I make, therefore I am: Agency, action, affordance, and the path to creative identity

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I MAKE, THEREFORE I AM:

AGENCY, ACTION, AFFORDANCE,

AND THE PATH TO CREATIVE IDENTITY

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Abstract

This thesis explores how everyday makers construct creative identities. The literature review charts creativity research from psychology, sociology, and anthropology. Transdisciplinary theories of creativity and identity are discussed, and the emerging theory of circuits of creative affordance is found to be a useful means for considering creative identities. Three research questions are developed: How do the internal and external affordances to creativity influence an individual maker's evolution toward seeing him or herself as a creative actor? How do people identify and perceive these affordances? How does assuming a creative identity change a person's life? Participants in the purposive sample (n = 42) were recruited from adult everyday makers in the UK and US who answered yes when asked if they felt creative working in their media. The quantitative segment of the parallel sequential mixed-methods research design consisted of an online creative identity questionnaire. The qualitative segment was comprised of one-on-one ethnographic interviews. The project also introduced craft elicitation, a method in which participants prepare for interviews by making something in the medium that they felt creative in, and thinking about when they first felt that way. Study findings indicate that participants are creative people who recognize affordances in their everyday making. A new Affordances-in-Action model proposes they burnish their identities in psychological, social, and cultural contexts by confronting affordances when they make things, which affects their sense of creative identity and produces the agency that drives further experiences in action. It is concluded that, when considered alongside agency and action, creative affordance theory offers a way to understand how everyday makers create identities.

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Acknowledgments

This thesis began when I met Professor David Gauntlett on Twitter in 2011. For years, I had admired his crystalline writing and panoramic point of view about creativity, so one tweet naturally led to many others. In autumn 2014, I moved across the Atlantic to study with him at the University of Westminster. It has been the intellectual adventure of my life. David's sparkling intelligence, generosity, and great good humor remind me how fortunate I am to count him as my mentor and friend.

I feel the same way about Professor Graham Meikle. His crisp logic and deftness with the most arcane creativity constructs provided precisely the feedback I needed to help me grow as a scholar. Dr. Matt Fifolt and Professor Maciej Karwowski were also enthusiastic about my work, and I appreciate their encouragement.

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Author's Declaration

I declare that all the material contained in this thesis is my own work.

CHAPTER 1

INTRODUCTION: THE FACETS OF CREATIVE IDENTITY

The man scooped the sweet raised dough from its warm glass bowl and coaxed it onto a sheet of baking parchment spread along his kitchen counter. After cutting the dough in half with a bench knife, he sprinkled a portion with flour and began to pass over it with an old wooden rolling pin. Yes, he said, he did feel creative whenever he made these cinnamon rolls. “But it didn’t happen overnight.”

His first attempts at replicating his mother’s recipe “looked pretty, but you’d break a tooth in a heartbeat,” he remembered. But he was undeterred. Subsequent experiments with every variable—ingredients, pans, ovens, times—were painstakingly recorded, along with tasting notes from his family and friends. After weeks of trips to the grocery store to buy supplies and 28 separate revisions, he had what he was after: the most delectable rolls anyone, including his mother, had ever tasted. He became the acknowledged master baker among his circle. Along the way, he said, “it just became a part of who I am.”

Context: An Expansive View of Creating and Identity

This man’s account of everyday creativity illustrates how the sense that one is creative is built. That construction—indeed, the construction of individual identity itself—is understood as a continual, reflexive process (Giddens, 1991). Yet, what is the foundation of the building? Is it, as in the baker’s case, an ambition that merges with a facet of identity? Or is it an internal conviction that one’s actions are novel and meaningful, as befits someone who is, by extension, novel and meaningful? More to

the point, how do people come to think of themselves as creative, and how do they keep thinking that?

This thesis, which incorporates four dozen interviews with amateur makers in the UK and US, attempts to resolve these seemingly simple questions. Yet, as the following chapters illustrate, arriving at answers was hardly a straightforward effort.

Historically, most of the research into creativity has been aimed at demystifying individual processes and qualities. Consequently, the preponderance of the existing research into creativity—and creative identity—is rooted in psychology. Moreover, much of it has examined the work of eminent creators in the hopes of arriving at a grand theory of creativity, still an elusive destination. After the introduction by social psychologists in the 1980s of the first systems theories of creativity, which will be discussed at length in the next chapter, the field had generally acknowledged that research should have psychological, sociological, and anthropological bases. After all, people like the baker make the things they do in specific personal, social, and cultural contexts.

Yet, while the interim has seen significant works focused on creativity in psychology, sociology, and anthropology, they frequently used language specific to their fields and were published in journals and books aimed at those who already understood what they might be saying. The silos of these fields in effect reinforced their differences and sustained their divisions, setting a challenge to those who would seek a broader vista. It follows that, as Glăveanu (2017) and Hennessey and Amabile (2010) continue to demand, concerted research efforts into creativity should interrogate them all.

A Case for the Quotidian

Moreover, those efforts could focus on everyday creators. As Amibile (2017) explains, little is known about how ordinary people go about their creative pursuits. The predilection in the field for studying well-known creators to illustrate by extension how all people could create has resulted in a shortfall in the field, she argues. Researching the way amateurs make things offers a complete picture of creativity, one that is central to the present research.

While the everyday makers who took part in this project think of themselves as creative knitters, painters, musicians, woodworkers, among other things, they are often creative in more than one medium. One of the participants described it this way: “It’s not that I’m creative in a thing. I’m creative, and it comes out in all sorts of different ways.”

Therein lies a significant reason why this work, and, indeed this field, matters. People like that participant are, Amabile (2017) proposes, the same ones whose creative identity and habits of thinking could power incremental positive change:

> Evidence is mounting that such individuals can be responsible for important instances of creativity and innovation in the world: Open innovation, user innovation, and citizen innovation. Research into this phenomenon could do much to advance the study and practice of creativity (p. 1).

Indeed, as Gauntlett (2011) explains, ordinary people who make things not only hold the potential for innovation but also perform as change agents in their contexts. By transforming their materials, their identities, and their social worlds, everyday makers can accumulate the capabilities to solve problems both big and small.

Theoretical Framework

To that end, this thesis surveys the personal, social, and cultural literature on creativity for ways to understand the stories of everyday makers who feel creative making things they love. Doing so allows for a full range of theories that reveal transdisciplinary insights about how these makers developed their creative identities.

For example, the aforementioned social psychology-based systems theories of creativity (e.g., Amabile, 1996; Csikszentmilhalyi, 1988; Glăveanu, 2017; Glăveanu & Tangaard, 2014; Hennessey, 2015) provide models of the interrelationships between people and their environments required for creativity to flourish. Likewise, sociological theories (e.g., Bourdieu, 1969, 1984; Dalton, 2004; Joas, 1996) attempt to clarify how creative practice interacts with society's rules and resources. Further, the anthropological aspects of phenomenology (e.g., Csordas, 1990; Douny, 2014; Merleau-Ponty, 1962; Warnier, 2001) clarify why material culture—the actual making of things—can help explain the epiphanies that occur to everyday creators.

Similarly, this project relies on theories of identity that are also cross-disciplinary. Social cognitive theory (Bandura, 1986, 1997) was initially developed as a social-psychological means to explain how people learn. It has since been adopted to explain identity, including creative identity (e.g., Jaussi, Randel, & Dionne, 2007; Karwowski, Lebuda, & Wiśniewska, 2012, in press; Tierney & Farmer, 2012). Sociological theories of identity construction (Giddens, 1984, 1991) describe identity as an ongoing project within a sociocultural milieu that requires people to build their creative identities reflexively. Furthermore, the narratives that people construct about themselves (e.g., Gauntlett, 2007; Pachuki, Lena, & Tepper, 2010) necessarily mix personal, social, and cultural perspectives.

The Significance of Affordances

Importantly, affordance theory (Gibson, 1977, 1979), an evolving construct whose genesis lies in ecological psychology, provides a crucial plank in the theoretical platform of the current research. At its essence, affordance theory is concerned with aspects of the environment that exist in potentiality until they are encountered by an organism. Then they function as a support or barrier to that organism. Almost anything can be considered as an affordance, which may account for the theory's use in such diffuse disciplines as artificial intelligence and economics. Its recent recruitment as a means of visualizing the supports and barriers people face in pursuing creative identities (Glăveanu, 2013; Moeran, 2014) offers a fresh and relevant way to consider the negotiations with tools, materials, and other affordances all makers encounter.

Moeran's (2014) circuit of creative affordances—which incorporates economic, representational, spatial, temporal, techno-material, and social aspects sparking off each other in much the same way neural networks fire—is particularly useful for looking at how everyday creators fuel their identities. Like the other theories that the present research draws upon, its transdisciplinarity can be seen as an advantage in examining how creativity's cultural, social, and personal permutations play out in the lives of people who make things.

An Opening in the Knowledge

Obviously, effort is required to stitch together the patchwork of disciplines and theories this project uses. Yet, as noted earlier, the time seems right for work that explores how regular people craft creative identities, perhaps in part because concerted, multi-disciplinary forays in research have been thin on the ground.

Those who advocate for the more expansive approach have just begun to scratch the surface. Consider Glăveanu's research into Romanian Easter egg decorators (2012). He used a variety of innovative methods, including narrative analysis, sketching, and videography, to capture their thoughts and actions. While operating in varied locales, the rural and urban egg decorators he surveyed were all working in the same medium and the same country.

Moeran's (2014) account tells how affordances showed themselves in the output and operations of Japanese magazine editors, photographers, curators, and ceramists—professionals involved in cultural production. Moeran, an amateur potter, participated in his qualitative research by staging a curated show of his work and including a chapter about the episode in his book based on the project. Much Western research frames creativity as an individual endeavor, while more collaborative Eastern approaches are less well studied, particularly by Western scholars (Radclyffe-Thomas, 2014; Sawyer, 2006). Therefore, Moeran's work is instrumental because he shares insights about the affordances faced by the Japanese professionals in his study.

These two projects are unquestionably revealing about affordance theory and creativity. Moreover, any project, including the present research, cannot investigate every aspect of creativity. Therefore, the opening exists for a study that looks at how everyday makers who work in a variety of media approach the affordances they encounter on the way to honing their creative identities.

Method and Inquiry

The present research aims to address how people move through the affordances they encounter in making and how they, in turn, effect creative identity. Its purposive

sample of six adult men and women in the UK and US in a pilot project, along with 42 in the main research project, included participants from a range of backgrounds and ages who pursued a variety of media. They each answered yes to the qualifying question, which asked if prospective participants felt creative when they worked in their medium of choice. Instead of using an arbitrary definition of creativity and seeing if participants aligned with it, the present research allowed them to define creativity for themselves. That self-definition was necessary for this project because of the vast number of personal, social, and cultural definitions people assign to creativity. Consequently, it was deemed more important for individuals to feel creative on their own terms than to fall into a too-narrowly conscripted line.

To get the fullest picture of the creative identities of these people, I selected a convergent parallel mixed-methods strategy (Creswell, 2014). This research plan calls for both quantitative and qualitative data to be collected simultaneously, with data related and interpreted during analysis.

The quantitative segment featured an optional online self-report scale that measures creative personal identity; it was adapted for the present research from Karwowski et al. (2012; in press). Use of this adaptation, the Creative Identity Questionnaire, was deemed a guard against the possibility of confirmation bias, the tendency to construe information in a way that confirms one's beliefs.

The qualitative segment featured *craft elicitation*, my term for a method that asks participants to make something in their chosen media and think about when they first felt creative doing so. Craft elicitation builds on the construct of making as a form of identity construction (Holroyd, 2017) as well as on previous research (Gauntlett, 2007; Schön, 1992) that proposes makers reflexively think while they create. This direction is also favored by Amabile (2017) in her call for a more thorough inquiry

into everyday creators. “[W]e must undertake studies of creative behavior—and the accompanying psychological states and environmental contexts—*in situ*” (p. 5). By asking participants to make things, and then interviewing them if possible in the space where they create, this research hews closely to that directive.

Interviews with participants took place as often as possible in the studios, garages, spare rooms, and kitchens where they worked. The resulting transcripts were systematically reviewed using the precepts of thematic qualitative text analysis (Kuckartz, 2014) in which successive waves of dissection build on each other, always relating back to the research questions.

Questions and Foundations

The key to selecting and implementing the elements of any research design is arriving at methodological fit (Edmondson & McManus, 2007). Accordingly, this project sought congruence between the research question, constructs and methods, the type of data collected, and the methods used to collect and analyze them.

Looking at interdisciplinary constructs such as creativity, identity, and affordances dictated the use of a mixed-methods research design. It also followed that an online quantitative assessment to measure creative identity, as well as craft elicitation and in-depth interviews, would yield layers of data that could be analyzed both statistically and qualitatively.

Ultimately, though, the success of methodological fit depends on the research questions. They emerged from the review of the literature:

- How do the internal and external affordances to creativity influence an individual maker’s evolution toward seeing him or herself as a creative actor?
- How do people identify and perceive these affordances?

- How does assuming a creative identity change a person's life?

To address the questions, the present research expands upon two empirical foundations. First, it is an independent examination of Morean's (2014) theory of creative affordances. Second, it aspires to deepen work on creative personal identity by Karwowski et al. (2012; in press) by combining its quantitative thrust with qualitative evidence. It also seeks to gauge the appropriateness of craft elicitation as a research method.

Clarifying Aims and Intent

Such a broad research agenda necessarily calls for a delineation of the scope of this thesis, a declaration of its scale and intent. By elucidating what this project covers—as well as what is beyond its scope—I present its intentions and goals as a way of situating its position in the field of creativity research.

One choice made in the process of conducting research influences those that follow. Of all the parameters of this project, perhaps the most important is the decision to focus on everyday creators. The field of creativity research calls these people *little-c* creators (Richards, 2007), as opposed to world-class, or *Big-C,* creators (Csikszentmihalyi, 1996). While these distinctions are discussed in more detail in Chapter 2, it is crucial here to understand the implications of this choice. The most significant of these is that the participants in the present research are amateurs.

While they may—like the baker at the beginning of this chapter—be recognized in their social networks for what they do, they clearly are not eminent creators. This differentiation matters because some researchers maintain that only those Big-C creators who solve long-elusive problems or produce acclaimed works can

be recognized as creative (Sawyer, 2006). Studying Big-C creators undoubtedly can bring insight into how the rest of us create. Studying these amateurs who follow the creative pursuits they do simply because they want to seems more likely to lead to findings that are directly relevant to a larger number of people, particularly in how they might cultivate creative identity.

Focusing on everyday makers has a related consequence: The field often measures eminence based on product. I reasoned that because the present research focuses on a range of everyday makers, it should be more concerned with creative process than creative product. My focus is on the path to creative identity, not the objects produced along that journey. So the decision to valorize the process over the product was not simply a matter of expediency borne of the difficulty in finding expert reviewers for activities such as creating spreadsheets or putting together outfits. Rather, the processes of everyday makers could reasonably be considered more relevant to the development of creative identity. This point of view also surfaces in the work of Glăveanu (2017), Gauntlett (2011), and Moeran (2014), which figures prominently in this thesis.

That the current research follows the lead of those scholars—whose backgrounds are, respectively, in psychology, sociology, and anthropology—signals another feature of this project. It canvasses research from each of those fields to arrive at a more global perspective into how creative identity is maintained and developed.

As noted earlier, the preponderance of research in the field of creativity is based on psychology. The literature review for this project, therefore, begins there to examine the inner states of creators. While there is currently no firm sociology of creativity, sociological theory focusing on how institutions and networks affect the processes of making does provide a useful background for understanding their effects

on a person's creative identity. Similarly, as material culture is a primary concern of anthropology, that field's theoretical foundations afford a basis for appreciating the motivations people have for making things.

The discipline of social psychology subsumes a variety of precepts from anthropology and sociology in the many configurations of systems theory, whose intricacies are well suited to a subject as complex as creativity. Social psychology, too, forms the core of much theory about creative identity, along with social and cultural aspects that also lend depth to consideration of the topic.

From those antecedents, the present research incorporates affordance theory (Gibson, 1977, 1979). While the theory arose from the field of ecological psychology, it has become appropriated by a host of other disciplines, including, fairly recently, creativity. Some of the most intriguing research in the field (Glăveanu, 2012; Moeran, 2014; Rietveld and Kiverstein, 2014; Withagen, de Poel, Araújo, & Pepping, 2012) relies mainly on the sociocultural turn in psychology yet is also undeniably transdisciplinary.

This thesis situates itself in that niche. By doing so, it contributes to the field by exploring the relationship between affordances, individual agency, and creative identity in the lives of everyday makers. Indeed, it finds that creative identity is shaped by the interaction of affordances, agency, and action as these everyday creators engage in their chosen activities.

Structure of the Thesis

Accordingly, this thesis first sets out the background necessary to understand the questions. Chapter 2 reviews relevant psychological, sociological, and

anthropological theories that could explain the birth of the creative actor. It also discusses germane systems theories of creativity that attempt to synthesize relevant principles from these disciplines.

With that grounding in place, Chapter 3 considers multidisciplinary approaches to creative identity, looking to social psychology as well as sociology to ascertain the importance of self-narrative. Chapter 4 assesses approaches to affordance theory and makes a case for Moeran's circuit-based schema (2014) as a fitting theoretical linchpin for this project. An overview of the convergent parallel mixed-methods strategy (Creswell, 2014) used in this project as well as the sampling and data collection procedures are highlighted in Chapter 5. Conveying the presentation and analysis of quantitative data, Chapter 6 details the questionnaire results and summarizes the comparative interlude. With the presentation and analysis of the qualitative data, Chapter 7 describes how craft elicitation and interviews together helped uncover more about the participants' creative identities. The chapter also spotlights themes that emerged from the repeated analyses of qualitative interviews. I discuss and interpret the results in Chapter 8, revealing a new theoretical model of creative identity that situates affordances in the action of making within cultural, psychological, and social spheres. In that chapter, I also identify the implications of the research and future directions additional research could take.

After sharing my reflections on the project, I offer a conclusion to the work. I argue that knowledge of how affordances temper action—and how agency and action, in turn, imbue creative identity—could point the way for people who say they cannot make anything to begin thinking of themselves as creative actors. This would allow them to not only experience the joy inherent in making but position them as people whose shifted worldview imbues them with creative identity.

CHAPTER 2

REVIEW OF LITERATURE, PART 1: PSYCHOLOGICAL, SOCIAL, AND CULTURAL PERSPECTIVES ON CREATIVITY

Creativity is sometimes described as one of the qualities that makes us human (Puccio, 2013; Sawyer, 2008), and as a critical factor in moving society forward (Hennessey & Amabile, 2010; Gauntlett, 2011). Yet for a trait so important, widely distributed, and valued, creativity only became a subject of sustained academic research after Guilford's (1950) presidential address to the American Psychological Association galvanized study in the field (Hennessey & Amabile, 2010). Subsequently, creativity has grown into an abiding interest for psychologists as well as anthropologists and sociologists—and their counterparts in subfields from innovation management to cognitive neuroscience.

In the ensuing decades, creativity research has endeavored to answer many of the big questions in the field. It is now widely acknowledged, for example, that creativity involves ordinary cognitive processes (Finke, Ward, & Smith, 1992); is developed cumulatively, rather than in a single inspired moment (Tardif & Sternberg, 1988); and is the province of groups as well as individuals (Amabile, 1996; Csikszentmihalyi, 1996; Sawyer, 2006). Yet the matter at the center of this investigation—how someone starts thinking of him or herself as creative—has yet to be directly addressed.

This chapter endeavors to bring context to that question by surveying and analyzing the pertinent literature surrounding creativity. It aims to underscore why the

present research constitutes a new and original contribution to the field by critically appraising what is known about how everyday creators build a creative identity.

While multiple perspectives from psychology, anthropology, and sociology provide necessary depth to the present discussion, these disciplines paradoxically point to one of the shortcomings in creativity study: While these fields share many of the same concerns and constraints, investigators in one arena may often appear oblivious to developments in another (Hennessey & Amabile, 2010; Montouori & Purser, 1995). The resulting fragmentation has meant that research occasionally duplicates or occludes, rather than illuminates, the existing body of knowledge.

Due in part to the momentum afforded by Guilford's (1950) exhortation, psychologists have considered creativity as a subject worthy of study in its own right for more than 60 years, and the majority of empirical research on the matter comes from that field. Social psychology now frames much discussion of creativity theory, while relevant sociological and anthropological theories often approach the subject obliquely through art practice or other sorts of cultural production (Burns, 2012).

Yet Sawyer (2006) describes creativity as necessarily requiring an interdisciplinary approach: "For a complex phenomenon like creativity, a complete understanding requires us to develop explanations at individual, social and cultural levels" (p. 316). His position is amplified by the abstract analysis performed by Kahl, da Fonseca, and Witte (2009) who found few published studies in any discipline which examined creativity from individual, group, organizational, and cultural spectrums. For the required panoramic consideration, then, this review will describe, analyze, and perhaps most importantly, synthesize significant psychological, anthropological, and sociological currents in creativity research.

The 'Who' of Interest

Before any in-depth theoretical analysis can take place, the nomenclature of the term "creativity" must be understood. Over time, it has been characterized as belonging to select groups, such as artists or intellectuals (Sternberg & Lubart, 1999), and these people were the first to be empirically studied as creators. It is widely agreed now, though, that creativity—be it world-changing or workaday—is an essential human trait (Petrie, 1991; Weisberg, 1993), an understanding that has given rise to the study of everyday creativity (Richards, 2007). In the investigation of the genesis of creative identity, everyday creativity is of primary interest.

Further, creativity requires some evidence of both novelty and appropriateness (Amabile 1996; Csikszentmihalyi, 2006; Kaufman, 2009; Sawyer, 2006). It is also construed as being relevant to degrees of significance (Kozbelt, Beghetto, & Runco, 2010). Torrance (1988) relates theories about levels that progress from expressive to productive, inventive, innovative, and ultimately emergent and generative. In a simpler delineation, Boden (1994) suggests a typology with H-creativity—that which is historically significant—and P-creativity, which is the creativity most people engage in daily.

Today, social psychologists most commonly classify creativity theories as applying to three levels of significance: *Big-C* creators (Csikszentmihalyi, 1996) are eminent; *pro-c* creators (Kaufman & Beghetto, 2009) evince professional-level creativity that stops short of eminence; and *little-c* creators (Richards, 2007) exhibit the kind of creativity that most people express every day—drawing a sketch, for example, or making a video holiday greeting. In a proposed fourth level, *mini-c* creativity (Beghetto & Kaufman, 2007), people construct knowledge, a necessary step

in developing any sort of sustained pursuit and integral to building the frames of reference necessary for all the other levels within a domain.

Indeed, Beghetto and Kaufman (2007) contend that the four levels are interrelated; big-C creators are likely to have been considered professionals before their rise to eminence, and everyday creativity can sometimes kindle a career. The permeability of the line between little- and mini-c creativity is relevant to the present research as both permit the consideration of real-life endeavor and learning.

In addition, creativity theories also are understood to apply to people, processes, products, and environments (Rhodes, 1962). Glăveanu (2013) suggests a similar framework drawn from social and ecological psychology: actors, action, artifacts, and—splitting Rhodes' environments into two segments—audiences and affordances. These transdisciplinary delineations are appropriate to the scope of the present research and will reappear later in this thesis. Regardless of the language used to address them, creativity theories consider the construct from a variety of vantage points.

Arriving at a Definition

In order to investigate what happens when someone begins viewing him or herself as creative, alighting on a definition that considers mini- and little-c creativity is essential. A selection of definitions over time and from a variety of vantage points illustrates how the concept of everyday creativity has evolved from an individualist point of view to a wider societal one. It also highlights the necessity of reading theorists in anthropology and sociology, as well as psychology.

Runco and Jaeger (2012) relate that the mid-1950s versions of what they call the "standard definitions of creativity" (p. 92) maintain a product or idea that is novel and unusual, a construct still standard in creativity research. Stein (1953) was among the first to explicitly describe creativity in this way:

> The creative work is a novel work that is accepted as tenable or useful or satisfying by a group at some point in time . . . By "novel" I mean that the creative product did not exist previously in precisely the same form . . . In speaking of creativity, therefore, it is necessary to distinguish between internal and external frames of reference (pp. 311-312).

Stein's (1953) characterization addresses the social implications of creativity, and also refers to the maker's existing knowledge as a starting point for novelty. Yet while its simplicity may be the reason for its longevity as a working definition, Stein's version does not go far enough in the direction of mapping everyday creativity.

Other mid-20th-century theorists constructed more complex definitions. Reviewing his life as a psychologist, Torrance (2001) recalled online his 1958 observation of creative thinking:

> [It] . . . is the process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and hypotheses about the solution of these deficiencies; evaluating and testing these hypotheses; possibly revising and restating them; and finally communicating the result (para. 4).

This became his working definition throughout his long career as a creativity researcher. While Torrance's (2001) description illuminates process and could apply to mini- and little-c creativity, it neglects to directly address the person doing the work of sensing, making, testing, and communicating.

One of the first specific mentions of everyday creativity in the academic literature comes from Richards, Kinney, Benet, and Merzel (1988). Explaining their Lifetime Creativity Scales, the authors identify everyday creativity by a pair of markers: "(a) originality—new or unusual elements must be involved and (b) adaptation to reality—outcomes must be meaningful to others rather than random or idiosyncratic" (p. 476). Interestingly, their definition was among the first to explicitly allow that a wide range of activities, recognized by a wide range of audiences, could be considered creative. Even as these researchers were attempting to measure the extent of everyday creativity among their study participants, though, they omitted the person in their definition of creativity.

An actor-centric direction emerged a few years later in anthropology. Taylor (1991) claims that ". . . creation becomes the paradigm mode in which people can come to self-definition" (p. 62). Pickering and Negus (2004) pick up on this characterization, considering creativity "a form of imaginative engagement" that matters to people because "it answers a need that is not otherwise satisfied" (p. viii). They also contend that creativity communicates the creator's experience via the product to others. Their interpretation clearly could apply to mini- and little-c creativity—and it addresses the person at the core of creativity—but it privileges the product above the process.

Glăveanu (2017) takes a longer, transdisciplinary view:

> Creativity is fundamentally considered *a sociocultural-psychological phenomenon embedded with (material and symbolic) action that, exploiting existing affordances, engages the relation between actors and audiences and leads to the generation of artifacts with properties evaluated as creative by the creator and/or other people* (pp. 276-277; emphasis in original).

Inclusive as it is, this definition does not consider the feeling of being creative. As such, it comes within striking distance of defining creativity for this project but stops short on this point, which is essential for querying creative identity.

Fortunately, a definition by Gauntlett (2011) strikes a balance between all concerns:

> Everyday creativity refers to a process which brings together at least one active human mind, and the material or digital world, in the activity of making something which is novel in that context, and is a process which evokes a feeling of joy (p. 76).

Centrally, in Gauntlett's point of view, evidence of one's own everyday creativity appears not only as the *something* that is made but also as "a process and a feeling" (p. 17). His mention of joy speaks of the transcendence resulting from the process and the product. It recalls Csikszentmihalyi's (1996) connection between enjoyment and creative flow, as well as May's (1994) contention that joy in making is an outcome of an enhanced consciousness and offers a personal glimpse into collective human potential. Joy might well also be an outcome of sharing one's work, Gauntlett says, and his referral to material or digital venues defines an array of networks where people show and talk about what they have made.

Because Gauntlett's (2011) definition of creativity accounts for novelty, creation, connection, process, and emotion, it allows the necessary latitude to consider both mini- and little-c creativity from a wide range of people, activities, and outcomes. Accordingly, it will be used in the present research.

Relevant Psychological Approaches

As noted in the previous section, the present research is concerned with theories that relate to processes and people generally, and specifically those of little- and mini-c adult creators engaged in everyday pursuits. Broadly considered, theories of creativity concerned with the specific thought processes of creative people involve the initial two elements of Rhodes's (1962) person-process-product-press construct. In other words, the psychological research reviewed here is devoted to discovering not just *which* everyday creators think creatively, but *how* they think in the first place.

Tracking the Creative Process

Plsek (1996) holds most psychological theories of the creative process are predicated on two principles. The first is that the creative process involves both conscious and subconscious processes to generate and evaluate ideas. The second is that a creative idea is not complete until it is implemented.

One of the first cognitive constructs of the creative process (Wallas, 1926) held to that standard by advancing a four-stage model that moves from preparation to incubation, illumination, and at the end, verification. Wallas asserted that these steps could be simultaneously used on varied problems, sometimes quickly, sometimes slowly. He proved to be far-sighted about the cognitive roots of creativity by stating that preparation and verification are both conscious processes, while incubation and illumination tread between the conscious and subconscious.

Following Wallas (1926), a number of stage-based theoretical models describing the creative process were developed throughout the 20th-century (Lubart, 2001). In his bisociation of ideas theory, Koestler (1964) elaborated on the concept that creativity requires the combining of ideas. Von Oech (1983) developed a two-

stage model that featured the development of an idea and its implementation. Barron (1988) detailed a four-step Psychic Creation model that proceeded from conception, gestation, parturition, and development. Amabile (1996) introduced a version of the basic stage model that features problem identification, preparation, response generation, and response validation, claiming the steps do not necessarily take place in that particular sequence. Mumford, Mobley, Reiter-Palmon, Uhlman, and Doares (1991) outlined sub-steps in their eight-step model of problem definition, information gathering, organization, conceptual combination, idea generation, evaluation, implementation planning, and solution monitoring. This model, too, allows for skipping or recombining steps.

Regardless of the number of steps in the model, these stage-based theories either implicitly or explicitly draw on the tension between divergent and convergent thinking. To that point, the multi-step thinking skills model (Puccio, Mance, & Murdock, 2009) moves from clarification to transformation and implementation and specifically calls for deliberate divergent and convergent thinking at each step. This model also accounts for recursion, an action critical to refining an individual's creative process (Lubart, 2001).

From Stages to Cognition

Stage models of the creative process raise an important question: Do the stages they describe pertain to creativity or do they illuminate all thinking? Enter creative cognition (Finke et al., 1992). It holds that creative thought draws on characteristic cognitive processes—indeed, the same ones used in everyday, noncreative thinking. It appropriates concepts from cognitive psychology—notably, conceptual combination

and expansion, creative imagery, analogy, and metaphor—to explain how people develop and rationalize ideas.

The theory is rooted in research that explored how participants discovered emergent patterns in images (Finke, 1996) and based on experiments in which subjects were asked to combine three visual forms (i.e., a cone, cube, parallelogram) mentally into structures that were put in categories that inspired possible creative uses. The resulting model describes both generative and exploratory processes (Finke et al., 1992). Generative processes spark ideas and can involve a range of cognitive actions—including memory retrieval, idea synthesis, and categorical recombination—sometimes all at once (Smith, Ward, & Finke, 1995). Exploratory processes take those sparks and with processes such as evaluation weigh the likelihood that they might result in a creative fire or a failure to ignite.

Much empirical work assessing creative cognition (e.g., Beaty, Silvia, Nusbaum, Jauk, & Benedek, 2014; Kunios & Beekman, 2014) draws on cognitive neuroscience and is supplemented by the widespread use of imaging tools such electroencephalography, positron emission tomography, and functional magnetic resonance imaging. Such studies typically have participants perform creative tasks while hooked up to one or more of the brain imaging machines. By analyzing what parts of the brain are activated when people solve problems, these studies have often validated conventional cognitive research (Sawyer, 2011), including the model by Finke et al. (1992).

Nonetheless, not all neuroscientific research on creativity is transferrable. Sawyer's (2011) critical review of the literature claims that such studies do not operate from a single definition of creativity, and further do not measure the same thing, as they employ a variety of exercises, from working puzzles (Jung-Beeman et al., 2004)

to listening to music (Silvia, 2011). For the purpose of the present research, that inconstancy might be a bonus. While it is true that all of these experiments do not necessarily adhere to the same definition and therefore do not compare like to like, they do indicate that creativity generates from multiple parts of the brain (Runco & Jaeger, 2012).

That, in turn, suggests that actions which reflect little- and mini-c creativity employ numerous neural networks, and offers grounds for believing that everyone is capable of creating. As Sawyer (2011) asserts: ". . . these studies suggest that what people think of as *creativity* involves a wide variety of cognitive processes, each of which results in distinct patterns of brain activation" (p. 151; emphasis in original).

Meanwhile, conventional creative cognition research continues. Miller and Dumford (2016) and Marin, Reimann, and Castaño (2014) have produced studies that found that people use a combination of deliberate and intuitive cognitive processes, including analogy and metaphor, in the service of everyday creativity.

In contrast to creative cognition, metacognition—literally thinking about one's thinking—accounts for an adjacent theoretical direction. It stems from mid- to late-20th-century examinations of childhood learning (Piaget, 1962; Vygotsky, in Zaretskii, 2009). Metacognition is also known in various branches of psychology as self-regulation or executive function (Livingston, 1997), and is considered a component of intelligence (Sternberg, Kaufman, & Grigorenko, 2008).

According to Flavell (1979), the difference between cognition and metacognition depends on how information is deployed. While cognitive strategies enable a person to achieve a goal (e.g., devise a new recipe for chocolate cake), metacognitive strategies will help him or her assess how effectively the goal has been reached (e.g., questioning whether the result tastes good and can be made again). The

link to creativity is implicit: Metacognitive experiences may come before or after cognitive ones—often when cognitions fail—to salvage a perceived shortcoming. Given the role of reflection, metacognition incorporates the cognitive skills of memory processing and knowledge of problem-solving techniques within the wide variety of domains that creative people pursue.

Hargrove (2013) explored how metacognition progresses in a study that tracked undergraduate college design students over the course of four years. A control group was given no metacognitive training, while two other groups were given instructions in metacognitive skills. Participants in one of those groups were also required to record their reflections in a shared online blog, which in itself can be construed as a metacognitive device. All the students were tested for creativity using the Remote Associates Test (Mednick, 1968) for convergent thinking, and the Similarities Test (Wallach & Kogan, 1965) for divergent thinking. Initially, students who were taught specific metacognitive techniques tested higher—that is, as being more creative—than the control group. Further testing throughout the study indicated that students who learned the skills continued to be more creative.

Interestingly, Hargrove (2013) credits the teaching of metacognitive skills and reflection on and sharing of learning as critical for fostering creative thinking. He speculates that over time those skills become ingrained. At that point then the line becomes blurred, and the metacognitive model of the creative process could be interpreted as a model of the creative person. As it happens, that blurring is a property of a number of creativity theories. That is perhaps inevitable with as complex a construct as creativity.

These models of the creative process are for the most part predicated on the understanding that the process begins with a creator's existing knowledge. That

knowledge is then variously put together and recombined into some new idea. Then, along the way to implementation, a creative idea must be judged worthy of pursuit (or not) by its creator. The tension between divergent and convergent thinking required in these models is not only key to their conception of the creative process; it is key to the way creative people think.

Theories of the Creative Person

Multiple theories of the creative process clearly exist, but there are fewer explicit theories of the creative person. The difficulty is in identifying exactly what the theories purport to explain—is it intellect, personality, or some other quality? The answer depends on the theorist. Runco, Namiro, and Walberg (1998) surveyed 143 creativity researchers for their implicit convictions of the creative person. The range of opinions led them to note that most creativity researchers agree the construct is complex and incorporates various psychological, social, and physical traits. Yet the degree and importance of individual traits was not so widely agreed to. Perhaps the challenge of formulating a trait-based theory that could be widely applicable has been a deterrent. Then again, perhaps creativity has less to do with traits and more to do with a turn of mind—an idea that will be explored shortly.

As it stands, many theories simply attempt to identify the factors that influence creativity, while others incorporate the factors outright. That is why the four-C model of creativity (Kaufman & Beghetto, 2007) identified in the introduction to this review is helpful: Its levels simply describe an individual's magnitude of creativity. From eminent Big-C creators (Csikszentmihalyi, 1996); to workaday pro-c creators (Kaufman & Beghetto, 2009); to everyday little-c creators (Richards, 2007); to

knowledge-making mini-c creators (Beghetto & Kaufman, 2007), each level clearly describes a person relative to her or his creations.

Since everyday creators are the main interests of the present research, theories that specifically illuminate them are relevant. Mednick (1962, 1968) was among the first with such a theory; he described creative people as those who employ *remote associates*—that is, they instinctively fit together ideas without strong overt bonds. His own insight came from his experience as a professor being correctly contradicted by a freshman student about the theretofore accepted interpretation of a psychology experiment. Mednick reasoned that the student's unfamiliarity with psychological theory allowed him to approach it openly and creatively.

Mednick's (1962) theory of creative persons is embodied by the aforementioned Remote Associates Test, an instrument which presents examples of three seemingly unrelated words. The test-taker adds a fourth to complete the series, and the assessment is scored for creativity by an independent rater. An example would be the words "moon," "cheese," and "bell"; the fourth word that connects them is "blue." Although the test arguably concerns itself with convergent thinking rather than fluency, flexibility, and novelty (Mendelsohn, 1976), and is obviously weighted in favor of people with strong verbal abilities, it is still in wide use.

In introducing the instrument, Mednick over-optimistically described its potential to revolutionize the field. Later studies (e.g., Andrews, 1975, Mendelsohn, 1976) reported that the assessment failed to show a pervasive relationship between scores and creativity. However, given Hargrove's (2013) example, it is still used to assess convergent thinking in creativity research. Both the Remote Associates Test and Mednick's theory (1962) are valuable in this discussion because their development reiterates the cognitive processes inherent in a creative person's associative thinking.

Some theoreticians argue that the acuity required to produce creative remote associates is implicitly linked to intelligence (Simonton, 2000; Sternberg & O'Hara, 1999), and some of these theories are likewise relevant to everyday creativity. One significant example comes from Guilford, the same psychologist who called for increased psychological study in creativity in 1950. He determined that problem solving—which he equated to creativity—requires four distinct qualities: fluency, flexibility, originality, and elaboration. Guilford's structure of intellect model (1967) also examined the ideas of a creative person in the context of both convergent and divergent thinking. His model is appreciably more complex than Mednick's, with either 120 blocks of subcategories or 180 of them in a later version (1988).

Guilford asserted that intellect manifests itself in three dimensions—content, products, and operations—and illustrated those dimensions with a cube. In the cube were five operations: cognition, memory, divergent production, convergent production, and evaluation. The cube also housed six types of product—units, classes, relations, systems, transformations, and implications—and four varieties of content: figural, symbolic, semantic, and behavioral.

Intelligence Models

Sternberg's triarchic model of intelligence (1985) offers a simpler construct and plainly enlists creativity in its structure. It contends that people have varying degrees of three competencies that can help them choose, adapt to, and change their circumstances: analytical/componential, practical/contextual, and creative/experiential. Problem solving is a key characteristic of the analytical set, while adaptation is central to the practical set, and discovery to the creative set. Sternberg (1996) later called this

the successful intelligence theory, with the understanding that people who successfully build on their strengths and minimize their weaknesses also successfully negotiate life.

A related intelligence model—Gardner's multiple intelligence theory (1985, 1999)—does not address creativity per se, though Simonton (2000) points out that its list of competencies relates to various aspects of creativity. Multiple intelligence theory maintains that people do not possess a single type of intelligence. Instead, everyone has eight of them, at least to a certain extent: verbal-linguistic, logical-mathematical, spatial-visual, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist. The theory supports the idea that individuals may have a set of preferred intelligences they use in learning and understanding, and that heightened proficiency in other intelligences can be cultivated. Gardner (1993) elaborated his theory with examples from the lives of eminent creators, including Martha Graham, Igor Stravinsky, and T. S. Eliot.

Critics of intelligence-based theories contend that the models have an array of shortcomings. For example, overall statistical support for the structure of intellect model (Guilford, 1967, 1988) has proved somewhat untenable (Sternberg & Grigorenko, 2001). Criticisms of both the triarchic and multiple intelligence theories (Gardner, 1993; Sternberg, 1985) assert that their distinctions between intelligences are unfocused and overlap with existing psychometric assessments.

Indeed, some critics question whether creativity and intelligence are related in the first place. In her meta-analysis of 21 creativity and IQ studies, Kim (2006) found a negligible correlation between the two constructs. Meanwhile, research that examined sociocultural aspects of Guildford's (1967, 1988) structure of intellect model (Amabile, 1996; Csikszentmihalyi, 1996; Kaufman & Baer, 2004, 2005) has accentuated the importance of creativity to affect, motivation, and domain specificity

in addition to intellect. That research will be more thoroughly discussed further in this review.

Economic and Investment Theories

Kaufman (2009) suggests that creativity theories referencing economics are also suited to a discussion of everyday creativity. Such theories generally consider creative output a form of capital, and a few of them refer to the creative person. Walberg and Stariha (1992) hypothesized that economic models of capital, with their emphasis on resource allocation, offered the means to enhance elementary school students' creativity.

Arguably the most important economics-based model of creativity, Sternberg and Lubart's (1995) investment theory proposes the creative person buys ideas low and sells them high. While nominally applicable to Big-C creators, the theory has particular resonance for little-c creators:

> Buying low means pursuing ideas that are unknown or out of favor but that have growth potential. Often, when these ideas are first presented, they encounter resistance. The creative individual persists in the face of this resistance and eventually sells high, moving on to the next new or unpopular idea (pp. 87-88).

Like other models, the investment theory attempts to explain the creative process, though it also warrants that intelligence, knowledge, environment, motivation, cognitive style, and personality are essential qualities of the creative person. In Sternberg and Lubart's (1995) view, six factors figure into a creative person's investment portfolio. Intellectual proficiency allows people to judge their own ideas

and convince other people to accept them. Stores of knowledge are required to predict the direction of a field, though too much of it can inhibit new ideas. An environment that supports creativity is necessary, as is sufficient motivation to work toward a goal. As cognitive style is an individual's preferred way of thinking, it is incumbent upon a creative person to cultivate openness and habitually put new ideas together. Finally, personality traits that promote creativity include a tolerance for ambiguity, risk-taking, and nonconformity.

Yet even if a person invests in all six factors, Sternberg and Lubart (1995) contend, the individual must choose to do something creative, regardless of the consequences:

> [C]reativity is in large part a decision that anyone can make but that few people actually do make because they find the costs to be too high. Society can play a role in the development of creativity by increasing the rewards and decreasing the costs (p. 97).

Sternberg (2012), alone and with others (e.g., Chart, Grigorenko & Sternberg, 2008; Zhang & Sternberg, 2011), has supported the investment theory with multiple studies of elementary through college students. Using devices such as short stories, drawings, advertising, and scientific problems as springboards to creative thinking, the studies indicate that creativity is domain specific, and can be predicted by the traits in the theory (Baer, 2010; Sternberg, 2009, 2012). Moreover, the theory continues to spur inquiry in topics as diverse as adolescent social creativity (Gu, Hu, Ngwira, Jing, & Zhou, 2016); unifying aesthetics with creativity (Vartanian, 2014); and teaching and learning mathematics (Shen, 2014).

Sternberg (2012) sums up the psychological position regarding the creative person in a way that crystallizes the abstraction of everyday creativity: ". . . creative

people are creative largely not as a result of any particular inborn trait, but, rather, through an attitude toward life . . .” (p. 3). With their openness to experience and tolerance of ambiguity, they are compelled to solve problems in new and unusual ways. To paraphrase the 20th-century American politician Robert F. Kennedy (1988), the creative person dreams of things that never were and asks why not.

Summarizing Psychological Theories

It should be noted that this section does not attempt to explain every theory regarding creative people and processes. Instead, it focuses on those that could be most helpful in clarifying what happens for people to consider themselves creative. For instance, it does not discuss evolutionary theories of creativity (e.g., Eysenck, 1996; Simonton, 1999) or historiographic ones (Simonton, 2010) since they emphasize big-C rather than little- and mini-c everyday creativity.

Until the unlikely development of a grand theory of creativity, the evolving and sometimes contradictory nature of theories of the creative process and the creative person, therefore, calls for a certain amount of perspective. Mumford and Antes (2007) discouraged relying on a single model to analyze creative achievement. The same could be said about models of the creative person and process.

To that end, this section reviewed several psychological approaches applicable to little- and mini-c creators. Theories of the creative process, including various stage-based models, were discussed. Models relating to cognition were also explored, as was the construct of metacognition. Then theories of the creative person were reviewed, and their connections to constructs other than creativity—such as intelligence—were investigated. Models of the creative person that borrow from economic theory were considered, and their current influence noted.

As noted earlier, psychological theories only tell part of the story of the birth of the creative actor. The next section of this review proceeds to explore the social forces that influence what happens when someone decides they are creative.

Relevant Sociological Approaches

Because creativity is a universal human characteristic, it follows that it is more than the province of individuals. Indeed, creativity often emerges through the interaction of individuals in groups (Sawyer, 2006). Moreover, the interplay between the individual and the group is why creativity can be considered the nucleus of social change, enabling people to solve problems, innovate, and alter institutions and societies (Pachuki et al., 2010; Sales & Fournier, 2007).

Creativity in some fashion enters into the work of the 19th- and 20th-century founding figures of sociology. Analyzing creativity and trends in social theory, Domingues (2000) considered four pioneers of the field and their contributions:

> Weber's (1980) far-reaching transformation via charisma and piecemeal changes under rational domination; Durkheim's (1912) 'collective effervescence' as the source of new "collective representations"; Marx's (1958) dialectics between (an active and creative) subject and object; and Simmel's (1989) appeal to the philosophy of life to explain the emergence of values (p. 468).

Domingues (2000) admits these early social theorists did not sufficiently expand their ideas to consider creativity per se. Instead, the subject has often surfaced obliquely, as a thread in sociological examinations of production—art-making, economies, influence, and leadership (e.g., Becker, 1982; Chan, 2011; McIntyre, 2012; Menger, 2014; White, 1993).

That is perhaps why Domingues contends that the sociological view of creativity ". . . has been unfolding as a highly decentered theoretical movement, without common project or identity among its promoters" (2002, p. 468). As examples, he mentions Giddens's (1979, 1984) theories of reflexivity and the potential for social change (which will be discussed later in this thesis); Habermas's (1981) theory of communicative rationality, which can be described as a product of successful communication; and Alexander's (1986) theories of cultural sociology, in which ideas and processes can hold sway over institutions. Domingues aside, however, other theorists are equally enlightening on the matter of society and creativity.

Williams and the Communication of Creativity

One of the most cogent discussions of creativity within a sociological context occurred in the 1960s when Williams wrote about the creative mind in *The Long Revolution* (2011). Though primarily focused on the relationship between creativity, art, aesthetics, and culture, Williams uses the book's first essay to pursue a spirited and still-relevant discourse on the past, present, and future meanings of creativity. Importantly, he identifies several themes in his essay that are central to later attempts to develop a sociology of creativity.

The first of these is that communication is central to making, a notion also reflected in Arnheim's aesthetic theory of gestalt (1974). Regardless of the medium—be it words, wool, or wood—Williams (2011) contends that communication can be taken to be one of making's most important purposes, and eliciting reaction and response its most important products.

Williams (2011) also suggested that it was important to think of making as a way to order both individual and group experience, particularly the experience of

sharing work with an audience. In the complex, often messy processes of living together, people create organizations that eventually become institutions, such as art. The meanings of these organizations influence making, and vice versa. Furthermore, Williams maintained that communication unveils meanings that the maker and the audience have in common; societies recreate these meanings constantly:

> Even the skills themselves are not commodities to be passively inherited, but processes that have to be learned, as part of any individual artist's growth: the means and the meaning, in a whole process, have to find this personal verification. Yet the common experience which the meanings interpret will itself be changing, either slowly and hardly noticeably or at a variety of rates to one so rapid that the fact of change is a matter of general consciousness (pp. 50-51).

As a social theorist with a background in literature and criticism, Williams further illuminates his conception of the social dynamism of creativity in *Marxism and Literature* (1972). The heart of creativity, he asserts, is the making and remaking of consciousness and creative practice sits at its core. In turn, Williams's sense of creative practice entails a constant exchange between the self and one's relations with others, what Pope (2005) terms ". . . an attempt to wrest from the complexities and contradictions we have internalised . . . something that helps us live to better purpose" (p. 11). This internalization of external forces is a key concept that surfaces in the sociological descriptions of creativity discussed in detail later in this section.

Given the vagaries of time and resources, creative practice proves to be a moving target, which is why Williams (1972) calls for a unified effort to identify its parameters:

> It is the special function of theory, in exploring and defining the nature and variation of practice, to develop a general consciousness within what is repeatedly experienced as a special and often relatively isolated consciousness. For creativity and social self-creation are both known and unknown events, and it is still from grasping the known that the unknown—the next step, the next work—is conceived (p. 212).

Joas, Creativity, and Action

The Creativity of Action (Joas, 1996) can be considered the beginning of a response to Williams's call for a sociological theory of creativity. Starting from a point of view informed by the pragmatism of James (1890), Mead (1934), and Dewey (1934), and reacting to the many of the same "theoretical fragments" described by Domingues (2000, p.145), Joas claims that sociology itself is predicated on action and that all human action is creative.

Examining five sociological metaphors—expression, production, life, intelligence and reconstruction, and revolution—he highlights the shortcomings of theretofore existing action theories. He expresses dissatisfaction with the ends-and-means exercise of simply sorting human action into poles of rational and normative extremes. In response, Joas introduces an encompassing third model of action—creative—that he said could better explain human agency: "It may still be the case that creativity contains a potential for understanding all human action that none of the alternative models of action can replace" (1996, p. 73).

In establishing this theory, Joas (1996) maintains that action is not singular, and not necessarily rational; instead, each act is a part of an unending fabric felted of inseparable thought and action. He also holds that the will and the body constantly

negotiate a relationship. He further posits that individual actors and their actions are embedded in social groups, which establishes the foundation for an individual-centered theory of creative action.

He outlines his theory with four tenets: situation, corporeality, sociality, and creativity. Because people are able to act on purpose, control (and be controlled by) their bodies, and act independently of others as well as their surroundings, Joas (1996) proposes that the creativity inherent in devising new modes of acting or thinking enables them to disconnect from habit and structure to build context anew.

Joas (1996) described their unfolding in terms of a creative practice:

> At the beginning of an action process goals are frequently unspecific and only vaguely understood. They become clearer once the actor has a better understanding of the possible means to achieve the ends; even new goals will arise on the basis of newly available means (p. 273)

In his point of view, creativity occurs when an individual actor breaks from habit to forge a new way of contextualizing the world.

Joas's theory (1996) is particularly relevant to thinking about the birth of the creative actor. Unlike rational and normative theories, it considers action as a response to a panoply of changing circumstances and structures. Yet and still, Joas offers his theory not as an alternative to those, but as an overarching complement. "These creative actors whom Joas describes are purposive in a more diffuse sense, and they are responsive to norms in action," writes Little (2011) in a review. "The chief tension Joas offers is between stylized, mono-stranded models of action, and thick theories that incorporate the plain fact of intelligent adaptation and shaping of behavior that occurs in virtually all human activities" (para. 14).

The Creativity of Action (Joas, 1996) informs the subsequent work of most of the sociological theorizing about creativity. Some of that work is benevolently critical (Del Mar, 2010), while other work, as discussed below, uses it as a springboard for an attempt at a more complex sociology of creativity.

Building on Joas with Bourdieu

Dalton (2004) claims that the chief flaw in Joas's (1996) theory is that it casts creativity as distinct from habitual action, and it thereby "neglects the possibility that some action may contain creative and habitual elements simultaneously" (p. 611). For an explanation of everyday creativity, this might be an important distinction. If a particular creative pursuit is part of a person's habitual routine—say, the knitter who always has a project going, or the poet who writes daily—then that quotidian output could be considered a part (if not outright proof of) her or his creativity.

To better bridge what he perceives as the gap between habit and creativity, Dalton (2004) incorporates ideas from Bourdieu (1969, 1984) about habitus, field, and practice into a proposed sociology of creativity. While Bourdieu does not mention creativity explicitly, Dalton argues that his theories about social capital and agency complement Joas's point about creativity arising from the interruption of habit.

For Bourdieu (1984), habitus involves an individual actor's largely unconscious predisposition toward rational, strategic action; it is a physical and psychic embodiment of the objective and subjective world. He further considers habitus a self-organizing disposition that lasts over time, "lasting but not immutable" (Bourdieu & Wacquant, 1992, p. 108), and one that is transposable to the gamut of arenas of social action. Those arenas, in turn, constitute the field—i.e., "the inescapable boundaries in which we live" (Gauntlett, 2007, p. 64). In Bourdieu's view,

the social space encompassed by the field is the scene of conflict and competition as individual actors struggle to control its power and seize its authority. In so doing, sometimes they reshape the field itself. However, they cannot succeed without sufficient capital—social, economic, cultural, and symbolic resources that aid mobility on the field. Bourdieu considered habitus, field, and capital as "thinking tools" (Bourdieu & Wacquant, 1989, p. 50). Indeed, Bourdieu (1986, p. 101) expressed these tools as integers of a seemingly straightforward equation:

$$[(\text{habitus})\ (\text{capital})] + \text{field} = \text{practice}$$

That is, an individual actor's predispositions and positions on the field result in practice, which can be understood as the exchange between her or his actions and circumstances. "Put another way," states Maton (2014), "we cannot understand the practices of actors in terms of their habituses alone—habitus represents but one part of the equation; the nature of the fields they are active within is equally crucial" (p. 51).

Considering Bourdieu's equation in terms of creativity, Chan (2011) frames it within creative practice, including art, literature, science, and technology. "Within each field, there is a configuration of capital, such as prestige, status, wealth, power or knowledge, that provides a structural dimension that recognizes the resources as well as constraints of practicing in that field" (p. 147).

In Bourdieu's (1993) view, the field is the scene of multiple struggles in practice. Positions are taken with respect to what are considered legitimate products, players, standards, methods, and outcomes. Capital is deployed to achieve advantage. As it contains a schema of predispositions, habitus enables individual actors to navigate their fields by informing their strategies for innumerable plays in practice that can subvert or succeed. It is, as Dalton (2004) notes, ". . . flexible and open-ended but

continues to place significant bounds on the 'horizon of possibilities' that Joas describes" (p. 613).

Implications for the Everyday Creator

Drawing out the concepts of habitus, capital, field, and practice, Dalton (2004) makes two observations that illustrate how these elements might support everyday creativity. In the first, he says that because habitus offers an "inevitably imprecise fit between general dispositions and concrete situations" (p. 613), it affords the sliver of an opening for creative action in practice. In the second, Dalton asserts that people operating within a field may take strategic action with their stores of capital that can increase their status and recognition—qualities which in turn are shaped by the field. Nonetheless, Dalton says the constraints of habitus and field do not suggest a robust environment for creativity: "This unidirectional model of agency ultimately cannot account for any but the most limited types of creative acts" (p. 613).

Dalton (2004) aims to reconcile Joas's (1996) action theory, with its implicit dependence on the individual and emphasis on the interruption of habit, with the group- and routine-dependent characteristics of Bourdieu's (1986) constructions of habitus and field. Dalton acknowledges the concurrent presence of both habit and creativity:

> Creativity emerges from the nature of routine activity itself (whether individually habitual or prescribed in roles or schemas), which can never be specified with absolute precision and demands "interpretation" or "performance" in the concrete realization of action. Recognizing further that action takes place in a social and physical environment in which creativity is both judged and has consequences for other actors establishes the potential for

> bringing the concept of creative action, so carefully and insightfully explored by Joas, into broader theorizing about the relationship between agents and the social structures in which they are embedded (p. 620).

As Chan (2011) sees it, Dalton's (2004) hybrid suggests that creative actors—irrespective of field—share the urge to create due to overarching habitus. Creative actors also share a choice when they come to a creative crossroads. Chan states:

> When faced with obstacles and difficulties, people may follow the habituated way of dealing with problems allowed in their field or they may question or challenge these accepted ways and act in a creative way that transcends or transforms their field (p. 149).

Chan (2011) suggests this framework succeeds on several levels. If creative fields exist, so do creative subfields, each with distinct habitus of standards, practitioners, experts, and dispositions. She claims the construct of capital helps account for the uneven distribution in a field (or subfield) to access of knowledge, support, resources, and communities. Harkening back to Bourdieu's (1986) equation, she adds that creative practice is the product of the interaction between the subfield and the habitus.

Additionally, she maintains Dalton's (2004) grafting of ideas ". . . allows for creative breakthroughs when practitioners overcome difficulties resulting from a change of environment or domain, working in a multidisciplinary team, or occupying a position of marginality" (2011, p. 150). Because habitus is self-mending, she says, it can cumulatively adapt to changes in field, which can afford creative action. Even creative teams with varied habituses can find space for creativity when members work together.

As for individuals, habitus might well explain the transition essential to developing a creative identity. Habitus is not just how an individual perceives the world, but how she or he experiences a place in it. If a person's habitus shifts, and if that shift is sufficiently reinforced, that person experiences him or herself differently in the world. Because habitus is a bodily expression, an individual in the first flushes of feeling creative is literally experiencing something different—that is, she or he could be said to be newly embodying creativity.

Summarizing Sociological Theories

That the psychological study of creativity seldom regards the interplay of habit and creativity has a champion in Glăveanu (2012). More understanding is needed about the ways in which everyday creativity is simultaneously manifested in the mind as well as individual action, he asserts. The model Dalton (2004) proposes is a start toward mending how psychology and sociology consider the act of creating.

Indeed, as a means of regarding the birth of the creative actor, Dalton's (2004) scaffolding holds together a range of psychological theories of creativity. The geneplore model by Finke et al. (1992), with its interplay of generation and exploration against a background of constraints, makes sense when imagined in terms of habitus, capital, practice, and field. It also accommodates the varied competencies called for in Sternberg's triarchic theory (1985) as well as the domain specificity required of Sternberg and Lubart's investment theory of creativity (1995).

Moreover, Dalton's (2006) construct offers a way of thinking about the themes Williams (1972, 2011) identified in his earlier discourses about the nature of creativity: communication, audience, practice, and the embodiment of creativity. Beyond talking about genres of creating, making itself is a means of communication, as Joas (1996)

holds. Audiences who bear witness to that making comprise the field, not only creating in collaboration and reaction but also collectively metamorphosing into societal structures that share and recreate meaning.

The internalization of creativity that Williams describes in *The Long Revolution* (2011) parallels the embodiment Bourdieu (1984, 1996) sees in habitus. Taken altogether, these aspects constitute a socially constructed practice that mirrors Williams's (1972) sense of "grasping from the known to the unknown" (p. 212), a situation Bourdieu also described, and which Dalton (2004) sees as the manifestation of creativity.

In the sociological gaze, the choices that a creative actor makes among a host of possibilities could be viewed as the locus of structure and agency. Yet anthropologists would posit that the role of culture is also influential. In a very real way, making something is in effect making culture. The next section, then, examines the role culture plays in the inception of a person's creative identity.

Relevant Anthropological Approaches

Anthropology offers a picture of everyday creativity that adds needed detail to the renderings drawn by psychology and sociology. The culture they interrogate is the milieu through which societies operate and perpetuate themselves and as such is clearly an aid to understanding the circumstances of how everyday makers come to think of themselves as creative. Indeed, the cultural sociologist Alexander (1988) noted the need for such added context that was lacking at the time in his field: "It is from anthropology, not sociology, that historians increasingly draw" (p. 91). Closely related to sociology, anthropology commands both ethnographic research and distinct theories to describe and analyze culture. Alexander's sense of the growing importance

of anthropology research reflects its current relevance not just in understanding history, but the study of creativity as well.

In the US and UK, cultural and social anthropology are both concerned with creativity. Broadly stated, cultural anthropologists view creativity in terms of how culture serves the needs of society while social anthropologists examine how it serves the needs of the individual (Monaghan & Just, 2000). The middle ground is that they both investigate the social dimensions of creativity and its ethnographic contexts; it is that space this review examines.

This section, therefore, details an array of anthropological theories useful in identifying the role that culture plays in helping an individual reach the moment where she or he first feels creative. It begins by considering the field's position on everyday creativity and proceeds to explore the anthropological constructs of agency and improvisation. The section concludes by examining how anthropologists view the creative process and creative artifacts.

Definitions and Distinctions

As in psychological theories of creativity, a principal concern in anthropological theories is the distinction between eminent and everyday creators. Turner (1967) summons the romantic ideology of the lone genius working toward an epiphany in his consideration of creativity. For Turner, creativity occurs when a maker, working in a particular sphere and somehow set apart from the commonplace, devises a product that transforms and adds value to the lives of others—a description that calls to mind the work of shamans or artists as popularly understood in the mid-20th-century.

The transformations wrought by these makers yields *communitas*, Turner's (1967) term for the gamut of human experiences in and beyond social groups that produce thoughts that forge feelings that in turn reciprocally fashion thought. In his view, communitas is a social by-product of creating though it is paradoxically brought about in social segregation.

Writing later, Lavie, Narayan, and Rosaldo (1993) largely agree with Turner's characterization. They add that creators can also be among the groups in which they live, "integrated into the mundane arenas of everyday life" (p. 5). Bruner (1993) contends in the same volume that as everyday creators mingle with others, that their creative products are not just tangible objects; rather, through what they make they "construct their lives as they live their lives" (p. 324).

These differences between the solitary and the social form a contradistinction in how people in Western cultures view creativity, according to Wilf (2014). He terms many popular Western depictions of creativity "the neoliberal philosopher's stone" (p. 398), detailing the stories of gifted individual creators as they attempt daringly transcendent feats of agency. Instead, Wilf says, creativity is ubiquitous, and anthropology provides the means in "clarifying the social dimensions of the ethnographic context of 'creativity'" (p. 407).

Habitus and Bricolage

Since the 1980s, creativity has been recast as "the recombination and transformation of existing cultural practices and forms" (Liep, 2001, p. 2), something that creators do routinely. Wilf (2014) contends that the actions of recasting and changing echo Bourdieu's (1984, 1993; Bourdieu & Wacquant, 1992) descriptions of habitus as well as Lévi-Strauss's (1966) semantics-informed description of bricolage.

Fittingly, perhaps, the term itself describes a mode of making that applies to the work of many everyday creators: “The etymological foundation of bricolage comes from a traditional French expression that denotes craftspeople who creatively use materials left over from other projects to construct new artifacts” (Rogers, 2012, p. 1). In Lévi-Strauss’s use of the word, bricolage is considered the opposite of engineering in that the latter relies on specific tools and materials, while the former relies on any tools or materials that might be on hand.

Habitus and bricolage have a particular relationship when viewed through an anthropological lens (Wilf, 2014). In both, creators both encounter and engage with existing structures.

However, the extremes are not as stark as the bricoleur/engineer comparison might suggest. Context shades the action that differentiates the two. The bricoleur is constrained by the rules and structures of what exists and recombines extant elements to make something new. For example, a bricoleur could make a backyard swing from a rope and a tire, and still be bound by the nature of the materials and the purposes to which the creation will be put to use. This creator might wonder: Would the rope be suitable for holding both tire and people, would the swing withstand the elements, would the combination be mounted on a tree in the yard?

When complete, the bricoleur’s swing will look as if it originated from a rope and a tire, and the creator’s internal dialog would have been about the nature of the materials. For the person in a headlong encounter with habitus, the constraint is not so much the experience of rules as it is the creator’s ingrained tastes, preferences, and perceptions shaped by her or his environment. Such a creator might wonder: Would the tire-and-rope swing be refined, would it be comfortable, would it—in the spirit of Morris (1884)—be both beautiful and useful? When complete, that swing might still

look as if it originated from a rope and a tire, but the creator's internal dialog will have been about taste, preference, and perception.

In the anthropological regard to action, bricolage and habitus obviously share common ground. For people who make things, material realities as well as one's tastes, preferences, and perceptions hold sway in the things they make. Yet Wilf (2014) notes that the extension of the two constructs—"the one operating within an already-given set of constraints, and the other by changing the set of those constraints" (p. 399)—set the stage for a ongoing debate between anthropologists about the role of novelty and tradition, and how creative actors proceed in each direction.

Innovation and Improvisation

An important distinction lies between those anthropologists who focus on creativity as innovation and those who consider it improvisation. For instance, Liep (2001) contends that creativity "involves a major restructuring of the rules and a reorganization of experience. This is not ubiquitous but concentrated at a particular time and place" (p. 12). By valuing novelty over convention, his position appears to point to eminent creators.

Hallam and Ingold (2007) contradict Liep by introducing the construct of cultural improvisation. They define it as a generative, relational, and temporal way of working in and considering the world. They assert that creators are impelled to improvise:

> . . . because no system of codes, rules and norms can anticipate every possible circumstance. At best it can provide general guidelines or rules of thumb whose very power lies in their vagueness or non-specificity. The gap between these non-specific guidelines and the specific conditions of a world that is never the

> same from one moment to the next not only opens up space for improvisation, but also demands it, if people are to respond to these conditions with judgment and precision. (p. 2)

Consequently, their position appears to point to everyday creators.

Ultimately, it is not wholly clear that these two forms of agency are polar. Sawyer (2006) maintains that they are points on a continuum of creative culture. Wilf (2014) concurs, holding that any study of creativity must take into account its universality as well as ongoing and concentrated efforts that aim to alter the constraints on a field. As Negus and Pickering (2012) noted, "the exceptional and the ordinary feed off each other" (p. 1). In other words, both the field-changing, paradigm-shifting innovation as well as the bricological, incremental improvisation can and should be viewed by anthropologists as creative acts.

The Constraints of Tradition

Negus and Pickering (2012) claim that pitting innovation and improvisation as opposites begs the relationship of creativity to tradition. The two, they say, are inextricable. "Creativity involves learning from what has been done in the past and learning how to take from it what can be used in the present, which thereby changes it" (p. 112).

To paraphrase Valéry (1962), the future is never what it used to be. Tradition is reacted to, reinterpreted, and reconfigured by each new generation, say Negus and Pickering (2012), which may alter that what might have been considered sacrosanct (e.g., reconstructing an "authentic" rendition of a folk song into a rap-laced version, perhaps, or sampling of Irish dancing in new balletic choreography). Interpretations and reactions may be based on the political and philosophical sensibilities of the

beholder. Even these are subject to the changes of time and cultural tide. In short, today's tradition is tomorrow's cultural substratum. There can be neither innovation nor improvisation without the context that traditional forms provide.

While the judgments of what is or is not what Liep (2001) calls "true creativity" (p. 12) might vary from group to group, anthropologists generally maintain that the pull with and against tradition is how culture is transmitted, both in fits and starts as well as in leaps and bounds. That is to say, neither world-changing cultural progression—nor the nuances of everyday creativity—could exist without the context of the things that have come before.

Culture and the Creative Experience

In the realm of making music, this principle is illustrated with what Small (1998) calls *musicking*—any activity related to a performance, whether playing, selling tickets, writing scores, or setting up a stage. In his estimation, musicking is an inclusive process that invokes the past as well as the present, even as it hints at the future:

> The act of musicking establishes in the place where it is happening a set of relationships, and it is in those relationships that the meaning of the act lies. They are to be found not only between those organized sounds which are conventionally thought of as being the stuff of musical meaning but also between the people who are taking part, in whatever capacity, in the performance; and they model, or stand as metaphor for, ideal relationships as the participants in the performance imagine them to be: relationships between person and person, between individual and society, between humanity and the natural world and even perhaps the supernatural world (p. 13).

Musicking—and, by extension, all making—is therefore highly dependent on the circumstance of all who partake in it. When creativity becomes a construct of collaborative action, collaborative context matters.

Because of its contextuality, Negus and Pickering (2012) argue that creativity is more than the sum of its parts: “Creativity is not simply the functional correlation of competence and social class” (p. 18). As does Csikszentmihalyi with his construct of flow (1996), they maintain that an individual actor’s creative experience compounds skill with ability and ongoing practice.

Indeed, the gulf between everyday and eminent creativity is filtered by an individual’s ever-altering reserves of logic and instinct, as well as his or her confrontations with social structures. The boundaries between Big-C and little-c creators can shift, and that fault line traces the way society changes. “There is in this movement an implicit rejection of the false divide between rationality and intuition for they have come to act in concert with each other, in a mutually enhancing absorption and understanding” (Negus & Pickering, 2012, p. 19). With this comment, they make the case that the process is as central to creativity as the person. In other words, creativity is a state of experience.

Making and Artifacts

The creative product is the tangible evidence of that state of experience. Each product brings together myriad facets of knowledge, perception, imagination, and anticipation in what Moeran (2014) terms “product-as-process” (p. 23).

Each product, in turn, is the result of a long line of selections by its maker (or makers). For instance, in fabricating a simple counterpane, a crocheter chooses a color palette, fiber, hooks, stitches, methods of joining, and edgings or trims. Bereft of these

selections and the effort of making, would this counterpane exist? Another counterpane might well materialize, perhaps, but not this very one. The choices it represents—beginning with the medium, on down to the last slip stitch—are informed by the crocheter's inventiveness and experience, as well as the culture and society she or he inhabits. Whether made explicitly or implicitly, each choice affects the others and renders the piece an avatar of sorts marking its and its creator's culture, society, time, and place.

In scrutinizing what is made and situating an artifact in context, anthropologists analyze material culture (Henare, Holbraad, & Wastell, 2007). Because the products of everyday creativity come into being only through human action, the act of making—designated by anthropologists as practice or performance—is considered as important a subject of study as the artifact itself (Naji & Douny, 2009). Indeed, the dynamic between the medium or domain and the creator, mirrored countless times by countless makers in any given society, provides the means by which culture thrives (Bruner, 1993).

The Experience of Textility

Seeking a framework for examining the constant exchange between maker and object, Ingold (2000) highlights the maker's skills, intelligence, and process. These elements amalgamate with the maker's cognition and the action of creating to form a materiality that arises through the process of creation. As a form of situated cognition, the interchange Ingold describes emerges from an ongoing adjustment of a creator's perceptions and movements to the context of making.

Ingold (2010) finds the interchange distinct from the Aristotelian construct of hylomorphism, which considers being an alloy of matter and form. The hylomorphic

creative actor imposes her or his will on the medium. The hylomorphic model has long been the anthropological concept that guided Western analysis of creative products (Murphy & Polombe, 2012).

Because he considers that model to be a backward-facing and ultimately unsatisfactory way to describe the creative process and product, Ingold (2010) proposes textility, which highlights the interaction between creator and created. Drawing from the philosophical stance of Deleuze and Guattari (1987), Ingold describes an interaction that is flexible, unpredictable, and, he avers, forward-looking. In making, outcome is never quite certain.

With textilty, Ingold (2010) also introduces the distinction between iteration—what might be considered production—and the necessary tinkering of itineration, comparing makers to walkers "bringing forth their work as they press on with their own lives" (p. 97). Itineration even applies to everyday creators who follow preset instructions, such as a blueprint, recipe, or pattern, Ingold says, because of the human agency involved in following (or not following) directions. The contact with the paint, food, fabric, or any other medium has bearing on the creative actor: "This field is neither internal to the material nor internal to the practitioner (hence external to the material); rather, it cuts across the emergent interface between them" (Ingold, 2000, p. 342).

Ingold's (2010) construct of textility informs a variety of subsequent analyses. Roberts (2012) applies the concept to ready-to-assemble IKEA furniture in the UK, while Paton (2013) employs it to recount his experience as a sculptor shaping stone from Cornish quarries. While the latter author acknowledges the primacy of materials, his reflexive account also considers time and familiarity essential aspects of the interchange between maker and medium. These aspects could well be part of the

affordances that the creative actor must accommodate, a construct that will be explored later in this chapter.

The sense that makers deploy such embodied cognition is a perspective that Malfouris (2013) builds on. Describing how prehistoric toolmakers work—and connecting it to the process of modern Greek potters—Malafouris traces the abiding relationship people have with the things they make: "The tool guides the grip, the grip shapes the hand, the hand makes the tool, and engaging the tool shapes the mind" (p. 174). In other words, a working creator thinks through, with, and about tools and materials in a continuous stream of metacognition. Things shape our minds, he says, and the agency that allows for that comes from the creative actor's relationships with both tools and materials. By studying makers and their tools, one might see the shaping taking place.

Phenomenology and Subjectivity

With its emphasis on embodiment, generativity, and action, the implications of Ingold's (2000, 2010) and Malafouris's (2013) approaches recall Bourdieu's (Bourdieu, 1984, 1993; Bourdieu & Wacquant, 1992) accounts of habitus. Even taken all together, however, those constructs do not adequately address what Naji and Douny (2009) classify as an inescapable ". . . dichotomy between subject/object, mind/body, cognition/emotion" (p. 413) that occurs in making.

To that end, Csordas (1990) combines habitus with the phenomenology of Merleau-Ponty (1962) to explain a creator's sense of knowing the world through making. In summary, the individual's skirmishes with the structures of society—and

with the structures of experience—consolidate with her or his bodily perceptions in understanding the world.

Warnier (2001) draws on that work, adding subjectivity to the formula with his praxeological approach to making. He contends that made objects embody the techniques and the knowledge of their creator. In turn, they imbue the creator's senses and body knowledge: "We know that incorporated material culture reaches deep into the psyche of the subject because it reaches not through abstract knowledge but through the sensi-motor experience" (p. 16). The experience of making, he says, changes the maker's subjectivity, just as the act of making, changes a material into an artifact. Each artifact alters its maker and vice versa.

Social Aspects of Material Culture

Douny (2014) incorporated these views of material culture—albeit with a markedly more social point of view—in her research with the Dogon people in Mali:

> From a standpoint different than Warnier's, I think that it is social relationships or socially directed processes that craft the individual's self as directed outer self. Following Bourdieu's thesis (1993), I suggest that subjectivity is founded in everyday life practice and cultural transmission. In other words, it results from the socialization process I saw in the field. (p. 43)

Douny notes the ways that Dogon material culture is shared and intentionally learned, and her analysis emphasizes Warnier's (2001) praxeological orientation as well as the phenomenology of Merleau-Ponty (1962). In Dogon communities of practice, she finds that agency assumes a social, rather than individual, role.

Writing about communities of creativity in Japan, Moeran (2014) agrees that this social aspect of creativity—that is, examining things that are made and the circumstances that surround the actors who make them—is the most direct way to analyze the choices made in cultural production. “To understand the meaning of creativity, we need to explore what choices are made by those involved and from what range of possibilities they are selected” (p. 24).

Summarizing Social Theories

Where are the seeds of creative identity situated in the field of anthropology? This section explores anthropological approaches to creativity and reviews definitions that evolved from the exclusive (Liep, 2001; Turner, 1967) to the inclusive (Moeran, 2014; Wilf, 2014), a position that is also held in contemporary theories from psychology and sociology. The section also examines the anthropological view of Bourdieu’s construct of habitus (1984, 1993; Bourdieu & Wacquant, 1992), contrasting its strictures with bricolage (Lévi-Strauss, 1996). It then considers how anthropologists view the tensions between innovation (Liep, 2001) and improvisation (Hallam & Ingold, 2007); tradition and creativity (Negus & Pickering, 2012), and makers, materials, and artifacts (Douny, 2014; Ingold, 2010; Malafouris, 2013; Naji & Douny, 2009).

From the current anthropological point of view, creativity is a state, not a trait. The experience of making reflects creative actor’s interchange with materials as well as the society she or he works in. As Ingold (2010) postulates, a wide berth surrounds the creative actor when people interact with materials, instructions, and each other. Following Douny’s (2014) line of reasoning, all comprise the elements that fabricate culture.

Douny's insights (2014) are especially useful in illustrating the social and individual complexities of making things. As an actor necessarily encounters barriers and encouragements on the way to considering her or himself creative, the anthropological means of considering artifacts and processes could yield significant information. Makers must contend with the constraints of their chosen media and abilities—the material realities of creating—as well as their socially formed tastes, preferences, and perceptions.

Small's (1998) rendering of making as occurring in a web of relationships drives home the point that creative products are the sites of these encounters, evidence of the action that manufactured them as well as the action they transfer to their makers and the people beyond the process who experience them. Speaking to both the individual and the social, such artifacts are fundamental to understanding creativity narratives that involve maker and context.

In his review of the semiotic influences of creativity, Wilf (2014) contends that anthropology offers the means to break from stubbornly held Romantic concepts that bind creativity to individualized inner nature. Its sharpening focus on the ethnographic and social dimensions of creativity, he says, is one of the field's great strengths.

Even as theories from psychology, sociology, and anthropology help explain the birth of the creative actor, they overlap in ways that suggest more expansive accounts. To that end, the next section of this review examines sociocultural theories of creativity that aim to further clarify what happens when someone determines she or he is creative.

Sociocultural Systems Approaches

Psychology, sociology, and anthropology each contribute a distinctive way of considering what happens when someone decides she or he can step into the world as a creative actor. As previous sections illustrate, these approaches are often disparate, even within a single discipline.

Yet some approaches are connected across disciplines by time, intent, and scope. For example, the ends-and-means psychology of the geneplore model (Finke et al., 1992) recalls the immediacy of Joas's (1996) action theory. Similarly, Dalton's (2004) sociological model of creativity is helpful in explaining Sternberg and Lubart's (1999) investment theory. Likewise, Ingold (2000, 2010) incorporates Bourdieu's (Bourdieu, 1984, 1993; Bourdieu & Wacquant, 1992) concepts of habitus, capital, and field to build the construct of textility.

These interdisciplinary congruencies hint at what some social scientists have been demanding for more than three decades: panoramic ways of explaining creativity. Increasingly, these researchers call for explanations that acknowledge the complexity and interactivity that creativity entails. "What we need now are all-encompassing systems theories of creativity designed to tie together and make sense of the diversity of perspectives found in the literature—from the innermost neurological level to the outermost cultural level" (Hennessey & Amabile, 2010, p. 590).

This section begins by exploring the suitability of systems theories in the social sciences and the implications they extend for explaining a subject as complex as creativity. There are sociocultural systems theories concerned exclusively with eminent creators—most notably, Simonton's (2010) mathematics-based reworking of Campbell's (1960) model of creativity as a matter of blind variation and selective retention. However, this

review considers four sociocultural systems theories pertinent to everyday creators and by extension applicable to disparate disciplines.

Networks of Networks

Systems theories arose in the 1930s and 1940s as attempts to explain the numerous classes of natural phenomena studied in life sciences. Popularized by the botanist Bertalanffy (1968), educator Bánáthy (1968, 1992), and sociologist Parsons (1951), systems theories are often collectively referred to as an ecological approach (Montouri, 2011).

Against the turbulent backdrop of the 20th century, systems were considered a more robust way to state conditions and conceive of solutions to problems than the rationalistic determinism of Cartesian philosophy and Newtonian science. In general systems theory, Bertalanffy (1968) holds, the emphasis is comprehensive, crosses disciplines, and "applies to any whole consisting of interacting components" (p. 109). Accordingly, systems approaches reflect multiple conceptualizations informed by diverse sources such as information theory, chaos theory, complexity theory, and cybernetics (Montouri, 2011).

Mountouri (2011) asserts that four paradigms characterize general systems theories. They are all non-representational, non-Cartesian, complex, and open or closed. That is, systems models feature networks in which people are but part of a larger ecosystem. Inevitable complexities, paradoxes, and connections are captured by tracing a system's context through its rhizomatic nodes and offshoots of connections (Deleuze & Guattari, 1987). These connections intimate that systems either allow interchanges between their constituents and the environment—in which case they are open—or they are isolated and closed.

In psychology, sociology, and anthropology, the systems approach attracted wide acceptance beginning in the 1980s (e.g., Barron, 1995; Bateson, 2000; Wilden, 1980). Accordingly, sociocultural systems theories relating to creativity came into being at about the same time, particularly in social psychology (McIntyre, 2013).

Sawyer (2010) maintains that systems of creativity, like systems that examine matter, intelligence, societies, and other complex subjects, are "chaotic, highly nonlinear, and essentially impossible to explain and predict from mechanisms and laws" (p. 368). Systems theories share a complexity with the human mind, he maintains, which accommodates simultaneous and multiple layers of ideas, perceptions, reactions, and intentions that are framed by society and context. For this reason, Sawyer argues, any empirical, systemic theory of creativity must feature social and cultural as well as psychological networks.

The systems approach is appropriate for examining this sociocultural characterization, he says, because it assimilates the phenomenon of creative emergence. Sawyer (2006) uses an example from biology to explain its telescoping nature:

> The design of an ant colony emerges from the tiny decisions of thousands of ants; the decisions made by a human brain emerge from millions of neurons firing; a new social phenomenon emerges from the mini-insights of hundreds of people working together . . . These are all examples of creative emergence, and a complete science of creativity should be able to explain all of them. (pp. 316-317)

Csikszentmihalyi's Domain-Field-Individual Model

Sawyer (2010) credits his mentor, social psychologist Csikszentmihalyi, for formulating one of the first and most enduring of the sociocultural systems models of creativity. The domain-field-individual model of creativity (Csikszentmihalyi,1988)

represents the circular relationships between culture, social systems, and an individual's genes and experiences. Using language that recalls but does not exactly duplicate Bourdieu's (1984, 1993; Bourdieu & Wacquant, 1992) construct of habitus, Csikszentmihalyi routes these three bases into domain (a system of symbols), field (the domain's social structure) and individual (see Figure 1).

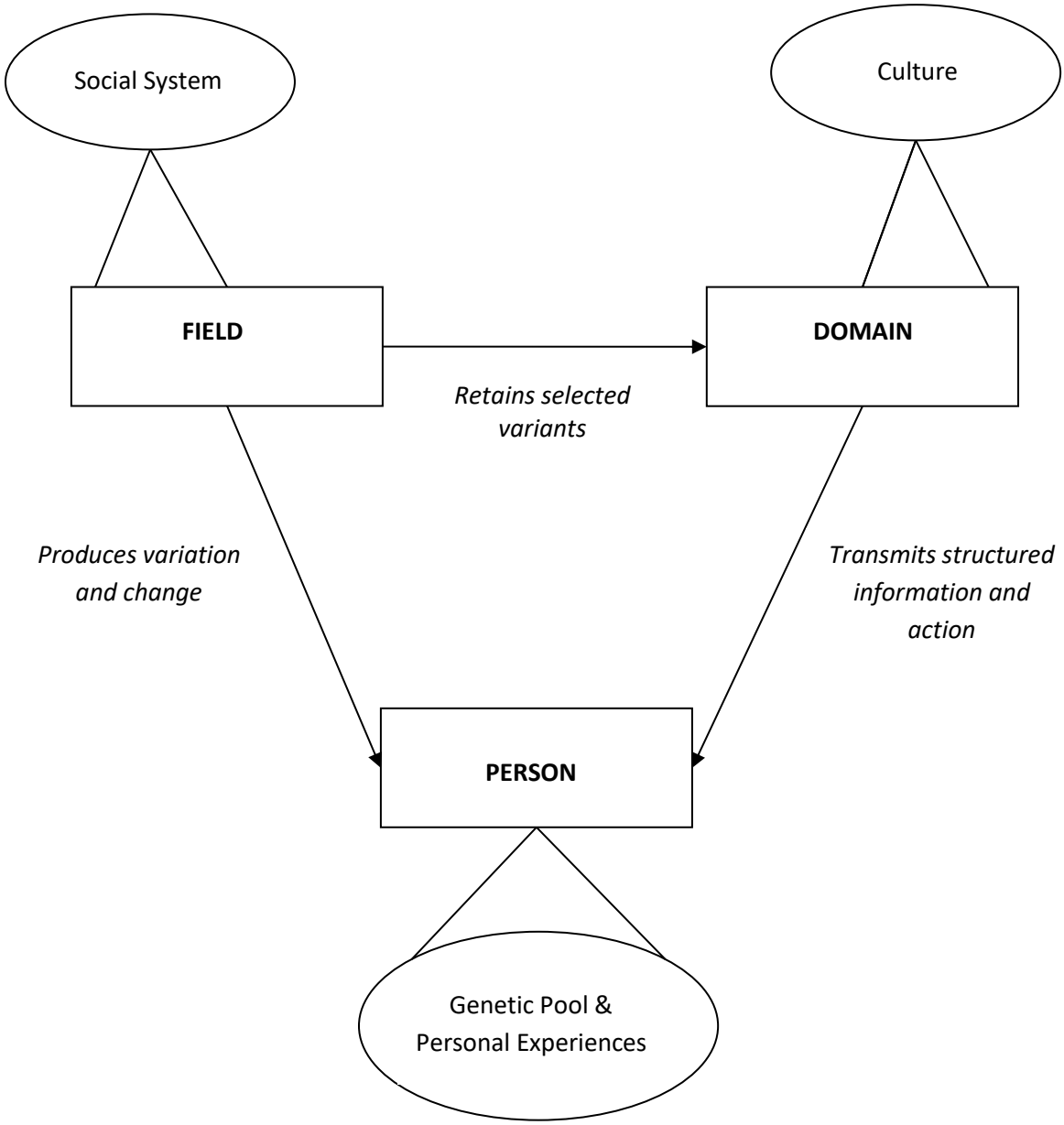

Figure 1. The domain-field-individual model illustrates the interrelationships between an individual, culture, and society that must be in place for creativity to exist. Adapted from "Society, Culture, and Person: A Systems View of Creativity," by M. Csikszentmihalyi, 1988, in R. J. Sternberg [Ed.], *The Nature of Creativity: Contemporary Psychological Perspectives,* p. 329.

Because this map plots the constantly shifting links of causality, any point in it can be considered the beginning of the creative process. Neither persons, nor domains, nor fields act unilaterally; this interconnectedness is the key to the model. In aiming a product—what Csikszentmihalyi (1988) calls a "selected variation" (p. 330)—at the field, the person is working within established parameters archived within the domain. To put it another way, the creative person is to some degree fluent in the lingua franca of his or her medium and uses that fluency to produce something that draws from ideas embedded in the culture. The product may attract the attention of the gatekeepers of the field, who also draw on those ideas implicit in the social structure.

Csikszentmihalyi (1988) points out that the concept of time is integral to his model. The recursion of "comparison, evaluation, and interpretation" that accompanies making requires it: "It is not only in the transition from the domain to the person but also in the move from the person to the field, and from the field back to the domain, that time is involved" (p. 332). To that end, the arrows that connect the person to the field and domain in the model are intended to be read as ascending spirals tracing the path of the sequences of variation, selection, and transmission common to evolution. In time, the creative process can change the domain, the field, and the person alike.

In his review of Csikszentmihalyi's (1988) model, McIntyre (2013) notes that it allows for the possibility of shifting power from domain to person to field. These components of the model provide what he terms a "scalable" view of the creative process: "That is, it applies equally well at the individual level and also at the group, organizational, institutional, or sociocultural level" (p. 92).

Research Studies of the Domain-Field-Individual Model

Because of their inherent complexity, systems models of creativity are challenging to explore with empirical research. “Each study using the systems approach demonstrates to varying degrees that one cannot take apart a system and hope to understand it without accounting for the principal synergistic qualities it exhibits” (McIntyre, 2013, p. 92).

As an illustration, McIntyre (2013) describes four studies he conducted on various phases of music production, from songwriting (2006, 2008) to music sampling (McIntyre & Morey, 2012). Each necessitated a different research method (e.g., ethnography, experiment, practiced-based inquiry) because of the heterogeneous nature of participants’ roles. Together, the studies can be taken as a wide-angle snapshot of a particular field. As such, the body of work illuminates McIntyre’s contention that open systems, such as the one in the field of contemporary music, alone supports creativity. Further, his investigations suggest that the patterns of agency sustain Csikszentmihalyi’s (1988) contention that only complex systems can explain creativity.

A longitudinal study amplifies that view. Slater (2015) recounts the interstices of agency that afforded creative opportunities to Middlewood Sessions, his performance group. Slater’s eight years of research involved participant diaries, textual artifacts, interviews, and performance videos taking place against a backdrop of concerts, recording sessions, and production. In his analysis, Slater notes that the field of music and his band’s self-declared domain of jazz/hip-hop/funk/soul cultivated audiences, gigs, and collaborations that nurtured their collective creativity. Yet at the beginning, the field and domain also confirmed their amateur status. That strengthened the group’s resolve to polish musicianship, renew financial and emotional commitments, and bridge the “gulf between aspiration and achievement, between the amateur project studio, and the alluring, professional music industry” (p. 70).

In Slater's (2015) dissection, time—that is, creative space both to improve and build networks—was the prime resource that Middlewood Sessions needed and eventually accumulated. Referencing Csikszentmihalyi's (1988) model, Slater notes the fractal nature of time—a reasonable point, considering the years he devoted to the group and his research:

> How creative work unfolds over time may equally appear stable and neat from a distanced perspective (e.g., listening to a track or reviewing a composer's lifework), but on closer inspection a story of messiness, uncertainty and flux is revealed . . . [W]e might think of the fractus of creativity to describe creative processes as interrupted, non-linear, broken, fragmented. While the experience of listening to music gives an impression of chronological time passing (perhaps) smoothly, the process by which that music was made is unlikely to be just so. An album, for example, proves creative processes took place, but it also obliterates the story of its generative origins through the illusion of the temporality it constructs (p. 72).

Clearly, corroborating the domain-field-individual model (Csikszentmihalyi, 1988) requires the use of what Hennessey and Amabile (2010) call "multiple lenses simultaneously. . ." (p. 590). These studies go about the job in different ways. McIntyre's (2012) tactic of examining various facets of a domain contrasts with Slater's (2015) time-intensive approach that looks at a single group's experience with those facets. By taking a long view, both researchers underscore the model's recursion.

It is no coincidence that these studies focus on professional métiers. Perhaps because of the model's (Csikszentmihalyi, 1988) emphasis on domain and field, corresponding research on aspects of everyday creativity has yet to be published. Nonetheless, the model is important to consider in unraveling the circumstances of the birth of the creative actor because of its emphasis on the interaction of culture, making,

and time. Moreover, it casts a long shadow over subsequent sociocultural models, including the others reviewed in this section.

Amabile's Componential Model

One of the practical applications of systems theories of creativity is how they relate to people working in organizations (Montouri, 2011; Sawyer, 2006). Such approaches matter because everyday creators are likely to spend time within organizations at work, and those organizations are likely to color the way people approach making away from work.

Amabile's componential model (1983, 1988, 1996; Amabile & Mueller, 2008) has been used to illuminate the everyday creativity of an individual's work life as well as how work organizations can benefit from supporting creativity (Amabile & Kramer, 2011). Perhaps because it can describe individual as well as group creativity (Kaufman, 2009), the model has cultivated wide acceptance. Amabile (2013) claims that initial versions of the componential model have been cited in more than 2,000 works of published research. In her consideration of the model, she maintains that its four components—domain-relevant skills, creativity-relevant processes, task motivation, and the social environment—coalesce to influence the creative process (see Figure 2).

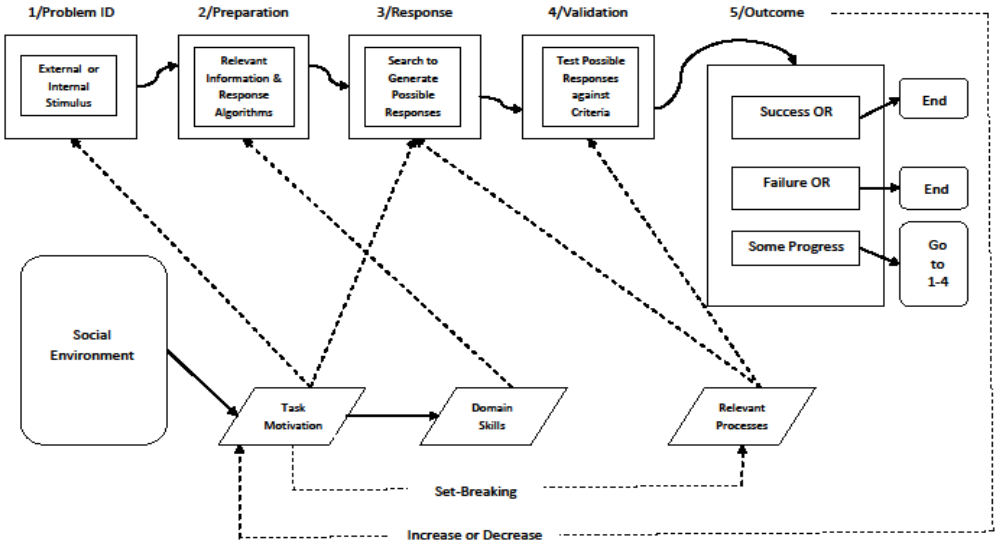

Figure 2. The componential model shows the bearing of task motivation, domain skills, and relevant processes on the creative process. The wavy lines between steps 1-5 of the process indicate a range of variations in the process, while the model's dotted lines suggest potential influences. Adapted from T. M. Amabile, *Creativity in Context,* 1996, p. 113.

As in other systems theories, the components of this one build on each other. A person's expertise in a particular field increases the likelihood that she or he can fashion creative responses to a problem, and then gauge possible responses. In turn, that person's characteristics—including a cognitive style that promotes risk-taking, self-discipline, and finding new solutions for problems—promote the tolerance for ambiguity that creativity requires (Sternberg & Grigorenko, 2001).

From those characteristics stem the drive to do something. Amabile (2013) calls this agency intrinsic motivation, the inborn drive is fueled by "interest, enjoyment, satisfaction, and the challenge of the work itself—and not by extrinsic motivators" (p. 136). The social environment can support or deny intrinsic motivation, influencing any future creativity an organization can generate.

The componential model details the subprocesses of creativity as a problem-solving exercise, a position also taken by Puccio, Mance, and Murdock (2010) in the thinking skills model discussed earlier. The problem and the resources needed to solve it are well-defined through clarification, idea generation, verification, and implementation. Also, as in Csikszentmihalyi's (1988) domain-field-individual model, the time sequence of this model is fluid; steps can be repeated in and out of sequence until a creative solution emerges.

Its 1996 permutation emphasizes that some extrinsic factors can enhance intrinsic motivation. For example, rewards might enhance resources for a project someone cares deeply about, or cause a person to feel that she or he is contributing to a creative goal that will benefit the greater good (Amabile & Kramer, 2011). Such an outcome, which influences individual positive affect, influences the environment as well as creativity-relevant processes.

Despite its widespread use, the componential theory is not comprehensive. Amabile (2013) acknowledges that it is not equipped to explain social forces outside of an organization that influence creativity. She also grants that it neglects to consider the role of the physical environment on creativity though further research could clarify that relationship.

Research Studies of the Componential Model

Much empirical evidence gathered on the componential model affirms its utility at work. Kaufman (2009) notes that Amabile and her colleagues have conducted several of these studies (e.g., Amabile, 1985; Amabile, Hill, Hennessey, & Tighe, 1994; Amabile & Kramer, 2011), though most have been independently performed.

One qualitative study that does not explicitly involve everyday creativity—but which yields some conclusions that could be helpful in considering the birth of the creative actor—concentrates on the balance between group and individual creativity in modern dance troupes (Harrison & Rouse, 2014). Using grounded theory, the authors observed, interviewed, and video recorded four dance groups whose domain expertise was vetted in competition. Each group had at least four members, including at least one choreographer. The interaction between the choreographers and the individual dancers revealed repeated patterns of integration and what Harrison and Rouse call "de-integration" (p. 1274) that shed light on how dancers work alone and together.

The first stage in their model, *surfacing boundaries*, merges Amabile's (1996) task identification and preparation phases as dancers realize their autonomy and choreographers impose constraints. The second stage, *discovering discontinuities,* relates to Amabile's response generation phase as the dancers use their domain expertise to respond within the constraints as choreographers loosen the restrictions to entertain new

possibilities. In the third stage, *parsing solutions*—which unites Amabile's response validation and communication and outcome phases—limits are mutually reinstated so the group can move forward with the dance.

Like Amabile (2013), Harrison and Rouse (2014) find the creative process to be a reiterative cycle rather than a linear trajectory. They differ from Amabile in finding constraints to be a generative force in the cycle; indeed, they saw in the dynamic between limits and freedom an elastic impetus for creativity:

> [T]he dance groups . . . relied on subtle interactions, sometimes increasing their autonomy and sometimes limiting it, during rehearsals to create a rhythmic ebb and flow, effectively generating enough constraints to guide action but also allowing enough flexibility for pushing against these constraints to recognize and refine novelty (p.1271).

The notion of dancers bumping up against constraints brings to mind the phenomenology of Merleau-Ponty (1962) as well as Ingold's (2000, 2010) construct of textility. Seen from both perspectives, the limits make the troupe, and the troupe makes the limits. For the person experiencing everyday creativity, this could mean that the individual, social, and cultural barriers to creativity are internalized and externalized in ways that could alternatively enhance creativity as well as inhibit it.

Hennessey's Telescoping Systems Model

A research paradox sparked the refinement of another model that extends Amabile's Componential Model (1983, 1988, 1996; Amabile & Mueller, 2008). Social psychologist Hennessey (2015) sought to clarify the sometimes-contradictory data she accumulated over several years from school children in various countries.

Her theoretical work with Amabile on the model (Amabile et al., 1994) encouraged Hennessey to conduct further studies in the United States and Saudi Arabia giving children tasks of telling stories with and without rewards. She expected that the salutary effect of participants' intrinsic motivation without rewards would be similar, regardless of culture. The American participants were judged to make more creative stories and be more highly intrinsically motivated when they were offered no rewards. However, the Saudi participants' creativity was less influenced by task motivation and external rewards though they found both the task and the rewards more compelling than the Americans (Hennessey, 2015).

Through these and other research projects in various cultures, Hennessey devised a model that features the components of task motivation, domain expertise, and problem solving. Her model begins with what she calls "'Big C' Culture" (Hennessey, 2015, p. 14), complete with values, norms, power distance, social cognition, and psychology of self. The model cascades to the "'Little c' culture" of the immediate environment, and then to individual differences before arriving at last at the componential trio (see Figure 3).

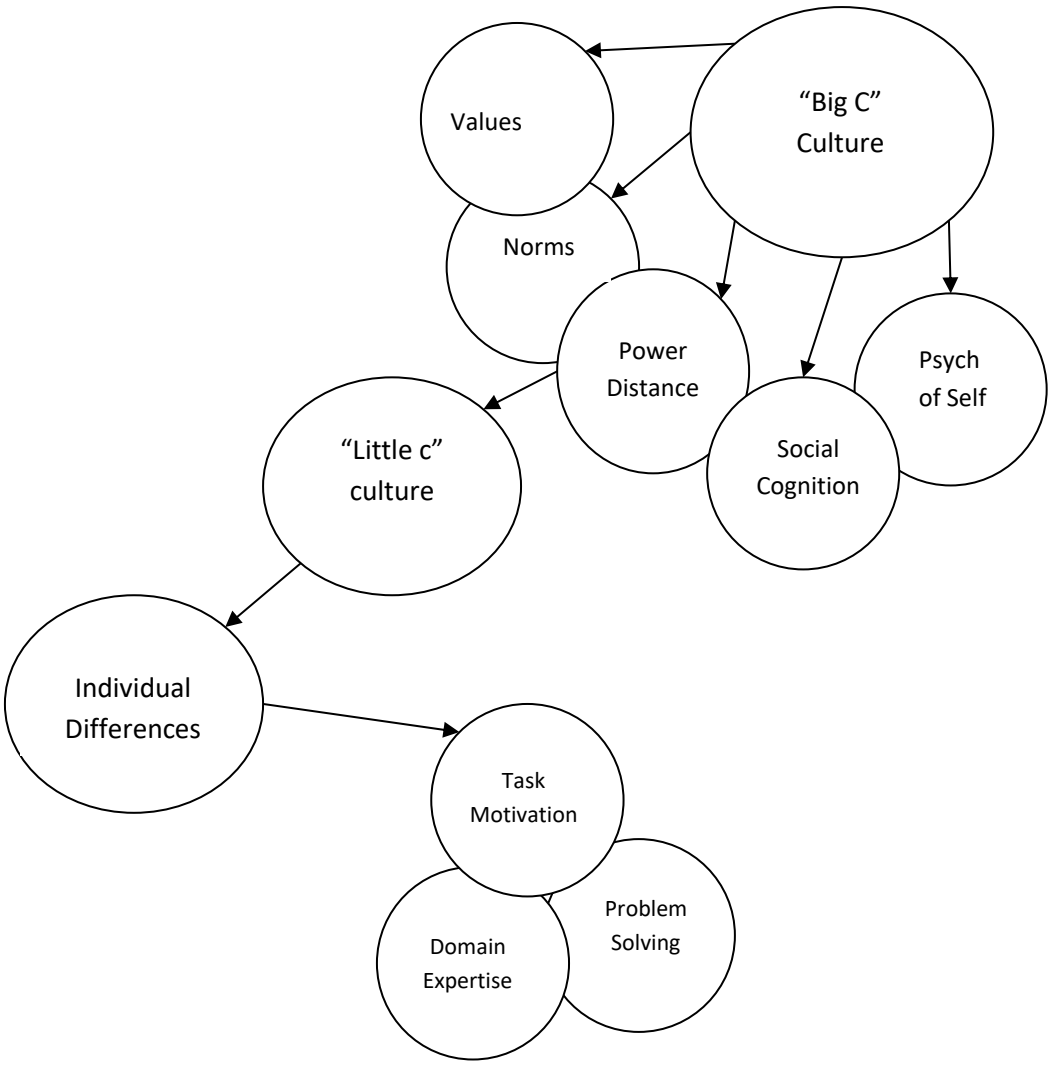

Figure 3. Hennessey's telescoping systems model incorporates broad cultural factors; these impinge on differences between people and an individual's stores of task motivation, problem-solving abilities, and domain expertise. Adapted from "Creative Behavior, Motivation, Environment and Culture: The Building of a Systems Model" by B. A. Hennessey, 2015, *Journal of Creative Behavior*, p. 14.

Interestingly, Hennessey began tinkering with the model when she was working with Amabile on the aforementioned article (Hennessey & Amabile, 2010) calling for more creativity research that involves society and culture. Her analysis, she says, led her from a binary individualist/group point of view to a more inclusive vista requiring a systemic approach (Hennessey, 2015).

By looking beyond the classroom's interior climate, Hennessey (2015) attempts to address what Amabile (2013) considers a shortcoming of the componential model. As it incorporates the expanses of culture in the mix, Hennessey's variation allows more latitude for thinking about the effects of cultural values and norms—something Amabile argues the componential model needs. With its emphasis on "Little c" culture, Hennessey's revision could even obliquely account for the kinds of physical environments that support creativity—a detail that might well matter in the work of everyday creators. Yet Hennessey's alteration does not address the effects of time and affordance on the creative process. Furthermore, the model appears to not yet have prompted research studies to confirm or contradict it.

Glăveanu's Updated Sociocultural Model

Exploring many of the same transdisciplinary aspects of creativity as this thesis, Glăveanu (2017) revisited earlier models of psychology that he suggested privileged the psychological vantage point over the sociocultural. Not quite an outright response to the work of other social psychologists, his model integrates components of other schema he has devised to describe a cultural psychology of creativity. Indeed, a further discussion about Glăveanu's model of creative affordances—a element of the following model—appears in the next chapter.

Glăveanu (2017) built this systems model around his five As framework. Mentioned in Chapter 2 as a counterpoint to the person/process/product/press schema, the five As refer to the necessary components of creativity as actor, action, audience, artifact, and affordances.

Glăveanu (2017) also includes a variety of ways to describe the artifact as a creative product, from the general cultural reception to the rarer new and original. Furthermore, the model typifies the creative process in terms of action (doing) and perception (undergoing) as well as making the unfamiliar familiar, and vice versa. Action, in this model, is innovative, improvisational, and habitual; affordances are uninvented, unperceived, and unexploited.

The triad of action, actor, and artifact at the center of the model provides the locus of creativity (Glăveanu, 2017). The other elements provide points of contact within and around the triad, with the creator transacting with each in the cycles of action (See Figure 4).

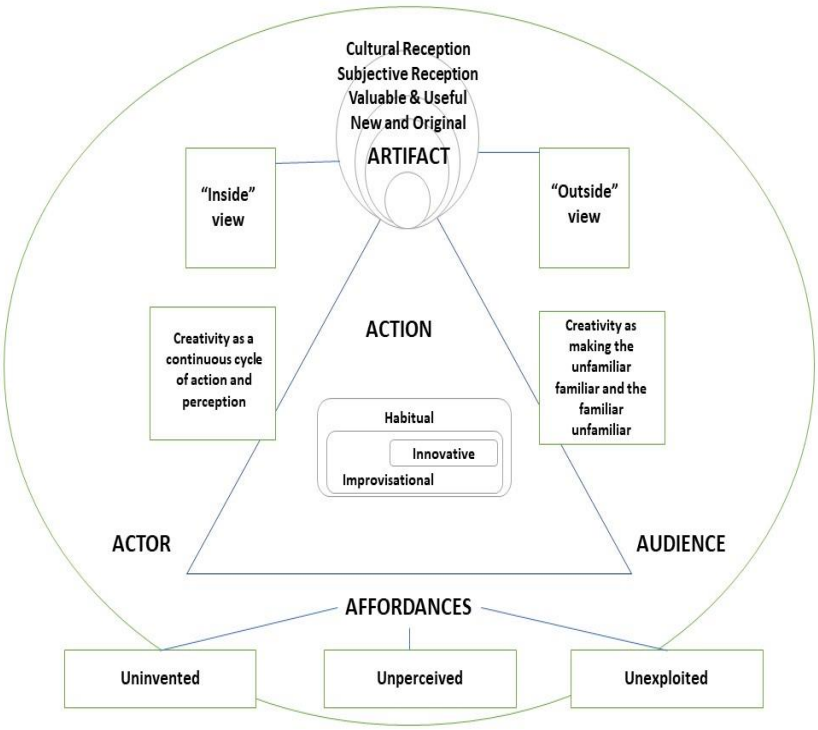

Figure 4. Glăveanu's revised systems model of creativity draws on his five As—artifact, action, actor, audience, and affordances—to describe the relationships crucial to making. In the model, the artifact is flanked by how it is viewed outside and inside the creator's experience. Bordering the triad between action, actor, and audience are qualifiers that describe the cycle of creativity, orientations for creative action, and the affordances that characterize how action is pursued. Adapted from *Thinking through Creativity and Culture: Toward an Integrated Model* by V.-P. Glăveanu, 2017, p. 277.

The model (2017) clearly evinces Glăveanu's approach as a cultural psychologist. It incorporates his contention that creativity is both psychological and contextual, that audiences and actors relate in various creative roles from ideation to evaluation, that ecological affordances mediate the physical environment for creativity, and that the entire system of cycles is embedded in time.

Glăveanu holds that the proof of the model (2017) is in how well it can explain instances of creativity, and he uses his mixed-media studies of Romanian Easter egg decorators (2012) to ponder its utility. As Glăveanu makes the case that the decorators superficially hewed to the contours of the model, he also calls for the model to be considered through other contextual examples of creativity, "from micromoments of creative production to the development of lifelong creative projects" (2017, p. 278). Such a perspective takes both the long and short view of creative pursuit and underscores an adaptability that applies to the eminent creator as well as the everyday maker.

Although the model (2017) intriguingly encapsulates a robust description of the social, cultural, and psychological bounds of creativity, it is not perfect. Its very expansiveness makes it difficult to trace the track between the five As and/or the four Ps of creativity. Its design also seems to emphasize the artifact over the making or the feeling engendered by creating. Furthermore, the temporal aspect of making is implicit, rather than explicit, in the model. That said the model represents an important step in articulating the dynamic between the personal and contextual bounds of creativity that the present research also explores.

While Glăveanu's model (2017) is beginning to gain traction from the larger field of social psychology, it is too new to have been verified by independent research. That said, he posits the model could inspire research into how people interact with audiences as well as the role affordances in play in limiting or permitting action.

Glăveanu and Tanggaard's Toblerone Model

A nuanced sociocultural systems model that more specifically accounts for the individual, social, and cultural forces involved in shaping identity could be central to understanding the barriers and affordances that must be negotiated before someone thinks of her or himself as creative. Markus and Kitayama (2003) call for "really social social psychologists" (p. 277) to work on these.

To that end, Glăveanu and Tanggaard (2014) take social discourse into account within their model of creative identity. While theories relating to creative identity will be covered in the next section of this review, Glăveanu and Tanggaard's model relates to the present discussion because it proposes a snapshot of a dynamic phenomenon overlaid with social and cultural context.

The prismatic creative identity schema by Glăveanu and Tanggaard (2014)—they call it the Toblerone model—borrows its shape from a schematic explaining representation by Bauer and Gaskell (1999). One face of Glăveanu and Tanggaard's prism denotes creativity while the opposite face denotes self. The third face represents multiple interactions with others, gatekeepers and audiences alike. The spine of the prism extends, say Glăveanu and Tanggaard, like a candy bar as each segment denotes societal discourses about creativity through time (See Figure 5).

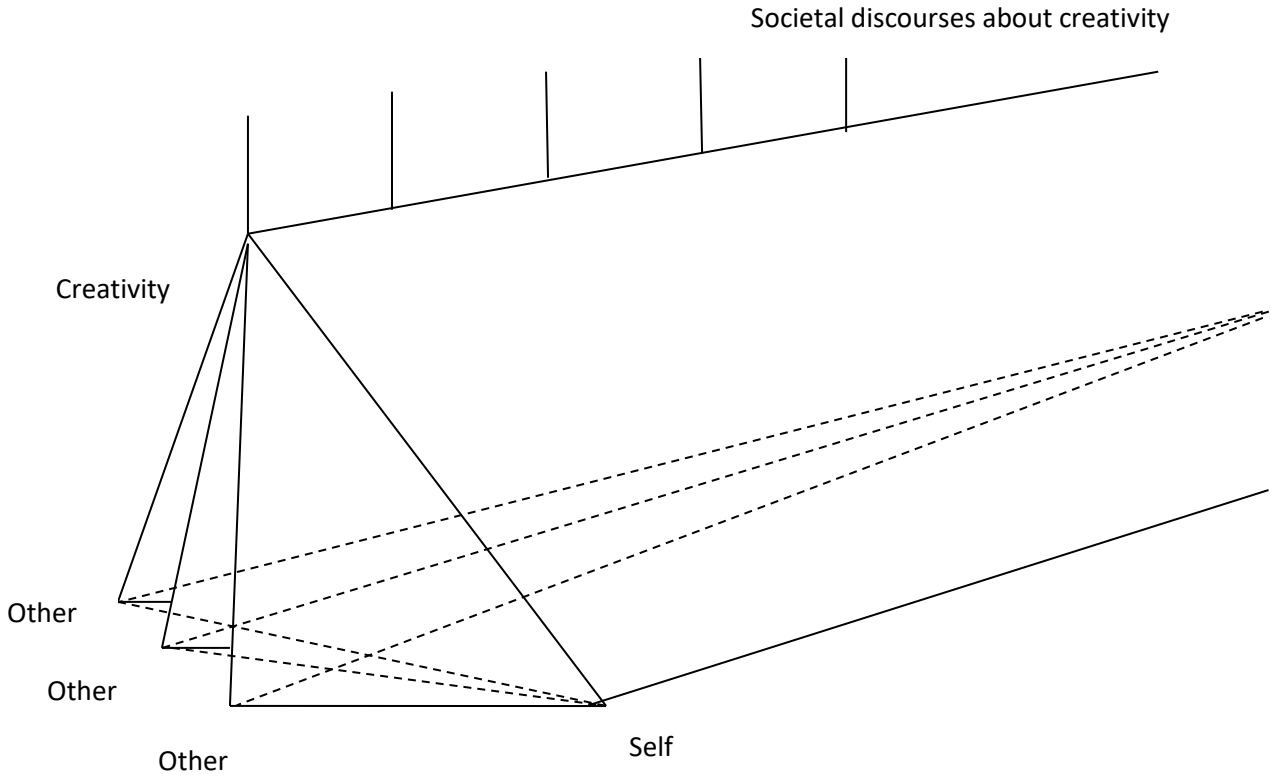

Figure 5. This prismatic Toblerone model of creative identity (2014) represents a trajectory over time of the relationship between self, other, and creativity. In it, a person's creative identity is negotiated over time by interactions with others, as well as society's ongoing exchanges about creativity. Adapted from "Creativity, Identity, and Representation: Towards a Socio-Cultural Theory of Creative Identity" by V.-P. Glăveanu and L. Tanggaard, 2014, *New Ideas in Psychology, 34*, p. 14.

Glăveanu and Tanggaard (2014) maintain that their model delineates how a creative person perceives him or herself in context to the greater world. However, they caution that the model centers on the concept that a person's creative identity is one sociocultural project among many. Identity is performed and reformed within a gamut of social contexts, though "the project we are referring to here is a much more diffuse reality, a general direction the self takes in relation to his or her creative potential and expression, based also on communication with others" (p. 15).

The Toblerone Model, Considered

Like Glăveanu's (2017) updated sociocultural model, this one, too, is recently developed to have sparked independent research. Glăveanu and Tanggaard (2014) substantiate it with examples from interviews they conducted with well-known makers in Denmark, focus groups with Danish teachers, and interviews with folk-art egg decorators in Romania. Reflecting on these interviews, Glăveanu and Tanggaard propose a typology of promoted, denied, and problematic creative identities "based on the premise that a creative identity is both acquired and maintained in a social context that can be more or less favorable to its formation" (p. 15).

Though Bourdieu is never mentioned, these distinctions certainly bring to mind the push and pull of habitus, field, and practice (Bourdieu, 1984, 1993; Bourdieu & Wacquant, 1992). More to the point, the later work more closely fits Dalton's (2004) sociological description of creativity as an interchange of habitus, field, practice, and action.

Indeed, Glăveanu and Tanggaard (2014) maintain in analysis that the construction of a creative identity is simultaneously personal and social. Moreover, it is ongoing—a creative project that has no end as long as the maker keeps making. In that way, this model

also subtly draws on Sternberg and Lubart (1999) with the contention that creativity is an evolving, emergent phenomenon that is at least partially dependent on context.

Intriguing as it is, this model is also a work in progress. Unless the societal discourses about creativity incorporate the cultural aspects Hennessey (2015) finds important—and that figure so prominently in the work of Ingold (2000, 2010), Wilf (2014), and Moeran (2014)—the creative identity model (2014) is incomplete.

Moreover, the model neglects to account for the approach a creative person takes in her or his work (Negus & Pickering, 2012), the experience of making, and the role of artifacts in how creative identity is shaped. In other words, it could help explain how people form creative identities, but not what they do with them. That is a key reason Glăveanu and Tanggaard (2014) call for basing fresh research on it.

Summaries of Systems Models

This section began by discussing the role systems theories have played in elucidating complex subjects in the social sciences, including creativity. Five relevant sociocultural models—Csikszentmihalyi's domain-field-individual model (1988); Amabile's componential model (1983, 1988, 1996; Amabile & Mueller, 2008); Hennessey's telescoping model (2015); Glăveanu's revised model (2017); and Glăveanu and Tanggaard's creative identity model (2014)—were examined. Several studies that extended the reach of these models were reviewed, which led to a deliberation of the strengths and weaknesses of each model.

While systems models come closer than single-dimensional versions to explaining a broadly considered vision of creativity, one model does not fit all cases. As noted earlier, Mumford and Antes (2007) warn against relying on any single model of creativity, and that caution certainly applies here. While these models incorporate some of the factors

across psychology, sociology, and anthropology that could account for the birth of the creative actor, none is a perfect fit. That said, each has elements that are worthy of consideration. Ideally, the most appropriate model for explaining the affordances and barriers people face as they pursue everyday creativity would draw from the models discussed here.

Perhaps, as the work of Hennessey (2015) suggests, the ultimate utility of systems theories of creativity is that they offer tools for reconstructing what is known in multiple disciplines about creativity. Glăveanu and Tanggaard (2014) agree. Their model intends to further the field by encouraging researchers to "consider it in a more comprehensive manner, one that might not be amenable to easy quantifications but nevertheless can guide the construction of novel research designs" (p. 19). Indeed, systems theories might eventually demystify what Mountouri (2011) calls "the vexing problems confronting researchers, and shed light on hitherto ignored dimensions of creativity" (p. 421).

To be sure, identity is one of those neglected dimensions. Glăveanu and Tanggaard (2014) claim that it is a crucial matter for those who want to examine what it means to be creative. Creativity, they augur, is "most of all about the integration of one's ability and actions into an identity project co-constructed by self and multiple others" (p. 19). Consequently, the next chapter of this thesis analyzes theories across disciplines that shed light on what happens when people begin to think of themselves as creators.

CHAPTER 3

REVIEW OF LITERATURE, PART 2: THEORIZING CREATIVE IDENTITY

Having examined the social, psychological, anthropological, and systemic views of creativity, the focus of this review now shifts to research that deals with an individual's construction of a creative identity. As with the theories of creativity that emanate from the different fields discussed in this review, theories of identity tend to fit within the foundations constructed by the disciplines. To be sure, even the terms used to describe identity vary from discipline to discipline and can be used to discern shades of differences in meaning (Elliott, 2012).

In psychology, for example, the personality-based construct of self-efficacy, derived from Bandura's social cognitive theory (1986, 1997), is the starting point for studies of *creative self-efficacy* (Jaussi et al., 2007; Tierney & Farmer, 2002). In sociology, and to a degree in anthropology, the threshold concept is the agency-and-structure-based *structuration*, based on work by Giddens (1991). Like all people, creative actors tell their stories in *narratives* (Gauntlett, 2007; Pachuki et al., 2010) that in various ways exemplify both creative self-efficacy and reflexivity.

As it outlines these concepts, this section considers a multi-strand approach. Taken altogether, personality and social theories of creative identity—and the empirical studies that examine them—can help capture a panoramic view of how adults come to view themselves as creative.

Getting to Creative Self-Efficacy

Constructed as a learning theory, social cognitive theory (Bandura, 1986, 1997) asserts that people are capable of understanding and generating symbols, possess the ability to apply forethought, and can learn vicariously by watching others. Further, they can direct their actions and ruminate over the results. These capabilities, Bandura (1986) claims, set the stage for dynamic action that combines the personal and the social: "Seen from the social cognitive perspective, human nature is characterized by a vast potentiality that can be fashioned by direct and observational experience into a variety of forms within biological limits" (p. 21).

Accordingly, Bandura's explanatory model of triadic reciprocity (1986, 1997) incorporates behavior, the environment, and individual aspects such as cognition, personality, and affect. Already interdependent at the outset, these factors interact over time in fits and starts rather than simultaneously, Bandura maintains (1986): "Because of the multiplicity of interacting influences, the same factor can be a part of different blends of conditions that have different effects. Particular factors are, therefore, associated with effects probabilistically rather than inevitably" (p. 24). In other words, human outcomes are more likely to be kaleidoscopic rather than laser-fine.

That said, Bandura (1986) posits that self-efficacy—a person's belief in his or her abilities—is one of the most important determinants of outcomes in human behavior. In light of social cognitive theory, however, self-efficacy is not a straightforward matter:

> Efficacy in dealing with one's environment is not simply a matter of knowing what to do . . . Rather, efficacy involves a generative capability in which cognitive, social, and behavioral subskills must be organized into integrated courses of action to serve innumerable purposes. Success is often attained only after generating and testing alternative forms of behavior and strategies, which requires perseverant

effort. Self-doubters are quick to abort this generative process if their initial efforts prove deficient (p. 391).

The making and learning that are keys to self-efficacy are also central to creativity. An extension of Bandura's work (1986, 1997) called creative self-efficacy (Tierney & Farmer, 2002) observes that self-judgments have a bearing on creative expression.

As an illustration, consider the maker of the tire swing discussed earlier. Whether she or he finds the outcome to be a novel and useful gesture of creative self-expression—that is, whether it aligns with a general definition of creativity—depends first on a set of personal evaluations. If the risk-taking that creative action demands is successful, the episode enhances the maker's feelings that he or she can be creative at that particular task.

Creative Personal Identity and Creative Metacognition

One such episode is not usually sufficient to cement the related construct of creative personal identity (Jaussi et al., 2007), which happens when someone considers creativity central to her or his self-concept. Instead, creative personal identity is built over time and indicates how much of a premium that person puts on creativity in thinking about him or herself.

Jaussi et al. (2007) describe its construction as a personal and contextual bricolage composed of memories and opportunities: "The importance of creativity to the self-definition in creative personal identity comes from one's past experiences and formative opportunities to engage in creativity, either experienced alone or through relationships" (p. 248).

Because people constantly act to reaffirm their identities, Jaussi et al. (2007) consider creative personal identity malleable enough to fit into an array of situations and contexts. Indeed, Kasof, Chen, Himsel, and Greenberger (2007) venture that the social

value ascribed to creativity is a potential driver for an individual's creative personal identity.

Researchers identify further connections. In a study looking at the relationship between creative personal identity and creative self-efficacy in the work environment, Jaussi et al. (2007) noted that the constructs were related, but their interaction could not predict creativity. In a longitudinal study of employees at a state social services provider, Tierney and Farmer (2011) found that when creative performance increased, so did creative self-efficacy. Similarly, Karwowski (2014)—examining middle and high school students to discover the relationship between creativity, creative personal identity, and creative self-efficacy—contends that creative personal identity is a foundation for creative self-efficacy.

One criticism of such research is that both creative personal identity and creative self-efficacy might be markers for facets of personality. Findings from a large (n = 2,674) sample of Polish men and women aged 15-59 (Karwowski, Lebuda, Wiśniewska, & Gralewski, 2013) assert that personality factors such as extraversion and openness to experience positively relate both creative self-efficacy and creative personal identity. Yet the authors tie their research to the construct of self-rated creativity. They contend that creative self-efficacy describes creativity as a potential aspect of the person, while self-rated creativity describes the belief that he or she is creative.

Assessing the Creative Self

To more precisely determine the relationship between constructs, Karwowski et al. (2012; in press) built on the lead author's previous work (2012) to devise the 11-item Short Scale of Creative Self. Using a 5-point Likert-type scale (1 = definitely not; 5 = definitely yes), the measure scores respondents on creative personal identity with

statements such as “I think I am a creative person” and “Ingenuity is a characteristic which is important to me” (Karwowski et al., 2013, p. 217). Confirmatory factor analysis found that self-rated creativity was correlated to both creative personal identity and creative self-efficacy, though it seemed more closely linked to the former.

Wondering about the associations between creative self-efficacy and creative personal identity, Karwowski then developed the 10-item Creative Mindset Scale (2014). He administered the measure in three online studies to more than 1,191 Polish men and women panelists registered with a research firm to look specifically at whether people who rated themselves as creative had fixed or growth mindsets.

In the study aimed at exploring creative self-efficacy and creative personal identity, the results suggested that those people who scored higher thought of their creativity as changing with time or practice. That not-altogether-surprising result suggested to Karwowski (in press) a new, higher-order construct involving both creative self-efficacy and creative personal identity—creative self-concept. As a social cognitive extension of creative behavior, creative self-concept could be a valuable tool to identify how confident makers are of their potential.

Creative self-concept also relates to the construct of creative metacognition (Kaufman & Beghetto, 2013). An elaboration of the metacognitive thinking skills addressed earlier in this review, creative metacognition is described as “a combination of self-knowledge (knowing one’s own creative strengths and limitations) and contextual knowledge (knowing when, where, how, and why to be creative)” (p. 155). Kaufman and Beghetto consider their definition of creative metacognition broad enough to incorporate the metacognitive traits of self-reflection, self-regulation, and self-monitoring, as well as the matter of domain specificity. By extension, they say, it may also apply to everyday creators. Correlating creative metacognition to psychological assessments such as the

Torrance Tests of Creative Thinking (Torrance, Ball, & Safter, 2003) is a chief concern of Kaufman and Beghetto. However, creative metacognition could also clarify the thinking processes of the everyday maker, which could be relevant to the present research.

The absence of consistent terms and clear assessments might explain why Glăveanu and Tanggaard (2014) note that identity as a topic of study has received uneven attention from psychology-based creativity scholars. “This can be due to the fact that identities are less stable than personality traits, and by comparison to cognitive abilities, are considered to be a ‘background’ element in creative production” (p. 13).

It could also be that these methodological challenges fail to consider fully the social, cultural, and temporal aspects of creativity that bear out the systems theories detailed in the previous section. Beyond describing how individuals construct identity, these aspects can help clarify the meaning of creative identity.

Structuration and the Self

Creative self-identity and metacognition do not happen in a vacuum. As previously noted, the contexts of society and culture are inevitable, and individuals are enmeshed in ways both meaningful and mundane in accommodating these facets of creative life. Under these circumstances, making a personal creative identity is a continual self-actualizing project—or, somewhat fittingly for makers—a series of projects. Indeed, Elliott (2012) maintains that social theory describes a multiplicity of “narratives of self as a site for reconfiguring relations between society, culture, and knowledge” (p. 7). Considered alongside Dalton’s (2004) synthesis of action and habitus, these narratives enable people to render interpretations about themselves, others, and society—and make changes that influence one, some, or all.

Dalton's (2004) middle path combining structure and agency in describing the sociology of creativity hews to Gidden's (1984) theory of *structuration*, a key social identity concept. At its essence, the theory characterizes people's actions as framed by rules—laws, regulations, and orders, and the general sense of what things are or should be like—and resources. Social interactions test rules and resources. From that, new rules and resources can emerge, and which get tested in ever more social interactions. The repeated cycles have a continual and lapidary effect: Social interaction changes or reinforces rules and resources, while the rules and resources change or reinforce social interaction. Small-scale change can, in turn, become societal-level change.

Individuals filter this constant change. In the process of busily constructing their identities, they survey their thoughts, actions, and emotions in what Adkins (2002) calls *reflexive modernity*. Giddens (1984) maintains that the dynamic between self and society can manifest its reflexivity at varied levels of consciousness. He details three of them: discursive consciousness, which could be considered top-of-mind; practical consciousness, which incorporates the commonly held understandings of the activities and procedures of social life; and the subconscious.

Structuration theory maintains that people tread between these states of experience because much of what happens in social life is routine. However, not all of it is, and therein lies an opening for creativity, both in the view of Joas (1996) as well as Giddens (1984, 1991). Identity-shaping change transpires over the course of a life: "Fateful moments are those when individuals are called on to take decisions that are particularly consequential for their ambitions, or more generally for their future lives" (Giddens, 1991, p. 112). At these instances, Elliott (2012) asserts, sweeping changes in the greater world interweave with intimate senses of self. "In Giddens's sociology, the capability for

autonomous thought and reflexivity permits a sort of emotional regrooving of self in the broader context of contemporary social transformations sweeping the globe" (p. 52).

A Series of Tipping Points

The implications for the incipient creative actor present two intriguing scenarios. If a person's rules, resources, and social interactions do not offer sufficient scope, he or she might not think of him or herself as creative. Then again, if one's social interactions allow, one's identity as a creative person can be transformed.

In that light, consider again the tire swing maker. Suppose she or he had never attempted such a project, and never considered her or himself creative, at least in making tire swings. Suppose further that she or he, for whatever reason, ventured a first foray using the rules (swings should be functional, sturdy, and safe) and resources (tire, rope, tree, time for making, expertise) considered necessary for the task. If the effort is successful—at least by the maker's personal standards—the person's identity as a creative tire swing maker might well be conceived.

If the maker's social interactions are supportive—say, if the children using it were pleased, or if the neighbors found it a handsome example—then that nascent creative identity might be burnished. If support were not forthcoming, the maker's creative identity might (or might not) be diminished. Perhaps the tire swing maker would stretch the boundaries of rules and resources with the next iteration. She or he may paint flowers on the tire, or use patterned macramé knots to secure the swing, or even rig it to a playhouse overhang rather than a tree. When the project was complete, the maker would self-assess its viability, and other social interactions would ensue to influence her or his creative self-identity.

The Ongoing Undertaking

Clearly, the continual process of an individual's creative identity is predicated on making and nourished by that person's ongoing reflexivity. To that end, Giddens (1991) maintains that people frame identity as a kind of biographical project, an evolving story that incorporates personal, cultural, and societal contexts.

> The existential question of self-identity is bound up with the fragile nature of the biography which the individual 'supplies' about herself. A person's identity is not to be found in behavior, nor—important though this is—in the reactions of others, but in the capacity *to keep a particular narrative going*. (p. 54; emphasis in original)

Seen under the light of Bourdieu's (1984, 1993; Bourdieu & Wacquant, 1992) constructs of habitus and field, keeping the narrative going could be a considerable, if not at times forbidding, task. To be sure, the social sphere can cast an outsize and amorphous shadow over the personal motivation to create. As Glăveanu and Tanggaard (2014) relate, some creators are induced to create so they can maintain their creative identities while others are enticed to create so they may not be marginalized. On the other hand, it might be said that those two conditions are not mutually exclusive.

Compelling though it may at times be, the identity project is not always top of mind, a reality that conforms to Giddens's (1984, 1991) delineation of the levels of consciousness. Glăveanu and Tanggaard (2014) agree that creative identity does not wax when it is thought about and wane when it is not. It does, however, come into focus when someone undertakes a mode of creative expression, and then communicates with others about that expression.

Creativity Self-Narratives

It is difficult to disentangle the actions, understandings, and meanings that define creativity. That said, a person's narratives can offer insight into the tacit knowledge and local understandings not just of the actors themselves, but their social interactions, too.

A pertinent empirical example comes from Pachucki, Lena, and Tepper (2010), who analyzed college students' narratives about their contributions to campus life. Looking at what they call "creativity narratives" (p. 122), the researchers asked 128 students from an American liberal arts college to complete surveys and write descriptions of where and how at school they felt they were most creative. The authors' content analysis revealed 40 dimensions of self-reported creativity, which ranged from writing (42 counts) to academic work (39 counts), to conversation (31 counts). Everyday creativity—defined by the students themselves—received 15 counts.

The ensuing factor analysis (2010) uncovered six dimensions: networking (event planning and group activities); renaissance (travel, art appreciation, athletics); nurturing (children, crafts, volunteering); idealistic (social change and religion); social media (media, computer, writing); and gregarious (conversation and humor). Not all dimensions appeared in the factor analysis, and the researchers examined those that remained with nonmetric multidimensional scaling. This analysis indicated separate blocks of what the authors label intellectual/artistic-based creativity (such as dance, theater, and visual arts) and everyday creative activities (such as cooking and fashion).

The study (2010) is useful in that it indicates how readily individuals identify creative experience, and that it suggests the students forge creative identities within their social interactions at school. However, the study's applicability to the present question is limited. Chiefly, it doesn't address the *how* the participants began to see themselves as creative actors

although the college students discovering pursuits that make them feel creative might prove fertile ground for that.

Moreover, the sample's homogeneous composition (2010) does not allow for the bigger and different picture that might emerge from a more diverse population. The use of a simple survey points to another shortcoming; it could be that students reported what they thought the researchers wanted to know, or what seemed relevant at the moment but not in the longer run. Indeed, the high incidence of writing as a self-reported creative activity may have emerged because the students were, in fact, writing about their creativity.

Gauntlett (2007) reviews social theories, constructs from the philosophy of science, and neuroscientific research to give context to his own work that unites the act of making objects with that of constructing identities. Three of his studies, discussed in detail in the following chapter, ask participants to be not just the descriptors of their identities but the creators of everyday works as well. The resulting narratives are richly revealing about the individuals' inner lives. Taken altogether, Gauntlett's studies suggest that in the process of selecting components, building models, and talking about what they made, participants also built new perceptions about themselves.

Gauntlett's (2007) research offers a logical extension of Malafouris's (2013) explanation of how people are shaped by the things they make. When individuals answer a question by making something—be it an essay, a video, a drawing, or a Lego metaphor—and then reflecting on the process, the process frees them to become the chroniclers of their stories, the experts of their experience.

Summarizing Theories of Creative Identity

The theories of creative self-identity explored in this chapter began with an accounting of social cognitive theory (Bandura, 1986, 1997), and traced how the creative personal

identity (Jaussi et al., 2007) and self-rated creativity (Karwowski et al., 2013) models emerged from direct inquiries into creativity. From these stem the overarching, more recently devised models of creative self-concept (Karwowski, 2014) and creative metacognition (Kaufman & Beghetto, 2013). They attempt to accommodate further the contexts of social action into psychological interpretations of making. By reviewing Giddens's (1984, 1991) structuration model, this section investigated the recursive nature of building a creative identity and noted the importance of narrative in augmenting that process.

These various explanations of creative identity call to mind Rumi's (2006) parable of the elephant in the dark. In the story, a series of people enter a blacked-out room to examine the animal. Each emerges with a different conception about its entirety: The trunk must be a water spout; the ear, a fan; the leg, a pillar; and the back, a throne. Each person was partially right but ultimately wrong. The poet's point is that while discrete perspectives are limited, the collective, enlightened view brings the whole picture into clearer relief.

In terms of creative self-identity, all of these theories help make sense of what happens when a person starts thinking of him or herself as a creative being. Like creativity itself, creative self-identity is neither a psychological nor a sociocultural matter. As an *ur*-creative project, it is both.

Perhaps because they elaborate and build on larger ideas, these explanations coalesce with many of the others discussed in this review, including Dalton's (2004) description of a sociology of creativity. Creative self-concept (Karwowski, 2012) and creative metacognition (Kaufman & Beghetto, 2013) help clarify Sternberg and Lubarts's investment theory of creativity (1995), as well as Hennessey's telescoping systems model (2015) and the prismatic model of Glăveanu and Tanggaard (2014). Each takes into account the stores of knowledge creating demands and places context on the social environment.

Similarly, Giddens's (1986, 1991) structuration theory amplifies the recursions essential to both Csikszentmihalyi's (1986) domain-field-individual model, Amabile's (1983, 1988, 1996; Amabile & Mueller, 2008) componential theory, and Glăveanu's (2017) revised model. Moreover, the constructs of structuration, metacognition, and creative self-concept also accommodate Ingold's (2000) construct of textility, and Lévi-Strauss's (1996) interpretation of bricolage.

Furthermore, the narratives that arise through making illustrate aspects of phenomenology (Merleau-Ponty, 1962) and Warnier's (2001) description of praxeology. Both underscore the fact that an artifact makes its creator as much as the creator makes the artifact. Taken altogether, these facets of creative identity reiterate Douny's (2014) point about material culture arising from everyday practice. As it happens, creative self-identity does, too.

A web of influences must secure studies that involve identity and creativity. Glăveanu and Tanggaard (2014) maintain that these influences include the making self who engages with others in social interaction, a common (if evolving) sense of what creativity is and what it means, and the identity project of the making self played out over time in the social context. With those considerations in the foreground, the next section addresses a critical waypoint in the fashioning of a creative self-identity: negotiating the affordances that seed a person's creative identity.

CHAPTER 4

REVIEW OF LITERATURE, PART 3: AFFORDANCE THEORY AND CREATIVITY

What enables a maker to create? Who helps? What hinders? What combination of supports and constraints conspire in the birth of the creative actor? To more fully understand the social, cultural, and psychological forces that encourage and discourage creativity, this review turns now to affordance theory (Gibson, 1977, 1979). The theory has influenced the field of human-computer interaction, neuroscience, and robotics (Şahin, 2008), and is beginning to permeate the study of creativity (Glăveanu, 2012, 2017; Moeran, 2014). This section explores the theory's precepts and scope and details its potential to explain creativity in a way that both accommodates and amplifies the creativity theories already outlined.

Affordances Explained

Gibson (1977, 1979), a psychologist whose primary interest was in the ecology of visual perception, coined the term *affordance* to label perceived aspects of the environment, both positive and negative, that affect an organism's function. In Gibson's definition, an affordance incorporates those parts of the environment's physical properties that suit the organism's movement, feeding, and actions. The crux of an affordance is what it offers the organism, Gibson maintains. His example is a stool, which affords sitting:

> If an object that rests on the ground has a surface that is itself sufficiently rigid, level, flat, and extended, *and if this surface is raised approximately at the*

height of the knees of the human biped, then it affords sitting-on (1977, p. 68; emphasis in original).

Anything in an organism's environment can be an affordance, from substances and surfaces to designs and configurations. "Affordances act as attractors drawing humans into action. . . The world acts, makes occur and initiates possibilities. 'Affordance' is a word for this activity" (Letiche & Lissack, 2009, p. 61).

Affordances relate in myriad ways. Water, for instance, can be a physical feature or a medium for washing, moving, or lubricating. Light can reveal the contours of the natural environment as well as the actions of another person; it can also blind. Interactions between people and their environments—including other people—further influence these actions. Yet until the affordances are duly sensed, the actions affordances bring only exist in potential, their meanings unclear. "The animate object can give you caresses or blows, contact comfort or contact injury, reward or punishment, and it is not always easy to perceive which will be provided" (Gibson, 1977, p. 77).

Therefore, a person's perception of an affordance is as important as the affordance itself. Gibson's (1977, 1979) theory builds on the precepts of valence, invitation, and demand inherent in Gestalt psychology (Arnheim, 1974). It makes implicit the organism's perception of the whole, sensing what Edwards (1999) calls "the 'thingness' of the thing" (p. 96). Values and meanings can be directly perceived, Gibson holds, and these perceptions in turn fuel an individual's actions. Because these perceptions take place in the context of a person's surroundings, Gibson argues that studies on affordances should incorporate an organism's environment. For people, that means the personal, social, and cultural aspects that surround them.

Affordances Expanded

Since its inception, other scholars—frequently, those who specialize in human-computer interaction—have elaborated on Gibson's (1977, 1979) theory. Many of their papers endeavor to attune real and potential action. Norman (1988, 1998), for instance, finds the theory relevant in incorporating affordances into software design so a user can infer what they offer. Gaver (1999) maintains that a person's perception of affordances is influenced by experience and will as well as culture and society. Weiser and Seely Brown (1995) consider an affordance in relationship to a person's intentions, perceptions, and capabilities. McGrenere and Ho (2000) suggest that a person's capabilities dictate the potential of an affordance, though the affordance exists regardless of those capabilities. Indeed, though a person's goals and needs change over time, they propose that the affordance does not.

Kelso (2008) theorizes about the relatedness of affordances and how they appear in dualities, such as organism and environment, or nature and nurture. Şahin (2008) suggests regarding affordance relationships from perspectives of the agent, the observer, and their shared environment. Writing about robotics, he further asserts that the perception of affordance relationships for both the agent and observer resides inside the agent. An agent's internal dialog holds the key to unlocking the interaction between him or her and the environment.

This diversity of these assertions offers a robust picture of affordance theory's evolution since Gibson's death in 1979. Although it began as a description of environmental perception, the theory now considers social and cultural contexts—for the creative actor, for the other, and for their shared environment—and the internal and external relationships they yield. Indeed, it appears that affordances invite human action while human assumptions about perceptions and society help define affordances (Letiche & Lissack, 2009; Withagen et al., 2012).

As it has become more fully developed, other disciplines have incorporated and helped popularize Gibson's (1977, 1979) theory. In ecological psychology, Warren (1984) conducted tests in which people climbed stairs of varying risers; he concludes that people detect physical affordances in measurements that correspond to human proportions. Explorations of the mirror neuron system (e.g., Grèzes, Armony, Rowe, & Passingham, 2003; Iacobini et al., 2005; Rajmohan & Mohandas, 2007) indicate that its primary purpose is representing affordances in terms of action.

Morganti (2008) and Constantini and Sinigaglia (2011) assert such research appears to support the triadic reciprocity of behavior, environment, and individual cognition of social cognitive theory (Bandura, 1997). In education, affordance theory rationalizes curriculum design (Brown, Stillman, & Herbert, 2004), distance learning strategies (Olofsson & Lindberg, 2006), and systems of disciplinary affordances (Linder, 2013).

Helpfully, for those studying how creative identity is formed, ecological psychologists Rietveld and Kiverstein (2014) draw affordances into a broad phenomenological tableau. They contend that the perception of affordances in an individual's environment is refracted by his or her skills. The resulting variations could also account for the genesis of someone's creative self-identity: "By virtue of our many abilities, the landscape of affordances we inhabit as humans is very rich and resourceful" (p. 325).

Human movement scientists Withagen et al. (2012) venture that the landscape itself has a beckoning character. They look to architecture and industrial design to suggest that affordances themselves invite agency. Recalling the work of Dalton (2004), Joas (1996), and Ingold (2010), they make three observations as to how affordances can invite action. First, affordances can be leveraged only if the agent perceives them. Second, because an invitation can be turned down, the decision for action lies with the actor. Third, agents do not necessarily

need to make rational decisions about whether to act on an affordance; they can unreflectively react to its invitation. It is, they assert, a case of the environment proffering the creative actor a summons to do something.

Understanding what various disciplines consider affordance theory to be is crucial for applying it to the study of creativity. The array of research affirms that the construct captures the empirical imagination. However, critics maintain that research often fails to account for its breadth. Şahin (2008) discusses several reasons in his review of Gibson's work. He calls the theory "an elusive yet confusing notion" (p. 2) that invites misapprehension. "Different quotes from Gibson's writings are often used to support different views on the concept" (p. 7). Further, Şahin claims, Gibson's interests in visual perception colored his image of the theory. In practice, he says, "Affordances apply to all types of perceptual modalities" (p. 8).

Therefore, it is important to consider the ongoing discussions that further the scope of affordance theory. It is also imperative to discern ways the developments can inform research in specific fields, such as creativity.

Two Views of Creativity and Affordances

In the field of creativity, work tracing the implication of affordance theory is fairly recent. Glăveanu (2012, 2017) and Moeran (2014) assume different vantage points to survey how affordances might explain how people perceive their environments as supporting or constraining their creative self-identities.

Glăveanu's Environmental Perspective

Glăveanu (2012, 2017) holds that one of the limitations of affordances is that they are not necessarily perceived by the creative actor. In his sociocultural model of an affordance theory for creativity, affordances represent action a person could take,

while intentionality is the action she or he would, and normativity is the action she or he should take. Affordances confront norms and intentions, he holds, which can limit the creativity exhibited by a person through a made object (See Figure 6).

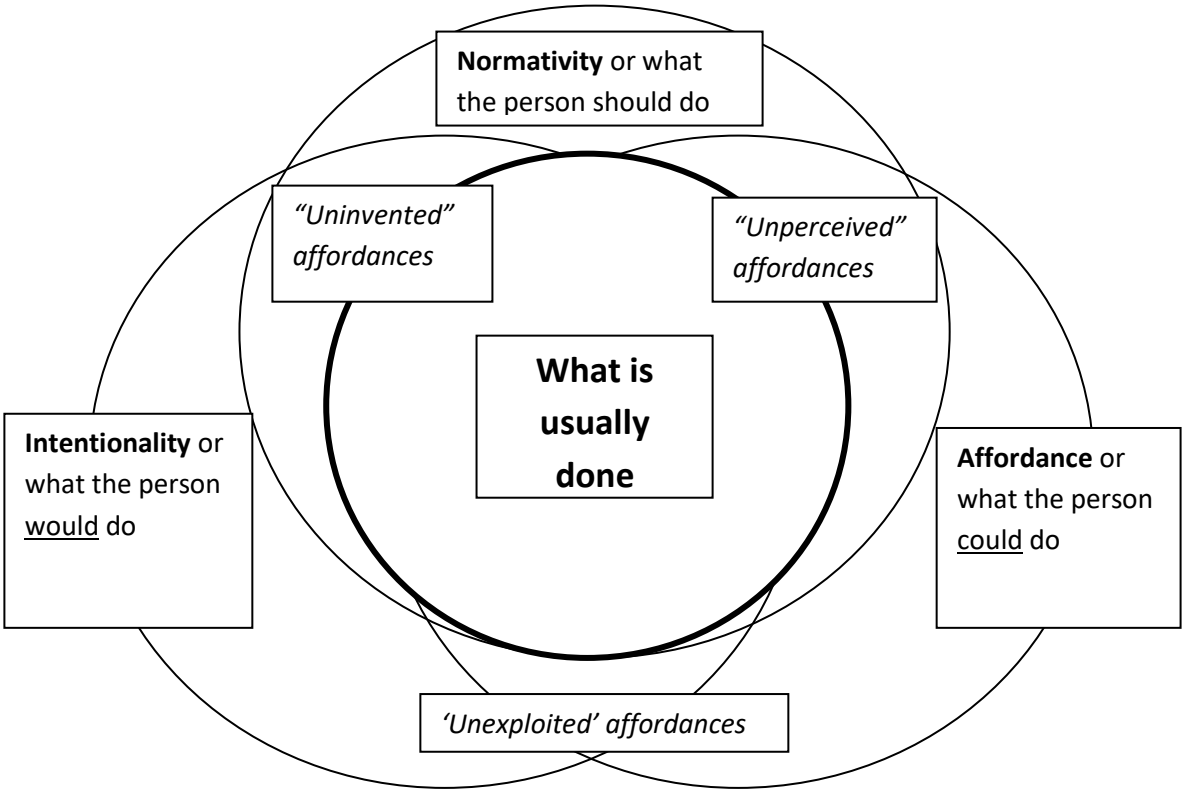

Figure 6. This sociocultural model for an affordance theory of creativity highlights the potential for creative action in its margins, where unperceived, unexploited, and uninvented affordances lie. Adapted from "What Can Be Done with an Egg? Creativity, Material Objects, and the Theory of Affordances" by V.-P. Glăveanu, 2012, *Journal of Creative Behavior, 46*, p. 197.

Glăveanu (2012) proposes his model as a way of visualizing the way that environment, objectives, and cultural standards form the backdrop for an individual maker's action. In the model, they intersect in the center to represent what is ordinarily done in everyday action, "considering physical, personal, and sociocultural constraints" (p. 196). The adjacent unperceived affordances are those that are not noticed by the maker and therefore unused, while the nearby uninvented affordances are those not yet available to the maker because they have yet to be developed, and the close-at-hand unexploited ones are unused because of cultural imprimaturs.

The model is dynamic, Glăveanu (2012) contends, because the sociocultural specter of creativity itself is dynamic. "As such, creativity is not 'in' the newly perceived, invented, or exploited affordances themselves, but 'in' the very acts of perception, invention, and utilization" (p. 199).

The model's empirical foundation lies in Glăveanu's (2012) mixed-methods research with Romanian Easter egg decorators. This folk art tradition is being disrupted by economic forces, he asserts, because practitioners are beginning to produce eggs for other holidays in a bid to make money throughout the year. In decorating eggs with Santas and Christmas trees, such makers are changing the constraints of tradition. Simultaneously, developments in the tools and materials for egg decoration are also changing traditional ways of working. In subject and media, both traditional and disruptive practitioners are finding in affordances the means to discover new ways of working, invent new forms, and redraw the idea of what egg decoration should be.

In those ways, Glăveanu (2012) contends, the boundaries of what is possible in a creative pursuit are recast. "What creativity offers the concept of affordances . . . is a more dynamic, supple account of what we, as individuals and a species, can do in relation to our

environment" (p. 206). The iterative drafts of constant, creative change brought about by affordances shape a creator, he maintains, as well as her or his perception of the environment.

While the sociocultural model of creative affordances (Glăveanu, 2012) clearly applies to the circumstances surrounding the birth of the creative actor, it does a better job of delineating the work of eminent creators than it does little- and mini-c creators. For example, at the beginning of a maker's experience in a particular medium, many affordances are unperceived and seemingly uninvented. Indeed, the maker could do "what is usually done" (p. 197), and still feel creative in that context and be recognized by friends and family as such, which Gauntlett (2007) affirms in his definition of everyday creativity. Ultimately, the model appears to offer more of a strict constructionist view of Gibson's (1977, 1979) theory than one that allows, as Şahin (2008) urges, for broader implications.

Moeran's Circuits of Creative Affordances

One creativity theorist sketches a vividly inclusive vista of the ways the theory depicts the life of a creative actor. Moeran (2014) superimposes affordance theory over the processes involved in producing Japanese fashion magazines, ad campaigns, pottery, and art exhibits. As a business anthropologist, his emphasis is often economic. His observations detail how affordances also help describe the ways amateur makers find their creativity both constrained and enabled, and how the experience of negotiating affordances imbues identity.

Drawing from Gibson (1977, 1979), Moeran (2014) also taps into Bourdieu's (1984, 1993; Bourdieu & Wacquant, 1992) ideas of habitus and field as well as descriptions of circuits of commerce by economist Zeliger (2011). Moeran claims that makers in various fields confront perceived techno-material, temporal, spatial, social, representational, and economic affordances of creativity. As with the later affordance theorists, Moeran finds that the relationships that enmesh these affordances are dynamic and highlight the positioning,

creative capital, and social conventions of the actors who live them. Furthermore, he maintains that their social practices, along with material practices, generate culture as well as cultural conventions that can be made or broken.

Techno-material Affordances

Moeran (2014) considers these to begin with understanding the rules of a particular domain. A writer, for example, must know the precepts of grammar and syntax while a photographer has to apprehend how to compose, light, and focus a shot. The rules can be adapted—that is one opening for creative results—and the writer's text and the photographer's images are subject to the dynamics of production. The tools used in production afford the introduction of ever more tools as disciplines and potentials evolve. Moeran (2014) uses the development of digital publishing as an example:

> Digital technology affords art directors, photographers, and cameramen new ways, and new conventions, of carrying out their work. It also affords the introduction of new materials, such as the use of flat liquid display screens in the work of video artists . . . as well as constraining, materials and technologies enable. Yet, in enabling, they also constrain. That is the explanatory power of affordance. (p. 41)

Ultimately, material affordances (i.e., media) dictate the often multi-layered technical choices the maker must select. From this "ensemblage of technical affordances" (Moeran, 2014, p. 42), the creative actor assumes a social identity. In short, the materials make the maker.

Spatial Affordances

Obviously, a maker's choice of materials and techniques affect the size of the outcome. Spatial affordances also come into play when the maker chooses a place to create. The classroom affords different parameters than the kitchen table for the beginning jewelry-maker, for example, and a corner of the garage a different set than a full workshop for the woodworker.

Moeran (2014) suggests that the physical and digital locations of display and performance can have both practical and symbolic import. Audience size is often contingent on these locations. He cites the matter of *terroir* in the production of French wine. The burgeoning farm-to-table movements in the US and UK incorporate the old concept of what a particular natural environment can do for the taste and authenticity of food. These movements increasingly draw from the participation of home cooks and backyard gardeners as much as they do entrepreneurial chefs and farmers (Schoenfeld, 2011).

Temporal Affordances

As in the systems models of creativity discussed previously, Moeran (2014) sees time as an element in this model, too. Time is a both constraining and enabling factor in making—a scarf can take weeks to knit, a pot days to cure, a fly minutes to tie. If you have the time to devote to making, producing any of those things is possible. Further, if any of those items is made as a gift or for a particular event, deadlines influence the time spent planning, making, and sharing as well as the actual production. Shortcuts may be taken, collaborators brought in, and the initial product might be altered to meet a narrow window of opportunity. In this way, Moeran says that time "affords both style and content" (p. 46).

More broadly, everything makers create is a part of the series that has come before it, both in the maker's frame of reference as well as in the larger cultural sense. Time, then, bears

upon the creativity that others see in a creative product. “In other words,” Moeran (2014) points out, “the affordance of time in the broader sense of historical continuity means that creative expression is not ‘created’ so much as ‘renewed’” (p. 47).

Representational Affordances

With Moeran’s (2014) emphasis on context in creative expression, it follows that genre, form, and aesthetics constitute a class of related affordances. There is, in most modes of creative expression, a typical way of doing things. For instance, a haiku has three lines and 17 syllables, a silver bangle fits around a wrist, and flour baked with water and yeast yields a loaf of bread. Each of these representational affordances carries constraints that help define the products.

At the same time, however, representational affordances can be shoved, if not toppled outright if conditions warrant. Moeran (2014) states:

> Just how far borders can be pushed would seem to depend on the personality of the creator, the nature of the product, genre, or communicative style; and the social world of which they are a part . . . The looser the aesthetic constraints, the easier it is to innovate, and vice versa (p. 50).

Social Affordances

As important as time, materials, space, and format are, other people also matter to the creative actor. They constitute the human networks that influence creativity: audiences, mentors, colleagues, and collaborators. In Moeran’s (2014) view, the “other” that features in all the systems theories of creativity—and that is central to Bourdieu’s (1984, 1993; Bourdieu

& Wacquant, 1992) discussion of habitus and field—is perhaps the most crucial affordance for a maker to negotiate.

In seeking equilibrium between the capriciousness of habitus and a particular field's rules, a maker contends with other people who can inhibit or enable the creative process. Social affordances can be interpersonal, organizational, or both. In the case of an amateur painter, for example, friends or family might voice opinions about a piece being entered in a community show. The exhibition jury will render another judgment, as will the audience at the show and the critics attending the opening. Whether the piece appears in the exhibit, formal or informal social networks may persuade the painter to produce similar work, pursue a new direction, or try another hobby altogether. In ways both subtle and bold, such social affordances influence the form, styles, and directions of creative products as well as the creative identity of their makers.

Economic Affordances

When markets are booming, and personal accounts flush, Moeran (2014) says, a creative actor may find it easy to spend on classes, materials, and studio space. When a recession plods along, however, buying even basic supplies might seem like an indulgence, or worse, a misappropriation of funds.

While the availability of money might seem to correlate with creative expression, Moeran (2014) stresses that this is not necessarily the case. A larger budget does not ensure a creative result. Lack of money can spur radical adjustments in techno-material and representational affordances that yield new modes of expression.

Circuits of Affordances

These six affordances connect for the creative actor in multiple ways, Moeran (2014) contends. Consider, for example, those that the maker of an oak basket must pass through, around, or over to produce a basket to give her granddaughter. First, she must go to the woods in the spring and find a straight oak sapling to harvest when the sap is rising in the tree. She must use an ax, a mallet, a drawknife, and wedges to cut a log from the tree, strip the bark, and split it in half, and then quarters, then eighths. After that, she must take a pocketknife and narrow the splits to the right size for weaving, smoothing each one with finer and finer grades of sandpaper. Then she must soak the splits in water so they will be pliable enough to work. Only after those tasks are finished can she begin weaving the handle and ribs, following a pattern her grandmother taught her, one that originated in the region many years ago.

Each selection in this series impinges on the maker's circumstances and choices. The choice of oak means that she must have access to land that grows suitable trees. She has to cut the sapling at the optimum time. Time, too, factors into the days she devotes to the basket. She must also have the means to buy and possess the tools and workspace, and be proficient in the techniques of working the wood. Her choice of a traditional pattern has some bearing on the techniques she uses, as well as in the worth of her gift to her granddaughter. Moreover, making this particular basket links her to generations of her family and the coterie of oak basket makers in her circle.

In this example, each indelibly affects the other. Like the basket in question, they are woven in a way that is specific to this maker's context. Regardless of maker and medium, these connections—what Moeran (2014) calls "circuits of affordances" (p. 35) plot the enabling and constraining conditions a person must confront in the process of becoming a creative actor (See Figure 7). "Each affordance is entangled in the others to such an extent

that the only way out of their enmeshment would seem to be to refer to them all by an overarching . . . concept like ‘creativity’” (p. 59).

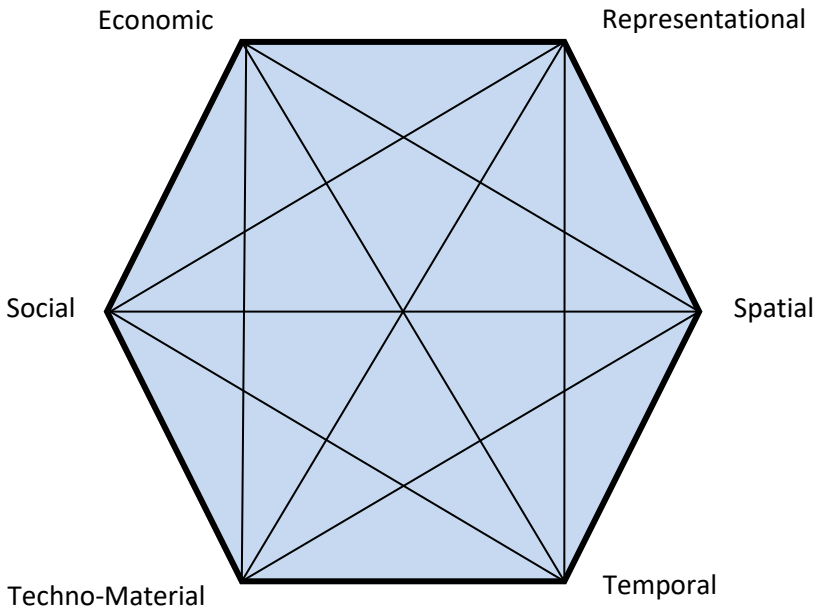

Figure 7. Moeran's circuits of affordances model maps the multifaceted connections between the aspects of the environment that both constrain and support the creative actor. In connecting, affordances lead from possibility to action. Adapted from *The business of creativity: Toward an anthropology of worth* by B. Moeran, 2014, p. 59.

Moeran (2014) interprets a maker's ongoing appraisals of affordances to mean that creative products descend from a succession of transitions that ultimately transform. The product is not the only result when someone makes something, however. Social relations and individual experience connect at specific points in time to establish and re-establish a person's identity as a creative being.

Summarizing Models of Creative Affordances

Affordance theory offers a way of thinking about the limits and allowances that a person necessarily confronts on the way to becoming a creative actor. This section details the interactive and iterative processes between organism and environment first described by Gibson (1977, 1979). It relates how affordance theory has been refined to support the development of human-computer interaction and explain action in fields as diverse as psychology, neuroscience, and education. The section then considers the applicability of Glăveanu's (2012, 2017) theory of creative affordances as well as Moeran's (2014) circuit-based schema in clarifying the types of affordances creative people encounter.

Interestingly, the concept of affordances brings this review back to the creative process described by Wallas (1926), through the neuropsychological realm, into social and anthropological spheres. It leads to the integration of these disciplines attempted by systems theory. In particular, it brings needed detail to the creative identity model of Glăveanu and Tanggaard (2014) and helps contextualize the identity building described by Karwowski (2012, 2014) and Giddens (1984, 1991).

As Small (1998) contends with musicking, the perception described in affordance theory is that of possibilities and relationships. Pursuing those relationships constitutes the action that is at the core of creativity. Because affordances are potentialities, the outcome of that action is never fully known until the maker processes it. Building the narrative of creative

self-identity might be a vital way for people to reflect on where affordances have led them, and at the same time perceive where the relationships they map may take them next. Indeed, the agency underscored by affordances could well promote an individual's identity as a creative being. That possibility and the promise it holds for understanding how someone develops a creative identity are considered next.

Conclusions from the Reviews of Literature

The winding route to the process and feeling of creativity, of making something that "evokes a feeling of joy" (Gauntlett, 2011, p. 76) has many aspects. Those aspects outline the everyday creator's interior, social, and cultural selves—and form the structure of this chapter. This section summarizes the most pertinent points made in this and the previous two chapters. It ends with a statement, informed by this review, of the central questions of the present research.

An Ordered Procession

The initial section of this review identified the need for a consideration of creativity that spans the disciplines of psychology, sociology, and anthropology. Levels of creative significance were discussed. The interplay between mini-c (Beghetto & Kaufman, 2007) and little-c (Richards, 2007) creativity—that is, the path between building knowledge and actually making something—was identified. Some definitions of everyday creativity were deliberated, and Gauntlett's version (2011), which accommodates the personal and contextual perspectives on making, was chosen for this review.

Heeding Mumford and Antes's (2007) admonition not to rely on any single model of creative achievement, this review examined psychological theories that

attempt to explain the process and personal attributes of creators. Creative cognition (e.g., Finke, 1996; Finke et al., 1992) and creative metacognition (e.g., Flavell, 1979; Hargrove, 2013) help make sense of the deliberate and intuitive ways people think about solving problems. However, psychological theories of the creative person are sometimes limited by reliance on personality, intellect, or other traits. Sternberg and Lubart's (1995) investment model transcends those limits by accounting for those as well as for knowledge, environment, motivation, and cognitive style.

The review then proceeded to discuss sociological approaches to creativity. Williams (1976, 2011) contended that a theory of creativity should evince the social dynamics that both people and societies require to function properly. Joas (1996) construed that human action is creative, while the work of Bourdieu (1984, 1993; Bourdieu & Wacquant, 1992) offers insights into the social routines of creativity in terms of habitus, capital, field, and practice.

Dalton (2004) resolves the contradictions in the earlier work by allowing that creativity lies in both the imprecise structural element of habitus and the freedom of human activity. The interplay of these theoretical positions was discussed. It was determined that Dalton's framework shares common ground with some psychological theories, notably the geneplore model by Finke et al. (1992), Sternberg's (1985) triarchic theory, and Sternberg and Lubart's (1995) investment theory.

The anthropological theories examined in this review suggest that artifacts and processes can shine a light on the individual and social vagaries the creative actor must negotiate. Cultural anthropologists (e.g., Hallam & Ingold, 2007; Naji & Douny, 2009; Negus & Pickering, 2012) track the rhythms of making. They maintain that material culture emerges in the tension between tradition and innovation and necessarily occurs in a social context. Ingold (2010) and Malafouris (2013) assert that makers, materials,

and artifacts act to change one another, a step towards bridging the social and psychological models discussed earlier.

Further consolidating the differences, the systems theories of creativity appraised in this section amplify what multiple disciplines consider important about creativity and creators. Csikszentmihalyi (1988); Amabile (1983, 1988, 1996; Amabile & Mueller, 2008); Glăveanu and Tanggaard (2014); and Hennessey (2015) all devise models that scrutinize makers and their contexts. Their work acknowledges that creativity not only takes place on multiple levels simultaneously but is an action that is constantly repeated.

That repetition is crucial to the creative actor's identity. Relevant theories deliberated in this review (e.g., Karwowski, 2012; Karwowski et al., 2012; Kaufman & Beghetto, 2013) attempt to pin down the ways that people assume identities as makers. As Giddens's (1984, 1991) structuration theory intimates, makers' narratives—indeed, their very actions—are bounded by the rules and resources they encounter in creating.

Indeed, those rules and resources constitute the affordances an individual must negotiate on the way to becoming a creative actor. This review explores the genesis and evolution of affordance theory (Gibson, 1977, 1979) employed in fields as diverse as human-computer interaction and education to clarify thinking about perception and environment. Withagen et al. (2011) relevantly depict affordances as affordances as invitations to agency.

In creativity research, the literature specifically points to Glăveanu's (2012) sociocultural model depicting perceived and unperceived affordances and to Moeran's (2014) constellation of techno-material, temporal, spatial, social, representation, and economic affordances. Moeran holds that these operate in circuits. The sequences could well map the creative actor's terrain of identity and making.

The Case for Knowing More

As has been noted elsewhere in this review, many theories of creativity have yet to be fully explored by empirical research. There are, for example, far more studies of eminent creators than everyday makers, and more research on the psychological aspects of making than the social and cultural ones. Therefore, the present research aims to break needed new ground by broadly considering theoretical implications that cut across academic disciplines to discover the affordances everyday people confront on the way to feeling creative.

The sense that one is creative is built; that construction—indeed, the construction of individual identity itself—is a continual, reflexive process (Giddens, 1984, 1991). What is the foundation of the building? Is it a chance remark that gets shaped into a facet of identity? Or is it an internal conviction that one's actions are novel and meaningful, as befits someone who is, by extension, novel and meaningful? In short, what makes some people say they are creative?

The present research examines creative people and the contexts through which they maneuver. It aims to resolve yet-unanswered questions with the objective of clarifying what happens when an adult begins to think of him or herself as creative. Based on the empirical research outlined in this literature review, the central research questions are these: How do the internal and external affordances to creativity influence an individual maker's evolution toward seeing her or himself as a creative actor? How do people identify and perceive these affordances? How does being creative change people's lives?

Answering these questions is intellectually significant because individual creativity has the potential to catalyze change in society, particularly as culture begins to facilitate what Richards (2007) calls the "greater social valuing of creativity" (p.

15). Richards's colleague Goerner (2007) envisions a societal reset integrating individual creativity with collective creativity and collaborative learning. Gauntlett (2011, 2014, 2016b) often amplifies that position, seeing the societal beginnings of a world-changing cultural transition toward creating and making and the individual and group empowerment those actions entail.

This research, then, has the potential to make a compelling contribution to knowledge. If more is known about the transition into creative selfhood—that is, what flips the switch toward creativity—then the transition might be eased.

CHAPTER 5

METHODS AND PROCEDURES

The previous chapters in this thesis surveyed a diverse landscape to examine the theories that inform how and why people develop creative identities. Those theories ground the methods used in the present research, and this chapter examines them in detail. Beginning with a description of the research design, the chapter describes the rationale for the selection of a mixed-methods strategy. The matters of sampling and participants are delineated, and the pilot study conducted to develop the research design is explained. The details of data collection, processing, analysis, and the proposed dissemination of results are outlined. Ethical considerations, strategies for establishing credibility, and methodological assumptions and limitations are articulated. The chapter ends with conclusions.

Research Approach

Pinpointing the birth of the creative actor is congruent to Faulkner's (1959) description of recognizing the moment of inner peace: He called it

> [a] condition in retrospect, when the subconscious has got rid of the gnats and the tacks and the broken glass of experience and has left only the peaceful pleasant things—that was peace. Maybe peace is not is, but was. (p. 67)

The key to getting an answer to the question about the beginnings of a creative identity is to find someone who already thinks of her or himself as creative, and ask this individual to articulate that *was*. The approach of the present research centered, then, on finding adults who already viewed themselves as creative and asking them to

reflect on the events and forces that led them to construct self-identities as creative individuals.

Achieving Fitness

The selection of the components of the research design was informed by work from Edmondson and McManus (2007). In their review of the processes of conducting qualitative research in organizations, they examine studies that exhibited to them an internal consistency between the research question, constructs and methods, the type of data collected, and the methods used to collect and analyze them. When those elements are "congruent and mutually reinforcing," the resulting theoretical contribution is a product of this "methodological fit" (p. 1156).

Data Collection and Analysis

To achieve that state, Edmondson and McManus (2007) recommend a holistic approach to assembling the components of a research project. As noted in the previous chapter, for example, the central questions of the present research are exploratory. Rather than choosing one method of answering them, Edmondson and McManus propose mixing qualitative and quantitative methods to yield multiple ways of producing relevant data.

Consequently, the present research was conducted using both quantitative and qualitative data in a mixed methods convergent parallel design. In this strategy, Creswell (2014) stresses that quantitative and qualitative data collection should occur simultaneously, as should analysis. Results are compared or related, and subsequently, all data interpreted (See Figure 8).

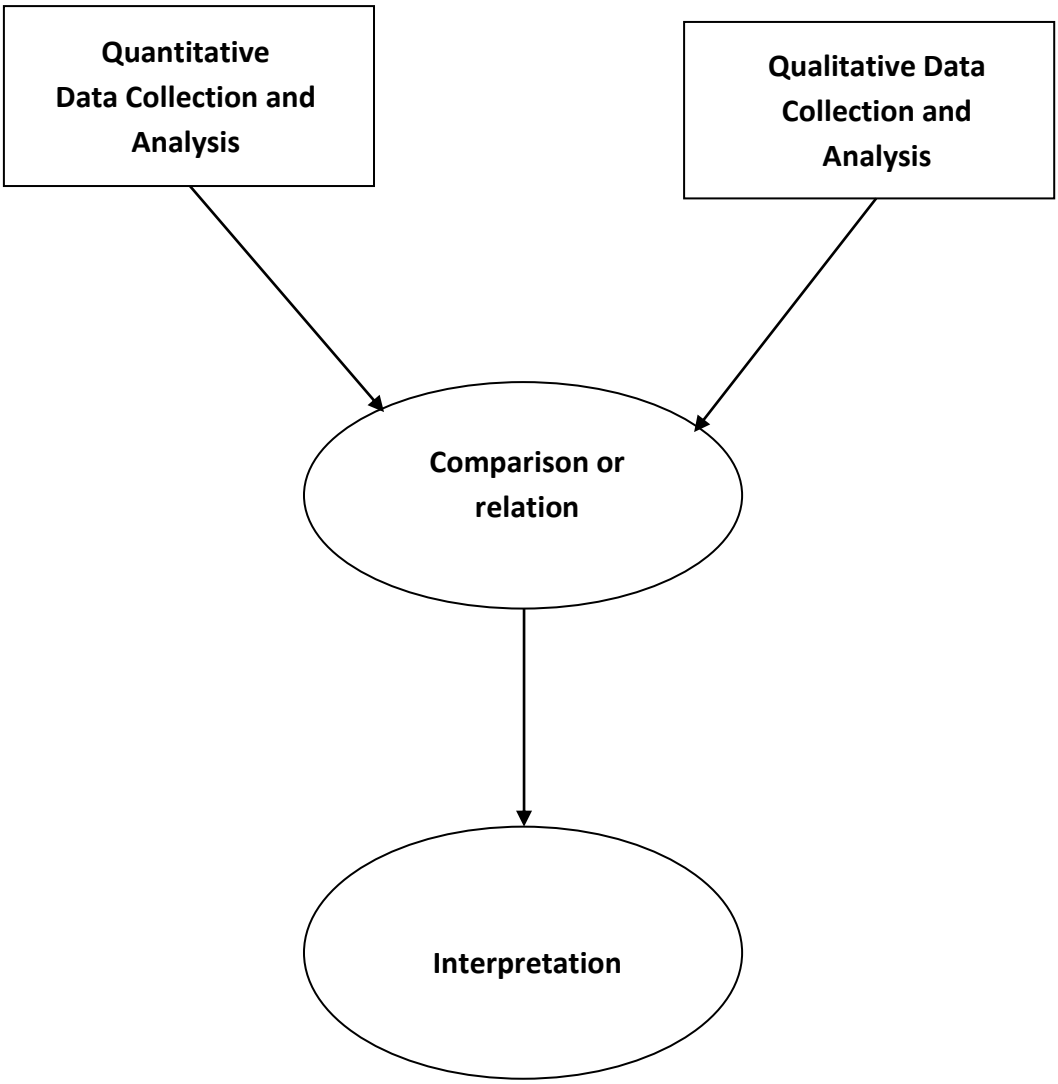

Figure 8. Convergent parallel mixed methods strategy. The design requires simultaneous collection of both quantitative and qualitative data. They are related and interpreted in analysis. Adapted from *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* by J. W. Creswell, 2014, p. 220.

Venkatesh, Brown, and Bala (2013) recommend this strategy for three reasons. First, it offers complementarity, a means of comparing qualitative and quantitative points of view. Second, it attempts to corroborate and evaluate the credibility of inferences made in one method with those in another. Third, it allows for cross-elaboration of key findings in the data.

There is also a longstanding precedent in psychology for selecting a convergent parallel design. Campbell and Fiske (1959) chose a multitrait-multimethod strategy—a quantitative forerunner of convergent parallel design—to validate their studies of schoolchildren's psychological traits. Because the present research seeks to explore psychological as well as cultural and societal aspects of creative identity, it likewise points to the need for a multifaceted means of yielding data.

The method of the present research was consequently composed of two parts. The qualitative process was influenced by narrative-based studies mentioned earlier that Gauntlett (2007) conducted to highlight aspects of creative identity. The qualitative method also drew from research on reflexive practice (Schön, 1992) that suggests the act of making animates a practitioner's tacit knowledge. The quantitative instrument was adapted from Karwowski (2012) and Karwowski et al. (2012, in press), whose work on creative identity is also outlined in Chapter 3.

Before proceeding with the present research, I proposed a general outline to the Graduate School Board of the University of Westminster as a part of the application to register in January 2015. The proposal was approved in June of that same year.

Qualitative Rationale

Gauntlett (2007) recounts three studies that proved instructive for the qualitative phase of the present research. In his "Video Critical" study, Gauntlett asked 53 English schoolchildren to make videos on their attitudes about media and ecology. In the process of learning how to make and then produce videos, Gauntlett found, the schoolchildren were able to articulate their opinions to a degree that had not seemed possible when the project began: "My observation of them making a video over a number of weeks provided a rich seam of information which would otherwise have been inaccessible to a researcher" (p. 100).

In a second study, 100 English 14- and 15-year-olds sketched a celebrity in action; Gauntlett (2007) then asked them open-ended questions about whether their drawings reflected something about themselves. His analysis of the drawings and the responses suggested that the act of drawing gave respondents time to think about their answers.

In a third study involving the facilitation methodology Lego Serious Play, Gauntlett (2007) asked 79 respondents from England and Norway to make "metaphorical models of their identities in Lego" (p. 151). Gauntlett identified 140 themes in the metaphors, and 100 influences on identity. In addition, respondents completed a questionnaire at the end of the workshops about their models and their perceptions of reality. Their narratives yielded abundant detail that added context to the themes. Taken altogether, this trio of studies indicates that making something—and talking about what was made—are valid steps in soliciting reflexive thinking.

That point is underscored in earlier work by Shön (1992), who suggests that makers not only engage in reflective practice but also possess knowledge beyond their ken, developing tacit reserves of perception that come into play when they make.

Among the several case studies he conducted at the Massachusetts Institute of Technology, Shön observed four students playing design games and building prototypes with Modula, Tinkertoys, and Lego. From these sessions, Schön proposes that the socially constructed contexts bracketing the process of making are rarely completely articulated; it is up to the maker to construct the world in which he or she makes and create strategies to find solutions. Schön offers that the prototypes, too, are heir to these individual constructions of reality. He asserts that their ultimate value lies in the maker's reflection on the process.

Taking cues from Gauntlett (2007) and Shön (1992), as well as incorporating Malafouris's (2013) idea of materials and making as a form of "enactive cognitive prosthesis" (p. 175), the qualitative phase of the present research required participants to make creative products in their chosen media while they thought about the time when they first felt creative. Participants were asked to photograph their objects and send me the digital images. I then interviewed each participant about his or her experience as a creative actor, with a focus on the creative affordances the participants negotiated.

Through one-on-one interviews, as well as extending the purposes of photo elicitation (Rose, 2012) to include craft elicitation, the present research aimed to reveal a wealth of verbal and nonverbal information about creative actors, their networks, affordances, and cultural worldviews.

Quantitative Grounds

Gauntlett's (2007) Lego project combined the qualitative aspect of making with the quantitative tool of a questionnaire. Building on that combination, the present research focused on adapting a quantitative instrument that focused on the creative identity of the participants in the sample.

Creswell (2014) notes that the quantitative instrument in the convergent parallel mixed methods design should measure parallel constructs. As discussed in the previous chapter, the Short Scale of the Creative Self (Karwowski, 2012; Karwowski et al., 2012, in press) attempts to quantify creative personal identity, along with creative self-efficacy. Six statements (3-6, 8, and 9) are concerned with cognitive self-efficacy; the remaining five (1-2, 7, 10-11) deal with creative self-identity. Their 11-item measure used a 5-point Likert-type scale (1 = definitely not; 5 = definitely yes) to ask respondents whether they agree with statements such as "I think I am a creative person" and "Ingenuity is a characteristic which is important to me" (Karwowski, 2012, p. 217). The internal consistency of the scale for creative personal identity was high ($\alpha = .90$), as was the scale measuring creative self-efficacy ($\alpha = .81$). Confirmatory factor analysis established a two-factor structure, and that finding was echoed by exploratory structural equation modeling (Karwowski et al., 2013).

Even though the measure surveys creative self-efficacy as well as creative self-identity, it was chosen for the present research for a compelling reason: Not only does it provide additional demographic data, it can be seen as a way of confirming that participants do feel creative when they work in their chosen media, neutralizing a potential criticism that the participants might be prone to confirmation bias. While the items of the scale addressing creative identity are of chief interest in the present research, the items concerning creative self-efficacy could provide more in-depth insight in later analyses.

The purpose of the survey was to verify the creative identity of the participants in the qualitative segment. Consequently, it was decided to limit the survey sample to them as the sample is not intended to be representative of a wider population. Surveying the participants in this fashion ultimately delivers a fuller picture of the people taking part in the research than would either segment alone.

Lessons from a Pilot Study

To audition the method of the present research, a pilot study (n = 6) was conducted in October 2015. Six amateur makers—three men and three women, four of whom were in the US, and two in the UK—were recruited from local classes and word-of-mouth inquiry. Pilot participants had a median age of 48.2 years. All answered yes to the question, "Do you feel creative when you make something in your preferred medium?" and agreed to participate in the pilot project. None of the pilot group participants were involved in the interviews that became the focus of the present research.

Once they agreed to take part in the project, the members of the pilot group, acting individually, made and photographed a range of objects, including silver jewelry, an oil portrait, a pine kitchen stool, a decorated birthday cake, a blog post, and a pan of cinnamon rolls to fulfill the first portion of the qualitative interview. Each participant was interviewed about his or her experience in making the object. Five interviews took place in person, and one via Skype. Five interviews took place in the makers' homes, while one occurred in the interviewer's home. Interview questions were broad and open-ended, touching on the creative process in general and more particularly on the various affordances each maker encountered on the way to feeling creative.

Pilot interviews took between 45 minutes and an hour to conduct. They were simultaneously transcribed as participants talked, a method often used by journalists for field notes (Powers, 2005).

Participants were then asked to complete an initial version of the Creative Identity Questionnaire at their convenience and were told at the time of the interview

that completing the survey was optional. Four participants completed the survey, while two did not.

Emergent Motifs

Once interviews were completed, transcripts were reviewed individually and together to discover the rough outlines of themes that might emerge. The review also served to identify any procedural changes that should be implemented in the primary project.

Foremost, the pilot project confirmed the decision to solicit a variety of makers as a way of understanding overarching patterns in individuals' creativity. Their disparate media yielded parallels in terms of the makers' motivations and rationales. For example, a number of participants discussed how long and how seriously they pursued their media before they felt creative. The painter put it this way:

> Sometimes, someone in class will say, 'Painting is fun, isn't it?' No, sometimes it is not. It's hard work. Besides, I'm not doing it for fun. I'm doing it because I want to excel. If I wanted to have fun, I'd eat chocolate instead.

In addition, participants revealed various affordances, often without being asked. "I work in my kitchen," the cake decorator said about her workspace. "That's one reason we bought the house we did. There's an island in the middle of the kitchen. If you have a big cake to decorate, you need a lot of space." The baker talked about his social support: "My son always encouraged me to bake. [My wife] does, too. Her office mates like my cinnamon rolls. During the holidays, they're always asking if I can make more."

When explicitly queried, participants vetted the experience of having made an object before talking about their creativity. The woodworker explained it in terms of clarity:

> Making [the kitchen stool] actually helped me think about why I enjoy woodworking. Working on it, I decided that it really comes down to an internal sense of satisfaction in making something. Then, getting to the heart of it, I admitted I want to always continue to learn and learn.

The blogger reported that the method yielded an unexpected but welcome consequence:

> Just talking about why I feel creative about working on this blog has had the effect of making me more deliberate about [writing] it. Being more intentional about how I express myself is one of the biggest gifts to have come from really thinking about my creativity.

The results of the survey also assented to its utility. Of the four respondents, all scored between 4 and 5 on the items that measured creative self-identity. This confirmed the participants' assertion that they did indeed feel creative in their media. In review, it was decided that the chief benefit of the survey was to offer a group portrait of respondents as creative individuals.

Practical Results

The pilot project was instructive in evaluating the working procedure for the present research, identifying both strengths and weaknesses. For example, though everyone asked to participate in the pilot project readily agreed, making their objects took as long as eight weeks, which was longer than initially anticipated. Deadlines

needed to be elastic to compensate for this timeframe. For more complicated projects, it was decided that future participants could make a portion instead of a whole object.

Likewise, the interviews appeared to be productive, but the method of capturing them needed to be standardized. It was determined that interviews should be digitally recorded and then transcribed. I could then redact the manuscripts, editing, masking, and inserting them into qualitative software for analysis, a procedure encouraged by Kuckartz (2014) for clarity and security.

As for the survey, participants reported liking its brevity and the ease of filling it out online. With an eye toward generating more textured data, I decided that giving respondents the option to disclose demographic information could result in a more accurate picture of the group.

Importantly, a necessary change to the Creative Identity Questionnaire became apparent in the pilot project. Because all items in the original Short Scale for Creative Identity (Karwowski, 2012; Karwowski et al., 2012, in press) were phrased positively, it was adapted for the present research by reverse-coding item 10. The original "Creativity is an important part of myself" became "Creativity is an unimportant part of myself." Weems and Onwuegbuzie (2001) suggest that making such a change in self-report questionnaires prevents the occurrence of automatic response patterns and enhances reliability.

Considered in its entirety, the pilot project indicated that the mixed method convergent parallel design (Creswell, 2014) was appropriate for learning more about the questions that sprang from the review of the literature: How do the internal and external affordances to creativity influence an individual maker's evolution toward seeing themselves as a creative actor? How do people identify and perceive these affordances? How does being creative change people's lives?

By illuminating the fine-tuning needed to ensure a workable method, the pilot project highlighted the benefit of contrasting the data-rich individual qualitative interviews with the mosaic of quantitative data from the survey. In aligning makers, their objects, and their thoughts in this strategy, the present research developed a growing sense of internal consistency, approaching the "methodological fit" of Edmondson and McManus (2007, p. 1115).

The Present Research: Sampling and Participants

Insights from the pilot project informed the more formal research project. For example, to mirror the diversity within the adult population of makers, I intentionally sought variety in participants as well as media. For the present research, purposive sampling (Barbour, 2001) offered a means of including the most comprehensive array of makers, allowing for participants to reveal with their stories the rules and resources that figure into the formation of their creative identity.

The point of purposive sampling is to encourage close examination of a group of people with a specific set of characteristics (Etikan, Musa, & Alkassim, 2016). Its parameters suit the close-textured nature of qualitative and mixed-methods research:

> Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience. [The technique] is typically used in qualitative research to identify and select the information-rich cases for the most proper utilization of available resources. This involves identification and selection of individuals or groups of individuals that are proficient and well-informed with a phenomenon of interest. In addition to knowledge and experience, note the importance of availability and willingness to participate, and the ability to

communicate experiences and opinions in an articulate, expressive, and reflective manner (p. 2).

In other words, participants in a purposive sample are chosen based on the presumption that they might bring acuity to the qualitative project. The goal is depth of understanding, not generalizability. By contrast, a probabilistic sample—one whose goal is to provide the researcher with a group that enables the drawing of generalizations about the broader world—would not necessarily require individuals with the narrowly specified set of characteristics a purposive sample demands.

Following the example of the Lego study (Gauntlett, 2007), the present research also surveyed makers in two countries—in this case, the US and the UK—to attempt a broader view. This approach addressed shortcomings in a study by Glăveanu (2012), who looked solely at the work of Romanian Easter egg decorators. It also takes a different approach than Moeran (2014), who examined specific Japanese organizations (e.g., a pottery, a fashion magazine, an advertising agency) in his work on creative affordances. In the current instance, 42 people—21 from the US, and 21 from the UK—participated in the study.

The present research aimed to discover more about the motivations that drive everyday creators; therefore, only amateur makers were recruited. In the interest of developing a broad pool, some potential participants were recruited on online maker forums (such as https://forum.yoyogames.com/index.php) others at hobbyist newsletters (such as www.learning-to-see.co.uk), and in-person community classes (such as https://www.camdenartscentre.org/whats-on/courses). Others were referred by people who had previously participated in the research. Working through varied platforms to uncover makers proved an effective means of finding qualified participants.

In addition to having an amateur standing—that is, not earning a living from their work in the media they felt creative in—potential participants had to answer "yes" to the question, "Do you feel creative in your particular medium?" The precedent for having participants define creativity for themselves—a fitting direction for something as individually construed as creative identity—was set by Pachucki et al. (2010).

If a participant in the present research responded in the affirmative, she or he was asked more about her or his medium to make sure it did not too closely duplicate others already in the study. After the discussion, each potential participant was emailed a letter (see Appendix B) detailing participation in the project, including instructions, confidentiality information, and contact information. Agreeing to take part in the project evinced participant consent.

To obtain a balanced sample, I deemed it important to interview men and women. I also decided that talking to people representing a range of ages would provide additional bases for comparison. To that end, 17 men and 25 women took part in the study; their ages ranged from 20 to over 55, with most respondents (n = 20) falling into the middle range. Identifying three racial categories (Asian, Black, and White) provided further structure to the potential sample. Those considerations imbued the data with built-in points for comparison and deeper perspective. Table 1 displays the details of participant demographics.

Table 1

Characteristics of the Sample Population (n = 42)

Characteristic	UK (*n = 21*)		US (*n = 21*)		Total	
	n	*%* of UK sample	*n*	*%* of US sample	*n*	% of total sample
Sex						
Male	9	43	8	38	17	40
Female	12	57	13	62	25	60
Age						
20-29	8	38	3	14	11	26
30-54	10	48	10	48	20	48
55+	3	14	8	38	11	26
Race						
Asian	4	19	1	5	5	12
Black	1	5	2	10	3	7
White	16	76	18	86	34	81

Note. Percentages rounded off to the nearest decimal point.

Additional insight into the demographic makeup of the sample population came from the Creative Identity Questionnaire. In the participant letter, makers were directed to https://www.surveymonkey.com/r/CreativeIdentity. Once at the site, they were asked to complete the questionnaire (see Appendix A) that comprised the quantitative segment. During interviews, I told participants that completing the survey was an optional step.

Of the 42 participants, 30 completed the questionnaire, a response rate of 71%. In addition to items from the Short Scale of the Creative Self (Karwowski, 2012; Karwoski et al., 2012; in press), the 16-item survey featured five questions concerning respondent demographics. Beyond standard questions about sex and age, the survey asked participants for country of residence, household income in their country's currency, and employment status. Because the survey did not ask for names, respondent data were labeled R1, R2, etc. Table 2 details the demographic breadth of this information.

Table 2

Characteristics of the Questionnaire Participants (n = 30)

Characteristic	*n*	% of respondents
Sex		
Male	13	43
Female	17	57
Age		
20-29	4	13
30-54	17	57
55+	9	30
Country of residence		
UK	15	50
US	15	50
Employment		
Employed full time	12	40
Employed part time	5	17
Not employed	6	20
Retired	4	13
Prefer not to answer	3	10
Income		
Up to 24,999	6	20
25,000 to 49,999	4	13
50,000 to 74,999	3	10
75,000 to 99,999	3	10
100,000 to 149,999	6	20
150,000 and above	6	20
Prefer not to answer	2	7

Note. Percentages rounded off to the nearest decimal point.

A well-constructed purposive sample has the potential of "enhancing sample coverage and providing a framework for analysis" (Barbour, 2001, p. 1116). By drawing a sample that sought variety in age, sex, nationality, race, employment, and income, the present research endeavored to shine the most informative light on the research questions.

Ethical Considerations

Participants were free to decline to participate in this study. There was no financial compensation for participation. For those who did take part, its benefits were intrinsic. Makers reported finding the interview process pleasant and seemed pleased with the knowledge that they were contributing to research. Many expressed enjoyment in making the object required for the project.

The study offered little inherent risk to participants beyond those encountered in everyday life. Beyond the time spent on making an item, participating in the interview, and completing the questionnaire, the risks to participants were minimal.

Information from the study was purposely shared with participants. They were informed about how the research would be disseminated in the participant letter (See Appendix B), which functioned as a means of informed consent.

I maintained participant confidentiality by assigning alphanumeric designations (P1, P2, etc.) to those who participated in the qualitative research. That designation appeared in the analysis software with the participant's interview and object photo.

My complete interview log—a record of participants' names, contact information, and stage in the project—was maintained on a different laptop computer than interview transcriptions. Access to both computers was password protected. Likewise, the digital recordings were tagged with each participant's respondent

designation, and filed in a secure password-protected account on the cloud storage service Dropbox. Moreover, participant IP addresses were made anonymous in the online assessment by the survey site: (www.surveymonkey.com). Interviews, transcripts, photos, and assessments will remain under password protection in my personal files for a minimum of three years.

Data Collection, Processing, Analysis, and Presentation

Figure 9 outlines the process of the present research. It began with the literature, incorporated the pilot study, and iteratively tracked between data collection, analysis, and the literature.

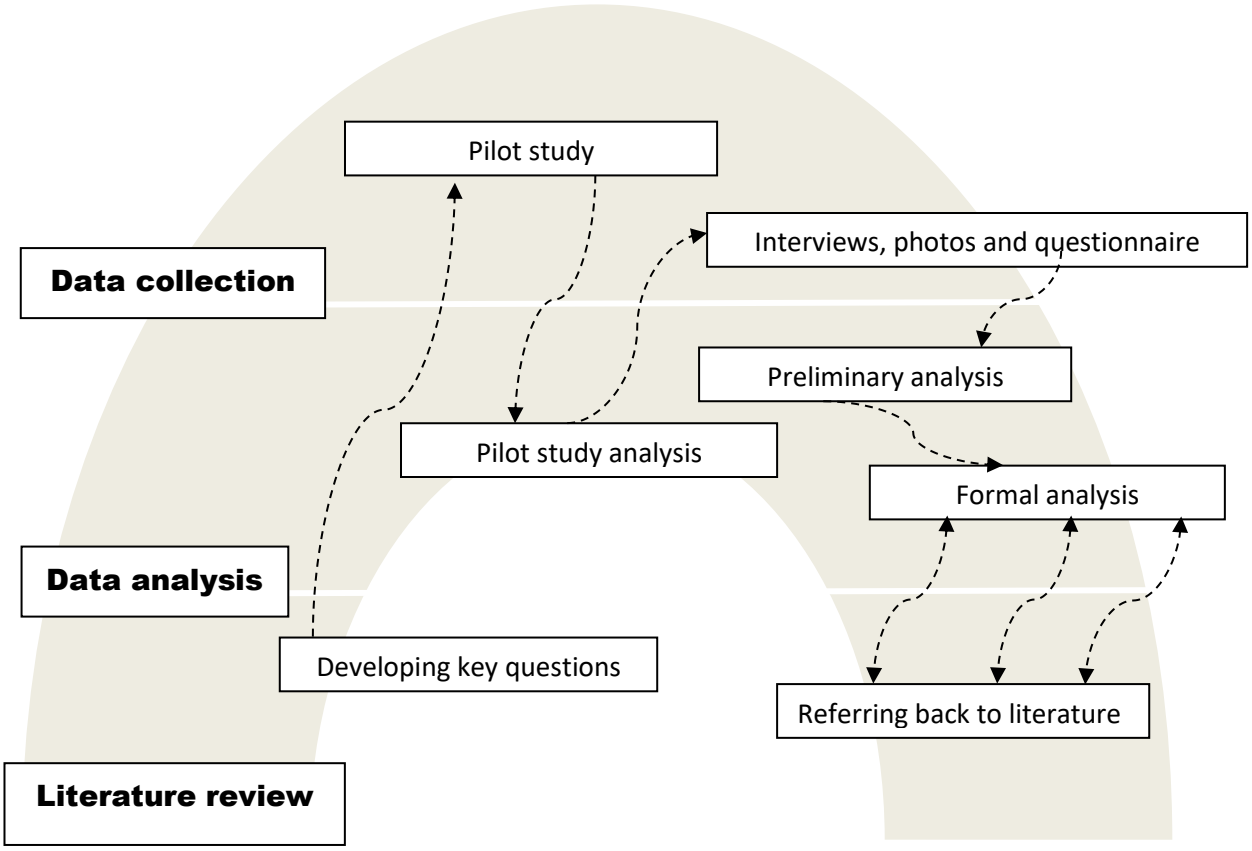

Figure 9. The path for the present research. The iterative steps of the empirical process trace an arc that begins and ends with the literature review. Adapted from "Let's Dance! Elastic Coordination in Group Work: A Qualitative Study of Modern Dancers" by S. Harrison and E. Rouse, 2014, *Academy of Management Journal, 57*, p. 1263.

Interview Mechanics

Much the way that a metalsmith alloys copper and zinc to make bronze, the qualitative research interview renders participants' narratives to create a composite picture framed by the research questions. Because the present study sought to make explicit participants' implicit views on creativity, participants were asked about previous and current experiences of making objects in their chosen media. In this way, both participants and the researcher were able to evince the individual qualities, practices, and evaluation of creativity (Patton, 2002).

The mechanics of the interviews—that is, how and where they were conducted—were central to the research outcome. Most interviews took place in makers' homes or making spaces (*n* = 27; 64%). Other locales included restaurants, coffee shops, bars (*n* = 12; 29%), and schools (*n* = 2; 5%). One interview (2%) took place in the participant's car. When practical, interviews were conducted in person (*n* = 27; 64%). When that could not happen, they were conducted and voice-recorded over Skype (*n* = 6; 14%), Google Hangouts (*n* = 2; 5%), or telephone (n = 8; 19%).

The longest interview was 88 minutes, while the shortest—which ended prematurely because of Skype issues—was 14 minutes, a range of 74 minutes. The average length, as well as the mode of interviews, was 44 minutes; the median was 43 minutes. Altogether, there were 1,840 minutes of interviews in the project (See Appendix C for the anonymized interview log).

Initially, I transcribed the first recordings (*n* = 3; 7%). In the interests of time and efficiency, I then used Rev.com, a professional transcription service, to transfer the remaining interviews (n = 39; 93%) into a written format. Kuckartz's (2014) rules for computer-assisted transcription, a straightforward framework for assisting the

accuracy and transparency of the results, provided a working template for all the transcriptions. Once they were completed, I edited, formatted, and masked the data.

Analytical Strategies

Qualitative coding and data analyses were performed using MAXQDA 12.1 software, which manages multimedia data and provides tools for writing comments and coding. Each prepared transcription was downloaded into the program.

Qualitative data were analyzed in a thematic qualitative text analysis process (Kuckartz, 2014). Thomas and Harden (2008) detailed how they successfully used the process to review constraints and facilitators to children's selection of healthy foods—a matter that echoes the creative affordances at the core of the present study. The iterative framework they describe suggests that the researcher survey the text in waves for topical categories and subcategories. At every new phase of coding, themes are recalibrated to the research questions (See Figure 10).

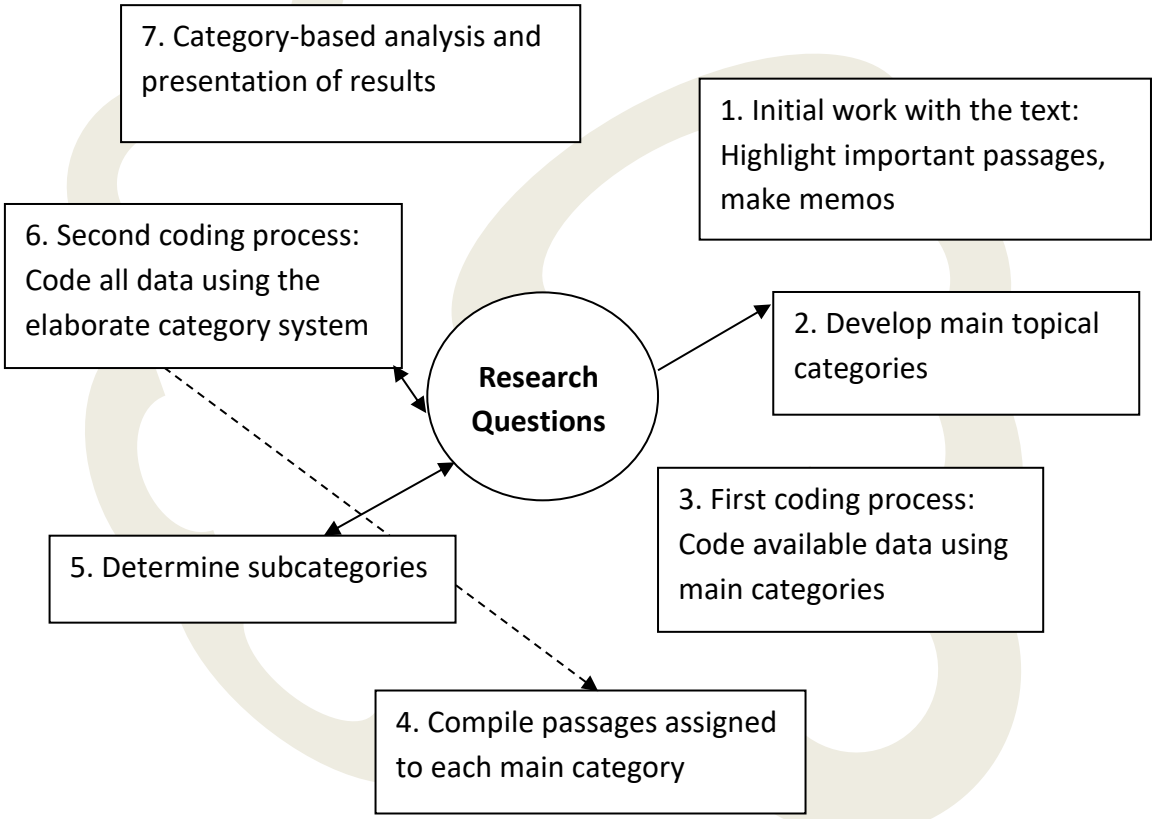

Figure 10. In the thematic qualitative text analysis process, the steps relate at critical points to each other and to the research questions. Adapted from *Qualitative Text Analysis: A Guide to Methods, Practice & Using Software* by U. Kuckartz (2014), p. 70.

In addition to the use of the mixed methods convergent parallel design, which Creswell (2014) maintains is a means of establishing credibility in qualitative research, two other procedures were used to strengthen the project. Validity in keyword and denotative coding was assisted by peer review, a practice Creswell also recommends. The peer reviewer for this project is a professional sociologist with several years' experience in conducting and evaluating qualitative research. In addition, the peer reviewer and my director of studies were privy to the research audit trail—including interview logs, field notes, and data—following the suggestion of Rodgers (2008) to promote transparency.

Quantitative data were analyzed using Excel 2016 software. The primary purpose of that analysis was to corroborate the participant group's demographic information and creative identities. As with qualitative data, quantitative data were kept in password-protected, cloud-based storage and laptops.

Presentation Aims

The present research will be shared in a series of written reports: This thesis, which will be published on EThOS, the British Library's electronic repository for theses, as well as journal articles, conference presentations, and book chapters. Moreover, in 2018 I will document the study in a blog, "X Makes Y," which highlights participants' narratives and images of their objects. The audience for the blog will be the participants themselves, as well as other creativity researchers and makers.

Methodological Limitations and Assumptions

Mixed-methods research customarily dictates the identification of the researcher's values and biases. In disclosure, I hold creativity to be a universally distributed human trait with a neutral ability to aid or hinder. I also believe amateur makers filter a number of personal, cultural, and societal influences to produce their work, and that no maker works in a vacuum removed from these contexts. I could be said to have inside knowledge about making; I spent 30 years as a nationally recognized journalist in the US, covering various aspects of popular culture, including fashion, interior design, architecture, handcraft, and cuisine. In the process, I became adept in the practice of interviewing as well as familiar with a range of various art and craft pursuits. I also make objects in a variety of media as an amateur, similar the participants in this research.

This experience can be viewed as a benefit because I can relate to other makers and effectively interview them; in that way, my background presents another tool for methodological fit (Edmondson & McManus, 2007). Nonetheless, incorporating a researcher's firsthand experience in a study's method requires self-awareness, and I have made every effort to remain objective.

Other limitations, many of them stemming from the necessity of capturing data, bind this research. For example, written transcripts are a generation removed from the voices of participants, but careful preparation renders them an effective tool for transparent analysis. Likewise, powerful software could be said to offer a range of pre-set ways of looking at data, though it offers an unparalleled means of helping a researcher examine material both close-up and at a distance to better identify patterns.

Another potential shortcoming is that this mixed methods research is exploratory; there are limits to its generalizability. While indeed it provides insight,

and it is hoped, will spur ideas for future studies, the study is nonetheless investigative. Yet Kuckartz (2014) acknowledges that theory development—and not generalizability—is the goal of such research. Moreover, the present research offers at least one other important benefit: Involving participants in this first foray into craft elicitation explores the contours of this untested methodology.

A Pair of Preconditions

The research method is predicated on two assumptions. The first is that asking participants to make something while they think about what happened when they first felt creative will yield richer data than just asking them outright. The second is that having a range of participants working in varied media will offer more insight than if the research centered on those who make only one type of object.

The initial assumption was defused by Gauntlett (2007), reflecting on his identity studies. “If participants are invited to spend *time* in the *reflective process* of making something, however, they have the opportunity to consider what is particularly important to them *before* they are asked to generate speech” (pp. 182-183; emphasis in original). The time for incubation is a by-product of making, he contended, allowing for whole-brain processing that allows a participant to come closer to what Gauntlett called “. . . an often-complex matrix of feelings and impressions” (p. 186). The true value of the experience of making is beyond language, he maintained. By absorbing motion, thought, intention, and memory, making allows a participant to express aspects of identity verbally as well as nonverbally.

The second assumption hearkens back to Kaufman’s (2009) call for more multifaceted creativity research. “I highly anticipate studies on the relationship

between creativity and blogging, aesthetic sensibilities and Facebook and MySpace homepage creation, group creativity and Wikipedia entry production, and how imagination is used in creating role-playing game characters" (p. 171). Studies that cast a broad net might not definitively answer universal questions about creativity, but that is not the point. "There is unlikely to be any one test or theory, or even one finding, that everyone agrees with, gets behind, and supports. But where's the fun in that, anyway?" (p. 174).

Conclusions about Methods and Procedures

The central research questions for the present study focus on creative affordances and how they relate to an individual maker's creative identity. How do the internal and external affordances to creativity influence an individual maker's evolution toward seeing him or herself as a creative actor? How do people identify and perceive these affordances? How does assuming a creative identity change a person's life?

Investigating the answers to those questions requires a strategic combination of methodologies, and reflects the broad influences that color the study of creativity itself. This chapter examined the method behind the present research. Specifically, it described the research design and made the case for the selection of a mixed-methods convergent parallel design. The rationales for sampling and participant selections were explained, and the pilot study was described in detail. Data collection, processing, analysis, and dissemination were discussed. Ethical considerations, ways to establish credibility, and methodological assumptions and limitations were recounted.

Throughout the chapter, the components of the research method were compared to the paradigm of methodological fit (Edmondson & McManus, 2007). The

field research aligns with the research questions at various points in the process: the use of mixed methods, the choice of interviewing as a means of data collection, and the development of craft elicitation as a way of achieving a portrait of sorts of the study's participants.

The intention is that somewhere in the junction of the selection of these methods, my background in interviewing and making, and participants' experience in making meaning along with their objects, patterns will emerge that will aid in the collective understanding of what it means not just to create, but to create a creative identity. Those patterns will become clearer in the following chapter, which describes and analyzes the data of the present research.

CHAPTER 6

CREATIVITY IN PROPORTION: PRESENTATION AND ANALYSIS OF QUANTITATIVE DATA

As detailed in the previous chapter, two streams of data fed the convergent parallel mixed methods research strategy (Creswell, 2014) behind this project. In the qualitative phase, which will be presented in the next chapter, I cultivated the stories of people who make things and feel creative when they do so. The Creative Identity Questionnaire (based on Karwowski, 2012; Karwowski et al., 2012; in press) that most participants completed—an instrument chosen due to its ability to confirm participants' creative self-identity—formed the quantitative branch. This chapter considers the results of the questionnaire in detail and moves through the interlude between quantitative and qualitative phases.

Quantitative Results: The Creative Identity Questionnaire

After gathering the qualitative demographic information discussed in the previous chapter from the questionnaires, determining the distribution of respondents' (n = 30) questionnaire scores was my next concern. For the positively worded items in the survey, the Likert-like scale scoring awarded the response "totally agree" with 5; "agree somewhat," 4; "neither agree nor disagree," 3; "disagree somewhat," 2; and "totally disagree," 1. The negatively worded items (items 8 and 10) were scored with an opposite scale (i.e., "totally disagree" scored 5, while "totally agree" scored 1).

Eleven non-demographic items comprised the survey, and four respondents skipped one question each. Table 3 displays these skipped as well as the median and standard deviations of participants' net scores for each question.

Table 3

Mean and Standard Deviation of Respondent Scores by Question

Item	Mean	SD
1. I think I am a creative person.	4.33	.98
2. My creativity is important to who I am.	4.33	.87
3. I know I can efficiently solve even complicated problems.	4.07	.68
4. I trust my creative abilities.[a]	4.24	.82
5. Compared to my friends, I am distinguished by my imagination and ability.	3.73	1.03
6. Many times I have proven I can cope with difficult situations.	4.37	.66
7. Being a creative person is important to me.[a]	4.55	.72
8. I am unsure I can deal with problems requiring creative thinking.	4.03	1.12
9. I am good at proposing original solutions to problems.	4.03	.71
10. Creativity is an unimportant part of myself.[a]	4.17	1.23
11. Ingenuity is a characteristic that is important to me.[a]	4.38	.67

Note: Per Karwowski et al. (2012, in press), items 1, 2, 7, 10, and 11 are concerned with creative personal identity, while the remaining items address cognitive self-efficacy.

[a] Item skipped by one respondent; $n = 29$. For all other items, $n = 30$.

While the descriptive statistics attempt to address whether participants saw themselves as creative beings, a review of the analysis in Karwowski et al. (in press) spurred a secondary but possibly related question: How strong is the relationship between creative personal identity and creative self-efficacy?

Finding the answer necessitated using fully completed questionnaires. Of the initial 30 respondents, one had an erratic answer pattern and was excluded from the calculations as a respondent error. Four respondents who did not answer items included in the subscales—as noted in Table 3—were also excluded. Both kinds of exclusions are recommended by Abell, Springer, and Kamata (2009) in rapid assessment instruments for ensuring reliable analysis. Therefore, $n = 25$ for this analysis.

To convert raw scores to a more meaningful representation, I created indices by summing the subscale scores for creative personal identity and creative self-efficacy. I then divided those numbers by the maximum score possible to create an index whose values ranged from 0 to 1. For the creative personal identity index, the median was .9, the mean was .84, and the mode was 1. For the creative self-efficacy index, the median was .81, the mean was .79, and the mode was .83.

Next, I calculated a Pearson product-moment correlation coefficient to compare the relationship between these two constructs. There was a positive and moderately strong correlation ($r = .61$) between the two variables. Squaring the coefficient ($r^2 = .377$) indicated that creative self-efficacy explained approximately 38% of the variation in creative personal identity in the sample. A scatterplot graph illustrates the results (Figure 11).

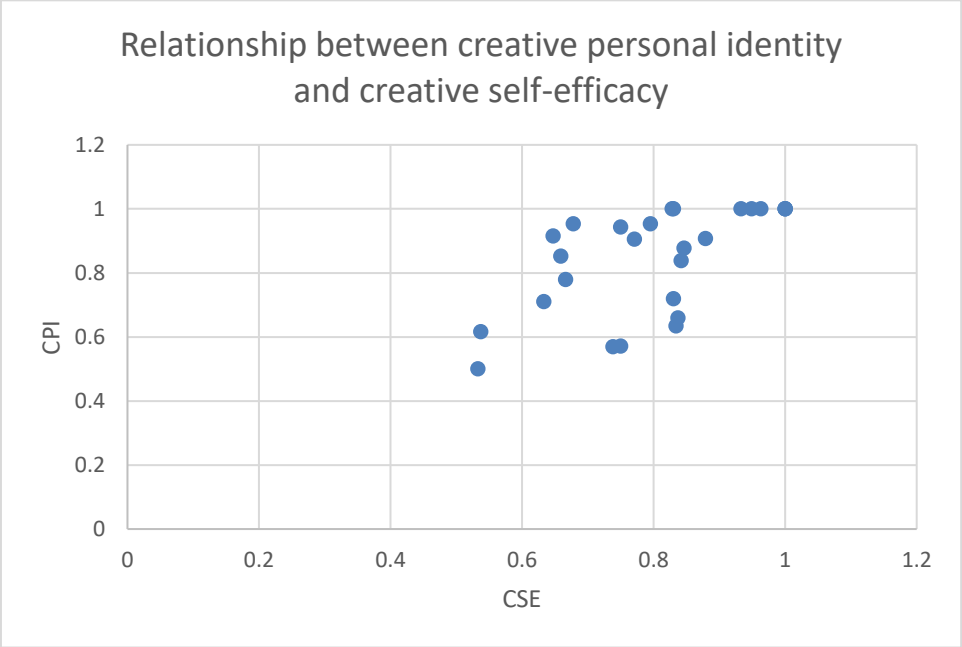

Figure 11. Plotting the points of questionnaire respondents' values for creative personal identity and creative self-efficacy illustrates their moderately high scores. The clustering of points in the upper right-hand quadrant of the graph also indicates the positive correlation between constructs.

Summary of the Quantitative Results

The results of the Creative Identity Questionnaire indicated that respondents confirmed having the attributes of a creative self. This result echoes earlier findings (Karwowski, 2012, 2014) that suggest how people perceive their creative abilities has a substantial bearing in their motivations and how they act on them.

The aligned results of creative personal identity and creative self-efficacy assessment also seem to agree with the contention of Karwowski et al. (2012, in press) that the two constructs are somehow related. While creativity is a complex subject that has benefitted from the examination by different perspectives, for simplicity's sake, one construct was considered sufficient for the purposes of the present research. The chief interest for this segment of the project was creative personal identity as a means of vetting the creative identity of the recipient. The qualitative results appeared to corroborate the contention that the individuals who participated in the present research were likely not simply saying so merely to take part in the study but instead did (and do) consider themselves creative.

Comparative Interlude: Of Numbers and Constructs

Thinking through the qualitative results was the first part of the comparison/relation segment of the convergent parallel mixed methods strategy. It then fell to me to devise the codes for the qualitative portion of the research that would encourage the side-by-side comparisons that Creswell (2014) suggests for this research design.

Just as Kuckartz (2014) maintains, this process began with the first interview. "If the researcher conducts the interview him or herself, he or she will automatically analyze certain statements according to his or her previous knowledge as well as the

interview question" (p. 132). That was certainly the case with this project. Listening to participants, whether in coffee shops or their homes or studios, I felt that I could hear the codes as they talked. In a real sense, I found myself reflexively "coding" while the interview was underway, keeping the research questions—and my own experience as an amateur maker—in mind.

Kuckartz's (2014) process for thematic qualitative text analysis outlined in the previous chapter prompted my formal analysis. My initial work with the text—which occurred during transcription, re-reading, and formatting the transcripts—focused on highlighting important passages and making memos that summed the thrust of each interview. I also initiated memos reflecting research notes and emerging questions at this point. I maintained and added to these running notes throughout the project using the analysis software.

Returning to the research questions, I assigned three main topical categories, which I came to think of as meta codes: Creativity, Identity, and Affordance. In turn, I assigned each meta code a set of sub-codes suggested by my initial review of the interview transcripts.

The sub-codes for Creativity were Physicality and Inspiration. For Identity, the sub-codes were Education and Age. Taking a cue from Moeran (2014), the sub-codes for Affordance were Time, Space, Money, Techno-material, Social, and Representation. Constituent sub-codes for Social (Family) and Representation (Far, Close) were also created. Table 4 reports the codebook definitions used in the primary analysis of the participant interviews.

Table 4

Code System and Working Definitions

Code	Sub-code	Constituent sub-code	Codebook definition
Creativity			Mentions of creativity, including definitions
	Physicality		Involving the body in making
	Inspiration		Mentions of ideas, people, things that inform creative identity
Identity			Relating creativity to identity
	Education		Mentions of school, classes, learning
	Age		Mentions of how old/young someone is
Affordance			Those things in the environment that affect creative identity
	Representation		Relating to how an inner vision affects making
		Far	When representation is far removed from mental ideal
		Close	When representation matches mental model
	Social		Relating to social forces
		Family	Mentions of a family member
	Techno-Material		Relating to how technology, tools, technique, skill, and materials act as affordances
	Money		How financial resources affect creative identity
	Space		How space (or the lack) influences creative identity
	Time		Relating to how time operates as an affordance

Coding took place in January and February 2017. Many passages in the interviews touched on multiple codes, and I coded these to reflect each one participants addressed, as recommended by Kuckartz (2014).

In this interlude between phases, the quantitative results provided a framework for exploring the numerical aspects of the qualitative interviews. Indeed, the numbers illustrate the scope of the project: Using the 16 codes of the first round, I identified 4,894 segments. Figures 12 and 13 detail these findings.

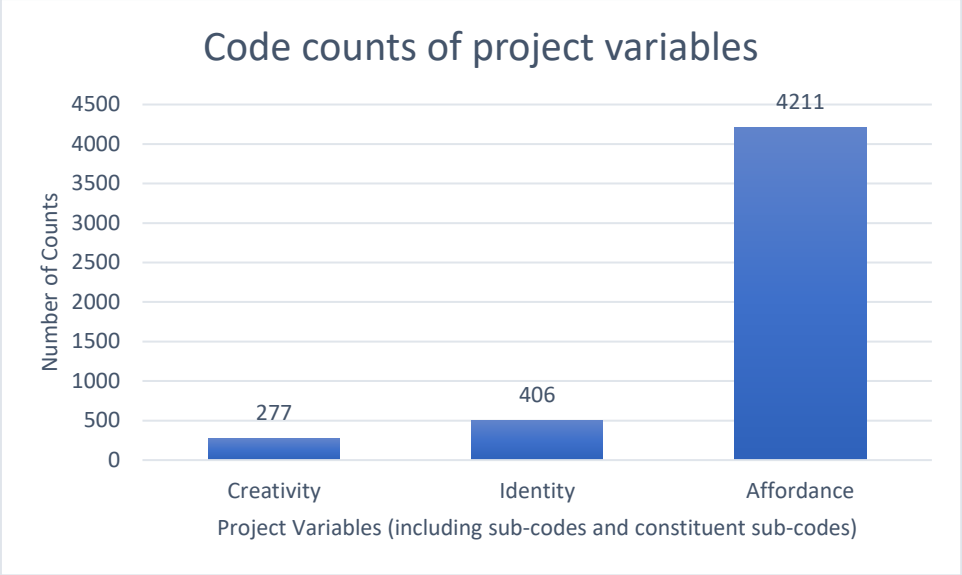

Figure 12. During the interviews for this project, participants were prompted to talk about affordances, the things that helped and hindered their creative identities. That they felt creative was already established by their participation, which might account for the relatively low counts for creativity and identity. Instead, the two variables could be considered the subtexts for the passages that explored affordance.

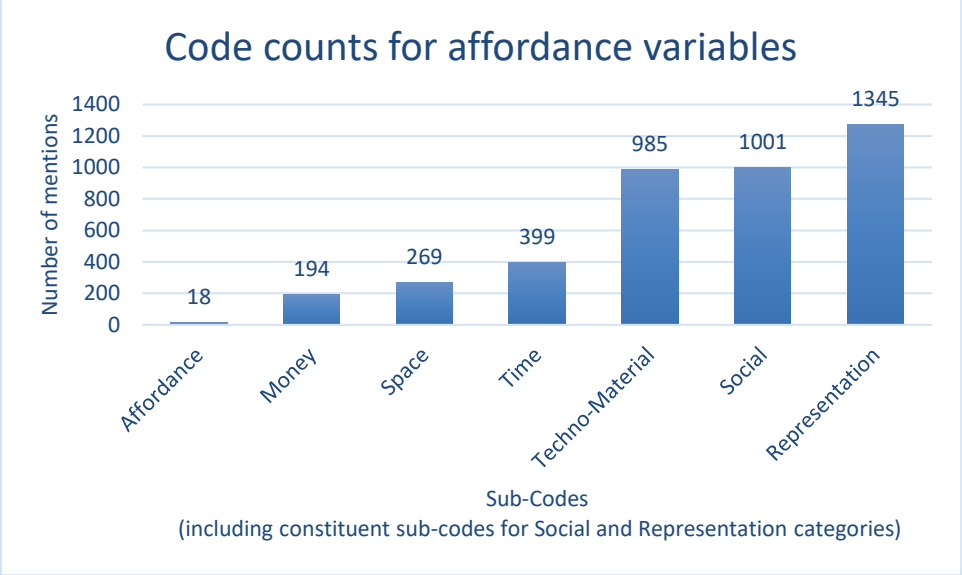

Figure 13. A closer examination of the counts for affordance sub-codes suggests that while participants discussed money, space, and time, they talked far more about their materials, social networks, and their conceptions of their work. "Affordance," a word that most participants were initially unfamiliar with, was only mentioned 18 times in the 42 interviews.

Summary of the Comparative Interlude

In one of their problem-solving protocols, Torrance and Safter (1999) recommend taking a step back when one episode ends to prepare for the next. The interval, they say, serves to "stimulate thinking to a higher level of creativity" (p. 29) necessary for the upcoming stage. So it was with the interval phase of this project.

I noted that I could hear codes falling into place during interviews with participants, and the time between phases enabled me to clarify my vision about the coding process described in this section. It also provided me the distance to specify the meta-, sub-, and constituent sub-codes I used in the analysis.

Thinking more clearly about creativity, identity, and affordances—and the various aspects of each meta-code that participants talked about—was time well spent. Not only did it allow me to link the numbers of the statistical analysis with the codes of the qualitative phase, but it also helped give shape to the dissection that follows.

CHAPTER 7

VARIABLES EXPRESSED IN EXPERIENCE: PRESENTATION AND ANALYSIS OF QUALITATIVE DATA

Numbers of codes describe one aspect of the data. Other meaningful facets lie within the insights, opinions, and creative experiences participants shared. Hearing what they had to say about the ideas behind the codes revealed both strong and subtle distinctions about the interplay between creativity, identity, and affordance. It also was crucial to seeing how the constructs are lived, and, I hope, to getting to the essence of what happens to facilitate the generation of creative identity.

As I accumulated their stories about the delights and irritations of making, it occurred to me that the often-powerful ways that participants relayed their experiences vividly brought to life Moeran's (2014) contention that creative affordances occur in circuits. I came to feel that creativity and identity must also cast their webs because participants frequently interlaced their comments with references that indicated that few, if any, of these constructs happen in isolation.

Yet, looking closely at what they said about specific codes—meta, sub, and otherwise—was an instructive means of seeing if the structure held up. This section, then, considers each in turn.

The Primacy of Creativity

Reading the interview transcripts, it was evident that participants understood that the text and subtext were their creative self-hood. Perhaps because they had already identified themselves as creative in order to participate in the project, they

more often spoke implicitly rather than explicitly about creativity. Nonetheless, they confidently expressed opinions on this key variable.

In so doing, they often underscored Gauntlett's (2011) definition of creativity, which this research operationalizes. As noted in Chapter 2, it emphasizes creating something novel in a specific context and the resultant joy that comes from making and sharing. Participants, too, explored issues of connection and process that Gauntlett delineates. For example, P40, an amateur novelist, linked context and communication: "If you're going to write a novel, first and foremost, you write a novel because you got a novel in you. And you want to write it. You want to share it with the world."

Likewise, P4, who practices the Japanese stitching pattern sashiko, made a point about sharing and creativity: "I thought about . . . when I feel most creative, and it's usually when I want to create something for someone. It's the gift-y thing, or if I get emotionally charged about something."

Cupcake baker P25 understood the individual nature of creativity, and her assessment reiterated Gauntlett's (2011) contextual definition. "I have a friend [who] works on motorcycles. To me, that's not creative, but I know it's his creative outlet. It's like [he's] fixing it, creating pieces for [his] motorcycle." Costume maker P7's view was similarly contextual and more inclusive. "I think a lot of people are creative without really realizing it because there are lots of ways to be creative," she said.

Creativity, for some participants, was a quality that satisfies an otherwise unmet need, and it was often characterized as integral to their lives. P1, a knitter, said the contentment she felt when working on a project caused her to realize a more general truth. "I think anything you do, whether it is painting or whatever art thing you do, it has to resonate with you in some way, fill some kind of thing that you feel like you need."

Her observation and others like it recall Taylor's (1991) assertion that making is how people come to define themselves. They also tie into the way Pickering and Negus (2004) typify creativity as being important because it helps people feel complete. Additionally, these insights relate to identity and reiterate how intertwined the concepts seem to participants.

Addressing creativity more generally, some participants said they felt creative from the beginning of their pursuits. Others talked about the coming of creativity only after they had gained what they considered sufficient experience and could push past the boundaries of their media. Such points of view are consistent with Sternberg and Lubart's (1995) investment theory of creativity. While these participants could produce outcomes that others recognized as creative, they felt they first needed to master their chosen pursuits.

Songwriter P16 affirmed that years of practice had a tangible payoff. "For me, it was only when I became proficient technically that I really thought I was genuinely able to be creative."

That accumulating experience is brought to bear in every project that occurs after that, and for some, the creative bar is set higher with each one. As P18, a crazy-quilter, related:

> . . . [T]o me, creativity happens . . . when you put something [of yourself] into it. So it's not enough to go get a pattern, to choose the wool and work it. It's more like, 'OK, I have this pattern; what can I do? Can I put a different stitch? Can I put two different wools together?'

Some interviewees linked creativity with completed projects. While boat-maker P23 animatedly talked about plans for renovating an old skiff, he was equally excited about a smaller project fresh off the woodworking bench. "I just finished

[something else] I think is creative. I call it my 'artisanal American craft project,' a small little funky chest that fits in a spot in the house." Perhaps because he had just made it, the chest loomed as large in his interview as the much more extensive project in his future. Ingold's construct of textility (2000), explained in Chapter 2, is apparent in this combination of experience, time, product, and process.

A few participants equated making with unmaking. When P5, an oil painter, recalled being creative in her childhood, she described a decisive moment: "I wanted to know how a clock worked, so I threw it [against a tree], and my mom was really angry at me . . . I still feel creative when I'm trying to destroy something."

Her youthful curiosity grew into an adult tool for knowing the world, which calls forth the precepts of phenomenologists such as Csordas (1990) and Merleau-Ponty (1962). By unmaking the clock and following through on her curiosity, she was constructing a persistent way of inhabiting her creativity.

My field journal suggested two creativity sub-codes. I noted that the people I talked to regularly referred to inspiration, as well as to a bodily sense of making, which I called physicality. While I did not subsequently code these categories often—inspiration received 78 mentions, and physicality 21—I nonetheless found that they shed additional light on aspects of participants' descriptions of creativity.

The Bolt from the Blue

Those who did talk about inspiration said that people and places most often fired their ideas. Photographer P29 said she could rely on friends who were chefs for meals and more. "Just to watch them do something that they love to do and are so good at—that also is creative, and I can feed off that." Likewise, P40 found herself

surreptitiously taking notes during conversations with her friends to fuel plot twists for her novel.

Cities were often-cited creative inspirations; London, in particular, was spoken of almost like a person in its ability to get creative juices flowing. Dancer P36 went into the city several times a week to visit museums, take photographs, and "feed off what I consider inspiration."

An underlying reason for the city's importance occurred to P14, whose creative pursuit was getting dressed every day:

> When I walk around, especially in London, I may notice some details . . . I'm thinking, "Maybe I should get something of that color." I think it's also human nature. If you find something nice, you want to attach it to yourself in some way.

Embodied Knowledge

Similarly, participants whose creative pursuits were physical were likely to become excited by their processes. Pianist P41 said that he was aware of his hands making shapes on the keys as he played. "You can feel the notes," he said. "When it's going well, you're aware that you're making pretty shapes. It looks good as well as sounds good, and the two go hand-in-hand."

Rhythm was also a key to the experience of potter P30: "I'm all about the centering, the beginning step, getting my hands into it and finding that rhythm, that motion, and getting it to where it can actually start to form something."

By cultivating source material from people, places, their work—indeed, even their ways of working—these participants were invoking Lévi-Strauss's (1966) construct of bricolage. They were using some of the most changeable materials at

hand—their social circles, city streets, their senses—and turning them into tools for making.

Identity: The Contours of Creative Selfhood

As discussed earlier in this chapter, the quantitative portion of this research sought to verify that participants in this research have creative identities. Identity is the second of three project variables in the qualitative phase of research for a powerful reason. If—to paraphrase Giddens (1991)—identities surface in people's ability to speak their truths through the stories they tell, passages in the interviews that mention identity outright could be even more revealing.

That point was voiced by costume-maker P7 when she talked about how inextricable creativity is with identity:

> Creativity is just kind of core force inside that has lots of ways of expressing itself . . . I don't really see any particular difference between creativity as making a thing, and creativity as generating ideas, or generating connections with other people, or figuring out good ways of carrying out even everyday tasks. It just comes out.

That said, a creative identity cannot commence, assert Jaussi et al. (2007), until a person believes in her or his powers of creativity. For some participants, that is hardly a straight path. Videographer P13 recalled in hindsight a series of experiences in school that led him gradually to acknowledge his creativity for the first time. Because he had not identified himself as creative before, the net effect was galvanizing: "To be honest, it was sort of like coming out."

Drone-maker P8 began describing his creative identity by saying that he was not "good" at art while growing up, and "struggled with wanting to make things, to

create things in the world that I could see and say, 'I made that.'" Then he found photography, which he enjoyed; wanting to take aerial photographs led to his current creative pursuit of making drones with his 3-D printer. He discovered, he said, "that I could use technology to be creative with, and [have become] very liberated through that."

Printmaker P9 took a circuitous route to creative identity, thanks to a prompt from her daughter at a drawing class. While P9 was in the room, the teacher admired her daughter's sketches and asked if she drew often:

> [My daughter] said, "Well, no, but my mother is an artist." I stood there going quite red. I have never even said it myself, but for her, it's clear. Then I realized, yeah, that's what I am now. I can say it easily.

The notion that creative identity, once acquired, can change over time was voiced by several interviewees. P9 worked as a creative director in films before she had children, but felt at a loss when she stopped working. "I thought, as much as I like to be a mother, there [was] another identity in me that I didn't have . . . now that I'm creating my own [prints], that's my identity."

Cupcake baker P25 more abruptly changed directions in her creative evolution. A few years ago, she was acknowledged by family, friends, and followers on social media as a scrapbooker of note. However, that changed for reasons she could not fully explain. She said:

> One day I just didn't want to do it anymore. I have so many scrapbooking supplies. I have thousands of pieces of paper that I just don't even look at. Now, I'm a baker. It's like, people would have said that I was born to scrapbook, but I couldn't go back to it.

Both P9 and P25 had sufficient stores of creative self-belief in one field, and they seemed unsurprised that they would have that in other fields, as well. Indeed, P25 was not sure how long baking would hold her focus, but she maintained because she is creative, some aspect or another would always surface. Her core identity—being creative—was stronger and more pervasive than the things she happens to be doing.

The route to developing a creative identity can begin at home. P2 makes fly-fishing ties. He recalled learning about making from his father, who gave him what he called "a jury-rigged heritage." The drive to wind snippets of fur and yarn around a hook to mimic an insect is a small thing, he said, but because of his father's ability to improvise repairs "from virtually nothing," he felt he was carrying on something of a birthright.

However, like paths to a creative identity, birthrights are not always easily assimilated. Poet P12 worked in a liminal space, treading between cultures on his route to creative identity:

> In terms of poetry, I am not sure what I am . . . I [would have] said, "I am an Urdu poet writing in English." If there is such an identity, that's my identity, because English is a way to communicate to a larger audience. But in terms of how my mind is organized, or my metaphors, or how I see the world, [that] is more informed by Urdu than English, and it's a tension always happening.

In varying ways, both Gauntlett (2007) and Malafouris (2013) describe how people are shaped by the things they make. These vignettes of creative identity suggest a full range of their claims. Drones helped P8 believe in his creativity, while printing and baking confirmed the creative identities of P9 and P25. Making flies no bigger than a thumbnail brought P2 closer to his roots while making poetry allowed P12 to

travel between cultures. In each case, as they create, they are forging creative identities as well.

When participants talked about themselves, they often referred to their schools and classes as well as their ages. In my working notes, I observed that these disclosures were a form of shorthand addressing aspects of identity that interviewees felt were important in talking about themselves.

With that observation, I invoked the sub-code education (118 mentions) whenever participants referred to any school, from casual instruction to formal education. I awarded the sub-code age (51 mentions) whenever participants made any reference to their age, past or present.

Lessons from Learning

Perhaps because people spend so many of their formative years in school, the place loomed large in the descriptions of some interviewees. The place—and the people within it—can help round out a pupil's learning, notably who they are and how they see the world. For example, videographer R13 credited his classes with opening his eyes to how to collaborate with others successfully. In particular, he said, one professor fired his ambition for expressing his creativity in a larger group: "He was like, 'Pick people who you can actually believe in their standard of work.' Ever since then, instead of creating stuff that I think is great, I create stuff that's absolutely formidable with a good team."

Novelist P40 also credited her university classes in English and literature with infusing her desire to be a novelist. As she began to write, however, she decided she needed more direction than she received as an undergraduate. "I realized that a novel has different facets to it, so it's not as easy as just sitting there and writing," she said.

“You need to have structure; there needs to be a plot, you need to have protagonists, your characters need to have depth, et cetera. My way of tackling it was to do a master’s [degree] in creative writing.”

For P42, whose creative pastime is mimicry and voice imitation, a six-week stint at art school when she was a teen set her up for a more substantive education as well as a creative identity. “I guess from that, my creativity . . . [started] because I was able to literally sit down with a piece of paper, and have a brief, and therefore create and get recognized for it.” The expertise she gained was largely positive because her teachers and classmates recognized her ability. However, it never felt like an organic process to her: “[I]t was almost like I was getting a tick, like ‘Yes, that is you being creative,’ as opposed to it just coming naturally.”

Cartoonist R35 made an off-curriculum observation about herself: “I discovered that if I turned in an assignment that was very creative—even if it didn’t fulfill all the other requirements—I would get a good grade.” For her, creativity offered a way out of the more troublesome parts of her education, even as it reinforced her lasting identity as a creative person.

Of course, not all learning takes place at school. Sometimes, family offers the impetus. Pianist P41 said that his uncle taught him the basics of playing 12-bar blues, while family bandleader P37 had his initial creative epiphany when his wife bought him 10 weeks of painting lessons. “I had a lot of fun,” he remembered. “I’m like, ‘Oh, maybe I can do this.’”

Friends can also catalyze learning, a principle that will be more fully explored further in this analysis. When R28 saw a friend’s handsewn leather handbag, she wanted to try making one for herself: “I asked, ‘Will you teach me?’ So we traded

skills. I photographed her daughter in exchange for her buying the leather and teaching me how to make that bag, that simple bag."

Several participants sidestepped formal learning for lessons from YouTube or other social media platforms. Fly-tier P2 expressed relief that he had taken up the hobby relatively recently so he could learn online instead of spending hours apprenticing at the bench of a master. Virtual classes helped sharpen the techniques of P32, who learned to hand-embroider satin-stitch borders on his silk pocket squares. Yet he yearned for in-person guidance to take him to the next level in his making: "I'm actually going to be taking a couple of hours with [a tailor], learning some other construction techniques for clothing so that I can start working on larger projects."

Obviously, education and making coalesce into something of a never-ending story. Spreadsheet maker P3 spoke of how rewarding it was at first to teach himself how to use financial software. From there, he learned to code and began to create his widgets. Then, to his amazement, a creative world sprang up around him: "I'm learning technology all the time. I'm learning formulas. I'm learning graphing. It was just this little project that kept growing and growing, and suddenly I've got my life focus in this one spreadsheet."

The Life in One's Years

It is understandable that some of the participants mentioned their ages during our interviews; it is, after all, how most people chart their progression through time. More to the point, some interviewees—in a range of ages—bound together the construct of age with creative identity. Certainly, no one felt too young to be creative, and no one felt too old to be creative, either.

That distinction illustrates how a once-radical idea from mid-20th-century creativity theorist Osborn (1953) has become mainstream. “Even if our native *talent* should not grow, our creative *ability* can keep growing year after year in pace with the *effort* we put into it” (p.60; emphasis in original).

In trying to recall when they first felt creative, participants frequently thought back to when they were children, often while remembering something about a creative parent. For example, card-maker P27 said that her mother, an artist, always had drawing materials lying around the house, which made it easy for her to develop her skills. “I’m not saying I was born and I immediately started doing things,” she cautioned, though she has sketchbooks she made when she was three years old.

Because participants ranged in age from 20 to over 70, their comments offer a real-time record of opinions regarding how the matter of age tracks throughout a person’s creative life. As the youngest person in the project, P31 talked about how keeping a journal was especially helpful at her age:

> I think just writing down your thoughts, even if no one hears them, [enhances] your ability to go back and review what you thought once. Oftentimes my feelings are repeated because I feel that I’m a relatively consistent human being, but also I’m just an angsty post-teen girl.

R12 started writing poetry about the same time—“late teens, early 20s,” he said—as he sought a reprieve from the burden of the family responsibilities he assumed after his father’s death. He felt he had almost begun too late, though he found one night that he was compelled to begin anyway. “Something came to my mind, and I just woke up, and I started to write. That night, I wrote seven poems.”

Life brings fresh ways to think about age and creative identity. For some, like landscape painter P21, the passage of time means developing a new resilience, a

recommitting to one's creativity. Affordances mattered less to him, he said, than persistence. "I think that once we get to a certain age . . . it comes down to grit and a willingness to stick with it, even when you suck."

Similarly, just a few weeks shy of her 63rd birthday, P10 said she considered creativity a way to stay young, at least in outlook. "I think that [continually making things] should be a treat in discovery—discovering what we are, and what we have inside—and this certainly happened to me."

In other words, she felt that her creative sense of self became stronger with age. Birthdays often trigger similar waves of reflexivity, causing people to reflect on the complexity of factors that constitute their identity, creative and otherwise. In this case, making fashioned her reflections into a bright, optimistic outlook.

Affordances: Encounters on the Way to Creative Identity

The geography of creative affordances sits at the sometimes-chaotic crossroads of cultural forces, interior perspective, interpersonal relationships, and, it could be said, people's ongoing relationships with the construct of creativity and things they make. The third and final qualitative project variable, it is the primary focus of the research questions for this project; accordingly, is where the largest number of codes fell.

That said, "affordance" is hardly a common word, and the construct took a good deal of explaining. Beginning with the participant letter and continuing with each interview, the word and the theories behind it (Glăveanu, 2012, 2017; Moeran, 2014) were frequently described. Participants uniformly asked basic questions about it and the half-dozen aspects that Moeran in particular highlighted. ("Now, what are those six things again?" asked movie-maker P19, echoing many others.) Once the working

definition was sufficiently clarified, however, participants could easily talk about the aspects as well as the construct itself—even if very few of them repeated the word "affordance" outright. To be sure, it was only coded 18 times.

The people who did use it independently seemed to claim it as their own. That was the case with mimic P42, who playfully talked about the relationship between affordances of time and money. She mused:

> Let's face it . . . if you've got enough money, maybe you'd have enough time. If you don't have enough money, maybe you have too much time. Or maybe if you've got too little time, you've got a lot of money. Yeah . . . you've either got a lot of one and a complete lack of the other, I think. Although those six things, they 100% do come in to play because of course, they would.

A more serious instance of understanding-while-talking occurred during the interview with P21, a former physician who immersed himself in landscape painting a few years ago after being diagnosed with cancer. During our interview, he pronounced "affordances" carefully, as if to weigh its etymology, and then began to consider in his own experience how they operate in networks:

> Here's an affordance intertwining issue: [When I became ill], I took a humongous pay cut . . . losing my practice. But I had reasonable disability coverage so that, even though we took a humongous pay cut, we [were] not going to lose our house. We had to live differently, but when you get a stage four diagnosis, that's not really a stressor in terms of what car you drive or what your income status is. I don't have to paint for money because I have more than I need to live, so I'm able to explore and practice and not worry about results, and because of that my learning has accelerated dramatically.

P21 cast a positive view of a terrible situation. In the parlance of creativity theory, he had successfully negotiated the affordances he encountered, emerging as a creative actor. His observations of how affordances relate to each other present a framework for the following examination of participants' views of representational, social, techno-material, economic, spatial, and temporal affordances.

Representational Affordances

In Moeran's (2014) definition, representational affordances relate to aesthetics "and give rise to formal properties based on such concepts as genre, form, and style" (p. 48). The delineation is well-suited to his investigation of professional designers, potters, photographers, and editors working under the constraints of deadlines, software, physical specifications, and audience demand.

For the present research, however, that definition seemed both too narrow and overly professional for this group of amateur makers. In the participant letter (see Appendix B), I used the term "how things look and feel" to stand in for representation during the interviews. In reading the transcripts, however, I began to construe representational affordances as relating to participants' worldviews. The concept of worldview refers to the assumptions people make about their psychological, social, and cultural realities (Koltko-Rivera, 2004; Gabora, 2000). While it is related to Karwowski's (2014; Karwowski & Brzeski, 2017) similar construct of mindset, the difference is one of degree.

Worldviews, explain both Koltko-Rivera (2004) and Gabora (2000), are self-organized and self-mending, requiring little in the way of reflexivity. In contrast, Karwowski claims that mindsets are comprised of an individual's beliefs about "the

fixed-versus-growth nature of creativity" (2014, p. 62). Indeed, I had taken both mindset and worldview under advisement when I devised my craft elicitation method for this project. Ultimately, I came down on the side of worldview, since the concept was more adaptable to the range of participants' demographics in this study, and did not require additional assessment. It was instrumental in my decision to let participants define creativity for themselves.

Glăveanu (2012) claimed that creativity lies in how people perceive it. As noted earlier, Şahin (2008) claimed that affordances lay in perception. Internalized perceptions of affordances, I reasoned, could be labeled representational affordances. Rereading the interviews before coding, I decided that this was an appropriate way to consider how people think and feel about not just the things they make, but how they go about making them. When people said, "I think," or "I feel," or made a judgment about what they were doing, I used the code for representational affordance.

Looking within Representation

Personal judgments were inevitable as participants talked about themselves, and their insights occasionally felt hyper-revelatory while we were talking. The bland typeface of the resulting transcripts did nothing to diminish their perspicacity, variously imbued with humor, honesty, and sometimes poignancy.

Even fairly straightforward examples of representational affordances revealed the pervasiveness of worldview. Family bandleader P37 developed confidence through exposure to multiple means of making: "Eventually, as I messed around with different paintings or sculpture, at some point I just became confident that if I wanted to create something, I could."

P33, whose creative pursuit is origami, arrived at confidence through a different route. After acknowledging that his repertoire had grown since his first childhood projects, he discussed how he decided to tackle a challenging project. “[I]n order for it to even kind of have life to it, I had to one, convince myself that it was worth doing, but also convince myself that I could do what I had envisioned in my head.”

It is interesting to note that he felt that his origami would not “live” if it could not align with his assumptions of what it could be; his worldview would not allow it. P26, whose creative pursuit is delivering one-liners, built on that concept: “I’m coming around to thinking that unless you can envision yourself as being creative, it’s not going to happen.” Their convictions hint at the relationship between creative identity and creative self-efficacy (Jaussi et al., 2007).

However, not everything about creative identity can be predetermined, and a few participants felt that accommodating unexpected outcomes sharpened their faculties. Boatbuilder P23 remembered projects that strayed far from what he had in mind. Over time, he said, he had learned to drop back and see where a mistake might take him. “It leads you to make a different decision about the next step in the project,” he said. “[Y]ou were forced to deter from the original path you were on because you screwed up something, [and] you end up on a better path.”

Representational Uncertainty

Coping with similar creative indirection elicited more diffuse feelings about representational affordances from several participants. Cartoonist P35 recalled struggling with a direction after deciding that she would start drawing on her own,

without mentors. “[I] just got rid of the notion that I need to do it according to how somebody else is telling me,” she said. Only after that point, she said, did she hit what she felt was her stride with her pursuit.

Creative uncertainty is bearable with the conviction that one has chosen a fitting pursuit. P16 described writing music as his keystone in an irresolute world. “You’ve got to get through your life. What music gets to—at a point that I’ve never found anything else—it gets me to the point where none of that stuff matters.”

Certitude evolves along with worldviews, reflected P29, who takes photographs of things like stones, clover leaves, or random patterns that look like hearts. The best course of action, she decided, was not to resist what could be inevitable. “Once something you loved and how you loved to do it changes, maybe it’s time to revisit . . . and get into something else.”

That was the case with embroiderer P10. She progressed in her medium for years, working in one specific style. Then, without warning, it began to pall. “I stopped maybe 18 months ago because I felt that I needed something else,” she said. The resulting change of direction, she claimed, revived her creative drive.

While P17 once found creative satisfaction in cooking and gardening, she now felt that the better part of what she called her “creative juice” should go to painting flowers. “It’s why I let weeds go now and other things, like hair on the kitchen floor, because I’ve got to let that go if my energy is going to focus on this one thing.” In her representation, a meaningful creative practice requires devotion; concentration is the surest way of attaining it.

Representation also surfaced in the way several participants talked about making as a retreat from the world, to make something that—as worldview would have it—more closely conforms to their reality. R38 could not quite put her finger on

why drawing was satisfying to her. “I don’t know if it’s the total absorption or doing it more kind of ...” She paused, then caught her thought. “It’s kind of a bit of a release for me.”

P3 echoed her point. Part of the appeal of his spreadsheets was that his world is perfectly ordered, at least on paper. He stated:

> It’s not necessarily working out in other areas of my life in terms of satisfaction with a job and just pressures and family. I don’t know that I’m accomplishing anything every week as I dive into this thing but it is an escape and [I have] this grasp of, at least, this is going to work for me.

P5 likewise discussed the daily necessity of dealing with life, and how eagerly she seized a respite at the easel. “[W]hile I’m doing the painting, it’s like I’m creating something just for myself,” she said. “I’m creating a new world.”

Ultimately, the aspects of a representational affordance are bounded by what someone thinks about her or himself and what she or he is doing. For some, the process was more important than the product. Potter P30, for example, claimed that time spent with her hands in the clay was more important to her than what she was making. Similarly, P35 found the cumulative effect of making many cartoons more satisfying than any one cartoon could.

Others, however, privileged the product. P15, who makes jewelry, said the rewarding way the representational affordance plays out is when it confirmed she’s creative: “The best feeling for me is to spend hours doing something and stand back and think, ‘Wow . . . I made that.’” Her declaration speaks to the power of a creative product to elicit feelings in its creator. In fact, at least one-third of participants kept photos on their phones to remind them of their creative progressions.

Representations Close and Far

Another coding distinction stemmed from my interview notes. In the process of coding, I became aware that the passages I coded as denoting more general representational affordances dealt with the interior life of the participants. Occasionally, participants described representational affordances that rendered outcomes that came close to what they had in mind, as when P38 said as she doodled, "I'm so happy right now drawing this." I coded these "representation-close" (75 codes). Conversely, I coded those passages "representation-far" (131 codes) where participants—such as P38 again—said things like, "I didn't like perspective, which was something I wasn't brilliant at."

To be sure, when things worked out, participants were pleased that their visions had been matched or exceeded. Baker P39 explained how she enjoyed baking when she is happy because the outcome is usually tasty: "[Baking is] just something you can do, and there's a nice result at the end of it."

Quilter P34 echoed her sentiments and rationale. She recalled the first quilt she made without a specified plan. It was a creative gamble that paid off. "I didn't quite follow a pattern," she said, but the product pleased her. "I'm like, 'Okay, hey, that's not bad, you know,'"

Potter P30 was less concerned about the product and more interested in the feeling of creativity: "I think pretty much anything where I can let my mind focus on it and let everything else melt away gives me satisfaction." With that observation, she comes close to the insights from those who saw that they were creating a new world with what they make. The difference for her is one of focus, which recall's Csikszentmihalyi's (1996) concept of flow—interestingly, a word none of the

participants mentioned outright. Perhaps, like "affordance," these makers experience "flow" more than they talk about it.

When representational affordances come close to or exceed the vision their makers have for them, the result empowers, said knitter P1. "[W]hen things turn out like you like them, or you envision them, it is motivating to keep trying other things," she said. When that does not reliably transpire, however, the representational affordance feels far indeed. "Well, I've also made some things that didn't work," she quickly admitted.

Many paths lead to the decision that participants disliked their creative processes or products. Occasionally, as landscape painter P21 noted, the process does not even begin before it is aborted. "You could go through any category [of pursuits], and you could find examples of people who say, 'No. I don't think I can handle that,' 'I'm not up for that,' or, 'I can't do it'."

Most often, backing away from making something has to do with other affordances—time, space, money, materials, or social connections—that go awry. Perhaps because these makers already consider themselves creative, those who mentioned far representational affordances described them with a degree of resilience. They told stories of learning something from their encounters.

One lesson is that others might want the things you would rather not see again. Sashiko embroiderer P4 enjoyed making blouses, though "I just can't stand it if they're not just so," she said. She had a friend who was delighted with her rejects. While giving them to her friend made her happy, she was quick to add that it would still bother her to wear something that had, in her estimation, turned out imperfectly.

Fly-tier P2 said that in the long run, it was worth persisting through some less-than-satisfying experiences because he eventually understood the process and

materials. That hardly changed his opinion of his early efforts, though. “They were so bad, but I’ve learned a lot from going out and using them.”

P8, who made drones, felt frustration about never having learned how to draw. In talking through what might go right as well as what could also go wrong with figuring out how to sketch on an iPad, he predicted the spread of his representational affordances. “Maybe we could have another conversation in a year about the fact that I realized, ‘Ah, it actually isn’t that tricky,’ or I’ve gone, ‘Oh, bloody hell. I still have no idea how to make things look like what they do in [my] head.’” In bringing up the extremes—and suggesting an indirect path might be best for him—he described an open and expansive worldview.

Social Affordances

Who you know can be said to at least partially determine the ideas you have, how you envision problems and solutions, and even, to a real degree, what you make. Douny (2014) notes that this is why people fashion their social selves from their social relationships, and why the subjectivity needed to forge a creative identity results from interacting with the sociocultural forces that make up social affordances. Dinner-maker P22 observed: “Some people really need the acknowledgment that they’ve done something from somebody else . . . I think that’s human nature.”

Such is their power that in outlining his theory of how creative affordances work, Moeran (2014) made the case that social affordances are arguably the most crucial of all for a person to navigate. “If there is a single overriding theme in creative people’s discussions of their work, it is the role played by other people, specifically by social connections, in the numerous projects that plot their careers” (p. 51).

Even though it was written with an eye toward describing people who work in organizations, Moeran's (2014) observation also holds for the everyday makers of the present study. By discussing how they came to feel creative, these participants made implicit and explicit observations of their social networks. Friends, bosses, teachers, mentors, and casual contacts from social media all played integral parts in their creative lives.

The Social Worth of an Audience

Many participants related experiences about making things for other people. Describing the reception of a recipient to one of her machine-made quilts, P34 said the reaction was in part a reward for her efforts. "I liked seeing the look on her face," she said.

Similarly, P29 shared familiar insights when she talked about photographing street performers. "It's really cool to watch them, but it's also cool to be able to go to them, [show them the photograph], and say, 'Hey this is you performing.' They're like, 'Wow, what?'"

Enthusiastic responses frequently proved to be a heady result. Getting a laugh in high school launched the creative identity of P26. He said:

> I always had some kind of wry comment or something to say . . . If there was any contention or discord in the classroom, I'd try and find some way to relieve the tension and get people laughing. I just felt great satisfaction in doing that.

The fulfillment he still found in making people laugh inspired his yet-to-be-met goal to test his mettle during an open-mic night at a comedy club.

Some participants discovered that their ability to make things was occasionally alluring to people who do not have creative pursuits. P11 found an eager audience for

his pop-art paintings after he produced a fresh canvas for a woman he was dating. “It [made] a cheap present, but that [relationship] didn’t work out,” he recalled, though he said it was no fault of the painting.

> I met another girl, made her a cheap present as well. I don’t think any girl I’ve dated since 2007 hasn’t received a painting . . . Every girl I’ve ever dated has found [receiving a painting] incredibly sexy, that’s for sure. I mean, they’re always very supportive in that respect.

Embroiderer P10 began reading embroidery blogs because she was intrigued with the work she saw and the way others shared ideas online. Eventually, she created her blog as “a way to take note of my creativity.” It became for her a journal of sorts, a way to record what she made, and share what she was thinking of doing with family and others who visited her site.

For all five of these makers, having warm receptions to their work from friends as well as relative strangers informed ongoing creative efforts. There are limits to making things for those in one’s immediate social networks, however. P1 cautioned: “If you have knitted as long as I have, you have made everything in the world. I can only make so many potholders and give friends or family so many scarves,” she said. “So I think the next thing I’m going to be doing is knitting for homeless people.”

The Social Outcomes of Collaboration

Apart from making things for others, participants sometimes mentioned the pleasure in making things *with* others. As observed earlier, P23 enlisted his childhood friend in making a sailboat; through the months they spent on the project, he said, their relationship reached new levels of mutual trust and respect.

Several participants mentioned the importance of digital media in supplying them with ideas and feedback. Cartoonist P35 shared her work on Twitter, sometimes making GIFs of process photos or video flipbooks of completed drawings. Flower painter P18 loaded in-progress photos of her work on Instagram, finding the exchange of knowledge powerful. "I posted [myself] doing an egg tempera yesterday because I think it's a cool thing to share technique . . . and just build on each other instead of being threatened by it."

Social media is also a means of finding new collaborators, occasionally taking care of other affordances in the process. Songwriter P16 recalled how his current performance group located a key colleague: "[Our] drummer we found on Craigslist, and not only is he an excellent drummer, he also owns the studio that we're playing in."

Unlike other participants, collaboration occurred both in real-time and virtually for P21. To paint portraits of friends or family, he said, he more often worked from photographs or sketches than from live sittings. Just because a sitter was not physically in the studio, however, did not mean that he or she was absent from the process:

> When I do a portrait of someone, and I know them, I feel like I've spent a week with them. When I send them a [digital] image, I'll say, "Hey, here's what I've gotten done. I feel like I've spent three days with you. It's been fun, but you haven't always been in a good mood" . . . I'll throw some humor in there, but it really is like they're on my mind, either consciously at times and then not, but I'm looking at them. But I'm not just looking at them; I'm looking at the visual pieces that make up their image as I sort of sculpt them. Emotionally, I'm with that person for [all] that time.

Going Solo

Making was a meditation for landscape painter P21 and other participants. Not every meditation-in-making is a social occasion. Sometimes, participants said, solitude better primed the creative pump. Potter P30 preferred it because "You know how, no matter what you do, other influences are going to creep in, but it's how you draw upon those influences that make it yours," she said.

Nosy outsiders were just what P31was hoping to avoid when she was journaling. "I try not to [write] outside my apartment just because I'm scared I'll stumble upon someone I'm not super comfortable with reading my journal."

For the potter and the journal-keeper alike, privacy was next to productivity. While they appreciated the creative ideas from their peers and friends, they were keen to process the source material by themselves so their products would be more completely their own.

The Social Benefits of Tutelage

Nonetheless, mentors and teachers can broaden a maker's creative perspectives by explaining the technical and material affordances in a given métier. Crazy-quilt maker P18 received motivation from her teacher and classmates to finish a lingering project. "She was going to have a show at her house and have all [our] quilts out there," she said. If it were not for the ensuing short deadline, "I'd still be working on it. It'd be like that wall hanging down there pinned up on the shelf that I've been working on for two years."

Modern dancer P36 preferred taking instruction from another kind of teacher—a choreographer—rather than starting from scratch with her dance steps. "I prefer just

working with somebody on their idea and perfecting it for them. It might be because I'm not a professional-level dancer," she said. Operating with a choreographer and other performers, she said, proverbially put her in the shoes of her collaborators and helped her find pleasure in "telling their story."

Pocket square maker P32 credited his mentor, the owner of a high-end menswear store, with cueing him in on helpful connections. "We have very great conversations together, and I use him as a resource for a lot of things that I do," he said. For example, his mentor introduced him representatives of fabric companies who have agreed to sell him exotic silk remnants at wholesale prices so he can continue to make his pocket squares.

That said, mentors do not always have to be familiar. A week before our interview, P2 was trying out his flies from a river bank while another fisherman just upstream appeared to be catching far more fish. "When I was about ready to leave, he eyed me walking back towards the car," he remembered. "He knew I was wanting to ask him, 'All right, what did you do?' So, he showed me what he did. But it was interesting because, you know, we essentially fished with . . . the same thing but we fished it differently."

The Social Place of Family

Most people's relationships with creativity begin with their families, and the way those relationships play out reverberate through an individual's life. In the present study, some of the participants' most compelling stories of social affordances involved their families. It became clear during the interviews that family would be an important sub-code; as it happened, it was mentioned by all but three participants. These

observations about parents, grandparents, siblings, children, and extended family illustrate how support—and sometimes the lack of it—can help forge a creative identity.

Father figures

Participants frequently named their parents as creative role models, if not exactly mentors. Mothers were occasionally brought up as teachers and creative presences, though fathers were mentioned more often. For instance, mimic P42 remembered childhood suppers where she and her father would linger at the kitchen table imitating TV stars. “It was just me and him that could do accents really well,” she said.

Oil painter P5 remembered playtimes when her father stoked her curiosity about how toys were built. He brought her kits for snap-together model cars, and together they would assemble and race them. From that, she said, she learned, “I really like doing that, assembling things. . . My dad encouraged me a lot.” She found the making and the competition with her father to be equally important in her drive as an adult to continue painting.

As the teenage stepson of a professional musician, songwriter P16 learned more surreptitiously. While he was welcome to play his step-father’s bass guitar, he never applied himself to learning on it. That changed one day:

> I was really angry, and he’d go, “Play scales,” and I’d play a scale and I’d say, “Now what?” because I was hoping he’d teach me. But [then] he’d say, “Now play in broken thirds,” and I would play in broken thirds. [He’d go], now play in fifths and I’d play in fifths, play in sixths . . . [all the way to] double octave .

> . . It took about half an hour to play a double octave. And after that, he [said], "You still angry?"

Even though P16 prefaced his story by saying that his stepfather "never taught me how to play bass," he was sure the method helped turn him into a musician.

It was hardly incumbent on fathers to have participated in the same pursuits as their offspring to inspire them. When she began making handbags, P28 was surprised to recall lessons in creativity from her father, who restored antiques.

> I [have] memories now of when I was a kid working with him. [They're] almost like flashbacks when I'm working in here to the same thing that we did when I was a kid. [I] never would have ever guessed that those experiences would play out somewhere in my future.

Making her bags was, she said, a way of being with his memory even though he had died years before.

Even hard times with a parent provided the spark of a creative pursuit. A difficult period in his father's life—and his family's—steered P3 into creating financial planning spreadsheets years later. His father, a philosophy professor, was left without a job after his university closed the department during a recession. P3 remembered being embarrassed to qualify for free lunches at school and vowed never to be in that position again. He learned accounting and financial management in the Navy before teaching himself how to build the software for tracking his family's finances. His project relieved him of the fear that he could not follow where his money was going. "I found [after that] that it was just a game," he said.

Being parents

Perspectives from parents raising families formed an interesting counterpoint to these memories from adult children. Flower painter P18 recalled deciding in her 20s that she wanted to have children. “I knew from the get-go that [there] was going to be a gap [in my painting]. I was able to make the choice to stay at home with the kids,” she said. With her children now in college, she had time to herself and, “I don’t regret any of it.”

Teaching is a way of passing on creativity to a new generation, said some parents. For instance, boat-maker P23 spoke about how making his first boat as a teenager with his father became a tradition he wanted to repeat with his son. As they made a skerry together, P23 was surprised and then gratified as his son learned to work with wood so well that he surpassed his father’s skills. “Halfway through it . . . he said, ‘Okay, Dad, I’ve got it from here.’ Then I would just come in to solve, [or] to try to help him solve problems.” Almost a decade later, he said, they still sail the boat they built together.

Sashiko embroiderer P41 claimed that the learning went both ways for her and her twin daughters. She gave them sewing machines for their ninth birthday, and the three of them had regular sewing classes at home. “What I love is that when they make something, [they wear it to school],” she said. “I would never have done that. I wouldn’t have had the confidence to do it.”

To keep his four-year-old son engaged, R24 frequently changed their creative sessions. Sometimes they would draw, sing, or find themselves “making a helicopter with blankets. Of course, if I’m getting the chance to say, ‘Let’s do drawing,’ he gets to choose the subject.” The payoff, he said, was the chance to see things through his son’s eyes: “His ability to slow down and notice beauty in a little weed or little

flowers, or looking at the street, is much more developed than mine is. I've got used to filtering stuff out."

With older children, the outcomes can be more challenging. P37, the family bandleader, said that his group was at a crossroads because to his teenaged daughter objected to a song he had written. "Our lead singer is thinking about going solo. She's not so interested in singing with the band anymore," he said. As a result, the band, which had been making videos for YouTube and posting music on Soundcloud for about 10 years, was on indefinite hiatus. Now, P37 said he was experimenting with other media—welding, painting, and furniture-making—to keep his own creative identity intact.

Withholding and providing support

Some participants found it necessary to come to terms with their families' perceptions of creativity. Jewelry-maker P15 said that her parents were so forceful in directing her to activities that would enhance academic work in law or engineering that they did not tell her about her grandfather's talents at building furniture, a pursuit she would eventually try as an adult.

Similarly, there was little early family support for the creative efforts of embroiderer P10. She said:

> When I was young, I was never encouraged by my parents to be creative. It was just not part of our family, [nor] the school in a certain way. And so I never felt encouraged, and I felt that I had no creativity at all.

It was only after a mid-life divorce that she felt free to devote time to creative pursuits. Reveling in that freedom, she began to embroider and blog about her work.

Printmaker P9 said that her parents were usually noncommittal when she showed them her pieces. She used to think they would eventually come around, but in time decided that it did not matter. “Now, if I want to ask somebody, ‘What do you think?’ . . . I have to actually figure out what do I think and what do I feel first.”

Participants’ stories of support from spouses, grandparents, siblings, and others who offered encouragement underscore the benefits of close collaboration. Costume-maker P7 collaborates with her husband on embellishing her creations with colorful LED lights that flash like sequins. Cupcake baker P25 said she was put on a creative path early on with a craft kit, a Christmas gift from her grandmother. “She always thought everybody should be creative,” she said.

P8 recalled how his mother sewed toy animals for her sons. Her example influenced the whole family: “My oldest brother is a crazy software tinkerer,” he said. “My middle brother is a wood botherer, and I’m a sort of mad scientist tinkerer.” The way he saw it, making ran in the family, thanks to their mother.

Crocheter P6 found friends and family a willing fan base for her linen face towels. The fiber, she said, was both luxurious and good for gifts. “I did [one] for myself, for my husband . . . my mother-in-law, aunt-in-law, all the girls next door, everybody.” In this case, the past and present properties of her social affordances helped complete a circuit with the material one.

Techno-Material Affordances

Creative identities depend on making, observed theoreticians as diverse as Small (1998), Ingold (2010), and Glăveanu (2017). The success (or lack thereof) of any made thing depends on how the maker has negotiated the media, tools, and techniques at hand.

Already possessing creative identities, participants in this project were well versed in talking about the rules and resources of the diversity of media they enjoyed. Indeed, perhaps because they had in many cases spent years working with their materials and tools, they understood inherent properties of their chosen media, describing them with words such as “love” and “beauty.”

Material Satisfaction

Several participants spoke of the pleasure of using high-quality materials. Journal keeper P31 had recently received her latest blank book from her artist/designer parents, who were adept at sourcing the first-rate materials she craved. She stated:

> I really love blank paper, very thin sheets of paper. I will seek that out. I also have a very specific kind of pen I love . . . Pilot G-207s . . . They’re so smooth. I love writing with that on blank paper. I think it’s awesome. I can doodle on the sides, which I love.

Pianist P41was convinced that a good piano was responsible for making him a better performer. “You play better with a beautiful piano, there’s no doubt about that,” he said. “If it’s got a fabulous tone . . . you’ll find something there which you perhaps haven’t been able to produce before.”

Correspondingly, P22 reveled in the ingredients she pulled together for dinner. “Last night we had peaches and goat cheese . . . I got out a big blue-and-white platter and did little baguette toasts [with] . . . sliced avocados, sliced tomatoes, and olives,” she said. Even though she considered the meal more an assemblage than something she actually cooked, the materials nonetheless moved her: “It’s just a beautiful thing, and it just makes me happy to put that together,” she said.

Sashiko embroiderer P4 spent part of our interview going through the stacks of old and new fabrics in her collection. Every piece seemed to have a story; something about the fiber attracted her, or the print was fanning her desire to make something in a particular style, or she had bought it someplace special. Each design spoke to her. As she unfolded a newly acquired cotton print, she asked, “Isn’t it great?”

Using Materials at Hand

The flip side of indulging in carefully curated materials is using whatever happens to be around and improvising in the process. When cartoonist P35 traveled for work, she made sure to carry black markers and a compact sketchbook. At home, however, the former teacher relied on a ready material she could spread out: “I’ve been drawing on colored paper because . . . when I was teaching, people would give me paper because I went through a ton of it.” Now pursuing another career, she estimated some “10,000 sheets” should keep her going for years.

Source material surrounds P38, a florist, every day at work. When the shop is quiet, she said she would pull a bloom and draw it with whatever pens and paper were at hand. These odd moments allowed her to break down her technique to better render individual flowers. “[I say to myself], ‘Okay that’s an anemone. It’s got five petals and a black middle and the little eyelash center.’” Although she knew her varieties by heart, the moments spent drawing them enabled her to see them more intimately.

For family bandleader P37, the materials at hand were song parodies; the tools were the Garage Band application as well as Soundcloud and YouTube. Beginning when his children were three and five years old, he wrote songs in various genres for them—jazz, soul, punk, “even rap, hip-hop, and a Beastie Boys song.”

The Technical and the Material

In his case and others, a fine line separates tools from materials. For instance, both P39 and P25 enthused about their Kitchen Aid stand mixers, a tool which has become a status symbol in creative kitchens in both the US and UK: “It’s super-heavy, but we use it for everything,” baker P39 said. “Anything we can put in there, we’ll just whisk up.” Evidently, the mixer not only powers through food, but also through identities: “I really started calling myself a baker probably six months into [making cupcakes],” P25 said, “when I got my big mixer.”

The tools necessary for other pursuits have similar effects. Quilter P34 talked about the difficulty in getting the desired results for her quilts with improvised tools. Over the course of cutting out hundreds of quilt pieces, she said, a homemade cardboard square can shrink from six inches to five. By the same token, twin-bladed scissors make precision cutting—a necessity for precision quilting—somewhat elusive. Some tools she had seen in the quilting store saved the day. “For this one [quilt], I bought a 6-inch square [plastic template] to use with a rotary [cutter],” she said.

Sometimes, however, moving forward requires a maker to strip the requisite tools to the essentials. For pocket-square maker P32, that meant learning how to make satin stitches with a needle and thread instead of the sewing machine he could not afford. The benefit was that he developed a “signature stitch,” he said, which became a way to make his work more distinctive than it might have been otherwise.

Materials Beckoning and Restraining

Making distinctive work was important to P20, who said that his experience in making turkey calls included an education in wood. When he first started, he typically used local varieties such as cedar and walnut that friends had given him. Once he became proficient, however, he wanted to work with exotic woods, such as Central American bocote. “It’s a beautiful wood. It has black and kind of a cream/tan colored stripes going through it,” he said. He found the patterns in a board of bocote so arresting that he wanted to take all his calls in a new, more decorative direction.

P14 decorated her daily outfits with items from the cache of accessories that lined her dresser drawer. “It’s the easiest thing to just put together jeans or a skirt with a shirt or a jumper,” she said, “but then it’s the accessories or jewelry like silver or whatever that bring a personal touch to the day.” She would think about how she felt, she said, and then choose more or fewer items, depending on her mood.

As Gibson (1977, 1979) might have observed, her silver necklaces were an affordance whose import lay in their potentiality: Would they complete her look or detract from it? What would she choose tomorrow? That is a point that embroiderer P10 understood with her medium. “I have this feeling that the embroidery is already there,” she said, waiting for her to discover it in the pristine fabric.

Discovery is part of the pleasure of making, said P9. She talked about experimenting with her printmaking tools and materials to push her conception of what a print is. Once, the after-image on a printing plate intrigued her more than the print itself, and she found it led her to experiment with other surfaces as plates.

Occasionally, the potential offered by a material can intimidate a maker. The paradox is familiar—recall the prototypical blank page that every writer faces. Similarly, painter P11 stashed a blank canvas behind his sofa while he was waiting for

inspiration to strike. It had been there in his last two apartments. Likewise, crazy-quilter P18 had fabric in her studio that had been waiting for years. “That white cotton that I bought six yards of it at $21 a yard?” she asked. “I get down there [to the studio], and I could pull out 10 patterns. Then I don’t want to cut into it.” Her self-imposed constraint compelled her to move along to less imposing fabrics.

When Materials Confer Knowledge

According to Ingold’s construct of textility (2010), materials work on makers as surely as makers work on materials. While most of the people interviewed spoke of what they had learned in their interchanges with the things they made, two participants relayed the satisfaction the processes can engender.

P33 generalized about the genres of origami, “ones that involve glue, and ones that don’t involve glue,” and explained that he chose the glued version for a life-sized paper sword because it would be more robust. “I wanted to brandish it,” he said, and not have it collapse. He had to find a digital design online he could tweak for his purposes, and he printed scores of pages onto heavy card stock. Satisfied with the resulting product, he acknowledged that the program appealed to his fondness of technical nuance; his medium was not just paper, but the program as well. “It was probably created for a lot of people like me,” he said.

P23 felt a similar kinship to wood and described what long years of making boats with it had taught him:

> You don’t cut a piece of wood and [see] the result before and the result afterward right there. A lot of times with wood, you need to predict what’s going to happen to that wood and that shape a year down the road . . . How [is it] going to behave in a more humid environment? A less humid environment?

When will it be potentially exposed to wet and rain or salt water, for instance? Wood . . . it's a constantly changing thing. That is, I think, a sensibility that just happens to you over time.

Certainly, he did not learn how wood "behaves" in the space of one project, or even five. In fact, he said he deepened that knowledge with every one he makes. That years-long relationship mingles techno-material affordances with temporal ones in a circuit every maker must relate to sooner or later.

Temporal Affordances

Obviously, making something takes time. Sometimes that is due to the materials and techniques used. To cite but one example, potter P30 pointed out that her vessels must cure for hours and occasional days before firing. However, crossing with materials is only one way the affordance of time inveigles itself in the maker's actions. Plans, sequences, and deadlines all have a reckoning regarding time. Moreover, as Moeran (2014) points out, every product takes its place in a long timeline of things created not just by the maker, but by the field itself.

Coming to terms with how time factors into what they make, participants talked about how much they needed to complete the things they made, how little of it they sometimes feel they have, and how elastic it can be when they are working. Occasionally, they came to clarity on the topic during our interview, as was the case with novelist P40. Asked about the affordance, she said, "Time, you can't just create it. You can't, like, [say] 'Oh, I'll just get rid of that little bit, or I'll just give myself some more time.'" As soon as she voiced that opinion, though, she reconsidered. "No, I guess you can. You can limit yourself to other things so I could get my work done a little bit earlier and have more time for what I want." She spoke for many of the

participants who detailed how they had to juggle their schedules and shift priorities to free up stretches of time.

Fitting in Time to Create

"I work at odd times," explained pop-art painter P11, who talked about how he fine-tuned his day to keep his pursuit going. "Mostly I work in the evenings. Or paint a bit when I've got up . . . [thinking] 'I'd better do an hour before work because otherwise it'd never get done'."

Participants also mentioned more extreme schedule revisions. Jewelry-maker P15 remembered when an idea awakened her at 3:00 a.m. Not that she minded: "I spent all night drawing and then went straight to work. I was happier because I got it out of my system." She could bear the fatigue that day because she found the idea so valuable. "It would've been worse if I'd gone back to sleep and then tried to remember," she said. "Then, you know, it's too late."

There are limits to revamping a day, however. Printmaker P9 was confident she could create daily, though obligations at work and home circumscribed her making. She said she leveraged days away from her bench by spending spare moments with her sketchbook, or visiting museums for ideas. On those busy days, she said, "[T]hat's all the time at the moment I can spare. The rest goes to the family. "

A few participants, such as journal-maker P31, spoke of savoring days they could spend recharging their creative batteries. A student, she was grateful for the easier pace of summers when she could broaden her horizons by taking in a movie, drawing, or reading. "[It] is such appreciated time. I realize that . . . it's gold. Time is a treasure now."

Although long days spent absorbing inspiration sound idyllic, the danger of waiting for uninterrupted stretches of time is that ideas can evaporate, and places can be lost. Sashiko maker P4—a physician with a busy practice and an active family—knew those limitations all too well:

> If I wait too long between [work sessions], I forget what I've learned. That's an older brain talking here. For instance, when I don't know the technique for a garment to look like I want it to look and I know that I could do it if I knew the technique or if I had enough practice, it can just be overwhelming. You just want to throw something through the window because you've spent hours on end with it, and you're just like . . . over it. But I think that's because of the time.

Nevertheless, she said, she found ways around the frustration, including experimenting with different approaches to sewing. That was what appealed to her about the ease of sashiko—its simple running stitch did not require her to remember complicated sequences. Picking up the technique meant that she could work on handheld projects at her children's ball games or on commutes to and from work—and, importantly, still feel creative.

At various points, such refocusing is crucial. For modern dancer P36, her physical abilities were the peg upon which part of her creative identity hung. Time was the reason why she decided to audition in her 30s for an amateur troupe after moving to London. "There was something bubbling inside me, like, 'You're not going to do [this] now? This is it. You don't have many years left to do this.'" Her successful audition was a reminder that, to a real degree, all makers realize that they will necessarily create a finite number of things.

Time, from Beginning to End

Be that as it may, most interviewees preferred to concentrate instead on how long it took them to complete the projects in front of them. Thinking about the day before, P25 said, “It took me three hours to bake about, I would say, 30 cupcakes. It really depends on, if I want to rush . . . I can do it in 45 minutes if I have to.”

Cartoonist P35 figured she “can easily do 10 drawings in an hour,” while boat-maker P23 estimated that he and his friend “spent probably 600 to 800 hours” assembling their cedar guide boat. Fly-tier P22 reckoned it took him “five to 10 minutes” to wrap a midge the size of a little fingernail.

For P20, knowing how long a project took went hand-in-hand with his enjoyment. “I can go out [and in one evening] from start to finish and do a turkey call,” he said. “[I]t’s almost like instant gratification.”

A few participants found there was nothing like a deadline to light a creative spark. P22 claimed, “I’m a slow cooker,” yet still managed to have dinner together every night because her family depended on it. “[My husband] is hungry when he gets home. He doesn’t have time for lunch. If he’s home at 5:00, he is starving.” The daily deadline, she said, gives her creative day a center.

Alternatively, P18 said she preferred to work hard to meet more sporadic time limits. “I can remember finishing Easter dresses at, like, 4:00 a.m., just in time to get to church,” she said. “I’ve always been inclined to look at the deadline and figure backward from it.” For her, the satisfaction of beating the clock rivaled the gratification of completing her garments.

Time to Revisit

Some participants found self-imposed deadlines altogether too arbitrary, questioning when anyone knew when something was completed. For instance, photographer P29 did not regret unfinished projects. Although she might "have to be in the same mode" she was originally, she has occasionally salvaged a long-forgotten image, which made her feel the dormancy was profitable.

Post-painting evaluation was a malleable period for P5. She said she was usually pleased with a just-completed painting. "But I know that maybe three weeks, or four weeks, later it will become a disaster for me," she said. "I will see it from a totally different point of view." After that, she would either rework the canvas or scuttle it all together, preferring to start anew.

By contrast, not all interviewees were inclined to return to what they had already made, despite estimable opinions to the contrary. Poet P12 recalled hearing an Indian writer recommend putting a poem away for a while, then coming back to it. "I tried that, putting the poem back into cold storage, and then going back and trying to develop it," he said, though he found the extra step unworkable. Instead, he said, in his experience "a poem just happens, end to end." For him, a poem takes precisely the amount of time it should.

Connecting Time and Space for Making

Most participants reported feeling the greatest satisfaction when they not only had sufficient time to make things but a space they felt comfortable in as well. For example, P1 said she was "not really a sitter"—except when she was knitting, and then time flew by as she settled in with yarn and needles. "When I'm working with knitting

or crocheting, I find myself relaxing and sitting down, and I'm concentrating on that instead of thinking about the 101 other things I could be up doing," she said.

Embroiderer P10 related that she looked forward each evening to "the moment you reach," sitting down at last in her easy chair, having finished all the day's duties. Only at that time and in that place could she then proceed with her work. "I will not sit and embroider during the day because I would feel guilty," she said. "It gives me so much pleasure." The affordances of time and space conspire, in her telling, to create the ideal setting for her favorite mode of self-expression.

Spatial Affordances

Like the two needleworkers, all of the participants were as persistent about finding places for making as they were about carving out time. I interviewed many of them in the spaces where they created—former basements, garages, attics, spare rooms, and sheds.

The ones who were fortunate enough to have these places were proud of them; they often expressed relief that they had a spot to themselves to keep in-process projects going, to tinker with materials, and to daydream about endeavors to come. Those who did not yet possess such places had adapted their creative pursuits to where they happened to be.

For example, one reason modern dancer P36 joined an amateur troupe was so she could gain rehearsal space. As a student, movie-maker P19 said he often filmed in public and edited his work on his laptop wherever he happened to be. Poet P12 said he usually wrote in his room, then recalled an especially productive night on the London Underground:

> I took the tube without even looking at where is it going. I just observed people. There was a girl who was very beautiful. I saw her in her green shawl, and I wrote immediately about that . . . [The] train is a very good place.

It could be that for him and the millions of people who ride the tube every day, the interior of a carriage is so much a part of the everyday experience that it becomes a place at ease outside of the home. Such is the effect of a city that it can nurture creativity, as P14 recounted earlier in her observations about how London inspires the way she dresses.

However, not even the largesse of a city could reliably yield a proper space for costume-maker P7. Now happily settled into her first home complete with a sewing room, she recalled with frustration a series of tiny big-city flats she and her partner had shared. They were, she said, "full of his stuff and full of my stuff and there just wasn't really room to do anything."

Finding Room

When P20 faced a similar lack of space, he took his turkey call making to the porch. As long as the weather was good, all was well. He was fortunate, he said, that the scale of his calls was small enough that the space suited his needs. "I had a couple of the tools out, a little drill press and [a small lathe]," he said. "I just [kept all of] it on my front porch."

The spatial affordance of the porch—and of his tools—was only temporary, however. As he gained experience, he also gained larger, more powerful machinery as well as the desire to make calls regardless of the weather. When he and his family bought a new place, he made sure it had a backyard shed.

When she needed space to make her crazy quilts, P18's partner designed a basement workshop for her. It worked well until she outgrew it. Now, she said, "There is so much stuff down there, and years of accumulation of fabric, and patterns, and books, and magazines." Her solution was to retreat to an out-of-town cottage she inherited from her mother. "Sometimes I just have to gather up three or four projects, put them in some bags, load the sewing machines, and the bags of stuff, and go up there to be able to accomplish something," she said.

For those times that wholesale change of venue is not an option, new living arrangements sometimes dictate a change. When embroiderer P10 moved in with her adult daughter for a year, they compromised. "I have a room my daughter calls the dining room, and I call my studio," she said. "So I understand that when we have guests, I have to put everything back, put under the bed, and use the table to serve dinner." This inconvenience, she said, was a tolerable constraint, since she was still able to embroider.

Several participants reclaimed space when their children left home for university. Handbag maker P28 said she moved operations to her son's former bedroom. With her daughter at school, card maker P27 was happily working out of the attic playroom. Novelist P42 sometimes wrote in her collegiate son's bedroom, too, though she also had a key to her neighbor's garden hut—his generosity, she said, would enable her to claim she had written at least part of her book in the prototypical backyard shed.

Reworking Spaces

Remodeling can also render an old space newly workable. Boatbuilder P23 recast a former one-car garage into a garage-cum-boatyard. "I've got two big bay barn

doors that open up out into the backyard," he said. "When the weather's nice, you can really have a great space there. It's going to be a little tight if I undertake my next project, but we'll see where that goes." In a parallel to P20's porch setting for his turkey calls, the garage-cum-boatyard made P23's commitment to both the scale and outsized time frame of building boats possible. In other words, his boat shop abetted his sense of himself as a boat-maker.

Such commitment to a pursuit forced more than one participant to make do with a substandard space. The case of P21 was instructive: When he first took up landscape painting, he simply painted in his basement.

> It was a basement that is technically used for lawn equipment storage. It had an outside entrance and no connection to the house other than it sits beneath it. It had no windows, no ventilation and it had fluorescent lights . . . I realized after some time that those lights were so bright that everything looked brighter, such that when I painted and took it into normal light, it looked like it was in shadows. All my paintings looked very moody and dreary. My still lifes looked like they were in a dungeon. When I realized that, the pendulum sort of swung the other way, so I started to paint in too high a key, such that I ran out of room on the light end. My highlights were pure white. I slowly learned how to bring it back . . .When [my mentor] came and visited me he said, "Show me where you paint." We went into the basement, and he looked at the space, he said, "Wow. You really do want to paint. This space is horrible."

Regardless, he said, it was the only place he could carve out time to paint, given his career. After his recovery from cancer, he was painting in a downtown studio that featured a bank of north-facing windows, and adequate ventilation, storage, and space for his family to be with him while he worked. "For me, it's a dream come true,"

he said. “All of a sudden, I’ve got this space where I don’t feel the pull of the dishes in the sink or the laundry that needs to be turned over.”

His story demonstrates several characteristics of space that had a direct bearing on his creativity. On the positive side, he was able to log many hours at the easel from his basement without leaving home. On the negative side, the basement’s lack of ventilation made the fumes from his oil paint potentially more harmful, and the inadequate lighting affected his judgment about which colors to use—which in turn negatively influenced his progress in the medium. With his mentor’s help and his own insights, he was able to correct for the space’s imbalances and eventually overcome them. Intriguingly, the basement’s deficiencies informed the amenities of his new studio, a space so well-appointed that artists traveling through town would join him in painting there.

For him and any maker, having a space for making things demands more than vision and will. One way or another, it also demands money.

Economic Affordances

From the economic state of the country to the change in one’s pocket, money makes itself felt as an affordance in ways both dramatic and subtle. People who make things require at least some outlay of capital, which in turn has some bearing on what they create. Recall, for instance, that P32 finished his pocket squares by hand because he could not afford a sewing machine, and that songwriter P16 was delighted to have found a drummer who came with his own rehearsal space. There were few conversations about making that did not in some way reference money.

Yet for all its cultural pervasiveness, money was mentioned in and of itself only 194 times, the lowest frequency of any affordance. Because of the way money interweaves with other affordances, perhaps participants felt that it was implicit in the cost of classes, say, the expense of materials, or the creation of a studio and did not warrant a special comment.

However, the things participants did say about money were revealing. Pianist P41 bluntly stated that he found that the necessary complications of making a living had a negative effect on creativity. “I found, certainly, that working for a living and having a family and doing all the mundane things that we do with our [lives are] not conducive to being creative at all,” he said. Like embroider P10, he returned to his favorite mode of self-expression once his children were living on their own and he had retired from a 9-to-5 job.

At the other extreme, 30-something P33 took the exigencies of life in stride; having a career, a home, and a family were for him not exclusive to making origami. “As long as I don’t think about actually trying to pay myself a wage to make it, yep, it’s good,” he said.

Between the poles of those opinions were many other points. Some participants justified spending money on their creative pursuits as an investment. Quilter P35 rationalized replacing her old sewing machine that way, and P25 and P39 talked about how high-quality ingredients were worth the cost because they would result in better baked goods. Dinner-maker P22 joked that she shopped for groceries so often that the bag boy at her usual market said goodbye by calling out, “See you tomorrow.” Repeated exposure to finer materials turned knitter P1 into a self-described “yarn snob.” But for her, there was a balance: “I still look at the super-saver packets,” she admitted.

The Low-Cost (or Free) Option

Several other interviewees confessed a fondness for saving money at least some of the time. P31 compared her current journal, a gift from her parents, to the camera and software she recently bought for her burgeoning photography hobby. “The journal most definitely was free,” she said. “I think that’s why I like it.”

While videography is costly, P13 had managed to acquire valuable tools—and the knowledge to use them—in exchange for interning with his mentor. The first time they worked together, the mentor spent a week teaching him how to use a clapper board. “It’s been two years now, and he’s taken me on every major job since. Every job I do with him, he gives me a new piece of kit.” Gaining experience and equipment was more than a fair trade for him—it was an economically feasible way for him to learn on the best stock-in-trade.

Potter P30 was almost gleeful when she said, “I have learned where to go dig up free clay.” Mountain basins and river banks offered materials that suited her purposes. “You know what you’re going to dig up if you go certain places,” she said. She was happy about being able to make things from the land under her feet and was also pleased with the inside knowledge her expeditions conferred.

Money As a Tool for Making

While she dug her own clay, others found in money a means of leveraging new creative pursuits. The oil painting classes P5 enjoyed fell into this category, as did a series of post-graduate writing workshops novelist P40 took.

P18 recalled that her first painting—George Washington’s horse—won a children’s art prize. It came with a social as well as a financial reward: “That was the

first time I remember being applauded for my art. It was a reward system that felt good," she said. "I put that money into my first art classes."

As noted earlier, money was both explicitly and implicitly behind P3's drive to make spreadsheets. While he initially developed them to track his investments, their potential grew with his exposure to the numbers. He said he began to see the power of his spreadsheets to help him gauge the amount of money he and his spouse would need to retire, or what their savings rates should be. "Suddenly, you start asking these questions so . . . the need for answers that are independently verified through your own calculations is driving the growth of the project."

When Making Is Better Than Buying

Like P3 with his do-it-yourself spreadsheets, some interviewees resorted to making things when items they had purchased were somehow deficient. Before he began tying flies, P5 had a habit of taking a handful of $2-to-$3 readymade flies whenever he went fishing. "Right there you've spent, you know, $25," he said. "And when you're not very good in the beginning, half of them end up stuck in rocks or on a tree branch behind you." After enough of what he called "$3 casts," he decided he could make better flies more inexpensively.

Cost was only one reason why P28 began making handbags. Before she made her first one, she remembered asking if her spouse would buy a costly bag she had admired in a store for Christmas. When she got it, she was disappointed to realize it was too heavy to carry every day, she said. Making her bags allowed her to tailor precisely what she wanted, from the weight of the leather to the length of the shoulder strap.

Turkey call maker P20 recalled a similar experience. He used a gift certificate to buy an expensive call from a sporting goods store. He stated:

> My thought was, well, if they're charging $85, $90 for their call, it's got to sound so much better than all the other ones. I bought one, and when I opened that thing up and played it, I was so disappointed, because to me it didn't sound any better than that $35 or $40 call that I had.

He deconstructed that expensive call to see how it was made, which eventually led to the first call to emerge from his workbench.

Interestingly, both P20 and P28 were among a handful of participants exploring ways to make money on the side from their projects. Friends had seen what they had made and asked for more. Sharing photographs of their work, often on Facebook and Instagram, heightened the appetite for their handbags and calls. Both were intrigued by the idea of making more of the things they enjoyed creating.

To get to that point often takes all affordances firing on all cylinders. Fortunately, as Gibson (1977, 1979) noted, the lack of an affordance can spur creativity as much as the abundance of it. Costume-maker P7 observed that a lack of money cut both ways for her. "A lot of my creative projects weren't really to do with making anything [tangible] because I couldn't afford . . . to buy the materials." For her, the lack of financial means was not a detriment. "Somehow even if you can't afford that thing, then there is this other thing that is also possible," she said. Finding that possible "other thing" is one characteristic these makers, to greater and lesser degrees, all had in common.

Summary of the Qualitative Results

The meta-codes of creativity, identity, and affordances were chosen to address if and how they interact to make a person feel creative. While participants in the present research spoke knowledgeably about creativity and identity, they were particularly voluble about how affordances affected their sense of themselves as everyday creators.

If their stories indicate anything, it is that the circuits affordances travel in are so dense they are at times impossible to tease apart. Narratives often eloquently described how, money affords materials, materials afford techniques, techniques afford time, and so on (Moeran, 2014). Indeed, in more than a few anecdotes, money, time, space, representation, materials, and social networks attracted each other like so many electromagnets; when that happened, Moeran's model (Figure 6) hummed to life.

Fortunately, the group was forthcoming and surprisingly cohesive on enough aspects of creativity, identity, and affordances that several themes emerged. For instance, participants had a great deal to say about creativity, which reiterated the results of the Creative Identity Questionnaire. Together, they voiced an opinion that creativity is a common human trait, and they often linked it to the projects they were making. They found inspiration in cities and other people and enjoyed the expansiveness of inspiration and the comforts of their senses.

Participants spoke of their creative identities as a reflection of the things they made as well as the reactions of others and credited formal and informal education as important in helping them see themselves as makers. Whether they felt creative as children or as retirees, they seemed to agree that any age is a good one to make something.

When they addressed affordances, they often appeared to grasp Gibson's (1977, 1979) distinction that affordances (or the lack thereof) can instigate action. Accordingly, their thoughts about representation—and they were thoughts, owing to my revision of the concept—grasped that finding one's way as a creative being sometimes meant stepping out into the world and at other times retreating. They found both succor and conflict within their social circles; were both shaped and discouraged by materials and techniques; and found and lost time, space, and money. In short, they covered a gamut of thoughts, emotions, and memories to make connections that informed this research—and sometimes themselves—about what it means to be a creator.

Supplementary Analysis: Agency Ascending

The interview transcriptions provided one flow of information for this study. They were, however, hardly the only source of insight. My case summaries, initially made as notes to myself as I began processing the interviews, proved helpful in finding related concepts that complemented the narratives. Moreover, they pointed to an important supplementary direction in the present research.

As I did with the narrative analyses, I followed Kuckartz's (2014) direction for the case summaries; he suggests that they align with the original texts and remain factual rather than interpretive. To that end, I began each one with a quote that seemed to me to capture some essence of the interview and continued with a thumbnail word sketch of the main points of the participant's story.

For example, this is the case summary for spreadsheet maker P3:

Quote: “I think part of the appeal of this spreadsheet is everything is working out in the spreadsheet. It’s not necessarily working out in other areas of my life in terms of satisfaction with a job and just pressures and family. I don’t know that I’m accomplishing anything every week as I dive into this thing but it is an escape, and it is this grasp of at least *this* is going to work for me."

Note: P3 is a 50-something man in the US whose creative pursuit is developing software and spreadsheets that track the financial status of his family. He talks about how his experience growing up in a family under financial straits contributed to his drive to make these plans. He also talked about how, while other people might not feel they’re classically creative, his projects bring him a great deal of satisfaction and confer peace of mind.

I envisioned these matter-of-fact summaries solely as organizing tools for the project. Because I created a deductive framework to explore research questions focused on identity, creativity, and affordances, it might have seemed that the organizing tools were no longer needed once I completed the lengthy interview analyses. Indeed, I only reviewed the 42 summaries on what I considered the back end of the analysis just to be sure I had covered all the thematic bases.

Mapping, I decided, would graphically cross-check the themes that emerged from my case summaries. In June 2017, I used a mapping tool in the software to plot the themes; unsurprisingly, most of them fit into established categories. Eight of them, however, did not. Phrases in my notes such as “determination,” “discipline,” and “intent” could not neatly align with any of the categories, even the interior-focused representation. After consulting with my peer reviewer, I determined that these eight

words—and the concepts behind them—fell under the heading “Agency” (See Figure 14).

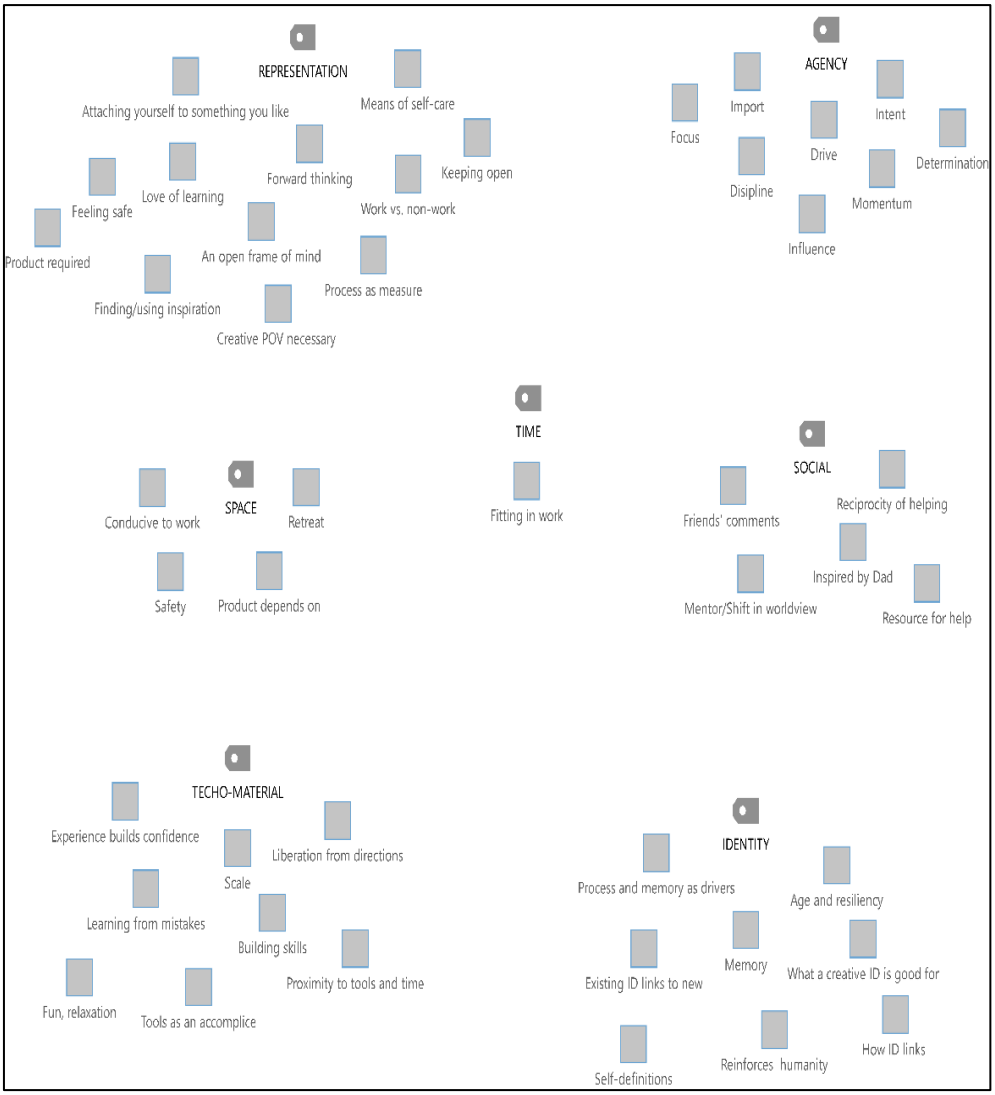

Figure 14. Case memo relationship map. This rough iteration details the themes of the memos I wrote to organize the interviews. Most of the phrases and words related to established categories, except for those in the upper right-hand corner under Agency.

The Case for Agency

The category of agency immediately seemed to accommodate an implied aspect of affordance theory that could also be useful in parsing creative identity. I have already noted that affordances invite agency if they are perceived by actors who reflexively decide to engage with them (Withagen et at., 2012). A more compelling reason to include agency in this analysis comes from those who call for heeding the social contexts of creativity: Dalton (2004), Joas (1996), Bourdieu (1984, 1993; Bourdieu & Wacquant, 1992), Williams (1972, 2011), Hallam and Ingold (2007), and Amabile (1996) among them. Furthermore, in his sociocultural model for an affordance theory of creativity, Glăveanu (2012) describes the "intentionality of the actor" (p. 192) as having a bearing on the inherent creativity of a product.

While my case summaries prompted me to create this category which led to a second review of the transcriptions, the words that instigated the summaries came from the participants themselves. Indeed, their insights indicated that if affordances invite agency, agency invites makers to make.

Several participant comments on agency have already appeared in this chapter. For instance, discussions from P1 and P10 about focus appeared in the section about spatial affordances. P30 mentioned influence while she spoke of social affordances, while P3 spoke of drive in the same section. These passages and others suggest the interchanges that exist between affordances and agency.

Agentic motivation

That relationship also surfaced in parts of participants' narratives that did not fit so neatly into categories of affordance. In discussing motivation, sashiko maker P4

was not only speaking about its effect on her, but those with whom she works: “I think it’s like lighting the gas line,” she said, “because once you get the right connection . . . you get a source of momentum and things just happen.”

Conversely, if momentum is missing, nothing much at all will transpire, costume-maker P7 said. She recalled the stalled progress of a project she began shortly after moving into her first flat: “I didn’t do anything, really, after that for quite a long time because it just took me so long. I was a bit discouraged,” she said. “I was really pleased with the finished product, but it took me a long time to find the motivation to finish it.” Her remark touches on several affordances, most obviously time and representation, with space being implicit. The motivation that comes at the end of the quote bears the stamp of agency, of doing something in response to or even in spite of those affordances.

Commitment and intent

Landscape painter P21 talked about how his new studio freed him from the self-imposed pressures of housework while painting at home. “It’s really allowed me to solely concentrate and be as productive and committed as I can be,” he said. Similarly, P17 was galvanized by a new, classically derived direction in her flower paintings: “I’m taking it very seriously now. Nothing’s in my way,” she said.

Facing down the affordances of space, time, and representation allowed them both to more fully apply themselves to pursuing what they said they wanted to do with their work. Their agentic responses did not bear the inner direction of representational affordance; instead, they both expressed a reflexive move toward deeper practice.

The concept of commitment plays into that of intent. Songwriter P16 described it regarding performance:

> It doesn't matter what song it is, there's only one way to play it, and it's out there, and you have to find it. That's where the right technical bits, the right intent, the emotional commitment to the song [come together]. In some respects, some people would argue that performance is part of that—finding that one song and playing it right. But for me, the performance is completely wrapped up in the intent.

In his telling, intent—like focus and drive—is not a choice so much as it is a compulsion to create. For him, intent was the locus of making music.

Discipline and determination

Embroiderer P10 described the necessity of intent when she discussed the independence she experienced after she moved to London. "The fact of not having a structure gives me the freedom to make choices, and to go in one direction or the other, which needs discipline," she said. "But it is a great gift." The gift could be intuiting that agency requires discipline.

It also requires adequate supplies of determination. Videographer P13 mused about how affordances have intertwined in his experience; he said they never completely aligned for him, but that did not matter. "I think it comes to a stage where I just have to accept that I can't have them all and just make do with that I do have," he said.

Printmaker P9 was more instructive about where determination can lead: "The head needs to be switched on, but it's also more intuition or an emotion that you need to keep up. It's difficult to explain," she said. "I think you do need to do something . . . and it will come." Her account recalls Joas's (1999) contention that creative action might be the way to comprehend agency. Agency, for her and many of the participants

in the present research, was and is a precursor to action, which in turn was and is the antecedent for creative identity.

Conclusions from the Data Analyses

This section of analyses began with a review of the results of the Creative Identity Questionnaire, moved through an interlude that charted the transition between the quantitative and qualitative phases of the present research, and proceeded with a detailed accounting of the qualitative data.

The answers on the questionnaire supported the proposition that respondents did consider themselves to be creative. Indeed, the average scores indicated that respondents considered being creative central to who they are.

In the interlude between analyses, I used the statistical results from the questionnaire to help frame the numerical aspects of the qualitative analysis as well as the codebook reflecting the research interests of creativity, identity, and affordances. Once I had ascertained the creativity of participants, I found it instructive to think of the codes used to analyze the interviews in terms of numbers. The alternative—plunging straight ahead into the qualitative data—would have lacked the depth necessary to adequately digest the descriptions.

By choosing to make things as diverse as dances and drones, or boats and bird calls, and then talking about them to me, these participants offered a window into how they came to think of themselves as creative, and how they continue to think that way. Indeed, their actions—and the way they talked about them—fueled the second round of qualitative analysis.

Affordance theory (Glăveanu, 2012, 2017; Moeran, 2014) seemed to be such a complete way to describe the things that help or hinder the formation of a creative

identity that it was only after a review of my case summaries that I discovered passages from the interviews that discussed agency. I discovered that participants used words that indicated they were very nearly impelled to create. What I found convinced me that agency hides in plain sight very near affordances and the action linked to them.

One of the research questions asked how being creative changes people's lives. The stories told by participants listed a gamut of outcomes, from happiness to frustration, and from open-mindedness to laser-like focus. It was an impressive range from people who partake of everyday creative activities simply because they want to. Or do they?

The man who felt creative as he and his son were playing, P24, said he thought that everyday creativity served a more compelling purpose, one that underscores the sweep of this thesis:

> Very often, there are lots of other things that would take first place in your life . . . The practice of something creative, what difference is that going to make? It's not going to pay the bills. It's not going to keep you your job, of course. However, if you have got the time, the process of doing it is like a kind of food. You feel what it is to be human.

CHAPTER 8

MAKING AND BECOMING: DISCUSSION, INTERPRETATIONS, FUTURE DIRECTIONS, AND CONCLUSION

As envisioned in Chapter 1, this exploratory study sought to address a gap in the literature of psychology, sociology, and anthropology by investigating how people form creative identities. Accordingly, the purpose of this research was to identify the confluence of events and circumstances that resulted in the formation of a person's creative personal identity. Its original contribution to the field sits at the intersection of perception, reflexivity, and the human drive to make things.

The central research questions aimed to get to the heart of the matter by viewing the development of creative identity through the transdisciplinary lens of affordance theory (Gibson, 1977, 1979; Glăveanu, 2012, 2017; Moeran, 2014). By contemplating the internal and external affordances to creativity—how they are identified and perceived, how they are negotiated, and how they change people's lives—the present research intended to recount makers' evolutions toward seeing themselves as creative beings.

This chapter takes the measure of the project and reviews the results of this exploratory study, relating them to the goals for this research stated in Chapter 1. It summarizes the main findings and clarifies their interpretations, contexts, and implications. It discusses the limitations of this research and contemplates directions for future inquiry.

Discussion of Findings

Investigating the multifaceted genesis of creative identity necessitated a congruent method. Because the present research was interested in the experiences people undergo on the way to developing a creative personal identity, a convergent parallel mixed-methods strategy (Creswell, 2014) was selected to allow for the complementarity and corroboration that arises during the quantitative and qualitative phases. The strategy called for simultaneous collection of quantitative and qualitative data followed by interpretation in analysis. It, therefore, encouraged a robust cross-elaboration of the data, as described in the section in Chapter 6 on the interlude between phases.

The quantitative assessment, the 11-item Creative Identity Questionnaire, was guided by the Short Scale of the Creative Self (Karwowski, 2012; Karwowski et al., 2012; in press), which among other attributes measures creative personal identity, the construct of greatest interest in this project. In this case, the questionnaire sought to confirm that participants possessed the creative identities they said they had. In the qualitative segment, participants were asked to make something in their preferred media as an effort to remember what it was like when they first felt creative, a direction that built on empirical research by Gauntlett (2007) and Schön (1992), as well as theoretical work by Malafouris (2013).

Following approval from the Graduate School Board of the University of Westminster, this craft elicitation method and the questionnaire were first introduced to six participants in a pilot project in October 2015. The formal project took place between January and November 2016. Its purposive sampling (Barbour, 2001; Etikan, Musa, & Alkassim, 2016) netted 42 adults—17 men and 25 women—in the UK and the US who defined creativity for themselves and affirmatively answered the question,

"Do you feel creative in your particular medium?" Nearly 40 hours of interviews followed, with makers whose media ranged from making music to getting dressed.

Quantitative and qualitative data were then analyzed using Excel 2016 and MAXQDA 12.1 software, respectively. Quantitative data were analyzed for descriptive statistics, and then the constructs of creative identity and creative self-efficacy were statistically compared. Qualitative data were analyzed in a thematic qualitative text analysis process (Kuckartz, 2014), which called for iterative reviews of the interviews to identify coding categories and subcategories.

Summary of Results

Quantitative Segment

Independently verifying that participants felt they had creative identities was obviously useful in addressing the research problem. After all, if these people did not feel they were creative, how could they describe their creative identities?

Taking the questionnaire was optional for participants. The 30 who did complete it had scores between 4.17 and 4.55 out of a possible score of 5 on questions relating to creative personal identity. As a group, they clearly regarded themselves as creative.

Subsequent analysis involved the creation of indices for raw scores and a Pearson product-moment correlation coefficient for examining the relationship between creative personal identity and creative self-efficacy. While not central to the present research, a moderately strong correlation between those two constructs was noted.

Comparative Segment

An interim phase between the quantitative and qualitative segments suggested by Creswell (2014) eased the transition from numbers to words. Making preliminary transcriptions and formatting the text revealed important passages. In turn, these precipitated memos and other research notes, often about the prevalence of creative affordances (Moeran, 2014) in the interviews. Periodically returning to the research questions yielded the meta codes of Creativity, Identity, and Affordance and various sub-codes: Physicality and Inspiration for Creativity; Education and Age for Identity; and Time, Space, Money, Techno-material, Social, and Representation for Affordance. Three constituent sub-codes—Family in Social, and Far and Close in Representation—emerged from the repeated reviews.

This phase also allowed for a consideration of the code counts that emerged from the review of the texts, which encouraged congruence between the quantitative and qualitative segments. Nearly 5,000 segments were coded.

As a means of further probing the research problem, this phase was informative in that it encouraged a reflexive examination of what was known about the project that helped bridge what had yet to be analyzed. Thinking of the codes in terms of their sheer proportions was a critical step in coming to see which creative affordances loomed largest for the participants.

Qualitative Segment

While this part of the project held the core answers to the research questions, condensing the data demanded clear analysis. In general, the density of qualitative

research often makes summarizing it a challenge. This project was no exception, largely because of the intertwining nature of creative affordances.

Indeed, as Moeran (2014) hypothesized, affordances occurred in circuits—at least, participants in the present research described them in that way. When they talked about money, for example, they were also discussing materials or space. Likewise, when they mentioned the role of friends or family, they occasionally also broached the subject of time.

Other affordances were often bundled into their remarks on representation. The category that was most frequently coded was enlarged from its original aesthetics-based definition to one that included participants' judgments about what they made as well as how they went about making. Moreover, their discourses regarding identity and creativity were also interwoven with their stories about writing novels, for instance, or shooting videos. That said, themes emerged from each of the categories that aid in distilling how participants understood the interplay of their media, affordances, and creative identities.

Creativity

While participants for the most part discussed creativity outright in implicit terms, their descriptions of it affirmed Gauntlett's (2011) predominantly social/individual view, the working definition of creativity for this project. Participants saw it as contextual, iterative, and integral to their beings. They spoke of sharing their work with others, of stretching their conceptions of the creativity in their social networks, and of the self-reward that comes with such generativity.

Participants linked creativity to experience as well as product and frequently characterized it as a way of knowing the world. Some felt creative when they first

began working in their media, while others noted feeling creative only after they had logged hours of practice to master technical intricacies. Many participants expressed the opinion that their efforts fulfilled an inner need to express their creativity. For most, this resulted in generativity, though at least one participant described the creativity that came from destroying something.

Participants also referred to the effects of inspiration and the physical aspects of creativity as having some bearing on their creative identities. Inspiration was, for some, a by-product of creativity. They cited people and places as fueling their ideas for projects to come. Others mentioned how the physicality of their media—playing music or dancing, for instance—gave them the momentum to keep creating.

Identity

A number of participants saw themselves as what might be described as pan-creative—that is, rather than strictly classifying themselves as a photographer, a drone-maker, or a mimic, they considered themselves creative at heart. While their participation in the present research required them to identify one pursuit to discuss, for many people, making in general seemed to reinforce their opinions of themselves as creative. The expansiveness of creative identity could explain why some of them could shift from one pursuit to another without looking back.

Some participants told stories of having friends or family spontaneously confirm their creativity, which stoked their creative identity. Indeed, some considered the propensity to make things a tradition in their families.

School was often mentioned as instrumental in building participants' sense of themselves as creators. School assignments often conferred expertise, as was the case when the people in the study became familiar with tools and techniques. Carrying such

expertise a step further, other participants were able to raise their grades by applying creativity in drawing or writing, even in non-related subjects.

Others learned their creative pursuits via social media, particularly YouTube. Proud of their ability to teach themselves something new, a few participants said that learning to make things had an effect that set the course of their creative lives in motion.

Age undeniably factors into how people describe themselves, and participants in the present research couched their discussions of their creativity in terms of it as well. From the youngest to the oldest, they spoke of creativity as a way of discovering oneself as well as a way of making sense of the world. Many participants tied their ages to the things they happened to be making at the time. Persistence in making was cited as a benefit of age.

Affordances

Participants understood the construct of affordances, a key construct for this project, but few uttered the word itself in conversation. Used by Gibson (1977) to describe the things in the environment that have the potential to promote or deny behavior, it is hardly a well-known word. Yet those who did mention it observed the ambiguity of affordances as a quality they had encountered. For them, either the perceived lack or surfeit of one could be either positively or negatively affect a creative pursuit.

The sub-codes of affordance—representation, social, techno-material, time, space, and money—accounted for the majority of the codes marked in the analysis of the interviews. While affordances appeared to "intertwine," as one participant called it,

sifting through the interviews for accounts of how they encountered each one helped make them more understandable. Consider:

- The sub-code *representation*, detailed in Chapter 7, focused on participants' interior perspectives of their creative pursuits. It also revealed aspects of their worldview. In more than one instance, participants described the necessity of seeing themselves as creative before they would try to make the things they envisioned. The ability to view mistakes as a path toward innovation was a theme that emerged from the interviews, as was the idea of creating uncertainty as a catalyst for new directions. Participants' conceptions of representational affordances also reflected the idea that making is a retreat from a busy world, and they sometimes offered their products or processes as proof. They also occasionally portrayed the things they were making as being either aligned with or removed from their vision, narratives that materialized in the constituent sub-codes close and far.

- As they spoke of their *social affordances*, participants often talked of making things for others, both as gifts and as more spontaneous ways to connect with people. In turn, making things with other people was gratifying for boatmaker and songwriter alike, although working alone appealed to those who plied solo pursuits, such as pottery or journal-keeping. Formal teachers and mentors as well as family—in this group, particularly fathers—frequently supported participants' creative forays, though they sometimes undermined them. That such obstacles did not

prevent these participants from developing a creative identity speaks to how they were able to turn a lack of support into an affordance that worked in their favor.

- *Techno-material* affordances were often described in terms of quality—especially for tools and raw materials—although some makers were pleased to report pride in working with things they happened to have on hand. Occasionally, however, the quality of tools or media intimidated the would-be makers, who would usually proceed to other, more reassuring, projects. Participants also expressed a sense of fulfillment in developing stores of knowledge about their materials; some went so far as to express a sense of kinship with paper or wood.

- The sub-code *time* reflected many facets: plans, sequences, and deadlines, as well as the personal timelines of each maker and that of their chosen field. Participants were willing to juggle their schedules to accommodate projects, stealing time before or after work and family commitments were taken care of. When they could not find sufficient time, they sometimes refocused by selecting projects that could be broken into small segments or scaled down for portability. Perhaps unsurprisingly, participants were quite specific about the number of days, hours, or minutes each of their projects consumed. Further, a number of them were sanguine about revisiting a completed project after a period of time; some felt it beneficial, while others found their pleasure in their product had diminished.

- Having a proper *space* to work was an ongoing issue for many participants. Many of them managed with outposts in garages, basements, and spare rooms, while others altered their projects so they could work in public. A few of them mentioned the constraints of working with family in the house, though there were some who took the initiative to create new spaces from old after children went to university or when other remodelings were taking place. When space for making was inadequate, participants expressed their frustrations. Perhaps predictably, those few whose spaces were well-tailored for their needs spoke of their satisfaction and relief in having a place of their own at last.

- *Money* affected participants in direct and indirect ways. Not being able to buy tools sometimes forced improvisation. Participants who could buy what they needed occasionally described money as a way to invest in their creativity with tools and raw goods. A few participants resourcefully pressed gifts into service, bartered for equipment, or tapped into the ground for free materials. Even as the lack of expendable resources compelled some of them to begin making things such as sporting equipment and fashion accessories, success with their output sometimes could generate social media fans who wanted to buy their creations. Further, participants reported that the lack of money could be ameliorated by a wealth of imagination.

Supplementary Analysis

Following the formal qualitative analysis, subsequent re-review and mapping of themes from the case studies revealed a number of quotes from participants that broached the matter of agency. Motivation, commitment, intent, discipline, and determination were the words they used to clarify their drive to make.

Participants' observations about agency sometimes emerged from their descriptions of how they negotiated the affordances they encountered on the way to developing a creative identity. Other times, they were simply talking out loud about what makes them want to create.

As a way of making sense of the how affordances influence creative identity, the addition of agency to the analysis of this project was a crucial step. After all, for each participant, agency drove the action that engaged with the web of creative affordances. As the discussion later in this chapter details, that addition is how this project follows Dalton's (2004) call to bridge Joas's (1996) theory of creative action with Bourdieu's account of habitus (1984, 1993; Bourdieu & Wacquant, 1992).

Constructing New Knowlege

In Chapter 1, this study made three proposals. First, it was to be an initial empirical examination of Moeran's (2014) theory of creative affordances. Second, it sought to further work on creative personal identity by Karwowski and his associates (2012, in press) by combining its quantitative thrust with qualitative evidence. Third, it proposed to follow the precepts of methodological fit (Edmondson & McManus, 2007) to gauge the appropriateness of craft elicitation as a research method.

A Web of Science citation search conducted in October 2017 of "Moeran, B. (2014). *The business of creativity: Toward an anthropology of worth*" listed five published works from four authors whose work appeared in *The Journal of Cultural Economy, Ethnography, Human Organization, American Anthropologist, The Anthropology of Work Review,* and *Signs and Society*. One piece was an essay; the others explored economic or organizational themes with ethnographic research of groups as diverse as career rock climbers and people who work in a fashion house. Therefore, the present research appears indeed to be among the first mixed-methods appraisals of the topic. Further, this research was also possibly the first conducted with amateur makers, as the search results as well as Moeran's own work focused on professionals.

Likewise, this appears to be a preliminary mixed-methods look at creative personal identity, a key precept measured by the Short Scale of the Creative Self (Karwowski; Karwowski et al., 2012, in press). As detailed in Chapter 5, the Creative Identity Questionnaire used in the present research was adapted from that tool. The Short Scale of the Creative Self has been used by its authors to help assess creative mindsets (Karwowski, 2014; Karwowski & Brzeski, 2017).

Because creative identity was the main interest for this project, self-efficacy and mindsets, while interesting, were not central to this discussion. The questionnaire was nonetheless useful in verifying that the respondents thought themselves creative. Moreover, combining it with the interviews went at least part of the way toward Karwowski's stated wish (personal conversation, August 5, 2016) that the scale be combined with a qualitative project such as this to explore its robustness.

As far as examining the methodological fit of craft elicitation, several participants claimed the method was helpful in getting them to remember some nearly

forgotten moments surrounding the first time they felt creative. P1 said it had been years since she had thought of the woman who taught her how to knit, but that the memories flooded back when she followed the request to make something and think about when she first felt creative in her medium. Pianist P41 called a few months after the interview to say he had purchased a new piano and renewed his music lessons as a result of participating in this project. During her interview, mimic P42 seemed to make the first connection between her fondness for imitation and her father's encouragement. As noted in Chapter 6, embroiderer P10 changed her creative direction after thinking about what she wanted to make as a part of this research.

To a degree, it was as if thinking and talking about their earlier experiences while they were making something turned a key for these participants. If the experiences of a lifetime of twisting yarn on needles or making chords on piano keys are cumulative, it follows that the way back to the beginning would be through making.

Interpretation of Findings

Arriving at meaningful insights from the findings involves unwinding a skein of intertwined themes. Chiefly, these involve the mechanics offered by affordances in general, and representation in particular, and how affordances coalesce with action and agency to apprise creative identity.

Affordances Realized

The most obvious finding was that each interview revealed how affordances influenced the way each participant worked, with the implication being that each story traced the winding path toward creative identity.

That the way forward was seldom direct, at least in the participants' telling, could be because of the inherent ambiguity of creative affordances, as well as the way they tangled together in participants' narratives. Each participant met these challenges in different ways. Regardless, the strength and intensity of the narratives described in compelling terms how these people engaged with the affordances they encountered and how the affordances influenced the eventual outcomes in terms of present identity and future projects.

Occasionally, these encounters were directly addressed. When painter P21 described how his cancer diagnosis paradoxically gave him more time to paint and improve his technique, he actually used the term "affordance intertwining." It was a particularly insightful characterization of the Jenga-like way the affordances of time, money, space, technique and materials—as well as his sense of them—came together for him when he was ill.

Likewise, when mimic P42 joked about how affordances collide when "you've either got a lot of one and a complete lack of the other," she was working through her understanding of them in terms of her experience. She was more than familiar with feeling pressed for time and cash, she said, so she could see how they would affect how she felt about her potential. Even though those affordances did not directly factor into her creative pursuit, the way she perceived their universality made an impression.

The Persistence of the Interior Landscape

Indeed, her internal association was an example of the importance of representation, as the term was operationalized in this project. As a means of identifying how people perceive and evaluate affordances, representation goes a long way toward understanding the ways people deal with what circumstances cast before them. Simply put, representation helps explain the dynamic properties of people's perceptions of affordances, as well as how they react to the psychological, social, and cultural circumstances they find themselves in. It also provides a focus for how they might challenge and ultimately break the constraints placed on them not only by habitus and field but their own self-imposed psychological and cultural inhibitions.

As such, the perceptive aspect of representation is why people can "see" how affordances affect them in the first place. Yet the perception of this affordance is particularly malleable. Participants often brought up how their sense of what they were making changed over time. To be sure, embroiderer P10 and cupcake maker P25 talked of initiating change when their initial creative pursuits failed to align with their internal assessments. What was the disruptive mechanism? It appears to have been reflexively weighing their progress against what they felt they should be doing.

Viewed in this light, their narratives further the case that representation is an affordance that easily accommodates the way it was construed in this project. As such, it moves beyond the uninvented, unperceived, and unexploited aspects of Glăveanu's models (2012, 2014) to assume a transdisciplinary role in how people decide to take advantage of or reject outright the offerings of the other affordances.

A Framework of Affordances-in-Action

From the narratives shared by participants in this project, then, Moeran's (2014) diagram of the circuits of affordances is sustained, and we can see that my broader definition of representational affordances serves the model well. The circuitry of enabling and constraining factors changes constantly and must be renegotiated every time a maker creates.

This renegotiation is the action that Joas (1996) valorizes. Situating affordances within action aligns with Gibson's (1977, 1979) contention that value-neutral affordances lie in potentiality until they are perceived and acted on. It is also congruous with Letiche and Lissack's (2009) declaration that affordances draw people into action.

However rich with affordances, though, action alone insufficiently describes how a person goes from making something to developing a creative identity. Enter agency, the motive force that propels people to action. As noted in the previous chapter, participants in this project spoke of agency in terms of focus, influence, motivation, commitment, intent, discipline, and determination. It was neither action nor self-efficacy they were talking about, exactly, neither potential nor ability. Rather, it was the intention of creating that drove them into action and the inevitable interchange with affordances.

The outcomes of that action lie well beyond tangible products. Each encounter with affordances clearly colored participants' judgments of themselves as creators. As cases in point, recall that both origami maker P33 and family bandleader P37 mentioned how important it was to them to be able to envision being able to make a project before they attempted it. Every project stretched their sense of what was

possible, in a way reminiscent of Williams's (1972) description of the construction of knowledge as "grasping from the known to the unknown" (p. 212).

That "known-to-unknown" pattern is also a useful way to think about how people construct creative identities. For the amateur makers who participated in this research, every creative episode—from the first agentic flicker to try something to the active negotiation of affordances—builds creative identity, regardless of the success (or failure) of the resulting product.

In the next attempt, agency may be modified slightly or significantly, informing the action and affordances as they shape identity. Like the tire swing maker described earlier, their repeated evaluations determine whether the next project is daring and more difficult or stepped-back and simpler. Certainly, for people like these who already claim creative identities, there is always a next project.

Figure 15 graphically represents this iterative process. Within the spheres of psychological, social, and cultural contexts, an individual maker capitalizes on her or his creative identity to engender agency. From the drive to make comes the action that brings forth the affordances of time, space, money, materials and tools, social connections, and representation that are inevitably confronted. The combination of action and affordances sparks the person's reflexive filtering of structure and agency. As creative identity is thereby informed by making, agency obtains adequate information to drive the actor's efforts forward, and the cycle repeats with the next creative act.

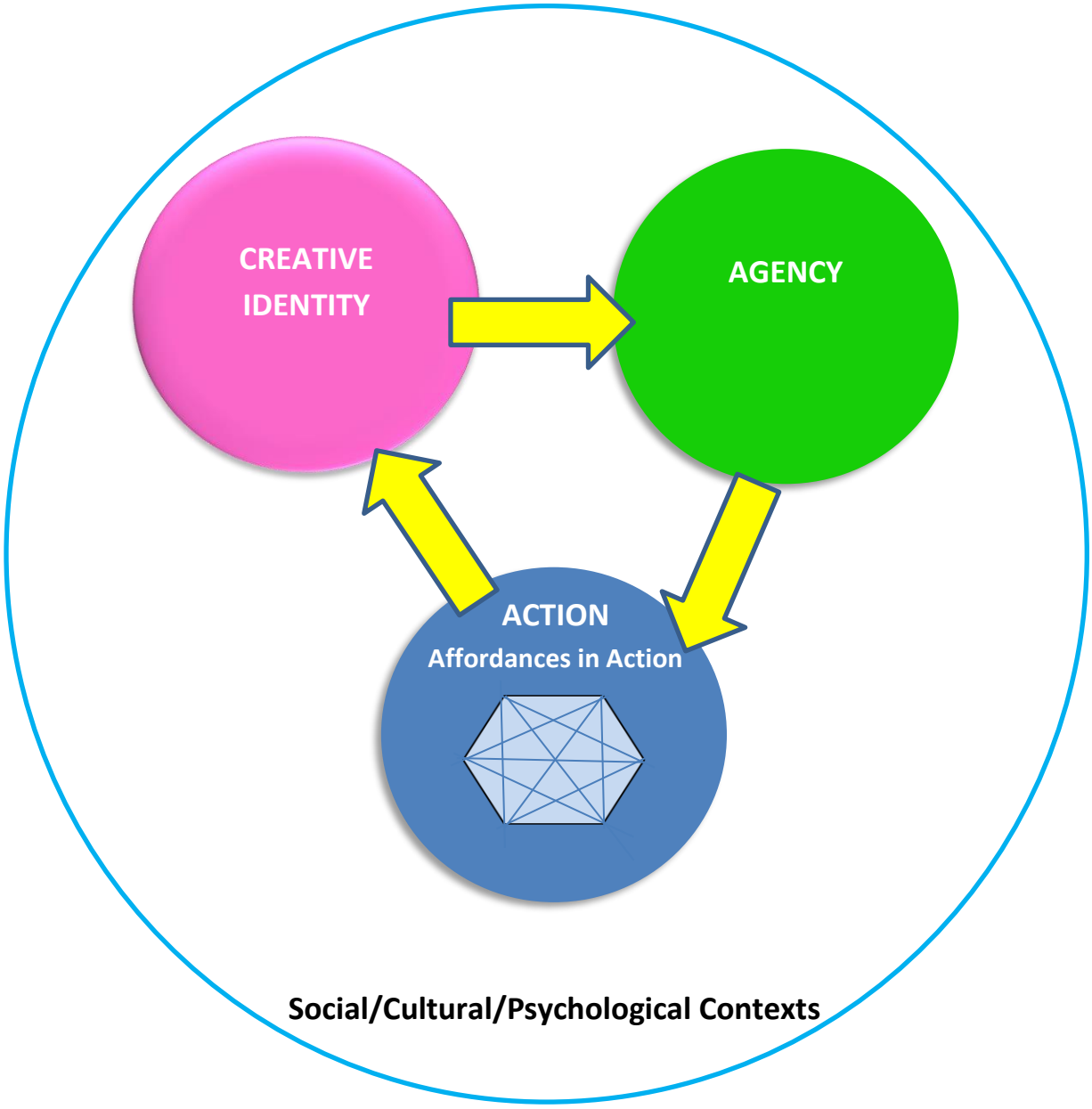

Figure 15. The Affordances-in-Action model describes the continual interconnectedness of creative identity, agency, and action situated in the contexts of sociology, anthropology, and psychology. The circuits of affordances embedded in action require renegotiation with every encounter.

Besides drawing on Moeran's (2014) model of creative affordances, the Affordances-in-Action model also incorporates precepts from Dalton's (2004) sociological grafting of the work on action from Joas (1996) with aspects of habitus, field, and practice from Bourdieu (1984, 1993; Bourdieu & Wacquant, 1992). The model additionally assimilates aspects of Douny's (2014) remarks on subjectivity as a product of everyday practice and cultural transmission as well as Giddens's thoughts on reflexivity and identity (1984, 1991). It illuminates the lack of demarcation between rationality and intuition in the service of creativity that Negus and Pickering (2012) suggest, and it is as valid for rule-bending bricoleurs (Lévi-Strauss, 1966) as it is for creators who work within the tight prescriptions of tradition (Glăveanu, 2012).

These antecedents helped delineate the model, while its emphases come from participants themselves. As creative people who worked in specific métiers, they regularly experienced the agency to try a new technique, material, or approach. In action, they confronted the affordances that faced them. They evaluated every selection they made throughout that action—and often continued doing so even after the process was over—thanks to the way they negotiated the affordances of representation. Whether positive, negative, or in-between, the results fed back into their creative identities and informed what happened when they made the next decision, the next project, or the next series. Essentially, these makers made things to keep making things. Chief among those things is a creative identity.

Context and Implications of Findings

The theories raised in the present research can be thought of as multiple branches in a sprawling family tree. Because it sought to explain how people begin to see themselves as creative beings, this project reviewed various psychological,

sociological, and anthropological theories that could contextualize likely answers. From there, it examined systems theories that to some degree blended the three into cohesive models. Then theories of identity and affordances were scrutinized before focusing on the specifics of creative identity (e.g., Glăveanu & Tangaard, 2014; Karwowski, 2012; Karwowski et al., 2012; in press) and creative affordances (Moeran, 2014). While this project can legitimately claim to be their theoretical heir, it has also inherited the DNA of the sometimes-knotty trunk from whence creativity study grows.

From Theoretical Parts, a Whole

This research was strengthened by looking for and finding commonalities in fields that often do not speak one another's language. Knowing about creative cognition (Finke, 1996; Finke et al., 1992) and creative metacognition (Flavell, 1979; Hargrove, 2013) helped me make sense of identity construction (e.g., Giddens, 1984, 1991). Seeing how Dalton (2004) envisioned action alongside habitus, capital, field, and practice (Bourdieu, 1984, 1993; Bourdieu & Wacquant, 1992)—as well as how those related to the mechanics of Sternberg and Lubart's (1995) investment theory—inspired me to look for further connections. I began finding them in many places. From worldview (Gabora, 2000; Koltko-Rivera, 2004) to self-efficacy (Bandura, 1997), I contrived to piece together a narrative of my own that cultivated constructs from diverse fields. It provided me with the broad context that became useful in analyzing the narratives of participants.

Throughout the reporting of this project, mention has been made of how participants' stories recalled various theoretical points mentioned in the review of literature. When painter P5 talked about destroying a clock to see how it worked, for example, she seemed to summon the phenomenological spirit of Csordas (1990) and

Merleau-Ponty (1962). Similarly, for boat-maker P23 the subtext of experience, time, product, and process was just as apparent in his story about a chest he had just made as it was in Ingold's (2010) theory of textility.

Working from broad themes to those that came closest to explaining how people perceive their internal and external affordances to creativity served to make me aware of the sedimentary effect of building knowledge. Psychology, the discipline that still undergirds most creativity research, cast its precepts onto sociology. Together, they influenced my reading of anthropological and systems theories of creativity. Certainly, by the time I began constructing the case for Moeran's theory of creative affordances (2014) and Karwowski's (2012; Karwowski et al., 2012; in press) work in creative personal identity, these layers had laminated in such a way that their commonalities were more apparent than their individuation. In other words, my perception of the theories I employed framed how I engaged with them as affordances.

Empirical Entities

The empirical research studies in the field that were most helpful to the present research all examined creativity and identity, and some used inspiringly innovative methods to do so. Glăveau's (2012) multi-modal research into Romanian Easter egg decorators was instructive in the ways that it viewed a culturally important creative pursuit through social and psychological frameworks. Likewise, analysis by Pachucki et al. (2010) of college students' creative pursuits incorporated the self-reported creativity precedent and narrative analyses also used in the present research. The studies of the Short Scale of Creative Identity (Karwowski, 2012; Karwowski et al., 2012; in press) rendered useful insights into the instrument's validity. Certainly, Moeran's (2014) report of the affordances faced by magazine editors, advertising art

directors, photographers, and others in Japan was also an important antecedent to this research.

That said, more than any other empirical work, this project owes much to Gauntlett's (2007) trio of studies that asked people make drawings and Lego models to promote thought and talk about identity. My research and his look at everyday creators, and our research designs and procedures were similar.

There were some significant differences that distinguish this work not just from that of Gauntlett (2007) but also from the other studies mentioned previously: This project involved people who make a variety of things, rather than a single medium, and they were interviewed one at a time in a mix of in-person and online formats. Moreover, the questionnaire that many participants completed substantiated their claims to creative identity.

Nonetheless, the precedent set by Gauntlett (2007) remains relevant to the present research. Not only did his work presage craft elicitation, it involved participants in various forms of making which stretched the boundaries of what media research can be far beyond the confines of print, broadcast, and even online. That, in turn, helped frame this project and its open-ended consideration of media so as to be worthy of academic exploration.

Significance and Implications for the Field

With regards to advancing the research methodology, this study introduced the method of craft elicitation. It was a valuable means to solicit reflection. As such, it joins projects (e.g., Gauntlett & Holroyd, 2014; Holroyd, 2017) that encourage creativity researchers to involve participants in pursuits more active than answering surveys. Moreover, by recruiting adults from a diversity of backgrounds, nationalities,

and ages, who worked in a variety of media, this project provided real-world insights that might not have been available through other means with more narrow populations.

The implication that agency is a key element in the ongoing construction of creative identity could have significant import for any group that studies creativity. As it echoes Gauntlett's contention that media curriculum should incorporate making as a means to bring insight (2016a), the present research could embolden teachers in higher and primary education, people who work in creative industries, and of course, everyday makers to do just that.

All of those groups seek to understand what they do and why they do it. Enlarging the remit of media studies to go beyond conventional producer-and-audience models could encourage students and professionals alike to think openly about all kinds of media as vehicles for action and reflection. As such, this research has the potential to encourage a broad range of people to think of themselves as media producers, regardless of the medium at hand.

The research could also hold important implications for the sector that produces the materials and tools makers buy. The affordance-in-agency model could exert considerable influence into market research for the sector. Such insight could not only clarify how makers use their wares, but a clearer understanding of how their end users turn those products into things that promote creative identity could also highlight trends that point the way into new products.

Knowledge about the affordances of creativity could have positive ramifications for people who feel blocked or frustrated in their creative pursuits. By framing the supports and barriers to making in a way that acknowledges their ability to be worked with and through, people could be freed to make things more readily and step into the world with more robust, intact creative identities.

In Chapter 1, it was noted that a preponderance of creativity research examines the products, processes, and environments of eminent creators. Such a line of inquiry is important because it illuminates how and where highly accomplished people produce breakthrough ideas and items.

The disadvantage of such concentrated study, however, is that creativity is not the sole province of the eminent. To that end, the present research addresses the gap in the literature identified by both Amabile (2017) and Karwowski (personal conversation, August 5, 2016), who indicate that one of the most important directions for new research in the field is examining the actions and motivations of everyday creators.

Discussion of Limitations

In Chapter 5, the constraints of the present research were identified. Under the duress of analysis, did those constraints change?

My previously disclosed biases—most importantly, that I construe creativity to be a value-neutral, universally distributed human trait influenced by psychological, social, and cultural contexts—remain intact. I would go so far as to say that these biases, which were developed over a career of interviewing creative people, have become even more ingrained in the commission of this project.

If anything, though, being aware of my own preconceptions and prejudices about creativity shaped the self-awareness I sharpened during this project. Further, it made me sensitive to the possibility of observer bias. I, therefore, tried to remain cognizant of both the text and subtext of what was being said in the interviews and stayed alert to unexpected insights. Indeed, my repeated reviews of the data, which always returned to the research questions, became object lessons in staying open to

surprises. The discovery of agency in the interview memos was an important case in point.

Interacting with participants, I tried to minimize potential observer effect in two ways. One was by involving them in craft elicitation. My thinking was that participants would become so engrossed in making that their attention would focus more on what they were doing than on what they would say when we talked. The other was to employ the first precept of high-yield interviewing: Spend enough time in conversation, so the somewhat artificial, awkward beginnings of an interview fall away into a thoughtful exchange. I believe the depth and range of the interviews resulted from the combination of these two tactics.

Other inevitable limitations, including those that dealt with how those interviews were captured, were dealt with as straightforwardly as possible. Transcripts were created as soon as possible after the interviews so that the tone and ramifications of what was said were top of mind and could be reiterated if needed. By using the software to capture insights both verbally and graphically—as in the case of reviewing key concepts from participant memos—I sought to mitigate the shortcomings of engaging with the software in a single mode.

Perhaps the most apparent limitation of any investigative mixed-methods research project is its lack of generalizability. This study was undeniably exploratory, and its sample of everyday makers, no matter how carefully selected or interrogated, could hardly be expected to speak for all creators.

Its greater utility might lie, as Glăveanu (2017) suggests, in how it offers a more finely-grained portrait of the layered relationships that constitute creative identity. For that reason, the Affordances-in-Action theory that emerged from

participants' insights into the nature of creativity and identity could be found to have the potential to ameliorate the absence of conventional qualitative inferences.

Directions for Future Research

Several matters arose in the commission of this project that point to a diversity of ways forward. Clearly, one additional direction would be to examine the role of creative self-efficacy in how people form creative identities, particularly since it was analyzed in the Creative Identity Questionnaire as well as in the Short Scale of the Creative Self (Karwowski, 2012; Karwowski et al., 2012; in press). Although this research takes the position that creative identity is separate from creative self-efficacy, it could be that creative self-belief plays some part in a maker's transition from identity to agency. While Karwowski and Brzeski (2017) have begun to investigate this possibility quantitatively, qualitative inquiry would complement and deepen any potential answers.

Another avenue for exploration would involve more closely following Moeran's (2014) lead and interviewing professionals who see their work as creative. Doing so would approach a concern voiced by P26, who found creativity in making quips. "Everyday creativity, which allows you to do something without any great risk to your livelihood or your existence, is fundamentally different [than the things you do at work]," he said. In what ways might the realities of competition, compensation, and market forces affect the way affordances interact with creative identity and the agency to create?

As noted earlier, Moeran's work on creative affordances (2014) qualitatively looks at situations among media and culture workers in contemporary Japan. Perhaps further mixed-methods research involving creative organizations in a number of

countries would present a fuller picture of how their employees negotiate the affordances of time, space, money, technology and materials, social networks, and representation.

Alternatively, research could be conducted with amateur makers working in a single medium, perhaps with participants of a narrower age group than those in the present project. Such an approach would provide a closer focus of the ramifications of specific techno-material affordances, or the permutations of making that come from the accumulation of knowledge over time. Furthermore, a similar project could be attempted with high school and university students to assess the fitness of the Affordances-in-Agency model with everyday creators who lack experience of the makers in this project.

Reflexive Points

Participants devoted hours crocheting, sewing, making videos, and painting—among other things—in the service of this project, in addition to the hours they spent talking about how and why they make. What, then, is the key insight of their efforts? Simply put, there is not a moment when creative identity is born. It is an ongoing process, and for people who create, life is filled with such moments.

Consider that participants in this project all professed to having creative identities, and tested well on an instrument aimed at assessing the strength of those identities. While many of them could remember making things in childhood—including card-maker P27, who had sketchbooks she drew in as a toddler—none could precisely identify when they first felt the mix of astonishment and satisfaction of realizing they had brought something new into being. No one could quite put a finger

on the initial time they thought, as Gauntlett put it, “Here I am” and “I made this” (2014, para. 7).

As it turned out, that mattered less than the fact that they could say, “Here I am” and “I made this” the day or the week before we spoke. Indeed, they often expressively told of how making had given them a sense of self, and fondly detailed the wonder of the elements of a dance they were learning (P36) or the ingredients they used in dinner (P22). Each time they approached the studio or the kitchen was not just one more try at making some new way to move or something else to eat; it was another chance at confirming to themselves and the world that material culture was their culture.

The way forward in many instances was incremental; regard the many Saturdays that P3 spent working on his spreadsheets, or the weekends P23 whiled away with his son in the boat shop. Nonetheless, the cumulative effect was that their creative identities were enhanced with even small steps.

Small steps or large, making was important to them because of its potential to bring joy to themselves as well as to the others in their lives. In negotiating their affordances, these participants found pleasure in devising things for and with others, as well as saving money or time, or finding a space of their own to create in. They also felt the delight of engaging with tools and materials they loved and the comfort of bringing into being something they had only before seen in their imaginations.

Conclusion

In Chapter 1, I wondered about the foundations of creative identity. Diving deep into that topic has been a challenge I have borne from the time that I first began writing this thesis. This conclusion weighs how well it met that challenge, and in so doing, satisfied the requisite demands of any serious academic undertaking.

My mixed-methods research queried everyday creators in the US and UK about how their making contributed to their creative identities. The topic was novel because creativity research, as discussed in Chapter 2, has historically favored querying eminent creators over those who are less renowned. In addition, affordance theory—a key component of the theoretical approach of this project—is a relative newcomer to the field of creativity research and has only just begun to be tied to creative identity. Further, my project yielded a new construct, the affordances-in-agency model which attempts to identify how cycles of agency and action inform an individual's creative identity.

The research method I inaugurated with this project, craft elicitation, is detailed in Chapter 4. The method was innovative in that it asked each participant to make something in her or his métier, think about when she or he first felt creative doing so, and then participate in a one-on-one interview and online questionnaire. It went beyond projects that looked at a single mode of making (e.g., Glăveanu, 2012), those that asked participants to construct metaphors of their identities (Gauntlett, 2007), and those that simply asked people to think about their creativity without making anything (Pachucki et al., 2010)

My thesis posed three research questions: How do the internal and external affordances to creativity influence an individual maker's evolution toward seeing him

or herself as a creative actor? How do people identify and perceive these affordances? How does assuming a creative identity change a person's life?

The answers are explored in depth in Chapters 6 and 7. Briefly, in response to the first question, I discovered that affordance theory offered a potent way of envisioning how the supports and barriers for creativity operated in participants' lives. By confronting the affordances of time, space, money, tools and materials, social networks, and representation in making things, the participants also made and remade their creative identities.

Regarding the second question, participants volubly described how they perceived affordances, and were fluent in detailing the ways they worked within and through affordances. I came to understand that while their narratives were different, they all managed to find various openings in their affordances for the action that is essential to creative identity.

As for how being creative changed their lives, participants frequently offered accounts of how being creative was central to their identities. One went so far as to say that being creative was tantamount to being human, which underscored for me why this research matters.

These findings add to the literature of creativity study with original contributions to knowledge. As noted in the previous chapter, this thesis apparently is among the first mixed-methods examination of Moeran's (2014) theory of circuits of creative affordance. Another contribution is that it complemented the qualitative Short Scale of the Creative Self (Karwowski, 2012; Karwowski et al., 2012; in press) with mixed-methods research. The chief implications of this new knowledge, discussed at length in the previous chapter, give a greater credence to the power of agency in helping forge creative identities.

As a result of my project, further research could take several directions: It could be carried out with professionals or with people who make one kind of thing. It would also be useful to see how circuits of affordances operate within the improvisation that takes place between students and teachers, both in secondary and higher education.

Most importantly, perhaps, the work points the way for new studies that could, as Amabile (2017) proposes, shed light on the internal and external practices of these makers in order to better understand how everyday creators think, work, and burnish their identities. Making things, of course, is the proving ground for that personal transformation.

Participants in the present research were unanimous: When making works, the experience is very good. Yet they were equally clear that even when it goes awry—the print out of register, the fly too obvious, the chord too dissonant—the action inherent in making still manages to imbue the maker with a sense of her or his own humanity.

That feeling is why a creative person heeds the urge of agency and bothers to tangle with affordances in the first place. One makes to feel creative again and again: I make, therefore, I am.

APPENDIX A

Creative Identity Questionnaire

Adapted from Karwowski, Lebuda, & Wiśniewska, (2012, in press)

Directions: The statements below describe various feelings people have about how they experience creativity. For each one, indicate the extent to which **you** feel the statement describes you by clicking on the appropriate dot. The response scale ranges from "Definitely not" to "Definitely yes." There are no right or wrong answers, only your opinions.

Definitely not **Definitely yes**

1. I think I am a creative person.

○ ○ ○ ○ ○

2. My creativity is important to who I am.

○ ○ ○ ○ ○

3. I know I can efficiently solve even complicated problems.

○ ○ ○ ○ ○

4. I trust my creative abilities.

○ ○ ○ ○ ○

5. Compared to my friends, I am not distinguished by my imagination.

○ ○ ○ ○ ○

6. Many times I have proven that I can cope with difficult situations.

○ ○ ○ ○ ○

7. Being a creative person is important to me.

○ ○ ○ ○ ○

8. I am not sure I can deal with problems requiring creative thinking.

○ ○ ○ ○ ○

9. I am good at proposing original solutions to problems.

○ ○ ○ ○ ○

10. Creativity is an important part of myself.

○ ○ ○ ○ ○

11. Ingenuity is a characteristic which is important to me.

○ ○ ○ ○ ○

12. What is your gender?

○ Female
○ Male

13. What is your age?
    - 18-29
    - 30-54
    - 55+
14. In what country do you currently reside?
    - US
    - UK
15. Which of the following categories describes your employment status?
    - Employed, working full time
    - Employed, working part time
    - Not employed, looking for work
    - Not employed, NOT looking for work
    - Retired
    - Disabled, not able to work
16. In your country's currency, how much TOTAL combined money did all members of your HOUSEHOLD earn last year?
    - 0-9,999
    - 10,000-24,999
    - 25,000-49,999
    - 50,000-74,999
    - 75,000-99,999
    - 100,000-124,999
    - 125,000-149,999
    - 150,000-174,999
    - 175,000-199,999
    - 200,000 and up
    - Prefer not to answer
17. Name (optional):

APPENDIX B

Participant Email

[Date]

Dear [Participant]:

Thank you for agreeing to take part in this study about creative people and the contexts they operate in. This letter outlines more about the project and your role in it.

What I'm interested in: I want to talk to people who feel creative in a particular pursuit and find out what helped (affordances, in the language of social science) or held them back (barriers) when they were on their way to becoming creative.

What you can do: Within the next six weeks, you should make something in your medium. While you are making the item, it would be great if you could think about what it took for you to feel creative as a person working in that medium. By the way, it doesn't have to be a whole piece—if your piece is labor-intensive, you might, for instance, complete a portion or even a sample. The main thing is that you make something and think about when you first felt creative.

The reason I'm asking you to make something is that making in itself is a meditation—you will think about your answer while you make your piece. Research indicates that the making process is a way of helping you arrive at a more accurate answer to the questions than if I just asked you to answer off the top of your head.

Next, I would like you take a quick photo of whatever you're working on and email it to me, just so I have a record. A smartphone or digital image is great.

Then I would like you to think about the constraints and encouragements that you had to negotiate before you became creative with what you just made. While you don't have to follow this list point by point, some things you might want to think about could include:

*Materials and techniques
*Space
*Time
*How things look and feel
*Money

*People in your social/family/regional circles

For instance, when you first started [medium], how did you learn about it? Who, if anybody, taught you how? What kind of materials? Where did/do you [make item]? How long do you spend doing it a day/week/month? How long have you been working in the medium? Did making things seem to take longer when you were first learning? How did the way your creations look change over the course of your experience? Were you able to spend more money on materials, instruction, or equipment when you became more experienced? And how did the people around you influence that acquisition of creativity? Who encouraged you? Who thought you should try something else?

You may find that these points are related. If you do, it would be great to know how you think so.

What I'm after: I am looking for the story of your creativity, and how you came to think of yourself as a creative [pursuit]. To do that, you and I can talk in six weeks at [date]. I'll take notes and record our talk. It would be best if we can talk in person in the place where you made your object. If that's not possible, we can talk by Skype or phone, or we can email—whatever works for you.

And at some point between now and our interview, I'd also like you to take a short online survey, the Creative Identity Questionnaire. The URL for the questionnaire is: https://www.surveymonkey.com/r/CreativeIdentity

Some other things you should know: You are free to decline being involved in this study. There is no financial compensation for taking part.

The study offers little inherent risk to you beyond those in everyday life. Beyond the time spent on making and photographing your item, participating in the interview, and completing the questionnaire, the risks are minimal.

I will maintain your confidentiality by storing our interview and your photo on password-protected computers and backing that up with password-protected secure cloud-based storage. The personal details of your interview—such as your hometown or the names of people you mention—will be made anonymous. All interviews, transcripts, photos, and assessments will remain under password protection in my files for a minimum of three years.

I will share information with you about the study as it develops. I plan for this project to be published in a series of written academic reports. I will also document the study

in a blog, “X Makes Y,” which highlights your and other participants’ anonymized narratives and the images of your objects. You and the other people in the study will be the audience for the blog, as well as other creativity researchers and makers.

That’s it! Let me know if you have any questions or comments about this process. I am so looking forward to hearing your story. Thank you for agreeing to share it.

Sincerely,

Mary Kay Culpepper, MSc
Doctoral Researcher
Westminster School of Media, Arts and Design
University of Westminster, UK

APPENDIX C

Anonymized Interview Log

P#	Country	Sex	Age Range	Interview Date	Locale	Length/ mins	Mode	Pursuit
1	US	F	55+	4-Jan-16	Home	65	Person	Knitting
2	US	M	55+	22-Jan-16	Studio	55	Skype	Fly tying
3	US	M	55+	8-Aug-16	Coffeeshop	17	Person	Spreadsheets
4	US	F	40s	4-May-16	Home	47	Person	Sashiko
5	UK	F	20s	17-May-16	School	53	Person	Oil painting
6	UK	F	55+	27-May-16	Studio	69	Person	Crochet
7	UK	F	20s	5-Jun-16	Home	33	Person	Costumes
8	UK	M	20s	5-Jun-16	Home	63	Person	Drones
9	UK	F	30s	8-Jun-16	Coffeeshop	47	Person	Printmaking
10	UK	F	55+	13-Jun-16	Coffeeshop	51	Person	Embroidery
11	UK	M	30s	14-Jun-16	Bar	69	Person	Pop art
12	UK	M	30s	20-Jun-16	Restaurant	32	Person	Poetry
13	UK	M	20s	22-Jun-16	School	32	Person	Videography
14	UK	F	30s	1-Jul-16	Coffeeshop	49	Person	Dressing
15	UK	F	30s	4-Jul-16	Coffeeshop	75	Person	Jewelry making
16	UK	M	20s	4-Jul-16	Restaurant	81	Person	Songwriting
17	US	W	40s	12-Aug-16	Studio	88	Person	Flower paintings
18	US	F	55+	13-Aug-16	Home	30	Person	Crazy quilting
19	UK	M	20s	17-Aug-16	Home	14	Skype	Movie making
20	US	M	30s	19-Aug-16	Home	43	Phone	Turkey calls
21	US	M	55+	19-Aug-16	Home	59	Phone	Landscapes
22	US	F	55+	23-Aug-16	Restaurant	32	Person	Making dinner
23	US	M	55+	29-Aug-16	Studio	27	Phone	Boat making
24	UK	M	40s	2-Sep-16	Home	36	Skype	Playing with son
25	US	F	20s	4-Sep-16	Coffeeshop	34	Person	Cupcakes
26	US	M	55+	5-Sep-16	Home	54	Phone	One-liners
27	US	F	40s	6-Sep-16	Home	43	Phone	Cards
28	US	F	55+	8-Sep-16	Studio	42	Person	Handbags
29	US	F	40s	8-Sep-16	Studio	44	Person	Photos
30	US	F	30s	8-Sep-16	Studio	27	Person	Pottery
31	US	F	20s	9-Sep-16	Home	34	Phone	Journaling
32	US	M	20s	9-Sep-16	Car	36	Phone	Pocket squares
33	US	M	30s	10-Sep-16	Home	36	Hangouts	Origami
34	US	F	30s	11-Sep-16	Home	31	Hangouts	Machine quilting
35	US	F	40s	19-Sep-16	Home	34	Skype	Cartooning
36	UK	F	30s	24-Sep-16	Home	44	Skype	Modern dance
37	UK	M	40s	24-Sep-16	Home	40	Skype	Family bandleader
38	UK	F	30s	5-Oct-16	Restaurant	29	Person	Drawing
39	UK	F	20s	6-Oct-16	Home	44	Person	Baking
40	UK	F	40s	18-Oct-16	Home	44	Person	Novel writing
41	UK	F	55+	20-Oct-16	Restaurant	22	Person	Playing piano
42	UK	F	20s	5-Nov-16	Home	35	Person	Mimicry

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