

/FAULT
Bridging Knowledge Spaces
LINES/
Irish Design Research Conference

2015



designcore
humanising innovation
policy · industry · society

Supported by
ID2015
A Year of Irish Design

co-chaired by
Colin Deevy / PJ White

/ President's Welcome /

I am delighted to welcome you all to the Institute of Technology Carlow for the inaugural Irish Design Research Conference.

The Institute has played a central role in the development of the emerging field of design in Ireland for over 40 years. In response to the Design in Ireland: Report of the Scandinavian Design Group in Ireland (1962), commissioned by Córas Tráchtála, the first graduates of design for 3D Product were conferred, from this Institute, in 1975. Those early pioneers of Irish design have gone on to make a significant contribution within the Irish and international design sectors, to business and enterprise and to the field of and within design education and academia.

New challenges and opportunities now face those engaged in the design and creative disciplines. Academic enquiry, research and innovation are playing an ever more important role in creating new opportunity in the economy, and in society. It is the outcomes of research activity and their application in solving real world problems that can enhance growth and prosperity in the years ahead.

The Institute is committed to research. That commitment has most recently been demonstrated with the opening of the Dargan Centre in 2014. This modern, dedicated research building brings together into one location key research activity from across the various Schools and Departments of the Institute. By creating a strong community of researchers engaged in applied research action, our aim is to support and foster an ethos of collaboration across and between the various disciplinary fields.



The Institute supports designCORE in this initiative to host this national cross-disciplinary dialogue among design researchers. It is through meaningful exchange, discourse and collaboration that new opportunity can emerge. I would like to take this opportunity to thank the conference coordinating committee in organising this conference and national milestone in Irish design research, and to offer delegates my support throughout the conference sessions.

Dr. Patricia Mulcahy
President
Institute of Technology Carlow

/ ID2015 - Year Of Irish Design /



Irish Design 2015 (ID2015) is a year-long programme exploring, promoting and celebrating the best of Irish design, research and creativity through events and activities on the island of Ireland and internationally. By raising awareness of the benefits of design in everyday life and the growing importance of design-led innovation to Ireland's culture, society and economy, the programme aims to encourage the use of design as a methodology to enhance other disciplines or domains.

ID2015 is supporting over 200 projects within Ireland during this year of design, and FAULTLINES - Bridging Knowledge Spaces, as the inaugural Irish Design Research Conference, is a significant event within this overall initiative. Investment in design research is essential to ensure that the design sector can continue to contribute to driving innovation across disciplines and throughout the Irish economy.

Design research - whether in the studio, laboratory or street - is an evolutionary process, presenting, archiving and transforming new design methods and concepts. FAULTLINES provides a timely forum for investigating design research in all its many fields, and the conference will help build an academic platform to better understand, and improve, the processes, products, services and systems being designed.

2015 is a highly significant year for design in Ireland, marking as it does the year of Irish design, 50 years after the establishment of Kilkenny Design Workshops. I am delighted that ID2015 has been able to support FAULTLINES, both through funding and helping to build a design research network across the island of Ireland. I look forward to seeing the conference play a pivotal role in helping to inspire, inform and develop Ireland's design research capacity and culture in the future.

Professor Alex Milton
Programme Director, Irish
Design 2015

/ Delegates, Speakers and Colleagues /

Welcome to the Irish Design Research Conference 2015, an initiative of designCORE at the Dargan Centre, Institute of Technology Carlow. This all island and event has been co-sponsored by ID2015 as part of Year of Irish Design. It aims to provide a national forum for current design researchers to disseminate emergent design research taking place within the discipline.

Ireland is showing clear indications of economic recovery, and a policy objective for ID2015 is to achieve growth within the Irish design sector. This timely forum seeks to draw leading academic researchers, from across the disciplinary bandwidth, into a stimulating, challenging and rewarding interdisciplinary discourse. This can provide the growing Irish design research community, a means to engage with each other, exchange experiences and share insight. The conference theme, FAULTLINES-Bridging Knowledge Spaces seeks to explore the interstices

between knowledge and practice. For cross-disciplinary relevance, the sessions address the more global themes of how design research can inform policy, impact society and find intervention in industry.

The importance of design research and innovation to the health and commercial development of the Irish SME sector is clear. FAULTLINES also seeks to bridge the spaces between academia and industry partners. Through the various associated events and networking opportunities organised, it is hoped you may identify further potential collaborative action; for mutual benefit.

I would like to thank keynote speakers and delegates for their contribution and all who have assisted in organising this event. I also wish to thank our sponsors for their generous support. While your time in Carlow and your contribution is critically important to the success of the conference, I hope you will also have a chance to visit VISUAL Arts Centre and experience



the engaging international exhibition in augmented reality being held there. There are also many events occurring around Carlow as part of EIGSE Arts Festival which will be of interest. More importantly, during the conference, I hope you have an opportunity to grow your networks and that you are inspired to extend beyond the conference itself to develop further meaningful dialogues together.

Colin Deevy
FAULTLINES IDRC Committee
www.designcore.ie



Raymond Turner is an internationally recognised authority on design leadership and management and their strategic value to business, government, and society. He has worked in the design industry for 40 years as a designer, design manager, consultant, and corporate director of design leadership. Now he is an independent specialist working with companies in many countries to secure strategic value from their design investment through business-based design direction and design implementation planning.

Author “Design Leadership- Securing the Strategic Value of Design”

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Turner works for businesses across a wide range of industries, including transportation, local and national government, city planning, public broadcasting, household and leisure product manufacturing, and construction. He is also a non-executive director of Image Now, Ireland’s leading branding consultancy.

Turner is one of the few design professionals who has held senior posts on both sides of the client-designer divide, having been group design director for two commercial companies, as well as managing director of two international multidisciplinary design consultancies.

**/ Raymond
Turner /**



Policy

Session Chair : Emma Creighton



The pillars of Product/Industrial design include creativity, user empathy, advocacy, Fuzzy front-end navigation, visualisation, storytelling iteration, testing, validation, innovation, entrepreneurship and design for the manufacture. Many of these indicate a research-led discipline. So why do we struggle with justifying our design practice, profession and research impact to academics and professionals in other disciplines?

/ Niall DeLoughry / Adam DeEyto /

Round Pegs in Square Holes- Justifying Design Research and Practice in Academia and Industry

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In the academic world, publication bears testament to success and facilitates progression. Research impact is measured predominantly in metrics such as numbers of publications in ISI rated journals. Quantitative data distils success and impact down to H indices and paper citations which arguably have little relevance to the world of industry and practice.

On the other side of the equation Industrial partners often mistakenly look to design as an add-on service in an attempt to improve their bottom line. Well-articulated design research and consultancy practice offers a model of how to lead both the research paradigm and industrial partnership. However, designers need to make a considered effort in communication to make it accessible to all.

We can explain our 'grey areas' in design through qualitative interpretation based on our capacity to articulate the nuanced and ambiguous. The degree of acceptance is predicated on the capacity of the listener to understand the qualitative justifications of the designer. In the absence of hard proof and relying on the interpretation of the 'grey areas', the designer is held up to a level of scrutiny more difficult than the measurable. At this stumbling block of proof - beyond the clear rational of proof - lies the 'insecurity' of designer in a scientific and engineering institution.

When the strength of proof is clearly in the gift of the scientists, how can the creatives flourish? This is the important question being asked by our design professionals and academics. How do we communicate our integrity where proof is the measure for acceptance?

/ Michelle Douglas / Ian Montgomery / Karen Fleming

Design as a Driver for Economic Growth in Northern Ireland

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In Northern Ireland, the legacy of socio-political difficulty and a pervading risk-averse culture has resulted in low innovation league table rankings which has led to a reduced confidence in its ability to compete globally using design as a driver.

The study uses international exemplars to propose a new paradigm for how innovation, design, and the development of a sustainable creative ecosystem can work in an advantageous way for Northern Ireland's economic growth. It offers a novel model of design and innovation and develops proposals for future policies and practices in the pursuit of sustainable internationally-focused creative excellence.



Northern Ireland's creative industries are a powerhouse of economic activity which require dynamic and sustainable collaborative networks, but are compromised by limited understanding and support at government level.

This is further compounded by an immature and unconnected network of creative communities, many of whom are unfamiliar with the concepts of collaboration and innovation as a positive and embedded part of their design and business processes.



Ireland is facing a critical juncture in the formation of robust renewable energy (RE) policy. Existing measures will not deliver Ireland's 2020 RES-H targets, with fiscal penalties incurred expected in the region of €100 - €150 million (SEAI) per percentage point, Ireland falls short of the 16% legally binding GFC target. The recent publication of the Draft Bioenergy Plan (2014) and Draft Rural Development Plan highlight the growing pressure to provide Ireland with an economically sustainable framework for RE post 2020.

Policy reform is essential under 2 pillars (Producer & Demand policy) with each pillar requiring a short, medium and long term policy framework. A multi-faceted policy design approach is proposed to provide the basis for a sustainable bioenergy policy framework post 2020.

/ Martin Leahy /

Ireland's Energy Future – Will Policy Design Allow LGB Fuels to Help Answer a Burning Question?

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Targeting: The literature and case studies advocate that each conversion technology requires a unique set of programs and technologies which can result in RE policy descending into a disjointed process seeking only to satisfy stakeholders. The literature review has identified anaerobic digestion and combustion based conversion technologies as having the greatest potential impact on reaching Ireland's 2020 RE targets.

Benchmarking: demonstrates policy success criteria factors through countries such as Sweden, Germany etc. A measure is likely to be more effective if it builds on and leverages existing policies and markets .

Evaluation of existing and (unsuccessful) superseded policy with the lessons learned. Forecast of potential impact(s) of draft and latest energy policy measures (Green paper, RDP, CAP Reform etc).

Agri-based case studies consider the impact and complexity of policy design (socioeconomic, political, bureaucratic, geographical and structural).

Commitment: The level of commitment to a policy from government, both in duration and resources, should create market confidence in order to provide a foundation for sustainable economic growth.





A role of design is to tell stories about the near future and then bridge the gap, or faultline, between intention and action. This perpetual tension means that design practice and theory undergoes transformations that reflect dominant or emerging social, political and technical contexts.

Building on transformations such as design for services and social innovation, we are witnessing the emergence of Design for Policy. This has led to the direct transplanting of contemporary design practices such as ethnography, behavioural insights and co-design into a policy context. There appears to be a desire to present design as a pragmatic yet speculative approach to policymaking to counterpoint the existing normative, ideological or utopian approaches.

/ Simon O' Rafferty / Adam De Eyto / Muireann McMahon

Design as a Phronetic Approach to Policymaking: Context, Patterns and Practice

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There are a number of tensions and questions that emerge from this. For example, to what extent is design practice constructed, commissioned and bounded by policy and politics? How do designers transition between government and the public? How effective and meaningful are these discourses? How is representation, participation and power articulated? What value and values does design bring to policy making in direct relation to other disciplines and domain expertise?

If we take inspiration from Flyvbjerg's reinterpretation of Aristotle's phronesis as an intellectual virtue that is "reasoned, and capable of action with regard to things that are good or bad" for society we may begin to articulate the value, values and distinctiveness of design practice and research in the policy context. Flyvbjerg (2001) argued that, in the social sciences context, the dominant emphasis on scientific and technical knowledge (episteme and techne) was unable adequately to "capture the role of context, values and power in social life".

When viewed from this perspective we can argue that design may temper the instrumental rationality of policymaking that is dominated by scientific and technical knowledge with an approach that is human centered, action oriented, reflexive and communicative. A phronetic approach would also demand that Design for Policy shifts from solely articulating and making desirable and reinforcing existing policy perspectives and power structures towards seeking to articulate dialogically the values and interests of the public within policymaking.

This paper is both reflective and speculative in that it will discuss these emergent issues of Design for Policy through the presentation of experiences of design practice in a public sector and policy context. Based on these insights, the paper will speculatively propose design and design research as a phronetic approach to policymaking.

/ Muireann McMahon /

The Gray Legacy Project : Exploring the Gender Balance in Product Design

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This research explores the development of routes into the discipline from a number of different vantage points; at second level, third level and on into professional life. The policies and cultural decisions that have driven the development of both education and the profession are examined and also how working in male dominated spaces influences and impacts upon female designers as they move through their careers.

Through a series of expert interviews, surveys and focus groups this research gathers together a variety of diverse, but individual, stories that help build a collective narrative of the current situation, both in Ireland and globally. The primary research is supported by literature reviews and explorations of best practice in other jurisdictions which provides context and background to the topic.

The research will then identify interventions that could support, encourage and facilitate the shaping of an Irish Design future where barriers to access are dismantled and gender takes a secondary role to merit, ability and creativity.



Good design is gender neutral; as should be the design process. However, equality in the process is difficult as female product/industrial designers are under-represented in both the professional and student realm. They comprise just 20% of the workforce (Rockwood 2009). The disciplines of architecture and graphic design appear to be, anecdotally, closing the gender gap but product design unfortunately isn't faring as well (Walker 2010).

In order to close these gaps we must first understand the potential barriers that may restrict access to the field, as well as the conditions that might limit progression and the resultant impact this has on the processes and the product outcomes.

Society

Session Chair : Dr. Nadia Pantidi

/ Barry Sheehan /

Discover Dublin by Reading and Running

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Could you recreate North Richmond Street from this description? Hardly. Could you from an amalgamation of extracts from the works? Compare this passage from the Wandering Rocks chapter of Ulysses.

“A band of satchelled schoolboys crossed from Richmond Street. All raised untidy caps. Father Conmee greeted them more than once benignly. Christian Brother boys.”

In A Little Cloud, the eighth story in Dubliners, Little Chandler quickens his pace as he walks down Capel Street and “For the first time his soul revolted against the dull inelegance of Capel Street.”

When I read this passage I was struck by how much this simple description sums up Capel Street, now in 2014, and in 1980 when I started studying architecture in Bolton Street.

So how much has Dublin changed since Joyce’s writings? Should the City pay attention to what Joyce wrote before it makes changes?

These passages possibly tell us more about the social strata of Dublin than they do the physical architecture of a street that Joyce once lived on. What if the City is about its people more than its physical character?

If you want to find the contextual details why not walk around the City, or run around it? That is what I have been doing, running and reading and researching. The narrow streets to the rear of North Richmond Street and Richmond Cottages have a pattern and physicality that are little changed since Joyce lived around the corner. He walked these streets and they influenced his writings.

So how does Dublin influence the writings? And how do the writings influence Dublin? There is a way to find out. Run, read, ruminate. And write a blog <http://www.jj21k.com>.



“I want... to give a picture of Dublin so complete that if the city one day suddenly disappeared from the earth it could be reconstructed out of my book.”

Is this true? Could you recreate Dublin from the books? In Joyce’s writings, Dublin is only lightly described. The following passage opens Araby, the third story of Dubliners:

“North Richmond Street, being blind, was a quiet street except at the hour when the Christian Brothers School set the boys free. An uninhabited house of two storeys stood at the blind end, detached from its neighbours in a square ground. The other houses of the street, conscious of decent lives within them, gazed at one another with brown imperturbable faces.”

DANCER'S FEEDBACK

"So the foundation was laid for me to then play with and explore. It is due to this that I felt the project was a success and if continued would definitely follow a strong developmental pathway."

"My intention was to communicate the dynamics of waves and an increase in energy, speed and dynamics."

AUDIENCE FEEDBACK

"It's really hard to tell because you can't really see. The dancers are making them move. So it's very hard to say."

"I mean, the original material might have been longer, but it's obviously edited, in 87 percent."

"But I think the editing makes you stop being able to tell whether it was or not. It was edited, so it's hard to tell whether it was or not."



/ Tara Whelan /

Making the Best of the Apocalypse - What we Can Learn from Making in a Crisis

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This talk examines a variety of objects designed to be fabricated by the end user. In most cases the “product” takes the form of a set of instructions which is flexible enough to allow for improvisation and an ad-hoc approach on the part of the maker. The objects are analysed from a material culture perspective. More importantly, it also investigates the processes and systems through which the knowledge necessary to create the objects is disseminated.

Several factors are helpful in encouraging people normally accustomed to the role of consumer rather than maker to cross that boundary. A discrete, finite goal is more appealing than gaining broad, but less tangible, expertise. It is necessary for an individual or group to take an authoritative stance and adopt the role of educator.

It is not necessary that this individual be an expert or professional; just that they are seen to have sufficient knowledge, though professionals – particularly designers – are well positioned to support users-as-makers if they so choose to. A dedicated space where face-to-face facilitation can occur is preferable to having the user attempt undertakings individually without support. The nature of these spaces is hugely varied, emerging from the combination of actors and networks supporting them.



This presentation examines situations of fear and emergency (such as natural disaster, threat of war, and riots) where people have stepped out of their habitual role as consumers and turned to making and hacking in order to provide expedient solutions to urgent problems when normal supply chains have proven insufficient.

It discusses the barriers that consumerism, bureaucracy and professionalism pose to amateur making and investigates the mechanisms and processes by which these barriers are surmounted during times of acute civic need. Finally, this paper posits lessons that can be learned from these acute cases in order to foster public resourcefulness and making in more day to day conditions.



In 1831 Catherine McAuley entered her final profession and took her vows as a religious sister, becoming the Foundress of The Sisters of Mercy. Little is known about this event or the habit she received on that day, but it is believed it was the habit typical of the time and worn through-out Christendom. As a very significant and defining form of dress, this habit was not designed but rather shaped and made by history.

This research investigates the key factors that influenced decisions during this time and uncovers the materiality and experience of wearing the habit everyday as part of the vows, values and religious faith.

/ Adelle Hickey /

The Habit of Mercy

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The aim was to uncover what the habit as a form of religious dress and uniform represented and identified with for the individual, the Catholic Church and society in early 19th Century Ireland. Each piece of this religious apparatus is researched to unveil its religious significance, meaning, symbolism and defining language for the wearer and the viewer. Every aspect of the materiality of the habit is uncovered from the raw materials, making, cost, maintaining, storing and replacement. This remains unknown.

To look closely at this form of dress within the context of its living and working environment, teaching and nursing the sick and poor. The everyday experience of the habit through the voice of the wearer is investigated through oral and written interviews.

The Religious Sisters of Mercy are the largest female religious order in Ireland and the third largest in the world. Religious orders are recorded and documented in history through religious, social, political, educational and medical channels. The area of material and visual culture remains unexplored. The voice from under the habit remains silent and unrecorded. To uncover and unfold the material and physical experience of the habit before it is lost in history.

/ Fiona McDermott /

Material Encounters with Digital Cultural Heritage

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The approach to the project is grounded on principles of co-design, the broad participation of curators, designers, developers and stakeholders into the process, and on a Do-It-Yourself philosophy to making and experimentation. Hands-on design and prototyping workshops are employed throughout the project to inform and shape development.

While the design and evaluation of such exhibits are often well documented, little is understood about how cultural heritage professionals engage in the design of interactive exhibitions in terms of their attitudes, process, expectations and understandings of technology.

This paper presents findings from the extensive co-design process which brought together cultural heritage professionals, interaction designers and technologists to design novel interactive experiences for 3 different museum settings.

The findings offer insight into the strategies and aspirations of domain professionals regarding interactive exhibitions, and to identify new ways to engage with them in collaborative design activities - particularly as their knowledge and understanding of interactive digital technologies becomes more advanced.



Material Encounters with Digital Cultural Heritage is a collaborative research project that has the goal of designing, developing and deploying tools for the creation of tangible interactive experiences for use in cultural heritage settings.

More specifically, the project aims to empower cultural heritage professionals themselves in the creation, installation, maintenance and alteration of exhibits that are meant to bring materiality and physical interaction to the forefront of visitors' experience, while simultaneously expressing the values of the cultural institution.



In this phase of late capitalist communication, ideologically framed as being one of the most open and connected points of history, is art accessible? My research asks how accessible dance film, a hybrid practice, is to the general public, from the perspective of design as a mediating agent in cultural production and practice. I will argue that design works to maintain boundaries between the artists, the public, and institutions.

/ Carol Breen /

All of this Belongs to Us? Can Communication Design make Dance Film More Accessible to the General Public?

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These boundaries maintain the status quo and perpetuate the need for accessibility programmes. Design reproduces division and inaccessibility and helps create questions such as the artist's responsibility to the audience. Dance film like many other art forms receives large sums of public funding, but for the most part is an unknown entity. (Ms. D Towers, 2011, pers.comm., 2 June). If art becomes accessible, its worth would decrease, and no longer have market value (Graw, 2009). The meaning of art is off limits to the general public, accepted only when it serves to perpetuate the myth that the institution is all knowing.

I will examine this connection between artist, audience and institution by examining findings from a focus group between specialists and the general public, by drawing on my own practice based research, and critiquing existing literature. Design is used to sell art, and design programmes to access art, but what about designing space for open dialogue about art itself? By using dance film as an example, I will argue that until we expose design as an ideological agent working to maintain the status quo, open dialogue about art will not take place.

/ Sandra Fruebing /

The Act of Falling

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'Learning to fall' is a drop-in session in which participants get familiar with types of falling presented in popular film. Participants are introduced to a Charlie Chaplin stunt in the film 'The Tramp', the airplane-chasing scene in 'North by Northwest' and Snow White's infamous fainting after she bit the poisoned apple. Within the workshop the participants learn about the message popular media conveys within the simple act of falling.

Chaplin falls and the fall is linked with stupidity, Cary Grant is a strong man and can save himself from the plane. The scene is constructed in a very masculine context and does not give us the impression of him being foolish or trying to amuse us. Snow White's fainting is another example of a body losing control to support oneself and gliding downwards to land on the floor.

The workshop explored 3 types of falling taken from famous film scenes. Charlie Chaplin in The Tramp, the plane chase scene in North by Northwest and Snow White fainting. In the workshop, boys were asked to imitate, with the help of the actor and personal trainer, a fall like Snow White and instantly became aware of the imprinted cultural assumption in film.

'The Dive of the Century' workshop trains for the perfect dive. It consists of four acts: the simple fall backwards, hunting-in-packs training, the shoulder-to-shoulder training and convincing the referee. For this workshop Sandra worked together with a personal trainer and an actor to support her in analysing body language and facial expression when one performs an accident that is not an accident but an act of performance. The issue of fairness in sports is raised and through the playful workshop the participants discuss winning and losing in football and life in general.



The act of falling is simple. Falling is what happens when you are off balance; it makes your body drop, lose control and often provides amusement for spectators. Defined as a downward movement from a higher to a lower level, to hang down, to drop away, to lose one's balance, to 'fall' conjures a multitude of images and associations. Falling is typically perceived as a negative phenomenon and associated with failing. However, learning also occurs through failing.



Industry

Session Chair : Con Kennedy



Dolmen has, over the past decade, evolved its process to include exploring and testing the thinking behind a variety of published theories in Design Leadership, Design Thinking, Strategic Thinking and Creativity. This article looks at how Dolmen have developed a toolset and applied their Strategic Design Thinking process (Discover, Develop, Deliver) to a number of companies, from start-up entrepreneur to dynamic SME, delivering tangible outcomes through a structured process.

The case stories ultimately explain why and how Strategic Design Thinking works for a variety of sizes of businesses.

/ Sean McNulty / Frances Mitchell /

A Design Consultancy Intervention: How Strategic Design Thinking Delivers in Practice. A Case Study Overview

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In Europe, small businesses (fewer than 50 employees) account for 97% of the total number of enterprises and generate 50% of Europe's employment. These businesses want to grow (typically only generating turnovers of circa €2m - €5m) but for a complex mix of reasons often fail to achieve their potential. Many are applying 'Lean' manufacturing to reduce costs to improve profitability, but all desire a level of growth with profitability. These companies are stuck and unable to 'cross the chasm'.

Dolmen carried out a continuous and in-depth study of new and innovative theories in the areas of Lean, Design Thinking, Innovation, Creative Thinking, Leadership and Strategy that complimented Dolmen's core process and enhanced it to the point that it is proven in its efficacy in delivering quantifiable impact for clients.

Dolmen was able to practically test theories and methodologies in a purposive way, re-ordering and reconstructing methodologies to suit specific situations. Using a trial and error approach, which works alongside the creative processes used in Design Thinking, we found the specific aspects of theories and methodologies that withstood repeated scenarios and real life settings and fit well into the day-to-day workings of industry.

Part of this research was prompted by Dolmen's involvement in the development of the CEN TS 389 Innovation Management System, covering leadership, market insights, culture and a learning process. We then led the expansion of the system into specific aspects around design thinking, management of creativity and assessing innovation activities in a business and organisation.

/ Lorna Murray / Colin Deevy / Hilary Dempsey

Creating Value through Out of Box Experience

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Every interaction between a brand and its consumer/ users is considered a touch point of opportunity to provide a positive experience.

The Out of Box phase of a product lifecycle consists of multiple touchpoints during the unboxing, set up and first use of a product. According to Accenture, product returns at this point are costing the US \$13.8 billion annually and 68% of these returns are due to non-existent faults which means the product did not satisfy user expectations. It was noted “25% of people who returned a product for any reason are unlikely to buy that brand of product again in the future” (Accenture, 2008). It is for this reason that the Out of Box Experience is an opportunity to reaffirm the purchasing decision in an attempt to create brand loyalty.

Video observations were conducted to observe participants completing the Out of Box phase of Mac Pro desktop computers. The observations highlighted a need for user insight during the development of these touch points. It was noted that users interact with products based on their reflective learned behaviours and product intuition prior to manufacturer provided instructions. This suggests that user expectations are a primary need to satisfy in reaffirming their purchasing decision.

Design is a problem solving tool that places the user at the centre of all decision making processes, utilising user insight to provide solutions that address the user’s needs, wants and limitations. This suggests that a design led approach is capable of creating value through the identification of the experience economy.



The main objective of any business is to create a customer. The customer is the focal point for any successful organisation. Creating and sustaining customer brand loyalty is a means of achieving growth. The brand is the part of the organisation in which the customer and user interact with and it is through the brand that the organisation communicates its values and instils experiences.

The experience economy has become widely recognised as a means of adding value to products and services. Organisations want customers to not only buy their brand but to buy into their brand. This is a way of achieving market growth through returning consumers.



Design thinking is firmly established as a key driver of tomorrow's innovations. Poised as a cure for delinquent services and estranged technologies, design thinking promises to reintegrate the user and embellish commercial offerings in positive experience. More often this means 'design as an add-on', a refinement step at the 'back end' of innovation processes employed only after strategic decisions have been committed.

This practice is enforced by empirical research dominated by new product development theories for effective project management. In this paper we re-address this imbalance by investigating its potential at the conception of new innovation directions as a strategic frontend driver.

/ Martin Ryan / Trevor Vaugh /

Getting the Right Design or Getting the Design Right: An Observation of 18 Industry Projects as they Progress Through a Structured Design Thinking Process

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Importantly, there are advocates of design thinking who promote its ability to find 'the right design' over its ability to 'get the design right' (Buxton, 2007). Expert design thinking is charged at the cold face of many innovation initiatives recognised for its ability to uncover new relevant opportunities. Design thinking literature contributes rich understanding of process sequencing (Lindberg et al., 2010) but makes limited contribution to phase implementation.

At this level it is mostly left open to interpretation and subjective preferences by its proponents. While this flexibility may be a virtue in expert hands, in the wrong hands it is at best a missed opportunity and worst an expensive fiasco.

We have conducted a 12 week field trial of design thinking with 18 participants in 18 organisations. We surveyed all participants and coded the resulting data. We found 2 stand-out patterns that have implications for effective design thinking integration in organisations:

1) position of the designer relative to the organisations and 2), emphasis of design thinking tools if earlier or later in the process.

Drawing on our extensive experience in teaching and practice we offer new insights to support design thinking purposed towards the front end of innovation and finding the 'right design'.

In this paper we integrate wider literature from insight (Klein & Jarosz, 2011) and cognition theories with design thinking theory and we build a theoretical model to support this application.

/ Ruth Duignan /

The Role of Nationality and Cultural Heritage in the Branding of Clothing Labels

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Using Holt's (2003) 'four authors' model which identifies the input of the company, popular culture, customers and influencers in forming a brand's culture, this paper concluded that the power and control over a brand's culture is in constant flux between these four forces. This paper uses analysis of the Burberry brand, past and present, to discuss its findings.

The findings indicate that nationalism, culture and ethnicity play an ever more significant role in the marketing and branding of clothing labels due to the increasing phenomenon of rapidly advancing technology and communications, and the advent of cultural branding (Holt 2004).



Brands and products are shaped by a nation's cultures and traditions. In turn, a nation's culture and traditions are formed by its brands and produce.

This research explores how nationalism, culture and ethnicity are used in the marketing and branding of luxury clothing labels. In addition, it will investigate how national perception affects both the production and consumption of these clothing labels. It will explore how brands use national heritage as a source of inspiration and control for designers, as a shortcut to creating a dialogue with consumers by marketing managers, as a method of expression and tribalism by their consumers and as a social barometer by society as a whole.



There is an appreciation by lecturers and practicing designers that the design industry is changing rapidly but also a concern regarding the huge gap spanning the worlds of education and industry. Graduates from design related courses often have to undertake multiple unpaid internships for up to 2 years to gain experience before employment. Our research through facilitation of student, industry and academic engagement, aims to reduce and bridge that gap.

Initial research came from the creation of Designers Northern Alliance in 2010. DNA was formed to create a collaboration of partners who met to discuss design and how academia could be tailored to meet the needs of the creative industries, and provide students with high quality, 'real world' experience.

/ Joanne Greenhalgh / Gary Peplow /

Costa Del Salford's a Model of Student and Industry Engagement in Graphic Design

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The formula developed for the model of student and industry engagement works with many design projects, but our research has shown that the key to the success relies on the project being driven and led by proactive students of varying disciplines. This ownership demonstrates learner engagement through the assignment of roles and responsibilities by the students across the board of creative design practice from project management, conceptual design, marketing and promotion. Factors that are crucial to the project working are that the concept must be creative, thought provoking, plus include an element of creative risk taking in order to be innovative.

The case study, 'Costa Del Salford's Beach Party', demonstrates our model and the impact it has on job creation. By concentrating on a high profile industry networking event, in which students showcased their strengths, resulted in multiple work placements, many of which led to full time employment.

Engagement between academia and industry through our facilitated events has led to further collaborations, which have ongoing impact on curriculum design. Synergies have been created between curriculum and industry needs, the research used to keep the course curriculum industry relevant and up to date with current trends and new technology, such as the development and generation of Apps, thus enabling graduates to be 'oven-ready' for the creative industries.

costadelsalford.co.uk

/ Simon Keogh /

Impact of Immediate and Heuristic Discussions on Structured Learning: The Role of the Interstices between Subject and Object

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In our visual culture, meaning is proposed to result from dialogue occurring between participants, an exchange which is shown to develop from an understanding of “inbetweenness”. This ‘social interstice’ is identified within forms of production, resulting from the engagement of the participant or user with actual work.

The interstice connects us together in actual space and is an essential component for inter-human relations. It is our visual production disciplines which contain varying physical interstitial characteristics and different types of participation that encourage new ways of seeing and thinking.

Resulting from prototyping adaptable furniture products in Ireland and a latency in manufacturing running as high as 95%, a gap for an Information Network Or Knowledge Exchange (iNOKE) has been identified. Accounting for irreverence, empathy, storytelling and conversation as four Irish traits, what form will this third heuristic service space take to ensure productivity?



There appear to be gaps in how the transfer of knowledge occurs between designers and manufacturers within creative industries. I posit that the production of a third space needs to be examined where these gaps can be bridged.

By looking at what exists between subject and object in creative disciplines, I examine the location and role of an “inbetweenness” or interstice in relation to the production and translation of meaning and set a case for employing iterative methods to create new places for structured learning.



Giles Ellis is the pioneering Founder and Designer at Schofield Watches. Schofield is an independent English watch company based in rural Sussex. They are actively involved in the continuing development of watch making in Britain and are proud to be at the forefront of its revival. At Faultlines Giles will be presenting his unique design research approach and process.

/ Schofield Watches Founder and CEO /

schofieldwatchcompany.com

“There are few global watch brands that can say they operate out of a bucolic village in the West Sussex countryside. But then there are few watchmakers that can also boast ‘ukulele maker’ under their skillset. However, such is the visionary nature of Giles Ellis’s pioneering watch brand, Schofield, that the horological rule book is being quietly re-written, from a leafy corner of the English countryside. What began as a personal quest to find a watch that fitted his exacting personal taste has evolved into an international operation that has carved out a curious niche in the competitive world of watch-making” Stephen Doig.

/ Giles
Ellis /



/ Policy For Education /

Session Chair : Dr Simon O' Rafferty



Education today is changing with current reform signalling a shift from the notion of schooling to one of learning. International and European policy calls for a move from the teacher-centered delivery of content mode of education, to a student-centered one, with a focus on the development of skills and competences through the curriculum (OECD, 2008; European Commission, 2007). A key objective of education today must be to support the overall wellbeing and educational development of students, thus enabling them to become confident, capable and autonomous individuals, with the ability to actively engage and participate within society.

/ Emma Creighton /

Learning to Learn Through Design and Making

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In an Irish context, change is underway at post-primary level with 'Key Skills' frameworks in place that emphasise the development of skills and competences, such as communication, problem-solving, information processing, critical and creative thinking and working with others, through the curriculum (NCCA, 2009; NCCA, 2011). In this paper the author makes a case for design learning as a model which supports adolescent development, in line with current curriculum reform.

The argument for design as an approach to education is not a new one, there have been and continue to be developing arguments in this area (Royal College of Art, 1979; Design Council, 1980; McCarthy and Granville, 1997; Baynes and Norman, 2013). The research presented contributes to this by actively investigating the impact and effectiveness of a design workshop model, set deliberately in out-of-school contexts, as external leverage on school learning.

By extending the learning beyond the four walls of the school and into temporary learning spaces, the research examines the potential for learning and development and the transfer of outcomes to the school context.

By embracing the pop-up culture in the creation of temporary spaces for learning, this work explores an iterative prototyping approach as a model for exploration and experimentation, without the fear and consequences of failure. In doing so, this research explores design, not only as a framework for learning, but also as a model for the development of educational practice.

/ Suzanne Martin /

Exercising Uncertainty – A Design Education Case Study

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Initiated by an invitation to curate an immersive week-long workshop for Post-Graduate students at the Estonian Academy of Arts in Tallinn, Estonia (in February 2014) led to the creation of a set of briefs, activities and themes that ran at the National College of Art & Design in Dublin (with 2nd year Education and 1st year Visual Communication students), with the MA Interior Design students at the Royal College of Art, London, UK and has grown into a larger model at the Estonian Academy of Arts in Tallinn, Estonia over the two years.

In exploring the contemporary role of design, and the designer, in a world in flux, the intention of the workshops is to prompt thinking, create tools and generate ideas that encourage students and staff to take advantage of the chaos. The ambition is to set out a tangible, conceptual and contextual framework for the design academy, based on evidence gathered from the workshops: to create a tested set of tools and approaches that might be applied in existing scenarios to prompt new thinking at a local level.

Addressing ‘the change agenda’ - currently a key focus of third level education in Ireland and internationally – this presentation sets out a series of approaches that could be extracted to promote a different space for design education to inhabit in the future. With this, it points to the opportunity for creating a ‘proof of concept’ model for change in third level design education, at a government level. Design education must go beyond its iconic, classical notions and this case study presentation offers an alternate space for this timely move.

The first edition of the workshop (run at the Estonian Academy of Arts in February 2014) won the Institute of Designers Ireland ‘Design Education’ award in November 2014, in recognition of the innovative approach to design learning.



Stability and security are in the past. The new rules aren't clear. The future is uncertain. Design education must make new rules, create a different stability and find ways to identify with uncertainty.

The academy must pre-empt change and inspire innovation in how design learning is delivered and used by its students. As part of a body of pedagogical practice that aims to exercise uncertainty in design education, a series of workshops have been developed and running for the past two years.



In user-centred design, there is recognition that designers must understand the perspectives of the users for whom the product or service is being designed. Sometimes, however, designers may not have direct access to end users or their environment and must rely on techniques to evoke their own and others experiences to uncover user needs. The purpose of this paper is to explore the role of scenarios in developing empathy for users in an undergraduate design project where there was a lack of access to users and the context of use.

/ Louise Kiernan /

How Scenarios Support Empathy in Design: A Case Study of Undergraduate Students

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This research involves a case study of a collaboration project which was conducted between undergraduate design students from Hogeschool Utrecht and the University of Limerick. The data analysis draws insights from group observations, field notes, review meetings and focus groups with six student teams.

This research explores the role of scenarios (imagined sequences of events) and how they are used to empathise with and understand the needs of users to develop and test design solutions. We describe also the techniques needed to build compelling scenarios. These techniques: stories, analogies, metaphors, personas, extreme situations, conflicting forces and experience prototyping, supported scenario creation to in turn fully scope out the problem area and uncover, not just issues associated with the physical aspects of the crew rest, but also the deeper emotional and physiological needs of Flight Attendants from diverse social and cultural backgrounds. The scenarios also facilitated the teams to develop and evaluate concepts later in the process.

These findings have implications for design education and the techniques described can act as guides and prompts to instil an empathetic approach in studio projects in both design education and professional practice.

/ Jeremy Madden /

E-Learning in Craft Based Education

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Osman et al. (2012) in Malaysia have produced a CDTC model of courseware which provides a digital learning environment to conserve teaching and learning of traditional crafts. GMITL are dealing with e-learning through a Virtual Learning Environment (VLE). Modules used throughout all the disciplines are available on Moodle as are recorded demonstrations on machinery processes and techniques. Communication is maintained with students from the College on international work placement.

Camtasia Studio enhances both the teaching and learning environment. Larkin (2014) has produced an online resource (WWrasp) for learning more about woodworking machinery and safe procedures which is now integrated into the first and second year syllabi. To conserve teaching and learning of traditional crafts, it is appropriate to provide a digital learning environment that disseminates craft information to a wide range of people.

However, there is limited knowledge and research on the effects of e-learning versus traditional face to face learning in craft-based education. Learning of craft-based skills assisted by ICT is relatively new. Diverse ICT knowledge and skills are not attractive to all creative disciplines. Simply incorporating new technologies into a craft based situation does not necessarily make it more effective.



The HEA (2011) (Hunt Report) promotes state of the art learning resources within a flexible teaching and learning experience in higher education which includes blended learning, open and distance learning, web-based learning and e-learning. Information Technology has been acknowledged as an essential element to enhance student access to material and promote efficiencies within teaching and learning practices.

E-learning is well researched at this stage but few have investigated the integration of technology in a traditional model of craft based education. In the UK, Wood N. (2010) has advanced the extensive use of video and multimedia as a means of passing on the skilled knowledge of the expert craft practitioner.



This research proposes that Ireland would benefit by broader education in advertising literacy.

The First Things First Manifesto was published by Ken Garland in 1964. It was a reaction by designers to conventional advertising practices. The manifesto suggested that graphic design should be used more for public services rather than commercial gain.

As well as issues within our financial system, consumer demand for credit had an indirect part to play in Ireland's recent economic downturn. It can be argued that advertising had a part to play in influencing consumers to buy overpriced financial and retail products, resulting in an appetite for credit, which led to large consumer debt.

/ Gwen Lettis /

Roghanna - A Resource to Help Teach Advertising Literacy in Ireland

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This type of advertising is an example of the design The First Things First Manifesto reacted against. The manifesto was renewed in 2000 and 2014. This indicates that an anti-commercial sentiment still exists amongst designers, and that the link between design and consumerism is still strong. This is not surprising as we live in a consumerist society: a society that puts pressure on the planet. 'The insatiable demands of 6 billion consumers...is going to smash into the timetable of the world's resources' (McWilliams, 2009).

Somewhere along the line, we began to think that we weren't happy with deferred gratification...as a result I think that we have paid a very, very big price for that very radical shift, and now the balance presumably is going to swing back the other way and it will be no harm. We clearly have come from quite unbalanced times and they have not been able to secure for us the kind of peace of mind, peace of heart contentment that we would have wished for. Now we're trying to find our way back to a more rooted and possibly more modest time.

Consumer demand drives the types of products and services we are offered. If demand changed, designers would sell better quality products and services. This would help Ireland avoid a recurrence of our economic problems, as well as the global meltdown McWilliams (2009) predicts. Also, The First Things First Manifesto would become redundant for Irish designers.

So, I designed a prototype for an educational kit. It aims to give primary school teachers a straightforward way to teach Irish children advertising literacy, so as to help the next generation make better consumer choices.

/ Pearl O' Rourke / Colm O' Kane /

Developing Identities for Undergraduate Design Programmes

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In this research, a framework was developed to identify guiding principles for individual undergraduate programmes. The optimal format for these principles was determined to be mission and vision statements, and these were drafted using a collaborative approach devised to harness the views of multiple internal and external stakeholders.

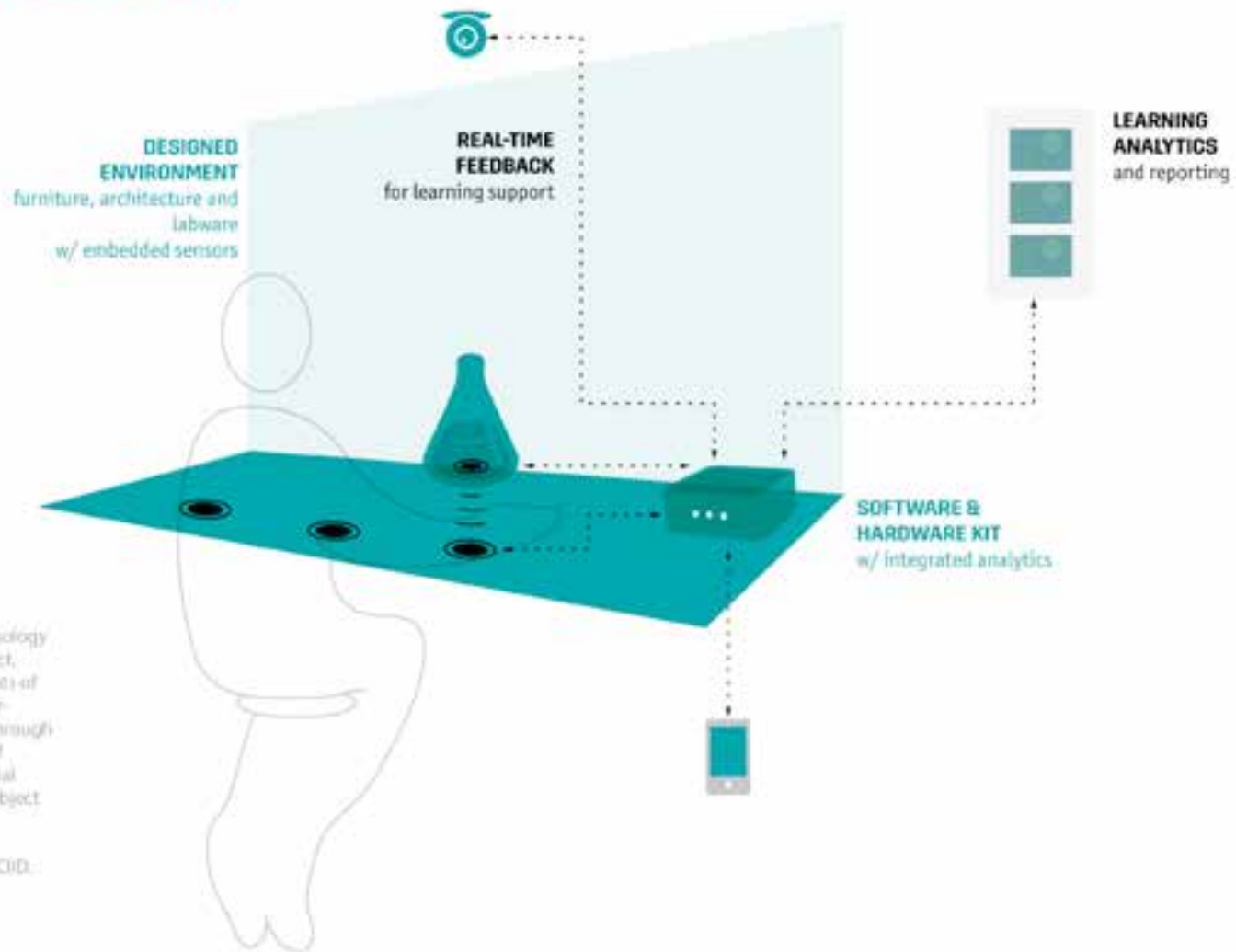
Using outputs from a staff workshop, preliminary mission and vision statements were developed for the DIT Product Design programme. The aim of the workshop was not only to produce a clear identity and vision for the programme, but also to provide a space for staff to reflect on the programme's purpose and their individual roles within that. These mission and vision statements will be assessed by several other stakeholder groups before finalisation.



Product Design as a discipline has attracted much attention of late in the Irish educational sector. Several undergraduate programmes have been formulated and developed in the area over the past number of years. The DIT Product Design programme is one of these. A key aspect of any programme in the Higher Educational landscape is the continuous development of a clear ethos which distinguishes it from offerings at other universities and institutes. This work focused on identifying the motivations, aims and strengths of the DIT programme in order to build and foster its unique identity.

A framework was developed for identifying this identity which should be transferable to programmes in other design disciplines and universities.

THE IDEA BEHIND PELARS



An example workbench technology scenario for the PELARS project, highlighting potential elements of system implementations (user-centered design developed through the project) for the creation of practice-based and experiential learning analytics for STEM subject matter.

Image by Catherine Descure, CID.

/ Society & Technology /

Session Chair : Tara Whelan



PELARS (Practice-based Experiential Learning Analytics Research And Support) is a three-year research project funded under the European Union's Research and Innovation programme, FP7, and involves twelve partners across Europe drawn from both academic and industry sectors.

The project is a true example of a collaborative multidisciplinary project as it bridges the knowledge spaces between design, technology, and education.

PELARS seeks to develop a Learning Analytics System (LAS) and integrate this system into a physical embodiment (furniture and/or environment) suitable for three proposed learning contexts; third-level interaction design education, postsecondary engineering education and secondary-level high school STEM (science, technology, engineering and mathematics) education.

/ Donal Healion /

PELARS – A User-Centred Learning Analytics System for Design and Stem Education

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The project is at the forefront of current progress in the use of learning analytics and technological integration to further educational development and policy change.

The project is broadly divided into three parts. Year one consists predominantly of research with a literature review and qualitative research with a user-centred approach. Year two sees the expression of the research results in iterative prototypes and technological development with user testing throughout. Year three then tests the efficacy of these prototypes with contextual or 'in-the-wild' user trials and evaluations.

The value of this research is manifold as the outcomes of the LAS seek to inform students, teachers and researchers as to what and how students are learning while engaging in hands-on education in design and STEM subjects. It is intended that this knowledge can be used to develop curricula and motivate policy change regarding the teaching of these subjects.

Currently, at the end of year one of the project, findings are constituted by the establishment of design requirements and opportunities in the areas of sensing and visualisation technologies, furniture and environment, learning analytics systems and curriculum development. These findings will shape and inform the next stage of concept development.

The anticipated outcome of the project is a fit-for-purpose LAS system, supporting kits and materials, relevant curricular activities and a suitable environment in which to implement these.

/ Niki Collier /

To Push the Boundaries of Science and Art in a Blended Scholastic Approach

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In this article we present a body of work in smart textiles as a collaboration between an e-crafter and a textile designer. We also showcase the possibilities and limitations of using the readily available components to design and develop interactive pieces.. Then, we identify key challenges that are the focus of our ongoing research. Finally, we provide an outlook of the future of this project.

The presentation discusses the prototyping, development and presentation of three smart textile pieces that argue that our Mammy knows best. The three pieces were developed for a Dublin based show using readily available e-textile components and designing a piece using traditional feltmaking techniques. The demonstrators argued that folklore methods for managing daily life have scientific foundation. The pieces discussed are a talking torque, a kelp that predicts the weather and a vest that detects presence behind your back.

Evaluation of the response for the three pieces at a show is offered as well as feedback from the audience and a general overview of display of smart textile pieces.

The work concludes that the readily available pieces are suitable for prototyping, but that the optimisation of the work is achieved through initial testing at community events . It also offers some insights on how a piece is handled when presented at a mixed media exhibition.

The work maps the prototypes into the international smart textile scene and offers insights into the future development of such pieces.



The research in smart textiles research is a new approach to developing and testing innovative solutions often outside conventional research spaces. It is used predominantly by non-formal groups and creative SMEs to develop interactive exhibition pieces or educational projects integrating electronics. The aim is to push the boundaries of science and art in a blended scholastic approach. The approach becomes increasingly popular with the accessibility of the prototyping method as well as the extensive resource bank of documentation related to such projects.



Local and alternative currencies are rapidly gaining momentum in today's unstable economic climate. Their aim is to keep local communities thriving, but little is known about the challenges and opportunities posed for local transactions by a changing technological landscape and the accompanying new forms of digital connectivity. Despite the proliferation of digital payment technologies, very few studies are examining the user experiences of such technologies and their implications for local currencies.

/ Jennifer Ferreira /

Designing Digital Exchange

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We designed a set of mixed-media “probes” to engage members of a local currency community (www.bristolpound.org) in two interactive workshops with the aim of informing the design of digital media for future local currency transactions. In this talk we will present the designed probes and discuss their role in embodying concepts from previous ethnographic findings on transactions with the BP (Ferreira et al., 2015) and, through the workshops, themselves becoming requirements for implementation.

Using the low tech probes), participants envisioned scenarios of use through which it was possible to examine: a) the role of infrastructure in enabling transactions, b) interactions at the point of transaction, and c) the social context within which transactions are embedded.

Our findings show that in the Bristol Pound community, a transaction is more than handing over cash or plastic, or just a mechanical exchange of money for something else. Issues of identity, business practices, and locality inextricably connected the financial transaction to its social context. The probes effectively facilitated three outcomes that we believe are useful for the design of digital local currency transactions:

- 1) Preserving the connection between the digital and physical worlds with minimum disruption to the practices of the traders and customers to allow rich social interactions,
- 2) Being social with spending data that is traditionally considered private, and
- 3) Supporting decision-making for ethical and responsible buying.

/ Tricia Harris /

Augmenting the Physical Learning Environment: Creating a More Active and Kinaesthetic Learning Environment using Augmented Reality

Body conscious design and integrating movement into educational environments is strongly advocated in recent times (Cranz, 2014; Milton, McMahon & Dennehy, 2013). This paper explores the integration of augmented reality into the CAD process to create a more kinaesthetic, active and healthier learning environment for design students. The hypothesis is that a concrete learning experience is created as the digital CAD model becomes almost tangible and real-time interaction between user and design is achieved.

The student is placed at the heart of the learning experience where their direct actions form and control the learning experience, some of the underlying principles of the Constructionist learning theory (Papert, 1980). Movement and activity are successfully integrated into the classroom, transforming the CAD process from a static seated one into an active kinaesthetic one.

An exploratory case study was conducted with third level design students using a marker-based AR plug-in for Sketchup and a handheld viewing device. Students could view and interact with a full-sized version of their 3D CAD model in a real physical space. Findings supported the concept of a new constructionist-based learning space created with AR.



Looking at Computer Aided Design in the context of the design process, two considered drawbacks exist; the static nature of the current CAD environment where students sit in front of a monitor and keyboard and the intangibility and shortcomings in relation to fully understanding a digital 3D model seen within a CAD program.

Although technology is continuously advancing, the physical learning environment of student and computer has for the most part remained unchanged. New opportunities exist with technologies such as gesture-based computing and wearable technologies, which are changing the way we interact with digital content. Augmented reality has been identified as having the potential to offer new learning opportunities.



/ Nadia Pantidi /

The “Wild” Side of Interaction Design

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By taking an ‘in the wild’ approach, such qualitative studies of technologies can reveal challenges and implications that cannot be discovered in laboratory settings and therefore can provide useful insights towards interaction design as a whole and ensure optimal user experience.

In this presentation, we provide three examples of current and previous work in the broader area of sustainability to showcase how studies in the wild provided the means to contextualise specific societal challenges and implications for design. In the first, we present a study that looked into the practices and concerns of biodiversity experts and informed the design of a bio-acoustic smartphone application to assist the surveying of a rare insect in the UK (Moran et al., 2014; Pantidi et al., 2014). The second case study presents an ethnographic study of an alternative local currency community in Greece that revealed societal and infrastructural issues that need to be considered in the design of technologies (Pantidi and Ferreira, 2014).

The third one discusses issues of control and trust relating to energy providers and agent-based systems that were revealed through a long-term deployment of home energy monitoring devices.

As technologies become more and more embedded in every aspect of our lives, considering how to best design such technologies is vital. The interdisciplinary area of Human Computer Interaction engages with research that seeks to inform or evaluate the design of ubiquitous technologies and, as part of this, emphasis is placed on user-centered design.

One way of doing so is by conducting real-world user studies – also known as studies in the wild (Rogers, 2012). These are qualitative user studies that take place in real world settings and consider technologies within the context of their use; that is how people use and appropriate technologies as part of their daily practices, how people interact with technologies and each other in their everyday lives.

/ Lisa Mercer /

Riding Shotgun: Supporting Truck Drivers with a Method of Anonymously Reporting Incidents of Child Trafficking

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In 2013 the National Human Trafficking Resource Center hotline received around 32,000 reports, of which only 300 were from trucker drivers, 28 from airline or airport personnel and zero from ferries. There are currently four ways to report incidents, phone call, text, online form or an email. This fact prompted me to ask, would some form of technologically based communication enable the general population to report incidents at a higher rate?

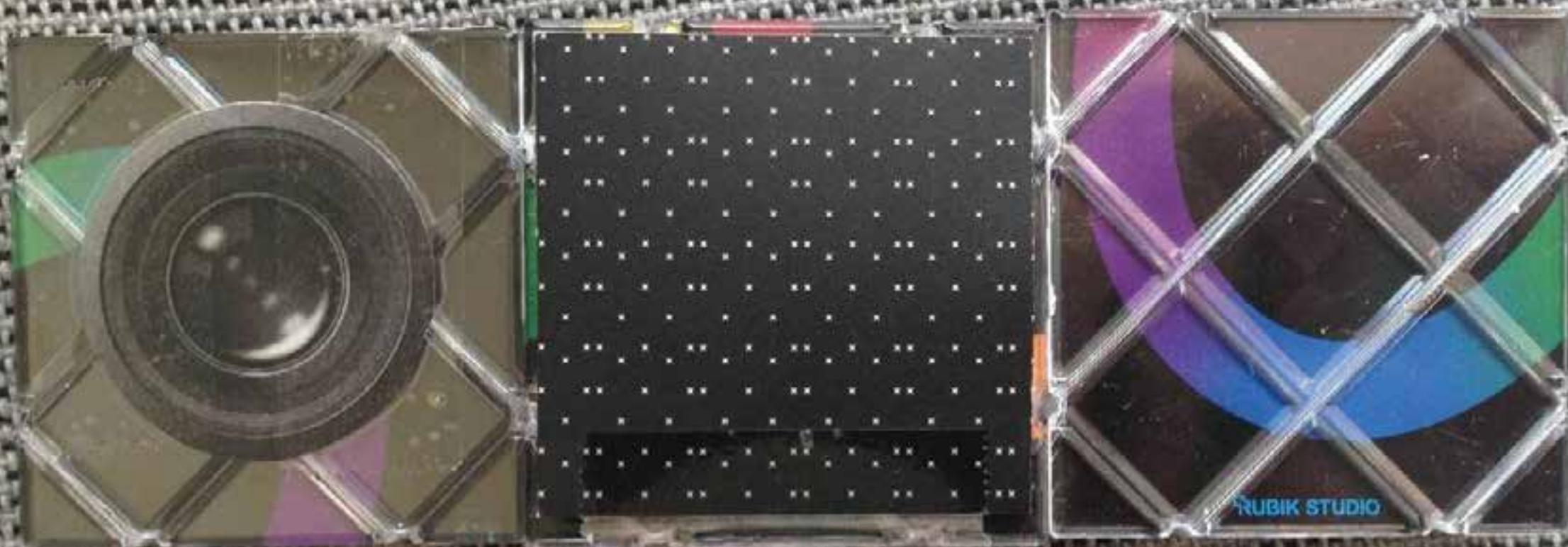
My contextual research, was focused on truck drivers in the United States and was based on prior qualitative study, sought to: 1) analysing how truck drivers engage in everyday activities while they are on the road working and 2) understand how extant or emerging technology could encourage higher levels of trafficking reports.

My investigation was broadly framed by activity theory and participatory action research. To gain a better understanding of how truck drivers operate while on the road and how technology would naturally integrate into their activities, I observed at a truck driver training school, I observed patrons behaviours at truck stops and conducted one-on-one interviews.



Common venues for victims of human trafficking to be smuggled are through ports, airlines and ferries. One of the leading non-profit organisations in the fight against human trafficking — reports truck stops in the United States as a common venue for sex trafficking victims due to their remote locations and lax security.

Many victims are often transported from one location to another with stays lasting 2-3 weeks at each stop. This constant movement makes it near impossible to find traffickers or for their victims to become familiar with their surroundings. Given this reality professional truck drivers, ferry captains (especially those who run from one country to another) and flight crews (international and domestic) are in a unique position to provide information to help victims of human trafficking.



RUBIK STUDIO

/ Industry & Process /

Session Chair : Sean McNulty



Creativity would seem to be the single most important competency of design practitioners. The literature would suggest that creativity is considered for generating positive outcomes for design practices and clients. This paper investigates how creativity can be defined within the paradigm of design practice and practitioners and draws upon references in international literature in order to establish themes and concepts.

Themes are investigated to identify potential problems with creativity. These include, but are not limited to: practices undertaken by the individual designer; attitude responses from the individual designer; how creativity is perceived within the client community; perceptions about creativity within popular culture; and myths associated with creativity.

/ Con Kennedy /

The Problem with Creativity

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This research is undertaken as part of my doctoral studies in business modelling for start up design practices in the visual communications sector.

Creativity would seem to be the core competency of a design practitioner and similarly with defining the discipline, creativity requires a wide and varied skill-set. The literature would indicate that creativity is the conscious and unconscious linking of information, knowledge and experiences in which ideas are generated through a cognitive methodologies, involving critical thinking, iteration, prototyping and testing, which results in a number of potential design solutions being produced.

In popular culture, there are a number of inhibiting myths surrounding design and creativity, the literature suggests that the design industry will need to work harder in order to dispel negative connotations associated with design and creativity. Research has shown that design, and creativity simply do not happen by accident, there is a deliberate cognitive process associated with design and this process is generally internalized by design practitioners.

The design process is complicated, requiring a staged structure, with staged deliverable outcomes that are assessed, and iterated until a satisfactory final design solution is arrived at.

/ Linda Shore / PJ White /

Lifelogging in Design Research for Older People

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Permission was granted from the participants to use image and recording devices as part of the ethical considerations prior to fieldwork study.

Life-logging is a method that records daily activity using a camera or some other device. The primary tool for image capture during this fieldwork was an 'Autographer' camera. As secondary support tools and devices an iPad and iPhone were used in conjunction with note and sketch detailing. The Autographer supported the researcher by passively capturing images of activity that enhanced detail and recorded each session as a means to define unmet product or service needs experienced by the Older Adult participants.

The Autographer assisted the researcher greatly by providing an image narrative (an ability to capture up to 360 images per hour) that added depth and further insight during transcription of each session. The design outcome and conceptualisation of product was assisted greatly by the detailed insight to User Behaviour being comprehensively captured unobtrusively.



As a result of decline in sensory function, mobility, balance and memory, ageing can have an impact on our ability to remain independent. By the year 2050, the Global Older Adult population is expected to exceed two billion, equivalent to 22% of total population. This presents an opportunity for designers to understand and define unmet needs experienced by Older Adults in day to day life when using products and services.

Recent Design research involved fieldwork using ethnographic methods of observation and enquiry with eighteen Older Adult participants. The fieldwork was conducted over a nine month period to enquire into eight specific areas of day to day life. It involved sixteen Life-logging sessions followed by a further eight Task Observation sessions.



While it is well established that products that are pleasurable to use have a positive impact on the level of user engagement, less attention has been paid to creating pleasurable research methods which enhance the engagement of participants and practitioners.

This paper discusses some of the research methods employed over two design research studies; a 3 year investigation into the motivational framework behind domestic energy consuming behaviours and a 6 week school furniture trial in an Irish primary school. It outlines the efforts made to keep the research process enjoyable for participants, and the positive impact this had on the depth of findings and on participant engagement over the term of the research.

/ Marcus Hanratty / Caoimhe McMahon /

Where's the Fun in Design Research? Unlocking Meaning Using Pleasurable Research Methods

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Several key considerations are presented which have been shown to facilitate the unlocking of tacit and latent participant knowledge and emotion, but which have also made the research process fun for those involved! These methods have been instrumental in gaining rich insight into the complex, constrained, and emotional lives of the participants, but as importantly, they ensured that all participants stayed involved with the research for its entire duration.

Presented as a personal reflection on the research methods and outputs of substantial case study, the paper questions the wider direction of design research and asks if, in some cases, we might be better to reflect on our personal strengths and design our research around them.

/ Peter Robbins /

Devitt, F / King, M / Mallon, G /

Design Thinking Collaborative Case Study in Cultural Tourism

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This paper describes a case study of one such innovation initiative: a collaborative innovation experiment that brought together over 30 of Ireland's national cultural institutions (including the National Gallery, National Library, National Museum) and commercial bodies to use a design thinking process to develop Merrion Square as a new, more integrated cultural tourism destination.

Merrion Square is a 'cluster' or geographic concentration of cultural organisations that, in this case, cooperated, for the first time in their history, to create and deliver new and market-focused cultural experiences for visitors. The group drew on ethnographic research; involved customers, tour operators, historians, local community activists and artists, and used them to develop a portfolio of novel ideas for individual and joint implementation.

As a result of this initiative, Merrion Square has played host to a number of new and vibrant tourist activities. 85% of the institutions involved report increased visitor numbers as a consequence of the project – with some specific events reporting an attendance rate of over 42% on the prior year. This paper makes a valuable contribution by outlining the role of design-thinking in collaborative, multi-sectoral tourism service design and by spotlighting the role of trends research.



The tourism sector in Ireland is growing fast and delivers significant economic benefits. Over 7 million tourists visited Ireland in 2014, an increase of 8% on the previous year. Tourism accounts for 4% of national GDP and 6% of all employment in Ireland. In attempting to promote tourism, the national tourism board has had to reinvent its role, since the recession, from one, primarily, of funder for infrastructural development to one of innovation engine for new ideas and experiences.



In recent years a departure from digital platforms in many forms of creative expression has led to a surge in craft based practitioners and practices. With ever increasing ability visual communicators, typographers, illustrators and artists are to be seen returning to analogue means in executing their designs.

Letterpress technology was the means by which most printed matter was achieved for over half a millennium. The technology changed little from when Gutenberg solved the problem of movable type in the middle of the fifteenth century to its ultimate commercial demise towards the later half of the twentieth century.

/ Jamie Murphy /

Dab Hands and Space Cadets: The Resurgence of Letterpress Design in Ireland

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The processes employed were painstakingly slow and required very specialised skills; type design and founding, relief image making, typesetting and composition, ink production, paper making and finally printing, binding and finishing. The time and effort required for the complete engagement of the craftspeople employed in the process was its ultimate downfall.

Many designers today are trained in a host of these skills through digital mediums quite removed from the tactile experience of their predecessors practicing as recent as a generation ago. It is my belief that something has been lost in this removal – core terminology, historic awareness, technical ability. A dependency on the computer has developed over the ability to trust one's own hands.

As with the explosion of vinyl in the music industry, appreciators of design are ever more frequently drawn by tactile work which has been produced by hand, by makers who have slowed down to produce something special and considered in every aspect. It is still true that the object crafted by hand holds more appeal than those mass produced by machine.

In this paper I will draw on approaches and work examples from several established practitioners and presses as well as the growing number of up-and-coming studios at the forefront of their craft in painting a contemporary view of the letterpress landscape in Ireland. I will show that we have a solid base from which to draw inspiration and that with a little nurturing, the future is very bright indeed for Irish letterpress design.





Based in Kilkenny, Tomm's company Cartoon Saloon has catapulted the Irish animated industry to global recognition. The company's first two feature films, *The Secret of Kells* (2009) and *Song of the Sea* (2014), were both nominated for the Academy Award for Best Animated Feature.

/ Director, Co-founder, Filmmaker and Illustrator at Cartoon Saloon /

Over the company's history, he has worked as Director, Art Director, Storyboarder, Animator and Illustrator on a range of projects from commercials to service work for feature films and TV series, as well as a number of short film projects.

From award-winning short films such as *From Darkness*, *Cúilín Dualach/Backwards Boy*, *Old Fangs*, *The Ledge End Of Phil*, and *Somewhere Down the Line*, to TV series like *Skunk FU!* and now *Puffin Rock* (launched on RTEjr in Jan 2015 and to be broadcast worldwide later this year), Cartoon Saloon has carved a special place in the international animation industry.

**/ Tomm
Moore /**

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