Between minds and bodies: Some insights about creativity from dance improvisation

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Abstract

Observing dance improvisation provides a unique opportunity to understand how people collaborate together while creating. It is an opportunity to consider how new ideas appear, not simply from the internal processes of a single creator but rather from the interactions between the minds, bodies and the environment acting on and between a group of improvising dancers. Improvisational scores served in this study as a laboratory into group creativity. Using a video-stimulated recall method, which asks dancers to reflect upon their own processes just after completing the score, I explored the interdependency between meta-cognitive strategies such as imagery and sense awareness, group processes, the role of others in one's own creative processes, and interactions between bodies and with the environment. As a result I describe how dancers build together a common improvisational space, which allows them to co-create and share their ideas mostly in non-verbal, non-propositional ways. I discuss the co-agency of such a process, showing that intentionality is distributed between dancers at each moment of improvisation and that they are mainly focused on supporting the ideas of others. I also discuss the medium of the body and the embodied response as central to dance improvisation practice.

Keywords

dance improvisation, group creativity, co-agency, embodied cognition

Introduction

In psychological discourse the creative process is mainly considered to be situated in the mind of the creator. Cognitive psychology attempts to explain mental processes underlying creativity, such as divergent and convergent thinking mostly from an individual perspective, attempting to explain, for example, how a person creates novelty (Sawyer 2012: 35). In this framework a creative process is seen as an execution of the creative work.

Psychologists describe such processes in a sequence of stages. The simplest model of creative process is a two-stage model, where there is an expanding state of 'divergent thinking', while many possibilities are generated, followed by 'convergent thinking', which hones in on the best idea. The more elaborated models add some preparation stages as well as execution of the created ideas (Sawyer 2012: 88–89). They acknowledge that creativity takes place over time, and most of the creativity occurs while doing the work. Working with the medium is also an essential part of creative process and the creators often get ideas while working with their materials. In this framework however, creativity happens purely in the mind of the creator who only interacts with the external world. On the other hand, a more sociocultural approach describes the conditions required for creativity at the level of culture, society or group showing the positive impact of diversity over group, trust and positive climate for experimentation (Sawyer 2012: 209).

Contemporary dance practice, especially dance improvisation, challenges the psychological and sociocultural perspectives outlined above. Creative process here is highly embodied, and the separation of mental processes from action, bodily expression and interactions with others render such isolation impossible. The ideas appear not in solitary minds, but rather they appear from interactions of mind and body, of body's disposition and ideas in the mind, from interaction with surroundings, objects and gravity, and with each other and each other's bodies. Dancers use their bodies as tools to think with (Kirsh 2010). They hardly differentiate between thinking and moving while creating. Moreover, the process is highly distributed between groups of dancers, as they communicate with each other mostly in a non-verbal way, and nonetheless successfully create work together which may have the appearance of choreographed, mapped or planned activity (Stevens et al. 2003).

Dance cognition

David Kirsh, in his article, 'Creative cognition in choreography' (2011), explored how dancers use their bodies as things to think with and their sensory system as engines to simulate ideas in a non-propositional way. He observed that when trying to create new movement form, dancers use their bodies as a medium, similarly as a graphic artist uses drawing as a tool. However, because of the nature of dance, there is very tight relation between 'body-as-tool' and 'body-as-display-medium' of creative work. This questions a paradigm that places creative processes as situated in the mind of a creator who 'just' relates to the external world and his or her tools. In addition, senses and sensory stimulation feed dancers' imagery, which again is translated into movement responses. If the body and the senses are tools to imagine with, and at the same time a dancer's presence is a result of this imagining in real time, the understanding of creativity as a pre-planned, sequential process that takes place in the mind, mostly through divergent and convergent thinking, is highly simplified.

Dance improvisation, as well as choreographic process, is a highly interactive activity. Dancers (with or without choreographers) work together, exploring, selecting and increasingly developing dance material. Research that explored Anna Smith's development of the piece, 'Red Rain', showed that even choreographic, fixed work appeared from complex dynamics and interactions among dancers and choreographers in a community of creative minds (Stevens and McKechnie 2005). When individual movement-solutions for a given task were found, the group gradually selected and developed the interpretations made by one or more of the dancers. The control over material (movement phrases memory, cues, order) was shared rather then held by the choreographer, and the choreographic process took place through interactive dance-making, to which everyone contributed. Although the elements of a cognitive model of creativity, like problem finding and solving, were easily found here, again, the development of movement engages inseparable dancers' bodies and minds, as it

challenged both the ideas and the limits of the human body, simultaneously negotiating the dimensions of space and time. Creativity happens on the edge of the physical world, where body expression, ideas and environment collide, it is a highly social, interactive process, rather than an individual, solitary activity.

Similar observations of the interdependency and complex character of creative work are made by Susan Foster, when she describes improvisational practice:

> Each moment of improvising, full of possible positioning, develops its choreographic significance as all participants' actions works to bring the performance into proper position or relation. During this playful labour, consciousness shifts from self in the relation with group, to body in relation to body, to moment in relation to space and time, to past in relation to present, and to fragment in relation to developing whole. Shared by all improvisers in a given performance, this embodied consciousness enable the making of the dance and the dance's making of itself. (2003, p.8)

Bringing those perspectives together, the creative process should be rather considered as a complex phenomenon that engages minds, bodies and environment in a highly interactive, inseparable way. Looking at creativity as a cognitive process that happens in one's mind gives a reduced image of creative work. In following this study I explore how dancers interact and where their improvisational choices originated, my aim is to understand how dancers coordinate their actions and where the agency of such processes is.

Between minds and bodies

This study was part of the research project, 'Shared Creativity in Dance Improvisation', which examined group creativity in dance practice with an emphasis on underlying cognitive strategies and shared flow experience. The study presented below was mostly exploratory, qualitative in character. Improvisational scores served here as a laboratory for group creativity research (c.f. Sawyer 2000). In each experimental session a group of dancers performed together to four different improvisational scores, which provided a starting point for improvisation. For two of the scores dancers were asked to work with sensory awareness and to use 'here and now' cues from the surrounding, while the two other dancers were given a multimodal image as a starting point for improvisation. In total, I facilitated five improvisation sessions, each time with a different group of four dancers.

To collect insights from the improvisational process I used the video-stimulated recall method, which involves video recording an activity and then presenting the recording to the participants so that they can comment on their actions, thoughts or other matters of interest. Compared with other methods, like reflective diaries, retrospective reports or classic interviews, this method leads to better recollection, does not require elaborate writing skills or high commitment from participants, and it is time efficient (Rowe 2009).

Each improvisational score was recorded separately and the video-stimulated recall process took place almost immediately following the improvisational tasks. Using an online application, participants individually watched the recordings on a handheld tablets. Their recollection had the character of 'thinking aloud' while watching, facilitated with the following instruction:

> As you are watching your improvisation, try to narrate your conscious thinking, considering questions like, 'Where was my awareness in that moment?' (compare: Norgaard 2011)

Four categories for reflection were proposed: Thoughts and Images; Senses; Actions; Relation to Others. To analyse collected material – recalls of improvisational process from four scores from individual perspectives of each improviser – I adapted content analysis method (Gläser and Laudel 2013), looking into reports from all dancers simultaneously. This allowed me to match their perspectives of the same moment in time and understand better how they interact with each other.

I supported my analysis (see below) with examples of quotations from a creative process in one of the groups, third-year dance students from Plymouth University: Danielle, Monica, Lorren and Adam. This group had extensive experience of working together while studying, and in the previous few weeks they had been preparing together their final, graduation piece, and therefore had worked intensively as a group.

Some insights

Creating improvisational space

Below mentioned dancers described their initial point of improvisation:

> I immediately felt a connection to Lorren; even through we didn't look each other. I had a hand on her shoulder and we were connected and then she acknowledged this connection by resting her hand on my hand. We kind of just looped and circled and I tried to twist with her. (Adam)

> I was ready to go in instantly which is unusual for me in improv. I felt Adam's hand on my shoulder and enjoyed that connection instantly. I felt comforted and like someone was with me. We kept the connection going. I enjoyed moving with Adam. (Lorren)

And from the other side of the space,

> It is a nice moment with Monica, we just kept switching spots one to another, aware that Adam and Lorren were starting something and Monica and I were starting something. (Danielle)
>
> Just felt right to do same as Danielle was doing. Just wanted to do that. Like we had sort of communication. (Monica)

Dance improvisation, as any creative process, starts from each initial point and then it is continually shaped through dancers' embodied interactions. They create shared temporal structures organizing space, movement and ideas over time, coordinating and negotiating each other's actions. This process is highly dynamic and negotiated on a moment-to-moment basis rather than as previously determined. High awareness of each other's presence in the space allows dancers to collaborate closely and co-create in improvisation.

Embodied creativity

When dancers described their improvisation process they mainly discussed their body reactions to the available cues and their own physicality. They immediately reacted through

the body and senses. Imagery scores, sounds and other available stimuli were immediately translated into movement and bodily reaction, as is clear from the examples mentioned below:

> Monica rattled weights in the bottom of the curtain. I'm letting that structure my elbows movement. Knowing that Lorren was behind me but not needing to make many choices this moment. (Danielle)

> Taking the movement from Danielle and then hearing the curtain rattle of floor. Interpreting that through my fingers. (Lorren)

Sounds and images resonate in dancers, and are explored through embodied actions. However, often, dancers are occupied with much more practical body-related problems, like here, when Adam is talking about partnering:

> I love this struggle of can I lift Monica's weight, can Monica get herself upon to my back? And she used her hands for support. And I was able to really hold her lift. (Adam)

These examples lead to another characteristic of the process: that group improvisation is mainly about supporting the actions of others.

Supporting each other's actions

Dancers most of the time are occupied with reading each other's intentions, responding to each other's actions or joining them. They support each other physically, by holding, counterbalancing or by simply being in the space. Sometimes they become 'objects' – substance of others' creation. In other words, they are not necessarily in physical contact with each other all the time but do act in connection to each other.

> And it's nice to see that everyone were picking up on their movement. And this swirling energy like a typhoon. I felt this was really connected, it really flowed as a piece. (Adam)
>
> Feeling like I needed to join the group for this swirled position school of fish. Coming in, swirling with Lorren; needing to join with the sound from the back. Translating that to both hands and stopping to flow into the next. Sharing. (Danielle)
>
> And again the spirals. Danielle joined the spiral and deepening in it. Connecting to the sound score. A spiral again through arms. (Lorren)

Joining each other's actions is more than simple copying. The movement response can emphasize, complement or transform the initial ideas. While constant interaction with each allows the initial idea to evolve in the most unexpected way.

Co-agency of creative process

Rather than dancers creating their movement response individually, solitarily in their mind, the creative process here is highly shared, as well as its agency as described in the examples. Many of creative solutions originate in being pushed, pulled of lifted. Here Lorren and Adam talk about the same moment:

> Good counterbalance, I was truly in a counterbalance, I would have actually fallen over if he wasn't there. Nice little partnering lift, simple. I didn't know where I was going, so I just let him move me where it went. (Lorren)

> And then Lorren saved my life a little bit before I felt over. This was very deep counterbalance, which felt amazing to be in. It felt longer then it actually was. And a slight shift of Lorren's weight over. And so far everything seems to flow really smoothly. (Adam)

Dancers share the agency of their actions, allowing others to lead or follow their decisions. There is a lot of trust between each other and on the process. The connection between the body and mind of dancers is inseparable, as well as connections between dancers in common improvisational space.

Summary

The contemporary model of studying creativity as a purely mental process is limited with regard to understanding creative practices. Most creative processes, not only dance improvisation, are shared and embedded in the creative space of work that is built through interactions with others while working. Therefore, there is a need to integrate embodiment into creativity research. The creative cognition happens through abstractive thinking as well as through sensing, feeling and doing.

A group creative process is not a sum of individual creative ideas that are transformed by a group, but rather it is highly interactive practice that mostly focuses on supporting the

actions of others. Therefore, the agency of such processes is shared and it is rather the process of creative collaboration, and co-creation of the work, that emerges in a shared creative space.

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