

Bridging, Balancing, and Blending: A Liminal Practice Perspective on Creative Processes in Organizations

Colin M. Fisher
Sarah Harvey
Poornika Ananth
Wen-Xin Xie
University College London

ABSTRACT

Recent research on creative work in organizations has revealed that ideas, creators, and the processes they follow can all transform throughout the creative process. Yet theories of the creative process often treat these entities as static, positing that a particular individual or team moves a particular idea through clearly defined stages of development. This approach has spawned a myriad of theories focusing on the properties of three kinds of entities: particular *stages* of activities (e.g., idea generation, idea evaluation, idea selection); characteristics of *ideas* (e.g., breakthrough ideas, little c-creativity); or *people* who perform the work (e.g., individuals, dyads, teams). In this paper, we instead focus on activities that occur between entities, which we call *liminal creative practices*. We theorize three kinds of liminal practices: (a) *bridging*, which facilitates movement from one entity to another; (b) *balancing*, which creates and maintains separation between entities; and (c) *blending*, which combines separate entities into integrated ones. We focus our analysis on connections within a single type of entity (e.g., ideas to ideas; people to people), developing the unique properties of each practice regardless of the entities it connects. By shifting the emphasis from the properties of entities to the practices that connect and shape them, this liminal practice perspective offers three contributions to the study of creativity in organizations. First, it provides a basis to theorize the ways in which entities and processes co-evolve – that ideas, creators, and stages are changed by the process of working on them, such that one need not assume that the entity at the beginning of the process is the same as the one at the end. Second, it offers an integrative framework for the many new practices that have emerged from recent field studies of creative work in organizations. Importantly, this perspective moves these liminal practices from the margins of the prevailing linear stage model into the core of creative work. Finally, this perspective implies a roadmap for future research by identifying those areas where practices have yet to be fully theorized.

Key Words: Creativity, Creative Processes, Creative Work, Ideas, Groups and Teams, Group Processes

RUNNING HEADER: LIMINAL PRACTICES IN CREATIVE WORK

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INTRODUCTION

How do people in organizations generate novel and useful products, processes, and services? This question is critical for organizations, which require constant streams of innovation and creative solutions to ever-changing environments in which they are embedded. Developing new products and services, or coming up with new solutions to pernicious problems should not be left to chance – scholars and practitioners need to understand the processes by which such creative outcomes emerge. Thus, it is critical for organizational scholars to develop frameworks for understanding how creative work is accomplished in organizations. Despite this, most research on organizational creativity has focused on inputs to and outputs of creative work, studying the personal and contextual factors that make creativity more or less likely to occur (e.g., motivations, emotion, rewards, autonomy, organizational climate; for reviews, see Anderson et al., 2014; George, 2007; Amabile & Hennessy, 2010) rather than the process itself (Anderson et al., 2014).

A growing body of research, however, takes a process-oriented view of creativity (Cronin & Lowenstein, 2018; Drazin, Glynn, & Kazanjian, 1999; Harvey, 2014; Mainemelis, 2010; Sonenshein 2014). This process perspective suggests that organizational creativity research not only should focus on inputs and outcomes, but also encompass the process of attempts to generate useful novelty. For decades, creativity scholars have relied on linear stage models that posit the creative process moves from initially recognizing a problem and generating ideas to later evaluating and implementing them (e.g., Wallas, 1926; Amabile, 1996). Updates of these models have named new stages (Perry-Smith & Mannucci, 2017), provided caveats that different sequences of events may occur (Amabile & Pratt, 2016) or argued that different kinds of creators, such as individuals, dyads, and teams, follow different processes (Harvey, 2014; Rouse, 2018).

Recent research, however, has uncovered two challenges to theorizing the creative process as a sequence of stages for particular creators and ideas (e.g., Coldevin et al., 2019; Long Lingo & O'Mahony, 2010; Sonenshein, 2014). First, the creative process is often non-linear – stages in the theorized process are often skipped (e.g., Fisher & Amabile, 2009; Fisher & Barrett, 2019), repeated (e.g., Harrison & Rouse, 2015) or combined (e.g., Harvey & Kou, 2013). Second, the stages, ideas, and people involved in creativity are dynamic, such that the entities involved are changed by the process itself (e.g., Hargadon & Bechky, 2006; Long-Lingo & O'Mahony, 2010; Sonenshein, 2016).

These insights have prompted only incremental change in the mainstream theories and assumptions about the creative process that underlie organizational creativity research. We argue that new findings have been difficult to integrate with the prior literature because of deeper epistemological issues that have characterized these process models. Namely, these models assume three major entities have clear boundaries which are stable throughout the process: (a) *stages* of coherent, temporally separated activity (e.g., idea generation, idea evaluation); (b) *ideas*, the potential solutions that are theorized to be generated, elaborated, evaluated, and implemented during the process; and (c) *people* whose contributions within the process can be identified and specified.

We propose an alternative perspective that emphasizes how the entities connect and change relative to each other. Truly understanding creative work in organizations must not only name and sequence these entities, but also should articulate how they relate to each other and how change from one entity to another occurs. To aid this goal, we propose a framework which theorizes creative work in terms of *liminal creative practices* – activities that occur in the spaces between entities (i.e., stages, people, ideas). We theorize three liminal practices that can apply to any kind of entity: (a) *bridging*, which facilitates movement from one entity to another; (b) *balancing*, which aids in maintaining multiple entities

simultaneously; and (c) *blending*, which combines discrete entities into integrated entities. We focus on intra-entity connections (e.g., ideas to ideas, people to people) to analyze creative processes through a liminal practice perspective, which offers three contributions to the study of creative work in organizations. First, it provides a basis to theorize the ways in which entities and processes co-evolve – that ideas, creators, and stages are changed by the process of working on them, such that one need not assume that the entity at the beginning of the process is the same as the one at the end. Second, it provides a framework to integrate otherwise disparate research about creative work, which has proliferated many concepts and frameworks. Finally, our perspective reveals a roadmap for future research by uncovering those areas where processes and practices have yet to be fully described.

AN ENTITIES-BASED APPROACH TO UNDERSTANDING CREATIVE WORK

Organizational creativity research both explicitly theorizes (i.e., in creative process research) and implicitly assumes (i.e., in outcome-oriented research) that the creative process can be modelled in terms of entities – discrete ideas that are produced by a stable creator (i.e., individual or team) through a set of separable stages of activity. We elaborate research on these three entities of the creative process (stages, ideas, people), and some limitations of focusing on those entities, below.

Stages in Creative Work

For decades, scholars have modelled the creative process as a progression through several stages—coherent patterns of activity each aimed at a particular sub-goal of the process (Wallas, 1926; Amabile, 1996). For instance, Amabile and Pratt (2016) recently updated Amabile’s (1996) work to summarize the process in five stages: (1) *task presentation*, during which a problem or creative task is identified and interpreted;

(2) *preparation*, in which task resources are acquired or accumulated; (3) *idea generation*, during which alternative solutions or ideas are developed; (4) *idea validation*, at which point alternatives are evaluated against task criteria; and (5) *outcome assessment*, when creators decide to return to an earlier stage and iterate to improve the value of alternatives based on the idea validation stage. These stages have changed little since Wallas's (1926) model of the individual creative process as preparation, incubation, illumination, and verification. We refer to these approaches as the *linear stage model* of the creative process, which implies that creative work must unfold by passing through each of these stages in turn, although more recent versions give the caveat that one can iterate by returning to earlier stages or the beginning of the process (e.g., Amabile & Pratt, 2016). Table 1 shows examples of existing stage models and how they theorize stages, ideas, and people.

[Insert Table 1 here – NOTE TO READERS: THIS TABLE ISN'T FINISHED YET, JUST AN EXAMPLE THAT WILL BE MORE COMPREHENSIVE]

When studying creative work in organizations, however, scholars have seldom found the process to be so clear or linear. For instance, in organizational contexts, ideas may be simultaneously generated and evaluated (Harvey & Kou, 2013), be repeatedly returned to as the process evolves (Harrison & Rouse, 2015), or involve a dialectical struggle between organizational factions (Drazin et al., 1999; Bledow et al., 2009). Traditional steps of the linear stage model, such as preparation or validation, may be skipped all together (Fisher & Amabile, 2009; Fisher & Barrett, 2018). Moments of creativity often result from a happenstance collision of knowledge and perspectives in ways that reframe past experiences (Hargadon & Bechky, 2006), rather than through planful processes of generating and refining new ideas for a particular problem. Other kinds of activities, such as help (Fisher et al., 2018; Hargadon & Bechky, 2006) and feedback (Harrison & Rouse, 2015), play key roles in the

process, but do not fit neatly into particular stages, often serving instead to blur distinctions among them. Some scholars have addressed these issues by proposing multiple, parallel theories of creative process, such as a model of improvisational creativity (Fisher & Amabile, 2009; Fisher & Barrett, 2019), a model of dyadic creativity (Rouse, 2019), or a model of breakthrough creativity in groups (Harvey, 2014).

We argue that the frequency with which creative work appears to deviate from linear stage model suggests a more radical rethinking than simply adding stages or proposing multiple processes. Indeed, a stage model in which stages need not occur in a certain order and can be skipped altogether is not really a theory of process, but a typology of activities (Gersick, 1988). Scholars like Amabile and Pratt's (2016) have acknowledged the limitations of capturing dynamism in stage models, and called for new theorizing in response:

Although we have added new dynamic elements to the model, much is unknown about them. Future research should explore feedback loops further, investigating not only how subsequent iterations through the creative process could be initiated, but also the mechanisms by which those subsequent iterations could be different from previous ones. ... Most likely, a truly comprehensive model will have to be even more complex than the one we have presented.

Despite this acknowledgement, scholars have continued to seek to label the types of activities, rather than to link activities to each other. We view this as problematic because this approach suggests that “stages” are coherent entities, composed of activities that are similar within a stage and dissimilar between stages. Moreover, stage models make it difficult to integrate new activities that do not clearly fit into one stage (e.g., feedback, helping, social construction).

Ideas in Creative Work

The word “idea” is commonly used, but rarely explained, in research on organizational creativity and innovation. As mentioned above, ideas feature prominently in the linear stage model (i.e., idea generation, idea validation). Perry-Smith and Manucci

(2017), for instance, characterize the creative process as an “idea journey.” In the rare instances in which they are formally defined, ideas have been defined as “possible solutions to a problem” (Girotra, Terwiesch, Ulrich, 2010: 591) or “cognitive representations of a creative solution” (Grimes, 2017). Prior work has focused on the properties of ideas. In fact, most creativity research concerns the extent to which ideas are novel and useful (Anderson et al., 2014; Zhou et al., 2019). This has taken the form of scholars arguing for different kinds of creativity, depending on how novel ideas are to the creator and to the world. For instance, Harvey (2014) developed a theory of “breakthrough ideas,” differentiating them from “incremental ideas” (see also George, 2007; Majar, Greenberg, & Chen, 2011). In another example, a widely-used framework differentiates between “Big-C” creativity, seen as the provinces of geniuses whose ideas have radically shaped their domains of expertise, and “little-c” creativity, in which ideas are more akin to problem solving and may, in fact, be novel only to the creator (see Kaufmann & Beghetto, 2009 for a review and more types of creativity).

In this view, ideas are independent and analytically separable entities. For instance, in social psychological research on idea generation, people are often asked to brainstorm a series of solutions to potential problems, such as thinking of ways for an egg to survive a ten-foot drop (Agogue et al., 2014). One idea might be to freeze the egg, while another might be to fashion a parachute. Such alternatives can then be counted and evaluated for creativity (e.g., Guilford, 1950; Diehl & Stroebe, 1987; Amabile & Hennessey, 2010). The theory underlying this entity approach to ideas is derived from an evolution metaphor—ideas are semi-random variations on mental representations that are selectively retained by an evaluator for further work (e.g., Campbell, 1960; Simonton, 1999; Staw, 1990). The assumption of this process is that any idea generated at the outset of the creative process has entitativity – it has clear boundaries separating it from other ideas, and its essence persists as

it passes through further stages in the process (i.e., the implemented idea at the end of the process has an essence that can be traced back to the idea generated at the beginning, making it the same idea) (e.g., Berg, 2014).

However, ideas are not wholly like genetic mutations that are born to survive and reproduce or die out – their nature changes and develops over time (Coldevin et al., 2019), such that it may be unclear whether a final product is really the same “idea” as what was worked on in the beginning. Even what constitutes an “idea” is socially constructed during the process of its reification (Nonaka, 1994; Tsoukas, 2009). Coming up with any idea may fundamentally shift a creator’s perspective on what the problem to be solved is (Cronin & Lowenstein, 2018), what is valid to be considered an idea (Coldevin et al., 2018) or what constitutes potential resources (Sonenshein, 2014). Thus, ideas are not clear entities that can be generated, evaluated, or selected as the linear stage model implies – the creation process itself constitutes boundaries around and relationships between ideas.

People in Creative Work

As documented in prior research, the people involved in creative work can also progress and change – work may iterate between various constellations of individual and collective work (e.g., Girotra et al., 2010; Long Lingo & O’Mahoney, 2010; Perry-Smith & Mannucci, 2017). Social psychological research on creativity has focused mostly on intra-individual processes. While caveats that small groups and teams may be involved have been added, most research focuses on personal characteristics, emotions, and motivation. Over time, different parallel theories of creative process have developed based on whether creators were individuals (e.g., Simonton, 1999; Gardner; Csizkesentmihalyi, 1999), dyads, (Rouse, 2019) or teams (Harvey, 2014).

Yet creative work in organizations is often accomplished not by individuals working alone (cites), or even by a stable team working together throughout the process. Creative work involves not only the involvement of outsiders to the process (Fisher, Pillemer & Amabile, 2018; Harrison & Rouse, 2015; Perry-Smith & Mannuci, 2017), but may in fact involve different constellations of creators at different times during the work (Hargadon & Bechky, 2006; Harrison & Rouse, 2014). For instance, the locus of creative work may suddenly shift from an individual to a collective in “fleeting moments” of spontaneous, collaborative interaction (Hargadon & Bechky, 2006). Moreover, handing-off creative work may not be a smooth or uncontested process: Creative work can involve hostile takeovers by outsiders (Fisher et al., 2018) or temporarily holding unwanted interlopers at bay (Long Lingo & O’Mahony, 2010), making who is involved in the process dynamic and contested (Drazin et al., 1999).

LIMINAL PRACTICES IN CREATIVE WORK

As we have argued above, an entity-based approach to understanding creative work presents two primary problems – it de-emphasizes how entities change through the process, which obscures the ways in which creative work is non-linear. In response, we redirect attention from the properties of entities themselves to practices that relate them to one another. Below, we discuss three liminal practices (bridging, balancing, blending) and their application to each entity (stages, people, ideas). Some of these practices have been documented by existing research, but have gone by a variety of other names; others are implied, but have not yet received explicit attention.

Liminal phenomena exist at a threshold between entities or states (Turner 1977; Huizinga 1955). We draw on this concept to describe practices that connect entities in the creative process to one another. As for other liminal phenomena, these practices have

characteristics of both of the entities they connect, and in doing so, they provide the possibility for transition between entities. They therefore provide a useful way to conceptualize the dynamic processes through which entities move during the creative process. Yet, liminal phenomena are also distinct from the entities they connect, and so require explicit theoretical attention. We focus here on relationships within a particular kind of entity (e.g., ideas to ideas, people to people), but later discuss potential relationships among different types of entities.

Bridging

We first describe practices that facilitate movement from one entity to another, which we call *bridging*. Stages are bridged when one set of coherent behaviors is interrupted and another set is initiated (e.g., Gersick, 1989). Ideas are bridged when creative workers move their attention from one idea to another. People are bridged when workers move in or out of active participation in the creative work, such as when creative work is handed from one individual (or a group) to another (Rouse, 2016).

Bridging is characterized by two features. First, is interrupting—work, in the form of attention and/or behavior, must cease for a focal entity. A brainstorming session comes to a close. An idea is discarded. An individual worker sends a draft to a colleague. Second, is initiating—work moves to a different stage, idea, and/or person. After generating ideas in a brainstorming session, workers transition to evaluating ideas. When attention moves on from one idea, a new one replaces it. When one person hands off the work, someone else begins working on it. The key to understanding bridging as a liminal practice is that neither interrupting nor initiating happen without action—some behavior needs to occur. Below, we explain bridging practices in stages, ideas, and people, respectively.

Bridging stages. Bridging stages involves creating pathways through which the creative process can progress from one set of activities to another or vice versa. These practices are strongly implied in the creativity literature, and better explicated in the group process literature. For example, creative workers engage in generating ideas, and then move to evaluating them (e.g., Mueller et al., 2010; Berg, 2014). In the group process literature, transitions are the times that bridging practices take place. However, the liminal practice is the gerund “transitioning” – transitions are enacted by through the practices of creative workers. For instance, in her classic studies of mid-point transitions, Gersick (1989) noted that groups doing creative work needed to shift from initially divergent activities (i.e., generating ideas for a radio advertisement) to convergent activities (i.e., rehearsing and producing it). Specific practices, such as explicitly mentioning clock time, commenting on group processes, or discussing the work with outsiders, allowed the group stop work on divergent activities.

As Gersick (1988; 1989) notes, stages of activity are inertial – patterns of action tend to persist until something interrupts them. Thus, bridging practices serve means for people to reorient their attention away from a focal activity (Okhuysen, 2001; Okhuysen & Waller, 2002), such as generating ideas, to something else, such as clock time, jokes, discussing with outsiders. When attention on the focal activity is disrupted by something temporary (i.e., it is not the focal creative work, so it cannot hold attention indefinitely without stopping work entirely), it allows attention to roam – attention might go back to its original target (back to generating ideas) or it might move to a new target (rehearsing). Thus, the second part of bridging activities is initiating a new activity. In its simplest form, an individual might initiate a new activity through role modelling, beginning to rehearse and letting others join in. Alternatively, a member might explicitly suggest changing tasks (e.g., “Why don’t we start rehearsing the ad now?” or “Shall we start prototyping?”).

Bridging ideas. Bridging ideas includes any process through which creators move from one idea to another. When ideas are bridged, creators interrupt attention on the focal idea and begin focusing active attention on the linked idea. Practices and facilitators of bridging ideas are prevalent in the creativity literature, though seldom the focus of research. For instance, Sutton and Hargadon (1996) document IDEO's well-known process for brainstorming. Consistent with early conceptualizations of brainstorming (Osborn, 1957), key tenets of this process are to "build on the ideas of others," and "encourage wild ideas." Facilitators at IDEO enforced these norms during brainstorming sessions, such that participants would acknowledge and explicitly refer to prior ideas when making further suggestions. Ideas themselves were stored on a white-board or post-it notes and the physical placement of these ideas on the board indicated their relationships to one another.

These brainstorming sessions were essentially a routine for bridging ideas. People working on creative tasks behave in ways intended to shift attention away from a focal idea to a new one (e.g., calling a session "brainstorming"; having facilitators "encourage wild ideas;" turn-taking). They create linkages between ideas by explicitly stating it (e.g., build on the ideas of others) or implicitly, by placing them in close physical proximity to related ideas. Similar practices for bridging ideas are implicit in research on divergent thinking (Guilford, 1950; Campbell, 1969; Staw, 2000). But because the processes by which people move from one idea to another are cognitive and, thus, difficult to observe, bridging ideas are seldom discussed. However, techniques, such as giving unusual examples (Agogue et al., 2014; Berg, 2014) can challenge people's initial sense of what is related to a current idea (Collins & Loftus, 1975), which opens up a conceptual pathway as the creator moves from one concept to the next, with each idea becoming more remote from the starting point. Cognitive processes such as disrupting assumptions (Nemeth 1986) and overcoming functional

fixedness (Dunker 1945) provide bridges between the ideas, moving creators from the more mundane to more novel idea.

Bridging ideas may seem natural in settings such as brainstorming, but illustrates a core tension within creativity. Bridging implies that work needs to move beyond the focal idea to some better alternative. The interrupting function of bridging practices encourage people to question their current assumptions and satisfaction with the ideas they have. For instance, calling something “an example” already implies that it is not sufficient to be used in a final product. The initiating practices suggest that a sufficient solution is not yet in the realm of focal attention, so further search is necessary.

Bridging people. Bridging people happens when creative work moves from one individual (or a group) to another. This practice has been documented in research on handoffs when different expertise is necessary to further develop ideas (Rouse, 2016) or selecting and prototyping ideas is done by different people than those who generate them (Berg, 2016; Mueller). In creative work, in particular, bridging people can be difficult because of the tight relationships between people’s ideas to their own identities (Elsbach & Flynn, 2013; Baer & Brown, 2012). For example, in her study of creative worker handoffs, Rouse (2016) found that, when an individual came up with an idea, they felt ownership over it and were reluctant to allow others to work on it. Thus, the individual would help themselves to lessen their feelings of ownership by moving from thinking and talking about ideas in reference to themselves (e.g., I, my, mine) and toward a more collective orientation (e.g., we, our, ours). Further, workers would often explicitly acknowledge their own limitations and others’ potential contributions as a way to help them stop work and prepare to hand it off to another. Like in previous examples, individuals who are doing focal creative work must interrupt work to extricate themselves from focal work.

Bridging people can be distressing for creative workers. For instance, Fisher et al (2018) found that, when high status workers took control of creative work from lower status workers (e.g., takeovers), it threatened focal workers' identities and elicited strongly negative emotions. Elsbach and Flynn (2013) observed similar dynamics, finding that toy designers were hesitant to accept the ideas other designers suggested because they found taking ideas to threaten the professional identities. Thus, how and when bridging occurs is likely to strongly shape its consequences.

Conclusion. Bridging practices has several common characteristics across entities. First, "interrupting" involves disrupting inertial forces. For stages, people tend to continue working in a consistent pattern until outside forces disrupt them. For ideas, there is a tendency to satisfice on the first viable idea, and to stay within a functional frame for the kinds of ideas one might generate. For people, ownership and identity concerns make workers hesitant to abandon creative projects. "Initiating" involves overcoming the switching costs associated with engaging with new entities. For stages, it means establishing new patterns of action, which may require different resources and structures. For ideas, this means entering new cognitive domains or forging new conceptual connections. For people, it means getting newcomers up to speed on what work has been done and what is happening with the project. Bridging practices are mechanisms of both forward and backward progress in creative work.

Balancing

In contrast to bridging practices, balancing practices allow workers to focus attention on multiple, distinct entities simultaneously. For instance, a particular moment in the famous *60 Minutes* television program about the design firm IDEO (ABC News, 1999) presents an excellent example of balancing people and ideas. In this video, an IDEO team was asked to

redesign a shopping cart over the course of a week. After agreeing on several important areas their future design must address, the team decided to split into four subgroups, with each subgroup working independently to create a prototype focusing on a particular user need (e.g., safety; speedy checkout). The team was aware that they could not deliver four different prototypes at the end of the project – they would have to either abandon some ideas in favor of others (bridging) or combine multiple ideas into a single whole (blending). Yet, at this point in time, the team took active steps to forestall convergence and continue working on multiple ideas by having multiple groups work independently.

This example illustrates the two core elements of balancing. The first core element is *separating* entities. The second element of balancing practices is *preserving* that separation. In the example above, people needed to enact the separation by moving to different work spaces and specifying a protected amount of time for independent action. Similar processes under a variety of names have been documented in the literature for people (Girotra, Terwiesch, & Ulrich, 2010; Harrison & Rouse, 2014; Long Lingo & O’Mahony, 2010) and activities (e.g., Sutton & Hargadon, 1996).

Balancing stages. Balancing stages facilitates the maintenance of a separation between different activities that occur during the creative process. Recall the examples of brainstorming from prior sections. A core aspect of brainstorming practice is to “defer judgment” – to divide idea generation from idea evaluation, even though these are often combined in practice (Harvey & Kou, 2013). For example, the use of brainstorming techniques (Osborn, 1953; 1957) encourage individuals to generate as many ideas as possible, with little consideration for how these ideas might fare in subsequent stages. At IDEO, brainstorming sessions are conducted in conference rooms, and IDEO’s version of brainstorming rules, adapted from Osborn’s rules are displayed in several locations across the room. “Defer judgment” was first rule for productive brainstorming displayed on the list of

rules, and participants in brainstorming sessions took great care to withhold criticisms of ideas, to clearly separate evaluative activities from generating them. The norm of deferring judgement is intended to separate two types of activities: generating ideas and evaluating ideas. In the Shopping Cart video, the facilitator of the brainstorming session then takes steps to maintain this separation by chiming a bell if anyone violates the norm and evaluates an idea during brainstorming.

It is only through balancing practices that separation between phases is created and maintained. However, these practices are so taken for granted that they are mostly overlooked in extant research. Balancing activities, in fact, fits the simplest version of the linear stage models of the creative practice—different activities, such as planning, idea generation, idea evaluation, and implementation are distinct because they are temporally separated. At a larger scale, different parts of the creative process may be distributed throughout an organization, such that different people are accountable for different activities at different times (e.g., R&D does idea generation, but managers evaluate the ideas and engineering works on implementation). Yet, as in our brainstorming example, people need to create the structures, norms and systems that separate activities in time and space. IDEO needs to put “defer judgment” on the wall and have facilitators enforce this norm because that is not naturally how people engage in the creative process (Harvey and Kou, 2013).

Balancing ideas. Balancing ideas occurs when two or more ideas are actively worked on simultaneously—even when they are seen as mutually exclusive. Balancing ideas therefore does not require creators to accept or reject the balanced ideas, instead allowing creators to hold on to multiple, potentially conflicting ideas. In the Shopping Cart example above, the IDEO team constructed several distinct “needs” from their research. They grouped similar ideas from their research on stakeholder concerns about shopping carts, then labelled groups of ideas with larger concepts like “safety” and “speed at checkout.” This process of

clustering and labeling was a way of separating ideas from each other. With ideas, the boundaries between ideas are not always clear until they are divided. In fact, what constitutes a distinct idea is socially constructed through the balancing practice. The idea itself is defined by how it is separated from other ideas.

Balancing ideas also means preserving separation, at least temporarily. The juxtaposition of two separate ideas might be appealing for a while, but preserving the separation successfully must also be enacted through practice. Balancing ideas means embracing competing visions and, rather than seeking to choose or reconcile, acting to actively keep these potentially contradictory visions alive.

Although balancing ideas has not been explicitly discussed in the literature, research has made clear that working on multiple, conflicting ideas can promote creativity. Most significantly, research on paradox and creativity has found that creators often accept and embrace the inherent tensions between two or more, often apparently contradictory, ideas (Miron-Spektor & Beenen, 2015; Miron-Spektor, Gino, & Argote, 2011; Miron-Spektor et al., 2018). Similarly, task conflict, which is characterized by disagreement about what ideas to pursue, often occurs as part of the creative process (Farh, Lee, & Farh, 2010). Within such conflict, groups simultaneously discuss multiple alternatives. Such conflict would be balancing ideas when such disagreement is held intentionally, rather than resolved.

Balancing people. Because creative work is frequently collaborative in organizations, people engaging in creative work can also be balanced. Balancing practices create and maintain distance or space between people who might contribute to deliver the creative outcomes. For instance, in the IDEO Shopping Cart project, larger teams were split into subgroups to work in parallel on competing designs.

Balancing people has already been documented in research on organizational creativity. The idea of acting in ways to maintain separation between people is common in

network research on brokerage, which has been linked with creativity and innovation (e.g., Burt, 2004; Perry-Smith, 2006; Zhou, Shin, Brass, Choi, & Zhang, 2009; Phelps, Heidl, & Whadwa, 2012). Specifically, scholars have evoked the notion of *tertius gaudens*¹ brokerage. Long Lingo and O'Mahony (2010) noted that Nashville music producers would separate different people involved in music production, such as record company executives and recording artists. At the extreme, this might constitute literally keeping people in different rooms at moments likely to evoke conflict that producers felt was unproductive. Another example of balancing people is the "de-integration" approach in elastic coordination of modern dancers (Harrison & Rouse, 2014). In this study, choreographers and dancers sometimes identified directions that were incompatible with the current group consensus. Recognizing the potential value of the curiosity of individual dancers, choreographers allowed individual dancers to distance themselves from the group to explore new moves. This disaggregation of an existing group enables collectives to embrace the novelty and unpredictability created by an individual. Moreover, research has found that hybrid approaches between independent and interdependent work promote more effective idea generation (Girotra, Terwiesch, & Ulrich, 2010).

Conclusion. Regardless of whether it is applied to stages, ideas, or people, balancing involves actions that separate entities and preserve that separation. By separating entities, balancing can sharpen or define the boundaries between them. Moreover, balancing can create new "levels of analysis" by disaggregating collectives into smaller units, such as a group breaking into subgroups or allowing individuals to work on their own. In the literature on groups and teams, such a function is familiar. Teams can contain subgroups and individuals; researchers can analyze entities differently, depending on their question. For ideas and stages, however, such aggregation and disaggregation is less familiar. Stages are

¹ Literally, the "third who benefits."

composed of activities that can be separated by time and space, so as to occur simultaneously in parallel. Ideas are especially fungible – in large aggregations of ideas (e.g., a flying car), disaggregation may be easy to understand: many smaller ideas compose a larger one. Even small ideas, though, have the potential to be separated or contrasted with others in ways that change their meaning.

Also of note is that the medium through which separation occurs varies between entities. Stages and people, by their nature, must be separated by time and/or space. As such, it is difficult for a single person to literally balance stages, such that two stages are unfolding separately but simultaneously. Balancing stages likely requires balancing people, which therefore requires dyads or groups of creators. Ideas, however, are representational and do not require time and space, and, theoretically, can be balanced by any constellation of creators.

Blending

Creative work cannot move between entities or maintain multiple entities forever – it often involves synthesizing disparate entities into a single whole. *Blending* describes those practices that facilitate the integration of different ideas, activities, and people. The case of Design Continuum’s development of “Reebok Pump” basketball shoes illustrates blending practices well (Hargadon & Bechky, 2006). In a series of brainstorming meetings, individuals who knew Reebok’s requirements for the shoe came together with others who had worked on designing medical devices. As Hargadon and Bechky (2006) described, “only during these momentary interactions did the design team come to recognize how their disparate knowledge of inflatable splints, IV bags, valves, pumps and other useful ideas could be relevant to designing a better basketball shoe” (p. 485).

In this example, individuals with different knowledge, perspectives and skills came together to work on a single creative task. In doing so, they went from working as

independent individuals to integrating their efforts in “creative collaboration” (Hargadon & Bechky, 2006), in which the individuals were working interdependently on a single task, with a single focus of attention. Further, although not described explicitly, ideas from different individuals necessarily came from different people. Ideas about using inflatable splints in shoes needed to be combined with ideas about Reebok’s aesthetic approach into a single, coherent whole.

The essence of blending practices is synthesis – that a new entity arises from the combination of two distinct entities; the whole must be distinct from the sum of its parts. A pump shoe is distinct from both a normal shoe and an inflatable splint. A team is distinct from the individuals of which it is comprised. Multiple activities are combined, such that they are qualitatively different from their component activities. Synthesis has been used to describe the dialectical processes between competing or paradoxical knowledge in organizations (Ford & Ford, 1994; Poole & Van de Ven, 1989). Notably, Harvey (2014) argues that groups can consistently generate extraordinary creativity by integrating members’ disparate ideas and perspectives into a single whole. In the following section, we explain the blending practices that forge connections and facilitate integration between different ideas, activities or people.

Blending stages. In everyday life, people experience the world as a coherent whole, then use analytical divisions to better understand it (e.g., Bordieu, 1977; Emirbayer & Johnson, 2008). In contrast to other liminal practices, blending stages may simply be the natural state of creative work. Separating stages, in order to bridge or balance them, is what requires effort and action. Creative work is not clearly split into idea generation and evaluation – these are analytic conveniences that people have created, and subsequently built ways to separate them in research (e.g., brainstorming all the ideas first, evaluating and selecting ideas second).

Idea generation and evaluation often co-occur and, indeed, can be indistinguishable (Coldevin et al., 2019). In their study of health care groups, for instance, Harvey & Kou (2013) found that comparing and contrasting a small number of ideas simultaneously clarifies the problem framework and criteria upon which decisions are to be based. Thus, the act of evaluating one idea converged with generating other ideas, figuring out the problem, and redefining what the criteria for evaluation were. Similarly, at the individual level, creativity research and lay accounts both document “Eureka!” moments of creative insight, when unconscious processing of a problem generates an instantly recognized solution. This phenomenon has sparked a great deal of research (see Helie & Sun, 2010 for a review) and calls for a creativity-specific kind of intuition, known as “intuitive insight” (Dörfler & Ackerman, 2012). In such moments, there is no distinction between generation, evaluation, and selection of ideas – and the combination of these activities is experienced as qualitatively different than their separation. These examples show how what researchers typically consider being separate activities are often blended in practice.

Scholars have sometimes argued for different theories of process when particular stages are blended. Fisher and colleagues have argued that improvisational creativity is distinct from compositional creativity because it blends idea generation, selection and verification (Fisher & Amabile, 2009; Fisher & Barrett, 2019). Harvey (2014) argued that breakthrough creativity in teams follows a separate process in part because of how idea generation and evaluation were blended. A liminal practice perspective, though, accommodates different stages without developing a separate theory for each combination.

Blending ideas. Blending ideas means merging two or more ideas into one. This notion has been strongly implied in research on creativity (e.g., Harvey, 2014) and innovation (e.g., Hargadon & Fanelli, 2002). When ideas are blended, creators are in a sense accepting both ideas because both ideas are retained for further creative work. However, unlike

balancing practices, in blending, there is no sense that the two ideas are incompatible and the ideas are not maintained as separate entities. Instead, they are related to one another and combined into a single idea. This may mean combining extremely disparate ideas (e.g., basketball shoes, inflatable splints), as in the Reebok example above. However, the distinctiveness of ideas is not always so clear-cut. For instance, in its celebrated films, Pixar animation blends art and technology, where workers constantly discuss how to integrate drawn artwork, technology-aided animation, dialog, and music. Any idea in one domain must be synthesized with ideas from other domains (Harvey, 2014). In this example, different ideas from different domains are changed by their combination. The appeal and meaning of the final film is quite distinct from the appeal of the music, dialog, or animation alone. This is the essence of blending, in which the synthesis of ideas must produce something that is seen as clearly distinct from the parts.

Blending ideas can occur in a single individual's mind or in social interactions. People reorganize knowledge structures and mentally transform them into a new pattern or configuration (Guilford, 1968; Wisniewski, 1996). The reorganizing cognitive process that has long been associated with creative thinking as a way that creators blend ideas. Blending ideas involves reorganizing concepts into a new pattern (Koestler, 1964), such as when people combine experiences or traditions from two different cultures (Godart, Maddux, Shipilov & Galinsky, 2015) or apply a common metaphor from one discipline to a different field (Biscaro & Commacchio, 2018).

In sum, existing research on creativity provides rich accounts of the practices underlying blending ideas. Teamwork and dialectical conflict resolution are one path by which blending ideas occurs (Harvey, 2014). Other forms of social interactions, such as feedback (Harrison & Rouse, 2014) and helping (Fisher et al. 2018) may also spark blending

ideas. It is notable, though, that, like all liminal practices, blending is predicated on how ideas are seen in relation to each other.

Blending people. Blending people involves combining separate, independent efforts into collective, interdependent ones. This process is well documented in literature on teamwork (e.g., Metiu & Rothbard & 2013), and has already received attention as a critical aspect of creative work. Examples of blending people in creative work includes Hargadon and Bechky's (2006) account of creative collaboration emerging out of helping interactions. Blending can reflect a reintegration that occurs after balancing, such as in the IDEO shopping cart video when the sub-groups came back together to present and make sense of the work they did separately, or Nashville producers reintroduced recording artists and record label executives into the same process (Long Lingo & O'Mahony, 2010) or choreographers who sought to pull dancers working on different elements back together (Harrison & Rouse, 2014).

In contrast to balancing practices, blending practices encourage social interactions such that people's perspectives and experiences are brought to bear on the problem. In blending, the similarities between the perspectives of different people are surfaced, allowing them to work jointly on achieve a solution. One person's action or comments, when considered by others, shapes theirs, which in turn (when heeded) shapes the next (Hargadon & Bechky, 2006). Practices that facilitate blending allow individuals to redefine, and solve problems in a way that a single individual within that collection would not have been able to if they worked alone.

Conclusion. Like balancing, blending practices alter the focal "level" of creative work. Blending is the practice that transforms smaller units into larger ones – the ways in which individuals become a collective, or multiple ideas become synthesized. The core of blending is the synthesis of independent entities into a single, interdependent one. Such a

practice is familiar in the literature on groups and teams (e.g., Metiu & Rothbard) and ideas (Harvey, 2014), but has seldom been applied to stages. Instead, when stages are blended, scholars have argued that the process should go by a different name entirely (Fisher & Barrett, 2019).

Interactions between Entities

For simplicity, we have presented each liminal practice within stages, ideas, and people, respectively. However, we do not intend to suggest that this is the only way liminal practices can be used to analyze practice – it is unlikely, for example, that ideas are only bridged or people are only balanced within any period of creative work. Instead, we propose that creative work will involve some combination of the practices we have outlined.

How liminal practices are combined may shape the way that creative workers experience creativity and the way that creative outcomes develop. When all entities relate to one another through one form of practice – bridging, balancing, or blending – it may produce a sense of coherence and forward momentum for those involved. Consider a case in which ideas, stages, and people are all bridged. For example, during a group creative process, ideas are bridged as the group shifts attention from one idea to another; stages are bridged when the group moves from generating ideas to evaluating each idea in turn; and shifts in attention and between activities may be accomplished by handing off speaking time or responsibility from one group member to another, which bridges people. This represents an orderly process in which group members understand their roles and how they relate to the group. From the perspective of a group member, for example, one listens to others ideas, generates an idea, evaluates each of the group's ideas, and once an idea has been selected, lets go of her own idea and moves out of the process, handing off to someone else (or alternatively, takes up the group's idea for further development and implementation while others step away).

Throughout that process, group members retain independence, individual ideas, and individual roles, with clear points of interdependence.

Alternatively, consider a case in which ideas, stages, and people are all blended. For example, a group may work together to blend two ideas into a collective output; blend stages by seamlessly shifting between developing the ideas and evaluating them at the same time; and blend people as their work becomes intertwined, so that the product cannot be attributed to any individual, only to the group as a whole. In this example, group members also understand their roles and how they relate to the group; from the perspective of a group member, one works on the group's focal idea, contributing both feedback and new ideas, and feels like a cohesive member of the group. Both extremes are likely to provide creative workers with clarity about how the work will unfold. In contrast, if some entities are bridged while others are blended, it may create dissonance with creative workers' expectations. For instance, ideas may be blended such that a group feels collective ownership of the idea; yet, the idea may be handed to only a sub-set of group members for further development. This may alienate or frustrate others in the group who retain a sense of ownership.

Whereas using one practice consistently across entities may feel more productive for creative workers, we also suggest that creativity itself is likely to benefit from work that engages multiple practices within any given entity. Taking the extremes of the examples of bridging and blending described above, when a group engages only in bridging ideas, they risk jumping from one to another without identifying opportunities to build on and blend members' inputs, because doing so would require splitting attention between some ideas rather than shifting from one to another. In contrast, when a group engages only in blending ideas, they risk failing to mine their most unique and valuable ideas, settling instead for combining the first ideas group members produce. Since people generate the most obvious ideas first, this may result in blending two mundane ideas. We propose that a more

comprehensive process that involved bridging, blending, as well as balancing, would provide for the richest development of creative work (cf Van de Ven & Poole, 1989).

DISCUSSION

In seeking to understand how creative processes in organizations unfold, prior research has foregrounded the characteristics of the stages, ideas and people involved. Even recent studies that have revealed dynamic and recursive aspects of the creative process have viewed these discoveries as complements or caveats to the linear stage model of the creative process. When deviations for the linear process model are noted, scholars have mostly argued that these constitute different kinds of creativity (Harvey, 2014; Fisher & Amabile, 2009) rather than signs of a more fundamental problem with current theorizing (cf. Coldevin et al., 2019).

We propose a different perspective on creative processes in organizations, focused on liminal practices defining relationships between entities, rather than the properties of the entities themselves. Liminal practices offer a new lens for understanding how creative work is accomplished that complements traditional models of the creative process. The linear stage model is one of many combinations of entities that can be accommodated within our perspective. For example, in a typical idea generation process, we might think of first bridging ideas through divergent thinking, then balancing ideas by pursuing two of the best ideas simultaneously, then ultimately blending the two ideas by taking the best of both. Similarly, we might think of bridging occurring as we move from the idea generation stage to idea evaluation.

By providing an integrating framework for understanding how creative work is accomplished, our model offers three contributions to the creativity literature. First, our approach captures the dynamic and non-linear nature of creative processes, while

acknowledging that ideas, stages and people can be changed by the process itself. Second, our model increases conceptual coherence in creative process research by using concepts that can theorize the functions of the many new practices that have emerged from recent research. Finally, our perspective reveals a roadmap for future research by uncovering those areas in which liminal practices have yet to be studied.

Entities are Changed by the Creative Process

Liminal practices help us to understand the undoubtedly dynamic nature of creative work. However, most scholars continue to view stages like steps in an automated car wash, through which a particular car travels to be washed, dried, and polished, with a particular set of people travelling in the car. The car is not changed through the washing process, the people in the car do not change, and steps in the wash are not altered by a particular car being washed. However, none of these apply well to the creative process. If the car in the metaphor is the idea and washing/drying/polishing are stages in the process, then the car itself would be fundamentally altered by the process of being washed, such that it might be difficult to say it was the same car at the end. Is the idea at the end of the process that is implemented truly the same idea that was generated at the beginning? Are the people moving through the process the same people?

A liminal practice perspective highlights how entities involved are changed by the creative process. Collaborations are formed through blending people and disbanded in balancing. What constitutes the “idea” to be worked on is fundamentally changed as it is balanced and blended with others, such that it may be difficult to even call it the same idea. In other words, the creative process differs in fundamental respects from any attempts to describe a linear, staged process because the process itself changes (and is changed by) what is being worked on and, often, who is doing the work. Rather than attempting to explain the

coevolving relationship between entities in terms of iteration and recursion (Amabile & Pratt, 2016), liminal practices allow scholars to theorize the creative process without making unwarranted assumptions of the stability of ideas, creators, and stages.

Moreover, a liminal practice perspective also sheds light on levels of analysis. The idea of levels of analysis is common in research in groups and teams (Hackman, 2003; Harrison & Klein, 2007). Scholars in this area have long acknowledged that teams are social systems composed of individual members, and those members themselves have multiple attributes (e.g., identities, skills, motivations). Researchers must specify the extent to which they are interested in the group as a whole or in the individual members. Liminal practices describe how such levels can be crossed and created. For instance, bridging can cross levels by handing off work from an individual to a collective, while balancing can disaggregate a team into a set of individuals, and blending can synthesize individuals into a team, thus creating new levels.

Similar logic of levels can be applied to ideas and activities. All creative work is an amalgamation of ideas. Liminal practices can describe how creators aggregate and disaggregate them, creating analogous levels to a team composed of individuals. Likewise, creators can use liminal practices to aggregate and disaggregate stages into component activities. In studying creative work, scholars make choices about aggregate ideas and stages and study them as wholes, or disaggregate them to study each in turn. Creators and evaluators face similar decisions. For instance, when proposing, accepting, or rejecting an “idea,” creators can take the whole as is, seek to identify useful parts and disaggregate it (balancing), or combine it with other ideas to regard it as a new whole (blending). In this fashion, balancing and blending are creating levels of analysis in ideas.

Increasing Coherence in Organizational Creativity Theory

First, a liminal practice perspective makes room for describing new practices that have emerged in recent work within the same framework as prior models. Our perspective therefore offers a way to integrate the discovery of new creative practices with a more traditional understanding of how creative work unfolds. For example, Harvey & Kou (2013) described generating and evaluating ideas as occurring simultaneously, offering a challenge to prior models. Our framework reconciles the two perspectives, by describing different practices through which generation and selection may be connected. For instance, the creative synthesis model has been presented as an alternative to the evolutionary model (Harvey, 2014). Our framework can capture both ways of conceptualizing the creative process. Whereas an evolutionary model may be viewed in terms of balancing and bridging ideas and stages, the synthesis model may be viewed as blending stages, ideas, and people.

In fact, a liminal practice perspective reduces or eliminates the need to theorize new creative processes when deviations from the linear stage models are discovered. For instance, improvisational creativity is an instance of blending stages (Fisher & Amabile, 2009; Fisher & Barrett, 2019). As we have described, practices such as “nexus work,” “deep help,” “creative synthesis,” and “elastic coordination” represent important advances in our understanding of creativity in organizations. All can be characterized by how they connect ideas, stages, and/or people without the need for separate theories or to apparently contradict the linear stage model.

Revealing Under-Researched Areas

[NOTE TO READERS: THIS SECTION IS A PLACEHOLDER AS WE REANALYZE THE LITERATURE WITH THIS FRAMEWORK SO WE CAN BE MORE COMPREHENSIVE AND PRECISE HERE.]

A final contribution of our perspective is that it identifies spaces where relatively little prior research has ventured, uncovering areas where the discovery of new liminal practices may be the most productive. In Figure 1, we provide an overview of liminal practices that have emerged from recent research.

[Insert Figure X about here]

The figure demonstrates that, although the literature has made significant progress in elaborating processes that connect entities, there is much work yet to be done. In particular, it highlights the progress and limitations of this emergent body of work. First, research on liminal practices between people is most advanced – there has been at least some explicit attention to bridging, balancing, and blending of people, though the conceptualizations vary from study to study. Second, blending ideas has received some explicit study, while bridging ideas must occur in existing conceptualizations, but the mechanisms require further study. Balancing ideas is strongly implied by recent work on paradoxical mindsets (Miron-Spektor et al., 2011), counterfactual thinking (Galinsky et al., 2002), and simultaneously generating and evaluating ideas (Harvey & Kou, 2013), but again, how creators manage to do this – especially in collective contexts—requires more research. Last, there is research on stages being blended in the creative process. There is also research on how groups more generally (and sometimes creative groups) can bridge stages (Gersick, 1989), but the stages in these models often do not correspond to other conceptualizations. Balancing stages, however, has seldom received much attention.

These relatively fallow areas provide a roadmap for future research. Moreover, scholars should study not only the areas mentioned above, but further investigate how liminal practices and entities combine and how they affect the creativity of products and the experience of creators. For instance, is balancing ideas more or less fruitful when balancing people? The triggers for different constellations of liminal practices would also be a fruitful

area of study. An interesting dimension may be whether bridging is volitional or emergent—whether people consciously decide to bridge, or that bridge is imposed on them. Another interesting dimension is the strength or finality of interrupting and initiating. Are ideas completely discarded, or placed in temporary holding? Will people come back into a project later? How might practices differ, depending on people’s assumptions about whether they will need to travel a bridge in both directions? How does the way in which bridging occurs determine how the focal entity impacts the bridged entity?

Conclusion

As we have argued, creative processes are an extreme case in which the task (i.e., ideas that are being worked on) co-evolves with the process of creating. For decades, theory on the creative process has pushed this reality into the background, implying that ideas, creators, and stages have consistent meaning and identity across the course of the project. As new evidence has come to light, this linear stage model has had increasing difficulty accommodating new findings, concepts, and processes. We believe the time is ripe for creativity scholars to re-orient their perspectives to the liminal practices that both enable movement between stages, ideas, and people, and help define and transform what the entities are.

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
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Table 1. A Summary of Entities in Stage-models of the Creative Process [NOTE: THIS IS NOT YET COMPLETE – WHAT INFORMATION MIGHT YOU WANT HERE?]

Author	Stages	Ideas	People
Wallas (1926)	(1) Preparation, (2) Incubation, (3) Illumination, (4) Verification	Not defined	Individual
Amabile (1996)	(1) Problem or Task Identification; (2) Preparation, (3) Response Generation; (4) Response Validation and Communication; (5) Outcome	Not defined	Individual or Team
Amabile & Pratt (2016)	(1) Task Presentation; (2) Preparation; (3) Idea Generation; (4) Idea Validation; (5) Outcome Assessment	Not defined	Individual or Team
Perry-Smith & Mannucci (2017)	(1) Idea Generation; (2) Idea Elaboration; (3) Idea Championing; (4) Idea Implementation	“Idea Journey—the path followed by a novel idea from its conception to its successful dissemination”	Individual, involving different network connections at different stages
Gersick (1989)	(1) Divergent activities; (2) Mid-point transition; (3) Convergent activities	Not specified	Teams

Figure 1: An (partial) inventory of liminal creative practices from recent research [NOTE: STILL WORKING ON THIS, NOT FULLY THOUGHT OUT]

	Bridging	Balancing	Blending
Stages	<p>Transition processes linking divergent and convergent activities (Gersick, 1989)</p> <p>Formal processes to move from generation to evaluation (Berg, 2016; Mueller et al., 2017)</p>	<p>Norms to forestall evaluation during generation (e.g. Osborn, 1953; Hargadon & Sutton 1996)</p>	<p>Dialog as representing multiple stages simultaneously (Tsoukas 2009; Harvey 2014; Harvey & Kou 2013)</p> <p>Improvisational creativity (Fisher & Amabile, 2009; Fisher & Barrett, 2019)</p> <p>Intuitive insight (Helie & Sun, 2010; Dorfler & Ackerman, 2012)</p>
Ideas	<p>Brainstorming for quantity and divergence (e.g., Guilford, 1950; Osborn, 1957; Sutton & Hargadon, 1996; Staw, 2000)</p> <p>Iterating and experimenting (e.g., Thomke, 1996)</p> <p>Using examples (Berg, 2014; Agogue et al., 2014)</p> <p>Feedback catalyzing a return to earlier ideas (Harrison & Rouse, 2015)</p>	<p>Paradoxical practices for balancing competing creativity goals (e.g., Miron-Spektor & Beenen; Miron-Spektor & Erez 2017)</p> <p>Conflict in creative groups (Fahr, Lee, & Fahr, 2010)</p>	<p>Creative synthesis (Harvey, 2014; Harvey & Kou, 2013)</p> <p>Knowledge translation / transformation as a way to blend ideas (e.g., Carlile 2004; Majrzack et al 2012; Stigliani & Ravasi, 2012)</p>
People	<p>Handoffs (e.g., Rouse 2016; Baer & Brown 2012)</p> <p>Idea giving and taking (Elsbach & Flynn, 2013)</p> <p>Formal processes to move between individual and collective work (Girotra et al., 2010)</p>	<p>Tertius Gaudens brokerage (Long Lingo & O'Mahony, 2010)</p> <p>De-integration (Harrison & Rouse, 2014)</p> <p>Separating individuals to initially generate ideas (Girotra et al., 2010)</p>	<p>Creative collaboration (Hargadon & Bechky, 2006)</p> <p>Deep help (Fisher et al., 2018)</p>

-  = more developed area, including theory and cumulative knowledge
-  = moderately developed area, with theory or description of practices, but little cumulative knowledge
-  = less developed area, where practices are implied, but not described or theorized