



VERONIQUE RICHARD 
 VLAD GLĂVEANU 
 PATRICE AUBERTIN

The Embodied Journey of an Idea: An Exploration of Movement Creativity in Circus Arts

ABSTRACT

Knowledge about embodied creativity is in its infancy. In circus arts, performers are nowadays ‘owning’ their creativity making this performance domain fruitful to study embodied creativity. Building on socio-cultural creativity perspectives and radical embodied cognitive sciences, the current study aimed at exploring movement creativity by tracking the journey of embodied ideas in a Circus School. Specifically, this research questioned how the interactions between actors, audiences, affordances, and actions support the emergence and evolution of movement ideas. A narrative ethnographic research design, gathering process observations *in situ*, was used to scrutinize the movement ideas generated by student-artists, teachers, and artistic advisors over a 4-month period. Reflexive thematic analysis led to the design of an exhaustive mapping which illustrates the key findings. Namely, the journey of an embodied idea is influenced by stimulating spaces and collaborative socio-cultural environment which ignite the actors’ desire to create. This desire, in turn, unfolds into multiple ideational pathways paved with research strategies (e.g., improvisation, constraints, variability) and emotions (i.e., pleasant and unpleasant). Embodied ideas then go through an assessment process leading (or not) to its growth. Results are discussed in light of embodied, pedagogical, and emotional considerations offering an alternative to the conceptualization of idea.

Keywords: creativity, embodiment, ideas, circus arts, socio-cultural perspectives.

In 2001, circus arts was recognized as a legitimate art form in the province of Quebec (Leroux, 2016a) and, a few years later, in 2009, by the Canada Council for the Arts (Katya Stephens, 2015). Consequently, circus schools and companies progressively opened their protected and secretive creative spaces to scholars leading to a limited yet widespread research endeavor (Leroux, 2016b). Namely, the work undertaken by Lavers et al. (2019) to examine the evolution of creative processes underpinning circus acts (i.e., 6–7-minute choreographed work showcasing the performers mastered tricks) is of key interest.

Circus acts were initially designed almost uniquely to display bodily prowess to evoke feeling of ‘awe’ and kinesthetic responses in spectators. Barely implicated in the creative process, artists could then perform the same act for years leaving many of them with a sense of imprisonment (Lavers et al., 2019), very similar to the way dance scholars Ric Allsopp and Lepecki (2008) described choreographies as an apparatus of ‘capture’ or as a ‘body-snatcher’. Although this ‘captured bodies’ culture is still prevalent in some circus communities to favor artists’ skill mastery over creative fulfillment, Lavers et al.’s (2019) interviews with 12 renowned circus creators point towards a wind of change. Indeed, new approaches to the creation of an act in contemporary circus (sometimes called third wave; Leroux, 2016b) emphasize more on connecting bodies with meanings to communicate humanly with the audience. Nowadays, artists are thus frequently involved in the creative process, sometimes even being the creators themselves. This cultural shift allows artist to inspire their movements from their personal life stories, multidisciplinary interests (e.g., it is frequent to see hybrid performances mixing theater, dance, arts, technology, and so on), and heartfelt messages.

Given this recent empowerment of circus artists to create their own act to express in movement what matters to them, a relevant next step to contribute to circus research is to study artist’s movement creation *in situ*. Since the emergence of contemporary circus, its dramaturgy and aesthetics’ evolution (which involved creative processes) has been described from an historical standpoint (Leroux & Batson, 2016), and retrospective interviews were conducted with circus creators/choreographers (i.e., mostly nonperforming artists) about the creative processes that lead them to unique ideas (Lavers et al., 2019). Despite the

relevance of such research methods to advance circus knowledge, “the usual stories of ‘having an idea’ are often post-factum reconstructions and re-organizations of a much more complex, messy, embodied, and non-linear process, letting the creative process frequently appear superficial and naive” (Stierand et al., 2019, p. 165). ‘Movement ideas’ or new possibilities connected to bodily gestures in circus arts vividly support this latter perspective.

To honor the complexity of ‘having an idea’ and bridge a methodological gap, the current research does not rely on retrospective storytelling but rather observe novel movements and embodied concepts as they emerge in performers. Specifically, this research endeavor was motivated by a desire to explore more thoroughly the journey of movement ideas, not only to refine and expand knowledge about creativity in circus arts but also to broaden the way embodied creativity is captured and understood. By questioning how ideas emerge, provoke, destabilize, transform, etc. through and between circus bodies, the goal was to move away from the notion that ideas are purely mental construction (e.g., divergent thinking) and move toward embodied principles (Malinin, 2019), infused with affect, and dependent on a network of social relations. Hence, the *in situ* observations of this research are built on socio-cultural and embodied conceptualization of creativity.

A SOCIO-CULTURAL AND EMBODIED CONCEPTUALIZATION OF CREATIVITY

Only recently was the dynamic interactive nature of creativity formalized within a definition. According to Glăveanu’s 5As framework (Glăveanu, 2013), “creativity is concerned with the *action* of an *actor* or group of *actors*, in its constant interaction with multiple *audiences* and the *affordances* of the material world, leading to the generation of new and useful *artifacts*” (p. 76). Specifically, actors are defined as socialized selves that navigate and influence socio-cultural contexts through their cooperation with others. In addition to be collaborators, the audience refers to any forms of social pressure that comes from others judging, criticizing, or using the creative act and/or resulting artifact(s). Bi-dimensional actions encompassing internal psychological processes and external behavioral ones are responsible for connecting actors, audiences, and artifacts. Those actions are influenced and must be adapted to the possibilities afforded within a specific environment (i.e., affordances) potentially resulting in the emergence of artifacts; an externalized expression taking the form of objects, concepts, actions, or performances which carry meaning within a specific culture.

In line with this definition, creativity research has shifted overtime from a computational (top-down) cognitive model where creativity happens in the mind first and is then transformed in behaviors to an embodied conceptualization where “the mind is not solely located in the brain but also involves the body and the body’s situation in the environment” (Malinin, 2019, p. 2). Specifically, some researchers suggest adopting a radical embodied cognitive science (RECS) approach which views creativity as *embodied*, *embedded*, *enactive*, and *extended* (4E; Malinin, 2019). That is, cognition is constrained by both the characteristics of the actor’s body (mind included) and the interaction of these characteristics with a specific environment (Marmeleira & Duarte Santos, 2019).

Knowledge about creative embodiment is still in its infancy because “common creative processes studied are related with non-embodied creative products that not include the person creating as a result” (Torrents et al., 2020, p. 1). In fact, when considered as a corporeal connection with others and the material world, embodied creativity often relates to domains such as music, painting, sculpture, and performing arts where senses, feelings, and the totality of the environment of things are engaged through the body (Creely et al., 2020). Given the importance of domain-specificity when it comes to creative processes (Baer, 2015) and the fact that the process differs whether the body is an integral part of the creative artifact or not (Abraham, 2018; Torrents et al., 2020), studying domains where creativity is fully expressed by the creator’s body could advance knowledge about creative embodied processes (Stevens et al., 2003). That can then be applied to a wider range of creative actions and help us bring forth the embodied nature of all creativity. Specifically, exploring the emergence of *movement creativity*—“the type of creativity based on movement, in which the process of creativity is embodied and the body is part of the creative product” (Torrents et al., 2020, p. 1) could revive the creative processes as action line of research which has been stagnant lately (Glăveanu, 2014). Because “the crucial element of circus, [is] its bodies and their different physicalities” (Tait, 1999, quoted in Lavers, 2014, p. 58), circus arts is a well-suited realm to examine how creative movement are formed.

While research on creative embodiment in the circus arts contexts is scarce, a few studies in the dance domain are of interest. For instance, to offer insights into embodied cognition and develop new theoretical models of creativity, Kirsh (2011) examined the work of a successful dance choreographer during a creative

choreographic process. He concluded that dancers use their bodies to think in visual, tactical, or somatosensory forms emphasizing the central role of the body to generate “dancerly movement.” In this vein, improvisational dance duet sequences were analyzed to uncover how embodied communication processes and bi-directional exchanges between informational and physical constraints shaped creative assemblies (Kimmel & Hristova, 2021). Micro-actions, sources of perceptual orientation, and momentary system states inviting creative development were explored with the dancers using video-stimulated self-confrontation. In line with the embodied conceptualization of creativity (e.g., 5A and 4E), findings revealed that creative sequences emerged from the coupling of multiple bodily components, the creative process co-evolved in harmony with constraints and affordances, and creative genesis mechanisms were nourished by embodied interaction. These transactional creativity notions corroborate with the conclusion of another study conducted in a similar context (Kimmel et al., 2018). Finally, the importance of the socio-cultural environment was highlighted in a study using a dance improvisation workshop to explore creative processes. Specifically, dancers reported that an environment promoting trust where they felt safe and accepted was crucial to unfold their creative motion (Łuczniak et al., 2021).

THE CURRENT INVESTIGATION

Drawing on the notions highlighted in these dance research, we pursue the exploration of creative embodiment by examining it holistically and longitudinally in a daily socio-cultural circus arts context. Specifically, the current study tracked the journey of embodied ideas at the *National Circus School in Montreal* (NCS), a world-renowned circus training institution considered one of the hubs of third-wave circus (Leroux, 2016b). In the context of the 5 A's framework, creative actions are discussed here in terms of movement and the transformation of embodied ideas which act as core and unifying components in this research. Importantly, we use the term ‘movement idea’ to refer to both ideas generated directly through movement as well as ideas about movement generated before or after the moving act. The current research questions thus are (a) What actors’ characteristics and environmental conditions facilitate the emergence and growth of an embodied idea, (b) How actors, audiences, and affordances interact in the embodied ideation process, (c) Which actions are undertaken to support movement ideas in various environments leading or not to an artifact. In other words, a socio-cultural perspective, centered on the entanglement of multiple elements, guided this research toward mapping the journey of embodied ideas.

METHOD

PARTICIPANTS

Because movement ideas generated at the NCS were the central object of study, we observed, as much as we could, everything and everyone entangled with these embodied ideas. This means we considered the entire NCS community composed of student-artists, teachers, artistic advisors, technicians, administrators, and their interactions with each other as well as with spaces, material, and objects during the creative process.

Located in Montreal, Canada, the prestigious NCS offers a high-school program as well as a 3-year Diploma of National Circus School Studies leading directly to a professional career. The 3-year program focuses on both theory and practice of performing arts in the five major circus disciplines: aerials, balancing, acrobatics, juggling, and clowning arts. A holistic and interdisciplinary approach is favored to support the development of a versatile and broad skill set in student-artists. While mastering one discipline more profoundly, the student-artists are thus encouraged to explore other disciplines during their studies.

Creativity is at the heart of NCS programs. Each year, student-artists are required to create their own act and present it in front of an audience which provide constructive feedback to guide their creative growth. At the end of the third year of college education, student-artists present their original creative act on stage (i.e., *épreuve synthèse*) in front of an audience filled with their closed ones and circus erudite. Most of the creative work leading to these presentations is done in a dyad or small group settings where one teacher and/or artistic advisor interacts with one student-artists (or a few for disciplines performed in duo or group).

Following the presentation of the current research project to the NCS community, some actors (i.e., student-artists, teachers, and artistic advisors) voluntarily accepted to actively take part in the research. Therefore, while the entire community as well as environments were considered at all times, the creative work of 32 student-artists from different levels (3 high school, 7 first year, 12 second year, 10 third year), 15 teachers, and 5 artistic advisors forming various dyads/groups was followed closely throughout the semester. Specifically, ideas generated by these dyad/groups in various contexts were tracked and scrutinized.

Because of the international reputation of NSC, the participants closely observed were coming from nine different countries and were speaking more than 5 different languages. Although French and English were the most used languages, Spanish was also spoken as both student-artists and teachers were from Spanish-speaking countries.

ETHICAL CONSIDERATIONS

We followed the American Anthropological Association Ethical Guidelines for Ethnographic Research. This study was first approved by the National Circus School's director of studies. Following the presentation of the aims and scope of our research to the school community, verbal consent was obtained from all the participants that were directly observed.

ETHNOGRAPHIC APPROACH AND DATA COLLECTION

To achieve an in-depth situational understanding, the use of qualitative methods such as ethnographic research is indicated. Specifically, researchers argued that process-observation of people in their 'work' environment is the preferred method to understand embodied creativity (Glăveanu, 2010; Hutchins, 1995; Malinin, 2019). Therefore, information about actors, audiences, affordances, actions, and artifact (Glăveanu, 2013) were gathered as they came into play during the creative process no matter how successful the outcome was.

The first author conducted the ethnographic fieldwork which spread over a 4-month period covering a complete semester. A contemporary ethnography approach was taken because it focuses on entangled relationships among humans and nonhumans as well as natural, social, and virtual environment which refers to the zone of entanglement rather than the surrounding of organisms (Culhane, 2017). Specifically, to explore the emergence of ideas at NCS, we used narrative ethnography to convey the "reflexive, representational engagements of field encounters" (Gubrium & Holstein, 2008, p. 251). The first author-ethnographer thus observed, listened and documented everyday activities (Gubrium & Holstein, 2009). Because this style of narrative ethnography "features the vibrant interplay between the ethnographer's own subjectivity and the subjectivities of those whose lives and worlds are in view" (Gubrium & Holstein, 2008, p. 251) it is essential to recognize philosophical and reflexive positioning.

PHILOSOPHICAL POSTURE

Epistemology and ontology, two branches of philosophy, undeniably influence ethnographic processes (Braun & Clarke, 2020). To respect the wholeness and complexity of creative processes, we adopted a *socio-cultural* epistemology (Glăveanu, 2013) which conceptualize, understand, and value creative artifacts "as part of a larger web of relations of people, things, institutions, and beliefs beyond that particular creation" (Weiner, 2000, p. 254). Furthermore, this research was inspired by *reliabilism* epistemology which considers that "a process with a significant propensity for leading to creative achievements may be deemed creative even if the actual outcome doesn't exhibit the desired quality" (Klausen & Ren, 2012, p. 349). Ontology referring to the consideration of being or what it means for something or somebody to be (Packer & Goicoechea, 2000), our perspectives highlight nondualist ontological assumptions. We are cognizant of the impact of these philosophical stances on the prioritization of relations over entities (Venkatesan et al., 2013) and processes over outcomes in both the field work and analysis.

As reflexive researchers, we also bring into the research our own cultural background, personal histories, world views, and motivations. For instance, although motivated by the exploration of the processes supporting creative movements, we must recognize, as two white Canadian and one white European researchers, that our conception of creativity is tinted by westernized norms and values which are mainly oriented towards the creative product (Klausen & Ren, 2012). In this vein, I, the first author-ethnographer, acknowledge that the data collected during field work was influenced consciously or not by my experience working in a renowned circus company as a performance psychology consultant, my background in sport sciences, as well as my academic work in the field of creativity and movement sciences. Compare to the first author which is moderately new to circus arts disciple, the third author has professionally grown in the circus community playing various role from acrobatic coach to research director. These significant experiences in the realm of circus arts, in addition to his visual artist background, have certainly imprinted the data analysis and presentation. Acknowledging their subjectivities, both researchers committed to a reflexive analytical process of mutual questioning to thoroughly scrutinize the data and shed light on the multidimensional processes influencing the journey of an embodied idea. The second author came later in the writing process

and was not involved in data collection or analysis. Yet, coming from the tradition of distributed creativity and the socio-cultural study of human possibility, his theoretical and philosophical perspectives on creativity influenced the conclusion and broader perspectives issued from this research.

OBSERVATION AND FIELD NOTES

Eighty hours of direct creative work observation and 50 hours of environmental observation (i.e., not observing the creative work of one specific dyad/group) was conducted in the various NSC studios. Observational data were gathered in the form of loosely scribbled field notes in either French or English. Field notes contained descriptions of ideas, material, context, situations, ambiances, critical incidents, as well as actors' behaviors, expressed emotions, attitudes, and verbal interactions supporting the creative work (Schön, 1983). Multiple dialogues between actors were written down as they happened. Additional contextual information was noted once a dialogue was completed. The ethnographer's reflections "in-action" were also written down. At the end of an observation day, the notes were transcribed and organized. When additional reflections arose during transcription, the ethnographer was writing them down while clearly identifying that they were post-observation reflection. The 'messiness' and nonlinearity of each creative moment was kept intact in the transcription.

INFORMAL ETHNOGRAPHIC INTERVIEWS

Informal 'ethnographic conversations' are spontaneous verbal interactions happening between actors and the ethnographer that provide an additional source of ethnographic data collected in natural settings (Darpatova-Hruzewicz & Book, 2021; Silk, 2005). In the current study, these informal interactions were mainly happening in the form of spontaneous questions asked to the actors to better understand specific creative moments. Conversations were also initiated by actors that felt the need to clarify some aspect of the process or verbalize what was happening 'in their mind' during a specific moment. Since the ethnographer is bilingual, interactions were happening in either French or English.

DATA ANALYSIS

Mapping

To summarize the data and illustrate the journey of movement ideas through mapping, we first used reflexive thematic analysis (TA). This method was chosen because it expands possibilities by encouraging creativity while emphasizing "the importance of the researcher's subjectivity as analytic resource, and their reflexive engagement with theory, data and interpretation" (Braun & Clarke, 2020, p. 3). Reflexive TA being a situated interpretative reflexive process, it allows open and organic coding from which themes can be developed. Following Braun and Clarke (2020) guidelines, data familiarization and initial coding were conducted in parallel to the data collection. Codes were used as an analytic tool that capture at least one observation. After each day of field work, the researcher reflected on the meaning of observation, field notes, and informal conversation to progressively develop themes (i.e., reflection of multiple observations or facets of the data). Because no pre-existing coding frame was guiding the analysis (although we acknowledge that the way we defined creativity might have influenced the analysis), an inductive approach was indicated to analyze the data (Patton, 1990). Theme's development was thus data driven. Although themes were developed, codes were used to design an exhaustive mapping of the journey of embodied ideas which extrapolate theoretical proposition from circus stories, transforming them into another language (Smith & Sparkes, 2009).

Ethnographic poetry

To honor the affective and sensorial creative finesse of contemporary circus arts, we followed Dara Culhane suggestion to "practice ethnography imaginatively, creatively, and rigorously" (Culhane, 2017, p. 4). Building on Smith et al. (2016) recommendations, following the analysis of the data from a *storyanalyst* perspective to capture the processual components of 'having an idea' though mapping, we transformed into *storytellers*. Specifically, ethnographic poetry was employed to "convey our knowledge, observations, and our theoretical analyses in poetic form". Poetry allowed us to "show rather than tell" (Smith et al., 2016) examples for the third theme (i.e., a dissonant desire instills discomfort and evokes the motivation to explore). Showing is about describing rich and vivid images in a way that is more lyrical so emotions can be portrayed and evoked (Elliott, 2017; Smith et al., 2016). In the context of circus arts, where movement, music, emotions, material, social interactions, and so on, are entangled, we argue that creative forms of writing, like

poetry, transcend theory better than traditional academic form (Elliott, 2017; Maynard & Cahnmann-Taylor, 2010; Smith et al., 2016).

RESEARCH QUALITY

To ensure the quality of reflexive TA, we went through the 20 questions developed by Braun and Clarke (2020) to guide TA analysis. Specifically, we carefully reflected on the theoretical and conceptual relevance of using reflexive TA and justified our choice briefly in the section above. We consistently followed the reflexive TA procedures to avoid confusion with other analytic methods while remaining flexible in the way we presented the findings (e.g., mapping using the codes instead of only themes). The ontological and epistemological assumptions guiding this research were clearly stated as well as other information about the authors likely to influence data collection and analysis.

RESULTS

The reflexive thematic analysis led to the development of the six thematic patterns to portray the journey of creative embodied ideas. To answer research questions a and b, Figure 1 illustrates the characteristics and interactions of the actors, audiences, and affordances supporting the deployment of movement ideas while Figure 2 supports research questions b and c by depicting the actions of actors and the state of movement and conceptual ideas throughout the creative process leading or not to new and useful artifacts (detailed descriptions of the figures in sections below). The codes from which the themes were developed are integrated in the figures and were used to write the descriptions. Both figures present the reflective process underwent by the researchers to give meaning to the data and develop themes. In fact, two figures were created for sake of visual clarity. Yet, the interacting elements presented in Figure 1 are ubiquitous throughout the process illustrated by Figure 2 and crucial to the emergence of embodied creative idea. If we could

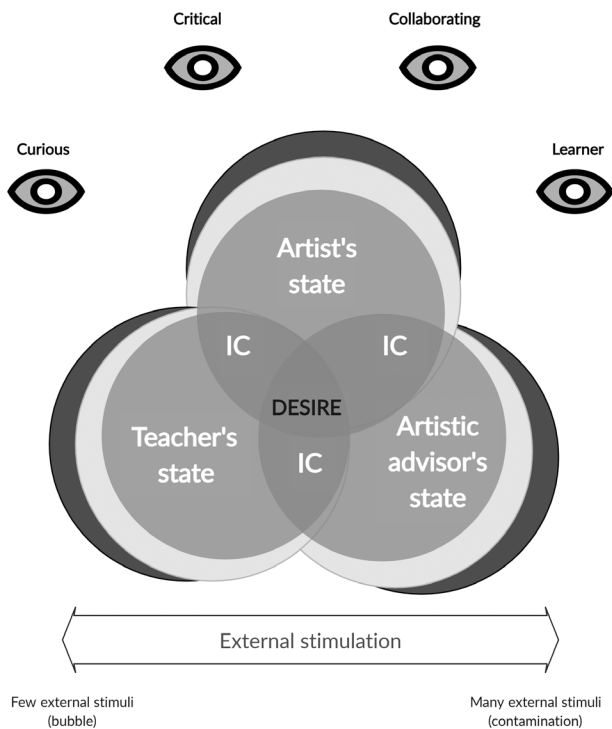


FIGURE 1. The journey of embodied ideas—actors, audiences, and affordances interactions leading to a desire to create (Themes 1–2–3).

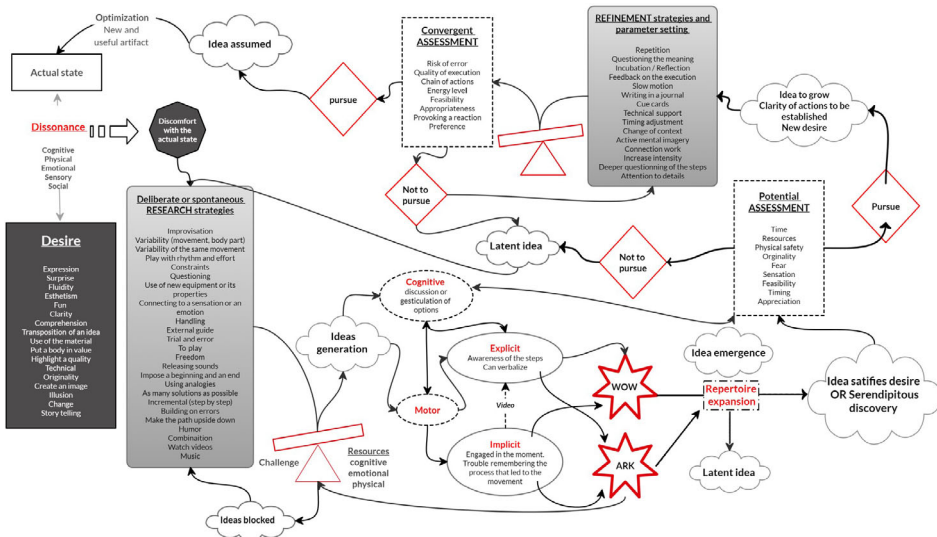


FIGURE 2. The journey of embodied ideas—desire to create leading to actions and artifacts (Themes 3–4–5–6). [Color figure can be viewed at wileyonlinelibrary.com]

illustrate the results with a three-dimensional hologram, everything would be entangled without any static beginning or end.

THEME 1: EXTERNAL CLIMATES AFFORD VARIED LEVEL OF STIMULATION AND MULTIPLE SOURCES OF INSPIRATION (FIGURE 1)

To “set the stage” for embodied idea to emerge, our observations indicated that environmental conditions are key. As illustrated by the left right arrow in Figure 1, various levels of stimulation characterized the environmental conditions afforded at NCS. From small, intimate studios with few external stimulation to huge open spaces where many actors are working simultaneously on various apparatus, these environments afford distinctive opportunities for ideas to emerge and grow.

On the left side of Figure 1, the “bubble” type of environment provides a space for actors to focus intensely on their craft with few distractions as expressed by a unicycle artist; “In the studio it is small, but it is more intimate. I feel like we have our own place here”.

On the right side of Figure 1, the crowded environments allow for contamination between actors as well as spontaneous inspiration from eclectic piece of equipment. For instance, by observing a *Strap* artist practicing beside him, a *Chinese Pole* artist had the idea to try a different type of movement on the pole he called “the gargoyle”; “I’m only trying this idea because I saw the strap guy do something interesting beside me.” NSC is even pushing the concept of contamination further by offering creative acrobatic classes where artists from diverse disciplines are invited to influence each other acrobatically (no use of specific circus apparatus). In this class, artists are moving everywhere, in anyways, with the material available in the space, without any performance expectation. They look at each other, laugh at their failed attempts, and encourage each other to be as silly and bold as possible; “Julie, I like the originality of what you just did, let me try something”. The spontaneous movement of Julie led Tom to experiment a *pike* position in his tumbling sequence; “Julie, I think your pike movement inspired Tom. This tumbling sequence is much more interesting now.”

The environment at NCS is also open to observers roaming freely in the studio or watching attentively through tall glass windows. Whether they are peer artists, other teachers, artistic advisors, interns, administrative staff, or random visitors, these curious, critical, collaborative or learning ‘eyes’ are impacting the creative ideation process (see the four eyes in Figure 1). Namely, in the intimacy of a small studio, an artist was comfortably experimenting how *A cappella* singing could influence the way he moves with his

apparatus. Walking in the corridor, his artistic advisor heard him. Curious, she quietly entered the studio and watch him perform for a bit. Because she loved the novelty of combining signing with circus arts, this intimate experimentation triggered a long collaborative journey of embodied ideation.

THEME 2: INTERTWINED LAYERS OF BACKGROUNDS, EXPERIENCES, AND STATES FORM AN OPEN AND COLLABORATIVE INTERNAL CLIMATE (FIGURE 1)

In constant connection with the external climate, student-artists, teachers, and artistic advisors are forming, through their interactions, an internal climate (IC) to welcome ideas. The vein diagram in Figure 1 presents the actors' characteristics impacting the IC. The encompassing layer (dark gray layer) represents the cultural, educational, technical, and artistic baggage that actors are bringing with them to the creation moment. This can be exemplified by an artist describing himself to his teacher as follow: "I am not a gymnast, never did circus before. I am a contemporary dancer; messy lines are what gets me excited". This background influenced the artist's perception of how to use 'traditional' circus apparatus leading to an original ideational journey. He ended up using the trapeze with his body in a completely different manner allowing him to fully express his desire for 'messiness'.

Everyday activities, inside or outside of NCS, as well as meaningful personal or public life events account for the second layers of IC influence (light gray layers). For instance, reading in the news about the *yellow vest protest* in France, a French artist expressed the desire to explore, through movement, what the color yellow meant for her. This desire unfolded into meaningful discussions between the artist and the teacher establishing an open and collaborative internal climate. This climate supported a rich explorative journey heading in widely varied directions. From moving with various yellow props, performing through yellow pieces of clothing on the floor, to expressing "yellow" emotions through the body, the political attachment of the artist to her country set the stage for embodied ideation.

The two outer layers (i.e., backgrounds and experiences) are thereby impacting the actor's states. While a myriad of states were observed, embracing discomfort and ambiguity, seeking sensations, low level of cognitive load and inhibition, being present, and connecting mind-body appears to be conducive to student-artists' engagement in their creative journey. Lydia usage of improvisation to warm up, not only her body, but also her mind is a suitable example of this. Standing in the middle of the studio, she started balancing gently with her *Cyr Wheel*, letting herself move in any ways she feels like for about 5 minutes; "this warm up allows me to connect with myself, to calm down, and to have fun." Teachers and artistic advisors were also playing an important role in reminding artists to set themselves in the proper state to create, as illustrated by the following statement; "Connect with your body and your breath and observe how it feels today."

Although not always possible to achieve, teachers and artistic advisors adopting a nonjudgmental, listening, open minded, and engaged state are contributing to the formation of a safe, yet productive, internal climate; a space where ideas can bounce from one actor to the other. This was frequently evidenced when artists were facing challenges. For instance, after questioning an artist about her perceptible fear of engaging into the embodiment of an unexplored idea on the *rope*, a teacher normalized the emotion as followed; "It is ok to be afraid. I always want you to let me know when you are afraid, I'm here to listen and help". This expression of support allowed the artist to connect with her fear and find the courage to engage fully within the ideation moment resulting in the transformation of a movement inspired from something she had seen on social media.

Overall, the environment at NCS denotes a culture of 'no right or wrong' where mistakes are welcome and celebrated and where sharing, collaborating, and having open discussion is key. These external and internal climates are favoring the free expression of a wide variety of desire (center of the vein diagram in Figure 1 further described in the left gray box in Figure 2).

THEME 3: A DISSONANT DESIRE INSTILLS DISCOMFORT AND EVOKES MOTIVATION TO EXPLORE (FIGURE 1—CENTER OF THE VEIN DIAGRAM AND FIGURE 2—LEFT BOX)

It became clear during the ethnographic process that the journey of embodied ideas at ENC was desire driven. The environmental conditions (i.e., theme 1) as well as the actors' characteristics (i.e., theme 2), actions (i.e., themes 4 and 6), and emotional reactions (i.e., theme 5) impacted and were impacted by actors' intrinsic desire, making it the central theme of the current research. Because this desire was frequently in conflict or in disagreement with the "status quo," we qualify it as "dissonant." This dissonance triggered discomfort in actors thereby propelling the search for embodied solutions.

Exemplifying adequately the emotional intensity and complexity of a desire using scientific writing methods is challenging. To “write the unspeakable” (Thompson, 1997), the next verses use the observation codes to create images and express, as sensitively as possible, the multiple desire that were observed at NCS.

A desire to develop a distinctive technique to perform a prowess.

To give life in a clashing way to a world of stillness.

A desire to express, surprise, move fluidly and esthetically.

To clarify, comprehend, tell a story through the body.

A desire to highlight the uniqueness of an organism in motion.

To create a change, an image, an illusion.

A desire to have fun playing around with materiality.

A scream of expressive originality.

A dissonance with the current state of the art.

A discomfort from which to depart.

THEME 4: IMPLEMENTING CHALLENGING RESEARCH STRATEGIES TO FACILITATE COGNITIVE OR MOTOR IDEAS' GENERATION (FIGURE 2)

When the appropriate external and internal climates are established and a desire to create change is ignited, the journey of embodied ideas unfolds into nonlinear and complex sequences of actions. Mostly deployed deliberately (but sometimes intuitively) by either the teacher or the student-artist, the ENC community use the term “research strategies” to refer to actions that are implemented to facilitate the generation of ideas conducive to the achievement of the desire. The light gray box in the middle left of Figure 2 provides a compelling list of the research strategies adopted at NCS. Most of the time, those strategies were not implemented in ‘isolation’. For example, a teacher attributed various movement ‘efforts’ to specific spaces in the studio. The acro-dance duo he was collaborating with thus had to move through the room and create spontaneously balance, flying, or falling movements depending on the space they were finding themselves in. This strategy was driven by the duo’s desire to find their “own style” of acrobatic movement beyond ‘traditional’ hand-to-hand or lift positions. This mixture of constraints and improvisation strategies resulted in the emergence of an interesting ‘falling’ movement interaction between the two artists which appeared new to them.

Interestingly, our observations revealed that creating a ‘challenge-skills balance’ is an important goal of those research strategies. Specifically, the research strategy adopted in a given situation must surpasses slightly the performer’s cognitive, emotional, and physical resources to present a stimulating challenge (illustrated in Figure 2 by a balance slightly leaning to the left).

When the right level of balance is achieved, it helps the artist to reorganize by generating solutions. Going back to the example of signing *A cappella* to influence movement differently, early in the exploration process the artist felt destabilize; “I think I am willing to commit to the idea, I’m just afraid. I’m worried about how much technique I’ll be able to integrate while signing”. By navigating this emotional and technical challenge, he realizes how signing was helping his breath regulation changing his range of motion and unlocking the exploration of new movement repertoires. Similarly, a tightwire artist decided to explore how wearing a long coat could lead to original embodied idea. Considering the balance demand of this discipline, the coat was initially preventing him to stay on the wire and movements were limited more than facilitated by the coat. Through a trial-and-error process, the artist tested different types of long coat and found a lighter one that was allowing him to stay on the wire while amplifying his movement and create surprising images.

However, if the strategy is too challenging for the artist, it may lead to ideas being blocked (i.e., as illustrated by the bottom cloud in Figure 2). This was well exemplified by an artist trying to produce sounds through her month to inspire the generation of different forms of movement; “It just does not come out, maybe I would need a warm-up like we do in acting class to free up sounds so I can move more freely”. When ideas were not emerging from the implementation of research strategies, it was eased, complexified, or changed to find a better balance.

These strategies provoked the idea generation process which can take various forms. Although ideas can sometimes be generated verbally through discussions between the actors (and/or audiences) or through gestulation, most of the time the artist immediately starts producing ideas in motion (see the dashed line ovals in the middle of Figure 2). Moving in relation with an apparatus, props, and/or partners, ideas can be spawned through an explicit process where actors are going through the motion step by step allowing them to process and remember what they performed. For instance, the desire to experiment with a more esthetic *German Wheel* initiated a motoric idea generation for Kyla. In complete connection with this new apparatus, she played and worked with the human size double-ring trying to figure how its nonlinearity and inconsistent motion could lead to novel movements. Step by step, the movements created with the wheel transformed into the original idea of combining a 'coin spin' with a 'half turn'; "It will work, I just need to find the right way to keep my balance when I transfer my weight".

However, ideas can also be developed implicitly (see the solid line oval in the middle of Figure 2). In this instance, the artist and the teacher are so engaged in the ideation moment (i.e., research strategy), they barely recall which steps led to the original and relevant movement outcome once the process is completed. Experimenting with sensorial strategies to inspire other form of movement, an artist was playing with the trapeze, stretching and rolling himself into it. Completely immerse in this sensorial exploration, he got himself stuck within the ropes. Searching for a way out, he created a movement that attracted his teacher's attention; "Oh!!! This is really good, you know how you got there?" Unfortunately, he could not recall the steps that led to the creation of the movement. Despite many attempts at re-creating the chain of actions with the help of the teacher external guidance, this creative movement was never retrieved or used in a formal context.

Because of the actors' awareness of this tendency to get completely immerse in the movement exploration, many used their phone to video record their idea generation. Video recording is thus a savior to access movement ideas performed implicitly (see dashed line between implicit and explicit oval in Figure 2).

THEME 5: EMOTIONAL EMERGENCE OF IDEAS PROVOKES REPERTOIRE EXPANSION

No matter how ideas emerged (i.e., explicitly or implicitly), a spontaneous evaluation, that first takes the form of an emotional reaction ranging from burst of excitement to repulsive disgust, is expressed as depicted by the two stars at the bottom of Figure 2.

The pleasant emotions usually testify of a desire reached or a serendipitous discovery (see cloud at the right of Figure 2). An embodied idea attached to a pleasant emotion may continue its journey toward a more deliberate assessment (see Theme 6). For instance, while working on variations of 'arabesque' positions on the trapeze, a teacher was using questioning prompts to help embodied ideas progress through the artist body; "What could you do with your right leg?", "Can you touch your head?". Through this collaborative work, the artist was building on the teacher's suggestions leading to the emergence of a new movement; "Oh, this is a very lovely image, I like it! Now we know that this movement work". Likewise, while playing with the properties of a hula hoop, bouncing it, flexing it, rolling it with different body parts, an artist-teacher dyad discovered an artistically pleasing way to throw and catch the hoop at each other without looking; "Yes!!! It works!!! Amazing, I'm gonna write this down".

However, the journey of an embodied idea attached to unpleasant emotions may take a turn and 'force' the reorganization of the research strategy to explore other pathways. For instance, the use of variability (i.e., always try a different way) to explore ways to hold the juggling balls led the juggler to a state of confusion; "the new way I am trying to hold the balls feels so weird, I hate it!". After a brief discussion, both the artist and the teacher agree that nothing relevant was emerging from imposing variability on the balls holding and thus changed strategy.

At multiple moment throughout its journey, an idea may 'pause' as it falls into a state of latency, that is, the idea become dormant because it is inadequate to the desire at hand and/or irrelevant to the context. This was nicely described by an artist when asked by her teacher if she felt there was always something new emerging while improvising with her apparatus; "Yes, I think so, but I don't always use it. It stays somewhere inside me". An idea may not stay in a state of latency indefinitely as it may be brought to light in other contexts or influence the generation of future ideas (see the cloud in the right corner of Figure 2). For instance, a juggler had the idea a few years back to use a metronome to represent the heartbeat of his juggling and 'force' very steady juggling movements. Unfortunately, in his native country, he did not have access to a metronome. When he arrived at NCS, the resource was available and thus the idea resurfaced. He started experimenting with various steady patterns of juggling leading to a whole juggling act around the heartbeat concept.

To sum up this theme, no matter what emotion the ideation journey evoked, physical, cognitive, or emotional repertoire expands since knowing, feeling, and sensing what ‘works’ or does not ‘work’ for a particular desire in a given context is relevant to broaden actors’ embodied conceptualization (see Figure 2 dot-dashed line box bottom right).

THEME 6: ASSESSMENTS AND REFINEMENT STRATEGIES LEAD TO POTENTIAL OPTIMIZATION

When an embodied idea satisfies the initial desire or is a serendipitous discovery that appears relevant, it goes through a more rational assessment of potential as described by the dashed line box to the right of Figure 2. Questions frequently leading this assessment are: “Is there enough time to develop the idea? Do we have the appropriate resources? Is it safe? Is it truly original? Is it feasible? Do I like the sensation? Can it be appreciated by others?”

Following this potential assessment, some ideas take the latency pathway, and the research process is resumed (see the diamond and the cloud in the middle of Figure 2) while others pursue their growth towards a thorough testing process where actions are clarified and desire refined (see the diamond and cloud at the far right of Figure 2). As described in the top-right gray box in Figure 2, refinement strategies are actions implemented to set the movement or concept parameters: the movement is rehearsed, kinematics is enhanced, the meaning of the body in motion is established, rhythm of the movement is adjusted, connection with other movements is developed, etc. Again, an appropriate balance between the challenge provided by the refinement strategy and the actors’ resources is key to facilitate the evolution of the embodied idea. At this stage of its journey, the embodied idea is clearly identifiable through the artist body, and its embodied refinement takes a lot of the actors’ attention and time. For instance, building on the desire of using the *tissue* as a ‘support’ rather than a ‘hanger’ apparatus, an aerial artist and his teacher created multiple geometric movement shapes. These innovative embodied ideas were assessed positively and then entered a refinement process where not only they were rehearsed and adjusted multiple times but challenged through questioning and feedback coming from the actors themselves or other audiences. Many of these movements were integrated in the artist’s final act, achieving the desire of changing the way *tissue* is used in circus arts.

As illustrated in the last example, when the refinement process is successful, the journey of the embodied idea may be followed by a convergent assessment where the movement or concept idea is considered in relation to the act in its globality (see top middle dashed line box in Figure 2). Is it appropriate in the act? What is the risk of errors when integrated in the act? Will I have enough energy to perform this movement within the act? Will it add value to the act and/or provoke reactions? If positively answered, the idea is assumed (i.e., top left cloud) and integrated in the act with lead, in some cases, to the optimization of the initial state; the idea becomes a new and useful embodied artifact (top left arrow in Figure 2).

DISCUSSION

Ideas play a crucial role in the emergence of creative circus movements. At NSC everyone talks about them, want “to have” them, and are proud “to show” them. How embodied ideas are conceptualized and intertwined with actors, affordances, audiences, actions, to potentially become (or not) artifacts was the question motivating the current narrative ethnographic exploration. Through reflexive thematic analysis, multiple codes emerged which were combined into six main themes resulting in the complex, multidimensional, and nonlinear mapping of *the journey of an idea* at NSC. Because of the richness of the immersion in this circus community, the reflection continues next around embodiment, pedagogy, and emotions. With the help of the existing literature, we thus discuss various journeys that combine, in the end, into an embodied, perspectival, and socio-cultural perspective of ideas.

A RADICALLY EMBODIED JOURNEY

We highlighted, at the onset of this paper, the evolution of circus arts in terms of the “ownership” of movement creativity. From ‘captured bodies’ or ‘consenting interpreters’ (Lavers et al., 2019), contemporary circus artists reclaimed the stage to express their full creative potential. Our observation of the internal and external climates underlying the emergence and growth of creative movement ideas at NSC supports the latter self-expressive posture. Although student-artists were frequently supervised by a teacher and/or an artistic advisor, ideas were not ‘owned’ by one or the other actor. Creative ideas were emerging in the spaces between all the elements involved.

These fluid interactions support the notion of distributed creativity where relational creative processes are considered “distributed between people, between people and places, and across time [making] this phenomenon mundane, ‘democratic,’ and reachable” (Glăveanu, 2021, p. 118). Following this perspective, creativity is no longer ‘locked’ in the mind or brain of renowned choreographers (or eminent creators in other domains) but can be expressed daily in a myriad of context whether you are a beginner, a student, or an expert. Sawyer and Dezutter (2009) have shown the relevance of distributed creativity principles by tracking the evolution of narratives of an improvised theater group composed of teenagers. Similar to the way movement ideas are evolving from multiple interactions at NSC, theatrical narrative emerged from collaborative processes where interaction among members “become a more substantial source of creativity than the inner mental processes of any one participating individual” (Sawyer & Dezutter, 2009, p. 83). In this vein, the way creative ideas were distributed at NSC supports the broader concept of radical embodiment, more specifically the 4 E approach (Malinin, 2019). At NSC, ideas emerged from a united body and mind (i.e., embodied) coupled with various environments (i.e., embedded) and relevant objects (i.e., extended) which are acted on in meaningful ways (i.e., enactive). These results corroborated with Kimmel and Hristova’s (2021) analysis of creative movements emerging from improvised dance duet. While these scholars took a deep dive into the analysis of creative movements per se, our research add on their findings by showing how the socio-cultural contexts of a performing art school influence the journey of an embodied idea.

A PEDAGOGICAL JOURNEY

The radical embodiment perspective of creative ideas has important implications for the way performing arts is taught and creative potential is fulfilled. To invite novel ideas, rather than being movement designers and/or correctors, teachers are environment designers. In addition to contribute to the establishment of a collaborative and open learning environments, our finding revealed that teachers must also implement challenging research strategies (see Figure 2) such as improvisation exercises (e.g., Biasutti, 2013; Richard et al., 2017), constrain-led approach (e.g., Torrents et al., 2015), variability training (Strafford et al., 2020), rhythmic or musical activities, and so on. When appropriately balanced with student-artists’ resources (i.e., physical, cognitive, affective), these research strategies support the exploration of ideas in an embodied, embedded, extended, and enacted way. The balanced relationship between perceived challenges afforded by the environment and individual perception of skills is also important for the emergence of optimal psychological states such as flow (Csikszentmihalyi, 1996), adaptability (Tenenbaum et al., 2015), and resilience (Fletcher & Sarkar, 2016). Hence, by designing challenge-skills balanced environments, teachers might do more than setting the stage for creative movement ideation. They might also provide a space for optimal psychological development. This hypothesis is partially aligned with Łucznik et al. (2021) study on the impact of dance improvisation. While dancers did not directly report on the ‘challenge-skill balance’ idea, their engagement in improvisation impacted their effortless attention and enjoyment in addition to contributing to their self-esteem and connectivity to the group. In circus arts, research strategies are mainly implemented for their performative ends (e.g., creating outstanding movements). Future studies in this context should investigate how these strategies can also be a mean to psychological growth (Rasmussen et al., 2017; Richard et al., 2021; Watson et al., 2012).

AN EMOTIONAL JOURNEY

By interacting with collaborative, open, and challenging environments, actors at NCS experience a myriad of emotions throughout their creative quest. Whether it is the angst created by the unsatisfying state of the art, the burst of happiness of a serendipitous creative moment, or the deep disappointment of an unfruitful research, ideas emerge, transform, provoke, dissipate, in parts, because of the emotional engagement of actors with the environment. In other words, if the environment is the road and actors are alternatively drivers and co-drivers, emotions are the fuel that propel the car on the ideation journey. This result corroborates with well-known frameworks that identify intrinsic motivation as a core component of creative processes (e.g., Amabile & Pillemer, 2012; Csikszentmihalyi, 1996; Sternberg & Lubart, 1991). Furthermore, in line with Amabile and Pratt’s (2016) findings, the emotional moments that we observed were often disproportionate to the level of progress made by student-artists. As represented by the “wow” and “ark” stars in Figure 2, small steps were sometimes received with exaggerated positive emotional reactions while little bumps in the road were attached to overly intense negative emotions.

It is hard to conclude though, considering the overall process, whether so called ‘positive’ or ‘negative’ emotions were more conducive to creative movement outcomes. In the literature, the relationship between

creative ideation and emotion's valence (i.e., positive and negative) is ambivalent (Davis, 2009). Some studies revealed that appraisal of uncertainty, leading to negative emotions such as fear and sadness, results in more structured ideation (Baas et al., 2012). However, the relationship between positive emotions and creative ideas received stronger support (e.g., Baas et al., 2008; Fredrickson & Branigan, 2005; Lai et al., 2021). When it comes to creative ideation in circus arts, our study points towards an idiosyncratic (Hanin, 2000) and contextual (Davis, 2009) consideration of emotions. For instance, for a student-artist in a specific context, emotions such as anxiety and sadness were *functional* to ignite a desire to create whereas for another artist those same emotions evoked in a different context were completely *dysfunctional*. Future studies should thus move beyond the emotional valence and investigate the effect of perceived *functionality* of an emotional state in its related creative context. Harnessing all sorts of emotions in the pursuit of a valued idea might be a promising way to make the most out of emotions in the creative process.

LIMITATIONS

While the current study highlights important considerations to support movement creativity in a circus school context, it also presents some limitations that must be addressed. First, NCS benefits from many resources that other circus schools might not have access to. The simple fact that student-artists are training and creating frequently in a 'one-on-one' context with a specialized teacher (and an artistic advisor) is a privilege that is not afforded in all schools. Because our observations focused mainly on those dyads, the journey of embodied ideas for circus schools operating in group-class set-ups or for circus artists working on their art alone might be different. Secondly, because the dyad that we observed thoroughly volunteered to participate, we did not observe closely all dyads generating movement ideas at NCS. It is possible that the description and topic of our study attracted a certain profile of student-artists and teachers that were more comfortable with being observed and willing to share their ideas. Although we tried to be as diverse as possible in our observations, this volunteer bias must be taken into account when considering our results. Finally, we opted for the use of process-observations to feel and connect with creative moments and interact with the actors involved. We acknowledge that our socio-cultural perspective of creativity might have resulted in a broad picture of the embodied journey of ideas at the expense of more detailed analysis of creative movements' evolution. Future study could thus complete the ethnographic analysis by adding video recorded *interaction analysis* as described by Sawyer and Dezutter (2009) or *micro-genesis analysis* as developed by Kimmel and Hristova (2021).

CONCLUSION: A FINAL PERSPECTIVE ON THE JOURNEY OF IDEAS

"There is more to creative activity than the having of ideas, and ideas are not always creative. Still, ideas may be involved in all creative efforts, at least early on" (Runco et al., 2014, p. 186). In this paper, we contribute to broadening the concept of 'creative idea'. Beyond mental schemas, we consider ideas embodied from the start. Studying the process of movement—both the movement of ideas and the emergence of ideas in movement—the current research calls for a dynamic and holistic approach to creativity in circus arts that certainly has a much wider applicability. Our conceptual and methodological approach was ultimately perspectival in nature (Glăveanu, 2021). The effort was to discover and place in dialogue as many meaningful perspectives as possible on the journey of ideas in ways that expand the space of possibility for all the creative actors involved, including the researchers themselves. It is not sufficient to claim that creative processes are embodied or nonlinear. We need approaches and methodologies able to 'show' these aspects and, as such, we need to integrate in our practice and our research more of those perspectives that would normally be otherwise silent or ignored. In a world in which often the interest in creativity is driven by neoliberal and consumerist approaches, we are called to create and cherish those spaces of togetherness in which minds and bodies are intertwined in acts of possibility-making. We hope this paper does justice to one of these spaces.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author, VR. The data are not publicly available because it contains information that could compromise the privacy of research participants.

REFERENCES

- Abraham, A. (2018). *The neuroscience of creativity*. Cambridge: Cambridge University Press.
- Allsopp, R., & Lepecki, A. (2008). Editorial: On choreography. *Performance Research*, 13(1), 1–6; doi: [10.1080/13528160802465409](https://doi.org/10.1080/13528160802465409).
- Amabile, T.M., & Pillemer, J. (2012). Perspectives on the social psychology of creativity. *The Journal of Creative Behavior*, 46, 3–15; doi: [10.1002/jocb.001](https://doi.org/10.1002/jocb.001).
- Amabile, T.M., & Pratt, M.G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157–183; doi: [10.1016/j.riob.2016.10.001](https://doi.org/10.1016/j.riob.2016.10.001).
- Baas, M., De Dreu, C.K., & Nijstad, B.A. (2008). A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin*, 134, 779–806; doi: [10.1037/a0012815](https://doi.org/10.1037/a0012815).
- Baas, M., de Dreu, C., & Nijstad, B.A. (2012). Emotions that associate with uncertainty lead to structured ideation. *Emotion*, 12(5), 1004–1014; doi: [10.1037/a0027358](https://doi.org/10.1037/a0027358).
- Baer, J. (2015). The importance of domain-specific expertise in creativity. *Roeper Review*, 37, 165–178; doi: [10.1080/02783193.2015.1047480](https://doi.org/10.1080/02783193.2015.1047480).
- Biasutti, M. (2013). Improvisation in dance education: Teacher views. *Research in Dance Education*, 14, 120–140; doi: [10.1080/14647893.2012.761193](https://doi.org/10.1080/14647893.2012.761193).
- Braun, V., & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18, 1–25; doi: [10.1080/14780887.2020.1769238](https://doi.org/10.1080/14780887.2020.1769238).
- Creely, E., Henriksen, D., & Henderson, M. (2020). Three modes of creativity. *The Journal of Creative Behavior*, 55, 306–318; doi: [10.1002/jocb.452](https://doi.org/10.1002/jocb.452).
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Perennial.
- Culhane, D. (2017). Imagining: An introduction. In D. Elliott & C. Culhane (Eds.), *A different kind of ethnography* (pp. 1–21). North York: University of Toronto Press.
- Darpatova-Hruzewicz, D., & Book, R.T. (2021). Applying a relational lens to ethnographic inquiry: Storied insight into the inner workings of multicultural teams in men's elite football. *Psychology of Sport and Exercise*, 54, 101886; doi: [10.1016/j.psychsport.2021.101886](https://doi.org/10.1016/j.psychsport.2021.101886).
- Davis, M.A. (2009). Understanding the relationship between mood and creativity: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 108, 25–38; doi: [10.1016/j.obhdp.2008.04.001](https://doi.org/10.1016/j.obhdp.2008.04.001).
- Elliott, D. (2017). Writing. In D. Elliott & C. Culhane (Eds.), *A different kind of ethnography* (pp. 23–45). North York: University of Toronto Press.
- Fletcher, D., & Sarkar, M. (2016). Mental fortitude training: An evidence-based approach to developing psychological resilience for sustained success. *Journal of Sport Psychology in Action*, 7(3), 135–157.
- Fredrickson, B.L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion*, 19, 313–332; doi: [10.1080/02699930441000238](https://doi.org/10.1080/02699930441000238).
- Glăveanu, V.P. (2010). Principles for a cultural psychology of creativity. *Culture & Psychology*, 16, 147–163; doi: [10.1177/1354067x10361394](https://doi.org/10.1177/1354067x10361394).
- Glăveanu, V.P. (2013). Rewriting the language of creativity: The five A's framework. *Review of General Psychology*, 17, 69–81.
- Glăveanu, V.P. (2014). Distributed creativity: What is it? In *Distributed creativity: Thinking outside the box of the creative individual* (pp. 1–13). Cham: Springer International Publishing.
- Glăveanu, V.P. (2021). *The possible: A sociocultural theory*. New York: Oxford University Press.
- Gubrium, J.F., & Holstein, J.A. (2008). Narrative ethnography. In S.N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 241–264). New York, NY: The Guilford Press.
- Gubrium, J.F., & Holstein, J.A. (2009). *Analyzing narrative reality*. Thousand Oaks, CA: Sage Publications, Inc.
- Hanin, Y.L. (2000). *Emotions in sport*. Champaign, IL: Human Kinetics.
- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: MIT Press.
- Kimmel, M., & Hristova, D. (2021). The micro-genesis of improvisational co-creation. *Creativity Research Journal*, 33(4), 347–375; doi: [10.1080/10400419.2021.1922197](https://doi.org/10.1080/10400419.2021.1922197).
- Katya Stephens, L. (2015). The economic lives of circus "Artists": Canadian circus performers and the new economy. *Canadian Journal of Communication*, 40(2), 243–260.
- Kimmel, M., Hristova, D., & Kussmaul, K. (2018). Sources of embodied creativity: Interactivity and ideation in contact improvisation. *Behavioral Sciences*, 8, 1–37; doi: [10.3390/bs8060052](https://doi.org/10.3390/bs8060052).
- Kirsh, D. (2011). Creative Cognition in Choreography. *Proceedings of the 2nd International Conference on Computational Creativity*.
- Klausen, S.A., & Ren, H. (2012). The notion of creativity revisited: A philosophical perspective on creativity research. *Creativity Research Journal*, 22(4), 347–360; doi: [10.1080/10400419.2010.523390](https://doi.org/10.1080/10400419.2010.523390).
- Lai, Y.-C., Peng, S.-L., Huang, P.-S., & Chen, H.-C. (2021). The impact of affective states and affective shifts on creative ideation and evaluation. *The Journal of Creative Behavior*, 55(1), 130–144; doi: [10.1002/jocb.440](https://doi.org/10.1002/jocb.440).
- Lavers, K. (2014). The political body in contemporary circus: Philippe petit and philippe ménard. *Journal of Theatre and Performing Arts*, 8, 55–68.
- Lavers, K., Leroux, L.P., & Burt, J. (2019). New work in contemporary circus. In K. Lavers, L.P. Leroux, & J. Burt (Eds.), *Contemporary circus* (pp. 155–208). London: Routledge.

- Leroux, L.P. (2016a). Contemporary circus research in Québec: Building and negotiating an emerging interdisciplinary field. In P. Tait & K. Lavers (Eds.), *The circus studies reader* (pp. 560–571). London: Routledge.
- Leroux, L.P. (2016b). Reinventing tradition, building a field: Quebec circus and its scholarship. In L.P. Leroux & C.R. Batson (Eds.), *Cirque Global: Quebec's expanding circus boundaries* (pp. 3–21). Montreal: McGill-Queen's University Press.
- Leroux, L.P., & Batson, C.R. (2016). *Cirque global Quebec's expanding circus boundaries*. Montreal; Kingston; London; Chicago: McGill-Queen's University Press.
- Łuczniak, K., May, J., & Redding, E. (2021). A qualitative investigation of flow experience in group creativity. *Research in Dance Education*, 22(2), 190–209; doi: [10.1080/14647893.2020.1746259](https://doi.org/10.1080/14647893.2020.1746259).
- Malinin, L.H. (2019). How radical is embodied creativity? Implications of 4 E approaches for creativity research and teaching. *Frontiers in Psychology*, 10, 1–12; doi: [10.3389/fpsyg.2019.02372](https://doi.org/10.3389/fpsyg.2019.02372).
- Marmeleira, J., & Duarte Santos, G. (2019). Do not neglect the body and action: The emergence of embodiment approaches to understanding human development. *Perceptual and Motor Skills*, 126, 410–445; doi: [10.1177/0031512519834389](https://doi.org/10.1177/0031512519834389).
- Maynard, K., & Cahnmann-Taylor, M. (2010). Anthropology at the edge of words: Where poetry and ethnography meet. *Anthropology and Humanism*, 35(1), 2–19; doi: [10.1111/j.1548-1409.2010.01049.x](https://doi.org/10.1111/j.1548-1409.2010.01049.x).
- Packer, M.J., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: ontology, not just epistemology. *Educational Psychologist*, 35(4), 227–241; doi: [10.1207/S15326985EP3504_02](https://doi.org/10.1207/S15326985EP3504_02).
- Patton, M.Q. (1990). *Qualitative evaluation methods* (2nd edn). Beverly Hills, CA: Sage.
- Rasmussen, L.J.T., Østergaard, L.D., & Gläveanu, V.P. (2017). Creativity as a developmental resource in sport training activities. *Sport, Education and Society*, 24, 491–506; doi: [10.1080/13573322.2017.1403895](https://doi.org/10.1080/13573322.2017.1403895).
- Richard, V., Halliwell, W., & Tenenbaum, G. (2017). Effects of an improvisation intervention on elite figure skaters' performance, self-esteem, creativity and mindfulness skills. *The Sport Psychologist*, 31, 275–287; doi: [10.1123/tsp.2016-0059](https://doi.org/10.1123/tsp.2016-0059).
- Richard, V., Holder, D., & Cairney, J. (2021). Creativity in motion: Examining the creative potential system and enriched movement activities as a way to ignite it. *Frontiers in Psychology*, 12, 1–18; doi: [10.3389/fpsyg.2021.690710](https://doi.org/10.3389/fpsyg.2021.690710).
- Runco, M.A., Walczyk, J.J., Acar, S., Cowger, E.L., Simundson, M., & Tripp, S. (2014). The incremental validity of a short form of the ideational behavior scale and usefulness of distractor, contraindication, and lie scales. *The Journal of Creative Behavior*, 48(3), 185–197; doi: [10.1002/jocb.47](https://doi.org/10.1002/jocb.47).
- Sawyer, R.K., & Dezutter, S. (2009). Distributed creativity: How collective creations emerge from collaboration. *Psychology of Aesthetics, Creativity, and the Arts*, 3, 81–92; doi: [10.1037/a0013282](https://doi.org/10.1037/a0013282).
- Schön, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Silk, M. (2005). Sporting ethnography: Philosophy, methodology & reflection. In D. Andrews, D. Mason, & M. Silk (Eds.), *Qualitative methods in sports studies* (pp. 65–103). Oxford: Berg.
- Smith, B., & Sparkes, A.C. (2009). Narrative analysis and sport and exercise psychology: Understanding lives in diverse ways. *Psychology of Sport and Exercise*, 10(2), 279–288; doi: [10.1016/j.psychsport.2008.07.012](https://doi.org/10.1016/j.psychsport.2008.07.012).
- Smith, B., McGannon, K.R., & Williams, T.L. (2016). Ethnographic creative fiction: Exploring the what's, why's and how's. In L.P.G. Molner (Ed.), *Ethnographies in sport and exercise research* (pp. 59–73). New York, NY: Routledge.
- Sternberg, R.J., & Lubart, T.I. (1991). An investment theory of creativity and its development. *Human Development*, 34, 1–31; doi: [10.1159/000277029](https://doi.org/10.1159/000277029).
- Stevens, C., Malloch, S., McKechnie, S., & Steven, N. (2003). Choreographic cognition: The time-course and phenomenology of creating a dance. *Pragmatics & Cognition*, 11(2), 297–326; doi: [10.1075/pc.11.2.06ste](https://doi.org/10.1075/pc.11.2.06ste).
- Stierand, M., Boje, D.M., Gläveanu, V., Dörfler, V., Haley, U.C.V., & Feuls, M. (2019). Paradoxes of “creativity”: Examining the creative process through an antenarrative lens. *The Journal of Creative Behavior*, 53, 165–170; doi: [10.1002/jocb.224](https://doi.org/10.1002/jocb.224).
- Strafford, B.W., Davids, K., North, J.S., & Stone, J.A. (2020). Designing Parkour-style training environments for athlete development: Insights from experienced Parkour Traceurs. *Qualitative Research in Sport, Exercise and Health*, 13, 1–17; doi: [10.1080/2159676X.2020.1720275](https://doi.org/10.1080/2159676X.2020.1720275).
- Tait, P. (1999). Circus bodies as theatre animals. *Australasian Drama Studies*, 35, 129.
- Tenenbaum, G., Lane, A., Razon, S., Lidor, R., & Schinke, R. (2015). Adaptation: A two-perception probabilistic conceptual framework. *Journal of Clinical Sport Psychology*, 9, 1–23; doi: [10.1123/jcsp.2014-0015](https://doi.org/10.1123/jcsp.2014-0015).
- Thompson, S.E. (1997). Writing the Unspeakable. In R.P.A.J. Parini (Ed.), *Introspections: American poets on one of their own poems* (pp. 280–283). Hanover, NH: Middlebury College Press.
- Torrents, C., Ric, Á., & Hristovski, R. (2015). Creativity and emergence of specific dance movements using instructional constraints. *Psychology of Aesthetics, Creativity, and the Arts*, 9, 65–74; doi: [10.1037/a0038706](https://doi.org/10.1037/a0038706).
- Torrents, C., Balagué, N., Ric, Á., & Hristovski, R. (2020). The motor creativity paradox: Constraining to release degrees of freedom. *Psychology of Aesthetics, Creativity, and the Arts*, 15, 1–12; doi: [10.1037/aca0000291](https://doi.org/10.1037/aca0000291).
- Venkatesan, S., Martin, K., Scott, M.W., Pinney, C., Ssorin-Chaikov, N., Cook, J., & Strathern, M. (2013). The group for debates in anthropological theory (GDAT), The University of Manchester: The 2011 annual debate – non-dualism is philosophy not ethnography. *Critique of Anthropology*, 33(3), 300–360; doi: [10.1177/0308275x13490310](https://doi.org/10.1177/0308275x13490310).
- Watson, D.E., Nordin-Bates, S.M., & Chappell, K.A. (2012). Facilitating and nurturing creativity in pre-vocational dancers: Findings from the UK Centres for Advanced Training. *Research in Dance Education*, 13, 153–173; doi: [10.1080/14647893.2012.694415](https://doi.org/10.1080/14647893.2012.694415).
- Weiner, R.P. (2000). *Creativity and beyond: Cultures, values, and change*. Albany, NY: State University of New York Press.

Veronique Richard, The University of Queensland, National Circus School in Montreal

Vlad Glăveanu, Dublin City University

Patrice Aubertin, National Circus School in Montreal

Correspondence concerning this article should be addressed to Veronique Richard, School of Human Movement and Nutrition Sciences, The University of Queensland, St Lucia, Queensland, Australia. E-mail: v.richard@uq.edu.au

ACKNOWLEDGMENT

Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.