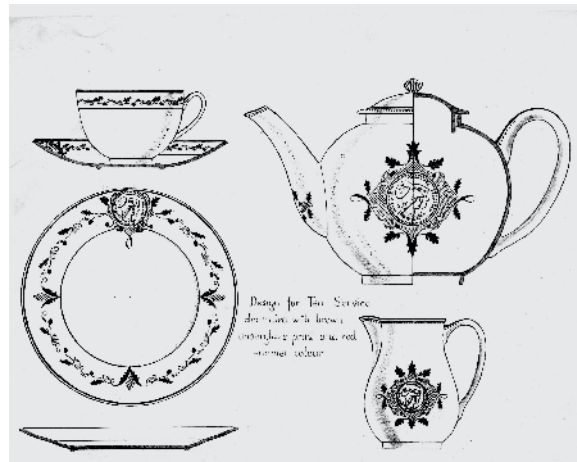Good Morning app by Lizzie Reid and Olivia Charlesworth, 2014

2

Empire, craft and taste

The design awards in the early 20th century

In 1924 the RSA inaugurated its Annual Competition of Industrial Designs. What constituted design at the time is fairly unrecognisable today. More akin to art and good draughtsmanship, it was the pursuit of a lone designer rather than a team, operating in a system of patronage where taste was a moral matter, and propelled forward by a wider context of European military threat and industrial competition.

Pottery by Audrey Samuel, 1939

The RSA was prompted to start the Student Design Awards, an idea it had been toying with for some time, amid post-WWI concerns that British manufacturers were becoming too reliant on designs from Europe, and the belief that '*the British empire in the future should be able to rely on its own people for such an essential element in its Art Manufacture.*'[2] This paradigmatic statement reveals that 'Art Manufacture' – or design – was an important element in the construction of national identity and international competitiveness, and indeed it had been ever since the RSA was born. The specific link between design quality and international competitiveness was particularly developed by the rise of the 'world's fair' or 'expo' – the inaugural one being, of course, the Great Exhibition of 1851, which the RSA had a strong hand in initiating.

By the early 20th century, design quality had a clearly understood relationship to the economic performance of a nation, through increasing its ability to earn income from manufactured goods. This is reflected in the content of Student Design Awards briefs throughout the first half of the 20th century: the goal was primarily protectionist, about keeping foreign design out, through generating better home-grown design. The travel bursary – not a feature of the contemporary Student Design Awards scheme, but central to the competition for many years – was both a tempting career-making opportunity for designers, and a savvy industrial strategy, expressly intended to expose young designers to the frontiers of industrial competition, and bring them home well-armed.
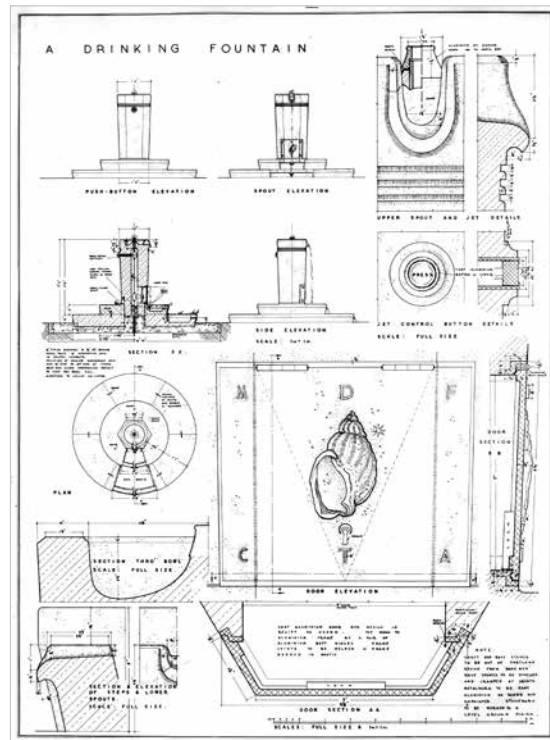
But design's significance was not solely economic – it was also powerfully linked to softer, cultural issues. Democratising access to quality goods was a valid social agenda: in Europe the Bauhaus school was already making a political project of bringing design quality and artisanal dignity to mass manufacture. But it was not just a case of equality for equality's sake. In late 19th and early 20th century Europe, taste was a serious matter: a nation's design output was an expression of national identity, and there was a thinly veiled suspicion about the impact of un-British design in British homes. It may be hard to imagine now, but conceptually design was linked much more deterministically to the moral and spiritual health of the population than it is today. One Royal Designer for Industry, Alastair Morton, expressed it neatly when he observed, 'we cannot expect well-designed fabrics in an unstable or badly-designed society'.[3] The world that the RSA's design students were entering was, in the words of Fiona MacCarthy, a cultural historian and writer on design, 'a never repeatable period of patronage'. Men of vision and taste, as patrons of design, decided what would be good for the public (whether they knew it, and agreed, or not), and employed designers to enact it.

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2   Letter from G.K. Menzies, RSA Secretary, in the RSA's 1917 Report
3   Quoted by Fiona MacCarthy, 'Pushing the Tank Uphill', Royal Designers on Design, Design Council 1986

Plasticine model of a porcelain group in the 18th century style
Winifred Smith, a winner in 1939

Technical drawing for a public drinking fountain
Peter S. Ferguson, entry in 1946

So in the early years the Student Design Awards submission categories were all notably craft-based, and reveal a conception of design that was preoccupied with materiality, form-giving and taste. In 1925 the categories were architectural decoration, textiles, furniture, book production, pottery and glass, and 'miscellaneous'.

Contrary to what might be expected of a time when women played less of a role in public life, women dominated the Student Design Awards between the wars, focused as it was on craft and matters of domesticity. In 1925 over half the winners and commended entries were from women, overwhelmingly so in the textiles category. Charles Darwent, in an essay for the Awards' 75th birthday,[4] attributes the wartime hiatus in the awards scheme at least partly to the fact that women had more important work to do. But by then the scheme was also in need of reinvention. Although at the outset the initiative was a fairly progressive and radical one, 14 years later, although still receiving plenty of entries, its mission had not kept pace with the times, and the categories were beginning to look outdated. In 1939 the travelling studentship (the top prize) in the Competition of Industrial Designs was won by '*a Miss Winifred Smith for her plasticine model of a porcelain group in the 18th century style*' – the sort of project which was beginning to seem a rather conservative interpretation of design.

If the First World War propelled the RSA into thinking about design for industry in the first place, the Second World War precipitated another shift. By the time of the Second World War, the craft-based, domestic conception of design embodied by the Awards was looking rather outdated, and so when the scheme resumed after the war it quickly took on a new flavour.

4   'RSA Student Design Awards 75 Years Review' (1999)

'a memorial library for a college, suitable for housing a small but rare collection of books (the method of arranging the bookcases and displaying a few objets d'art is left to the competitor)'

'vestments and church fabrics, including altar frontals etc'

'designs for the complete furniture of a bedroom, decorated in William and Mary period'

'design for a binding for 'The History of Tom Jones, Foundling' by Henry Fielding, in cloth'.

– Examples of briefs from 1925[5]

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5   Taken from 'Report on the Competition of Industrial Designs, 1925', Journal of the Royal Society of Arts, No. 3795, Vol. LXXIII
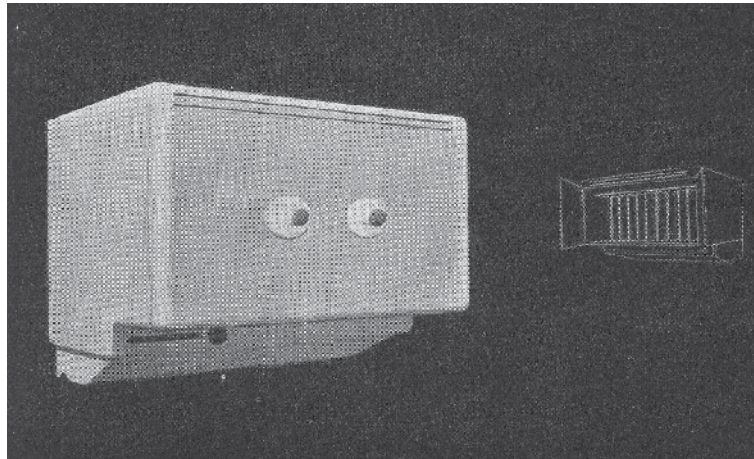
3

Utility and industry

The mid-20th century

In the middle of the 20th century, although design and the Student Design Awards were still primarily about form-giving, the object of design shifted from craft and domesticity ('art manufacture') to industrial manufacture, responding to rapid technological shifts, and changing centres of world power.

Gas-heated kitchen cupboard, by Colin Reginald Cheetham, 1953

After the war, the competition was relaunched in 1946, and in 1948 it started to shift from its 1930s craft focus to what would eventually become an exclusive focus on industrial manufacturing. So in 1948 there were design briefs for carpets, dress textiles, footwear, furnishing textiles, leather goods – but also 'domestic solid-fuel-burning appliances'. Electric light fittings were added in 1949, domestic electrical appliances in 1950, and gas appliances in 1951. We can read here the concerns of post-war Britain, more focused on utility and rebuilding the nation than dictating the aesthetics of British homes. The type of sought-after entrant changed too: in order to ensure submissions from a perhaps different category of person, the new appliance categories were made open to '*craftsmen, clerks or similar persons engaged in industry*'.

Gordon Russell RDI reminds us that the social agenda was not lost, post-war, with the move away from crafts: '*the standard of industrial design in a country is one of the visible signs of its standard of manners, and of its general approach to life. Never was it so important to hold fast to real values.*'[6] The RSA was certainly very caught up with nation rebuilding, as its involvement in the Festival of Britain shows.

In the 1950s the competition became even more oriented to industrial manufacturing, and styles were influenced by utility and military aesthetics. There are disparaging comments from the judges about '*too many designs being of what might be called an airy-fairy pretty pretty nature*' in the dress and furnishing textiles section.[7] And although there were still briefs relating to traditional materials, the Awards encouraged student designers to experiment with newly available materials: PVC and laminated plastics (1951), perspex (1953), acrylic sheet (1960), extruded brass (1973). Often the briefs would be sponsored by a manufacturer of the material in question, and the prize could be a placement with the company: formica is one example.

An obsession with specific kinds of appliances followed in the 1960s and 70s. By the evidence of the awards scheme, industrially-focused design reached its peak in 1985, when there were 11 briefs under the Industrial Design heading: Automotive Design, Furniture, Electric Kitchen Project, Flat-Bed Television Project, Personal Communication System, Small Electrical Products, Transport, Multi-Disciplinary Design, New Concept Development, Office and Business Equipment, and Design for Leisure.

6   Gordon Russell, speaking in 1948, quoted by Fiona MacCarthy in 'Pushing the tank uphill'
7   Interview with James Sandison

From 'domestic solid-fuel-burning appliances' to 'Personal Communication Systems' is quite a technological shift. It represents a heightening of the complexity of design activity and process, and correspondingly the way in which design work was done also evolved. Students went from studying 'commercial art' to the many different design disciplines we talk about today. And from the pre-war lone artist-designer, the 1950s saw the rise of the first design consultancies. In 1975 the Student Design Awards – recognising that complex design problems require multi-skilled responses – set the first brief for a team project, and in the 1980s went one step further and encouraged multi-disciplinary working in some briefs. This is typical of the role that the Awards organisers have played in orchestrating the competition over the years, scanning industry and society for emerging ideas, technologies, trends, and practices, and introducing students to them at the start of their careers. For those students who have engaged, the result can be career-defining, and consequently many entrants in the Student Design Awards have gone on to become household names. In the mid-20th century Bill Moggridge (designer of the first laptop and pioneer of human-centric design), and fashion designers Wendy Dagworthy and Betty Jackson were all launched into stellar careers via the Awards scheme.

In the early 1980s Britain's design capacity became something of a political hot topic again, prompted as before by paranoia about industrial competition. Margaret Thatcher, concerned about the rise of Japan as a manufacturing superpower, convened a Downing Street design seminar in 1982, and her government followed up by making efforts to improve national design standards: '*indoctrinating industry across the country, supporting the expansion of design education in schools and colleges and funding a design consultancy service for industry through the Design Council*'.[8]

Concerns about advancing competitors on all fronts led to the designation of 1986 as 'Industry Year', and through the Student Design Awards it was hoped that '*the relationship between the skills of young designers and the needs of industry will be brought closer together.*'[9] As well as special categories in the RSA's annual competition, the Department for Trade and Industry also funded a 'Young Designers into Industry' placement programme. The following year the Student Design Awards bumped up their range of briefs to seven market and industrial sectors: Industrial Goods and Services, Consumer Domestic Goods, Retail and Leisure Environments, Fashion and Textiles, Communications and Information Technology, Health and Community and Transport. The Awards were demonstrating how design might be enthusiastically applied to all areas of economic activity.

In the middle of the 20th century the Student Design Awards were almost wholly focused on producing designs for British industry. However at the peak of this tradition – the mid-1980s – another paradigm shift in design begins, driven in part by the Student Design Awards agenda to reconsider the wider impacts of design.

8   Quoted by Fiona MacCarthy, 'Pushing the Tank Uphill', Royal Designers on Design, Design Council 1986
9   RSA Student Design Awards Annual Review 1987

From left clockwise: Suit by Frances Upton, 1972; Luggage Label by Eileen Boffey, 1966; Opening of the Industrial Design Bursaries Exhibition, 1975

UNDER THE SUN

'I was absolutely amazed to be short listed, and I wore my best Biba maxi coat which I thought was just fab! I told the panel that if I won I would go to New York, as I thought it must be the most exciting place in the world.'

– Betty Jackson CBE RDI

4

Humans and computers

The return of the user and the rise of digital

In the mid-1980s, at the peak of industrial design (as represented in the Student Design Awards), we can see the beginnings of a more impact-conscious design practice, and of an understanding that design might be applied to more things than just objects, and for reasons beyond pure commercial gain.

Susanna Berger Steele Spoon, 1992

As we have seen, 1986 – Industry Year – was all about export-focused and commercially-savvy design. But it was also the year of 'New Design for Old' an exhibition at the V&A's 'Boilerhouse', exploring the ways in which older people are marginalised by the way we design products and our physical environments. Promoted further by the Student Design Awards, this quickly developed into a whole 'inclusive design' movement – and one that went international. The RSA continued to be at the heart of this, both through the Awards, and as founder members of the European Design-for-Ageing (DAN) network, which sought to pool ideas through exhibitions, competitions and new curricula.

In response to the New Design for Old category, Gavin Pryke undertook extensive action research into the lifestyles and physical abilities of older people to produce his design for 'a jar we can open': 'the new shaped lid is easier to open and more comfortable to handle'. Julian Croft produced a simple, but very marketable, design for a kettle which tilted to pour but did not need to be lifted, a refinement which 'would help both elderly and able-bodied people'.

Environmental issues also appeared in the Awards at about the same time, as man-made damage to the environment became an accepted and pressing common concern. The Oxford English Dictionary records the first use of the term 'sustainability' in an environmental sense in the RSA's Journal in 1980, and the first 'design for a sustainable world' brief appeared in 1992, following the RSA's rearticulation of its mission around the three themes of 'A Learning Society, Sustainable Worlds, Living and Working'. So although designers and thinkers outside the mainstream had been talking about it for some years, this was the point at which the idea of designers having to be more socially aware, politically engaged, and environmentally responsible came to centre stage. Within the RSA, the initial focus on inclusive design led the RSA's design team to develop more socially responsive briefs in other areas, such as international development, health and community, and 'new life for neglected areas'.

Briefs concerned with more hard-nosed questions of industry and manufacture didn't disappear from the Awards altogether though: in 1992 the competition report comments that '*the objective is to raise the general level of understanding of the contribution which design makes to the quality of life and to successful industrial production*'. This period in fact saw a renewal of emphasis in the Student Design Awards on increasing British exports by design, both as a response to debates over the UK's relationship to Europe, and to the recession of the early 1990s.

With 1992 fast approaching, designers faced the challenge of breaking into the European market. Candidates were asked to present a range of six footwear designs to form their first collection to show at an international footwear fair.

The social turn in design was supported conceptually by a reconfiguring of the relationship between designer and user/consumer. Perhaps in reaction to the overly mechanistic industrial design culture of the 1970s, the 1980s saw the increasing power of design in driving consumer culture. The growing popularity of stores like Habitat indicated a more sophisticated public taste, and rising expectations around design quality. This consumer lifestyle agenda for design was reflected in the Awards with the introduction of briefs for bathroom design and interior design (1979), home furnishings (1981), design for leisure, giftware and glassware (1982), and eventually these were all grouped under one meta-category of 'consumer domestic goods' in 1986. In the 1990s, a new trend – called 'customer service' – surfaced, which proposed making the customer and their needs the focus of all business decisions. This shift in priorities for businesses opened the door to design being used in much more varied – and intangible – ways, contributing to the rise of 'service design'.

The early years of New Labour formed the political backdrop to the latter stages of this change, and in the youthful administration's optimism about the role governments could play in the lives of people, the application of design to public services was encouraged – an idea which the RSA, the Design Council, and others enthusiastically took up. In terms of overt support for the design industry, the tone was very different from Margaret Thatcher's industrially-flavoured patronage. New Labour's valuing of design was distinctly cultural. Crucial to the 'Cool Britannia' brand, the government gave a platform to the UK design industry, first by inviting its heavyweights to a Downing Street housewarming party,[10] and then by initiating the search for Millennium Products.

Another significant driver of change in design and the Student Design Awards in the closing years of the 20th century was the growing presence and influence of digital technology, which has transformed almost everything it has touched. In response to this even faster rate of socio-technical change, the Student Design Awards introduced a category of briefs called 'Future Gazers', asking students to speculate about future conditions and design responses. 'Design for Life' asked students to consider the threats associated with the pursuit of 'Virtual Culture', to choose an area of life which is an 'endangered species' and present concepts that might mitigate the negative impact of digital. Responses included contact lenses that allow the wearer to check the basic character traits of a potential partner for compatibility, an interactive directory of regional accents for a future where everyone sounds the same, and a kit that reminds people of the importance of real interaction through 'playing' with a digital friend.

The Awards also dealt with digital technology more pragmatically, asking students to propose digitally-enabled forms of communication, entertainment, and working practices, and new approaches to the very act of designing itself.

In 'Communications', the Awards released a 1985 brief for a 'personal communication system', and in 1991 for 'communications on the move'. Responses included a telephone for use by children (by Kenny Yip), where a fashion element was introduced through an interchangeable strap containing the battery – a precursor to current innovations in wearable technology. Andrew Russell's design response included a micro writer keyboard, text scanning and fax;

10 'RSA Student Design Awards 75 Years Review' (1999)

Gavin Pryke, design for 'a jar we can open'
in response to 'New Designs for Old', 1994

and James Dawton's proposal had both a work and personal number to prevent the merging of home and office. Video conferencing was introduced as a brief in 1992. Iain Ellwood designed a system to enable a team to work across time zones on the same project, and addressed the problem of how to identify established working hierarchies during a video conference. Arun Banerjee's design for a laptop had two screens – one could be used to show the faces of the participants in a meeting, the other to take notes, design and retrieve information.

In terms of entertainment, the 1980s and 1990s saw the beginnings of our love of personal portable music, a trend which has subsequently gone entirely digital. Richard Howarth (now a designer at Apple) submitted a design in 1994 that in hindsight seems uncannily prescient:

"... *the user receives the product free of charge but pays a fee for accessing a Sony Music Store. By downloading the music in digital format on the telephone, the user can select what tracks to record onto the Telepathik Fish. This transfer would take seconds to complete and allows the user to make up compilations...*".

In 1997 a 'multimedia' brief asked students to 'create a virtual world in which on-line users can meet, chat and share experience'; and an 'interactive service for TV' brief asked for proposals for 'a service that facilitates the exchange of opinions between television viewers'.

When Computer-aided Design (CAD) appeared the awards scheme did not hesitate to set young designers to work experimenting with the potential that CAD presented. In 1989, the SDA report commented that '*computer-aided design and computer graphics technology is now readily available for production of both technical drawings and ready rendered images of 2D and 3D objects. In general, however, computing is usually limited to the later stages of the design process and is rarely used at the conceptual stage*' – a ripe opportunity for designers.

These drivers of change – social responsiveness, digital capability, and public support for a wider conception of design – led to the beginnings of a qualitative shift in the task of design. Embodied by the 'Future Gazers' briefs in the Student Design Awards, the RSA began asking young designers to identify a problem themselves, rather than simply respond to a brief. This was the first time students had been asked to openly speculate about a future world, and set the course for the path the Awards have taken in the early years of the 21st century.

Briefs and projects: 1985-2000

1989 brief: The intelligent ATM

A team project for two students, each from a different discipline, to focus on the design and dialogue of an Automated Teller Machine (cash dispenser), taking into account the needs of the user and the bank/building society. Direct communication ties should be made between display information and areas of interaction to provide the user with a machine that is easy to operate. [...] The sequence of transactions that are currently taken through an ATM are quite limited and the 'dialogue' between the ATM of tomorrow will have a high degree of 'intelligence' or computer power built in to them. This will enable them to interact in a much more flexible and imaginative way to the requirements of the user, via a key pad or touch screen, with the system responding with the possible use of sound and colour graphics and/ or animation.

1991 brief: Communications on the move

The telecommunications industry is about to deliver an entirely new service known as personal communications. This means communications for people, not places, enabling calls to be placed or taken regardless of location using a handset small and light enough to become a personal accessory. Unlike existing services, the new network will offer high quality, digital sound and very high capacity - enough for more than ten million customers.

1993 brief: City transport for 2050

Entrants are asked to consider suitable methods of transport for a city in the year 2050 where legislation has called for all transporting devices to have zero pollution.

Student response: **Craig Justice** designed a winged vehicle which was driven through tunnels using a combination of air and pedal power. This pollution free transport system allowed its user to reach speeds of up to 40mph and allowed for slipstreaming. Channels would be available for overtaking or the user could tuck in behind another winged vehicle joining a chain.

Student response: **Darren Corner** designed an underground delivery system. Its primary concern was to deliver goods to inner cities by a network of tunnels just under the surface of pavements. With two outboard microprocessors, the delivery units would come from one of four depots on the outskirts of the city and make their way to a retail outlet where the goods would be unpacked and rubbish would then be sent back to depots on return journeys.

1994 brief: Information on Europe

Design a series of educational aids to help students understand the structure of the main European Community institutions and the relationship between them. A specific educational group Is to be targeted and the design can take any appropriate form.

Student response: **Timothy Wong** and **Keshen Teo** designed a game from the Commissioner's point of view to see who could run the EC most efficiently. Stamps and toys were used to represent each member state and the various elements epitomised the different national identities.

1997 brief: Innovation

Innovation is the successful exploitation of new ideas. Design a range of visual images that present both the holistic nature of the innovation process and its importance to industry, commerce and society as a whole.

Student response: Alan Brickwood, of the DTI's Innovation Unit, commented that award-winner **Ben Terrett**'s interactive, non-linear CD-ROM 'makes people work and think and look at things differently - which is what innovation is all about'.

1998 brief: Future gazers

On a path to 2020 While not being able to predict the future we can anticipate some fundamental changes in society. Bearing these changes in mind how do you see 2020. Focus on specific issues, develop a rational or user scenario and then product concepts and/or a solution.

1998 brief: New design for old

Develop clothing, textiles, footwear or other personal items for active older people; consider the needs of very old people and how we can deliver the care and other services they need while maintaining as much of their independence as possible.

1999 brief: Millennium Products

The Prime Minister, Tony Blair, launched Millennium Products in September 1997 beginning a search for the UK's most innovative products and services. The aim is to have collected 2000 examples of Britain's business ingenuity by the new millennium. Innovative visual solutions are called for to promote the Millennium Products website and to convey the essence of the Design Council's scheme to promote British design.

2000 brief: Laryngoscope

Research into the existing devices and clearly establish the needs of the different users. Then develop a new proposal which will address these needs and encourage the use of a laryngoscope and insertion of a proper tracheal tube. […] This is a rare chance for a product designer to revitalise the use of a traditional device. By applying modern technology, materials and processes, the benefits of using a laryngoscope could be enhanced and lives would be saved.

Student response: In 2005 former Northumbria University student **Matt McGrath** launched a medical device into the market that started life as a winner in the RSA's 1999 Student Design Awards. Entered as the 'Smartscope' laryngoscope, the device is an advance on the instrument used by paramedics and anaesthetists to see down a patient's larynx, and is the world's first with a built-in video camera system. Matt's entry attracted funding from various bodies that allowed him to extend his research and prototype the device. Many of the features of the original RSA winning design are incorporated in the market-ready design.

RSA Student Design Award Winners as pictured in an article in *Blueprint* magazine 8 June 1994. From left to right: Richard Howarth with the Telepathik Fish, 'a millenial walkman'; David Hubball and his packaging for tools; shoe designer Rachel Alsbury; Timothy Wong and Keshen Teo with Europoly, a game to explain the EU; car designer Eugene Skelton; and graphic designer Katie Waters.

5

Society, sustainability, stewardship

As global challenges have become ones of stewarding responses to wicked problems through complex systems, the early years of the 21st century have seen design move away from the object and into far more openly-defined fields.

In a way, we are now seeing the Student Design Awards returning to something more like the broad challenges set down by the RSA's 18th century premiums.

This presents questions around the skillset of the designer and modes of design business, as well as major opportunities for systemic innovation.

From left: Project work by Tom Tobia and Elle Matthews in response to the 2005 'Voting by Design' brief, which asked students to create a new voting experience to reduce voter apathy.

Building on the emergence of service design, social innovation, digital ubiquity, global connectivity, the political backing of design for public service reform, and the popularisation of 'design thinking' (the idea that the intellectual activity corresponding to design can be separated from the design 'object', and applied to any situation where innovation is required), the range of appropriate targets for design has expanded enormously in recent years. Environmental, social, economic, business, political and governmental systems are all potential candidates. The nature of these problems means that design can no longer simply be about creating a blueprint and moving on, but about stewardship of solutions.

The Student Design Awards scheme has been at the forefront of this change. Reorienting the competition to provide fewer briefs (from 40 down to around 10) that were less prescriptive, less object- or discipline-specific, more open-ended, and more challenging, prompted students and tutors to think differently about the purpose and practice of design. And although initially many were somewhat unprepared to respond to these much more open and complex briefs, now the Awards Programme have led a change in student perceptions about what kind of design work is exciting, and what kind of arenas they might want to work in.

Although we argued at the beginning that there has always been a socially-progressive flavour to the RSA's work, and hence to the design awards, it is fair to say that the Awards scheme is now more explicitly focused on how design can be used for contexts where the material of design is social and systemic. This builds on an ever more detailed understanding of the relationship between design and behaviour. For example, in the question of designing for an ageing population, the briefs have ranged from simply redesigning products to be easier to use, to considering other aspects of ageing, such as 'later life wellbeing' (2010). In relation to politics and democracy, briefs focused on the European Commission, on voting (a project developed with the electoral commission in 2004), and on campaigning (2006). The notion of applying design to the interaction between citizens and the state, or public services, influenced briefs on design against crime (2000, supported by the Home Office), prison visits, and healthcare.
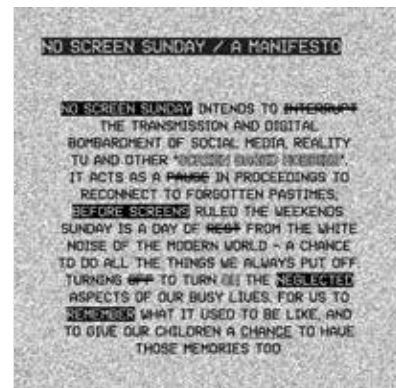
Design agendas around sustainability have shifted considerably, from greenwash, to designing just-less-bad products, to a much deeper engagement with sustainability. Of course the very nature of design practice – if it means the production of items for manufacture – is somewhat at odds with the sustainability agenda. This presents something of a dilemma for designers. The RSA – whose name as founded, the Royal Society for the Encouragement of Arts, Manufactures

Through briefs such as 'water for all', 'collaborative consumption', 'tomorrow's workplace' and 'designing to quit', the Student Design Awards scheme today promotes a socially-responsive and proactive approach.

The programme has therefore led a change in student perceptions about what kind of design work is exciting and what kind of arenas they might want to work in.

Lisa Hornsey, Sanitary Towels Campaign, 2014

Left - right: Nicholas Sharp designing out bicycle theft, 2009; Katie Cadwallader, No Screen Sunday, 2014

and Commerce, presents a question about what role manufacturing ought to play in the 21st century economy – has been addressing this in a number of ways: with projects supporting the move to a circular or zero-waste economy, by foregrounding the use of design in areas beyond the manufacturing of objects, and by asking designers to think about environmental challenges themselves as design problems. In contrast to the Awards' habit of responding to industry concerns in the mid-20th century, today's briefs are ahead of the curve in tackling major challenges that businesses – and consumers – will ultimately also have to face.

To address these different kinds of objects and values, the way in which design is done now varies enormously. Open challenges are non-discipline specific, and research-heavy, and so the designer's (ideal) skillset has increasingly borrowed and added on bits from other disciplines – engineering, psychology, social science, information technology, anthropology. Digital has fundamentally opened up the possibilities around design process, in terms of both research (for example, big data), and practice (such as crowdsourcing, and global design events). In this context, what is the role for the skills and expertise more traditionally associated with design – for example draughtsmanship, the exercise of aesthetic judgment, even taste?

Industry needs have changed: businesses want 'storytellers' as well as people with technical skills. We have begun talking about T-shaped designers, with deep expertise in a particular discipline, and experience working across many contexts. But how will designers who choose to focus on social challenges continue to keep a roof over their heads? Although the consultancy model is still dominant, there are perhaps yet further iterations of the operating model. How long will a system based on client relationships work where the object of design is not primarily commercial?

There is also a real and pressing question about the ability of the design education system to keep pace, beset as it is by multiple pressures. The move from polytechnics and art colleges to universities has put new demands and research expectations on design. The drive to get more people through university has led to more students, and relatively fewer teachers. Fees have been introduced, with the very practical implication that students who win an RSA award now often spend their prize money on more education – rather than on travelling to expand their experience and horizons. Just when we might need creative problem-solvers the most, with the result that we are making it harder and harder for young people to negotiate the system.

Briefs and projects: 2000-2014

2000 brief: E-mail with feeling

Gaze into the future when e-mail doesn't have to be so anonymous.
Your brief is to create a new verbal and visual language for e-mail which is quick, easy and fun to use, which allows emotion to be properly expressed. Anything you imagine is possible, don't be constrained by current technology. It doesn't always have to be the same tiny bitmap typeface, same cumbersome attachment process, same black and white appearance, whoever is sending the message, whatever the message says. Allow the writer of the e-mail to stress the importance of something, let their personality shine through, let them fully express their feeling visually. Your solution can include ideas capable of expressing feelings in as many situations as you like - however all presentations should include an e-mail to a lover and an e-mail to your bank manager.
Quite simply - make e-mail exciting.

2002 brief: Less crime through design

Look at the laptop from a thief's viewpoint, and then consider how to make it riskier, require more effort or make it less rewarding to steal in the situations where it is at risk.

2004 brief: Interactive media

An interactive TV (iTV) to bring government closer to the population and enable them to understand and be willing to engage with the government's message.

Laurence Kemball Cook, After the Post Office, 2009

'Winning the RSA Student Design Awards in 2009, with my 'After the Post Office' project, seed funded my business, Pavegen... I am delighted at the support the RSA Student Design Awards gave me.'

– Laurence Kemball-Cook (Winner, 2009)

'I first discovered the RSA Student Design Awards when I was a student myself, and I've spent more than 20 years in different senses being involved. There's no other institution internationally that I know of that has supported this kind of excellence and breadth of thinking in design.'

– Andrea Siodmok, Head of Policy Lab, Cabinet Office

'... it's great to know that the future pipeline of design talent is embracing big world problems.'

– Neil Smith, Unilever

6

The future

Over the last 90 years, although the outward form has remained remarkably similar, the purpose of the Student Design Awards has shifted with the times. Its motives have ranged from industrial warfare and espionage, to charitable career-boosting for young designers, to opening up ideas about the potential of design, to seeding society with a new generation of creative and socially-responsive problem-solvers. Given its current focus, the potential candidates for problem-solving through design are numerous. This year has seen its fair share of crises and highly complex problems: an Ebola outbreak, the ongoing rise of religious fundamentalism and violence, calls for devolution, a backlash against the EU, and the rise of nationalism and anti-immigrant sentiment across Europe, increasing concern about inability to address climate change, the continuing violation of women's rights... These challenges are all ripe for some innovative thinking – but is design – and are designers – equipped to respond? And what role should the Student Design Awards play?

Here we propose a set of provocations in consideration of the future of the Student Design Awards:

In line with the Power to Create conception of creativity as latent in everyone, should the Student Design Awards open up, beyond designers? As per the RSA's original 'premiums', and the nature of open innovation challenges, perhaps the Awards should accept submissions from a wider variety of specialisms?

– **How might the Student Design Awards integrate further with other strategic challenges?**

– **Should the Awards develop a 21st century curriculum for design, training students in new knowledge domains, systems thinking, and ever more reflexive practice?**

– **If designers are now intervening in governmental, political and social contexts – where ethical considerations are manifold – should there be a new set of professional practice guidelines? What role could the RSA play in developing these?**

The creativity of as many people as possible needs to be mobilised to successfully innovate in response to the challenges of coming years. The RSA, founded in optimism, continues to believe and promote the idea (now through the Power to Create) that human ingenuity and resourcefulness is the key. Hence design sits at the heart of the next period of the RSA's history.

If you'd like to become a part of the next phase of this history, to make a contribution to global challenges and to carry the Student Design Awards into the future, please do get in touch with the team at the RSA.

Authors and acknowledgements

About the authors

Jocelyn Bailey is a Consultant at BOP Consulting. Jocelyn's work at BOP includes projects for the Digital Catapult, Design Council, Nesta, Taiwan Design Council, the Creative Industries Federation and The Space. Alongside her time at BOP in 2014 she was a Visiting Scholar at the V&A, part of a small team conducting research for the AHRC that has informed their approach to social design. Building on this work, she is now pursuing a PhD looking at the uses of design in government. Before joining BOP, Jocelyn led the manufacturing, design and innovation team at Westminster think-tank Policy Connect. She now serves on the board of Policy Connect and is a Fellow of the RSA.

Sevra Davis is Associate Director of Design at the RSA and Manager of the RSA Student Design Awards. A dedicated champion of design for social good, Sevra worked as an architect and urban designer before joining the RSA. During her time at the helm, Sevra has led the development of the competition to include workshops, mentoring opportunities, and an annual 'roadshow' introducing the briefs to universities in the UK and internationally. She has consulted on design education and social innovation for international government clients, and advised on the expansion of the RSA Student Awards in the United States and in Malaysia.

Nat Hunter is a user-experience designer and uses her work to explore ways design can have positive social impact. She was a founding director of Airside, an award-winning cross-platform design agency that worked in moving image, graphic design, illustration, and digital interaction until its closure in early 2012. From 2012 through 2014, Nat was Co-Director of Design at the RSA. She studied Psychology, including Human Computer Interface Psychology, at Edinburgh University, before completing an MA in Interactive Multimedia at the Royal College of Art. Nat is a regular contributor to the design community – speaking on sustainable design practice around the world, judging awards such as D&AD, Design Week & Creative Review, and writing for Grafik and Varoom.
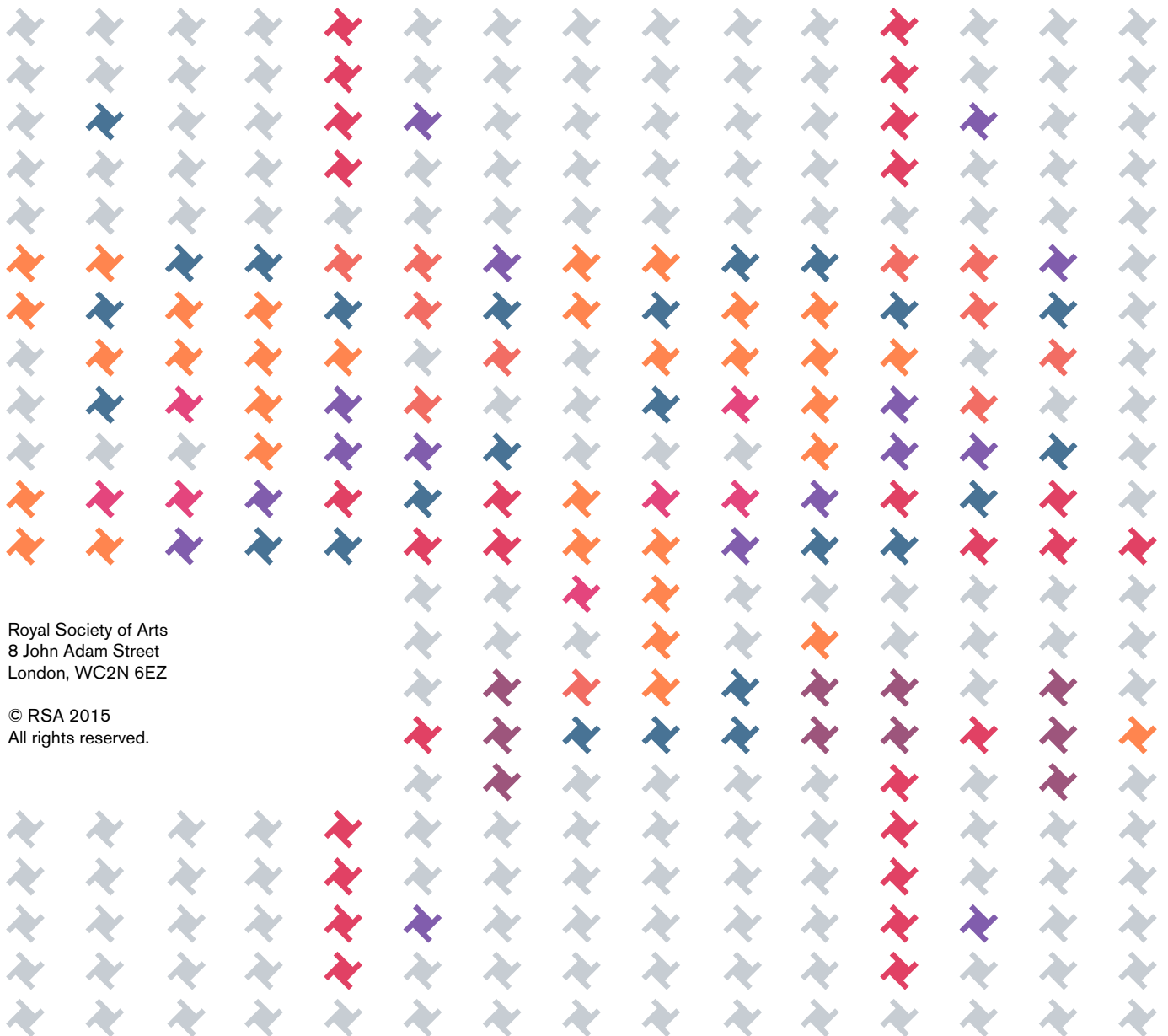
Acknowledgements

Through the history of the RSA Student Design Awards, this report charts the transformation of design education and the design industry from a collection of arts and crafts artisans in the early 20th century, to today's generation of creative and socially-responsive problem solvers.

For more information about the RSA Student Design Awards, please visit: sda.thersa.org

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