

Hamlet's Norwegian Doll's House: *reframing embodied knowledge with virtual architectonics of performance*

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In this paper we respond to the theme of real-time virtual performance that generates ways to increase embodied and spatial knowledge in the contexts of theatre history scholarship and related performer education. Through discussing a series of international and inter-institutional collaborations on a project called VIMMA, primarily funded by the Finnish funding agency for technology and innovation TEKES and led by the Centre for Practice as Research in Theatre T7 at the University of Tampere (Finland), we share the results of investigating real time modes of performing through revised engagements with digital 3D models of interactive performance environments. The environments were designed to enable experiments with embodied agencies, transformations, transgressions and medialities (in-between states of adaptation or contrast) that inform spatial enquiries into historical performance venues. Along with sharpening our current views on how to approach past performances, the digital production, training and performance formats employed can be used as emergent elements within new performative contexts, such as open game environments, complex non-human character scenarios and extended narrative elements of play.

To present findings from the collaborations of VIMMA, we discuss the particulars of two series of workshops titled *Hamlet's Norwegian Doll's House* (2013) and *Vimma Goes Odradical* (2014). The workshops employed 3D real-time Motion/Performance Capture (MoCap/PeCap) technology to enable simultaneous virtual, intermedial and physical performances by performing arts professionals and students in a PeCap studio environment, as well as spherical (360-degree) recordings of the performance data¹. The first workshop created open scenic landscapes by exploring a digital model of the main stage of Nationaltheatret (Norway) through the manipulation of a series of digital properties inspired by E. G. Craig's famous stage

design for the Moscow Art Theatre (MAT) production of *Hamlet* in 1911-12². This was done alongside an experiment to combine and compare the performative conditions of Shakespeare with Ibsen as part of a larger Digital Humanities (DH) project that sought deeper understanding of the architectonics of performance located within venues where the works of both had been performed (both originally and in contemporary modes). Academics involved in the processes were Teemu Paavolainen, Riku Roihankorpi and Mika Lehtinen (University of Tampere), Matthew Delbridge (University of Tasmania), Daniel Skovli (Deakin University), Joanne Tompkins (University of Queensland), Tanja Bastamow (Aalto University), Simon Alexanderson (KTH Royal Institute of Technology) and Ari Tenhula (University of the Arts Helsinki). The software interface generated by Ortelia (Australia) that facilitated this enquiry models a unique tool for historians, academics, students, directors and designers to explore, play with and collaborate on staging possibilities in an efficient and immediate way.

Background and Potentials

Current advances in virtual and mixed media technologies allow us to effectively examine how idiosyncrasies and changes in artistic agency affect the embodied knowledge that develops over time and under different cultural circumstances. This, in turn, enables ways to refine and better grasp the psychophysical paradigms that affect our present or future understanding of performative agency and environments. The setup is particularly rele-

vant for the study of theatrical texts, performances and production processes, which not only reflect the cultural politics of a certain era, but pass their ideological and embodied premises on to future performances by modes of intermediality (techniques and methods that re-sensibilise or 'refresh' epochal perception)³ and ways of identification specific to each performance (individual agencies in relation to specific cultural conditions). The subjectivities implicit in these performances (active points of practical and normative transference) change throughout the ages and articulate different notions of realism, hierarchies of the «fictive cosmos» (Elinor Fuchs cited in Turner 2015: 8), and gestural politics. The project's approach to new DH methods implies a strategy to share our growing understanding of the research that recreates virtual reality (VR) models of historical theatres to function with alterable sets, props, and lighting, in order to recapture, better apply and analyse the use of space and gesture in historical performances. Sharing this knowledge redirects scholarship emphasis from language to physicality (movement, gesture, the 'blocking' of actors on stage etc.) to provide fuller insight into key performance aspects that enable more detailed interpretations of the works of Shakespeare and Ibsen, for example. The strategy responds to the need to evaluate how visualisation tools enhance understandings of the relationships between characters, performers and audiences or performers and stage properties in different historical eras. This will significantly augment the methods and practice of performance analysis and education, as well as the radical rethinking of theatre history.

The above approach implies a reconsideration of the parameters of theatre history in creating new knowledge. Acknowledged and systematic work in this field includes Fotheringham and Tompkins (2010) fashioning of scholarly VR models of the long-demolished Rose and Boar's Head theatres in London (c. 1590s), following on from the Ortelia project, which developed the original research potential, functionality, and scope for VR application in theatre and beyond⁴. On the basis of Ortelia's easy-to-use models, the scholars involved

have made arguments that challenge assumptions about Early Modern performance – for example, how much light came into the theatres and what acting styles were possible. When MoCap files proved interoperable with the VR theatre models, it suggested a new direction in theatre research that merges these two elements. We may now address the practice of theatre at large with DH tools that reshape the implications of theatre history and augment the digital dimensions of performances' architectonics⁵.

The early part of the above study on Early Modern performance focused on space, lighting, and props. These operate in different ways from Shakespeare to Ibsen, of course, but the Early Modern experience has facilitated the development of new instruments for interrogation of movement and gesture in the Modern era. The opportunity to test different dramaturgical choices, acting methods, and performance traditions in the same layout – a modernist one – was one aim of the Finnish workshops⁶. Using two historical periods helped to test the methodology and to argue DH's strategic value to theatre history, and, iteratively, how the study of theatre history can enhance the scope for visualisation tools. The work preceding VIMMA thus focused on venues which, when 'recovered' through virtual technology, have a wealth of architectonic information to reveal. Most of these explorations were undertaken in a project titled DREX in 2012. Figure 1, which displays an embodied exercise in a VR reconstruction of the Rose Theatre, demonstrates how the historic or original state of a venue can be recovered virtually. This step made possible the real-time analysis of a gesture and movement 'text' in the VIMMA workshops, a text of physical action that is embedded in stage directions, language and the performers' expertise, but has only been studied through limited physical reconstructions and re-enactments.

During 2013 the VIMMA project deployed the demonstrated tools to creatively examine and reimagine the works of Shakespeare and Ibsen as case studies. The effect was an augmentation of what can be gleaned from existing static performance data, such as engravings, sketches, and photographs. This new method enriches the study of the architectonics of performance⁷, which is the wealth of information about how performances might operate in given (or imagined) venues and about playtexts' embedded spatial/temporal codes that underpin performance. These are curiously often ignored in criticism. In the following chapter, we will discuss some ways in which the VIMMA project reconfigured the above methods to influence contemporary pedagogical modes of performance, and their subsequent invocation in new performance environments, such as video games.



Fig. 1 Aleksi Holkko plays a spectator qua virtual camera in a 3D model of The Rose Theatre. Image: Matt Delbridge 2012.

Approaches, Terminology, and Implementation

Following Andrew T. Tsubaki's impressions of Craig's production of *Hamlet* for the MAT, the use of real-time PeCap in creative exploration of historical performance produces a realm where «art is not an imitation of facts but [...] the creation of facts» (Osanai - Tsubaki 1968: 593). As a means to replicate, navigate and transform human interactions and material conditions no longer available to us, it not only reconstructs performances of playtexts in real time, but facilitates ways to create, define and validate the meanings implicit in past practices and artefacts. This approach surpasses the earlier methods of analysing forms of performative media that offer no first-hand experience of historically relevant embodied data, and it does this by harnessing information accumulated within practical trajectories and the dynamics between performers and their environments. It enables immediate study of multiple and contradictory paths of action, and therefore demonstrates the different uses and potential misuses of historical data – the problems pertinent to dynamics of memory and the role of culture as a political influence. From the gleaned embodied data one can form an instructive set of conditions and potentials that guides a performer to adopt a comprehensive psychophysical understanding – ‘embodied knowledge’ – of each historically specific or reconfi-

gured environment.

In the VIMMA workshops, the embodied knowledge relevant for the above aims was achieved through uncovering the instructive qualities and conditions of an open and virtualised scenic landscape and, subsequently, the translative performance potential from screen to physical stage and back again. The virtualised experiments and the subsequent transference of real time information between the stage and the screen open up an interrogation of an ‘inter-’ space, or what Dorita Hannah has discussed as the ‘hyphenated space’⁸, not quite liminal but occupying an understanding between the physical and virtual, or analogue and digital, the performed and captured (or streamed) – or indeed both/all at the same time. The exploration of this hyphenated space offers potentials for 1) visualisation in the context of developing theatre sets to reconfigure historical performance, as well as for 2) generating opportunities to teach students and scholars alike how to critically engage with creative approaches to what we now call DH. To provide continuity for the said approaches, and to better connect

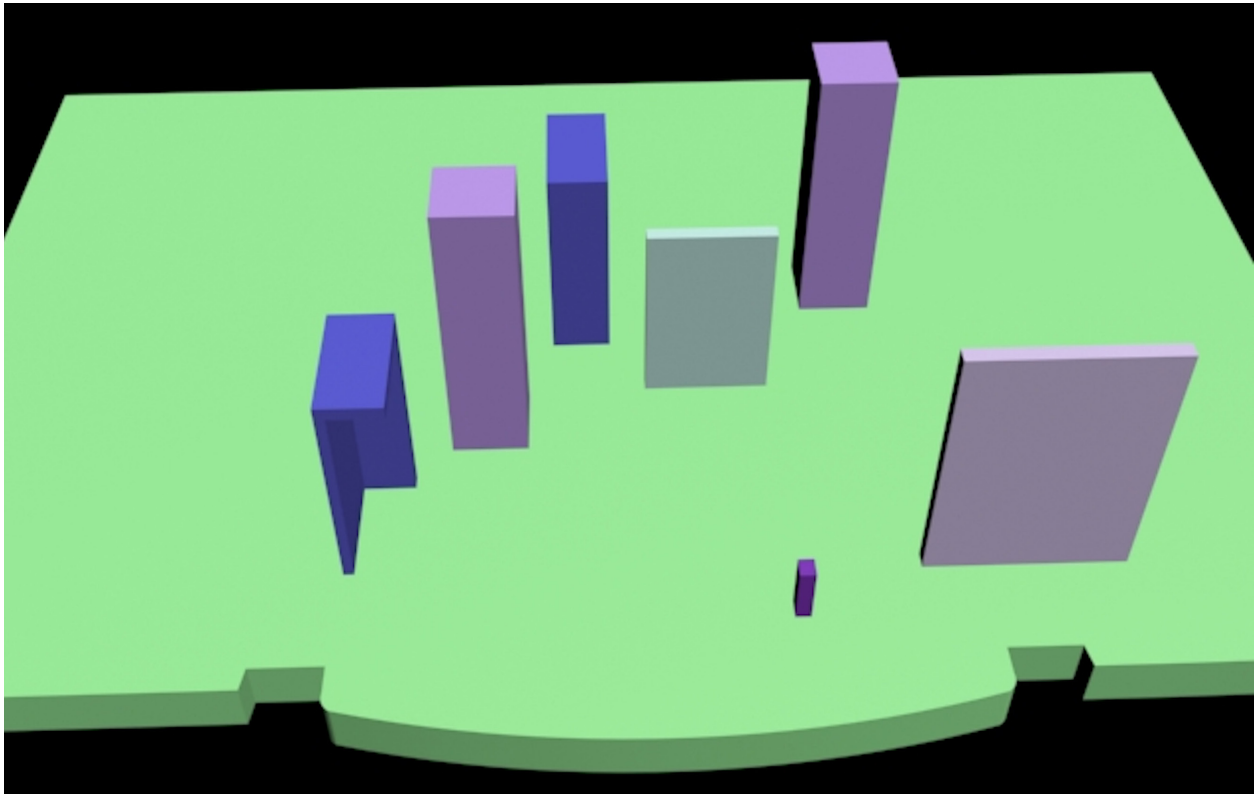


Fig. 2 A 3D model of the Nationaltheatret main stage with virtual columns inspired by Craig's abstract screens for the MAT *Hamlet*.

them with contemporary commercial platforms and production methods, a key aim of the project was to 3) uncover the industry-oriented outcomes related to recreated 3D virtual performance. What we have discovered is that systematic use of digital real time production formats in performer and designer education enhances the impact of established dramaturgical techniques on performance-based media, and enables instructive forms of performance that emphasise the role of embodied knowledge.

In the design workshop in May 2013⁹, experiments were undertaken with student participants from design, dramaturgy and directing disciplines, engaging with PeCap work processes as a means to rewrite the dramaturgy of past settings. As mentioned, the developed virtual sets were based on an existing theatre venue (the main stage of Nationaltheatret in Oslo, built in 1899)¹⁰ and two 'source sets', Edward Gordon Craig's design for *Hamlet* from 1911 and the stage directions of Ibsen's *A Doll's House* (prem. 1879) – both of which deal with aspects of space and have rich source materials available (Roihankorpi 2014: 151). Ibsen's use of spatial metaphors and

conditions (throughout his *oeuvre*) to express cultural, social and psychological conflicts and dynamics provides a prolific landscape for dramaturgical investigations that see virtuality both as a means to revisit spatial histories of theatre, and as a means to test out thematic variants of those histories. *Hamlet*, as an allegory of performative choices designed to mask, reinstate or expose interpersonal hierarchies, establishes an incisive pedagogical case for excursions into giving physical interaction new meanings through virtual aesthetics¹¹. While the screens of the MAT *Hamlet* implied the idea of space as a kinetic machinery that may adapt and contribute to the moods and the psychological tensions of the play¹², the workshop participants wanted to harness this idea to inform the interaction of the characters (both in *Hamlet* and *A Doll's House*) through virtual division and decentralisation of space. In the design assignments, thus, an emphasis was laid on the students' creative vision and rendition of earlier designs and dramaturgical suggestions, enabling the construction of a virtual set affecting live performers' actions.

The workshop dedicated for performance in August¹³ then utilised the designed sets as versatile, animate and unpredictable milieux for the performers. Apart from exploring the dimensions and peculiarities of the virtual sets, the students sought to transform, expand, (re)animate and destabilize the virtual and concrete performance environment(s)¹⁴. The aim of the workshop was thus to study 1) the

convergences and disparities of the historical/virtual and the contemporary/physical sets and 2) how they could or should be approached and reworked with forms of real time performance and creative *ad hoc* design. By using simple and gender-neutral 'bubble head' avatars (virtual actants built by the MoCap system/software on the basis of the performers' movement data) driven by the performers – equal in size and shape but individualised by colours – the workshop exercises laid emphasis on the performers' interaction with the virtual architectonics at hand, rather than assessing the interpersonal dynamics central to more traditional dramaturgical approaches. Nevertheless, the physical traits of the performers animated the avatars in distinct ways and set up scenes where individual trajectories towards comprehensive embodied awareness of the virtual architectonics became possible¹⁵.

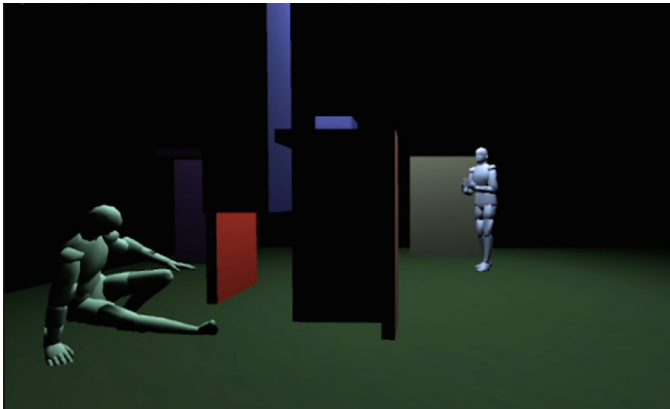


Fig. 3 *A Doll's House* (Act III) with Torvald (left) and Nora.

Reworking the binary of the historical and the contemporary (as well as the virtual and the corporeal) was done through a series of four exercises, in which the student performers and director-dramaturges explored, firstly, the functional disparities and congruences between the virtual elements of set design and the physical objects representing them and enabling their dynamic involvement in the performances¹⁶. The virtual equivalents of the screens of Craig's *Hamlet* were given distinct colours and modified to be human-sized to make the performers and the virtual sets more equal components of the exercises. The several objects bearing MoCap markers (a hockey stick, an umbrella, a toy gun, boxes of various sizes etc.) used to drive the pieces of the virtual set challenged the participants to adapt their physical actions to a more nuanced direction, as the incommensurate relationship between the corporeal and the virtual exposed them to a performative situation where individual movements triggered or brought about significant shifts in the architectonics of the virtual stage and performance. The purpose of this was to give the performers and the designers alike a more incorporate thema-

tic awareness of the effect of set design on the interaction onstage.

Secondly, the participants engaged in teamwork that is required to drive the avatars, their interaction and the manoeuvrable sets at the same time, and in accordance with the planned dramaturgy – a team-based choreography of the interpersonal conflicts and dynamics of *A Doll's House* and *Hamlet*¹⁷. In the first case this enabled direct embodied exploration of the visualised psychological «pressures on the modern subject in architectural terms» that some of Ibsen's (and Strindberg's) works foreground, of the «particularly self-conscious architectural drama» of Scandinavian modernity that assimilates abstract anxieties with the spaces and the artefacts the characters encounter¹⁸. Employing the virtual columns inspired by Craig's screens to separate and unite Torvald and Nora (Figure 3) – along with a warped textual dramaturgy by Riku Roihankorpi that cut the beginning of Act II together with the ending of Act III (and thus, anticipation together with resolution and despair)¹⁹ – allowed the performers to create a distinct dramaturgical microcosmos for the themes of the play. This enabled them to rework the themes and their historical and contemporary implications within an architectonic choreography that combined a) embodied knowledge of the virtual and the real stage/props/set; b) the virtually set physical limits of the Nationaltheatret model; c) the physical interaction needed to produce a dynamic virtual (thematically invested) scene and d) the active role of the virtual set in disclosing and determining the relationship between Nora and Torvald, and thus between different societal norms and changes that define modernity. The second case, a 'ghost sequence' (parts from Act I, Scenes IV and V) in *Hamlet* – with Hamlet's line «It waves me forth again;—I'll follow it» in sc. IV cut together with Horatio and Marcellus exiting in Sc. V – allowed the performers to explore both implementing the fragmentation and multiplication of a single character on the virtual stage and the use of synchronised bodily movement to direct and manipulate the visual information and its thematic focus in the (virtual) screen

space, thus ‘marking’ the ghost (Figure 4). This was done via two intertwining exercises. First the performer playing Hamlet chased three separate ghosts of Hamlet’s father with a virtual flashlight (i.e., three MoCap markers set on a toy gun to create a first person virtual camera/flashlight to limit the view on screen) amid the now partly collapsed Craigan columns set in a labyrinth-like order²⁰. After this the roles were reversed and Hamlet himself was played by three separate actor-avatars, the dramaturgy thus approaching the themes of identification and identity as a paranoid and decentered process that Shakespeare’s play, in itself, sketches out. The students playing Hamlet or his father’s ghost could therefore reflect on questions of identity and its exogenous construction by engaging in embodied interaction that created virtual reaches suggesting alternate identities, subjectivities or realities – fuelled by or affecting a single agency. Embodied agency and knowledge take part in creating, transforming and analyzing realities (and their politics)²¹, and the hybrid, multiple reality of PeCap shares this attribute with the tradition of theatre.

Thus, thirdly, the workshop participants could creatively process the psychology and the embodied affects arising from imagining the thematic functions of the virtual setting and from combining the physical delivery

of the texts (the physical scene) to the simultaneous performative decisions by the performers driving the virtual sets. This denotes a complex but informative way to develop an understanding of how we identify ourselves with representational or performative norms – or related ideologies – through practices and interactions. Identification was theorised in the workshops as a process of adopting and adapting to agencies that form subjective or collective relationships with norms and values, and further produce agencies affected by those relationships. The definition is thus analogous to some of our earlier characterisations of performance itself, which see it as 1) the mode(s) through which a given state of affairs is articulated by form or in relation to a structure/dramaturgy; 2) the abstract and the tangible capacities with which this process is carried out and the implicit capacities of the articulated phenomena and 3) the (essentially virtual) capacity to transform the mentioned articulations and the continuities they embody (Delbridge - Roihankorpi 2015: 51). This implies an understanding of intermediality, which refers to the ongoing transformations in the practices with which we produce our surroundings and identify with cultural operations. Fourthly, it was essential to further explore the multisensory/multimodal ways to generate, experience and manipulate the virtual performance environment (the changing setting) through the physical stage; that is, embodied effects achievable with sound, touch, kinetic trajectories and shared or individual physical orientation. The exercise was carried out by students of dance and choreography from the Theatre Academy of the University of the Arts Helsinki, under supervision of Professor Ari Tenhula. It involved

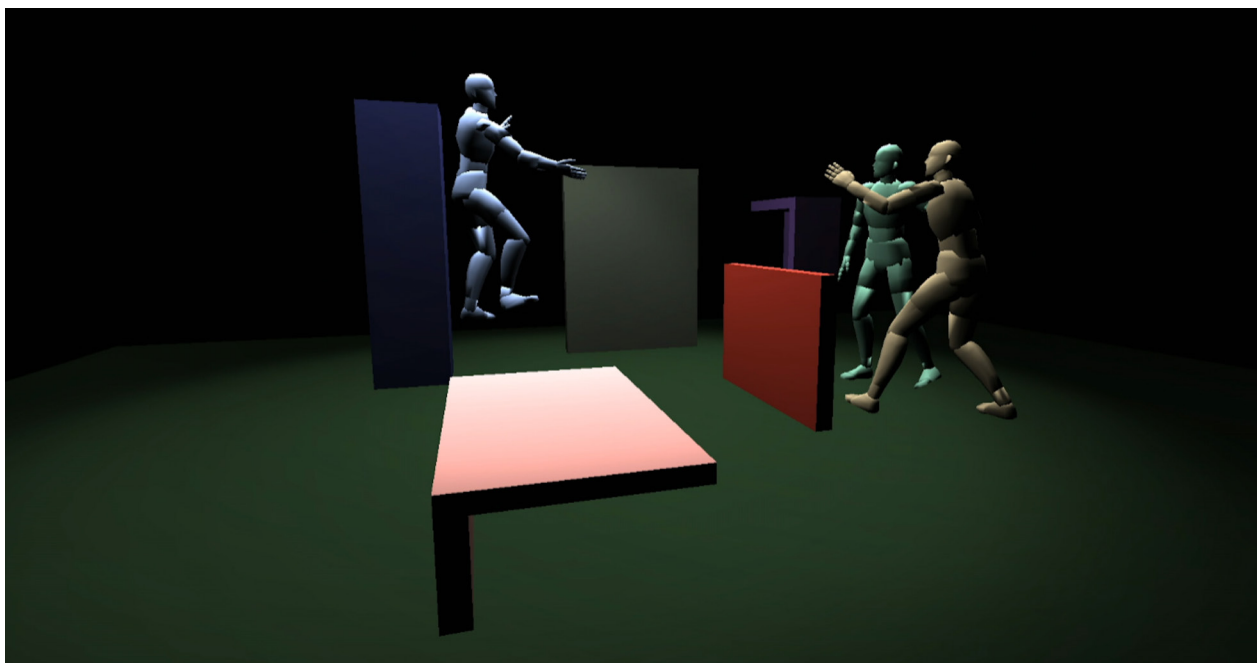


Fig. 4 *Hamlet* (Act I, Scene IV) – King Hamlet’s ghost (left) approaches Hamlet and Horatio (far right).

navigating through the physical space of performance by reacting to and predicting the shapes, sizes and positions of the virtual Craigan set, randomly repositioned on the surface area of the Nationaltheatret main stage. The intermedial interaction of the anthropomorphic bubble head avatars (driven by the dancers) with the virtual set was coordinated by various sound effects that any contact by the avatars to the pieces of the virtual set triggered in the studio space – different sounds for different columns. What emerged was a reactively evolving choreography carried out on the studio floor, which was first directly informed by the virtual set in the screen space, visible for the dancers and their audience, and later made increasingly mimetic as the screen was turned off and the dancers sought to locate the virtual positions of the columns and themselves merely by aural responses from the system²². This enabled a multimodal study of the spatial reaches and the irregularities of the stage that may greatly inform the ways in which a performer can rehearse, modify and adapt to the dynamics of a performance from an embodied perspective. It comprehensively responded to some of our earlier observations, according to which

[...] exercising with digital technologies offers an opportunity to treat the reactive capacity of the systems as a tool for altering [the performers'] psychophysical orientation. Learning the functions of a mocap suit and system or the preparations, working methods and communicative skills required from a performer to become an organic element of the virtual machinery serves as an introduction to several unanticipated dynamics, laws, regularities and structures (Roihankorpi 2015: 154).



Fig. 5 *A Doll's House* with Torvald (Martti Manninen, physical stage left) and Nora (Anna Kuusamo). Image: Jaakko Lenni-Taattola 2013.

Into the Future: Conclusions

On the basis of the exercises undertaken, the aim was to advance the dynamics and the new ways of making, communicating and executing artistic choices that are peculiar

to the intermedial and the doubly embodied – or 'e-bodied', hyphenated in the sense of Dorita Hannah's definition – parameters of a live PeCap performance. The knowledge gained by the students and the scholars involved suggests that through similar processes, we may now address and reconsider a vast array of questions on where to locate the socio-cultural and the thematic architectonics of a performance. The exercises, while drawing on millennia-old canons of performative evolution, explicitly tackled the issue of how to create a 360-degree viewpoint on the spatial and gestural politics and notions of representation that emerge from specific historical and cultural motifs but, by default, change (and have changed) with the introduction of the stage to new technologies and media, thus embodying the definition of intermediality (Roihankorpi 2015: 154). With virtual architectonics of performance, the repertoire of means to study the very genealogy of performative politics and related practices becomes more aware of the mutual (intermedial) influence of artistic choices and technological affordances. The results of the project are pragmatic in nature, but represent a wider need to employ joint expertise in performance and technology to assess our current cultural ethos.

In line with the definition of intermediality as re-sensibilisation (as explained by Kattenbelt, Groot Nibbelink and Merx), Robert Wechsler sees that a crucial challenge for performing with motion capture technologies is not «one of improving the technology, but rather one of developing an understanding of its implications – the changes in the mindset and sensibility of artists as they put it to use»²³. This remark is prone to amplify the claim that reliving the embodied evolution of modern performance through virtual and immersive experiences is essential to any attempt to understand our current ways of producing the largely digital life-world and knowledge society. The freedom promoted by the interchangeability of norms and practices has become a central component of digital subjectivities, which identify themselves with pervasive, constantly transforming but still situational agencies (modes of transferring aspects of intermediality and subjectivity from one era

to another) that are thoroughly performative. For example, the multicast (many-to-many) environments for storytelling and performance in present and future media – increasingly accompanied by 360-degree video technologies and immersive VR or Augmented Reality (AR) interactions – can and should be critically assessed and developed by employing the information gained through embodied exercises with virtual architectonics of performance. As the field of media constantly shifts towards transforming identities, collaboration through layered roles of participation and open performative environments (such as co-creation in the social media and non-linear/non-human game play), the untapped role of performer-developers of the said field needs to be harnessed systematically. The knowledge and know-how acquired during VIMMA are thus aimed at observing the creative dividers between production, education and user-consumer markets of new media experiences, anticipating the future import of media activities and game play. In short, our work has striven to assume a proactive role relative to the fact that each process, storyline and environment of operation in the said fields may be constantly performed and re-performed (created) by their users. This vision and strategy, in turn, may have an impact on how the arts in general target their activities and attract related operators – arts and media industries, facilitators and producers of broadcasting/game experiences – to work accordingly. To look for another example, then, international game development is undergoing a ‘performative turn’, which generates unforeseen game experiences in the form of open game environments, non-human characters and extended narrative elements of play. The turn can be described as a digital equivalent to the emergence and the aesthetically and technically challenging development of film production a hundred years ago. Despite its radical effects on game design, this process has not invested systematically in performance-led research processes that may revise and expand the experiential potential of related production models.



Fig. 6 Henrik Bäckbro and Ulla Väättäinen drive an abstract virtual entity. Image: Jaakko Lenni-Taattola 2014.

Thus, in 2014 the VIMMA workshops – devised as a co-operation between the University of Tampere, Aalto University, Queensland University of Technology, the Cabaret Electrique group and the Royal Institute of Technology KTH – then moved on to utilise the methods and data from the previous workshops to embrace the idea of ‘becoming’ (Figure 6), an ontological mode relevant to virtual agencies, and approached this thematic via four lines of practical work²⁴.

Inspired by Peter Handke’s play (or *Sprechstück*) titled *Self-Accusation* (1966), the figure of Odradek from Franz Kafka’s short story *Die Sorge des Hausvaters* (1919), and the dystopian surrealism of the Polish painter Zdzisław Beksiński, the two-part workshop set out to investigate 1) what kind of psychophysical cooperation allows two or more performers to drive/puppeteer an individual virtual entity in live PeCap; 2) what questions of direction should we address with (or are essential for) this kind of live animation; 3) what is the role of the animator in this process, as well as 4) how can this entity interact with pre-designed virtual environments, and what does this require from performers, directors, dramaturges, animators and virtual set designers – an ensemble for devising and producing performance-based games and media?

Apart from the practical observations concerning the dynamics of such digital ensembles (which we shall omit here for future discussions), the scholars and students noted how the acts of witnessing and participating in the ontological mode of becoming not only reveal what real time performance with MoCap systems and related processes of performance, direction, and animation are all about, but also determine how several variables of the work – such as ableness, cooperation, and glitches – should be approached. This, in turn, further emphasises the significance of the concept of performance and performer-based approaches to current and prospective digital agencies. The future

employment and societal influence of both theatre students and scholars may depend on their capacity to operate with rapidly changing intermedial approaches to traditional forms of performance, as well as with new professional settings that articulate performance – or a performer herself – as a state of intermedial becoming.

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Notes

- 1 Cfr. Delbridge 2015; Delbridge - Roihankorpi 2015.
- 2 Cfr. <http://t7.uta.fi/vimma/motionCapture.html>.
- 3 Kattenbelt 2008: 25; Groot Nibbelink - Merx 2010: 218.
- 4 Cfr. e.g. Ortelia 2016.
- 5 Cfr. also Holledge et al. 2016: 6-7.
- 6 Cfr. Holledge et al. 2016: 126 on the impact of physical relocation on the dramaturgy of *A Doll's House* (*Et dukkehjem*).
- 7 Turner 2015: 7-8; cfr. Turner - Behrndt's 2008: 148 discussion on the role and the duties of a production dramaturg.
- 8 Cfr. e.g. Hannah 2008: 19.
- 9 Cr. <https://vimeo.com/67709127>.
- 10 Cfr. Hamlet's Norwegian Dollhouse performance workshop video on Vimeo, <https://vimeo.com/79282220>, from 01:00 to 01:26.
- 11 Cfr. Sandberg 2001: 33-34; Turner 2015: 10-11, 23, 33-34; cfr. e.g. Owen 2012; cfr. also The Wooster Group's *Hamlet* (2007, 2012): <https://vimeo.com>.



com/110411210.

12 Osanai - Tsubaki 1968: 589-93; cfr. Senelick 1982.

13 Cfr. <https://vimeo.com/79282220>.

14 Cfr. performers as 'moving architecture' in Turner 2015: 8.

15 Cfr. Vincs 2016: 270-1.

16 Cfr. the design workshop trailer (<https://vimeo.com/67709127>) from 00:27 to 00:51 and the performance workshop trailer (<https://vimeo.com/79282220>) from 01:00 to 01:26.

17 The performance workshop trailer from 01:40 to 02:40.

18 Sandberg 2001: 33-34; cfr. Turner 2015: 10.

19 The excerpt from Act II ended with the following line and stage direction: «Nora: Ah! there is someone coming-. [Makes a movement towards the door, but stands irresolute.]» This was followed in the workshop adaptation by the final scene of Act III, so the one to enter was not Mrs Linde but Helmer (Torvald). Torvald proceeded with the line: «I see, I see. An abyss has opened between us – there is no denying it. But, Nora, would it not be possible to fill it up?» Cfr. Ibsen 2008.

20 Cfr. the performance workshop trailer from 3:17 to 3:37.

21 Cfr. e.g. Papat - Preece 2012.

22 Cfr. <https://vimeo.com/79282220>, from 02:42 to 03:03.

23 Wechsler 2006: 75.

24 Cfr. Vimma 2014, <http://t7.uta.fi/vimma/styled-5/index.html> and <http://t7.uta.fi/vimma/resources/VIMMA2014-WSdescription-Odradical.pdf>.