CHAPTER 1

Introduction: Creativity, Innovation and Everyday Dynamics

Abstract This introductory chapter frames the background to our study of creativity and innovation, which consists of intersecting disciplinary developments and historical conditions. This chapter introduces the subject of creativity as studied by some prominent psychologists over the past century and links it to more contemporary conceptualisations, including its economic and cultural manifestation within the discourse of the creative industries. The chapter sets the scene for the chapters that follow by focusing on the importance of human connectedness in understanding creativity and the everyday practice of innovation. We present the argument that 'everyday dynamics', as a shorthand for the ethical dynamism of creativity that depends on and harnesses human connectedness, can become a mechanism for assembling a new form of reality to address the problematic complexities of our world.

Keyword Creativity · Innovation · Everyday dynamics · Innovative practice · Ordinary creativity

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Creativity (Re)Introduced

> The real source of wealth and capital in this new era is not material things. It is the human mind, the human spirit, the human imagination, and our faith in the future
> —Steve Forbes (in Siebold, 2010: Ch. 12).

Creativity has been of great interest to human beings for a very long time. It has been studied for by psychologists and social scientists over the past century, and while always a factor in human life, tapered off as a subject of keen scholarly inquiry until the late 1990s. This coincided with the advent of the technological age, most prominently demonstrated by the rise of global Internet access and digital business transactions. Interest in the discourse of creativity was heavily boosted by the unveiling of the concept of 'creative industries' at that time. The concept of the 'creative industries' has its formal origins in the United Kingdom in 1998, as one aspect of British Prime Minister Tony Blair's economic revitalisation strategy, captured in the popular term 'Cool Britannia' (Flew 2012). Following Britain, many developed and economically-aspirational countries around the world—including, in the Indo-Pacific region, Australia and Singapore, just to name a couple—have adopted 'creative industries' in their public policy nomenclature to describe and promote their arts and cultural sectors (Hesmondhalgh 2002; Howkins 2001).

Even though government leaders and bureaucrats viewed the creative industries as a source of wealth and capital, in terms of how creative businesses can help to boost productivity and economic gains, the concept sparked the rise of creativity as a cultural discourse (Lee, 2007). As media and creative industries scholar Terry Flew declared, creativity has become 'both big business and a lot of different things to different people' (2003: 90). The upsurge of interest in the area since the late 1990s had stemmed from the pace and extent of take-up of the notion of 'creativity' within government, policy and corporate circles (O'Keefe 2004: 34; Flew 2004: 161).

When Richard Florida, a Canadian business school professor, arrived with his 2002 best-selling book *The Rise of the Creative Class*, interest in what could be described as 'creativity as a new form of humanism' had skyrocketed. Florida's key argument is that economic growth is a

by-product of creativity and that the nurturing of what he calls the 'creative class' is the key determinant of an economy's success or failure (Florida, 2002). Florida puts forth the case that creativity flourishes best in places and times marked by four characteristics: 'domain activity, intellectual receptiveness, ethnic diversity, [and] political openness' (Florida 2002: 35). Florida famously championed the promotion of tolerance, alongside technology and talent, collectively known as the '3Ts', as keys to harnessing creativity (Florida 2002: Chapter 14). Florida specifically cites 'bohemianism' and 'homosexuality' as two non-conformist cultural practices that test the limits of tolerance of a society, and suggests that creativity presents itself in intellectuals or individuals within the 'creative class' who are motivated, even empowered, by such diversities (Lee, 2007).

Although widely employed by many people, the term and discourse of creativity remains a nebulous concept, not unlike the term and notion of 'culture', which Raymond Williams (1976) describes as one of the most complex and complicated in the English language. Creativity is even described by experimental psychologists Teresa Amabile and Elizabeth Tighe, both of whom have conducted extensive research on creativity, as 'too ill-defined a quality to be studied properly' because it is a vacuous concept that defies ordinary thinking (1993: 8). Creativity could thus be said to be 'extraordinary' in that in order for to be considered creative, a product or response "must be different from what has been done before" (Amabile and Tighe 1993: 9). Herein lies the most widely accepted conceptual definition of creativity: "the ability to invent and develop new and original ideas" (adopted by popular dictionaries such as the *Collins Cobuild English Language Dictionary* (1993), and virtually in all search engine sites).

Yet creativity is more than just a new idea or invention, since not every original idea can be construed as creative. According to Margaret Boden, a professor of cognitive science, creativity should also be 'valuable' both aesthetically and pragmatically (Boden 2004: 10). In other words, creativity must be appropriately applied to a situation that would be well-received by its audience. This is referred to as creativity that is 'domain-relevant', the first of three basic components of creativity advanced by Amabile and Tighe (1993: 14). While the first marker of creativity has to do with the originality-and-appropriateness of an idea, solution or product, the second relates to the level of passion for the

creative activity (Lee 2007). Amabile calls such passion 'intrinsic motivation' or the ability to engage with a creative activity due to genuine fervour for a task (Amabile 1993). In essence, the principle of intrinsic motivation is that:

> People will be most creative when they feel motivated primarily by the interest, enjoyment, satisfaction, and challenge of the work itself (intrinsic motivation), and not by external pressures (extrinsic motivation).... [and] people will achieve the level of deep task involvement that is essential to creativity. (Amabile and Tighe 1993: 16)

Although it may be possible for intrinsic motivation to coexist somewhat with extrinsic motivation, one tends to emerge as the primary driving force for a given task (Lee, 2007: 50–51). Based on Amabile and Tighe's (1993) principle, the task undertaken with intrinsic motivation tends to be more creative as a result. The third element of creativity relates more to the socio-cultural environment within which the creative person operates. Amabile and Tighe (1993) describe this as 'creativity-relevant skills' which include cognitive and personal styles that tend towards independence, risk-taking, innovation, non-conformism and tolerance for ambiguity and diversity, all of which are seen as 'conducive to generating novel and useful ideas in any domain' (Amabile and Tighe 1993: 15).

All the above points to a need to understand creativity as a natural, perhaps evolutionary (in the broadest sense of the term), result of human discourse, exchanges and networking. The corollary is that human capacity to be creative must have had an ancient history. In truth, the evidences are plentiful. Recent archaeological research shows that human creativity, evidenced by art and technological invention, existed centuries ago. According to Pringle, "our power of innovation did not burst into existence fully formed late in our evolutionary history but rather gained steam over hundreds of thousands of years" (2014, 6). According to him, thousands of years ago in Africa, and also in Europe, creativity and innovation were lit by a web of 'biological and social factors' (ibid.). This is when human groups were large enough to create social networks that built on other people's ideas. Larger groups increase the chances of good ideas emerging, foster sharing with others and spur creativity.

The introduction of agriculture and sedentary lifestyles, and the formation of cities, gave people more time to think, and more free time led to

the expansion of language and imagination, evident, for example, in Akkadian poetry, such as the Gilgamesh Epic (2100 BC) (Pringle, 2014). We now live in a digitally connected age that has increased our chances of connecting with others and finding the information we need to improve our ideas. We have never been more connected and willing to share and collaborate, so it is no coincidence that the rate of creativity and innovation over the past three decades is unprecedented in history. Yet simply being connected does not explain how creativity arises from collaboration, a vital question in an era of social media and rapid social change (Nussbaum 2013: 27). Whereas cognitive psychology and neuroscience have shown that creativity is not only for the gifted few, sociocultural perspectives shed light on "how we must act in a social context to be creative" (Nussbaum 2013, 27).

While this chapter, and indeed this book, draws a great deal from both early and popular psychological studies on the subject, we argue concomitantly that sociocultural approaches also offer valuable insights into creativity and innovation. The theme that will recur throughout this book is that human connectedness—what we refer to as *everyday dynamics*—accompanied by the practical acts of doing through experimentations and inventions is the key to stimulating creativity. From an organisational perspective, realising innovative potential hinges on the ability to encourage creativity and to "make decisions and choices on the basis of being well-prepared, informed and connected" (Dodgson and Gann 2010, 117). David Gauntlett asserts that "making is connecting" (2011, 2). The act of making (something new) is connecting in the sense that materials and ideas combine within a social framework in ways that stimulate our engagement with the world. Taking a broader view that reflects the philosophical perspective of Gilles Deleuze, it can be argued that "all of life is a process of connection and interaction" (Colebrook 2002, xx). In a precarious and uncertain world, the challenge for thinkers and creators is to make "'new connections for thinking', opening up whole new planes of thought" (Deleuze, quoted in Colebrook 2002, xix). Deleuze and Guattari (1987: 296) explain that creations are "like mutant abstract lines that have detached themselves from the task of representing a world, precisely because they assemble a new type of reality that history can only recontain or relocate in punctual systems".

In this book, we argue that the *everyday dynamics*, as a shorthand for the ethical dynamism of creativity that rides on and harnesses human connectedness, can become a mechanism for assembling a new type of

reality that we desire (and require) to address the problematic complexities of our world. It is timely and relevant to consider the relationship between creativity and connectedness. As Mark Thomas, Professor of Evolutionary Genetics at University College London, puts it: "It's not how smart you are, it's how well connected you are" (cited in Pringle 2016, 10). To be well-connected implies a dynamically productive relationship between creativity and connectedness. Rather than a marker of attachment or fixity, connectivity is a conduit to openness and flexibility, yet informed by ethical perspectives and principles.

Adopting a sociocultural approach, Vlad Petre Glăveanu describes creativity as "grounded in openness" and as capturing "our flexibility towards the world, expressed in the ever-present possibility of changing course and developing new perspectives on any given problem or issue. The fact that we are not trapped within our perceptual here-and-now is both a marker of creativity and its great achievement" (Glăveanu 2018, 156). Glăveanu outlines three dominant paradigms in the study and research of creativity: the genius or "He-paradigm"; the creative person or "I-paradigm"; and the social or "We-paradigm" (2010: 80). The latter gestures towards the social psychology of creativity, underpinning the conceptualisation of creative expression as a vital form of cultural participation (Glăveanu 2011). As Glăveanu (2013) contends, thinking about creativity beyond Rhodes' (1961) classification of the 4Ps (person, process, product and press) invites consideration of perspectives from a range of evolving and newly emerged inter- and multidisciplinary areas, including cultural or sociocultural psychology. We begin by considering some of the vital conceptual turning points that have defined our thinking on creativity—and by extension, on innovation.

Changing Conceptions of Creativity

Creativity is closely associated with originality in capitalist societies, but not at all in traditional and religious cultures including the Ancient Greek, Roman, Hindu, Taoist and Buddhist cultures and existing traditional first cultures today. Creativity, as we understand it today, would therefore have no meaning for ancient or traditional cultures. For example, Ancient Greek culture acknowledged the ability of poets, only, to bring something new into the world, but the source of their 'inspiration' was attributed to a muse. All other art, or techne, was the result of imitating ideal forms that were bound by natural laws. Ancient Hindu, Confucian, Taoist

and Buddhist cultures also understood creativity as a form of mimicry. However, the Romans used the terms *creatio* (creating) and *facere* and *creare* (creator) to indicate that sculptors and poets drew on imagination and inspiration to produce their work. The Latin *creatio* was used throughout the Medieval Christian period (500–1500 AD), but artists were considered craftsmen because God, alone, had the power to create from nothing. The idea of individual human potential only arose during the humanist shift we associate with the Renaissance period (Albert and Runco 1999). Art became evidence of humankind's God-given, or innate, ability. In this environment, Leonardo da Vinci (1452–1519) was able to ask questions, observe and conduct experiments in areas as diverse as engineering, medicine, architecture, music, mathematics, astronomy, sculpture and painting. These provided the necessary conditions for science to emerge in western Europe; as the rise of science increasingly challenged religious faith during the sixteenth and seventeenth centuries, the West began to shift from a religious to a secular worldview. The shift to secular and scientific knowledges also prompted a shift from otherworldly explanations of creativity to innate explanations that came to be associated with genius (Sternberg 1999).

As a result of growing faith in individual ability, the English political philosopher Thomas Hobbes (1588–1679) first noted the role of imagination, and by the close of the seventeenth century, it was accepted as the key to 'artistic creativity' (Albert and Runco 1999: 22). During the eighteenth century, there was a growing belief that rational thinking, which underpinned empirical science, could uncover all of the laws of nature and free individuals and societies at last from the constraints of nature. This included freedom from our dependence on the natural world for existence and freedom from our natural instincts and emotions. This optimistic Age of Enlightenment (also known as the Age of Reason) clearly placed enormous faith in the human ability, which in turn encouraged a growing interest in individual rights, freedom of speech and opposition to authority. These shifts opened the door for genius to be understood as human potential (ibid.).

Within this intellectual environment, William Duff tried to explain the cognitive (mental) traits of genius. In his published piece, *An Essay on Original Genius and its Various Modes of Exertion in Philosophy and the Fine Arts, Particularly Poetry* (1767), Duff identified the key cognitive traits of imagination, judgement and taste. He valued imagination above all because it expressed the ability of the mind to reflect, organise ideas

and make infinite new combinations, whereas judgement referred to the evaluation of these ideas and taste referred to an aesthetic adjunct of that judgement (Duff, in Runco and Spritzker, 1999: 316). Twentieth-century cognitive psychologists and twenty-first-century neuroscientists tend to agree with him. Duff (1767) was also the first to note the influence of social factors. It is important to realise that over three centuries ago, it was widely acknowledged that this human potential was subject to the wider political environment and could not flourish in a repressive regime. However, Duff's ideas also reflect the influence of Romanticism, which emerged in response to rationalism and the horrors associated with industrialisation (in Runco and Spritzker, 1999: 316).

The Age of Reason had placed enormous faith in the human ability to solve problems using 'reason', at the expense of 'instincts and emotions'. The rational scientific model was based on formal rules of research to demonstrate the rational laws governing physical nature, diminishing the significance of the individual in the process. However, due to the ongoing social and political turmoil during the shift from an agrarian to an industrial economy, an important counter-movement emerged (Runco and Spritzker, 1999). The Romantics (roughly 1770–1850) valued freedom differently because they understood that the purpose of individual freedom was to enable innate predispositions to flourish (Albert and Runco, 1999). In other words, they placed originality at the heart of creative genius, elevated emotions and individual imagination, and thereby freed artists from the rules that governed ordinary behaviour. Romantic works of art and literature therefore celebrated the importance of individual self-expression, for mental and moral health, and placed this squarely in nature. As a result, two models of originality emerged, which created a growing intellectual wedge between the rational scientist and artistic genius that would not be reconciled for another century (ibid.).

By the close of the eighteenth century, four important conclusions had emerged that continue to underpin our present understanding of creativity (Albert and Runco 1999: 22). According to Albert and Runco (1999: 22), the four conclusions were:

1. Genius is not tied to the supernatural.
2. Genius is a potential in all individuals.
3. Talent and genius are distinct.
4. Potential and its exercise depend upon a political climate.

During the nineteenth century, creativity was considered a fixed attribute limited to 'gifted' individuals and was associated with the fine arts, especially the visual arts, whose works were appreciated primarily for their imaginative, intellectual and aesthetic appeal. Scientists were interested in discovering the origin of 'artistic genius'; they asked the same questions that were still being asked in the twentieth century: What is creativity? Who has it? What are their characteristics and can creativity be developed? (Albert and Runco 1999).

Two important schools of thought within psychology emerged: those who argued that artistic genius was the result of an ability to make new associations, and those who argued for a systems approach to idea generation (i.e. synonymous with Gestalt theory in psychology). In 1879, psychologist Francis Galton drew on Darwin's theory of natural selection to deliver a ground-breaking statistical analysis of individual difference. Galton's analysis severed any connection between creativity and mysticism while also contributing to the enduring idea that the unconscious can be brought to consciousness by making intelligent associations between our thoughts (see Runco and Spritzker, 1999). While Darwin argued that genetic inheritance was the key, gestalt psychologists such as Max Wertheimer (1880–1943) famously argued that mental operations needed to be studied holistically because the mind creates patterns (ibid.).

In more recent times, while acknowledging the profound impact of genius, social psychologist Robert W. Weisberg (1993; 2006) has argued that "all creativity, including creativity at the highest level, is the result of processes of ordinary thinking" (Weisberg 2014: 141). Although creative thinkers can draw upon experience and expertise, and have the ability to bring a rich repository of responses to creative situations, the cognitive mechanisms underpinning their achievements "can be very ordinary" (Weisberg 2014: 139). In other words, creativity can be found in a myriad of places, derived from most ordinary people. This 'ordinariness' therefore exists on the level of the everyday—in the way we both conceptualise creativity and apply innovation in daily practice—this book directs its attention to the notions of creativity and innovation firmly situated within the ordinary and everyday.

Ordinary Creativity: Everyday Dynamics and Innovative Practice

It is important to state from the outset that creativity and innovation must be studied from the perspective that it is always in-process, ongoing and necessarily disruptive and incomplete. Viewed through these lenses, creativity and innovation are not high-brow and only achievable by a privileged few, but everyday practices that ordinary or 'average' people are capable of. In this book, we seek to show how the everyday dynamics of creativity and innovation is what makes the ordinary extraordinary.

In the five chapters that follow, we unpack and demystify the broader and twin discourses of creativity and innovation. In the chapter that follows (Chapter Two), we examine key historical developments in the way creativity has been theorised that have in turn led to how we understand and value creativity in our contemporary era, particularly in Western culture and societies. Chapter Three adopts a similar approach to consider how innovation is intimately tied to the prosperity—and social well-being—of nations, even though it is commonly associated with changes, even disruptions, to the status quo. Innovation, in practice, can be deemed the application of "necessity with fresh eyes" (Austin et al. 2020), which implies that the innovation imperative is often preceded by an urgent need, technological shifts or even a crisis, such as climate change or a pandemic. The chapter offers examples of innovative COVID-19 responses during the critical years of the pandemic (2020–22) to illustrate how everyday dynamics can spark and inform innovative practice.

Chapter Four takes the book into an everyday 'practical' direction by drawing on a range of creative thinking tools and presents them as 'prompts' or strategies. These creativity prompts can enable, enhance and encourage both convergent thinking and divergent thinking that are the hallmarks of creativity and the creative process. The chapter takes us on a journey through a selection of creative thinking prompts, including: asking questions, analogy, assumption surfacing and provocation, attribute listing, brainstorming, the 6 thinking hats, forced connections, lateral thinking, mindmapping, PMI (plus, minus and interesting), reversal and SCAMPER. We explore and explain how these prompts can be used and how they might be beneficial in the generation or refinement of ideas or problem-solving. Chapter Five follows along a similar 'practical' trajectory by outlining the creative problem-solving process and exploring the challenges posed by difficult problems. In this chapter, we

explore the importance of building team environments and the characteristics of effective teams in enhancing everyday creativity and generating opportunities for innovation.

The final chapter provides a brief conclusion to our discussion by considering the everyday dynamics that are almost always present in the practice of creativity, especially as they relate to big problems such as COVID-19 and climate change. We consider how digital technologies, such as artificial intelligence (AI), have and will continue to challenge our thinking and ethical perspectives around human creativity and what counts as innovative and original creation. Above all, we ruminate on the future of creativity and innovation, and the applicability of creative processes to solve new and bigger problems.

References

Albert, S.A. and M.A. Runco. 1999. A History of Research on Creativity, in Robert J. Sternberg (ed.) *Handbook of Creativity*. Cambridge: Cambridge University Press.

Amabile, T.M. 1993. Motivational Synergy: Toward New Conceptualizations of Intrinsic and Extrinsic Motivation in the Workplace. *Human Resource Management Review* 3: 185–201.

Amabile, T.M., and E. Tighe. 1993. Questions of Creativity. In *Creativity*, ed. J. Brockman, 7–27. New York: Touchstone.

Austin, R.D., M. Healy, and T. Watson. 2020. Understanding the link between crisis and innovation, *Ivey Business Journal*, July/August, Available: https://iveybusinessjournal.com/understanding-the-link-between-crisis-and-innovation/. (accessed: 11 August 2022).

Boden, M.A. 2004. *The Creative Mind: Myths and Mechanisms*, 2nd ed. London: Routledge.

Colebrook, C. 2002. *Understanding Deleuze*. Crows Nest, NSW: Allen & Unwin.

Collins Cobuild English Language Dictionary. 1993. London: Harper Collins.

Deleuze, G. and F. Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Trans. B. Massumi. Minneapolis: University of Minnesota Press.

Dodgson, M., and D. Gann. 2010. *Innovation: A Very Short Introduction*. Oxford: Oxford University Press.

Duff, W. (1767). *An Essay on Original Genius: And Its Various Modes of Exertion in Philosophy and the Fine Arts, Particularly in Poetry*, USA: E. and C. Dilly.

Flew, T. 2003. Creative Industries: From Chicken Cheer to the Culture of Services, *Continuum: Journal of Media and Cultural Studies*, 17 (1): 89–94.

Flew, T. 2004. Creativity, The "new humanism" and cultural studies, *Continuum: Journal of Media and Cultural Studies*, 18 (2): 161–78.
Flew, T. 2012. *The Creative Industries: Culture and Policy*. Thousand Oaks: Sage.
Florida, R. 2002. *The Rise of the Creative Class*. New York: Basic Books.
Gauntlett, D. 2011. *Making is Connecting: The Social Meaning of Creativity, from DIY and Knitting to You Tube and Web 2.0*. Cambridge: Polity Press.
Glăveanu, V.P. 2010. Paradigms in the Study of Creativity: Introducing the Perspective of Cultural Psychology. *New Ideas in Psychology* 28: 79–93.
Glăveanu, V.P. 2011. Creativity as Cultural Participation. *Journal for the Theory of Social Behaviour* 41 (1): 48–67.
Glăveanu, V.P. 2013. Rewriting the Language of Creativity: The Five A's Framework. *Review of General Psychology* 17 (1): 69–81.
Glăveanu, V.P. 2018. Creativity in and for Society. *Creativity: Theories, Research, Applications*, 5 (2): 155–158.
Hesmondhalgh, D. 2002. *The Cultural Industries*. London: Sage.
Howkins, J. 2001. *The Creative Economy: How People Make Money from Ideas*. London: Penguin.
Lee, T. 2007. Industrializing Creativity and Innovation, in Kenneth P. Tan (ed) *Renaissance Singapore? Economy, Culture, and Politics*. Singapore: NUS Press.
Nussbaum, B. 2013. *Creative Intelligence: Harnessing the Power to Create, Connect, and Inspire*. New York: Harper Business.
O'Keefe, B. 2004. Suits can profit from a spell in the sandpit. *The Australian*, 17 November: 34.
Pringle, H. 2014. The Origins of Creativity. *Scientific American Mind* 23 (1): 4–11.
Rhodes, M. 1961. An Analysis of Creativity. *Phi Delta Kappan*, 42 (7): 305–310. In JSTOR at: www.jostor.org.
Runco, M.A., and S. Spritzker, eds. 1999. *Encyclopedia of Creativity*, 1st ed. Imprint Academic Press: Elsevier.
Siebold, S. 2010. *How Rich People Think*. Naperville, Il.: Sourcebooks.
Sternberg, R.J., ed. 1999. *Handbook of Creativity*. Cambridge: Cambridge University Press.
Williams, R. 1976. *Keywords: A vocabulary of culture and society*. London: Fontana.
Weisberg, R.W. 1993. *Creativity: Beyond the Myth of Genius*. New York: W.H. Freeman.
Weisberg, R.W. 2006. *Creativity: Understanding Innovation in Problem Solving, Science, Invention and the Arts*. Hoboken, New Jersey: John Wiley & Sons.
Weisberg, R.W. 2014. Case Studies of Genius: Ordinary Thinking, Extraordinary Outcomes. In *The Wiley Handbook of Genius*, ed. D.K. Simonton, 139–165. Hoboken, New Jersey: John Wiley & Sons.