



**Performance Generating
Systems in Dance**

Dramaturgy, Psychology,
and Performativity

PIL HANSEN

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Introduction: Performance Generating Systems in Dance

This introduction motivates the objectives of Performance Generating Systems in Dance and provides wayfinding markers for the inquiries, insights, and resources of the book. First, the need to understand, conceptualize, and render accessible the practice of performance generating systems is discussed. I then sketch the interdisciplinary and multimethodological journey of research this book is based on and name the established artists and research collaborators that have been involved. The three theoretical frameworks of the book – dramaturgy, psychology, and performativity – are introduced and anchored in key insights about performance generating systems. From this backdrop, I outline how these frameworks are applied to, and further developed through, case examples of the practice by sharing a selection of the topics covered and discoveries offered within the contents of the book.

Performance generating systems are systematic and task-based dramaturgies that generate performance for or with an audience. In dance, such systems differ in ways that matter from more closed choreographed scores and more open forms of structured improvisation. Dancers performing within these systems draw on predefined and limited sources while working on specific tasks within constraining rules. The generating components of the systems provide boundaries that enable the performance to self-organize into shifting patterns, instead of becoming either repetitive or chaotic. The patterns that emerge and the transitions they go through tend to develop iteratively over multiple performances. Every performance is slightly different, and change does occur, though it tends to emerge indirectly and in relation to co-performers and environments, rather than as an expression of individual or choreographic intentions.

Conceptualizing and researching performance generating systems

In 2010, I observed that while such systematic and task-based dance works were celebrated in the dance industry (often winning awards and touring extensively), they also puzzled peers and audiences who met them with well-intentioned, but poorly matched expectations. These expectations derived from the often more familiar contemporary genres of choreography and improvisation that works with task-based systems both draw on and depart from. Similarly, the analytical tools and creative strategies I worked with as a dance dramaturg did not fully equip me to facilitate the development of this work and its engagement of audiences. It became clear that a new concept was needed to differentiate the practice and direct attention towards its generating components. To arrive at a useful conceptualization of performance generating systems, I began the process of developing analytical frameworks for understanding how systematic and task-based dramaturgies are composed, how they work, and the effects they produce. It was important to me that these frameworks would become both research- and practice-based, adaptable to different artistic and research projects as the artform continues to develop, and supportive of choreographers and dancers wanting to create performance generating systems.

This research journey has taken me through observations as an audience member; time spent in creative processes as an observer or collaborating dramaturg; interviews and collaborative writing with choreographers, dance dramaturgs, and dancers; systematic analyses of large amounts of archival performance and creation recordings; and experimental tests of how the systems affect dancers' learning and cognition, completed collaboratively within arts-science teams.

Each of these positions of observation and participation required different methodological approaches. A wide range of dramaturgical, critical, qualitative, and scientific methods have thus been used to pursue diverse questions about performance generating systems within matching study designs. The methods used and questions pursued produced complementary insight into different aspects of the practice. Some of the results of these studies have been published individually and are revisited here, while others are new. However, all of these results are related and discussed holistically for the first time in this book, providing a comprehensive set of frameworks for the conceptualization, analysis, and dramaturgy of performance generating systems.

The dance works and creation processes that I have selected as case examples for this book are choreographed by William Forsythe (Germany/USA), Deborah Hay and Christopher House (USA/Canada), Ame Henderson, Karen Kaeja (Canada), and Lee Su-Feh (Canada/Malaysia). These choreographers characterize their work as contemporary ballet, contemporary dance, and/or performance art. Although most are based on the North American continent, their sources of

influence are generally international (many received training in Europe, and all work and/or tour internationally). Cultural and artistic diversity has furthermore been invited into these choreographers' work by engaging performers from different contexts of contemporary and traditional training. Most notably, however, the included works derive from critical questioning of dance norms and artistic inquiry into related themes of embodied memory; interpersonal coordination and connection; development of or reconnection with collective memory; and environmental responsiveness within hierarchical, transactional, and dissociating circumstances. In addition to the choreographers mentioned above, research collaborators whose contributions have been instrumental for the results presented here include dance dramaturg and scholar Freya Vass (UK), behavioural economist Robert J. Oxoby, and educational psychologist Emma A. Climie (CA).

Through these cases and collaborations, I discovered that dramaturgical agency is negotiated and changes over the run of a performance generating system. Whereas such agency initially is embedded in how each system works and affects the dancers, dancers eventually gain dramaturgical agency by undergoing a learning curve within the system. As their embodied understanding of the system's self-organizing dramaturgy grows, dancers begin to make interpersonal and relational choices that negotiate the system's boundaries. Part of this learning is psychological, as system tasks and rules often require dancers to attend, perceive, process, and respond differently from trained tendencies. In turn, dancers gain an increased ability to bring something repurposed or new into the world. Like the artists who create performance generating systems, I discovered that these systems' ability to affect relational change may extend beyond such dramaturgical and cognitive processes and gently begin to address interpersonal, intergenerational, and environmental dissociation performatively. Changed ways of perceiving and responding destabilize the norms that initially make a system self-organize in a specific way, which funnels the system into transition towards a new pattern of self-organization. Each iterative transition between one pattern and another provides an opportunity for dancers and participating audiences to navigate relationships slightly differently, together.

Three analytical and dramaturgical frameworks in application

Organized around these broad areas of discovery, this book falls in three parts, respectively dedicated to the dramaturgy, psychology, and performativity of performance generating systems. Each part features a theoretical framework that then is applied to (and further developed through) case examples of dance works. As we advance through these related, but different, frameworks, key concepts and tools

are accumulated and applied iteratively, while supporting concepts remain anchored in the artistic inquiries and systems of specific cases. This approach demonstrates how the combined set of frameworks can be applied selectively and adaptively to match the inquiry, generating components, and dynamic of each work.

Dramaturgy

Part One establishes, discusses, and demonstrates the dramaturgy of performance generating systems and its agency with analytical tools that are designed for the purpose.

More specifically, Chapter 2 first establishes the concept of performance generating systems by comparing the practice to dance improvisation and choreography and positioning it in relation to different forms of agency in dance dramaturgy. I propose that the dramaturgy of performance generating systems is best understood by examining how these systems affect dancers during performance. Beginning this inquiry, I draw on both cognitive and cultural memory theory to discuss the often-implicit influence of embodied memory on the generation of performance in the present. I also suggest that tasks to consciously recycle or inhibit such memory within a performance generating system may lead to greater agency over embodied memory, and thus to the capacity to bring something repurposed or new into the world.

Chapter 3 takes us from this potential to the challenge of identifying and notating performance generating components so that they may be reengaged and further developed by other artists across time and space. I present an analytical and notational tool based on Dynamical Systems Theory (DST) as a rigorous, yet adaptable, solution, which enables us to identify and understand the self-organizing dynamics of performance generating systems.

This tool is then applied, in Chapter 4, to a detailed DST-analysis of the generating components and patterns of self-organization in Ame Henderson's *relay* (2010). The source materials that are recycled within this system are memory fragments from choreographies the performers have danced in the past. It is discovered that *relay* both articulates and changes these autobiographical kinaesthetic memories through iterative cycles of collective learning and adaptation. Individual memories are effectively rendered collective and undergo change in the process. The analysis reveals how the system's dramaturgical agency produces this effect. Possible consequences for choreographic ownership, archives, and the dancers' sense of self are also discussed.

Psychology

Part Two outlines the cognitive and perceptual demands that performance generating systems place on dancers, with a focus on how such demands affect dancers' learning and agency.

In Chapter 5, I pursue the question of how an expanded performance presence is earned in cognitive terms by dancers of these systems. Working on tasks within limiting rules, and while recycling specific source materials, places extremely high demands on dancers' ability to multitask while maintaining kinaesthetic attention. This demand is understood by choreographers as an effortful performance presence. Such an earned presence also involves the intellectual effort of inhibiting prior learning and responses according to rules; shifting attention between sources, tasks, and rules; and problem solving when demands become overwhelming or system boundaries become destabilized. I explain how this embodied, intellectual learning curve increases the dancers' ability to affect the system and gain dramaturgical agency. The ethical implications of the unlearning involved are also discussed.

In Chapter 6, this framework is first applied to short performance generating systems within William Forsythe's 'learning piece' for new ensemble members *Whole in the Head* (2010). In comparison to Forsythe's earlier digital learning tool *Improvisation Technologies*, the learning piece offers more advanced and interpersonal reference points for movement generation, which are achieved through kinaesthetic motor imaging and coordination tasks. The learning piece also enhances the dancers' ability to consciously use, coordinate, and adapt large repertoires of memorized movement. A DST-analysis furthermore reveals that each system has a different built-in obstacle to self-organization. The dancers depend on metacognitive awareness and develop dramaturgical agency as they learn how to overcome these obstacles during performance.

Christopher House's adaptation of Deborah Hay's Solo Performance Commissioning score *I'll Crane for You* (2015) is the focus of Chapter 7. Hay's tasks and rules require the performer to continuously register and inhibit responses that derive from prior learning or emerge repeatedly within the system. In addition to altering perceptual practice, this work teaches dancers to unlearn reliance on habitual and implicit memory. Simultaneously, obstacles to self-organization are embedded in a recycled score text that therefore requires the performer to develop problem-solving strategies in rehearsal and during performance.

Performativity

Part Three turns to performativity and trauma theory to consider how dramaturgical agency and psychological change may arise within performance generating systems that are sourced in change-resistant circumstances.

Under change-resistant conditions, like those produced by trauma and colonial displacement, the relational and metacognitive dramaturgical agency becomes significantly less accessible. Intergenerational dissociation, repression, and self-protective barriers can hinder conscious recycling of memory and relational

engagement. In Chapter 8, discursive and material performativity theory is drawn on to theorize how such conditions may begin to adapt – indirectly, iteratively, and performatively. Relating this theory to DST, I argue that when a system transitions from one pattern of self-organization to another, performers working with change-resistant sources may gain some agency to navigate differently. Connections are drawn between this potential and trauma through the methods of Dance/Movement Therapy while transferring processes of change from a privatized space to a communal one.

Chapter 9 takes us through Karen Kaeja’s personal and creative process making a trauma-based performance generating system for *Crave* (2013). Carefully sourced in uncomfortable memories of touch, this system features a simple set of tasks and rules that, over iterative cycles, enable the dancers to transition from dissociated movement to extended moments of holding hands and walking together with emergent relational capacity. By means of transference, an isolating condition is made visible, and alternative possibilities are modelled within a communal space that remains safely contained by the boundaries of the performance generating system.

I turn our attention to Lee Su-Feh’s *Dance Machine* (2017) in Chapter 10. The change-resistant conditions this work engages derive from intergenerational displacement. Lee chose the materials and tasks of the *Dance Machine* to examine gaps in knowledge about herself as a Malaysian immigrant in Canada, the Indigenous peoples of this land, and relationships between humans and environments. The rope, bamboo, and cedar of the *Dance Machine* entangles audience members as they act on seven tasks, which in turn teach participants how the machine responds and can be cared for. The transitions in attentiveness and environmental engagement this process enables produce experiences of connection.

This book reveals the dramaturgical, psychological, and performative complexity of performance generating systems. It provides frameworks for engaging with this complexity for purposes of research, creation, performance, learning, and relational capacity building. Yet, when arriving at the concluding chapter, I hope readers will lean into Lee’s observation that each moment of relational connection generated through these systems is ‘a simple dance’. Similarly, the conceptualization of performance generating systems offered through the three frameworks and five cases of this book refers to a simple dance in all its complexity.

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Performance generating systems are systematic and task-based dramaturgies that generate performance for or with an audience. In dance, such systems differ in ways that matter from more closed choreographed scores and more open forms of structured improvisation. Dancers performing within these systems draw on predefined and limited sources while working on specific tasks within constraining rules. The generating components of the systems provide boundaries that enable the performance to self-organize into iteratively shifting patterns instead of becoming repetitive or chaotic.

This book identifies the generating components and dynamics of these works and the kinds of dramaturgical agency they enable. It explains how the systems of these creations affect the perception, cognition, and learning of dancers and why that is a central part of how they work. It also examines how the combined dramaturgical and psychological effects of the systems performatively address individual and social conditions of trauma that otherwise tend to remain unchangeable and negatively impact the human capacity to learn, relate, and adapt. The book provides analytical frameworks and practical insights for those who wish to study or apply performance generating systems in dance within the fields of choreography and dance dramaturgy, dance education, community dance, or dance psychology.

Featured cases offer unique insight into systems created by Deborah Hay and Christopher House, William Forsythe, Ame Henderson, Karen Kaeja, and Lee Su-Feh.

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