CHAPTER ELEVEN

CREATIVITY MODELS IN A SOCIETY OF NETWORKS

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Abstract

Many prominent creativity theorists highlight the process of creativity as being a cyclical process between an individual and their social environment. The advent of the digital age has dramatically increased this social environment to create an exponential number of new and diverse spaces for this cycle to take shape. This chapter reviews creativity models and analyzes them alongside the sociology of networks to explore the potential impact on interpretations of creativity.

Keywords: Creativity Models, Society of Networks, Digital Media, Social Media, Social Construction

Creativity Models in a Society of Networks

Digital media platforms are changing the landscape for creativity across the globe by giving individuals unprecedented access to the tools and services needed for launching creative products. That which once required established sponsors, agencies and studios is now increasingly available to individuals on their computers or their mobile devices. Indeed, a variety of software and services have empowered individual creators with the tools needed for the creation and editing of art, outlets for the publication of text, platforms for disseminating ideas, equipment for the manufacturing of products, resources for problem-solving, and even by making funding opportunities more available than ever. Businesses large and small are having to think about what it means to live in a world of borderless inspiration, global collaboration, and international creativity. One platform that exemplifies this international space is Spotify, a music platform that, according to its founder Daniel Ek, is "driving record revenues for the music industry" and supports "more artists sharing in that success than ever before." (Wright, 2022).
    To get a sense of the scope of Spotify, in February 2021 Spotify's co-Head of Music proclaimed that 60,000 new tracks are uploaded to the streaming service every day (Ingham, 2021). That's approximately one new music track every second of every day. Spotify is among the most popular music streaming sites in the world with 456 million users and 195 million subscribers (Spotify, 2022). The site has made sure to increase its functionality by being more than just a place to listen to music, it is also a social media platform with community groups, forums, interactive podcasts, and blogs. It

is a space for individuals and groups of people to share, influence, critique, rank, curate, and collectively decide what is and what isn't creative.

As a social space, Spotify offers a window to the reality of our new networked experiences of creativity. This site, like many similar social sites, has become a primary conduit for many people across the traditional borders and boundaries of time and space to express their creativity. It has also become the place where creative expression finds influence, participates in feedback, and can quickly gain a global audience. Social platforms provide content creators with templates, social markets, and innovative tools for creative novelty. This chapter will consider how the underlying connectivity that digital global platforms like Spotify, Instagram, YouTube, TikTok, and many more create social spaces that disrupt and challenge some traditional models of creativity. The chapter will briefly review two established models of creativity alongside a sociological perspective of networks that accounts for this digital shift, and then offer a discussion on how creativity theorists may interpret these as we look to the future.

Creativity as a Social Construct

The idea that creativity is a social construct is based on the premise that human perceptions are developed in a process of codified social agreements. This is not to suggest that an objective world does not exist or that everything is relative, rather that human perception of objective reality is shaped, nurtured, and continually impressed upon by social systems (Eberle 2019). This supposition draws in part from the sociology of knowledge proposed by Berger and Luckman (1967) better known as the social construction of reality. In this framework, individual perceptions are reciprocally reinforced or challenged by interactions, mostly through codified knowledge that humans have constructed and share in the form of socialization and through institutions. Simplified, this cycle involves the process whereby individual perceptions are expressed as externalization, confirmed or denied by the social world as objectivation, and then accepted by individuals as internalization (see Figure 1). Even more simplified: I see, you (collectively) agree or disagree, then I understand.

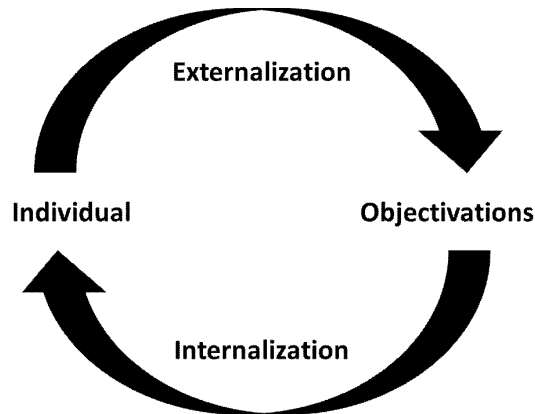**Figure 1:** *Social Construction of Reality process diagram*

Diagram of the three phases of the social construction of reality. Adapted from Social Construction as Paradigm? The Legacy of The Social Construction of Reality (Pfadenhauer & Knoblauch, 2019).

       Though this theoretical framework has often been co-opted by postmodernists to mean that all human perception is relative and there is no collective reality, as a sociological paradigm that is not its purpose. Instead, social construction as a concept is more focused on the collective side of the cycle: the codification of knowledge built over time. Rather than addressing the question of how individuals interpret reality, it is really looking to address how a society collects information about reality and accepts it as real (Hiebert, 2014). This distinction is important to stress because it takes the emphasis away from the individual and moves it instead to institutionalized knowledge that can take the form of culture, religion, and other educational and formative institutions. These institutions traditionally act as the gatekeepers of reality on the right-hand side of the cycle in the diagram in Figure 1. It is through this cycle that we traditionally understand the interaction of individuals with greater human social systems. And it is in recognition of this interaction that many social theories find their grounding.

       Creativity theorists have also grappled with the premise of social construction or constructivism in their work (Runco 2014; Sternberg et al., 2004). In order for creativity to be recognized, it must interact with the greater sense of human reality in some way. How else does creativity stand out if not as a contrast to everything else that exists within a context or culture? As a recognition of this need for social contrast, the systems model proposed by Csikszentmihalyi (2004) suggests that creativity is only discernible within the interaction of three social elements: the domain, the field, and the individual (see Figure 2). In this model, the domain represents the institutionalized social repository as the genre or classification of creative products; the field comprises the gatekeepers or established judges of the products; and the indi-

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vidual is the person acting within. Creativity, thus, is found within the interaction of these three, where at times the individual can persuade the field to change some aspect of the domain, the domain influences an individual, or any other combination of interactions that has an outcome of novelty.

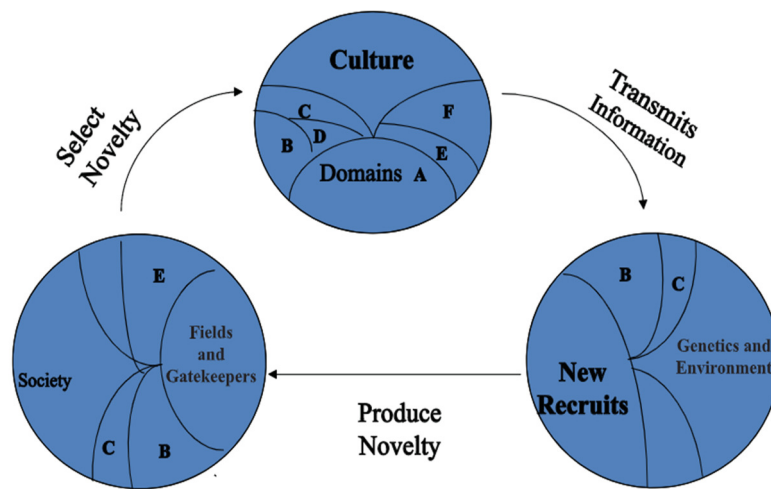**Figure 2:** *Systems Model of Creativity*

Diagram of the systems model of creativity from The Systems Model of Creativity and Its Applications (Csikszentmihalyi, 2014).

Csikszentmihalyi also pays special attention to explaining how institutionalized social entities, in this case culture, play a contextual role as the arbiter of the various domains. He stated:

> The first element is the culture. In this context, I will define culture as the system of learned rules regulating human consciousness (i.e., thoughts, emotions, beliefs, and intentional acts – as well as their products, such as the various technologies developed or adopted within the culture). By 'learned,' we mean here that the rules are not programmed into the genetic instructions we inherit but are absorbed through interaction with other members of society. (Csikszentmihalyi, 2014, p. 538)

In this quote we can understand that though creativity can be perceived as an individual contribution, the Systems Theory recognizes that its expression is only understood within the context of its domain, the influence of its field, and the overall lens and rules provided by culture.

Like Systems Theory, Amabile's Componential Model of creativity also asserts the importance of the social context in recognition of- and as influence to- creativity (Plucker et al., 2004). A simple description of this model proposes that creativity is influenced by three elements within the individual — skills, process, and motivation — as well as by the elements of the sur-

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rounding social environment and organization (Amabile, 2012). Since being proposed as an original theory in 1983, the model has expanded to name several additional social environmental factors like affective states, motivation, and specific organizational contexts, all of which continued to add to the importance of social spaces and influences on creativity, and specifically on creative output (Runco, 2014). Indeed, much of Amabile's research includes the interplay between external and internal factors that allow for creativity and innovation.

The concept of social construction is embedded in the componential model and within Amabile's theorization of creativity. For example, she has stated that her own ongoing definition is "grounded in the assumption that creativity and innovation are subjective constructs, socially bound by historical time and place" (Amabile & Pratt, 2016, p. 158). By adding the anchor of time and place in her definition, Amabile has acknowledged that this interplay of social institutions and contexts contributes to seeing creativity as embedded in the socially constructed situation of the environment. The componential model illustrates this social context as a complex cyclical interplay between organization and individual, and all the components that are factors within. It provides clear conceptualization of the organizational environmental impacts on creative output and has proved instrumental to organizations seeking to foster creative work.

These two influential models of creativity interact with the concept of social construction as an embedded concept for understanding creativity. Each highlights the interplay between individual and social context as instrumental to the expression and evaluation of creativity. The premise of social construction, social systems, and social contexts becomes important as we consider the dramatic changes brought upon us by the opportunities and challenges of the digital age. It is helpful not to consider these changes only as technological or accessibility to content, but as portals to exponentially more social spaces — meaning more domains, more fields, more components, more external factors, and more people. The implications that these exponentially available spaces may have for creativity are, well, exponential.

Networked Shift of Social Spaces

Much research has set out to discover what a digital world means for human experience. Within sociology, the seminal work *The Network Society* (Castells, 2010) provides a helpful theoretical framework to ground this research. Castells describes a transition from an industrial/post-industrial society that was primarily location and time bound, to one that is establishing itself within networks. In the past, an organization or an individual would need to situate themselves in a particular place and mostly operate locally without much access to others outside a physical radius. Moreover, these actors would only be able to operate fully within the bounds of time that allowed for collaboration to occur well. However, in the present and future, these factors are less important (though not irrelevant). In a network society, organizations and people are able to collaborate through the networks themselves and so do not have to be *primarily* concerned about location or time. This framework repre-

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sents a monumental shift from most of time and space bound reality of human history.

Several theorists have expanded on this framework to consider the effects of a networked reality on the individual and group experience of everyday life. Rainie and Wellman (2014) discuss the potential of networked individualism as a direct result of this new social organization. Networked individualism suggests that this societal shift has changed the landscape of social interaction, displacing individuals' own sense of belonging so that now they must act as the center of their own networks (Rainie & Wellman, 2014). Within this conceptualization, institutions lose their primacy in everyday life as the source of human understanding, such that instead of individuals attempting to become part of institutions, institutions are vying to become part of individual networks (See Figure 3). This concept flips the social construction reality concept a bit upside down, where individuals gain a more equal footing in the curating of human experience. While theoretical, this idea raises many questions in regard to the established understanding of social systems.

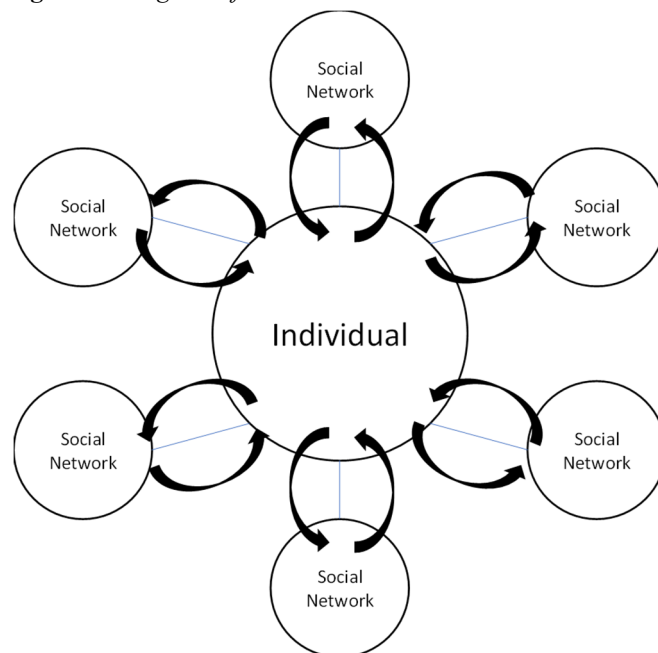**Figure 3:** *Diagram of Networked Individualism*

Diagram of individual as center of a variety of social networks.

Beyond an individual network mentality, Raab & Kenis (2009) proposed that the plurality of networks has actually multiplied to the point that this shift should be called a society of networks rather than a network society. Other contemporary authors studying this new social landscape have also

considered the effects of this flipped social dynamic. Twenge (2006) discussed this multiplicity of networks as disrupting our previous understanding of community and connection, leading to isolation. Turkle (2015) also studied the disruption of traditionally understood norms of interaction and its toll on the human ability to interact. Research into online gaming networks has brought about mixed discussions about whether people are more connected or less connected to increasingly variable social groups (McGonigal, 2011; Barany & Foster, 2021). Certainly, research into the impacts of social networks will continue to be an important part of understanding human interaction in a digitally enhanced world. There does, however, seem to be an agreement in the current literature that networked experiences have disrupted the traditionally understood relationship between individuals and their social spheres.

New Models of Creativity in a Society of Networks

The models of creativity reviewed in this chapter emphasized the importance of social institutions for the process of creativity. Like the sociological concept of the social construction of reality, these models hold that social organizations and institutions play an important role in gatekeeping the collective understanding of creative expression. However, they have yet to factor in the new interactions that come from our societal shift toward networks. In a society of networks, there are more social spaces, and their reach becomes expanded, even global. These network spaces allow individuals access to an increased number of potential social spheres and change the traditional perspective of which social spaces inspire and determine creativity. Furthermore, if the potential of networked individualism is to be considered, networked life has placed the individual as the focal center of their own network, turning the established norms upside down.

This change may require an adjustment in some of our current models on the relationship between creativity and social spaces. In the current models, of creativity is conceptualized in a singular closed loop between the individual and their environment. In these closed circuits, the dynamics of feedback, power, and creation are illustrated as binary and the gatekeepers of creativity have a much stronger position of power. Adding a networked perspective opens and expands this model. Rather than a single circuit that loops from individual to a social entity to individual, a society of networks creates a far more complex field of varying network spaces and open interwoven loops. Individuals find themselves with more power and more options to search for different gatekeepers, challenging the idea that domains can be contained by a singular field. Indeed, even our understanding of "domains" or "environments" may be more difficult to contain within the same defined parameters that have existed up to this point.

While theoretical models have yet to grapple with what this means, in practice, the effects of networked creativity are already widespread. As mentioned in the introduction, platforms like Spotify have individuals developing content at an incredible pace. To increase activity, these platforms are continually designing new production tools and services to encourage creators to develop content. Soundtrap by Spotify, as an example, offers a variety of

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templated tools and options for creators. This service provides music creators with ever-growing libraries, templates, and ideas from which to draw to express creativity. Similar creativity templates and applications are arising across the internet, from Canva to Grammarly, to those embedded in other social creativity platforms. These applications are designed to provide individual creators with more tools to enter platforms and develop content and to further place the individual in the center of their creative environments.

In their examination of these expanding spaces, some creativity theorists like Gardner and Davis (2013) have suggested we will see a rise in middle-c creativity as networks promote more creators, but a potential stifling of big-C output as networks multiply. Because a society of networks diffuses the one traditional environment into multiple, there could be fewer possibilities for singular stars to rise in them all. So even as individuals developing creative content find themselves able to do so more freely, they may find themselves in an even more competitive space. Though individuals have tools that let them reach a variety of audiences and social spaces directly, without having to jump through the hoops of traditional gatekeepers, the lack of gatekeepers may also make the environment itself more difficult to navigate. Moreover, the variety of social creativity platforms opens possibilities for them to create content in multiple environments, while making it more difficult for them to define creativity for themselves.

The disrupted traditional loop between established social spaces and individual creators presents a challenge for creativity models and a potential paradox for creativity itself. As digital platforms continue to pop up and provide new social spaces, the possibilities for creative output grow, but so do the challenges. Without the traditional arbiters of creativity that are present in the singular loop models, who will define creativity, and how will these definitions find traction? Thus, the society of networks brings about a paradox for creators and a challenge for creativity theorists: an expansion of individuality, a plurality of social spaces, a marketplace of infinite resources and tools; but also a virtual wild west, a variety of competing gatekeepers, a deficit in historically established norms, and an over-reliance on templated pathways to novelty. As social creativity platforms continue to disrupt, definitions and conceptions of creativity will need to evolve to become more inclusive of these network spaces.

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