Mapping qualities of cultural co-creativity

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This paper explores some of the ways in which ideas of co-creativity have been recently theorized and enacted across disciplines. Drawing on previous research into co-creative practices and practitioners in the arts and anthropology, and a review of literature across multiple disciplines, it proposes a number of qualities of cultural co-creativity as constellated, positional, situated, mutable, and evolutionary. Using a recent process of co-creative exhibition design in a university teaching context as illustration, the paper outlines recurring themes, issues and potential implications for emergent understandings of co-creativity with particular reference to education and learning.

I. Introduction

Co-creativity and co-creation have become increasingly ubiquitous terms taken up to describe and theorize forms of collaboration and creative endeavor in a range of disciplines. Collaborative creative practices have

been applied to growing variety of social, political and economic agendas, with high expectations about the forms of value that they create. They are touted as making contributions to increased innovation, creativity and ethically sensitive practice in diverse contexts of cultural and economic activity, including in the context of education and learning. Over the past decade I have undertaken research into co-creative practices in the fields of art, anthropology and community development, both as practitioner and research academic (Haviland 2017b). My current research is seeking to theorize the dynamics of cultural co-creativity and the organizational scaffolds that enable and constrain co-creativity within cultural organisations and institutions. In this paper I seek to consider the question posed by the editors of this special edition: how has co-creativity been theorized and modeled so far?

I begin by undertaking a brief literature review and survey of themes and approaches to co-creativity from a number of disciplines. This discussion draws on ongoing research into how the term co-creativity is applied across disciplines, and using iterative searches for academic literature using the phrases co-creativity and co-creation, as well as broader research into collaborative practices in the cultural sector. In the second section of the paper I introduce a small illustrative example of co-creative practice drawn from my own university teaching in the field of exhibition design and delivery. This example is provided as illustration of how co-creativity has been utilized as both a process for teaching and learning, as well as a topic of importance for teaching and learning in cultural disciplines, rather than as an in-depth case study. In the final section of the paper I propose and explore a number of qualities of cultural co-creativity, drawn from my ongoing research into co-creative practices in the cultural sector, and offered here to contribute to the theorizing of practice of, and education about, co-creativity.

II. A short exploration of co-creativity across disciplines

The emerging histories of co-creativity generally begin with the coining of the term *co-creation* in the context of business and marketing (Prahalad &

Ramaswamy, 2004; Ramaswamy & Gouillart 2010; Ramaswamy & Ozcan 2014) and its adoption into other fields such as design (E. Sanders & Stappers 2008), digital media (Spurgeon et al. 2009) and arts (Kester 2011). Ind and Coates wrote in 2013 that "*co-creation has become a widely used term to describe a shift in thinking from the organization as definer of value to a more participative process where people and organisations together generate value and develop meaning*" (p. 86).

Co-creative practices are not new – but they are being increasingly theorized and applied into ever more diverse domains, as the 'co' and the 'creative' are found to have contemporary resonance, multiple values and applications. They are part of the seemingly ever expanding spectrum of collaboration, with roots in practice across multiple disciplines far deeper and wider than contemporary conversations usually reflect (Haviland 2017b, pp. 16–26). Co-creation and co-creativity are part of what has been called the 'collaborative turn' in which conventional hierarchies of knowledge creation have been challenged and the status of 'experts' have been questioned (Gershon 2009; Lassiter 2005). Moves towards making collaboration more explicit in fields such as anthropology and art have seen the foregrounding of collaborations not only between professionals, such as academics in different disciplines or professional artists working together, but across more multiply constituted differentials of identity and social position (Haviland 2017b, pp. 26–36). These now include human-machine collaborations in the increasingly theorized domain of digital creativity and artificial intelligence (Kantosalo & Toiven, 2016; Liapis, Yannakakis, Alexopoulos, & Lopes 2016).

Models of co-creativity are being theorized and applied across multiple domains, from corporate product creation (Banks & Potts 2010; Ramaswamy 2008), generation and review of public policy (Bason 2010), urban design (Sawe & Thelander 2015), arts, cultural documentation, social justice work (Haviland 2017b), computer-human interaction (Liapis et al. 2016) to education (Breunlin, Himelstein, & Nelson 2008; Stenning et al. 2016). The seemingly exponential increase in the range of applications for the phrases *co-creation* and *co-creativity* have some divergences, but

generally share essential underpinnings. They are commonly spoken of as projects that seek to work across difference, be they differences of power, class, organizational affiliation, ethnicity, age, educational background etc. They usually point to practices in which the dynamics surrounding the generation and distribution of value have been actively reshaped to engage or 'co-opt' the ideas, labour and perspectives of 'consumers', 'communities', and 'stakeholders' (Banks & Deuze 2009; Bason 2010; Prahalad & Ramaswamy 2004; Simon 2010). They are frequently attempting to alter and re-shape historic hierarchies of knowledge creation and cultural production that have biased the 'expert', the organization or corporation as the site of innovation, and as such they are frequently seeking to integrate users and non-professionals into production processes. By definition co-creative initiatives are seeking to integrate multiple forms of knowledge and creative action, and in doing so they tend to generate multiple forms of value. Tangible outcomes of co-creativity might be a collaborative approach to museum curation that includes organizational 'outsiders' and 'insiders'; a new or improved product, such as a shoe or a video game; the design for a public park that meets the diverse needs of the people living in the neighborhood; a documentary film or a set of books telling the stories of a particular local community or group of people from an 'insider' point of view.

Co-creativity and co-creation offer relationally focused models of creative production, that de-centre the tangible to be just one potential outcome of cultural production. Value co-creation has been embraced in marketing and business contexts to challenge the idea that value is produced and located in a product, generated in isolation from the consumer and 'delivered' to them. What is called the 'service-dominant logic' sees value co-creation as a process of interaction between firm and consumer, with the product being an outcome but not a source of value per se (see for example Edvardsson, Tronvoll, & Gruber 2011; Payne, Storbacka, & Frow 2008). This approach maps with relational and interactionist models of education, which reject the 'empty-vessel' approach to education, seeing value generated in the interactions between teacher, learner, process and content (Rodriguez 2012). A similar comparison can be drawn from the

museum sectors rethinking of the 'new museum', in which focus has shifted from the object, collection or institution as the site of value, to value being relationally constituted with audiences and source communities (Connolly 2015; Simon 2010; Weil 1999). In educational contexts extending from formal contexts such as schools and museums into less formalized community development projects, co-creativity is seen as a means to foster creativity and innovation in learning process, to better motivate learners and generate learning experiences that are more locally and 'user' relevant and specific (Breunlin et al. 2008; Walsh, Craft, & Koulouris 2014).

There has been recent focus on efforts to survey and define co-creation and to further distinguish points within a spectrum of collaboration. This has led to practical distinctions being made between value *co-creation*, *co-production* and *co-creativity* – distinctions that seek to differentiate the kinds of value generated by particular collaborative processes (Akaka & Chandler 2011; Galvagno & Dalli 2014). Sanders and Simons (2009), writing specifically from a design perspective, have articulated three kinds of value derived from disparate applications of co-creation – monetary, use/experience and social values. Akaka and Chandler distinguish *co-creation* as being focused on phenomenological value (i.e. use/experience), and *co-production* as focused on the development of potential and exchangeable resources (monetary value in Sanders and Simons terms).

My own use of the phrase co-creativity has been inspired by the work of Spurgeon et al. (2009) and the term 'co-creative media', which has been used to describe collaborative media practices such as digital storytelling. In identifying collaborative and participatory processes of media production as socially facilitated, constellated around people, organisations and technology, Spurgeon et al. are particularly interested in unpacking the agency or 'enthusiasm and expertise' of particular players in co-creative constellations. The role of facilitation in co-creativity is coming under increasing analysis, particularly in relation to the facilitating nature of digital technology, as see in the growing field of

enquiry into human/computer co-creativity. As Katasalo and Toiven (2016) have described, there is an increased interest in human-computer co-creativity as a means to foster deeper human creativity, and a number of projects have been investigating the potential of developing models of digital gaming and learning platforms to foster co-creative and non-linear interaction in learning and educational contexts (Chappell et al. 2017; Walsh et al. 2014).

One of the useful aspects of this line of research is a focus on close analysis of the facilitating processes of 'computational creative agents', breaking down the creative and facilitating contributions of the computer into discreet and identifiable tasks, concepts and components. For example, Yannakakis et al (2014) have mapped the contributions that computational agents can offer to co-creative contexts, in what they call *mixed-initiative co-creativity*. These include offering fresh and novel stimuli to inspire creative production; providing visual and diagrammatic aids to help map and navigate creative processes; and, the ability to search large amounts of data quickly to provide novel and feasible concepts or possibilities in relation to a specific creative task.

Similar close analysis of the specific contributions of human or organizational facilitators is notably scant in non-technologically focused co-creativity research, despite calls for closer articulation of diverse forms of labour in collaborative cultural production over many decades and across several disciplines (see for example Ruby 1995 in Haviland 2017b, p. 34). Some important work has sought to better theorize and render visible the relational labor of facilitation in digital and arts-based co-creative practices (Fortunati 2007; Jarrett 2013; Terranova 2000). This lays the foundations for better parsing and articulating the diverse inputs and dynamics of co-creativity, a necessary prerequisite to deepening understanding and models of co-creative value creation and distribution as it plays out over time, and in different domains.

As described above, co-creativity has been theorized across diverse, and often disparate, disciplines, providing insights into a range of dynamics and concepts that have relevance to the specific fields of education and

learning. Co-creative practices are being manifested to achieve a range of educational agendas, as I have documented in more detail elsewhere (Haviland 2017b, pp. 42–69). These include using co-creative writing of creative non-fiction as a way to get high school students and adult learners to engage with literacy and generate texts of local relevance to particular communities (Breunlin & Haviland 2008; Breunlin et al. 2008; Nine Times Social and Pleasure Club 2006); supporting a range of digital literacies and cultural knowledge transmission through collaborative digital media production (Campbell & Palmer 2014; Kral & Schwab 2012); using collaborative video production to engage marginalized and 'at-risk' youth (Davey & Goudie 2009; Wang, Hope, Wright, & Waage 2012); and previously mentioned digital gaming and virtual learning environments utilizing computer technologies to foster creative collaboration amongst groups of learners, teachers and non-human agents (Chappell et al. 2017; Walsh et al. 2014).

These initiatives take different foci as to how they position co-creative engagements in relation to intended processes of teaching and learning. All of them seek to engage 'learners' in collaborative (co) creative processes, to meet a range of learning agendas such as problem solving, various forms of literacy, transmission of cultural knowledge etc. ... To a greater or lesser extent some also include an explicit focus on learning *about* co-creativity, its requisite skills, concepts and stages, through the process of doing it. By way of example in this next section of the paper I will discuss a recent example of using a co-creative process in the context of university teaching, in which the activity sought to both foster creative learning through co-creativity practice, as well as learning *about* co-creativity as a key set of skills and concepts to underpin cultural action. Using this small example as illustration, I will then discuss some qualities and principles of cultural co-creativity drawn from existing literature, my ongoing research into co-creative practices and practitioners in the cultural sector, and my own practice in community and university contexts. Articulating and critically examining these qualities can provide useful frames of understanding praxis in co-creativity, and provide

reference points to support ongoing practice and theorizing of co-creativity in educational, and broader cultural contexts.

III. Fostering co-creativity in learning, fostering co-creativity as learning

In the second half of 2017 I taught a class called 'Exhibition Design and Delivery' as part of the Masters in Heritage and Museum Studies at the Australian National University. It is a course designed to engage students in the practices and processes of creating a small-scale public exhibition and this year drew inspiration from a larger collaborative research project I am involved with that explores collaborative curatorial processes and community art as a form of cultural history.[1] The outcome was a public exhibition on community art in Canberra at the ACT Heritage Library, part of the public library system in our city.

This approach to university teaching is well documented and fits within what is known as research based teaching (Healey 2005), or practice led research (Haseman 2014). The processes of collaboratively making an exhibition as the focus of a 12-week tertiary course highlighted elements of co-creative processes common across disciplines and contexts, whilst also bringing into focus some of the pedagogical benefits and contextual challenges of applying ideas of co-creativity to educational settings and projects.

In the first instance the course was an example of using co-creative practices to support learning in a formal educational setting. Early activities in the course were focused on theories and practices of exhibition design, and group research into those objects and stories that would go on to shape the exhibition. The students worked collaboratively in small groups on specific themes and parts of the exhibition. As an ensemble we worked in collaboration with my colleague Dr. Anni Doyle Wawrzynczak drawing on her previous research on community and arts in Canberra (Doyle Wawrzynczak 2016). Together as a class group we worked on the overall exhibition concept, research, design parameters

and installation. The exhibition was to be situated within the ACT Heritage Library and some of the research and install was facilitated by its staff. More broadly, the students also collaborated with a variety of groups and individual artists around the city of Canberra in researching, sourcing and curating objects and stories for inclusion in the exhibition.

The last few weeks of semester saw our small class move into makers-mode, negotiating the part of our creative cycle where the variables of the exhibition were pulled ever closer together, whilst the shape of the uncertain whole was yet to manifest. In those weeks my role moved from that of lecturer and course convener to senior curator, producer, editor, design advisor. Students became curators, designers and makers. Our classes became workshops and issues of assessment and timetabling gave way to the practicalities of creative production- pulling together the threads of research, making real world design decisions to a deadline, and resourcing an exhibition on a shoe-string while creating a public launch event in the National Capital. At different points over the semester different people offered varied contributions that supported co-creativity - evident in both the process and the product of the exhibition. Recalling the earlier discussion of Yanakakis et al (2014) about the contributions of facilitating agents, my role, and that of others I brought in as guest facilitators to the class, was to offer new and novel stimuli in the early stages of the project; to offer different models, concepts, and ways of working that helped students navigate the creative process; to create processes, spaces and parameters in which small groups could collaboratively and creatively respond to the design brief; and, to apply our expertise to finding feasible pathways through creative and design dilemmas.

Making an exhibition this way was a good way to satisfy multiple goals and agendas of the diverse groups of people involved. It made a public exhibition in the library, drawing out stories from its local heritage collection. It gave physical form to some of Anni's existing research, furthering curatorial and research aims of our broader collaborative research project, whilst also providing a core logic to my teaching about

exhibition practice. It gave students a lived practical experience of the range of ideas and processes they had been reading and talking about in their studies, and developed their skills in initiating, sustaining and negotiating collaborations in cultural production and research.

The exhibition production enabled us to both 'do' co-creativity and iteratively teach and learn about it, facilitating learning that the students may hopefully employ in other contexts at other times. Learning *about* co-creation to enable potential future cultural action is important for students training in cultural sector industries because collaborative practices have become a 'key trope' and a 'paradigm shift' across a range of disciplines and are increasingly expected and foregrounded (Kester 2011; Lassiter 2005, p. 72; Ramaswamy & Ozcan 2014). Many have argued that co-creative processes yield more ethical, effective and culturally relevant outcomes across a range of contexts (Chappell et al. 2017; Govier 2010; Lassiter 2005; Spurgeon 2014). The extent to which such claims are true are rightly a source of debate. However, with the increasing expectation of the potential value of co-creative practice across sectors, explicit actions to foster skills in initiating, negotiating, sustaining and distributing co-created value are, as Chappell et al. have stressed, a necessary part of educational futures within cultural and other disciplines.

The kinds of skills related to co-creativity that were embed, to varying extents, within the learning opportunities in the Exhibition Design and Delivery course, include:

- Negotiating the parameters, processes and protocols of engagement with collaborators and 'stakeholders'
- Working with multiplicity and complexity
- Working in creative cycles
- Managing relational ethics

I will briefly discuss each of these skills below.

1. **Negotiating the parameters, processes and protocols of engagement with collaborators and 'stakeholders'**. These negotiations were with immediate creative team members such as other students, library and faculty staff and facilitators – and importantly those people whose stories, histories and objects we were working with. Defining the conceptual space and 'rules' of a co-creative initiative are some of the capabilities and roles that Kantosalo and Toiven (2016) have

identified as necessary for co-creative initiatives – in their case focusing on two party collaborations between human and computer. Other research into creativity has examined the role of tensions, interactions and relationships in supporting and mediating collaborative creativity (see for example discussion in Grossen 2008; Littleton, Rojas-Drummond, & Miell 2008 and further discussions of framing of perameters by facilitating agents below).

2. **Working with multiplicity and complexity.** In practice this means actively inviting multiple potential inputs and variables into the creative process; considering and negotiating multiple perspectives, agendas, aesthetics and points of view. Kantosalo and Toiven have identified ways in which this might be negotiated in human-computer co-creative endeavours and a range of research into creative and cross-cultural collaboration has mapped how such multiplicity and complexity is negotiated, more or less successfully (Breunlin & Regis 2009; Lassiter 2005). Encompassing multiplicity and complexity in co-creative processes frequently includes working towards multiple outcomes, some of which may be relational rather than tangible and which may manifest over differing time scales.

3. **Working in creative cycles.** The process of implementing a creative task is cyclical as opposed to linear, and includes iterative processes of feedback between ideas and practice, revision and redirection, interaction and prototyping. Learning through creative practice usually includes emergent and evolving experiences of insight and value that may differ significantly for participants (see for example Chappell et al. 2017). The skills of sticking with a process from first conception through the creative process to completion are specific, and benefit from practice. As Rachel Breunlin, has written "*there is very little … education that teaches you how to establish long term partnerships around creative practice. When I was young, no one explained what a creative cycle was to me, or how I could develop the concentration necessary to do deep, creative work*" (Breunlin 2009). Models such as design thinking, widely taught and applied in multiple disciplines today, encompass some of the important techniques and skills for iterative creativity and integrating multiplicity, but perhaps not the deep concentration about which Breunlin writes, nor specific skills in sustaining collaborative relationships over time.

4. **Managing relational ethics**. The skills described above are part of a set that could be called relational ethics –a concept difficult to learn in the abstract as it is enacted slightly differently in each iteration of the co-creative endeavor (Ellis 2007). Protocols and negotiated parameters of interaction, mentioned above, can provide potential guidelines, if well informed and respectfully enacted by all parties, but cannot substitute for the necessary process of critical self-reflection of individuals and creative groups in ethically negotiating collaborations. Chappell et al. have stressed that a key goal of supporting co-creativity in educational contexts is fostering ethical considerations in collaborative learning (2017). The Exhibition Design and Delivery university course used self and peer assessment rubrics to trigger critical reflection. Building on Craft's model of wise creativity, Chappell et al. seek to generate learning experiences and environments in which co-creativity is enacted towards notions of the 'collective good' and are intended to have value to the 'community'. How this is measured and evaluated comes depends to the multiplicities of values potentially generated from co-creative endeavors, which are shaped differently by context, time and social position. Further research into methods for understanding and assessing multiple values emerging from co-creative practice, as perceived by multiple players is needed across disciplines.

IV. Mapping qualities of co-creativity

In the final section of this paper I will outline some qualities of co-creativity I have identified through engagement with diverse literature and case studies, and my own applied research into co-creativity in cultural and arts work. These are co-creativity as **constellated, positional, situated, mutable** and **evolutionary**. I will look at each in turn and discuss some recurring themes, issues and potential implications of engaging in co-creative practices. Exploring these qualities can help to provide a mud map or sketch of the kinds of terrain we are likely to encounter in co-creative endeavors. Such maps can be of particular valuable when implementing co-creative practice in existing organizational structures, such as formal educational settings.

First, I argue that co-creativity is **constellated and positional.** There are always multiple actors within any particular co-creative process, and they are multiply positioned in their relation to each other in that specific context, for that particular purpose. Meaning and value is generated not just in the actions or experiences of the individuals but in the relationships between multiple actors. Application of social roles theory to co-creative dynamics have seen shifts from conceptions of co-creative processes as dyads – primarily between people and organisations, or people and technology – to triads, such as Spurgeon et al's descriptions of co-creative media as facilitated processes involving people, organisations and technology (Spurgeon et al. 2009). Akaka and Chandler (2011) extend this to a network approach, taking an interactionist perspective on social roles to attempt to understand how resources and value are negotiated in dynamic ways. They see social roles as resources, which actors can draw upon to create and /or access different forms of value in a collaborative context.

Value (experiential, social or economic) can be generated, distributed and accessed differently by people in different positions in a specific co-creative constellation. People move positions over time, these changes

can lead to changes in perceptions of value. In this way co-creativity is **positional**. A range of case studies have been published outlining the ways in which perceptions of specific social roles in co-creative endeavors, such as being a 'volunteer', can change over time, and so too can perceptions of value and its equitable distribution (Banks & Deuze 2009; Haviland 2014; Postigo 2009). Positionality is important because of our growing understanding of the potential fluidity of roles in co-creative contexts as they play out over time. As different kinds of value are generated, and people find novel ways of leveraging against it, it is not unusual for people to begin in 'community', 'amateur', or 'volunteer' roles and move into 'professional' positions over time. This is nimbly documented in Postigo's work with AOL volunteers as an early case study of co-creativity in the digital domain and has been repeatedly observed in ethnographic work with co-creative digital gaming communities since (Banks & Potts 2010; Postigo 2009; Roig, San Cornelio, Sanchez-Navarro, & Ardevol 2014). In the context of the Exhibition Design and Delivery course the constellation of possible positions included student, teacher, researcher, maker, organizational manager, community storyteller, audience member, to name a few. Should material from this exhibition be used again in the future, many of those currently in the role of student may by then be cultural sector professionals. Doubtless their capacity and desire to create or access particular forms of value from their involvement in the project is likely to have changed.

Across disciplines there is a growing call for more research looking at the perceptions of value in co-creative interactions from the 'consumer' and 'community' points of view, a call similarly reflected in the parameters set for this special edition in relation to student experiences of co-creativity in educational contexts (Saarijarvi, Kannan, & Kuusela 2013). What is recognized in the literature spanning business, marketing, digital media, arts and public sector co-creativity, is that further empirical research is needed into the experiences of co-creativity and value co-creation from multiple positions and, I would add, an examination of how these might evolve, change and inter-relate over time.

Social roles and positions in a specific constellation of actors working together in a co-creative endeavor can have a potent impact on experiences of agency. As one of the primary of goals of cultural co-creativity is the reshaping of conventional hierarchies surrounding the production of knowledge and culture, differentials of agency and power are implicit. Various studies looking at co-creative dynamics in digital storytelling and participatory photography projects have stressed the manner in which storytellers and community participants are constrained in their creative processes by the social roles they bring to, or assume within a project, or through their straddling of the boundaries of particular social groups (Haviland 2017b, pp. 28-31; Vivienne 2012). Studies have also identified the significant role that facilitators and facilitating organisations play in defining the parameters of a specific co-creative project (González Flores 2007; McWilliam 2009). Michael Bauwens (2014) in his analysis of the industrial paradigm of peer production highlights the framing of parameters by corporations or organisations in what he calls a 'ladder of participation' with identifiable 'gradations of control' and 'polarities of power' between communities of external collaborators and corporate entities. As Lara Worcester writes in relation to digital storytelling, co-creative workshops and processes "*are not isolated from the relations of power that make up the greater social context*" (Worcester 2012, p. 92).

These insights highlight co-creativity as **situated**. Each co-creative endeavour is always located in a particular socio-economic context, shaped by specific cultural and structural frames, collective and individual histories. These include what is considered possible and normal in specific contexts, such as within particular organisations, within specific legislative frameworks, knowledge systems or cultural practice (see Grossen 2008, p. 247 for discussion of creativity as 'dialogical').

Because co-creativity is situational and seeks to work *across* difference it will manifest differently with each iteration, contingent on the range of power relations, and those constraints and influences shaping the possibilities and experiences of participants.

Awareness of the extant architecture and the often defining role of facilitators and facilitating organisations (Haviland 2017b, pp. 42–69) is perhaps critical to avoid replicating traditional hierarchies of knowledge creation and access. Despite their express aims of altering historic inequities through co-creative processes of cultural representation and knowledge production, co-creative projects are often situated within and subject to the dynamics of coloniality, mirroring or reinforcing those representational dynamics they sought to invert (see for example Haviland 2014).

Undertaking a co-creative project as the basis of an Exhibition design and delivery course in a university highlighted particular constraints. Mostly these had to do with normalised models of teaching and learning mandated by university policy, that established norms about workloads for specific level courses, are designed around the linear progression of learning spread across a designated 12-week semester, and expect uniform learning tasks for all students in a class. Underpinning these institutional policies are normative assumptions about the relative value of individual or collective creativity, authorship and learning; the pathways and value of development and/or transfer of standardised skill sets; norms about intellectual property rights, monetary and social value and their distribution when generated in institutional contexts. Such normative assumptions do not always sit easily within the realities of a collaborative or creative practice, nor the agendas and priorities of diverse participants.

I have documented elsewhere some of the creative forms that are commonly used as the basis for co-creative cultural work, including but not limited to digital stories, video, theatre, creative non-fiction books and other print materials etc. (Haviland 2017b, pp. 42–69). Each of these forms are structured and bounded in part by related technologies and formal qualities. Making a book will follow a different process than making a film or a piece of theatre, even when they share similar creative cycles and collaborative dynamics. A range of what I think of 'social technologies' have been developed to specifically facilitate forms of

cultural co-creativity. The most famous is probably Design Thinking, but Digital Story Telling, with its 7 narrative elements, is another well-known example (Kimbell 2011; Poletti 2011).

Models of practice developed by collaborative arts and documentary organisations such as Big hArt in Australia[2] or the New Orleans Neighborhood Story Project[3] in the USA provide specific structures and processes around which groups have formed or adapted (Breunlin 2009; Haviland 2017b, pp. 141–144). Cultural forms and facilitating processes, like university courses and or community art programs, provide a distinct set of parameters and boundaries that may be useful in enabling creativity for those unfamiliar with working in creative cycles or with each other but these forms are also collaboratively mediating of creative and other outcomes. Research into participant response to digital storytelling, for example, has shown that the mediation of a DST workshop structure can be experienced by participants in a range of positive and negative ways (McWilliam 2009; Worcester 2012).

Specific forms, like academic and professional disciplines, also have norms around style and habits of recognition. They are themselves sited within historic, cultural and economic contexts. Dynamics of recognition or encompassment of co-creative contributions vary according to context and situation, as James Leach has described in relation to collaborations between artists and scientists (Leach 2007). These dynamics can have significant, although sometimes unpredictable, implications on processes of value creation and distribution. As has been described in the context of consumer co-creativity in digital industries, changing dynamics of recognition and value can have negative impacts on facilitating organisations, the products created, and the communities and relationships associated with these products and organizations (Banks & Potts 2010). This research reinforces that not only do our social roles and relationships with our collaborators change, but the things we make together also go on to have lives beyond the contexts of their creation. Different forms of value accrue and disperse, are imagined and enacted, and often in unpredictable ways. The things we make, whether they are

objects like a book or a design for a shoe, an event like an exhibition or a creative performance, live on and circulate, are re-interpreted and revalued in potentially promiscuous ways (Stout 2014).

So in addition to being multiply situated, constellated and positional, co-creativity is **mutable**. Collaborations occur in particular moments and periods of time. They form, un-form and re-form. The idea of mutability is significant because collaboration often has different temporal implications and perceptions for different actors. Frequently, expectations of how sustained a co-creative enterprise is, how and for how long they link collaborators together, can be seen to diverge. Perceptions of value shift as do generative relationships, their groupings and relative configurations of their assembly. Returning to the small example of my course, co-creativity required us to stretch conventions of time bound engagement over a semester. Some of us continue to work together after the course and its assessments are over. These relationships may reshape, fall away or sustain as other iterations of co-creativity play out.

The skills outlined earlier – working in iterative creative cycles, dealing with relational ethics, encompassing multiplicity, are all deeply related to co-creativity as mutable. Working in creative cycles creates pressure points and hotspots at different moments, however the imperatives of production are not the only time scales at play. Encompassing multiplicity not only involves working with diverse inputs, outputs and audiences, but also working simultaneously with different timescales of impact and relationship. As more case studies of co-creative cultural production are undertaken we see that it is in the tail rather than the front end of dynamics surrounding our collaborative projects where relational ethics really play out (Haviland, 2017b pp. 151–167). This is another space in which further research needs to be conducted, to understand the mutable dynamics of collaboration and better map the disparate perceptions of, and access to, co-created value over longitudinal time scales (Haviland 2017a).

The final qualities of co-creativity I want to propose are co-creativity as **evolutionary and generative**. Potts et al. (2008) have argued that co-

creation can be understood as an evolutionary dynamic shaping our contemporary economic and cultural forms. Diverse manifestations of co-creativity are certainly generating a wide range of new social, cultural and economic processes and products, and are also altering the very organisational and institutional structures and cultures in which much of this work is embedded (Haviland 2017b, pp. 131–150). The mutability of co-creative dynamics and values require adaptability in its contexts of implementation. Some organisational structures are better able to undertake such adaptation than others. Although in the corporate sector there has been an effort to map the scaffolds and organisational systems that better support value co-creation between organisations and consumers (Ramaswamy & Ozcan 2014), to date there has been no comparable research in the cultural sector. Indeed, there are some indications that there is a mismatch in attempts to transfer models of co-creativity and value co-creation between for-profit and not-for profit contexts (Sawe & Thelander 2015). What organisational scaffolds might better enable co-creativity in educational contexts? How are small initiatives such as a project with a single class or a redesign of a course contributing to the gradual evolution of institutional structures towards the 'co' and the 'creative'? How are social, as well as digital, technologies providing us with tools, contexts and models for deepened co-creative practice? How might we both teach and learn through co-creative practice, as well as teach and learn about co-creativity and its constituent skills? Chappell et al. (2017) see co-creativity as a key part of educational futures, but how does this become normalised and embedded in our organisational structures and educational institutions?

In their analysis of co-creativity as an evolutionary force Potts et al. urge us to recognise that '*co-creation processes are dynamically situated in the context of continually shifting cultural relations and economic opportunities…*' (Potts 2008 pp. 465). As such they are key factors in disrupting existing institutional structures that can lead to creative responses and new boundaries. These include the development of new models of value that integrate market exchange, cultural production and personal experience as co-evolving forces and that can result in new organisational and

market structures (Banks & Potts 2010). However, despite diverse evidence of forms of evolutionary change, the situated, constellated, positional and mutable natures of co-creativity must be continuously recalled. Context is powerful. Hierarchies and power dynamics are intersecting, sticky and elastic. Change is cyclical and iterative. Within the range of case studies of structural change occurring to enable and accommodate co-creativity are warning signs of the easy re-assertion of the status quo (Haviland 2014; 2017b, pp. 111–130).

There is increasing evidence that the evolutionary dynamics described by Potts et al. are well underway in a range of sectors and disciplines, be this in the changing foci and practices of the 'new museum' and cultural organisations' attempts to reimagine their structures and practices (Simon 2010); in collaborative project-based models of education between universities, community or industry contexts (Breunlin 2009); models of open source platforms of knowledge sharing; or co-design as increasingly normalised in industry and the public sector. Which makes co-creativity a critical and potent skill set for contemporary teaching and learning, both a tool and a topic for education. Co-creative practices are moving towards becoming normalised baseline positions within a range of contemporary cultural contexts. Through implementing and critically reflecting upon processes of co-creativity, in whatever form, field or context we may find ourselves, we incrementally advance our understanding and practices of collaboration and creativity. We render visible the skills, knowledges and organizational structures that can enable rather than constrain both the emergent 'co' and the necessary 'creative'. Through such work we can, to quote Potts et al., 'experiment with where the boundaries are and what their consequences might be' (2008, page 465).

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Footnotes

[1] *Into the Heart – Curating Collaborative and Community Art as Cultural History of Canberra* is a collaborative research and curatorial project between the author and Dr. Anni Doyle Wawrzynczak.

[2] Online at: http://www.bighart.org/ (last access: 07 December 2017).

[3] Online at: https://www.neighborhoodstoryproject.org/ (last access: 07 December 2017).

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