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Embodying, enacting and entangling design:

A PHENOMENOLOGICAL VIEW TO CO-DESIGNING SERVICES

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ABSTRACT

What is holding back service design from making a distinct departure from a product-centred to a socio-material human-centred framework? We have a concern for co-designing that is often discussed as a generic method to develop empathetic connections and understandings of people and their contexts. In this use, mastering the craft of co-designing had inadvertently isolated the method from the practitioner, fragmenting its process as a series of static events or a tool for deployment in staged workshops. Contributing to current debates on co-designing and design anthropology, our paper seeks to re-entangle co-designing back into its lived and enacted contexts. We see co-designing as a reflexive, embodied process of discovery and actualisation, and it is an integral, on-going activity of designing services. Co-designing can catalyse a transformative process in revealing and unlocking tacit knowledge, moving people along on a journey to 'make real' what proposed services might be like in the future. Co-designing plays a critical role especially when it involves the very people who are enmeshed in the realisation of the proposed services itself. As such, our case study of a weekend Ordnance Survey *Geovation* camp pays closer attention to how this took place and discusses the transformative process that was central to it. By taking a phenomenological perspective and building on a seminal anthropologists' work, Tim Ingold, our paper counters the limitations in service design that tends to see its process as a contained series of fixed interactions or systemized process of methods. Through Ingold, we see 'the social world as a tangle of threads or life-paths, ever ravelling here and unravelling there, within which the task for any being is to improvise a way through, and to keep on-going. Lives are bound up in the tangle.' Similarly, we view co-designing as *being* and *becoming*, that is constantly transforming and connecting multiple entanglements.

INTRODUCTION

Public services in Western economies are being fundamentally re-shaped and re-formed by acknowledging that people who use such services have hidden, latent resources. Government-driven, one-size-fits-all approaches to service delivery to fix social 'wicked problems' are inadequate due to the diverse character and needs of communities. It is increasingly recognised that various stakeholders need to collectively draw on their local, situated knowledge (Parker & Parker 2007). The open source paradigm uses distributed network and collaborative modes of delivery through participation to devise effective solutions (Sangiorgi 2011). Going well beyond the idea of 'citizen engagement' or 'service user involvement', service providers are pooling the capacities and knowledge of service users and the wider community in order to provide a mutually supportive network of people around the service (Boyle & Harris 2009). In this dynamic relationship, service provision becomes an on-going combination of resources through its integration and application where people become an active participant of the value creation process (Wieland et al 2012).

In this context, co-designing is commonly seen as an effective method for engaging people in a collaborative process. Examining co-designing in design discourse revealed several key definitions. According to Mattlemäki & Visser's (2011) extensive literature review that compared how co-design and co-creation are used, their findings suggests that both terms are often used interchangeably, describing a range of creative methods to involve various stakeholders' input. They summarise four findings of co-design:

- it describes general involvement of designers and users when exploring, envisioning and developing solutions
- it brings a political and power-dimensional aspect of empowerment, giving voice and tools to those who are not usually involved in a design process (e.g. participatory design)
- it describes engagement of potential users and stakeholder collaboration
- it is a general process or tool for collaborative engagement

Seminal contribution by Liz Sanders emphasised harnessing people's creativity, broadening the focus from just 'users' alone and the functionality it implies with the term 'use', towards seeing *both users and designers* as 'everyday people', bringing an empathetic orientation to respect peoples ideas, desires and dreams (Sanders 2000, 2002; Sanders & Stappers 2008). Others have acknowledged that co-designing is a complex staged series of events and performances enacted both by people and materials, networked in a Latourian sense (Eriksen 2012; Vaajakallio 2012), catalysed by the shifts from *designing* for to *co-designing with* people.

When co-designing enters service design, it magnifies unique features such as intangibility, experience, temporality and more commonly, co-production. Yet the discourse in service design is still dominated by an object-oriented thinking, reflected in how methods and services are

conceived. This is not surprising, given the legacy of 'goods-dominant logic' in services that emphasises goods (objects) as central to the production and distribution of value. Wieland and colleagues (2012) argue that this prevalent paradigm for services embeds value during the production process. The 'customer' is seen as a 'consumer' of such value, and services are viewed as add-ons to goods or special types of treatment, but seen as inferior to goods. Designers that traditionally made 'things' might also view services in a 'goods-dominant logic'. Buchanan's (1998) four orders of design describes its historical transition from designing physical objects in the second order to designing systems and environments in the fourth order. Progression of those trained in the first (graphic) and second order (product) of design has initially contributed to the field of service design. The consequence is such that the object-centred legacy still holds firm, and with it, its tools and offerings – touch-points, digital artefacts, blueprint, service concept map – rather than the active power of the process of co-designing.

Reflecting on these various discourses and evolution of co-designing we pursue a phenomenological approach to further nuance it as a continuous growth, movement and transformation of people, relationships and understandings. Phenomenologists' see knowledge as active, created in the 'living' moment and affective, bodily encounters in our world. Through this lens, the paper draws centrally from the work of the anthropologist, Tim Ingold, to inject his concepts into the service design discourse to lift us, literally and metaphorically, into a richer mode of perceiving. Ingold is a seminal scholar who seeks a critical yet generous understanding of human beings and knowing in the world as continuous phenomena, rather than perceiving them as disconnected particulars that have to be joined up to be rendered coherent (2007). Metaphors such as 'lines' and 'walking' thus feature strongly through Ingold's writing to describe continuum, movement, trajectory and most importantly, embodiment, to entangle histories and relations to place and people. In building on his work, it can help us re-situate services as an organic, co-created process and see co-designing as a journey and process of transformation in how we design our world, and ourselves, with others.

In order to 'bring to life' how co-designing a service manifested we share vignettes of a case study drawn from workshops that involved postgraduate service design students and team members undertaking the *Geovation Challenge* as part of the Ordnance Survey (OS) open innovation strategy. This initiative generated various Geomedia services for potential social, environmental and economic benefits. Through observation and reflection on the workshops, we discuss three movements of co-designing to situate it within a phenomenological framework, as opposed to a series of methodological steps. First, we see the process of co-designing as a way that reveals tacit knowledge, experienced and ingrained in the everyday of the Geovation team members. Ingold's view is central to our discussion, that the ways of knowing come from inhabiting the world; 'knowing is itself a path of movement through the world … along a line of travel' (2007, p. 89). The co-designing process can unlock tacit knowing that is embedded in our lived experiences. Secondly, we look at co-designing through sketching and drawing, giving shape and rhythm to the flows that moves the process along. Each progressive sketch – capturing, synthesising, distilling, combining, imagining, revealing – is a movement that loops past and current understandings, and propels us forward to somewhere further we could go. The engagement through drawing and making, acts not only as 'mnemonic devices but also as materials that are making social relations possible' (Nafus and Anderson 2010, p.202). And lastly, we discuss how co-designing 'brings to life' the prototyped services, which can only come to being through flows and movement of other things and people. Yet, it is not just the services that are undergoing transformation - it is also continually occurring to those who are part of its very process. 'The inhabitant is rather one who participates from within the very process of the world's continual coming into being and who, in laying a trail of life, contributes to its weave and texture' (Ingold 2007, p. 81).

We firmly situate design as a continuous process and activity, and so in this paper, we use the term *designing* as a verb (hence, *co-designing*). To say we engage *in design* (a noun) loses such distinction between process and outcome, and likewise, we apply this same logic to using *designing services* and use *service design* to denote the name of the field. This helps us reinforce the notion that services are not an end outcome or a resultant of a series of fixed interactions. Instead, it is an on-going process of transformation, which grows and evolves, very much like a living organism. Aside this fundamental point masked as a grammatical note, we have noticed other forces at work that attempts to formalise and systematise the process of designing. The next section examines this more closely.

THE PROBLEM WITH METHODS IN SERVICE DESIGN

We have observed a persistent trend in service design where methods alone have become king, as a way to legitimise the

field and a practical way to 'be a service designer'. Attempts to clarify, structure and advocate the benefit of service design has led to a sweeping phenomenon of 'glossing over' the contextual knowledge grounded in action and the messy realities of practice (Akama 2009). Service design suffers from the same issue beset to most description of design methods as something that can be separated from the practicing designer, exported and become 'commodified' for repeatability (see Akama & Light's 2012 provocation at *AltCHI* conference).

However, we put this critique carefully so as not to throw the baby out with the bathwater. As a young, nascent field, service design needed a step-by-step, 'how to' guide. Such introductory experiences through service design *Jams* or downloadable toolkits play a vital role for those who are entering this field. We, as educators in service design, have immensely benefited from artefacts like IDEO cards and Stickdorn and Schneider's (2010) book on service design in teaching students the basics ropes. Such products' accessibility has great value on many levels, including its seductive materiality (as objects) and simplicity in instruction. Other books are highly effective as training manuals that come with a promise of mastery in methods. Though, our concern is that mastery in methods does not necessarily equate to proficiency in designing services, or indeed, practicing as a human-centred designer. We need to revisit the emphasis that promotes methods as if it can be as easily replicable and readily portable into any manner of contexts. Methods and techniques cannot be reduced down to a formula. Skilled practice 'is not just the application of mechanical force to the exterior of objects, but entails qualities of care, judgment, dexterity … whatever practitioners do to things is grounded in an attentive, perceptual involvement with them … they watch and feel as they work' (Ingold, 2000, p. 353). Similarly, we argue that designers progress from a novice to an expert through their embeddedness in the context and their fusion with their enacted tools or methods.

When co-designing is framed as a generic methodological umbrella for involving others in designing services, it can carry with it the same emphasis of detachment and replicability. We argue that the *craft of designing services* isn't about better mastery of methods or use of 'tools', but brought by a gradual attunement of action and perception through an 'active engagement with the constituents of his or her surroundings' (Ingold 2000, p. 5). In describing attunement, Light and Akama's (2012) paper traced the growth of empathy and understanding through personal encounters they had with a community at risk from natural disasters. 'Attuning … cemented more nebulous understandings of people and how to approach them … Saturation in the issues helped the designers feel their way and focus, and thus to become an embodied conduit to share their learning' (p 66).

Co-designing makes a different organisational and socio-material practice (Eriksen 2012, p. 24), shifting away from the focus on methods and pre-designed proposals to an awareness of 'participating materials and formatting co-designing in the situation and network where people and materials meet, align and make each other act'. The addition of those two little letters 'co' in co-designing (ibid) is a philosophical and epistemological shift, signalling an openness to embrace the influence, interventions, disruptions, tensions and uncertainties brought to bear by other things and people. It requires the designer to step into the 'in-between' space that is dynamic, emergent and relational. It necessitates the designer to entangle itself into this space whilst being 'crafted' by it, as well as 'crafting' it.

Service design has reached a watershed that requires its seasoned designers to mature the depth and quality of this field. Contrary to common belief that a maturity of the field is in having a 'systematised' repertoire of distinctive methods, we argue that the sign of proficiency is to grapple with the complexity and messiness in projects, and avoid sanitising it to 'fit' method-centric accounts. The challenge and responsibility for design researchers must surely be to go down the harder road and to tell the 'swampy' (Schön 1983) stories of what is really involved when designing services. And this story includes the improvisations that are necessary to 'fit' encountered situations (Williams & Irani 2010) and the embodied experience of the practicing designer that determines the actions that are taken in situ (Goodman et al 2010). An appropriate object of analysis for design research is the designer *using the method* (Light 2010) –methods and techniques require embodiment. There is no method until it is invoked. The designer's knowledge changes, and so the subsequent method they perform and enact, as they engage, observe and 'make' things with others (Light & Akama 2012). If designing is a process of transforming materials or generating a new value-creation process (Vargo and Lusch 2008), we must also remember that such transformation firstly occurs within ourselves. The practitioner must never 'scrub' themselves out from these accounts.

BACKGROUND TO THE CASE STUDY

The following section gives the general outline of the

Ordnance Survey's[1] (OS) *Geovation Challenge*. This is a learning context for the students in the Master of Design in Service Design Innovation, London College of Communication, University of the Arts London. Launched in 2009 as part of OS's open innovation strategy, the *Geovation Challenge* is a crowd sourced innovation initiative that aims to support entrepreneurs and developers realise their cartographic and geographic data ideas through running themed challenges. In the past, topics such as *'How Can we Improve Britain's Transport' 2011* and *'How Can we Transform Britain's Neighbourhoods Together' 2012* had taken place. The challenge encourages the application of geomedia to deliver social, environmental and economic benefits. The submitted entries are shortlisted with the best ideas receiving seed funding to develop them further. The paper has woven specific vignettes from this initiative to illuminate the 'micro-moments of interaction' (Light 2010) that took place during the co-designing engagements. As such, the case study may seem small and short, but they are in fact a part of a longer, on-going process.

For the past three years, a group of ten students have been invited to take part in a weekend-long innovation camp. Several years of groundwork preparation by the staff responsible ensures that there is mutual focus and direction on social innovation. The synergies between *Geovation Challenge* and the MDes programme has been established through on-going dialogues and professional relationships between the stakeholders to create a shared set of human-centred values that sees the potential of service design and geomedia[2] as a driver of change. Both Geovation and the MDes course in service design is about lived experiences – food, waste, health, transportation, aging and the contradictions that arise through the need for a growing economy, sustainability and quality of life. These are topics that are integral to the MDes programme and it attracts students who resonate strongly with these issues. The pedagogic role of taking part in the innovation camp is an accelerated form of practicing their ethnographic skills and learning-through-experiencing the rich and dynamic complexity of co-designing with others.

Students are encouraged to explore and support the realisation of the shortlisted ideas through co-designing in teams. Usually, there are 17–20 teams consisting of local government, non-profit organisations and IT companies, who are competing against each other to win the seed fund. Before participating in the innovation camp, students review the shortlisted ideas in class. First impressions in terms of their service strengths and weaknesses are discussed. At this stage, it is difficult to determine the service offer and the potential of the proposed solution without more information. Upon arriving at the OS Head Office, ice-breaking activities are undertaken where all the Geovation team members and students take part. It is an informal gathering though the mood in the room has the tension of a competition as the teams mingle, some being more open and approachable than others. The story continues in the next section.

CO-DESIGNING TO UNLOCK TACIT KNOWLEDGE

Each room, white and plain, is occupied by a couple of teams who are seated around tables talking amongst themselves; the atmosphere is focused and intense. The ten students divide and join the various groups to observe and absorb the discussions. The first introductions are most intimidating. The teams are incurious to the role and support the students are offering. For many of the teams this is the first time they have encountered designers and are unsure of what their purposes are in this phase. The existing groups reluctantly break-off their discussions to provide a brief description of the problem they have identified and their solution. These descriptions frequently lack clarity and it is difficult to determine how the proposed geomedia service will be taken-up and sustained. Initially, the Geovation teams take notes and make lists with each other but there is no shared social experience. Students ask questions on the origin of the idea, the catalyst and the scale of the problem. Slowly, the team share their stories on how they came up with their concept through their daily lives and experiences; for example, a person tells the story of suffering verbal abuse as a result of her disability. Some of these stories are deeply personal. As these experiences are being shared, students listen and start sketching, visualising these experiences and the narrative. These open up further conversation on how their solution has the potential to transform a neighbourhood or a community. With each sketch the story moves forward. By the afternoon the previously clean and blank rooms are transformed into spaces full of

1. Ordnance Survey is a Government owned mapping agency in the UK. Its origins were in the 18th Century to comprehensively map the South Coast of England as part of the Government's defence strategy to hold off an invasion. Famed for its paper-based maps throughout the 20th Century, it's contemporary form is digital mapping data that accounts for around 90% of its business. It provides both the public and private sector with reliable geographic data to support decision making and assist in the delivery of effective services such as transport logistics, the police and insurance companies. http://www.ordnancesurvey.co.uk/oswebsite/

2. Geomedia refers to location specific software, databases whose essential purpose is to index information on a particular location.

working sketches, maps and prototypes, interweaving and embellishing the stories…

We see here that co-designing is already taking place among the *Geovation* team members, prior to the students taking part. This co-designing corresponds to the description by Mattlemäki & Visser (2011, p. 2) that is aimed at 'searching new potential directions and producing design ideas and solutions', to make sense of the topic at the early phases of exploring. The teams have come to the camp with their proposed idea, and they are engrossed in discussion to work on it further without knowing what the students' contribution will be. However, through the students' active engagement, dialogue, listening and sketching, another dimension of co-designing becomes more apparent. The combination of these activities connected the students and the team, enabling a flow of stories that became richer, bridging the experiences between them. For the team members, communication that was lost in rapid dialogue had transformed when the students began drawing. Mapping was useful in taking rudimentary, disconnected ideas to reveal the interplay of locally situated practices and the complexity of place (Fig. 1). One team member expressed how the visualisations were more than a representation of the team's proposed service, and its true power lay in the fact that visual skills ignited dialogues that were not in place before (Albagli 2012). One student commented how 'it elucidates and tests mental models in ways [that is] outside the competency of words, changing our way of imagining' (ibid, p. 35). Engaging in such activities dissipated uncertainties of 'how they would collaborate to evolve their ideas' and whether they would be 'willing to embrace the risks of dismantling and re-arranging their original thoughts or maybe redefining them from scratch' (ibid, p. 31).

Co-designing here can be seen as a process of drawing people together and making connections in-between. Social relations are being created '…in the process of people moving between text, visual, material and orality' (Nafus and Anderson 2010, p. 202). In the space of this in-betweeness, co-designing is neither the ownership of one person's nor another's. Visualisation joins ownerships of ideas amongst the different team members thus strengthening the collaborative workings.

Putting a line down on a piece of paper is a co-created act that breaks down barriers and opens up an engagement in a shared space with others. At its most essential, drawing describes 'a line alert to the changes of the rhythm and feelings of surfaces, spaces and people' (Goldsworthy 1994, p. 82). The act of drawing is an alchemical process where lines and surfaces join people together in imagination and communication. This process is not only to cement what is collectively known, but also to generate understanding that is tacitly felt or articulated about a certain thing or experience.

In describing tacit knowledge, Polanyi explains, 'owing to the ultimately tacit character of all our knowledge, we remain ever unable to say all that we know, so also, in view of the tacit character of meaning, we can never quite know what is implied in what we say' (1962, p. 95). It is as intuitive as guesses, hunches and imaginings of a pre-logical phase of knowing, where the meaning might not become clear until it is born into the world. Conversations, as seen between the team members and students here, are in-between spaces where meanings and understandings can be generated together on the particular Geomedia services that are being imagined.

Catalysed by the students' sketches, co-designing emphasises people's sensory and perceptual consciousness and is based on taking-in and working with what is, rather than manipulating an environment or situation to some predetermined outcome. Co-designing can be described as a mode of awareness that is receptive and open to events as they happen, apprehending an engagement directly. It unlocks tacit knowledge that can be holistic, non-verbal, non-linear and intuitive. Co-designing is an interconnected process, moving freely among person to person, deepening each person's awareness and understanding as it unfolds.

Fig. 1 Images from Geovation Challenge (Albagli 2012)

CO-DESIGNING A JOURNEY – CARRYING PEOPLE FROM PAST, CURRENT TO FUTURE

The students are encouraged to listen, to observe and to draw. Through drawing, they interpret and translate the conversation, and by showing this to the Geovation team, a mutual understanding emerges and the students begin to understand the potential service narrative. With each sketch the story moves forward. The visualisation of the story changes the dynamic of the teams. Problems that were previously unseen are recognised, discussions ensue, stories are revisited and slowly the services unfold. Solutions that were originally seen simplistically as a technological offering grow to show their complexity of humanness. In parallel, the teams' perception of the students also shifts from initially being viewed as an interloper, someone to use at the end of the weekend to make the final presentations attractive, to a critical contributor to moving the project forward, giving form and making the ideas and solutions real.

The team members bring embodied, tacit knowledge and immersive experiences gained through their daily jobs, for example, as volunteers, public sector employees and campaigners in non-profit organisations. Some of these stories and experiences are deeply personal, emotional and confronting. Despite not having first-hand experiences of such contexts, the mature-age students also bring their past and current life experiences, through family ties and

relationships, previous working environments and the rapid developments occurring within their home countries. They bring their motivation for societal challenges and the environment, and the potential of designing services to act as a driver of change. All of this knowledge, memories and encounters are brought to bear, and crucially, it retains that connection to the past.

Ingold's (2007) poetic metaphor of 'line-making' is useful here, where he encompasses many human activities, such as walking, observing, storytelling, drawing and writing. All these have commonalities of threads, traces, temporality and trajectories – a process of generating tacit understandings of our surroundings 'forged in the very course of our moving through them' (p. 88). This also usefully describes the process of drawing, as seen in the exchanges between the students and team members. These sketches enable a confirmation of the unfolding, unvoiced knowing or other tangential understandings to develop. This is not a linear process but one that grows from each action and encounter. Together, they knit the entanglements of lines from their collective experiences to something that is becoming – manifesting – in front of them.

Ingold's work on mapping is apposite to the co-designing of geomedia services, where the 'everyday knowing' and opening-up of stories so locally bound, is critical to designing services. Ingold explains the importance of knowing one's whereabouts, not by comprehending an independent system of co-ordinates, but by knowing its place through its history. 'Places exist not in space but as nodes in a matrix of movement' (2011, p. 219). Knowledge of a place is thus embedded in locally situated practices. In contrast, lines that are made up of dots have no movement (see Fig. 2). The danger of viewing co-designing as an assemblage of stages is to break up the fluid movement into disparate

Figure 2: A scatter of dots joined up – drawn by Tim Ingold (2007, p. 74).

fixed points. These dots are reduced representations of time, places and people. Criticism for designers who 'parachute' into projects suffer the same disadvantages here, like the dots that are 'broken off from those preceding and following … they do not grow or develop' (Ingold 2010, p. 74), disabling them from establishing an integrated knowing and relationship with the project context. Similarly, co-designing needs to be firmly rooted in its location, time and people and 'grows out' organically from rich engagements and deep interactions over time.

Here, the generated service prototypes in the *Geovation* camp, based on imagined scenarios, assists the movement from the now to the future. Prototypes are central to practices of participatory design (Sundström et al 2011), prompting engagement with users and imagining possible future use (Brandt and Grunnet 2000). Its central purpose is creating an imagined future outcome of a design process (Gunn & Donovan 2012). Through co-designing and unfolding of the service, proposed solutions shift from being seen as an isolated technological touch-point to something that can be enmeshed in the flows of everyday lives. Co-designing moves people along on a journey of discovery and actualisation. Even though their reality is rooted in the here and now, it asks people to play with the edges of this reality to imagine what it could or should be.

CO-DESIGNING TO 'BRING TO LIFE'

The room falls silent when prototyping takes place. It's another level of activity that absorbs everyone in concentration. They are all engrossed in cutting, sticking and making things such as large mobile phone mock-ups and stop-frame animations for the proposal by members of the Probationary service – 'Community Payback Visibility'. These act as stage props in bringing the imagined services to life. This service is based on using the mobile phone to photo any graffiti and fly-tipping on the street. A map is created to report the clean-up by offenders to the public. People act out sequences of what could happen, using the props, leading them to role-play different scenarios. Different perspectives unfold through the scenarios – from the victims of crime, local neighbourhoods, probationary services and supporting sectors. Potential controversies and reactions by the local and national media also thread into the discussions. They imagine how the clean-up effort by the offenders ties in with the service. There is pleasure and surprise expressed at the realisation that these ideas have a life, a potential for change.

The culmination of drawing and sketching combines multiple threads, carving a shared path that leads to another form of co-designing that of prototyping services. Prototypes, scenarios and touch-points grow out from such stories and drawings. Though the prototypes are crudely shaped from pieces of paper, cardboard and sticky-tape (see Fig. 1), it transforms and materialises the idea, making the invisible visible, turning the fiction into something tangible. They invite people to make it genuine. According to Erkisen (2012, p.234) there is a 'special kind of collaborative materializing' taking place when co-designing in groups 'where the dialogue with the material is often intense and can be surprising'. This materialisation is giving 'form to ideas, details, proposals, issues and questions' (ibid). Materialisation and making of the material is 'talking back' (Schön 1986) to the team and the situation.

Eriksen's observations resonate with what we are seeing in the *Geovation* workshop. Through role-play, imagined scenarios of acceptance, rejection, bewilderment and entanglement with broader political, social and technological debates are enacted and experienced by the students and team members. Improvisation is a way of dealing with life as it unfolds and our paths blend with it (Ingold 2010). In the act of improvising a service using prototypes, it uses our own experiences to inform our enactment of it. It is impossible to disconnect our lived paths. It echoes our personal experiences, the impromptu moments that can make services so unpredictable and uncontained. These co-designing moments bring the future service 'to life' and, at the same time, connect it back to our own lived realities. They could be conceived of as 'knots' – convoluted lines that link other lines – bringing together different strands of experiences and perspective, together weaving a meshwork of lines (Fig. 3). These knots are 'formed of the very lines along which life is lived … they trail beyond it' (Ingold 2007, p. 100). In this way, services are woven into the meshwork – the web of life and living.

However, it is not just the services that are 'brought to life' through co-designing – transformation is also continually occurring to those who are part its very process. 'The inhabitant is … one who participants from within the very process of the world's continual coming into being and who, in laying a trail of life, contributes to its weave and texture' (Ingold 2007, p. 81). Team members and students are enriched through co-designing, having absorbed like osmosis, each other's knowledge and lived experiences. It is a human-centred connection and a shared experience of co-creation. Co-designing have materialised various number of tangible, on-going connections. For the Geovation team members, what was previously a dry, technological solution

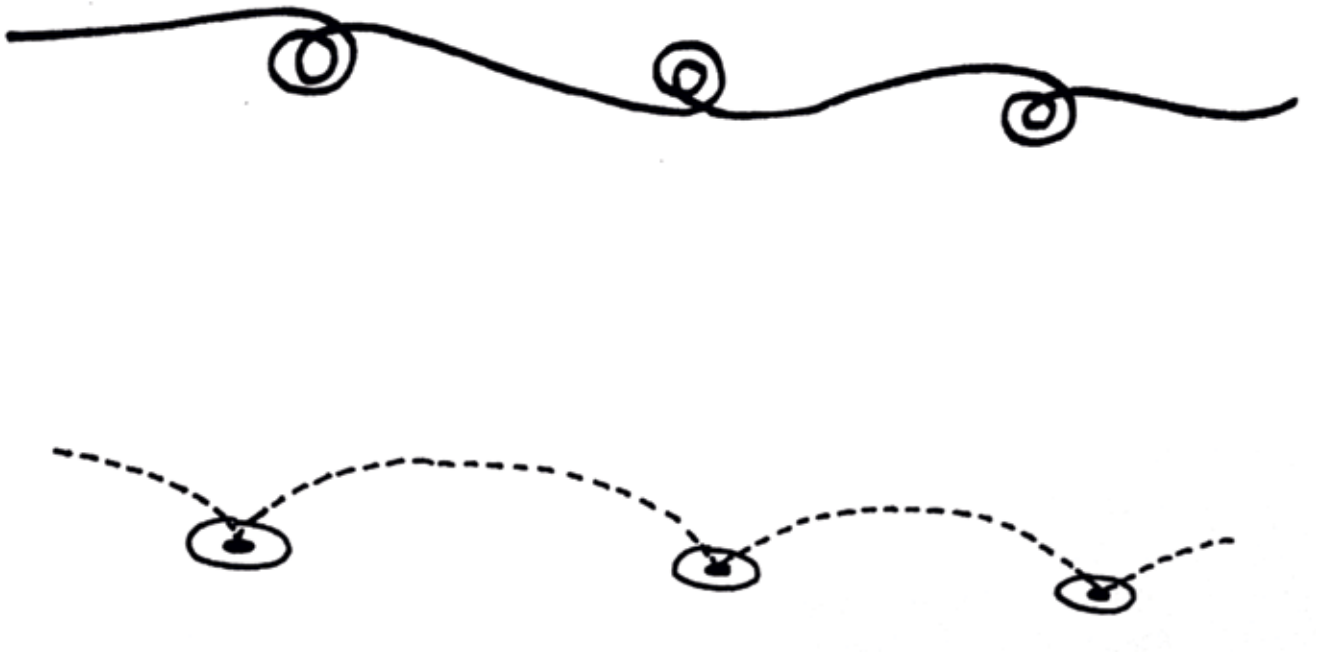

Figure 3: The knot, drawn below, is in contrast to the dot that 'hops' from one to the next. Drawn by Tim Ingold (2007, p. 101)

had transformed into something real with meaning and connection to their lives. By the final presentations the team members often become emotionally heightened with a sense of collective gratitude to the students' efforts of bringing their service ideas to life. Relationships that are initiated between the team members and students have often continued. Students have been given internships opportunities or invited to provide design support for the next round of the Geovation service development.

Participating in what Ingold says as the 'continual coming into being' and 'contributing to the worlds' weave and texture', is a process of transformation and evolution. We are designed by our own designing (Willis 2006). It is a circular movement that, in fact, we can never really step outside of this 'dance' of designing. And such processes of design leave traces. These traces are physical, ephemeral and conceptual things we discard to move forward, like lines on a paper, a thought expressed vocally, or writings on a post-it note. These traces are also internal – feelings, experiences and thoughts that we embody and absorb as we design, which in turn, loop outwards into the world. Ingold likens this to a spider's web, spun from the materials exuded from the spider's body and are laid down as it moves and weaves its home. 'They are lines along which it lives, and conduct its perception and action in the world' (Ingold 2010, p. 12). These are just such lines of transforming, growing, developing, becoming. Co-designing interweaves the experiences and knowing gathered through an immersion into a context. This act of transformation is a co-created process, not just between people, but a co-creation that interweaves the specificities and materiality of the place in which designing is taking place. We are constantly 'being' and 'becoming' through this transformative act. Designing services we are engaged in designing ourselves, people and the world around us in an on-going process.

CONCLUSION

By looking closely at how methods are performed by practitioners, we can begin to focus our attention to the active power of the processual aspects of the creation of services. The very essence of a phenomenological position is to emphasise the transformative, the reflective and the becoming. The Geovation co-designing workshop offered a site of deep immersion and reflection for the MDes students. It enabled an opportunity, out of an academically-supported environment, for a multidisciplinary collaboration

with people who were unfamiliar to the practices of co-designing. Reflecting on Ingold's work may help us with this metaphorical 'mould-breaking' in how we preconceive methods and artefacts. As design researchers, it is our responsibility to curb our tendencies to detach methods from enactment, embedment and performance, and remind ourselves to re-stitch it back into the 'meshwork' of living, re-connected to the lives and contexts of people, places and time. Integrating Ingold's perspective in service design and using phenomenology as a guidance could help us remove our blinkers and see what extends beyond, and falls in-between, the cracks. In fact, co-designing is a powerful reminder because it cannot be enacted without this connection. In our case study, the OS Geovation Challenge became the site where students were learning and practicing this connection. Being immersed in this context, and through listening and teasing out tacit knowledge, it fostered an empathic, deeper involvement between people. It allowed a collective creativity that supported divergent views interwoven from the stories of everyday experiences. Co-designing enables us to value the contribution from everyone and everything, no matter how incidental, in the overall weaving of life.

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