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### Dance for Solidarity

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## **Dance for Solidarity Uniting Dancers and Audience Through Movement**

by Aafke van Mourik Broekman, Tom Postmes, Ernestine Gordijn, Namkje Koudenburg and Kirsten Krans

Dance is part of societies since human existence (Brown, 1991; Spencer, 1985). Dance can be used in cultural rituals to enhance a sense of community and to reflect a culture's values and beliefs (Evans-Pritchard, 1928; Beeman, 1993; Seeger in Ingold, 1994). Tribes for example dance to celebrate birth, death, or marriage, perform musical or theatrical rituals to prepare for war, or perform just to entertain. Many of these performing traditions are still manifested in modern societies (think for instance about the Dutch annual celebration of Liberation Day with music and dance). We know that these activities can bring a community together; performing such rituals can strengthen bonds between people within the community (Spencer, 1985; Beeman, 1993; Xygalatas et al., 2013). Not only active participators can experience this sense of togetherness, spectators also get entrained by the performance, merely by observing the others (Beeman, 1993). Anthropological and cross-cultural perspectives provide evidence for the social value of performing arts and rituals; performing together in harmony brings individuals (both performers and spectators) together and strengthens a sense of community. Subsequent group behaviour can alter because of these bonding processes; for example, when going to war with a neighbouring tribe, this elevated sense of unity, created by collectively coordinated (displays of) action, can result in feelings of elation and enhanced coordination and cooperation between members of the group (see e.g., Fischer, Callander, Reddish, & Bulbulia, 2013; Valdesolo, Ouyang, & DeSteno, 2010).

Nowadays, performing arts often touch upon topics that reflect current social issues or everyday human vicissitudes. However, little is known about the social impact of performing arts and contemporary dance on spectators in particular. Are the social effects described in the anthropological literature still present in contemporary dance? How do audiences respond to observing a group that physically expresses a sense of community? Can a sense of community be transferred from *active* dancers to *passive* audiences? From a social psychological perspective we are interested in group formation processes and how distinct types of groups can arise from different types of social structures. Therefore we wonder: Can dancers portray these distinct types of community, and in extension, are audiences sensitive to distinguishing different types of community and feel a sense of togetherness in line with the dancers on stage?

As we shall demonstrate in this paper, there are indications that dance and performing arts in general may affect social wellbeing. Dance and physical interaction have a direct (visceral) impact on emotions and relationships (e.g. De Meijer, 1989; Foster, 2008; Burgoon, Stern, & Dillman, 1995; Bernieri & Rosenthal, 1991). The aim of this article is to review literature on dance, movement, and nonverbal interaction and relate this to basic processes of group and relationship formation. By bringing these findings together, we shall argue that dance performances can have a profound social impact. Dance may be able to shape social structures by facilitating social bonding among dancers and audience. We shall conclude the review with the suggestion that performing arts, and specifically dance, fulfil an important societal role not merely for aesthetic reasons (art for art's sake) but that performance and dance fulfil a key role in the maintenance of community and the creation of social bonds (art for *our*

sake). We shall briefly describe the programme of research that we are currently undertaking, in order to corroborate and verify these assertions.

## **Dance**

Dance can be seen as either a participatory activity, an art expression meant for an audience, or both. As a participatory activity dance can elicit strong emotions that bring people together and create a sense of community between individuals (Spencer, 1985). In some cultural rituals dance is a means of expressing identity, group membership, or status (Seeger in Ingold, 1994). Interestingly, cultural rituals that are expressed by collective coordination of bodily movement or vocalizations are shown to establish social identity and increase prosocial behaviour and cooperation (Xygalatas et al., 2013; Fischer et al., 2013). Thus, dance can be used as a social instrument: Collective expressions, coordination, and common experience can bring communities together in harmony (Evans-Pritchard, 1928).

The purpose of dance as an art expression is to engage and entertain the audience. In the anthropological literature the performing arts are seen as a meaningful reflection of society and the expression of cultural values (Beeman, 1993):

*Spectacle is a public display of a society's central meaningful elements. (...) The meaningfulness of a spectacle is usually proportionate to the degree to which elements displayed to the public seem to represent key elements in the public's cultural and emotional life. It is almost as if the mere event of displaying these symbolic representative elements in a special framed context is enough to elicit strong positive emotional responses from the observing public. (p.380)*

He later states:

*Theatre does even more than engage participants and spectators in the immediate context of the theatrical event. It evokes and solidifies a network of social and cognitive relationships existing in a triangular relationship between performer, spectator, and the world at large. (p.386)*

There is thus a great expressive power emanating from interactions displayed on a stage. This expressive power may lead audience members to get psychologically engaged in the performance.

More generally speaking, (bodily) movements have shown to influence emotions and cognition. Humans are very adept in recognizing and interpreting body movements. People are able to recognize emotions merely by observing light points on a human body that expresses emotions and people make relational inferences based on stick figures or animations moving together (Dittrich, Troscianko, Lea, & Morgan, 1996; Lakens, 2010; Miles, Nind, & Macrae, 2009). This effect of movement is so strong that people even ascribe emotions to and observe relational patterns in moving inanimate objects, such as moving circles and triangles (Heider & Simmel, 1944, see <http://vimeo.com/48908599>). Clearly, movement is a strong means of communication and transference of emotion (De Meijer, 1989; Gervasio, 2012). Moreover, there is evidence that movement can influence cognition. Fluid movement is believed to promote creativity and decrease rigid social judgement and behaviour (Slepian & Ambady, 2012; Slepian, Weisbuch, Pauker, Basitan, & Ambady, 2014).

## **Interactional Dynamics**

When watching a dance performance audience members may not only be able to ascribe emotions to the displayed interaction (Gervasio, 2012; De Meijer, 1989), they may also be able to internalize the observed expressions and consequently feel closer to the performers on stage. The fact is that we are physical beings and for large part communicate nonverbally (e.g., Knapp, Hall, & Horgan, 2013). This may provide another reason why dance can have a potent social impact.

During interaction people communicate through the use of language to convey content, but also communicate nonverbally. Think for example of body posture, gestures, speech pattern, rhythm, tone, or facial expressions. During interactions these nonverbal actions, and in particular coordinating these actions with interaction partners, are important for forming and maintaining relationships (Kendon, 1970; Bernieri & Rosenthal, 1991; Bernieri, Davis, Rosenthal, & Knee, 1994; Burgoon et al., 1995). We know that these organic processes of reacting to each other's behaviours within coordinated interactions can have a tremendous social impact on the interaction partners involved. These coordinated interactions can foster rapport, identification, and cohesion. Indeed, recent research shows that the close coordination of interactions can have a positive effect on the relationship, whereas failure to coordinate interactions hampers the development of a positive relationship (Koudenburg, Postmes, & Gordijn, 2011; 2013). Thus, these coordinated co-actions are instrumental in forming social bonds.

During interactions we do not simply send signals through these nonverbal channels, we are also sensitive to receiving and interpreting nonverbal signals. People, often unconsciously, mirror, adapt, and coordinate nonverbal behaviours with their interactions partner(s). These processes of adapting and mirroring behaviour are believed to contribute to emotional contagion and empathy (Hatfield, Cacioppo, & Rapson, 1993; De Waal, 2008). Processes of emotional contagion and empathy ensure that by mirroring the physical state of the interaction partner (or simulating these behaviours in our brain, i.e. through mirror neurons) humans are able to experience and converge towards other people's emotional state (Bernieri & Rosenthal, 1991; Hatfield et al., 1993; Burgoon et al., 1995; De Waal, 2008; Barsalou, Niedenthal, Barbey, & Ruppert, 2003; Hawk, Fischer, & Van Kleef, 2011; Jaffe, 2007; Foster, 2008). In other words, through physical coordination we cannot only communicate our own emotions, but by mirroring these behaviours we can also experience and understand our interaction partners' emotions.

Thus, people are very sensitive to other people's emotional state and wellbeing and these processes of emotional contagion and empathy often have very strong effects. For example, when we see a friend crying, we may feel like we are experiencing some of this pain as well. This may be especially so when we have a strong bond with the person in distress. However, in a similar vein humans are also able to experience these emotions when they are not related to the person of interest. Think for instance about a movie or TV series. Here also, we can experience emotions in line with the characters on screen. Thus, we can feel psychological bonds and empathize with distal individuals and groups we have not met. Other examples are music bands, sports teams, or political parties. Somehow, the processes of empathy and emotional contagion are so strong that they are experienced even when one is not actively part of an interaction with the target individual or group.

In addition, there is evidence that humans can make social inferences when merely observing others interact (Bernieri et al., 1994; Lakens, 2010;

Lakens & Stel, 2011; Ip, Chui, & Wan, 2006). When watching others interact we are highly sensitive to reading body language and making relational inferences based on this. So, the coordination of behaviour between interaction partners is not only informative for the interaction partners involved, *passive* observers also use co-action between others to determine whether these individuals belong together or form a social unit. We therefore hypothesize that one could feel closer to individuals and groups by observing their interaction from a distance. The psychological processes of coordination, adaptation, and empathy involved within organic interactions may also explain how individuals outside the interacting group can experience the same social effects when merely observing the group. That is to say, an audience observing a performance on stage can experience emotions and social dynamics in line with those displayed by dancers on stage. Following this, dance could shape the social structure among dancers and spectators; observers should not only be able to identify, but also *feel* a sense of solidarity with a group that displays a coordinated interaction.

### **Group Dynamics**

Up till now all the evidence from the literature suggests that dancers on stage do not only send signals to an audience that needs to interpret them, but that the audience takes an active part in interpreting and internalizing what they observe. The audience is not merely a *passive* receiver; the audience becomes psychologically involved in the performance. Given the audiences' involvement it should theoretically be possible for a sense of community to originate from this psychological bond between dancers and audience.

That brings us to social psychological theories on group and identity formation. If physical interaction and movement have such a powerful effect on social cognition and emotions, dance performances should have a social impact, that is, they should be able to alter the social structure among dancers and audience. As understood from the anthropological literature dance can have a social function of expressing identity and strengthening social bonds and harmony. Can contemporary dance performances have similar effects in maintaining or even creating social bonds with those who do not actively participate in the dance? In other words, can dance instil a sense of community between dancers and audience?

From previous research we learned that different types of interactional dynamics between individuals within a group can elicit feelings of solidarity and togetherness through different pathways (Van Mourik Broekman & Koudenburg, 2012; Koudenburg, Postmes, Gordijn, & Van Mourik Broekman, 2014). The way actions between individuals are coordinated can result in group formation based on distinct principles. These principles reflect two different types of groups which we can distinguish within society. On the one hand, there are small interacting groups. Examples of such groups are friends, family, or a small community. These groups are formed around individuals that may be very different from each other with respect to personality, attitudes, or skills. Through interaction and interdependency individuals identify and feel strong bonds with the group (Gaertner, Iuzzini, Witt, & Oriña, 2006; Postmes, Spears, Lee, & Novak, 2005). The dynamics within these groups are built on the additive value of each member. Each member thus has an important role in forming and maintaining the group. Think for example of a village in which each inhabitant has a unique profession. This community works as a function of each individual's different but complementary role. When the mailman would leave the village, the group as a whole is affected; mail is not delivered anymore. In fact, previous research

shows that individual distinctiveness and mutual indispensability are key predictors in the social unity that arises in these groups (Jans, Postmes, & Van der Zee, 2011; 2012; Van Mourik Broekman & Koudenburg, 2012; Koudenburg et al., 2014). The complementary nature of individuals in these groups is essential for the sense of solidarity experienced by its members. Durkheim (1893/1984) termed social unity based on such group dynamics *organic solidarity*.

On the other hand, we are part of many groups which are much larger, and based on a more *mechanical* form of solidarity (Durkheim, 1893/1984). Groups like these are often based on categorizations: they arise in the presence of a clear intergroup context and are based on similarities with respect to a certain characteristic that distinguishes ingroup members from a relevant other group (Tajfel & Turner, 1979; Turner, 1985; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Postmes et al., 2005). Groups can be based on, for instance, religion, occupation, or nationality. A major difference with organic groups is that these groups are not necessarily based on interaction; group members do not even need to know each other in order to be a group member. Group membership is merely based on commonalities and a shared identity with others. Here, the individual is trivial; the group dynamics would not change if one member leaves the group. Nonetheless, these groups elicit strong feelings of togetherness. Think for instance about how you could experience national pride when your country wins the FIFA World Cup. Or how being part of a group that is affected by governmental budget cuts can lead to unification to collectively demonstrate injustice. In such cases, carrying out a collective identity can make you experience togetherness and strength. Solidarity arising from these groups is termed *mechanical solidarity* (Durkheim, 1893/1984).

The dynamics within groups based on either complementarity (organic) or similarity (mechanical) can be observed at an interactional level. The manner in which individuals coordinate their interaction can correspond to either organic or mechanical principles. On the one hand, interaction partners can behave differently but react to each other's movement in such a way that a string of movements is displayed that together forms a meaningful whole (*behavioural meshing*; Bernieri & Rosenthal, 1991). On the other hand, interaction partners can behave similarly by (un)consciously copying each other's behaviour (*simultaneous behaviour*; Bernieri & Rosenthal, 1991). Research shows that both types of interactional dynamics lead to solidarity. However, complementary or organic relationships lead to solidarity through a distinct pathway; they lead to solidarity through feeling of individual distinctiveness and mutual indispensability (Jans, et al., 2011; 2012; Van Mourik Broekman & Koudenburg, 2012; Koudenburg et al., 2014). One can think of complementary behaviours that indeed elicit social bonds; for instance everyday conversations depend on interaction partners smoothly interchanging the role of speaker and listener. Only when this speech coordination runs smoothly it results in feelings of well-being (Koudenburg et al., 2011; 2013). Or one can think of teamwork that requires each individual to have a unique contribution, such as a restaurant where each employee has his or her specific task, but group success depends on the coordination of each person's effort to create a gastronomically refined and pleasant evening for the customers. Conversely, similarity in behaviour, for instance a synchronously marching army, can convey unity. Likewise, cheering in sync during a soccer match or a demonstration can be a way to experience and express togetherness. Another example of such mechanical solidarity is King's Day (formerly Queen's Day) in the Netherlands where everyone dresses up in

orange and plays old Dutch games. This is done to celebrate the King's birthday, but even more to celebrate and amplify the Dutch nationality and its cultural heritage.

### **Transference of solidarity**

Research thus shows that interactional group dynamics cannot only foster rapport and solidarity, but that the way in which the interaction is coordinated plays an additional role in the type of solidarity that arises. If dance psychologically engages the audience and the audience is sensitive to understanding bodily expressions, we wonder how the coordination between dancers on stage affects the perception and experience of solidarity in the audience. Dance may be a powerful mode for conveying a sense of solidarity and expressing different group dynamics. Furthermore, dancers may be especially adept to using their body for the purpose of communicating and conveying emotions and connecting with and drawing in *passive* bystanders (audience members). If the coordination of interactions can encourage feelings of belonging and rapport, and people who observe such interaction experience feelings in line with the performers, it should theoretically be possible to transfer a sense of solidarity onto non-participative observers. This could mean that the physical interaction among dancers on stage influences the audience in such a way that the audience converges towards the dancers' state. Moreover, dance performances may elicit distinct types of solidarity among an audience depending on the interactional dynamics displayed by the dancers. In this way, dance performances can have a social impact on spectators and shape novel social structures based on the collective experience of the dance performance and the relationship between dancers and audience.

In our current research we aim to investigate just that: The social impact of contemporary dance on audiences. Preliminary findings from a pilot study done at a festival of performing arts are promising. During this study the audience watched dance performances that were made exactly for the purpose of this investigation. Dancers on stage displayed organic solidarity, mechanical solidarity, or no solidarity. Audiences watched one of these performances and subsequently audiences' experience of solidarity was measured through questionnaires. In other words, we measured whether the audience could distinguish the different forms of solidarity displayed and whether they experienced solidarity with the dancers as a result of the observed interaction. This pilot study revealed that indeed the audience was sensitive to distinguishing different forms of solidarity. Moreover, it showed that feelings of solidarity with the dancers arose from observing solidarity (as opposed to no solidarity) displayed by dancers on stage. In our research we hope to prove that the social impact of observing performers interact extends beyond the mere development of a psychological bond between individual audience members and the performers, but that the audience as a group is affected. Through collectively sharing a social experience with fellow audience members, the audience as a group can feel, and perhaps even act, in line with the solidarity displayed by performers on stage. This way the psychological group boundaries grow beyond the interacting target group to include mutually connected audience members. Future research will continue to study these effects though quantitative as well as qualitative (verbal and behavioural) measures at the individual and group level. By continuing this line of research we hope to shed light, more generally, on group formation and group growth phenomena (the process of group expansion by inclusion of psychologically involved spectators) and, more

specifically on the role that performing arts, and in particular contemporary dance, have in constructing social dynamics and facilitating social bonding among audiences.

### **Conclusion**

These interconnected findings from existing literatures pose an interesting question for choreographers and dance performers, but also for performing arts in a broader sense. When people visit performing arts, they expose themselves to a group of actors (dancers) who display interactions on stage. The psychological consequences of this performance on the audience go beyond the appraisals of beauty (aesthetics) and skill (aptitude). Dance performances have a social function of bringing people together, shaping social structures and perhaps even fostering social behaviour. But how does this social influence occur? What processes play a role? And can dancers transfer a sense of solidarity upon a *passive* audience? Studying this empirically can potentially change the way we think of performing arts and dance. Furthermore, it can help us understand the social impact performing arts have on audiences and how relationship between actors and audience can be manipulated into a (socially) desirable direction.

### **Dance for Solidarity: Uniting Dancers and Audience Through Movement**

In her PhD research project Aafke van Mourik Broekman, together with prof. dr. Tom Postmes, prof. dr. Ernestine Gordijn, and dr. Namkje Koudenburg, investigates how small groups can grow into larger communities. They focus on processes in small groups that enable such transition. Small groups are formed *organically* around interactions and interdependencies. They aim to show that bystanders can get psychologically involved in this, even without participating actively. Through emotional *contagion* and empathy, organic bonds can extend to bystanders. Psychologically, bystanders thus become part of an in-group. This process may, at a fundamental level, underpin a broad range of group growth phenomena and alter our understanding of large group formation.

Promotor: Prof. dr. Tom Postmes, social psychology, University of Groningen

Co-promotor: Prof. dr. Ernestine Gordijn, social psychology, University of Groningen

Co-promotor: Dr. Namkje Koudenburg, postdoctoral researcher, University of Groningen

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