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# Jordan Beth Vincent, Kim Vincs, John McCormick

Deakin Motion.Lab

Deakin University, Burwood, Australia jordan.vincent@deakin.edu.au, kim.vincs@deakin.edu.au, john.mccormick@deakin.edu.au

### Abstract

In theatrical vernacular, the term 'splitting centre' refers to two performers staged at an equal distance from a centre point and sharing the focus of the audience. This term encapsulates the notion that two people (or, in the case of trans-media dance, two or more performance entities) are dividing the attention of the audience, operating as equal collaborators in a performance context. The augmentation of live performance with 3D projected scenography and mobile devices offers a starting point for discussions on the potential for dramaturgy, choreographic process, and changing expectations for audience behaviour in the theatre. In 2014, Deakin Motion.Lab premiered The Crack Up, a trans-media dance work that incorporated live performance, 3D digital scenography, and The Crack Up App, an app for mobile devices that audience members were invited to interact with during the performance. This investigation into the potential of trans-media dance performance, (defined here as a live performance in which both the digital and biological elements are choreographed as artistic equals within the theatrical context) with the addition of a mobile device raises questions about how the makers of trans-media dance might direct the attention of their audiences when the work is performed simultaneously across multiple platforms.

#### Keywords

# Dance, trans-media performance, digital and virtual environments, mobile devices, interactive apps, tweet seats

The integration of digital imagery with live performance is becoming increasingly common in Australia and overseas with artists such as Wayne McGregor, William Forsythe, Robert Lepage, Klaus Obermaier, Garry Stewart and Gideon Obarzanek among others creating work that enmeshes digital and biological performance entities within a theatrical context.<sup>1</sup> The works by these artists draw on a range of technologies, from interactive and motion tracking systems to registered projected video, motion capture, 3D scenographic landscapes and more, exploiting the possibilities of emergent technologies. As Dils & Naugle suggest, "the scope of dance is not narrowing towards digital, rather, it is expanding."<sup>2</sup> In 2014, artists at the Deakin Motion.Lab premiered The Crack Up, a new full-length trans-media dance work, (trans-media dance is defined here as a live performance in which both the digital and biological elements perform simultaneously as artistic equals within the theatrical context), directed and choreographed by Professor Kim Vincs.<sup>3</sup> Inspired by F. Scott Fitzgerald's 1936 short story of the same name, The Crack Up integrates performances by five dancers immersed and superimposed in 3D projected scenographic landscapes.<sup>4</sup> The creation of imagery rich environments augments Fitzgerald's first-person story about a man losing his grip on reality. 'Cracking' landscapes and crumbling digital characters provide a visual reflection of the ambivalence and despair of the text, reflecting on the notion of fragmentation.<sup>5</sup> The Crack Up also exploits the sense of 'cracking' (or dividing) the attention of the audience by introducing The Crack Up App, a universal app for mobile devices that audience members were invited to download prior to attending the show.<sup>6</sup> In theatrical vernacular, the cue 'to split centre' refers to two performers at an equal distance from the centre point of the stage. With lighting and set design, as well as within the frame of choreographic practice and dance training, to 'split centre' carries a meaning beyond a staging one. It is the notion that two people (or, in this case, two or more performance entities) are splitting the attention of the audience, operating as equal collaborators in a performance context. In essence, The Crack Up 'splits centre' across its multiple platforms, with the direction of focus shared between the screen on stage, the dancers on stage, and the mobile devices. This paper investigates the potential for augmenting live performance with 3D projected scenography and mobile devices, and offers a starting point for discussion on the potential for dramaturgy, choreographic process, and the directing of audience attention within trans-media dance performances.



Figure 1. Screenshot of *The Crack Up App*.

Activated within the theatre and with highresolution imagery running parallel to the action on the stage, the content on *The Crack Up App* follows its own unique narrative trajectory, while contributing to the larger

visual story of the work as a whole. Drawing on the common usage of mobile devices for tweeting and texting, The Crack Up App quotes Fitzgerald's The Crack-Up (as well as other writing by and about Fitzgerald) and places these texts within visual contexts that reference and comment on the action on the stage and 3D projection screen. Although the content of the scenography and the imagery on The Crack Up App was largely pre-determined and fixed (aside from some audience interaction capability), the movement from scene to scene across the platforms was live. In this way, the performance of The Crack Up App happens in concert with the action onstage, with the work taking place simultaneously across multiple platforms and with multiple points for audience access. This offers a kind of 'choose-your-own-adventure' experience of trans-media performance, with the audience's decisions about where to look divided between three distinct options: 1) the larger-than-life imagery projected onto the stage screen; 2) the dancers standing within, in front of, and beneath the imagery, or 3) The content on The Crack Up App. As Vincs has argued, there is no 'right' place to look at any one time during The *Crack Up*; rather the work simply exists in multiple forms, simultaneously, with a multiplicity of experiences. By consciously drawing the attention of the audience away from the stage and actively encouraging some freedom of experience (i.e. only parts of The Crack Up App are interactive) The Crack Up utilizes a mode of dramaturgy akin to site-specific or gallery-based work, or perhaps work in which audience members are free to roam around the performers or where the parameters for performance are set, but are left relatively open and uncontrolled.

The challenges with dividing the attention of the audience across multiple platforms are fundamentally dramaturgical and technical ones, with the creation of a "performance that is no longer designed for a 'normal' three-dimensional space, but which must speak within an artificially constructed volume."7 In other words, the traditional performance area for live performance (the stage) is challenged by the "altered, augmented and perceptually distorted spatiality" inherent in trans-media dance, offering many new directorial and perceptual possibilities.<sup>8</sup> For directors of live dance performances, the decision about where to draw the focus is integral to the shaping of the performance. As Johannes Birringer suggests, this is fundamental to the nature of the integration of digital bodies with live bodies in a performance context because "digital performance with real-time media always involves projectional activities at the same time, i.e., simultaneous and deferred image, sound and light movements and 'micro-tonalities' which happen in continuous contingent (causal and non-causal) interrelationship with each other in total architecture."9 With lighting designed to direct the eye of the audience to the most important, the brightest, and the most lit form, the body at centrestage becomes, literally, the most visible object on the stage. However, *The Crack Up* takes place across multiple platforms simultaneously, with the moments of performance not solely beginning and ending within the geographical space of a proscenium theatre, but offering a performative example of convergence culture.<sup>10</sup> The 'stage' for *The Crack Up* is both the space beneath and within the proscenium, but also on the individual screens held and activated by each individual audience member.

Within trans-media dance productions, the 3D projections are literally made of light and, in the case of The Crack Up, are projected six meter tall screen. This offers an enormous visual draw for the audience, and, even without the presence of The Crack Up App, challenges some of the conventions that might govern choreographic practice. How the different performative elements are integrated provides a dramaturgical challenge, particularly when the components are not seen in terms of a theatrical hierarchy in which either live performance, or projection might be privileged. As Beckwith & Vincs have argued, the use of 3D scenography within a digital performance environment, while offering untapped potential for the telling of physical stories, also poses a number of challenges in terms of cognitive synthesis for the audience, including reconciling the "inherent disjuncture between the spatial objects" such as live bodies and digital entities within the same geographical space.<sup>11</sup> Beckwith & Vincs propose the use of Kurt Koffka's Gestalt theories as a means of "creating perceptual wholeness" for the endless stereoscopic possibilities.<sup>12</sup> The addition of a mobile app, which intrinsically draws the attention of the audience away from the stage and down to their devices, further challenges the cognitive synthesis of watching transmedia performance. However, it is perhaps less important how the components of the work are integrated as individual elements than it is how they cohesively translate a theatrical meaning to the audience.<sup>13</sup> This demonstrates that the entire notion of 'direction' with performance art that enmeshes digital and biological content/bodies questions the accepted norms of theatrical dramaturgy. This collision of traditional stagecraft with new technology fundamentally shifts the dramaturgical requirements of creating trans-media dance. In this way, The Crack Up perhaps draws on American choreographer Merce Cunningham's work in de-centralising the notion of the stage centre in dance, but rather than abolishing the idea of the centre, The Crack Up instead divides it, quite precisely and consciously, between different perceptual, temporal and technological modalities.

The augmentation of live performance with mobile devices has been hotly contested in recent years, with the spectre of 'tweet seats' already challenging the sanctity, or rather the *perceived* sanctity, of the theatrical, Western, concert space.<sup>14</sup> An audience member in a 'tweet seat' is 'allowed' to access and utilise their mobile device, tweeting or publishing immediate responses from within the theatre. The presence of 'tweet seats' undermines the traditional theatrical adage to 'turn off your phone,' while simultaneously raising concerns about preserving the 'mysteries' of a performance or what it means to have only a partial, or third-person experience of a performance. For avid tweeters, or for those audience members unable to be physically present in the theatre, live tweeting during a performance adds an interactive and responsive dimension to the experience, colouring the social act of attending the theatre with the faceted and multi-layered experience of social media. Opponents to the inclusion of social media within the performance space, such as Alex Roe, Director of New York's Metropolitan Playhouse, have suggested "outside interaction, even of virtual kind, might keep people from getting lost in a good play." 15 According to Roe, "'Part of the whole theatrical experience is the thought of being present in the company of the rest of the audience and the actors... [and] the thought of encouraging people to tweet during a performance is necessarily a violation of that agreement.""16 In other words, live tweeting during a performance where it is not part of a dramaturgical design, would cause an unwanted 'splitting of centre' for the audience.

The difference with 'tweet seats' and *The Crack Up App* is not just a matter of content, nor is it a matter of a dramaturgical effect. Although *The Crack Up App* takes place on interactive devices, it limits the amount of control and interactivity the audience has over the content.

### References

However much freedom is offered to the audience, it's inclusion begs the question of how focus and attention may be diverted or controlled for theatrical purposes. In the triad of live performers, stereoscopic imagery and mobile devices, the process of 'splitting centre' in The Crack Up is not a battle between two performative entities, but three of them. The Crack Up addresses this issue by creating a three-way split between perceptual modalities that remains consistent throughout the work rather than introducing digital elements in discrete sections, and by tying the digital content more directly to the conceptual development of the work. However, there remains a fundamental disjuncture between views such as Roe's, that see any engagement outside the on-stage performative world as a detraction from the performance experience, and works such as The Crack Up which view divergent sources of engagement as a means of enhancing and extending the conceptual scope and sensory experience of the work. Perhaps the broader philosophical issue this debate raises relates to how one approached the idea of divergence itself, whether of attention, or materiality, of biology versus technology. We argue that 'splitting centre' could be considered in relation to how one responds to the changing nature of attention itself in a digitized culture-to resist the multifocal and multiplicitious, or to specially embrace and cultivate it in a performance context. With the increasing development and availability of new technologies, as well as their increased incorporation into dance and live performance, there is room for further research into how the notion of 'splitting centre' could be exploited to create new and exciting performative possibilities.

<sup>&</sup>lt;sup>1</sup> In the context of this paper, the reference to 'biological performance entities' refers to human dancers.
<sup>2</sup> Ann Dils and Lisa Naugle, "Dance with the Mouse: Format for the Future," *Dance Research Journal*, 32:1 (Summer 2000), 163.

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<sup>&</sup>lt;sup>6</sup> The Crack Up App was available for free download

through the iTunes and Google Play stores.

<sup>&</sup>lt;sup>7</sup> Vincs, "Foreword by the Director—The Crack Up." <sup>8</sup> *Ibid*.

<sup>&</sup>lt;sup>9</sup> Johannes Birringer, "After Choreography,"

*Performance Research*, 13: 1, (March 2008), 119. See also: Johannes Birringer, "Dance and Media Technologies," *PAJ: A Journal of Performance and Art*, 24: 1, (1 January 2002), 84-93.

<sup>&</sup>lt;sup>10</sup> The notion of 'theatrical space' is a contested one, and one that is challenged by the potential of digital technology to redefine and create fluxuations in spatial relationships between people, digital entities, and architecture. See Benedict Anderson, "Out of Space: The rise of Vagrancy in scenography," *Performance Research: a Journal of the Performing Arts*, 18:3, (24 Sept 2013), 109-118. For a discussion of convergence culture, see Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York University Press, 2006).

<sup>&</sup>lt;sup>11</sup> Megan Beckwith and Kim Vincs, "Stereoscopic Theatre: the impact of Gestalt perceptual organisation in the stereoscopic theatre environment," in Cleland, K., Fisher, L., & Harley, R. (Eds) *Proceedings of the 19<sup>th</sup> International Symposium of Electronic Art*, ISEA2013, Sydney, http://ses.library.usyd.edu.au/handle/2123/9475.

<sup>12</sup> Ibid.

<sup>13</sup> Jerry H. Gill, "On Knowing the Dancer From the Dance," The Journal of Aesthetics and Criticism, 34: 2 (Winter 1975), 133. <sup>14</sup> As Rupert Christiansen quipped in *The Telegraph*, the

softening of the rules towards mobile devices may be "yet another concession to barbarity and further evidence of a catastrophic decline in the etiquette of audience behaviour." Rupert Christiansen, "Why theatre seats for Twitter junkies is a #goodidea," The Telegraph, 17 October 2014.

http://www.telegraph.co.uk/culture/culturenews/1116904 0/Why-theatre-seats-for-Twitter-junkies-is-a-

goodidea.html.

Beenish Ahmed, "'Tweet Seats' Come to Theatres, But Can Patrons Plug In Without Tuning Out?" NPR, 12 December 2011,

http://www.npr.org/blogs/monkeysee/2011/12/12/143576 328/tweet-seats-come-to-theaters-but-can-patrons-plugin-without-tuning-out. <sup>16</sup>*Ibid.* 

## **Bibliography**

Ahmed, Beneesh. "'Tweet Seats' Come to Theatres, But Can Patrons Plug In Without Tuning Out?" NPR. 12 December 2011, Accessed 10 December 2014. http://www.npr.org/blogs/monkeysee/2011/12/12/143576 328/tweet-seats-come-to-theaters-but-can-patrons-plugin-without-tuning-out.

Anderson, Benedict. "Out of Space: The rise of Vagrancy in scenography." Performance Research: a Journal of the Performing Arts. 18:3 (24 Sept 2013), 109-118.

Beckwith, Megan and Kim Vincs. "Stereoscopic Theatre: the impact of Gestalt perceptual organisation in the stereoscopic theatre environment," in Cleland, K., Fisher, L., & Harley, R. (Eds) Proceedings of the 19th International Symposium of Electronic Art, ISEA2013, Sydney. http://ses.library.usyd.edu.au/handle/2123/9475

Birringer, Johannes. "After Choreography." Performance Research. 13:1 (March 2008), 118-122.

-----. "Dance and Media Technologies." PAJ: A Journal of Performance and Art. 24:1 (1 January 2002), 84-93.

Christiansen, Rupert. "Why theatre seats for Twitter junkies is a #goodidea," The Telegraph, 17 October 2014

http://www.telegraph.co.uk/culture/culturenews/1116904 0/Why-theatre-seats-for-Twitter-junkies-is-a-

goodidea.html

Dils, Ann and Lisa Naugle. "Dance with the Mouse: Format for the Future." Dance Research Journal, 32:1 (Summer 2000), 161-164.

Fitzgerald, F. Scott. "The Crack-Up." Esquire, April 1936. http://www.esquire.com/features/the-crack-up

Francis, Rain. "Using Apps to Create a New Dance Experience: Deakin Motion.Lab." *Dance Informa*, 2 December 2014, Accessed 5 December 2014. http://www.danceinforma.com/magazine/2014/12/deakin -motion-lab-presents-crack/.

Gill, Jerry H. "On Knowing the Dancer from the Dance." The Journal of Aesthetics and Criticism. 34:2 (Winter 1975), 125-135.

Huschka, Sabine. "Media-Bodies: Choreography as Intermedial Thinking Through in the Work of William Forsythe." Dance Research Journal. 42:1 (Summer 2010), 61-72.

Jenkins, Henry. Convergence Culture: Where Old and New Media Collide. New York: New York University Press, 2006.

Lewis, Jessi. "The Crack Up-Dance Review." Melbourne. Arts. Fashion. 3 November 2014, accessed 18 December 2014. www.melbartsfash.com/99895.

Mullis, Eric. "Dance Interactive Technology and the Device Paradigm." Dance Research Journal. 45:3 (December 2013), 111-125.

Mokotow, Amy. "Why Dance; the Impact of multi-arts practice and technology on contemporary dance." Masters of Creative Arts diss., University of Melbourne, 2007.

Vincs, Kim. "Foreword by the Director-The Crack Up," Deakin Motion.Lab website, accessed 18 December 2014. https://blogs.deakin.edu.au/crackup/foreward-bythe-director.

Vincs, Kim and Alison Bennett, John McCormick, Jordan Beth Vincent and Stephanie Hutchison. "Skin to Skin: Performing Augmented Reality." In Augmented Reality Art: From an Emerging Technology to a Novel Creative Medium, edited by Vladimir Geroimenko, 161-174. Cham, Switzerland: Springer, 2014.

Vincs, Kim and John McCormick. "Touching Space: Using Motion Capture and Stereo Projection to Create a "Virtual Haptics" of Dance." Leonardo. 43:4 (2010), 359-366.

Wiens, Birgit. "Modular Settings and 'Creative Light': The legacy of Adolphe Appia in the Digital Age." International Journey of Performance Arts and Digital Media. 6:1 (2010), 25-39.

## **Author Biographies**

Dr. Jordan Beth Vincent is an Associate Research Fellow at the Deakin Motion.Lab researching dance and digital technology, a position she has held since 2013. Jordan's background is in dance history and criticism, and she holds a PhD early 20<sup>th</sup> century Australian dance history from the University of Melbourne. Since 2008, she has been a critic for The Age newspaper, and has contributed to a range of online and print publications in the areas of dance, physical theatre and circus.

Professor Kim Vincs is the Director of the Deakin Motion.Lab, Deakin University's motion capture studio and performance technology research centre, which she established in 2006. She has been a choreographer for over twenty years, and has focused on interactive dance technology for the last ten. Kim has five Australian Research Council projects in dance, technology and science, and has established numerous industry collaborations in motion capture, movement analysis and digital art.

Dr. John McCormick is one of the pioneers of new media dance, motion capture and telematics performance. John has worked with Motion.Lab for the last five years, researching movement visualisation and analysis, and with the Centre for Intelligent Systems Research for the past three years investigating machine learning of movement and its application in the performing arts.

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