New Realities of the Body in Contemporary Performance: Québec, European and Latin American Perspectives

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with participants from the Université du Québec à Montréal, Hexagram, the University of Venice, the University of Chichester, Concordia University, Universidad de Caldas, Universidad Distrital Francisco Jose de Caldas and invited members of other Latin American universities

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Abstract

This panel considers the new and multiple relationships of the senses and related perceptual and cognitive processes which characterize contemporary performance integrating new technologies. Focusing on the corresponding effects on corporeality, performativity and representation, it considers the sensori-perceptual deconstruction, reorganization and reconstruction involved when the body is "touched" by, interacts with, and "in-corporates" the effects of technology. And, as these new approaches directly concern current research-creation and are expressed through collaborations, hybrid artistic approaches, new forms of interdisciplinarity and communities of practitioners, the panel will also consider the implications of this activity for existing networks of research-creation, looking at their specificity while examining how participants in these networks exchange, interact and collaborate.

Keywords

new technologies, performativity, the senses, somatics, perception, cognition, design, embodiment, research-creation

Introduction

Over the past decades, a fundamental epistemological rupture – or shift of perspective – in the arts and performance has redefined notions of performativity and representation under the influence of new technologies. Mediation and digital technologies have extended dramatic, narrative and semiotic possibilities, revealing, amongst other things, new and multiple relationships of the senses and modes/levels of perception. They have thus also challenged and transformed conventions surrounding spectatorship and the understanding of corporeality in performance: for performers and spectators alike. As an introduction to these themes and the panel that will address them, this article presents an overview of the book *Through the prism of the senses: Mediation and new realities of the body in contemporary art and performance. Technologies, cognition and emergent research-creation methodologies,* a forthcoming publication by panel moderators Isabelle Choinière, Andrea Davidson and Enrico Pitozzi. While taking into account a current context of research-creation and its conceptual and empirical prerogatives, the book centers on the question of technological intervention from the perspective of its encounter(s) with the sensate, somatic body. Based on a first premise of the body as a living perceptual entity, adaptive biological phenomenon and indeed, "technology" in its own right, the authors reflect on the status of *corporeality* in contemporary art and performance while analyzing the various technical means and artistic strategies employed by artists to inscribe the mediated body and its manifestations within a spectrum of contemporary artistic production.

If life in the 21st century has seen the mass adoption and ubiquity of a digital "norm" touching all areas of human activity and thought – science, philosophy, sociology, biology, medecine, and art – technology can also be described as having produced an ontological shift away from worldviews anchored in a culture of knowledge based on representation, moving instead towards a world of "machine-based modes of "world-making" (Hörl 2008) based on a science of algorithms, modelization, simulation, emulation and binary code. Requalifying a centuries-old understanding of *technē* and foundational Platonic distinctions of *technē*/art/the artificial on the one hand, and nature/*epistemē* on the other, it has uprooted the classical age notion of representation as mimesis – in the arts as in science. Or, as Roy Ascott noted in 1996, today, "our personal neural networks merge with global networks to create a new space of consciousness" (2007).

Technologies are not simply "means". They constitute an environment, a logic and thought processes. This said, in the context of artistic projects, discretion is in order. On a *technical level* – that is, in the course of a work's technological development – technology must be subordinated to the *aesthetic level* of artistic composition.

Only in this sense can technology be truly understood as a *logic of technicity* – or *technē* – and not as a simple spectacular application. And only in this sense can an aesthetic of digital art and performance be approached and understood as a unique form of knowledge that is principally communicated through perception and sensory experience.

The omnipresence of technologies in daily existence has also ushered in new habits, skills, activities, modes of communication and the production of yet other machines; what French philosopher Stéphane Vial (2013) calls "digital ontophany"[1] after Gaston Bachelard's term *phénomènotechnique* (1953) – a phenomenality of the technical. Bodies today already live and perceive in multisensory and multimodal dimensions. As living organisms, they have adapted and continue to adapt to a perpetual state of transformation that seems to be accelerating, with obvious consequences for entire populations and the environment. The body which emerges in a context of technological evolution constitutes a new reality: a *contemporary body*.

It is this body and the multimodal, multisensorial phenomenality expressed in the aesthetic of contemporary digital performance that the authors address with their analysis, situating the different levels and types of adaptive mechanisms, learning skills and multiple channels of perception at play in the body's contact with technology and its assimilation of phenomena within new technological environments. Along with this axis of perceptual-cognitive activity, attention is also paid to the emerging interpretations of time-space, presence and corporeality in contemporary art and performance.

The book thus proposes a reframing of notions and conditions of representation with respect to new contemporary performative stages via the prism of the senses. It notably examines the sensori-perceptual deconstruction, reorganization and reconstruction involved when the body is "touched" by, interacts with, and "incorporates" the effects of technology, and, as the authors argue, how new and multiple relationships of the senses also call into play various interdependent forms of cognition of which they distinguish a capital role of bodily intelligence and the possibility of transformative experiences through interactions with technology. Seeking to identify and analyse the new configurations – or cartographies – of the living body's sensory mappings, the book examines the impact of technologies in

performance which, at the same time as they extend theatrical potentialities and modes of performativity, also solicit and engage spectators in new sensori-perceptual relationships with art and more explicitly embodied forms of reception.

Compositional modalities involving digital technologies and new media may be alternately interactive, immersive, multimodal and/or networked. Through artistic strategies involving sensory immersion, altered cognitive experience or intermodal sensoriality, a new "geography" of perception linked to reception is constituted, which the authors argue constitutes a potentially fertile space for the imagination, but also for a more embodied experience of art, heightened sensory stimulation and psycho-corporeal awareness. And, if artistic paradigms such as the transitional, flux, the processual and non-matrixed representation can be seen to underpin such experimentation, the evolutive, transversal and/or emergent nature of such artistic processes also reflects the new aesthetic paradigms that characterize the contemporary stage in its plural forms while also marking the point of departure for new research-creation methodologies.

A new methodological framework for research-creation

Adopting a predominantly historical-critical tone, *Through the prism of the senses: Mediation and new realities of the body in contemporary art and performance* presents a multimodal, three-stranded methodological approach whose goal and *modus operandi* is to reveal – like a prism – different facets of relations existing between the body and technology and thereby examine the status of *corporeality* in the arts and performance today. Conceived by Isabelle Choinière and developed in interaction with Enrico Pitozzi and Andrea Davidson, this methodology can serve as a tool for an enriched understanding of the creative experience as well as a model for creative practice. Grounded in transversal and syncretic research processes, it implies, on a first level, an interweaving of practice and theory that is characteristic of much research-creation, while also defining a form of collective and collaborative research.

On a second level, this methodology can be said to engage a form of "personal risk" (Rolnik 2006) (Roux 2007). Here, the researcher accepts to sublimate his or her preferred practice and/or methodological approach in order to explore other levels of being and perception; what art historian Céline Roux has called "matter to be rediscovered in a conscious way of thinking about being" (2007). In the specific context of research concerning artistic processes integrating new technologies, it implies that the researcher be willing to engage in, and experience first-hand – physically – the mediated environments under study and artistic strategies which destabilize and potentially transform corporality and corporeality. These

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[1] "(...) *ontophany* in the etymological sense of the term initiated by Mircea Eliade (...) signifies that something presents itself to us" (Vial, p.110). "Digital ontophany" signifies "how people and things appear to us through digital devices or the effect of their ubiquity, and this can be described with the help of eleven characteristics: noumenality, idealism, interactivity, virtuality, versatility, reticularity, instant reproductibility, reversibility, indestructibility, fluidity, ludogenity".

strategies notably underpin the creative process of Isabelle Choinière, and were tested and experienced by various researchers studying her work including Enrico Pitozzi. Promoting a form of embodied comprehension of a topic, this approach also allows for a complementary empathic dimension to emerge between theory and practice.

On a third level, and in connection with the second, the proposed methodology allows for an intimate exploration of the ways in which technologies solicit and stimulate new forms of sensoriality, cognitive responses and bodily intelligence, proposing a means through which to study the interplay between perception, cognition, the experiential and technologies – in mediated art in general, and with respect to notions of performativity, artistic expression and reception in particular. One example might be first-hand testing and analysis of practices that generate "sound bodies" wherein the body not only serves as a medium for the production of sound, but also, in which the generation of sound awakens alternate forms of "tactile" reception and the possibility of sensory "re-creation". One could also reference forms of simulation that determine particular relationships between the body and environments; for example, situations in which the performer (or spectator) must imagine and project his or her body in space before taking physical action or interacting with a media device.

Conversely, this methodology can also be applied and experienced as an evolutive framework for undertaking practical research. Constituting an integrative approach that favours interconnection and complementary intelligences, it validates proprioceptive experience and bodily intelligence alongside embodied thought as guidelines for research and the basis from which to reflect upon the body in its more internal, functional, developmental, adaptive and homeostatic aspects. The flexibility of this methodological approach also allows for a consideration and implementation of knowledge issuing from a potentially vast range of scientific disciplines – for example, from neurobiology, movement studies, kinesiology, physics, biomechanics, biomedicine or dance, sports and computer sciences amongst others – as complementary epistemological perspectives in the creation of technological environments. When integrated with a spirit of methodological openness and transversality, knowledge culled from other disciplinary contexts – each with its own logic, applications and/or functionalities – can create new spaces for the imagination while also offering refreshing sources of stimulation for any investigation of technological mediation in performance.

Lastly, the book's cross-methodological and pluridisciplinary nature allows for original perspectives to emerge regarding terms habitually employed to describe the sensory modalities of contemporary artistic reception: *kinesthetic empathy*, *embodiment*, *intersubjectivity, the*

haptic and *corporeality*, to name but a few. Questioning existing understandings of performativity, the effects of presence and the role of empathy as a form of communication between spectators and performers, the book takes into account the multimodal effects of sensory stimulation on the body and the physiological consequences of synesthesia and other technologically-induced destabilizations of perception by examining the body's adaptive mechanisms and capacity for accrued sensori-perceptual awareness. It goes without saying that dance, or specifically, the dancer's keen awareness and knowledge of the body in its proprioceptive, kinesthetic dimensions, can serve as an appropriate model and testing ground for the effects of technology on the body. It is also perhaps not by chance that two of the authors have had extensive training and experience of various dance techniques, the martial arts and somatic practices.

Engaging in a dialogue with technology that is simultaneously productive and critical, the proposed methodology is both open – implying and comprising the various disciplines it traverses – and specific – in the description and analysis of complex works. This position allows the authors to change the point of departure (and basis) for a form of reasoning commonly associated with more normative interpretations of technology, its references and founding concepts, proposing instead a structure of reasoning and possible discursive developments that can change the way certain terms are habitually understood by redefining them. This is, of course, an ambitious task because nothing is more difficult than changing the angular concepts and fundamental ideas which support an entire intellectual edifice. The whole structure of the system of thought is therein upset, transformed. This is what one must be prepared for.

Lastly, if technology has the potential to modify cognitive processes, it can in turn be influenced or conditioned by the creative process, which invariably introduces new demands and forms of knowledge. This is important from the point of view of the methodology proposed. On this level, interesting interconnections between the living "machine" of the body and the "artificial" machinery of technology are to be found. Through the arts, a particular account of the impact technology has on human life can be elaborated by questioning, for example, how practices, thought and behaviours might have changed our understanding of technicity over time, or how design has influenced the composition of stage devices in terms of an architecture of the stage as environment. One must also consider the consequences of technical progress – and the arts are an excellent observatory from which to do so – by controlling the direction and nature of the research at hand. The book's methodological approach thus also extends to encompass ethical and anthropological dimensions of research as an "ecology" of technology.

Axes of reflection
Adopting a strategy of multiple voices with the three authors engaged in a process of discursive interaction, the book takes the form of a triple-voiced narrative which establishes interrelations of theme and subject matter, while also operating subtle shifts of focus that reflect a pluralistic worldview, also exemplified by the three authors' different professional experience, backgrounds and nationalities.

This methodology concentrates its analysis on two main axes of reflection in interaction. The first consists of the analysis of technological devices as means and processes by approaching new performative stages/devices integrating technology as complex systems which are designed, tested and supported by a structured set of knowledge, skills and practices: of the body, as well as of technological environments. The aim of this approach is to discern the new perceptual processes underpinning and generating the composition of digital works in their aesthetic, scenographic, and technological dimensions. The dynamics of its integrative nature constitutes a flexible yet comprehensive basis for examining physical and media interactions and distinguishing emerging forms of performative behaviour through analysis of the ways in which technological devices establish new relationships with the performative body, and, further, how these interactions can provoke and induce changes in corporality. This last point extends to include the more opaque way technologies operate today: through a consideration of how, on the one hand, technologies produce cognitive changes in terms of anthropological development (de Kerckhove 2014), and on the other, how creative processes can influence technological development and to what extent the creative process itself can become a "territory" for generating new technological tools.

The second axis, closely linked to the first, consists of reflecting on the conception and experience of the performative body in light of the relationship(s) it entertains with technology. The authors propose to consider this relationship as an evolutive *complexification of self* developed through and expressed by experimentation with new modes of perception and reception related to multimodality and multisensoriality. Reflecting on why artists feel propelled to invest in such multimodal and multisensory explorations, some of the theoretical perspectives explored in the book include Derrick De Kerckhove's view that the technological age in which we live has broken with the distancing objectivity of the Renaissance "era of vision" (2014) or Jean-Louis Weissberg's (1989) view that we now inhabit multisensory universes which are apprehended with instant awareness of the whole. For Suely Rolnik (2007), digital technology has activated a process of sensory renewal through an acceleration and permanent destabilization of the senses produced by, amongst other things, electronic media which have brought together different universes. Provoking a constant reorganization of the senses, this situation creates an exacerbated state of being, of presence, but also, according to Rolnik, a potentially salutary, adaptive state of openness facing the experiential at large.

Choinière, Davidson and Pitozzi interpret these positions as manifesting a *fracturing of the visible*; a situation concretely reflected in the multimodal and multisensorial nature of scenography in contemporary performance. This position allows one to alternately consider new stage devices from the angle of physical and symbolic time-spaces that are increasingly hybrid or to analyse modifications of the physical body produced by contact with technological devices. It also invites analysis from the perspective of a disappearance of the fourth wall, calling into question issues concerning the subject/object or spectator/performer relationship and leading to, amongst other things, a consideration of the dissolution of psychophysical borders between the performer and audience, and to contemporary forms of intersubjectivity (Rolnik 2007a, 2007b) (Berthoz 2013) (Brett 2004) (Rizzolatti 2005).

To account for the intermodal perspectives just evoked and to the concepts from which they derive, the organization and internal logic of the book develops three correlated levels of analysis in resonance. These perspectives, which also correspond to the book's three chapters are organized as follows.

Strand 1: *embodied thought*
A first methodological strand, developed by Enrico Pitozzi, correlates a theoretical framework of analysis with direct observation of artistic practices and a consideration of the experiential body. While constituting a primarily aesthetic and philosophical approach, it nevertheless emanates from, and takes into account, the researcher-theorist's first-hand physical experience of compositional processes involving new media devices: in Pitozzi's case, stemming from close collaborations with choreographers as an outside observer-researcher of their works and through pedagogical experience with dancers. The theoretical position that issues from this experience reflects a logic of *embodied thought*, leading the author to propose an emerging philosophy of contemporary stages in resonance with the book's other methodological strands.

Overview
Pitozzi begins his analysis announcing a theme of *corporal potentiality* as constituting a vital element in the relationship between the moving body and technology. With a first reference to the concept of virtuality, from the medieval Latin *virtualis* and *virtus*, "force," "power" (Lévy 1998), he establishes correlations with Spinoza's

positions on the body as a "reserve" of movements and gestures (2007) and subsequently, to perception and more specifically, to the modification of perception as influenced by technology. Here, he aligns his analysis with references to Leibniz on perception (1921) and to Berthoz (1997) and Jeannerod (1994) with respect to physiology. This framework allows him to introduce notions of *corporeality* and *corporal potentiality* with a specific analysis of artistic processes involving technologies that mobilize perception and/or extend the body's potentialities. These issues lead to the question of intermodal, multi-sensory strategies of composition and the emergence of *new performative behaviors*. As a first example, he cites the sound body – "*le corps sonore*" – (Pitozzi 2010) developed in the work of Isabelle Choinière, a model that has also been explored by other artists in different ways.

Examining relationships between the conventional stage for theatre and dance and immersive and/or multisensory installations which, importantly, stage the presence of devices, Pitozzi then considers a range of contemporary experimentation which points to a new understanding of multimediality: from the more "organic" representations of the body in multimedial stage productions by artists such as Myriam Gourfink / Kasper T. Toeplitz, Ginette Laurin / Martin Messier, Robert Wechsler / Palindrome and Isabelle Choinière, to the more stylized audiovisual environments and installations of Dumb Type / Ryoji Ikeda, Hiroaki Umeda, Cindy Van Acker / Mika Vainio, Shiro Takatani and Herman Kolgen. Four trends emerge from his analysis: the first concerning the creation of immersive environments that transform the conventional stage into perceptual environments – for example, in the case of works by Granular Synthesis or Edwin van der Heide. The second concerns a reinterpretation of structural models of nature in their metaphysical dimension – as in the works *Datamatix* (2008) by Ryoji Ikeda (2009) or *Rheo* (2009) by Kurokawa Ryoichi. A third perspective describes strategies that "extend" sound and vision – as in *Dust* (2009) by Herman Kolgen, *Ripple* (2004) by Thomas McIntosh, or *To extend the visibility* (2008) by Elio Martusciello – in which media devices are employed to "visualize" normally invisible and inaudible dimensions of reality. A fourth category includes works that, in their most radical dimensions, have led to the emergence of autonomous multimedial forms – for example, in the works of Heiner Goebbels or Verdensteatret, where performers have been replaced by a *theatre of objects and machines*.

Having established points of connection between multimedial stages and installations, Pitozzi then turns his attention to the phenomenon of multisensory immersion and to compositional strategies involving immersive devices, which he describes as producing a unique aesthetic related to a *logic of latency* and the capacity to induce specific sensations. Advancing the idea that these strategies initiate a transformation – or reconfiguration – of performers' and spectators' sensorial activity, he also places emphasis on the subliminal dimension of artistic composition, questioning not only the material conditions of composition, but also, conditions underpinning reception. If the transformative aspect of installations lies in a reconfiguring of spectators' perception, it also concerns the relationship spectators entertain with environments in which they are immersed. A pathway, or "current", is created between the stage or installation's materiality and the mind – the artist's intention and performers' action – on to the spectator's perceptual sensibility. Pitozzi argues that through this connection, spectators gain access to an unprecedented scope of perception, which, in turn, invites a reconsideration of the range of all possible sensation. He suggests that in this experience, the apparent substance of all things perceived may be but the spark of an encounter between what he calls two infinities: between the material stage or installation, and the stage of perceptual experience.

Strand 2: *embodied cognition*
This second methodological approach constitutes an axis of practice-theory that Isabelle Choinière, as a dance artist-performer-researcher, tested and developed in the context of her interdisciplinary choreographic practice and further conceptualized in her writings. Rooted in the experiential, and specifically, in the artist-researcher's moving body in contact with technology, it aims to establish an interactive relationship between practical research and the generation of theory wherein practice informs theory and theory, practice. The creative process – here understood as both practical and theoretical – is guided and enriched by critical and reflexive feedback: as much via collaborations with external researchers as by practical experimentation in the studio. One example of this cross-fertilization is a consideration of the reorganization and reconstruction of the performer's sensori-perceptual references when in contact with technology as a form of phenomenological knowledge, also implicit in the dancer's accrued sensory, perceptual and improvisational capacities. Choinière thus proposes a means to understand digitally-based creative processes as systems of *embodied cognition*, underscoring an intersection of the somatic with the technological, but at the same time, proposing a new way of thinking about and creating digital works.

Overview
Choinière's research takes as a basic premise the possibility of a modification and evolution of corporality through the body's contact with technology. Firstly grounding her argument in a revisitation of the etymological origins of the term "aesthetic" – understood by the ancient Greeks as a reference to sensation and the

capacity to perceive – and a reference to the sensori-perceptual nature of lived, subjective experience in what she describes as a renewal of Merleau-Ponty's existential phenomenological project, she subsequently bases her hypothesis on notions of personal risk-taking (Roux 2007); on cultural processes of transformation marking the transition from a logic and a culture of objects to one of intensity and flux (Buci-Glucksmann 2001); and on Rolnik's theory of a dissolution of psycho-corporal boundaries (Rolnik 2006) (Brett 2004) (Clark, cited in Brett 2004) (Luz 1975) (Rolnik & Diserens 2005). She then introduces her model of a collective and collaborative form of research that served both as a creative impetus for *Flesh Waves*, a project she has developed over the past years, and as the work's evolutive methodology, inspired by a phenomenology of *lived experience* and a dynamic of empathy. Her intention is to create a space of bodily resonance and ecosystem of interaction and mutual influence, in which empathy and corporal intersubjectivity are proposed as a form of *intercorporeality*.

Presenting the principal axes of her practical research and referencing other creative works she has designed and participated in, Choinière firstly addresses questions of sensory perception and the complex multisensory, multimodal and integrative relationships which characterize her work and distinguish it an alternative vision of the performative body. This analysis sheds light on her research's central interest and focus: a dynamic link between somatic principles and technology, derived from a personal practice of contemporary dance rooted in the somatic and an equally strong interest in digital interfaces from the outset of her career as a choreographer. She also evokes the new aesthetic, cognitive and communicative paradigms she sees emerging with this technological-somatic orientation, also reflecting on dance's potential contribution to a broader understanding of technological evolution in general.

The technology-somatic relationship, which Choinière further describes as underpinning the concept of *embodied cognition* already alluded to, was concretely tested in practical experimentation in the studio with five dancers for whom she elaborated exercises to develop heightened sensori-perceptual and experiential awareness, and secondly, through the creation of a performative model involving an interactive sound interface in which the dancers' movement, breath and intimate vocal utterances generate a sound environment and what she calls a "collective carnal sound body" (2014, 2015). She notably outlines the strategies of sensori-perceptual destabilization tested with the dancers, describing how, on the one hand, they imply a learning process with technology based on principles of self-organization and sensory "attunement", and on the other, how a relationship between the performative body and technology can construct, through a focus on intensities

and flux, minute changes of state, and elements in resonance, a new form of presence that is at once physical and mediatized, and further, capable of communicating, through an extended or diffused effect of resonance, with the somatic sensibility of spectators seated in proximity to the stage and immersed in the sound environment generated in 360°.

On the basis of this experimentation, Choinière elaborates a theory of *vibratory and interfaced intercorporeality,* expanding on Pitozzi's notion of *corporal potentiality* and also qualifying it as a new aesthetic of the interface. She notably argues that the collective body can constitute a new paradigm and organizing principle for experiential forms in the performing arts when the body and its specific intelligence are "reintroduced" in the understanding, conception and elaboration of relationships amongst performers and between performers and spectators. While describing the technology deployed in her research as itself constituting a distinct physical environment and new form of physicality with which performers engage, she suggests that technology can become the activator of a process of sensori-perceptual reconfiguration leading to a phenomenon of *interfaced intercorporeality*. For Choinière, this paradigm is possible thanks to a renewal of the types of relationships artists can develop with technological interfaces and the notion of *corporal potentiality* which is activated and actualized in her creative work.

Strand 3: *embodied perspective*
Picking up on the themes of *corporeality and sensori-perceptual transformation* raised by Pitozzi and Choinière*,* Andrea Davidson adopts a third methodological approach and focus: that of the practitioner-theorist engaged in the analysis of the performer's double status as *mediated body* and *mediating agent*. Drawing on empirical knowledge gleaned as a former dance artist and choreographer, and applying analytical tools common to dance and somatic theory and practice, Davidson establishes a first line of inquiry concerning what she observes and analyses as the corporeal or somatic dimension of digital performance as it plays out in the performer's physical contact with technological devices: how does the *body* actually *experience* technology? What changes in the relationship with respect to one's "normal" state? What adjustments are required? These questions lead her to further consider the effects of mediation on those on the receiving end of a work: spectators, who, wittingly or not, also become mediated bodies of sorts.

In a second line of inquiry, for which she adopts a more aesthetic and discursive methodological framework of analysis that draws on a wide and transversal set of sources, Davidson examines the performer's experience as a mediating agent operating

within systems of technological interfacing. This analysis leads Davidson to evaluate, after Broeckmann (2003) and Kusahara (2007), the nature of the technological device as encapsulating or cristallizing a concept, a channel of perception and a discursive mode. Correlating the practical-theoretical strands of her methodology, she then advances a notion of *embodied perspective,* through which she proposes an understanding of digital interfaces as *new viewing/sensing devices* (Davidson 2013, 2015) which, in their capacity as *instruments of perception,* proffer somatic experiences while also conveying a work's particular aesthetic *perspective.* Her argument concludes with a consideration of perspective itself as a new form of dramaturgy.

Overview
On a first level of interpretation, Davidson situates the dual nature of the mediated/mediating body within a general context of mediation and intermediality in performance, and then, with respect to new aesthetic imperatives that locate and stage performers within hybrid technological systems. Examining the two-way connectivity of interfaces and/or of networks of interrelated devices which characterize these works, she looks at the alternative and multiple forms of presence, intervention and relational complexities their dramaturgies introduce. She then focuses on the new skills, forms of address and composite forms of corporeality that become necessary/operative for performers acting as mediating agents within these environments, also broadening the scope of her analysis to scrutinize other relationships generated by mediation in performance: between the mediated/mediating performer and spectator, and between spectators and mediated environments. She notes, for example, how mediation and intermediality can challenge, divert or deter habitual chains of sensori-perceptual-cognitive action and reaction, their levels of intensity, modes of organization and aesthetic outcomes (Lévy 1998) (Ihde 2009) (Kattenbelt 2008).

On a second level of interpretation, Davidson remarks, like Pitozzi, that the multimodal nature of contemporary scenography often goes beyond an appeal to the senses of sound and vision alone to elicit modes of perception that are multi-sensorial, layered and/or immersive. She notes that in so doing, artists can amplify or concentrate perception, communicate different levels of narrative complexity, and further, inform the spectator of his or her own corporeality. She suggests that these devices/interfaces also underscore the capacity of technology to reveal what has hitherto remained inaccessible or hidden to the senses. To support her argument, she looks at a selection of works from several artistic disciplines, also questioning whether disciplinary prerogatives may change the way mediation is conceived

of and designed, and, if so, what changes to performative agency and reception might be involved.

In a third perspective, Davidson introduces the notion of interfaces as "new viewing/sensing devices", looking at the range of possible somatic qualities expressed or stimulated by mediating devices. Examples are given of works that namely stage the effects of variables such as light/shadow, colour, air, temperature, pressure, weight, balance, distance, proximity, scale, orientation and reverberation. Noting how these devices call into play responses of a proprioceptive and kinesthetic order and also identifying the more psycho-physiological relations they produce, she notes how, in provoking new spatiotemporal references and sensory reactions, certain devices can also constitute variations of touch, new ways of sensing space and time, perceiving objects or experiencing gravity. These observations lead her to advance the notion of *embodied perspective* as a new form of dramaturgy. Situating the role of sensori-perceptual adaptation and corporeality alongside the singular perceptual/semiotic perspective a device offers, she analyzes how these new dramaturgical forms stage alternative dimensions of performativity and modes of reception.

On a final note, any analysis of current trends of contemporary performance involving technology would be incomplete without considering a posthuman or transhuman vision of the body and agency. Under this category, works can include representations of critical discourse surrounding identity in a technologically mediated world, the depiction of bodies that are instrumentalized, controlled and/or replicated by machines, devices that physically penetrate the body and/or transform the human form, or transmutations of human attributes as virtual entities, modelizations or abstract functions. While aesthetic statements and strategies like these are not necessarily new or recent, with artists such as Stelarc, Orlan, Marcel-lí Antúnez Roca or Guillermo Gómez-Peña already having explored this territory, Davidson remarks that they may not be the only possible response to technology or expression of a posthuman aesthetic. On the contrary, she asks, how might an expressly somatic – human – vision of the body inform technology? Citing Remshardt's (2008) concerns, after Auslander (1995) about mediation having sealed the fate of the phenomenal body in performance and his comment that "mediation changes only the perceptual, not the ontological status of the body" (2008), Davidson, for whom these oppositions remain problematic, expresses the view that an ontological status of the body in mediated performance need not necessarily eschew the mediated body because, as in society, the mediated body has become increasingly integrated as part of human experience.

For Davidson, somatic experience, as an expression of presence-to-experience, can also pose a

viable counterpoint to what Remshardt (2008) further refers to as a contemporary "collapse into mediation". Citing the example of *Huang Yi & KUKA, A Duet Of Human and Robot* (2013), in which dance, robotics and laser technology combine to communicate a rare poetic symbiosis of man and machine, she distinguishes what she views as the ongoing potential of mediated performance to renew performative models while also transforming the perception and rituals of theatre. On that note, she ends, raising questions as to how technologies of the future will impact the performative body and spectatorial experience. What new media, interfaces and applications will emerge? What new potentialities of the performative body will they inspire?

Conclusion

The themes evoked in *Through the prism of the senses: Mediation and new realities of the body in contemporary art and performance* fall within a range of current research at the intersection of the arts, culture and media studies exploring questions of mediation, sensoriality, perception and human-computer interaction. In placing corporeality at the core of its aesthetic focus, the book distinguishes itself however from studies which limit their analyses to the functioning of technological "objects", machines or systems, an evaluation of mediation from historical, aesthetic and/or sociological perspectives alone, or alternately, notions of "lived-in" or "body-specific" knowledge as they apply or can be related to fields such as software studies, the computation of movement as numerical representations or their equation with concepts of immediation, enactment, interactivity, ergonomy, etc. Even the adjectives "embodied", "intuitive" and "intelligent" used to describe aspects/qualities of digital systems have become so common and all-encompassing that the processes they reference are also taken as givens and left largely unexplained, incomplete.

The experiential, multisensorial and somatic nature of mediated performance does not readily conjure up abstract concepts or theoretical objects, but rather, as the book demonstrates, derives from and facilitates an active experience of embodiment. One of the principal arguments advanced by the authors concerns the role of *bodily intelligence* in the conception, reception and analysis of works deploying technology, also underscored by the concept of *corporal potentiality,* proposed as a new aesthetic model for interactive interfaces. In the cross-modal, relational and creative relationship the moving, sensate body weaves with technology, these principles can open up new understandings of the contemporary body and spheres of performative action and spectatorship, while also constituting the basis of new dramaturgical strategies.

The book's practical/theoretical axis highlights another dimension of this activity that has not yet found a precise aesthetic framework of analysis but that is examined and also integrated in the book's dynamic and transversal methodology: an understanding of the experimental nature of practice as a process of transformation and not, as habitually understood, a process leading to representations that are anticipated as such, and thus locked into, final, fixed outcomes. The paradigm of *interfaced intercorporeality*, as an example of a dynamic experiential process revealing the complexity of the body in a state of constant evolution, can open up a powerful space of transformation in creative work and also be of interest for the history and evolution of new contemporary stages by marking a transition from representation to transformation. It is hoped that these perspectives and their emphasis on corporeality and the inherent somatic dimension of human-technological interaction, can be of significance to any debate surrounding mediation in art and performance.

Panel participants

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Enrico Pitozzi (Author, University of Venice)
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