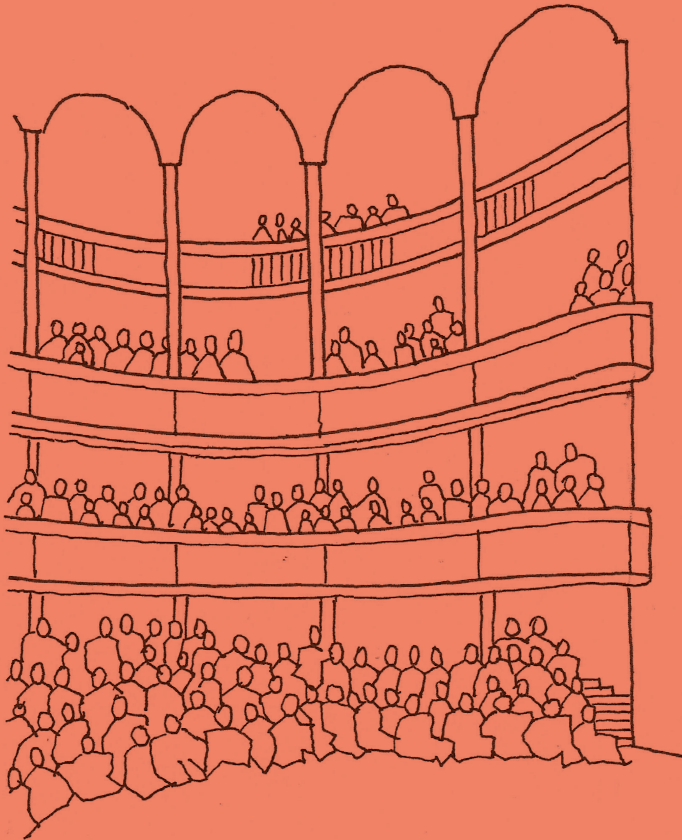
Theatre Architecture as Embodied Space

A Phenomenology of Theatre Buildings in Performance



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A Phenomenology of Theatre Buildings in Performance

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Kurzfassung der Dissertation

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Das Projekt erforscht die Zusammenhänge zwischen Theaterräumen und dem menschlichen Körper mit dem Ziel, eine Phänomenologie der Raumerfahrung in bestimmten Theatergebäuden zu formulieren. Ausgangspunkt ist die These, dass der leibliche Erfahrungsraum veränderlicher ist als der physikalisch verstandene euklidische Raum und dass deshalb auf die Frage, wie Theaterräume wahrgenommen werden, erstaunliche Antworten möglich sind. So kann zum Beispiel ein modernes Guckkastentheater wie das *Sadler's Wells Theatre* in London im Moment der Aufführung ‚verschwinden', und so erklärt sich auch, wie Schauspieler und Regisseure des *Shakespeare's Globe Theatre* ihr Theatergebäude konsequent personifizieren, sogar vermenschlichen können: „It embraces me," oder „It tells you what to do."

Der Theorieteil der Arbeit untersucht phänomenologische und wahrnehmungspsychologische Theorien des gelebten Raumes auf ihre Anwendbarkeit auf das Theater hin: so z.B. das Konzept des ‚gerichteten Raumes', entwickelt von Kurt Lewin, dessen Text *Kriegslandschaft* (1919) die phänomenologische Gerichtetheit der Kriegslandschaft auf die Frontlinie hin beschreibt. Die von ihm identifizierte perzeptive Veränderlichkeit des Raumes ist, so meine These, auch im Theater erfahrbar. Raumwahrnehmung ist, wie Maurice Merleau-Ponty es formuliert hat, ein körperlicher Prozess, der nicht nur Sinnesleistungen, sondern auch aktive Bewegung, Erinnerung und Imagination erfordert – ein Schaffensprozess also, der nicht nur *einen* Raum, sondern eine Vielfalt an sinnlichen und affektiven Räumen hervorbringt. Gelebter Raum, so die Erkenntnis, ist immer mannigfach.

Der zweite Teil der Arbeit wendet diese Erkenntnis auf drei Fallstudien an: Zuerst wird anhand des Globe Theaters in London gezeigt, wie ein Theatergebäude im Erleben der Schauspieler, verkörpert' und als zu spielendes Instrument begriffen wird. Dann stellt die Inszenierungsanalyse des Tanzstückes *I Don't Believe in Outer Space* dar, wie Körpertechniken und ‚Tonarchitekturen' den Raum und seine Wahrnehmung verändern können. Zuletzt wird unter Einbeziehung phänomenologischer Blick- und Aufmerksamkeitstheorien die Erfahrung des ‚verschwindenden' Sadler's Wells Theaters untersucht.

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With special thanks to Eoin Bowler for the architectural sketches and the title page drawing.

Introduction

"An Actor Walks into a Room, and the Room Changes."

A thing is never perceived simply in relation to itself. How it appears depends as much on the perceiver as it does on its objective physical features. A cave, for example, might be of a certain shape and have a certain height and depth, but it will only materialise as a place of shelter to a creature of the right size, with a body that 'fits' and can enter into a meaningful relationship with it. Meaning is made in the intertwining of the two.

The same principle applies to buildings and spaces where theatre takes place. The objective physical features of such buildings and spaces can be measured, represented in drawings, plans or photographs, placed in a historical context or described in terms of their stylistic and aesthetic qualities. Even the social and cultural functions of theatre spaces, in so far as they are generally agreed upon and understood, can be described as part of their objective reality.[1] None of these ways of engaging with theatre buildings, however, can equal or reproduce direct experience of them. Direct experience, the 'intertwining' of object and perceiving body, can only be approached by attending equally to the object of perception, the individual perceiver and the specific situation that person is in at a given moment. This thesis adopts such an approach in relation to theatre buildings, aiming to develop a method for describing how they appear, rather than what they objectively are. In the early stages of my research I once attempted to articulate this idea in an informal conversation with the theatre director Dominic Dromgoole. His response was appreciative but laconic:

1 An exception to this point would be when performance takes place in non-theatre spaces that retain traces of their former identities (typically empty office blocks or hotels, former factories or abandoned military structures). The social functions of such spaces are too indefinite to be described as an objective reality, especially as the purpose of site-specific or immersive theatre work is often to destabilise any notion of a fixed social reality even further, by negotiating and reconfiguring how these spaces are used.

"Oh yes. An actor walks into a room, and the room changes."[2]

This would not in itself be a new idea if it were simply concerned with the stage alone. Without a doubt the presence and movement of actors (but also of objects, lighting, sets, or scenographic elements) transform our perception and interpretation of stage space during performance.[3] But Dromgoole did not say, 'An actor walks on to the stage, and the stage changes'. He talked about 'a room', and this room refers to more than just the stage itself: It is the space shared by spectators and performers in performance, encompassing the stage, its directly adjacent areas such as wings or orchestra pit, as well as the entire auditorium. I will refer to it as the 'stage-auditorium system' in this study, in the absence of a better, more established term for this particular sub-section of the larger architectural structure of the theatre. The fact that no commonly used term for it exists is symptomatic of the almost exclusive focus on the space of the stage in traditional theatre scholarship. Stage space as it is experienced in performance has been described, analysed and categorised in great detail and to considerable degrees of sophistication, as the literature review in the next chapter will show. The space of the auditorium, however, has received far less attention. Of course descriptions of the various types of theatre auditoria can be found in books on theatre architecture, but the vast majority of these are written from a historical or technical perspective and only give an account of how theatre buildings stand empty and unused in measurable space.[4]

A notable exception to this point is David Wiles' book *A Short History of Western Performance Space*. In its introduction he states that performance events, unlike play texts, cannot be analysed separately from the space in which they take place:

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2 Dominic Dromgoole, Artistic Director of Shakespeare's Globe Theatre, London, in conversation on 14th February 2013.

3 Indeed, it was Max Herrmann's insistence that theatre is primarily an art of spatial transformation rather than a form of 'applied literature' that led to the emancipation of theatre scholarship from literary studies, and eventually to the establishment of theatre studies as an academic subject in its own right. Herrmann's foundational text *The Theatrical Experience of Space* will be discussed in Chapter I.

4 Richard Leacroft and Helen Leacroft, *Theatre and Playhouse: An Illustrated Survey of Theatre Building from Ancient Greece to the Present Day* (London: Methuen Drama, 1988) or John Earl and Michael Sell, *The Theatres Trust Guide to British theatres, 1750-1950* (London: A. & C. Black, 2000) are typical examples for such an approach.

“The play-as-text can be performed *in* a space, but the play-as-event belongs to the space, and makes the space perform as much as it makes the actors perform.”[5] For the purpose of my thesis, the reverse is equally true: The space cannot be analysed independently of the performance. A theatre building as it is experienced in performance is a radically different perceptual entity than the same building when it is dark and empty.

Even with this in mind, there are different ways of going about analysing space in performance. Wiles’ book is characterised by careful attention to theatre-going as a social (and spatial) practice. Marvin Carlson’s *Places of Performance* concentrates on the situation of theatre buildings in their larger architectural, social and economic context – for example how they are embedded in the cultural economy of a big city.[6] And Gay McAuley’s *Space in Performance*, though largely concerned with the space of the stage itself, also addresses questions of how communities engage with theatre buildings outside of designated performance times, that is, how integrated a theatre is in its community.[7] All three arrive at their analyses of theatre spaces and buildings by taking a global view of the social structures and patterns of behaviour that shape theatrical practice. Their analytic position in relation to their object of research can thus be characterised as all-seeing; almost literally a view from above, capturing flows of people as they congregate and disperse in the acts of performing and attending theatre.

My aim in this thesis is different. I am attempting to develop a method that will allow me to shift the perspective from objective and omniscient observer to that of an embodied and situated participant. By analysing the spatial experience of theatre buildings from within, that is, by describing what the space appears like from a particular position and at a particular moment in the performance, I offer a view of what theatre architecture is, or can be, in

5 David Wiles, *A Short History of Western Performance Space* (New York: Cambridge University Press, 2003), 1.

6 Marvin Carlson, *Places of Performance: The Semiotics of Theatre Architecture*, 2nd ed. (Ithaca & London: Cornell University Press, 1992, c1989).

7 Gay McAuley, *Space in Performance: Making Meaning in the Theatre* (Ann Arbor: University of Michigan Press, 2000).

individual perception. This is not to say that such individual perceptions are somehow more valid than technical or historical accounts of a building's objective reality, and my observations are not meant to replace such accounts. I do, however, aim to extend their scope. In a sense this approach is only possible because of the work that has already been done by scholars such as Wiles, Carlson, and those following in their footsteps. They have opened up the field of spatial analysis by theorising spaces and buildings not as fixed containers or given realities, but as socially produced and therefore transformable entities. This idea of transformability can now be expanded: Describing the stage-auditorium system from an inside perspective allows me to describe what might be called a 'perceptual morphology'[8] of theatre architecture, addressing phenomena such as the fluidity of bodily space, experiences of resonance and responsivity in relation to the architectural structure, and shifts in the orientation of body and space. What I am proposing, in a nutshell, is to describe and characterise theatre buildings not in terms of Euclidean, abstract and measurable space, but as lived space.

Theatre Architecture as Lived Space

Lived space is space as it is experienced in everyday life: the space of creaturely comfort or discomfort, of imagination and emotion, of closeness or distance, up or down, inside or outside. It is closely linked to the body and its perceptual horizons. Chapters II and III of this thesis will address the idea of lived space in a much more detailed manner, but for now it will suffice to say that lived space always has to be lived by someone, and that looking at theatre space as lived space therefore means adopting the perspectives of

8 In this I come close to following a suggestion made by Erika Fischer-Lichte in the architecture chapter of her book on *The Semiotics of Theater*, where she proposes applying Bernhard Schneider's three-part analytic system of topology, geometry and morphology to theatre architecture. Schneider being an architectural theorist, his conception of 'morphology' is limited to how architectural elements and materials fluctuate and erode, reacting to environmental forces. Understood in a wider sense, as a 'perceptual morphology', this could be an interesting alternative theoretical framework for the topic of this thesis. Erika Fischer-Lichte, *Semiotik des Theaters I: Das System der theatralischen Zeichen* (Tübingen: Narr, 1983), 135.

those who participate in it, as performers, spectators, and, to a lesser extent, those who work behind the scenes (as stage technicians, for example). The space as lived by a performer will differ significantly from the space as lived by a spectator, but this does not mean that these two spaces are ever completely separate. They overlap in a variety of ways: A spectator, for example, may be imaginatively absorbed in – and momentarily living – the space of the stage, only to be returned to herself with a jolt when her mobile phone, accidentally left on, starts to ring in her bag.

Particularly unhelpful is the idea of a performance as something that is produced by performers and merely viewed, or digested, by the audience. Just as the performance is something that only comes about through a shared perceptual and imaginative effort[9], space perception (which, as we will see, is always also space production), equally and collectively involves performers and spectators acting together. Performers are often thought to be constantly and only 'producing' effects and the extent to which they are also always reacting to outside stimuli is often underestimated. Performances in open-air theatres such as the Globe or in classical Greek theatres draw attention to this fact. There, performers are seen to be less in control as performances are obviously contingent events, dependent on weather and environmental forces and in constant flux. I want to stress that the same is true for all forms of performance, and that performers, audience and environment form a complex system from which it is not possible to isolate one particular action or experience. Throughout this study I will therefore look at the experience of all these groups of participants in a holistic way, taking into account a variety of perspectives. The methodological challenge of doing this, i.e. of describing theatre buildings in terms of lived space, is how to access these various perspectives. I approach this challenge from two angles, broadly

9 Cf. Jens Roselt, *Phänomenologie des Theaters* (München: Fink, 2008), 47–48: "Entscheidend ist, dass dabei tatsächlich alle Beteiligten in die Überlegungen einbezogen werden. [...] Eine Theateraufführung wird demnach nicht von Regisseuren oder Schauspielern gemacht und dem Publikum dann zur Anschauung gebracht, sondern die Zuschauer sind konstitutiver Teil der Aufführung, an deren Verlauf sie aktiv Anteil haben."

characterised as 'theoretical' and 'experiential'. As this thesis is primarily a theoretical study, the most important tool for engaging with the concepts of lived space and embodied experience is the phenomenological and, to a lesser extent, psychological literature selected for this study. I will give a brief overview of this shortly. In addition to these theoretical tools, I draw on my own embodied and intellectual experience as a spectator in a wide variety of theatre events. As a former dancer, it is perhaps not surprising that many of the performance examples come from the field of dance, as well as one case study exploring bodily architectures created by dance. I agree with the assessment by the dancer and writer Elizabeth Waterhouse that there exists a body of knowledge among dancers and other performers that has only begun to be mined.[10] My study is characterised by the desire to value the perspective, experience, and embodied knowledge of performers. In order to further understand their experience and particular perspective, I utilise observations of performances and rehearsals, performer-based literature and training manuals. My previous personal experience of training and performing ballet will, I suspect, unavoidably inflect my analysis and interpretation of certain performances, but it will not be addressed or reflected upon directly.

Structure

This thesis is divided into two parts. Part One is predominantly theoretical, comprising of three chapters that seek to elucidate the relationship between body and space as they come together in theatre architecture. Chapter I provides an overview of the existing literature relating to theatre architecture and theatre space. Orientation and embodiment being essential characteristics of lived space, Chapter II addresses the orientations of stage and

10 Elizabeth Waterhouse, "Dancing Amidst The Forsythe Company – Space, Enactment and Living Repertory," in *Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater*, ed. Gabriele Brandstetter and Birgit Wiens (Berlin: Alexander, 2010), 165: "I wish to support further dialogue between dance and philosophy. I believe that my colleagues have unusual understanding that could contribute to scholarship of embodiment, and that philosophical insight could similarly develop choreographic practice."

auditorium space, while Chapter III outlines theories of embodiment and space perception, focusing in particular on Maurice Merleau-Ponty's ideas on space perception. With this theoretical framework established, I then apply the tools developed in Part One to three case studies in Part Two. Two of these case studies cover theatre buildings – Shakespeare's Globe Theatre and Sadler's Wells Theatre – while the remaining one engages not with a material building but with the immaterial architecture of a dance piece. In all three, however, I seek to describe spaces and architectures not as they are but as they appear from an individual, situated and embodied perspective. The purpose of these case studies is to demonstrate the validity and usefulness of the phenomenological approaches outlined in the first part of the thesis, and to address peculiarities or special experiential features of these buildings. At the Globe theatre this is the fact that it appears to many of the people working within it as an animate being with its own personality. The dance case study explores how a production by The Forsythe Company is able to 'warp' the space of the theatre by creating immaterial architectures of sound and movement, and the final case study looks at how Sadler's Wells theatre can be said to 'disappear' into the performance through an absolute focus on the stage.

To clarify my methodology it is worth noting that these are all examples that I have direct personal knowledge of – they are theatres where I have worked, and artists whom I have met and (mostly) spoken with. The impressions and experiences I describe are therefore not singular or incidental phenomena, but chosen specifically because they say something about the building or performance and offer points of connection for the experiences of others. It is important to stress the open-ended nature of this kind of research: These examples are by no means exhaustive or a complete catalogue of theatre types or buildings. The method I develop in the theory part of this study is tailored to my case studies, but it could very well be modified to apply to other examples. Mine are necessarily personal examples, because of the

need to write and analyse from an embodied, situated perspective, but that does not mean that they are naive first-person descriptions. Phenomenology as a method is often criticised for this, sometimes justifiably so, but in the following I want to make clear that done right, it is a rigorous, demanding methodology.

The Phenomenological Method

Phenomenology has been a popular and productive method for analysing theatrical experience since the 1980s, but it is still occasionally met with scepticism, generally because it is regarded as an 'anything goes' approach, content with simply and uncritically recounting personal experiences. The editors of a recent volume on *Performance and Phenomenology*, for example, note in their introduction that the initial enthusiasm for theatrical applications of phenomenology sparked "many naive first-person accounts of attending or making performance", but warn that, "simply foregrounding the author's experience is not itself phenomenology, notwithstanding how popular this move has become."[11] So what, in itself, is phenomenology? Maxine Sheets-Johnstone, one of the method's greatest champions, writes: "The methodology of any bona fide phenomenological analysis is not to argue but to show, that is, not to contend in support of a certain perspective or state of affairs but to uncover and elucidate via a precise and rigorous methodology the essential nature or features of a phenomenon."[12]

Founded as a school of philosophical thinking by Edmund Husserl at the turn of the twentieth century, phenomenology is the study of experiences as they appear to consciousness directly. Husserl defined his method in his 1913 book *Ideas*[13], and evidently envisaged it to become a 'school' in the proper sense of being taken up and applied faithfully by pupils and followers. However, the

11 Maaike Bleeker, Jon F. Sherman and Eirini Nedelkopoulou, eds., *Performance and Phenomenology: Traditions and Transformations* (New York: Routledge, 2015), 4–5.

12 Maxine Sheets-Johnstone, *The Phenomenology of Dance* (Philadelphia: Temple University Press, 2015, c1966), xxv.

13 Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie: Erstes Buch: Allgemeine Einführung in die reine Phänomenologie* (Halle a. d. S.: Max Niemeyer Verlag, 1913).

movement almost immediately diversified, as his students and those influenced by him (including Martin Heidegger, Jean-Paul Sartre, Max Scheler, Maurice Merleau-Ponty and others) developed off-shoots of the theory and moved into a variety of different directions. Phenomenology thus never became a unified school, and instead of giving an overview of its development as an entirety here, I prefer to clarify which kind or branch of phenomenology has been important for this thesis.

The most significant difference between Husserl's project and phenomenology as it is practiced in fields such as theatre scholarship today, put very simply, is that Husserl attempted to reduce experience to its basic essences, while contemporary uses of the method seek to describe experience in its vast range of differentiation. Criticism directed at phenomenology as a method focused and continues to focus on this tendency to think in essences; and assuming the universality of direct experience can indeed be phenomenology's weak point.[14] However there is now a general understanding that there is no fundamental incongruity between phenomenology's quest for capturing experience itself and the poststructuralist project of critiquing essentialist assumptions regarding race, gender, disability, or sexual orientation. In fact, phenomenological description has long been used to make experiences of the 'other' visible and accessible. With cautionary measures in place to keep "illegitimate universalism"[15] at bay, phenomenology can thus be a compelling way of doing research, because it acknowledges this two-way tension: On the one hand the range of individual experience is diverse to the point of infinity, but on the other hand there has to be a way of understanding how this multiplicity of experience is still interpersonally communicable and

14 Cf. Vivian Sobchak, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton, NJ: Princeton University Press, 1992), xiv: "[...] little understood and even less read, "phenomenology" was loosely conceived and associated with a multitude of precontemporary sins. It was regarded as idealist, essentialist, and ahistorical. It was also seen as extremely naive, making claims about "direct" experience precisely at a moment when contemporary theory was emphasizing the inaccessibility of direct experience and focused on the constitutive process and mediating structures of language."

15 A term used by dance scholar Philipa Rothfield, who suggests keeping description 'thin' to avoid making assumptions about 'the body' as a general thing, rather than *this* specific (ethnic or gendered) body. Philipa Rothfield, "Differentiating Phenomenology and Dance," in *The Routledge Dance Studies Reader*, ed. Alexandra Carter and Janet O'Shea, 2nd ed. (London & New York: Routledge, 2010), 303.

intelligible. Certain strands of phenomenological research – often in conjunction, or overlapping with, areas of cognitive science – seek to uncover the basic perceptual mechanisms that make it possible for experience to be shared and communicated to others. These strands are those which interrogate the role of the body in creating and making sense of the world: the study of perception and action, of embodied cognition and consciousness. Stephan Käufer and Anthony Chemero explain in their recent book *Phenomenology – An Introduction* that they consider this strand of phenomenology as being the most relevant and productive for a wide range of contemporary concerns: "One prominent concern of phenomenology has been to provide an account of the structures that make a shared, objective world intelligible. This account recognizes that bodies and skills are fundamental for this intelligibility."[16] Following in this line of thinking, the theorists that will reappear throughout this thesis are those working in the overlapping area between phenomenology of perception and psychology: Maurice Merleau-Ponty, Kurt Lewin, James J. Gibson, Maxine Sheets-Johnstone, and, to a lesser extent, members of the Gestalt School of Psychology.

Having briefly mentioned Husserl here, his theories will not play a significant role for the rest of this study. The reason for this is the inherent cognitivism of his thinking:[17] Husserl developed his theories in relation to conscious thought, and only those coming after him sought to ground the structures of intersubjective experience in other kinds of consciousness. Heidegger leaned towards emotional, affective forms of being, and Merleau-Ponty finally emphasised the primary importance of the body as the basis that enables us to experience a shared objective world. Käufer and Chemero elucidate:

> Heidegger's views [...] make implicit claims about the bodily nature of the skills and competences through which we understand the world. But

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16 Stephan Käufer and Anthony Chemero, *Phenomenology: An Introduction* (Cambridge & New York: Polity Press, 2015), 2.

17 Hubert L. Dreyfus, "Husserl's Epiphenomenology," in *Perspectives on Mind*, ed. Herbert R. Otto and James A. Tuedio (Dordrecht: Springer Netherlands, 1987).

> Heidegger rarely mentions the body, while Merleau-Ponty makes the body the centerpiece of his theory. He argues that the way we are directed at the world, our intentionality, is essentially a 'motor-intentionality' grounded in our bodily abilities.[18]

Throughout this thesis, and with recourse to Merleau-Ponty, I stress the importance of the body as the basis for experience, thinking, consciousness – our being in the world and knowing the world. The theatre unquestionably being part of this world, it must follow that we can gain important insights into how theatre functions by attending to the bodily mechanisms of performing and experiencing it.

In phenomenological terms, what I am setting out to do in this study is to perform a phenomenological, or epistemological, reduction (epoche) of theatre architecture.[19] This means bracketing out all forms of non-perceptual knowledge one might have of the thing one is encountering, including common-sense assumptions even of the most basic kind. Merleau-Ponty calls it the "ambition to make reflection emulate the unreflective life of consciousness."[20] For example, a statement such as 'the theatre building embraces me' might seem impossible in terms of common-sense, but it is a sound phenomenological description of a particular first-hand experience of a particular theatre space at a particular moment. This study will explore a variety of such descriptions.

I should clarify at this point that I am not proposing to perform an eidetic reduction of theatre architecture in the classical Husserlian sense. This would involve attempting to find the 'essence' of what a theatre building is, by trying to uncover its elemental nature. Although there have been previous attempts by theatre scholars to 'peel the onion' of theatre and ask what external layers can be removed to reveal its essence,[21] I do not think that this is a useful approach in this context. More than that, it would

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18 Käufer and Chemero, *Phenomenology*, 93.

19 For a helpful overview of Husserl's three investigative epoches or reductions, see: Sobchak, *Address*, 35–38.

20 Maurice Merleau-Ponty, *Phenomenology of Perception* (London & New York: Routledge, 2002, c1945), xvii.

21 The 1960s particularly saw a number of attempts by practitioners and scholars to access theatre in its most basic, reduced form. See for example the work of Jerzi Grotowski, Peter Brook, or, in scholarship Eric Bentley's 'basic formula' of theatre, "A impersonates B while C looks on", Eric Bentley, *The Life of the Drama* (New York: Atheneum, 1964), 150. Cf. also Eugenio Barba, "The Essence of Theatre," *The Drama Review: TDR* 46, no. 3 (2002).

feel presumptuous to claim the right to intuit theatre's essential, universal nature, especially as the tendency today is rather the opposite: We live in an age of multiplicity and simultaneity, where new forms of theatre and performance are constantly emerging, shifting and multiplying. This thesis looks at theatre spaces *in performance* and understands these spaces to be created anew each time in a shared perceptual effort by performers and spectators. Its basic approach is therefore already incompatible with the idea of an immutable, unalterable essence of what theatre architecture is and can be. Going into the main part of this study, I would instead like to hold on to the idea of multiplicity, which also happens to be one of the most productive concepts in the current understanding of space. The geographer Doreen Massey for example describes space as "the sphere of the possibility of the existence of multiplicity in the sense of contemporaneous plurality; as the sphere in which distinct trajectories coexist", and goes on to suggest that, "Perhaps we could imagine space as a simultaneity of stories so-far."[22]

'Spatial Illiteracy'

The fact that contemporary scholars such as Massey are still offering definitions of what space is, or how it can be described, points to one of the main challenges in this project: The available tools for getting to grips with spatial experience remain scarce and underdeveloped. Although space and architecture are an important part of social and historical discourses and as such have of course been linguistically defined, such discursive spatial analyses tend to address architectural spaces as manifestations of social or political practices. Direct spatial experiences, meanwhile, are non-linguistic concepts that are difficult to articulate in words, or may not even be articulable at all. Spatial perceptions, unlike spatial social practices, are irreducible to language. Coupled with

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22 Doreen B. Massey, *For Space* (London & Thousand Oaks, CA: SAGE, 2005), 9.

an equally underdeveloped understanding of how perception itself works[23], this means that, generally speaking, there is very little awareness of how fluid and variable the perception of space actually is.

In the course of this thesis I will argue that the fluidity, or instability, of perception is amplified in the theatre, because a large part of what theatre practitioners (including performers, set designers, technicians, sound people...) do, is to manipulate the space of the theatre in virtuosic and subtle ways. The space of the theatre itself may be amenable or resistant to such practices of manipulation, as the theatre consultant Josh Dachs explains:

> ... the first most important thing – really the central question of theater architecture in my view – is making rooms that are good to perform in, and in which to witness those performances. [...] There are certainly many bad examples in the world today and there are certainly hundreds of projects in which they have all the latest technical equipment, everything runs very smoothly backstage, but they are absolutely dreadful places in which to see a production and in which to perform, for dozens of reasons.[24]

The problem, in his view, is that there is no word to describe the quality of a space being 'good to perform in'. One can talk about good or bad acoustics of a space, but the question of 'performability' goes further than that. Dachs's suggestion is that "maybe *raumgeistology* or something about the 'spirit of the room' is that word", but concludes that the search for the right word is not yet over, and that the job of theatre architects and consultants is still to create such 'performable' spaces rather than finding the right words to describe their qualities: "We need a word for this quality that we all value in a room that makes it a wonderful performance space, and for me that's the center of the theater consulting profession, to figure out how to make these rooms with these right qualities."[25]

In the 1990s, the theatre architect and consultant Iain Mackintosh complained that architecture was one of the 'least

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23 This is not to claim that perception as a field of research is underdeveloped, but that insights from such research into cognitive and perceptual processes have been slow to filter down into general consciousness.
24 Josh Dachs in: Richard Brett, ed., *Theatre Engineering and Architecture: Architecture and Planning* (London: Theatre Engineering and Architecture, 2002), AP 4-3.
25 Ibid.

understood' aspects of theatre, despite being "one of the most vital ingredients of the theatrical experience"[26]. Before him, in the 1950s, the architectural theorist Bruno Zevi even spoke of an "illiteracy regarding space"[27] in a more general sense. Today – a spatial turn later and in the middle of what might in future come to be termed an 'architectural turn' – things have changed. Current spatial discourses in fields ranging from geography, sociology and anthropology to architecture and all the way to theatre and performance studies are dynamic and vibrantly inclusive. This study seeks to contribute to this development, following in the footsteps of some of those who are attempting to ensure that space and architecture are not just 'read', but experienced on their own terms.

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26 Iain Mackintosh, *architecture, actor, and audience* (London & New York: Routledge, 1993), 3.
27 Bruno Zevi, *Architecture as Space: How to Look at Architecture* (New York: Horizon, 1957), 22–23.

PART ONE

Phenomenological Approaches

The three chapters in this first part of the study seek to apply a number of established phenomenological theories of space perception and embodiment to the project of describing how theatre architecture appears in direct, lived experience. This requires taking a step back from what we think we know of these spaces, bracketing objective forms of received knowledge and carefully attending instead to how body and mind engage and interact with them.

Chapter I begins by asking what it means to experience theatre space from the inside, from within a performance, and from a particular perspective in the auditorium. It looks at how this has been done previously, surveying existing phenomenologies of theatrical space.

Chapter II posits that lived space is oriented, experienced as a field of forces in which the perceiving body is always already implicated.

Chapter III highlights the essential multiplicity of embodied space. It suggests that in order to know how a theatre space appears (and particularly how it appears in performance) it is not enough just to look. Only by also attending to non-visual forms of perception can the full range of spatial experience be understood.

Chapter I

The Phenomenology of Theatrical Space

... like a circus that is the general movement and light and air which any theatre has, and a great deal of glitter in the light and a great deal of height in the air ...
... but the theatre was so huge that I do not remember at all seeing a stage I only remember that it felt like a theatre that is the theatre did. I doubt if I did see the stage.

GERTRUDE STEIN

The above short passage from poet and dramatist Gertrude Stein's *Lectures in America*, describing her experience of visiting a theatre for the first time as a child, shows in an exemplary way what a phenomenology of theatrical space can do: Rather than trying to account for what was there in an objective sense, it conveys her direct experience and perception of the space. Objectively there certainly would have been a stage, even if she as a child was unaware of it, or at least not aware enough for it to have made a lasting impression. Using technical phenomenological terms, we could say that the stage was part of her perceptual horizon (or ground), and did not emerge as a figure in its own right. Instead, she recalls how she was directly affected by a general sense of movement in the space around her, by light, glitter, and the physical experience of height – all of them effects of the architecture and her position within it.

It is one of the basic assumptions of this thesis that theatrical experience is conditioned by the direct experience of theatre buildings. The scholarly discourse around theatre space, however, often sidelines or overlooks the buildings themselves, concentrating mostly on spaces created by particular productions or the fictional

Epigraph:
Gertrude Stein, *Lectures in America* (London: Virago, 1988, c1935), 112–13. Also quoted in: Gay McAuley, *Space in Performance: Making Meaning in the Theatre* (Ann Arbor: University of Michigan Press, 2000), 256.

spaces and locations of play texts. The focus, in short, lies firmly on what happens on stage, while the rest of the auditorium remains largely in the dark. Gertrude Stein's description is therefore a refreshing reminder that it is possible to have a vivid experience of theatre even without seeing a stage at all. It is an example of what this thesis seeks to achieve, even if, unfortunately, her phenomenology of theatre architecture is only three sentences long. Nor are there many others like it (at least none that I have found). But it is a very good starting point, and one that I will return to at several points in this study. She writes about how the theatre 'feels' like a theatre, which leads to the useful question of 'What makes a theatre feel like a theatre?', as well as opening up the possibility of a theatre *not* feeling like a theatre, which indeed is a criticism encountered in relation to some theatre buildings. The National Theatre in London, for example, with its exposed concrete aesthetic is often described as unresponsive or forbidding.[1]

The purpose of this first chapter is to review the existing literature on theatre space and architecture. It takes into account a wide range of texts by authors from different fields including theatre studies, architectural theory, philosophy and sociology, as well as the hybrid discipline of theatre consulting, which seeks to mediate between the architects who build theatres and the theatre professionals who use them. The intention is to provide a broad sweep of a number of approaches, picking out the phenomenological insights that will be important for the rest of the study. It seems that the texts (or even passages of text) which are particularly relevant for my topic seem to be distributed across a wide range of scholarly work, making it necessary to cast the net widely.

I begin quite literally with *ground*work, evoking the ground as the realm of physicality and materiality that underpins theatrical practice. Theatre performance has often been described as an

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1 An example of such criticism is recalled by Richard Eyre, former artistic director of the National Theatre, who tells the story of how "the actor Albert Finney, on hearing Peter Brook say that a theatre should be like a violin, its tone coming from its period and age, snorted: 'who'd build a violin out of fucking concrete?'" Quoted in: Juliet Rufford, *Theatre & architecture,* Theatre& (Basingstoke: Palgrave Macmillan, 2015), 6–7.

oscillation between physical space and fictional place.[2] Just as the experience of the individual spectator or actor oscillates between being present in the here and now of the theatre building and being transported to an immaterial, narrative or abstract 'other' reality, theatre as an art form also oscillates between focussing on the one hand on its material ground, and on the other on the creation of fictional spaces far removed from the reality of the building or space itself. The tension between material space and immaterial place is thus one of the defining dialectics of theatre practice, scholarship, and historiography. Robert Weimann, for example, uses the terms 'locus' and 'platea' to denote the two sides in this dialectic: Locus, largely restricted to the elevated space on the scaffold stage in early forms of theatrical practice, represents fictional locations by means of indexical references (such as for example a throne signifying a palace). Platea, on the other hand, refers to the open playing ground on the same level as the spectators and is characterised by a festival atmosphere and the possibility for interaction between performers and audience – a space, in short, that is first and foremost 'here' in an immediate sense.[3] In later forms of theatrical practice, locus and platea become uncoupled from their specific locations and develop into concepts that are perhaps best described as modes of performance, tending either towards representation and illusion (locus), or towards more performative forms of playing (platea).

In the following, I investigate instances of artists engaging with the physical space of the theatre building in ways that could be interpreted as a 'return to the ground' or to the performative mode of the platea. It seems that this often happens after a period of increased focus on issues of fiction and illusion, and is frequently motivated by a desire to re-engage with the physical reality of the space shared by performers and audiences.

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2 See for example Jean Alter, *A Sociosemiotic Theory of Theatre* (Philadelphia: University of Pennsylvania Press, 1990), https://books.google.de/books?id=Sdzfb5AQKGQC, 78 or Mike Alfreds, *Different Every Night: Freeing the Actor* (London: Nick Hern Books, 2007), 13.

3 Robert Weimann, *Shakespeare and the Popular Tradition in the Theater: Studies in the Social Dimension of Dramatic Form and Function* (Baltimore: Johns Hopkins University Press, 1987, c1978), 80.

The Ground beneath their Feet

A theatre building is not 'the ground' of theatre if ground is understood as a place of origin, standing for the roots of theatre practice in ritual and communal celebration. Martin Puchner speaks about the ground in such terms; and of the raised platform stage as the emancipation from this ground, to which theatre aspires because it promises greater flexibility in relation to fictional locations, greater scope, universality and independence. According to him, once theatre "controls its grounds, it can use them to represent the most far-flung places."[4] He sees the symbolic entities of ground and raised stage as the two extremes defining the polarity of theatrical endeavour, with theatre either moving towards greater emancipation from the reality of the ground, or returning to it in the search for lost grounds, hoping to find them in the circle of the ritual or the dust of site-specific forms of performance. The theatre of the nineteenth century arguably came closest to complete emancipation from the ground, being technically accomplished enough to achieve perfect illusions of almost any imaginable far-flung or fantastic location. The inevitable counter movement then followed in the early twentieth century. Puchner writes: "Time and again, a reaction against the theater's emancipation from specific locations has set in, most recently in the twentieth century, when theaters were searching for their lost grounds, seeking once again to be inextricably tied to a particular place."[5] Seen like this, the theatre building as the physical place where theatre takes place can after all be regarded as part of its ground, or perhaps more precisely: as that which grounds the fictional universes it creates.[6]

I am interested in how theorists and artists have taken the idea

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4 Martin Puchner, "The Problem of the Ground," Seminar description The Mellon School of Theater and Performance Research, http://thschool.fas.harvard.edu/icb/icb.do?keyword=k76089&pageid=icb.page552802. I took part in his seminar, which ran from 2nd – 13th June 2014 at Harvard University.

5 Ibid.

6 There remains a trace of paradox in this argument: If the theatre building *contains* the raised stage, surely would make more sense to assign it to the same side of the polarity, rather than the ground? But as became clear during the seminar, a 'return to the ground' today often takes the form of paying renewed attention to the theatre building itself. This process as was even described as taking a site-specific approach to theatre performances in theatre buildings themselves.

of the ‘stage as ground’ to literally mean a place to stand on, making it the primary intersection between body and architectural structure. Specifically I want to show, with the help of two contrasting examples, how differently this intersection has been theorised. Both examples contain evocations of ground and feet, and both come from early twentieth-century texts. Martin Buber, in his 1913 text “The Space Problem of the Stage”[7], describes the stage as a ground that cannot be shared, emphasising as its essential quality the fact that it is removed from everyday experience and from the physicality of the corporeally present spectator. To him, the stage as the ‘other’ is fundamentally inaccessible despite its apparent physical here-ness:

> The stage may begin a few steps in front of us; we could take these few steps, but we know that nothing would be accomplished thereby. Our feet can certainly tread the boards of the stage, but we cannot set foot on the space of the stage. Because this space is of another species than ours, because it is created and fulfilled by a life of another density than ours, because our dimensions do not hold good for it. To possess this knowledge as feeling is the core of the genuine scenic experience.[8]

Buber thus maintains that it is the quality of unreality and ‘un-enterability’ that defines the scenic space of the stage, an assertion that seems to place him close to the ‘raised stage’ end of the polarity discussed above. This is particularly interesting because of Buber’s closeness to Adolphe Appia, who provides our second example of feet connecting with ground. Buber‘s text “The Space Problem of the Stage” was written for the programme book for one of Appia’s productions in the artist colony at Hellerau and Buber writes that he participated in the theatrical experimentation being undertaken there under Appia at the time (without specifying what form this participation took exactly).[9] Yet, as the following anecdote shows, Appia himself seems to have been at least equally

7 The original German text was written for a programme book for the 1913 Hellerau production of Paul Claudel’s *Tidings Brought to Mary* (‘*Verkündigung*’) and then re-published: Martin Buber, “Das Raumproblem der Bühne: Erstdruck: Die Zukunft 21 (1913) Nr. 40 (5. Juli),” in *Texte zur Theorie des Theaters*, ed. Klaus Lazarowicz and Christopher Balme (Stuttgart: Reclam, 1991).

8 Martin Buber and Maurice S. Friedman, eds., *Pointing the way: Collected essays* (Amherst, NY: Humanity Books, 1999), 67–68.

9 Buber confirms this in his text: see footnote, ibid., 67.

interested in the physical reality of the space of the stage (that is, in its material properties) as in the immaterial quality highlighted by Buber.

It is reported that when he was a schoolboy, Appia, who was already then an avid Wagnerian, quizzed a friend at his school who had had the fortune of having been taken to see a performance at the Festspielhaus in Bayreuth about what the space of this famous theatre was like. The fact that his friend was only able to talk about the fictional reality depicted on stage, as if he had truly seen the medieval forest and castles from the opera, frustrated Appia greatly. His biographer Richard Beacham writes how, "Even as a fourteen-year-old student, he was preoccupied with the concept of space in the theatre"[10] and goes on to quote Appia himself telling the story:

> One of my friends at the boarding school had seen *Tannhäuser* in Germany and gave me vague reports of it. I tried to pin him down and inquired whether the characters were really 'in a place' and what this 'place' was like. He didn't understand me. I remember having been rather insistent and having finally asked almost in despair, 'Where were their feet?'[11]

Later, in his own groundbreaking work, Appia would create spaces that were shared, where the feet of audiences and performers stood, platea-like, on the same floor.[12] His focus on the physical reality of the stage and its scenographic elements did not allow it to 'disappear' into the fiction, as Wagner's stage had disappeared for his school friend. It surely also is no coincidence that Appia expressed his preoccupation with the physical and material aspects of stage space by evoking the stage floor, or ground.

Artists and performers are often acutely aware of the impor-

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10 Richard C. Beacham, *Adolphe Appia: Artist and Visionary of the Modern Theatre* (Chur, Switzerland: Harwood Academic Publishers, 1994), 7.

11 Ibid. Beacham is here quoting from a 1921 essay by Adolphe Appia, "Theatrical Experiences and Personal Investigations". French language text in Marie L. Bablet-Hahn's edition of Appia's *Oeuvres Complètes* (Lausanne, 1983), Vol. 4, pp. 36-56. English translation in Walther Volbach and Richard Beacham, *Adolphe Appia, Essays Scenarios and Designs* (Ann Arbor, 1989), 47-72; 48.

12 Cf. Gabriele Brandstetter and Birgit Wiens, eds., *Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater* (Berlin: Alexander, 2010); Tagung: Dresden, Festspielhaus Hellerau, 2007, 28. She also emphasises the role that shared plays in this: "[...] eine völlig neue Konstellation von Raum und Publikum, die auch dadurch zustande kommen soll, dass das Licht beide, Tänzer/Performer und Zuschauer/Zuhörer, umfasst und damit einen geteilten, einen lebendigen Raum der Aufführung schafft."

tance of the floor in grounding a practice or performance.[13] The theatre director Mike Alfreds, for example, speaks of it as a powerful point of intersection between actor and stage, as a field of movement, and as the site where gravity is most tangibly experienced. He therefore insists on the stage floor being the starting point for any set or scenographic design solution: "The most important part of the set is the floor [...]. The floor creates a dynamic space on which actions will be played out. Concentrating on 'walls' (as most projected images do) merely creates flat decoration."[14] This understanding of the stage floor as a dynamic field in which pathways and orientations inscribe themselves and become visible for the audience will be discussed in more detail in Chapter II, which examines the ways in which space is oriented in phenomenological experience. It is particularly relevant in the context of dance, as the choreographer Anne Teresa de Keersmaeker confirms: "In future I think we will only make floors. It is, along with the silence, still your first partner."[15]

Taxonomies of Theatrical Space

Instead of just 'making floors' as de Keersmaeker suggested, theatre has of course continued to create and represent entire spaces in a great variety of ways. It is the project of theatre scholarship to document, categorise and theorise the entire range of such theatrical space production and to propose taxonomies of the different spaces at play.

Gay McAuley begins her comprehensive study on theatre and performance space, *Space in Performance*, by offering her own taxonomy of theatrical space, informed by a detailed and considered review of all other such taxonomies currently in existence.[16]

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13 Declan Donnellan for example speaks of 'ground energy': "It helps to imagine that the energy wells up from the ground because far too often the actor unconsciously believes that all useful energy trickles down from the brain. This invisible assumption limits the actor's freedom." Declan Donnellan, *The Actor and the Target* (London: Neck Hern Books, 2005, c2002), 154.

14 Alfreds, *Different*, 290.

15 Anne T. de Keersmaeker, "Between Heaven and Earth: An Interview," in *Theaterschrift II: The Written Space / Der Geschriebene Raum*, ed. Marianne van Kerkhoven (Brussels: Kaaitheater, 1992), 174.

16 They include among others: Anne Ubersfeld, *Reading Theatre* (Toronto: University of Toronto Press, 1999),

She prefaces this by rattling off a list of the spaces to be covered – no doubt to give a sense of their great number and variety from the very outset:

> [...] the physical places of performance as they exist in the wider social space of the community, the space of interaction between performers and spectators, the energized space of the stage when it is occupied and rendered meaningful by the presence of performers, the organization of stage and offstage, the fictional places that are represented or evoked within or in relation to all these physical areas, and, interacting with all of them, the space of verbal reference."[17]

In synthesising and evaluating the wealth of literature dealing with theatrical spaces, McAuley identifies a striking lack of commonly accepted terminology to describe the ways in which they function. She goes so far as to call this area of theatre scholarship a "terminological minefield"[18], particularly in comparison with the much more unified field of research relating to the concept of dramatic character. Whereas there is a clear understanding of the relationship between actor and character (helped by these two very exact terms), there is no equivalent pair of words to denote the relationship between 'real stage space' and 'fictional space', nor are there established terms for spaces that are not part of the stage itself but still part of the universe of the play.[19] For the purpose of this thesis it is therefore important to position myself within this 'minefield' and to establish a consistent use of terminology. McAuley's convincing framework will continue to form a frame of reference in this respect.

She delineates five major categories of spatial function: "The Social Reality", "The Physical/Fictional Relationship", "Location and Fiction", "Textual Space", and "Thematic Space".[20] The last

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111–18; Patrice Pavis, *Analyzing Performance: Theater, Dance, and Film* (Ann Arbor: University of Michigan Press, 2003), https://books.google.co.uk/books?id=c4iEcafdAPIC, 152–53; Hanna Scolnicov, "Theatre Space, Theatrical Space, and the Theatrical Space Without," in *Themes in Drama, Volume 9: The Theatrical Space*, ed. James Redmond (Cambridge & London: Cambridge University Press, 1987). I am not aware of any other major taxonomies of theatrical space to have emerged since the publication of McAuley's book.

17 Gay McAuley, *Space in Performance: Making Meaning in the Theatre* (Ann Arbor: University of Michigan Press, 2000), 7.

18 Ibid., 17.

19 Ibid.

20 Ibid., 24–25.

three of these fall into a the more general category of 'fictional space' and will therefore be treated as just one category here. Combining them like this allows us to say that while the first category comprises physical spaces (that is, theatre buildings or other spaces of performance, including all related front-of-house and backstage areas for performers and audiences) and the third purely immaterial, imaginative or fictional spaces, the second category is the complex, theatre-specific one where the two meet, where fictional space manifests itself in materially present scenography, and where phenomenologically tangible spaces are created by immaterial means such as movement, voice, or symbolism. It follows that this is exactly the area of research that receives the most attention, and that results in the greatest terminological confusion.[21]

In her taxonomy, McAuley seeks to theorise the interlocking relationship between physical and fictional space by proposing two terms: 'stage space' and 'presentational space'. Stage space denotes the physical space of the stage as a neutral working environment, while presentational space describes the same space as it functions in performance, when the presence of scenographic elements and actors transforms it into a more expansive, 'other' space. In this it is comparable to what Patrice Pavis calls "gestural space"[22], as it allows for the fact that the spatial transformation into another place may be effected simply by an actor pretending to be caught in a storm, rather than by physically present props or stage effects. A term such as "scenographic space"[23] (used by Anne Ubersfeld),

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21 It should be stressed, therefore, that there are significant differences in how other taxonomies discuss this category. Scolnicov, for example, from the outset only distinguishes between theatre space, which is architectural and exists in the realm of the everyday, separately from performance, and theatrical space, which is created through performance and provides freedom from the everyday, its restraints and rules: "From the point of view of the production, the theatre space is a given space, full of potential, but also beset with limitations. As an architectural space, the theatre space is part of everyday space and exists independently of, and prior to, any performance. [...] Although theatrical space is created by the performance within the theatre space, that is, within everyday space, it stands apart from it. In every performance, the actors define their particular space through word, movement and gesture, and with the aid of props, scenery, lighting and acoustic effects. In that space alone their play has physical extension." Scolnicov, "Theatre," 11–12.

22 Pavis, *Analyzing Performance*, 152–53: "Gestural space is the space created by the presence, stage position, and movements of the performers: a space 'projected' and outlined by actors, induced through their corporeality, an evolving space that can be expanded or reduced."

23 Ubersfeld, *Reading Theatre*, 112.

does not take this possibility into account.

In order to illustrate the conundrum that these scholars hope to solve with terms such as 'gestural' or 'presentational' space, I want to give an example from performance practice: Jacques Lecoq, in his book *The Moving Body* describes an exercise given to actors in training at the school, which requires them to play a scene taking place in a great expansive space such as a forest using only a very restricted space measuring no more than two square metres: "Two people, lost in an immense forest, search in vain for one another, then at least meet up. Physically they can be fifty centimetres apart while dramatically the distance is hundreds of metres; they can call to one another across a valley, or from the tops of hills, while all the time standing back to back."[24] The forest, in this example, is the fictional, or dramatic, space to be evoked; the two square metres given to the actors to perform on are the stage space; and the space created by their voices calling out to each other, perhaps even creating sound or echo effects, is the 'presentational' or 'gestural' space binding together dramatic fiction and physical reality.

The same example can be used to demonstrate some of the issues addressed by McAuley in those parts of her taxonomy relating to purely fictional, dramatic or narrative space. She writes: "The notion of fictional place is so complex and so fundamental to both drama and theatre, and its functioning has been so richly varied over the centuries, that the subcategories needed to account for it can be seen as constituting the third major area of the taxonomy [...]"[25] The complexity is due in part to the fact that any dramatic situation naturally draws on a system of non-represented spaces, as well as on a spatio-temporal framework of past and future spaces. The scene in the forest, for example, might include a conversation between the two characters once they have been found each other, detailing where they have been and describing the places they discovered. These places thus become part of the

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24 Jacques Lecoq, *The Moving Body: Teaching Creative Theatre*, with the assistance of Jean-Gabriel Carasso, and Jean-Claude Lallias (London: Methuen Drama, 2009, c2000), Translated by David Bradby, 65.
25 McAuley, *Space in Performance*, 29–30.

theatrical universe, and are variously referred to as "offstage fictional space"[26], "diegetic space"[27], "conceived space" or "dramatic space without"[28]. Perhaps the most comprehensive study of such off-stage spaces is William Gruber's full-length exploration of offstage spaces, messenger speeches, off-stage sex and violence. He argues that the diegetic space evoked through narration is experienced as "a mental seeing of a somewhat different and more complex order."[29] At the same time it could be argued, contra Gruber, that this kind of mental seeing is no different to what we see when reading for example a novel, and that purely fictional space is not an intrinsically theatrical form of representation but rather an area of overlap between theatre and other types of fictional world-making, including poetry and film. Christopher Balme, for example, writes that "dramatic space is not strictly speaking an area of research specific to theatre studies, as it also belongs to the sphere of textual criticism."[30] However, as the purpose of these taxonomies is to provide a set of tools for performance analysis, the 'fictional space' category must necessarily be included for the sake of completeness.

Semiotic and Phenomenological Analysis

The impulse that has led to the above taxonomies of theatrical space can be described as a desire to be able to say very precisely what a particular kind of space may mean; and to fix any such meaning by allocating and translating spatial signs to their signifieds in an indexical way. It is thus underpinned by the expectation that theatre, or more specifically theatre space, can be explained semiotically. While these taxonomies then helpfully address

26 Ibid.
27 Christopher Balme, *The Cambridge Introduction to Theatre Studies* (Cambridge: Cambridge University Press, 2008), 57. In the broad framework of differentiating between 'diegetic' and 'mimetic' space, the sound effects denoting the forest would belong in the category of 'mimetic space': "Mimetic space can also include space evoked by acoustic signs such as off-stage noises, but is mainly connected with scenography and the visual design of a stage space."
28 Scolnicov, "Theatre," 15.
29 William E. Gruber, *Offstage Space, Narrative, and the Theatre of the Imagination* (New York, NY: Palgrave Macmillan, 2010), 31.
30 Balme, *Cambridge Introduction*, 49.

questions of 'what it means' (or, more accurately: offer a detailed framework for analysing what something means in a systematic way), they do not offer answers to the equally interesting questions of how we are able to make and understand such spatial meanings in the first place.[31] They do not, in other words, address the question of perception.

The method of theatrical analysis that does traditionally focus on perceptual processes is phenomenology. It seeks to capture impressions before they become fully formed and reflected-upon ideas, that is, before an act of interpretation has taken place. Such impressions may be described in the first instance as undefined surges of perception – an initial consciousness of *something* – before they are either recognised and 'filed' as known perceptual facts, or explored further as yet unknowns. While capturing and describing ('re-languaging') sense impressions as they affect us is the main project of phenomenological analysis, this is not to say that interpretation has no part in this process. Phenomenology as a form of theatrical analysis is very much concerned with interpretation. The difference is that instead of focusing solely on the result of such cognitive processes of interpretation, it seeks to elucidate how we are able to arrive at them at all.

A certain amount of scepticism has therefore been expressed from the side of phenomenologists in relation to what the semiotic approach with its tendency to categorise can achieve. Rush Rehm, for example, writes: "A moment's reflection reveals that these categories aim at taxonomic completeness rather than at an understanding of dramatic action and spatial interaction. Everything that happens in a play will 'fit,' but we may understand no better in the end what they are 'fit for.'"[32]

Conversely, one of the perceived weaknesses of the

31 Tim Fitzpatrick's attempt to definitively fix spatial meanings at the Globe might serve as an example to illustrate the problems of adopting a purely semiotic approach in relation to theatre space. The system of perceived meanings and functions is so complex that not even the meaning of a single door remains fixed for longer than a few moments. Fitzpatrick finds that "even within a scene the 'meaning' of a door can be 'neutralized' to enable it to serve another purpose." Tim Fitzpatrick, *Playwright, Space, and Place in Early Modern Performance: Shakespeare and Company* (Aldershot & Burlington, VT: Ashgate, 2011), 236.

32 Rush Rehm, *The Play of Space: Spatial Transformation in Greek Tragedy* (Princeton, NJ: Princeton University Press, 2002), 2.

phenomenological approach lies exactly in its inability to differentiate effectively between processes of 're-languaging' and of interpretation. Craig Steward Walker points out this problem when he writes that "one can go just so far in explaining a phenomenon before one begins to analyze what it *means,* and at that point, one has begun to regard the object semiotically."[33]

It should be clear from this that the sense of opposition that exists, or existed, between these two schools of thought is a false one and that they are in fact two sides of the same coin. In order to arrive at a full picture and interpretation of a theatrical phenomenon (such as a particular moment in a production), it will always be necessary to take both approaches into account to a certain extent. Phenomenological description can, for example, offer a solution to the problem of 'semiotic redundancy'[34] – the fact that a theatre performance always offers more signs to be read than are necessary to convey a specific meaning. This means that, unless these 'signs' or dramatic elements (including voice, gesture, costume, set and many more), are deliberately put together in such a way as to clash with each other in order to destabilise or cast doubt on an already established piece of meaning, their doubling-up in terms of meaning could be regarded as strictly unnecessary. Why, to give a simple example, dress the queen in velvet if her crown already shows her to be a queen?

Because phenomenological analysis does not treat the 'reading' of signs as a simple translation process, it is more likely to allow for the fact that meaning is to be found in the presence of bodies and dramatic elements in themselves. It seeks to draw attention to this presence by describing, as evocatively as possible, the effect that

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33 Craig S. Walker, "Reckoning with States on the Phenomenology of Theatre," *Journal of Dramatic Theory and Criticism* XI, no. 2 (1997): 80.

34 Henry S. Turner, *The English Renaissance stage: Geometry, Poetics, and the Practical Spatial Arts 1580-1630* (New York: Oxford University Press, 2006), 158–59. Turner demonstrates the principle of semiotic redundancy with the help of an example: "The 'rude mechanicals' of *A Midsummer Night's Dream* - with their lantern-for-moonshine, their rhetorical 'disfigurement', and their emblematic and personified 'wall' - are perhaps the most spectacular example of the semiotic redoubling that is typical of stage performance: by accentuating signification to the point of representational confusion and mimetic rupture, the play disarticulates the individual elements through which the process of cultural coding occurs, defamiliarizing these codes and inviting an audience to hesitate between the world of representation and the semiotic and theatrical processes through which this world comes into being."

such presences have on the perceiver. Pannil Camp, for example, writes about the phenomenology of Bert O. States: "The measure of phenomenological writing, as well as the proof of its worth, are found in writing that disrupts expectations, writing in a poetic mode."[35] Poetic phenomenological writing such as States' can, in fact, get by without engaging too deeply with phenomenological theory in the strict philosophical sense. His 1985 book, *Great Reckonings in Little Rooms*, is an example of this. It is phenomenological in that it is expressively descriptive and concerned with the 'thing' of theatre itself, but not in the sense of engaging with theories of embodied perception or cognition, as later phenomenologies of theatre do. Instead, States' approach could be described as a reaction to the dominance, at the time, of semiotic analysis and its perceived bloodlessness, and as timely re-affirmation of the mysterious ephemerality of the theatrical experience. It could be argued, too, that the modes of analysis used in theatre scholarship need to reflect the elusiveness of theatrical experience in order to be credible.

Phenomenology, however, can do more for theatre scholarship. Instead of just attempting to recreate experience, it can examine the structures of experience, that is, of how experience is made or comes about. Stanton Garner's *Bodied Spaces* does this very successfully, engaging deeply with philosophical phenomenology, especially the phenomenology of Husserl and Merleau-Ponty. Garner and also Jens Roselt, the author of the more recent German *Phänomenologie des Theaters*, concentrate on bodily processes of perception and thus aim to answer fundamental questions about how we come to understand things happening on stage, and why this process of understanding is (or can be) experienced as a pleasurable or meaningful activity. Several of their ideas will be revisited later in this thesis.

However, neither States nor Garner or States discuss the physical spaces of theatre buildings in any great detail. Garner's

35 Pannill Camp, "The Trouble with Phenomenology," *Journal of Dramatic Theory and Criticism* 19, no. 1 (2004): 82.

basic approach of taking the dramatic play text as his point of departure already precludes this, so that when he does offer a phenomenological analysis of a spatial structure, it is of the larger universe of a particular text.[36] This means that still the only extended and truly phenomenological account of the physical space of a theatre as shared by performers and audience is Max Herrmann's 1931 text "The Theatrical Experience of Space"[37]. Although not described by him as a phenomenology, it remains one of the most significant and insightful phenomenological analyses of theatrical space in existence.

Max Herrmann's Phenomenology of Theatre Space

The most concise summary of Herrmann's text and evaluation of its enduring significance is by Christopher Balme, who writes:

> Herrmann makes three inter-related observations and distinctions that have come to be crucial for our understanding of the spatial dynamics of theatre. The first is that theatrical space only comes into being through the act of human movement. Secondly, theatrical space is the result of an aesthetic transformation: the physical space of the stage is never identical with the space on which actors perform. Thirdly, this transformation from one realm (the physical and actual) to the aesthetic or 'artificial' can only be described in experiential terms.[38]

The approach described here is phenomenological in practice if not in name, as Herrmann focuses on the underlying perceptual structures that make spatial transformations of the stage possible, instead of merely interpreting the results of such transformations. The spaces he describes are not part of absolute, objective space;

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36 Stanton B. Garner, *Bodied Spaces: Phenomenology and Performance in Contemporary Drama* (Ithaca, NY & London: Cornell University Press, 1994), 5: "It may appear surprising to some that a study concerned with the phenomenological parameters of theatrical performance should conduct its investigation largely in reference to the dramatic text, that prescriptive artifact whose traditionally literary authority contemporary performance theory has sought to overthrow. [...] But if drama is historically, formally, and even culturally restricted in its uses of performance, and to varying degrees imperialistic in its privileging of the written text, its specificity and determinacy make it useful for phenomenological analysis by grounding analysis in a mode of particularity at once textual and theatrical. [...] The dramatic text, in short, is a valuable means of access to the stage in particular phenomenological configurations."

37 Max Herrmann, "Das theatralische Raumerlebnis: aus: Beilagenheft zur Zeitschrift für Ästhetik und Allgemeine Kunstwissenschaft 25 (1931), S. 152-163," in *Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften*, ed. Jörg Dünne et al. (Frankfurt am Main: Suhrkamp, 2006).

38 Balme, *Cambridge Introduction*, 48.

that is, they cannot be accounted for without taking into consideration the distinct lived experiences of performers and spectators separately. Herrmann does this in his text, as well as re-tracing the spatial imagination of the playwright as the 'architect' of the spatial transformation to be effected.[39]

The most important and radical of Herrmann's insights, however, is that the basis, or origin, of the stage's aesthetic transformation lies not in the space of the stage itself nor in the dramatic text, but in the shared space of stage and auditorium, or more precisely, in what happens in this shared space . He thus identifies the 'transformability' of stage space to be a matter of psychology: It is something that happens between performers and audiences, with the playwright (and/or director) as a kind of facilitator, or conjurer. By analysing how the presence and perceptual effort of spectators aids rather than disturbs the process of transforming physical space into fictional, imaginative space, Herrmann arrives at a conclusion that, as Fischer-Lichte[40] points out, is effectively 'performative': The illusion comes into existence by people living it and believing in it.

> Conducive for the spatial experience of the performer and for all his endeavour is also the audience, even though one might assume that the missing fourth wall of an interior space, and its replacement with the presence of many people, should really disrupt the creation of this possible spatial illusion: The actor hardly 'sees' these people, only 'feels' them, and this feeling is a vital source of energy for his art as much as for the spatial transformation he effects.[41]

A second important section in Herrmann's text concerns the situation of the dramatic character within the spatial universe of the play as represented on stage. Initially a description of how characters are bound, or shaped by their socio-economic circumstances (which impact in a very real way on their spatial

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39 Herrmann, "Raumerlebnis," 502–3.

40 Erika Fischer-Lichte, *Ästhetik des Performativen* (Frankfurt am Main: Suhrkamp, 2004), 55–56: "Herrmanns Aufführungsbegriff, [...] leistet in der Tat eine Erweiterung des Begriffs des Performativen avant la lettre, wie er von Austin und später Butler definiert wurde. [...] Die Aufführung selbst sowie ihre spezifische Materialität werden im Prozeß des Aufführens von den Handlungen aller Beteiligten überhaupt erst hervorgebracht."

41 Herrmann, "Raumerlebnis," 508, my translation.

surroundings and environment), it turns into a philosophical evaluation of the influence of different spaces on people in general and on actors specifically:

> Every human being is, in his entire habitus, quite dependent on the space in which he finds himself: our way of walking, our gestures, our way of speaking are different in the great outdoors than they are in enclosed spaces and also further dependent on the specific particularities of these various open or enclosed spaces. It follows for the art of acting that the space in which the portrayed character finds himself at a certain moment must already be contained in the very movements and ways of speaking of the actor.[42]

Theatre Architecture and Socio-Historical Practice

What Herrmann does in this section is to begin, tentatively, to theorise the relationship between space and social activity. The dramatic character and the performing actor in his text both act within a certain social space. Their actions produce and are simultaneously conditioned and shaped by this space. Space, in this conception, is thought of as a field of forces in which the individual is situated, and which dictates or at least influences his or her movements and choices. As is clear from Herrmann's writing, he considers actors to be capable of re-living the spatial 'imprints' of certain situations – such as a certain way of speaking or walking in the open landscape as opposed to in a closed-off room – and of recreating these situations on stage. He thus requires them to be independent from, or in control of, the space in a way that non-actors are not. They, it seems, remain dependent on the space in their entire habitus.[43]

The concept of space as a socially produced field of forces, formulated most importantly by Henri Lefebvre in his book on *The Production of Space*, has developed to become one of the most influential and dominant spatial discourses of today. Lefebvre's understanding of space is that it is first of all *used* in certain ways,

42 Ibid., 504–5, my translation.
43 Ibid.

and that only through such use does it acquire an identity as a certain space. He calls the use of spaces 'spatial practice', which makes it possible to say that 'spatial practice produces space(s)'.[44] Sleeping in a room, for example, is a spatial practice that produces the space of a bedroom. Lefebvre writes:

> The spatial practice of a society secretes that society's space; it propounds and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it. From the analytic standpoint, the spatial practice of a society is revealed through the deciphering of its space.[45]

Specifically for the analysis of architecture this means that buildings are understood to be able to reveal details about the spatial practices of the society that built them, as well as of the society that continues to use them. They are therefore not just 'built' anymore by individual architects, but 'produced' by the entire society or community of which the architect is part.

Because of this increased emphasis on communal activity and societal practices, the psychological situation of the individual person – still the main focus of Herrmann's text – has become somewhat subsumed in the analysis of larger social patterns. The advantage of the concept of socially produced space, however, is that it enables theorists to uncover the social, cultural and economic factors contributing to the formation and continued use of theatre buildings and performance spaces. David Wiles, for example, uses Lefebvre's framework to analyse the shapes and geometries of historical stage and auditorium spaces and to find traces of past and present performance and viewing practices.[46] An example of how architectural spaces reflect social structures and hierarchies through their layout and design is how they regulate the flow and behaviour of people. Some West End theatres from the Victorian period, for example, still have separate entrances for the

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44 Henri Lefebvre, *The Production of Space* (Oxford & Cambridge, MA: Blackwell, 1991, c1974), Translated by Donald Nicholson-Smith, 16.

45 Ibid., 38.

46 Cf. David Wiles, *A Short History of Western Performance Space* (New York: Cambridge University Press, 2003), 12.

upper galleries, whose original function it was to keep those who could only afford cheap seats out of the main foyers and well away from the upper classes in their finery. Feeling oneself being ushered through the winding passageways of such theatres' innards, the architecture's ability to direct and enforce social conventions is palpable even today.

In McAuley's taxonomy of spatial function, the first major category, 'The Social Reality', includes "the physical places of performance as they exist in the wider space of the community"[47]. This, too, is already an example of thinking not just in terms of what a space is, but also how it is socially defined. In order to understand how spaces appear in individual perception, it is vital to take into account the socio-cultural and practices that produce them.

Tight Roaring Circles versus Perfect Sightlines: Practical Studies of Theatre Architecture

The final strand of literature to be discussed covers the physical spaces of theatre buildings as described by those who work intimately with them or are in some way responsible for their design: architects, consultants, and artists working with and in them. Stylistically this is an excursion into a different way of writing and thinking: less academic, more practical, passionately if not always consistently argued, and with tangible results, shaping the theatre landscape in a very real way. Theatre buildings actually come into existence as a result of many of these texts, which are often documentations of the design process of a particular building that then influences further projects.[48] The accounts of these practitioners are useful because they often have a very pragmatic

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47 McAuley, *Space in Performance*, 7.

48 Cf. Francis Reid, *Theatre Space: A Rediscovery Reported* (Cambridge: Entertainment Technology Press, 2006); Ian Appleton, *Buildings for the Performing Arts: A Design and Development Guide* (Amsterdam, Boston & London: Architectural Press, 2008, c1996); David Ward, *Transformation: Shakespeare's New Theatre* (Stratford-upon-Avon: RSC Enterprise, 2011); Stephen Joseph, ed., *Actor and Architect: Publication of the University of Manchester's "Theatre Week" Conference 1962* (Manchester: Manchester University Press, 1964).

understanding of how architectural structures and elements affect audiences and performers in direct, lived experience. Because they want to build good theatres, they really pay attention to how different parts of the building affect the theatrical experience, in a way that theatre scholars would not necessarily know how to.

They generally engage with theatre buildings in a material and technical sense, asking how theatres perform technically, what their historical function and reputation was and how this affects their relationship with audiences today, how they could be improved, and what historical precedents exist for 'ideal' theatres in terms of architectural proportions, materials and design elements. The fundamental question seems to be: How should theatres be best built to best serve the needs of practitioners and audiences? I include this strand of literature because of its closeness to the experience of practitioners and audiences of their theatre buildings, and its ability to capture how actors and directors talk and think about the spaces and buildings in which they work. As their discussions concentrate on the different spatial forms that theatre takes, and on the merits and problems of these different shapes or types of theatres, a side effect of this section is the compilation of a very basic overview of the various types of stage forms, covering proscenium arch spaces of different shapes as well as a variety of types of thrust stages.

So who are these people, these architects, these consultants? An important starting point for this study was Iain Mackintosh's book *Architecture, Actor and Audience*, in which he advocates a 'human-centred' approach to theatre architecture. Written from the perspective of a practising consultant and architect with a background in theatre producing, his book stresses the importance of certain architectural qualities such as geometry, scale, verticality, volume and density for the creation of engaging, intimate theatrical experiences. He illustrates how theatre architects from Vitruvius to Erwin Piscator have grappled with the task of building theatres that aid the process of audience engagement and offer a meaningful, collective, and intimate experience. There is a link here (though not

stated) to the ideal of embodiment, of architecture that is 'activated' by the body. Mackintosh suggests that architects should learn from historical precedence, look at theatres that 'work' and model their new designs on them. As a theatre architect, he has developed a strong personal style, amounting almost to a 'school of values' in the field. This informal school, which draws on the legacy of, for example, Tyrone Guthrie and also includes Francis Reid and Michael Holden, has dominated theatre architecture in Britain throughout the second half of the twentieth century and is now being carried forth by a new generation of theatre consulting firms such as Theatre Projects or Charcoalblue.

The basic tenets, or values, of this school can be summarised as follows: Theatre should offer the experience of sharing *one* space between performers and audience, and this one space should be characterised by intimacy, curves, verticality, and decoration. The 'false gods' of functionality, according to Mackintosh, are size (that is, theatres which are too big), perfect sightlines, adaptability and flexibility, and an emphasis on big sets.[49] They are, in his view, the false gods of commercial theatre architecture in particular, and he has spent much of his career arguing that large commercial theatres designed to offer perfect sightlines to a maximum of people ultimately have to fail in achieving what they set out to do, i.e. providing an intense theatrical experience. He believes that the effect of intimacy created by a concentrated, cauldron-like space created on the basis of the principles mentioned above – *one* space, intimacy, curves, verticality and decoration – far outweighs the disadvantages of not all seats having equal view of the stage.

What Macintosh and his colleagues are doing, then, in their books and at industry conferences such as the *International Theatre Engineering and Architecture Conference*[50] (which takes place every four years), is to address the questions touched on in the introduction of this thesis: How can we understand and

49 Iain Mackintosh, *architecture, actor, and audience* (London & New York: Routledge, 1993), 165.
50 Conference reports: Richard Brett, ed., *Theatre Engineering and Architecture: Architecture and Planning* (London: Theatre Engineering and Architecture, 2002) and Richard Brett, ed., *Theatre Engineering and Architecture: Planning and Architecture* (London: Theatre Engineering and Architecture, 2007).

articulate the ‘performability’ of theatre spaces? What makes a space good to perform in? What makes a theatre good to watch, and listen to, a performance in? How can a space enhance the experience of being at the theatre? I would like to add another question to this list: ‘What makes a theatre *feel* like a theatre?’ This question is adapted from the epigraph opening this chapter – Gertrude Stein’s miniature phenomenology of theatrical space. What she says there about what made her feel like she was in a theatre bears striking resemblance to Mackintosh’s list: He speaks about one space, verticality, curve, decoration – she of height, glitter, light and movement. As the following paragraphs will make clear, ‘one space’ and curve lead to movement; verticality leads to height; and decoration leads to glitter and light. I will use elements of Stein’s description to structure this short overview of practical studies of theatre architecture. In doing so I will ask, firstly, how such impressions as she describes can be created through architectural means, and secondly, why it might be good, or even important, for height, glitter, light and movement to be present in theatre buildings.

… ‘like a circus’ … ‘a great deal of height in the air’ …

Stein talks about the space of the theatre as she remembers it as being ‘like a circus’, with ‘a great deal of height in the air’[51]. The spatial form most associated with that of the circus is the drum-shaped circular amphitheatre. One of the characteristics of such circular or drum-shaped theatre spaces is that they have only one unified internal space that is shared by performers and audiences alike. In order for everybody to see, audiences have to be positioned on the outside of the circle, while performers occupy a space in the centre or at one end of the circle. What Stein is essentially describing, is the principle of what has been called a ‘cauldron theatre’, the shape advocated by Iain Mackintosh and other theatre

51 Stein, *Lectures*, 112–13.

consultants. Michael Holden, for example, writes: “What I call a cauldron theatre is three tiers, very steeply raked and vertically organised in almost a complete circle, creating a sense of a complete enwrapment.”[52]

This type of theatre has important historical precedents: The Elizabethan theatres, for example, were cauldron theatres, as were Italianate opera houses and eighteenth century playhouses. It should be noted that cauldron theatres do not necessarily have to be circular; the Fortune theatre, for example, one of the Globe’s Shakespearean contemporaries, was built on a square ground plan.[53] The principle of one shared space, with audiences positioned along the walls on several levels, equally applies to elliptical or rectangular spaces.

When this principle of one internal shared space was rediscovered in the twentieth century as an alternative to frontally organised theatre spaces with one space for the audience and a separate space where the performance takes place, one of the discoveries made by architects was the positive effect that ‘papering the walls with people’ has on the theatrical experience: By surrounding the walls with shallow galleries all the way up to the ceiling, a sense of unity is created that amplifies the function of the central space as a shared area of focus.[54]

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52 Michael Holden, in: Brett, *Theatre*, PA 2-3.
53 Cf. John Orrell, *The Quest for Shakespeare’s Globe* (Cambridge & New York: Cambridge University Press, 1983), 116–17.
54 Cf. Mackintosh, *architecture*, 128–29: “Clearly the actor prefers a warm responsive multi-tier auditorium to a cold uniformly raked single-tier theatre which looks more like a cinema or a worn lecture hall. Warm responsive auditoriums of more than 150 or 200 seats generally have a gallery or number of galleries which wrap around the space, so as to enfold the performing area in a welcoming embrace. [...] The popularity of such theatres, and hence implicit acceptance by audiences that sightlines need not be perfect, often surprise architects and designers of theatres.”

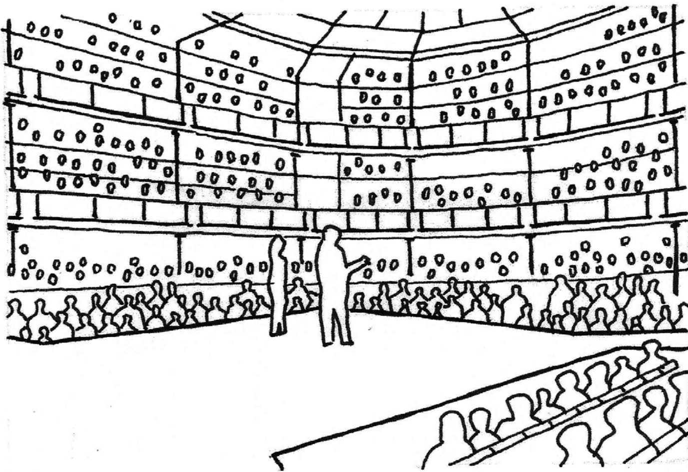

Fig. 1

The opposite of a cauldron theatre is the frontal, cinema-style theatre, where seating is usually raked at an angle of less than 45 degrees and the rows are straight or only slightly curved. No sense of enwrapment is generated. The stage is up there in front, often separated by a proscenium arch, and therefore experienced as a separate space that as a member of the audience you can look into, but that nevertheless remains apart.[55] While such frontal theatres claim their own valid tradition and historical precedents (Wagner's Festspielhaus in Bayreuth being a prime example, having been designed to place it in the tradition of the Greek amphitheatres), their design is usually motivated primarily by a desire for good sightlines and the democratic ideal of all seats having an equally good view of the stage.

55 Note that it is not the proscenium itself that is the cause of this effect. Many 'one space' cauldron theatres such as for example Italianate opera houses do have proscenium arches, but they generally also have a section of the forestage that juts out into and remains part of the shared space of the auditorium. Mackintosh calls this the vesica piscis, the 'magical' area where "the worlds of actor and audience connect". ibid., 144.

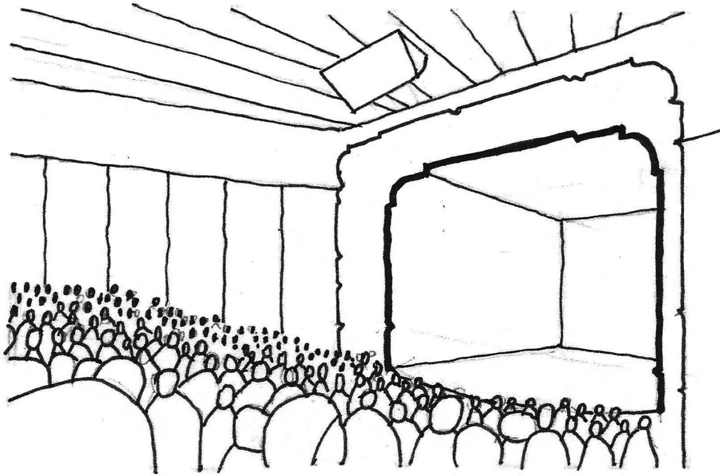

Fig. 2

There exists a variation within this type of theatre, particularly in the Anglo-American tradition of commercial theatre, that places two or three frontally oriented layers of seated spectators above each other, resulting in 'shelves' of people facing the stage.[56] This kind of architecture, with a person seated on one of the shelves, underneath another shelf, is not conducive to the kind of impressions recalled by Gertrude Stein. The overhang produces a 'tunnelling' effect on your view of the stage and prevents any sense of the entire space or 'height in the air' being felt. The other characteristic of such frontally oriented theatres is that other people in the auditorium are only visible from behind, seen as backs of heads or not even that if, as sometimes is the case in modern theatres designed for comfort, seats are fitted with high backs.

56 Francis Reid writes that "Unlike much of central Europe, where a tradition of court and civic subsidy allowed the retention of eighteenth-century style shallow seating tiers offering good contact with the stage, Britain's commercial approach necessitated the development of deep galleries to maximise seating capacity and revenue." Reid, *Theatre*, 11.

The sense of movement in an auditorium space can only come from those sitting (or standing) within it, their rustling, changing of position, adjusting viewing angles to follow the action on stage and so on. If these people are obscured by their seats, or only seen from behind, this significantly reduces the sense of movement in any theatre space. It could be argued that the long historical development that has led to theatre buildings offering greater comfort to their visitors is also a development towards less 'general movement': While large standing areas for example in the stalls of eighteenth century theatres or the Elizabethan and Jacobean 'pits' were common, the practice of asking audiences to stand, or walk around, during performances today is largely seen as a novelty and needs to be motivated by a particular architectural set-up (the new Globe, for example, with its standing-only yard), or by promenade or immersive styles of performance.

If the space of a theatre is to be experienced as a shared space, however, it is important that one be able to see others sharing in the experience. Frontally oriented theatre spaces, like cinemas, emphasise the individual and private experience of each audience member rather than creating a shared experience by enabling spectators to see others' reactions, and to be seen by them. Reacting to what is happening, seeing and being seen, also leads to movement in the space. The aforementioned architectural principle of 'papering the walls with people' is related to this: An audience that is arranged vertically and wrapped around the stage in a tight curve has the opportunity to see itself reacting, as well as seeing what is happening on stage. Undoubtedly this form of audience arrangement necessarily affects sightlines from seats situated away from the central axis of the stage, but the corollary of spreading out the arrangement of seats to improve sightlines is to lose closeness, intimacy and crucially movement, as the tiny shifts of audiences turning towards or adjusting their posture towards the stage, is lost.

Tyrone Guthrie was one of the earliest and most vocal

promoters of a return to the thrust stage, so much so that 'the Guthrie thrust stage' has become an acknowledged technical term.[57] A great proponent of 'packing them in', he argued that the alternative – comfortable sightlines, particularly when paired with a shallow rake – would lead to auditorium spaces with huge expanses of empty space above people's heads, and that these volumes of empty space would interfere with the dynamics of the performance: "It is axiomatic in my philosophy of the theatre that the audience has got to be packed into the place. The rapport between the stage and the audience is tremendously conditioned by the amount of cubic space that is empty."[58] McAuley mirrors this opinion when she writes that '"more air" does not necessarily entail more space'.[59]

The volumes of empty space that Guthrie and McAuley speak about here should not be confused with the 'great deal of height in the air' described by Gertrude Stein and associated in the previous section with the verticality of 'cauldron theatres'. The empty space at the centre of such a concentrated, surrounded space is less empty, so to speak, because it enables contact between members of the audience and creates 'movement in the air' through the sense of others being present. The architectural principle of 'enwrapment' ensures that spectators do not lose contact with each other as they focus on what is happening in the performance area, as Michael Holden confirms: "Theatre designers are aware of the benefit of curving rows of seats so that in our peripheral vision we see others in the audience participating in the same event. We are very social animals and we draw comfort in associating with others in the pack."[60]

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57 Cf. Tim Foster, Iain Mackintosh and Peter Ruthven Hall, *The Guthrie Thrust Stage: A Living Legacy* (Stratford-upon-Avon, 2012) and Tyrone Guthrie, "Theatre at Minneapolis," in *Actor and Architect: Publication of the University of Manchester's "Theatre Week" Conference 1962*, ed. Stephen Joseph (Manchester: Manchester University Press, 1964).

58 Ibid., 31.

59 Gay McAuley, "What is Sydney about Sydney Theatre? Performance Space and the Creation of a "Matrix of Sensibility"," in *Performance and the Politics of Space: Theatre and Topology*, ed. Erika Fischer-Lichte and Benjamin Wihstutz (Hoboken: Taylor and Francis, 2012), 90.

60 Michael Holden in: Brett, *Theatre*, PA 2-3.

… ‘a great deal of glitter in the light’ …

Having addressed height and movement, ‘glitter’ finally raises the question of decoration in theatre buildings: Does a theatre building have to feel ‘festive’ in order to feel like a theatre and does decoration contribute to the experience of theatre? There are two answers to the first part of this question, exemplified in effect by two different building types. The first type of mostly very magnificent historical theatre buildings still in use would affirm that, yes, magnificence is a requisite of theatrical experience. The second type of mostly contemporary theatre buildings conceived in accordance with a modern, functional aesthetic, would contest this.

The modern aesthetic is the more dominant to-day and the origins of this aesthetic can be traced back to the first sentence of Peter Brook’s book *The Empty Space*, possibly the most influential single sentence uttered about theatre architecture in the 20th century: “I can take any empty space and call it a bare stage.”[61], has inspired generations of directors and designers and has changed the way we think about theatre architecture. What interests me is Brook’s influence on determining what kinds of spaces can be used to house performance. Often he and the actors he worked with performed in spaces that were not built as theatres. Examples include factory buildings, old market halls, industrial spaces – in short, ‘any empty space’. In a curious development, however, these empty spaces, which were originally used by Brook and his company, underwent a transformation as they became established as theatres in their own right.[62] In the process they were painted black, filled with lighting rigs, even sometimes fitted with a proscenium arch. They have become what we now call Black Box theatres. Thus Brook‘s call for empty, flexible space has led to a reduced, decoration-less aesthetic, the black box aesthetic. Is this a misunderstanding of what he meant by ‘any empty space’? Does

61 Peter Brook, *The Empty Space* (Harmondsworth: Penguin, 1979, c1968), 1.
62 They include for example Mercat de Les Flors in Barcelona and Tramway Arts Centre in Glasgow.

‘empty’ have to mean black?[63] As this aesthetic came to be questioned some years later, research appeared that had investigated the affect of decoration on the theatrical experience. A group of cognitive scientists measured spectators’ responses to different types of theatre spaces and their resulting levels of attention to the performance. They came to the conclusion that a beautiful, highly decorated environment which provides sensory stimulation, increases the engagement of the audience with the theatre event. Furthermore they found that environments with a high degree of unity, such as for example functional theatres or black box spaces, tends to dull attention, resulting in a longer ‘lead-in’ time to engage with the performance. Rikard Küller, who led the research, explains the group’s findings: “In architecture today there is a tendency to play down complexity in favour of unity. The information rate very often is far too low - and as a result there is understimulation. [...] There might also be the misconception that a low information rate of the surroundings will be beneficial to the performance.”[64]

The basic question here is the function of decoration and in the broader sense, complexity, in theatres and how it affects us directly, i.e. phenomenologically. Is a theatre space supposed to be there and make its presence felt, or is it supposed to make itself as invisible as possible, so as not to disturb the performance? The highly decorated theatre does the first, while the black box does the second. Reading Brook’s famous sentence about ‘taking any empty space and calling it a stage’ in its proper context almost inevitable leads one to question and doubt the assumption that he meant for ‘empty’ to mean ‘neutral’ or ‘invisible’. The theatre spaces with which Brook became most associated with, the Bouffes du Nord in

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63 Ariane Mnouchkine suggests a compromise between this new workaday empty space aesthetic and the magnificence of old theatres: “Like Peter Brook, I work on the concept of the empty space… I like purity, but I hate austerity. I think an actor needs a magnificent empty space.” Quoted in: Christopher Baugh, *Theatre, Performance and Technology: The Development of Scenography in the Twentieth Century* (Basingstoke & New York: Palgrave Macmillan, 2005), 170.

64 Rikard Küller, “Psycho-Physiological Conditions in Theatre Construction,” in *Theatre Space: 8. World Congress, Munich, 18 - 25 September 1977*, ed. James F. Arnott (Munich: Prestel, 1977), 173. Significantly, he also links the complexity of a space to the number of people present and visible in a space: “No matter what sort of environment it concerns, the experienced complexity increases directly to the number of individuals present.” Ibid., 171. This means that an auditorium designed to showcase, rather than hide, the people sitting within it, is experienced as more complex and stimulating.

Paris and the Brooklyn Majestic Theatre in New York, are anything but black box spaces even if they are not magnificently decorated in the traditional sense. Yet they do provide a complex and stimulating environment. Peter Brook's relationship with these theatres and their strong sense of presence and identity will be revisited later on in this thesis, in the chapter on architectural anthropomorphism.

Historically the idea that theatre spaces should 'retreat' in the face of a performance is very new; historical theatres were never designed to be neutral or unobtrusive. Among theatres built or renovated recently, there is a trend towards complexity again, a development arguably culminating in the re-building of the Globe on the Southbank, and the remodelling of the Royal Shakespeare Company's home base in Stratford-Upon-Avon. Both theatres can be characterised as having a very strong and distinctive identity. The theatre architect Michael Reardon, for example, writes: "I have noticed that designers have abandoned the ideal of 'invisibility' and are restoring historic theatres, which of course were never intended to be 'invisible'."[65] I will return to this idea of 'invisibility' of theatre spaces throughout this thesis. The question as to whether a theatre can have a 'personality' as well as an identity will be treated in chapter IV under the heading of 'Globe anthropomorphism'. The impact that neutral, 'disappearing' theatres have on performers and audiences will be explored in chapter VI, using Sadler's Wells as a case study.

65 Michael Reardon, "Sacred Space and Secular Space," in *Making Space for Theatre: British Architecture and Theatre Since 1958*, ed. J. R. Mulryne and Margaret Shewring (Stratford-upon-Avon: Mulryne and Shewring, 1995), 25.

Chapter II

Oriented Space

What counts for the orientation of the spectacle is not my body as it in fact is, as a thing in objective space, but as a system of possible actions, a virtual body with its phenomenal 'place' defined by its task and situation. My body is wherever there is something to be done.

MAURICE MERLEAU-PONTY

Buildings are planned and designed in absolute, abstract space that extends homogenously into three dimensions. It is the space of Euclidean geometry, spatial co-ordinates, and architectural plans. In the process of designing a building, architects thus assume an all-seeing perspective that allows them to view the imagined space from above or below, sliced into sections or cut open diagonally. Once built, however, this abstract form of seeing is no longer available to the earthbound perceiving body. Instead, buildings become lived space. Lived space, in its turn, is not accessible by any means other than direct experience – being in it, or, as Merleau-Ponty would have it, being *of* space[1].

Juhani Pallasmaa, an architect who has written about the need for architecture to develop, or recover, an approach to building that takes the body into account more than it currently does, describes lived space as "always a combination of external space and inner mental space, actuality and mental projection. In experiencing lived space, memory and dream, fear and desire, value and meaning, fuse with the actual perception."[2] I can thus be conceptualised holistically as a person's perspective, or outlook, from a particular place at a particular moment in a particular situation and state of mind.

Epigraph:
Maurice Merleau-Ponty, *Phenomenology of Perception* (London & New York: Routledge, 2002, c1945), 291

1 "We must therefore avoid saying that our body is in space, or in time. It *inhabits* space and time." ibid., 161.

2 Juhani Pallasmaa, *The Architecture of Image: Existential Space in Cinema* (Helsinki: Rakennustieto, 2001), 18.

Both this present chapter and the next will be concerned with delineating the primary characteristics of lived space, namely that it is oriented and embodied.

The term 'orientation' can be used in several ways. In its narrower, architectural sense it describes how buildings are situated in their larger contexts, that is, how they fit into their urban or geographical environments. Through their orientation they enter into communication with the world around them, as in the example of churches traditionally facing east: Their eastward orientation establishes a relationship both with a global religious geography and, through the rising sun, a Christian view of the cosmos. More relevant for this study is the wider meaning of orientation, which includes but is not limited to the idea of directedness, or alignment. To say that a space is oriented means that it viewed from a particular perspective. The relationship between perspective and orientation is thus a reflexive one – my view of the space is my perspective, whereas what the space 'does' as a result of this perspective is its orientation.
To give an example, I can say that the space as it is experienced in everyday life has an 'up' and a 'down', and that up and down are more than simply fixed locations in space. They appear as characteristics of the space itself. Whereas absolute space knows no up, down, front, behind, left, right, near or far, lived space is organised along a system of vertical and horizontal axes that mirror those of the human body.[3] This is, of course, because the human perspective of space is inescapably conditioned by the human body and its perceptual horizons. We are vertical creatures, and our eyes are directed towards the front. When I say that I see an expanse of space 'stretching out in front of me', I am therefore describing not the space itself, but its orientation in relation to my frontal perspective.

Interestingly, it took longer for theorists to formulate the concept of lived space than it did for them to arrive at the

3 Cf. Otto Friedrich Bollnow, *Human space* (London: Hyphen, 2011, c1963), Translated by Christine Shuttleworth and Joseph Kohlmaier, 18.

abstraction that is absolute space[4]. This is surprising, because in experiential terms, lived space is naturally the primary reality. It is worth briefly tracing the circumstances of this recovery of experiential, lived space.

The End of Absolute Space

The early twentieth century saw a shift in thinking about space that reverberated across all areas of scientific and artistic endeavour. It was sparked by the appearance in 1905 of Albert Einstein‘s revolutionary Theory of Special Relativity. This postulated, among other things, that cosmic space and matter are not separate entities but different intensities of the same space-time: “Physical objects are not *in space,* but these objects are *spatially extended.* In this way the concept ‘empty space’ loses its meaning.”[5] This idea (expressed very simplistically), that bodies are computations of energy[6] – clusters of particles held together by their inherent energy but no different than the particles making up space – enabled theorists in other fields to re-think the relationships between space, time and matter. Specifically, it challenged and for the most part, laid rest to the image of space as an empty container, a void in which bodies are positioned and matter flows around. From this point on, the idea of the field became firmly established not only in physics, but also as a potentially transferable concept. This field is a field of forces, which may be best visualised when seen as a magnetic field in which small metallic arrows are put under pressure to align themselves along a certain axis, depending on the location or orientation of the magnet.

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4 Isaac Newton introduced the term in 1686 to delineate space from place, thus defining absolute space as a space of mathematical abstraction in which all points are equal.

5 Albert Einstein, *The Berlin Writings 1914-1917*, in: The Collected Papers of Albert Einstein, Vol. 6, edited by Arne J. Kox, Martin J. Klein und Robert Schulmann (Princeton: Princeton University Press 1996), 418, in: Jörg Dünne et al., eds., *Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften* (Frankfurt am Main: Suhrkamp, 2006), 40.

6 Cf. Vilém Flusser, “Räume,” in Dünne; Günzel; Doetsch; Lüdeke, *Raumtheorie*, 281: “Die Berechnungen im virtuellen Raum und im Weltraum stimmen darin überein, daß das, was wir ‘Körper’ nennen, Raffungen sind (oder, wie man gegenwärtig sagt, ‘Komputationen’). Vom Standpunkt der virtuellen Teilchen ist ein Körper eine Ballung von Teilchen, wodurch die Teilchen ‘wirklicher’ im Sinn von eben ‘körperlicher’ werden. Vom Standpunkt der Kosmologie sind Körper jene Orte im Raum, wo Energiefelder dichter werden, also etwa Täler im sich krümmenden Weltraum.”

Other disciplines followed the example of physics in declaring the end of absolute, empty space. In philosophy, for example, Ernst Cassirer reformulated the concept of space as an organising principle rather than a void, extending it to include imaginary or mythological spaces,[7] In sociology Georg Simmel postulated that the perception of space is socially conditioned, that is, determined by a society's belief systems and social practices.[8] In architecture space was for the first time thought of something material that could itself be shaped and moulded, and in art the cubists combined several aspects of space on to the canvas at the same time. The painter El Lissitzky found strong words for the sense of liberation that accompanied this re-evaluation of space and its function in art and everyday life: "We reject space as a painted coffin for our living bodies."[9] Theatre, too, was affected by this pervading sense of spatial revolution. The movements to reform the dominant architectural form of the proscenium stage (by Appia and Meyerhold among others, touched upon in the previous chapter), can be seen in this light.[10]

Most relevant for our purpose here, however, are the effects that the rejection of empty space and the introduction of the concept of the field had on psychology and phenomenology.[11] It was the idea of space as field that arguably enabled psychologists to develop the idea of space not as a void in which the person acts,

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7 Dünne et al., *Raumtheorie*, 449.

8 Ibid. 291.

9 El Lissitzky, quoted in: Claire Bishop, *Installation Art: A Critical History* (London: Tate Publishing, 2005), 80–81.

10 Christopher Baugh is insightful on these movements to reform the pictorial stage. He speaks of the different ways in which the pictorial stage was rejected in favour of new conceptions of it for example as a machine (Meyerhold), as an architectural structure (Appia and Craig), or as a shared ground for ritual (what he calls 'new atavism'). He also highlights the 'ongoing validity' of these approaches – how the same choices and 'acts of rejection' continue to be made despite this not being a reaction against a dominant aesthetic anymore. "The solutions and propositions that were created by Craig, Appia, Meyerhold and Stanislavski have not been superseded in either practical or artistic usefulness - unlike, for example, ideas and solutions of early twentieth-century physics and technology. Their work co-exists alongside later approaches and newer solutions." Christopher Baugh, *Theatre, Performance and Technology: The Development of Scenography in the Twentieth Century* (Basingstoke & New York: Palgrave Macmillan, 2005), 45.

11 At this early stage in the formation of both phenomenology and psychology as scientific and philosophical methodologies, their aims overlapped to such an extent that they cannot quite be separated. Husserl, for example, though of his theory of phenomenology as a form of descriptive psychology: "First, in its beginnings, Husserl calls [his theory of phenomenology] "descriptive psychology." Its self-conception is bound up with a reconfiguration of the field, which is rooted in basic questions about the nature of the mind. The emergence of scientific psychology contributes to these basic questions." Stephan Käufer and Anthony Chemero, *Phenomenology: An Introduction* (Cambridge & New York: Polity Press, 2015), 7.

but as something to which the person is intimately related to, entangled with and mutually dependent upon. The concept of the field is one of the most promising tools available for dealing with lived spatial experience and, in particular, orientation within such spaces. For this reason I will, in the following, introduce a key theorist of psychological field theory: Kurt Lewin (1890 – 1947). I begin with a text by him that, in my opinion, offers a striking and successful description of lived space in a very particular and extreme situation, the experience of a soldier in the First World War.

Kurt Lewin and the Directedness of the Landscape

The text "The Landscape of War"[12] (1917) was written in a field hospital by the then 27-year-old Kurt Lewin, where he was recovering from a tour of duty on the front during the First World War. It describes the perceptual reality of the landscape in war as experienced by a soldier. What makes this text so interesting in the context of my project of capturing the direct experience of space and in particular, orientation within the space, is that it conceives of the landscape not as static or fixed, but as a dynamic field of forces, in constant flux and determined by the specific situation of being at war.[13]

He begins by stating that what he is about to describe should not be regarded as the portrayal of an imaginary, or imagined, landscape, but as solidly 'real' in terms of perception: "While a formation's phenomenological properties are not significantly altered by its status as phenomenological reality or unreality, it ought to be noted that I will only give account of those formations that I have at some stage encountered as *real* landscape

12 Kurt Lewin, "Kriegslandschaft," in Dünne; Günzel; Doetsch; Lüdeke, *Raumtheorie*. Translation: Kurt Lewin and Jonathan Blower, "The Landscape of War," *Art In Translation* 1, no. 2 (2009), doi:10.2752/175613109X462672.

13 More than that: the specific situation of being at war in the sense of being in this particular war. The phenomenological landscape of a different war, certainly of a contemporary war, would be completely different. Modern warfare creates a very differently oriented perceptual field.

formations."[14] What this means in relation to the field is that one orientation of this field (by a particular situation) is as 'real' as another orientation of the field by a different situation. There is not one state that could be seen as the field's normal or 'rest' state. The two situations that create opposing orientations of the landscape in Lewin's text are the situation of war, and the situation of peace (as well as several transitional states including for example the semi-peace situation of fighting having moved on to a different area).

In peacetime, the orientation of an open piece of countryside is characterised by its unity and roundness: "*The landscape is round, without front or behind.*"[15] In war, however, this roundness disappears as the landscape splits into distinct zones and areas. Lewin writes of the experience of approaching the line of the front: "If one approaches the front zone, however, the expansion into infinity no longer applies unconditionally. The area seems to come to an end somewhere in the direction of the Front; the landscape is *bounded*."[16] The soldier gradually moving towards this sudden 'end' of the landscape, for example when returning to fighting after a period of leave from the front, experiences the landscape he is marching through as oriented:

> The landscape appears [...] to be *directed*; it has a front and behind, and a front and behind that do not relate to those marching, but firmly pertain to the area itself. And this is not a case of being aware of the growing danger and ultimate inaccessibility ahead, but of a change in the landscape itself. Up 'ahead' the area seems to have an end, which is followed by a 'nothingness'.[17]

Lewin then goes on to describe various characteristics of this bounded and directed landscape, such as its danger points and zones, the pathways that run through it, and the ways in which such zones and orientations affect the structures and objects that lie within them. The situation of war transforms such structures into 'combat formations' ("Gefechtsgebilde") and objects into

14 Ibid., 201.
15 Ibid., original emphasis.
16 Ibid., original emphasis.
17 Ibid., 202.

‘things of combat’, which are ontologically different to the same objects in peacetime: “The difference between these ‘things of combat’ and the corresponding peacetime things is profound enough to influence decisively one’s behavior towards them.”[18] An example of this would be a destroyed building, which, in the situation of active fighting ceases to be a house and instead becomes a place of cover for the soldier. Only when fighting has ceased or moved on does the place of cover (previously experienced only in terms of degrees of its adequacy as a place of cover) return to being a destroyed house, with all its attendant unpleasantness. A similar thing applies to spaces and elements of the landscape itself. For example, Lewin describes how, once a position has been won, the area that the combat position previously occupied suddenly becomes part of the landscape again:

> When a position is broken up in mobile warfare, not only is the boundary of the danger zone moved and its character abolished, but rather: one notices with astonishment that where there had just been a position there is now only countryside. [...] Without having experienced any actual change, the place of combat things has suddenly been occupied by a field, a meadow, or the like, which now exhibit landscape-like associations with the surrounding fields and forests.[19]

Objects or structures left over from such an abandoned combat position, suddenly seen outside their natural field of orientation, seem to make no sense in the landscape. They have no meaningful relation to the landscape as it is oriented in peacetime.

There are several terms and concepts in Lewin’s text that have the potential to be powerful tools of analysis in the context of theatrical space, such as for example the attribution of ‘directional power’ to objects or structures. Before applying ideas from this text to theatre architecture, however, I want to explore Lewin’s description of the field not just in the context of war, but also in the less extreme context of his later psychological writings. The text Kriegslandschaft is not a singular phenomenon – it is embedded in

18 Ibid., 205.
19 Ibid., 207.

a school of thought, and I will turn to this school of thought and its most important exponents below.

Field Theory and Environmental Psychology

After returning from the war, Lewin joined the psychology department at the University of Berlin and, some years later, became associated with the Berlin School of Gestalt Psychologists, which also included Wolfgang Köhler, Kurt Koffka, and Max Wertheimer. One of the main contributions of the Gestalt theorists was the insight that perception happens in wholes: we perceive a totality, instead of constructing the totality out of building blocks of individual sense impressions, and this totality is also a separate entity to the sum of its parts.[20] Applied to the example in Lewin's text, this would mean that both the landscapes of war and the landscapes of peace are experienced as totalities which are separate from their components (such as trees, meadows, sounds, sense of danger…) and hence perceived as two separate, or distinct, localities, even though the parts of which they are composed are very similar.

However it is not primarily as a Gestalt psychologist that Lewin gained influence. In 1933 he had to leave Germany and immigrated to the United States, where he became an influential figure in the field of practical psychology. He developed a theory of motivation that utilised the concept of the field – imported from physics – transferring it to describe the relationship between a person and the environment surrounding him or her and even going so far as to be able to express this relationship in a 'formula'. Put simply, he states that a person's behaviour can be described as the sum of the person and his or her environment. Conversely this means that a person's behaviour ("B") cannot be interpreted independently from the environment that he or she is situated in. Lewin writes:

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20 Cf. Kurt Koffka, "Perception: An introduction to the Gestalt-theorie: First published in Psychological Bulletin, 19, 531-585," http://psychclassics.yorku.ca/Koffka/Perception/perception.htm.

> In psychology one can begin to describe the whole situation by roughly distinguishing the person (P) and his environment (E). Every psychological event depends upon the state of the person and at the same time on the environment, although their relative importance is different in different cases. Thus we can state our formula B = (S) for every psychological event as B = (PE). The experimental work of recent years shows more and more this twofold relationship in all fields of psychology. Every scientific psychology must take into account whole situations, i.e., the state of both person and environment.[21]

The result of this kind of thinking is that behaviour that what might, in a different psychological understanding, be attributed to a person's character or personality, is here conceptualised as a complex intertwining of person and environment.

The environmental factors that Lewin takes into account as being relevant in this system are varied, comprising of material as well as a great range of immaterial and dynamic factors such as ambitions, beliefs and social constraints. His own pragmatic formulation is: "*What is real is what has effects*."[22] Read from the perspective of theatre scholarship or of art and literature in general, this is an evocative and liberating statement, but for Lewin as a psychologist it posed a methodological problem: How to account for, describe and document such a multiplicity of immaterial and immeasurable influences? Indeed, he writes that in the absence of an adequate scientific form of recording and depicting this complex system, the method of representation that captures the field of lived space most accurately is that of literary description:

> The most complete and concrete descriptions of situations are those which writers such as Dostoevski have given us. These descriptions have attained what the statistical characterizations have most notably lacked, namely, a picture that shows in a definite way how the different facts in an individual's environment are related to each other and to the individual himself.[23]

Artistic representations of lived space, in literature but also for example in painting, can thus become a resource to be used productively in science or philosophy, in the same way as artists

21 Kurt Lewin, *Principles of Topological Psychology* (York, PA: The Maple Press Company, 1936), Translated by Fritz Heider and Grace M. Heider, 13.
22 Ibid., 19.
23 Ibid., 12–13.

have always and will continue to borrow insights from other fields of knowledge (including psychology, anatomy, sociology and many more). A further example of such borrowing is Merleau-Ponty's essay "Cézanne's Doubt", in which he interprets Cezanne's paintings as true illustrations of what direct visual experience looks like; an insight that feeds into his own theory of perception.[24]

Lewin, however, naturally did also develop scientific methods for representing the field of lived experience. The most relevant of these for our purposes here is the concept of 'valences'. Valences, a translation of Lewin's original term, "Aufforderungscharaktere", are experienced as those qualities prevalent in the field or environment in which the person is situated, which invite or prohibit action: "Valences are opportunities to engage in actions"[25] and are perceived as forms that "are a function of the person's state and the environment's characteristics."[26] In terms of field theory, valences can be described as vectors running between the person and specific elements of the environment, either in a 'positive' direction and thus implying an invitation, or negatively, forming a barrier. For example, a forbidden door would have a negative valence for a timid person, but a positive valence for an incurably curious person. The door's respective vectors should be visualised as running in opposite directions for each person.

Lewin's theory of valences and vectors in the field was taken up and developed by an American psychologist working in the field of environmental psychology, James, J. Gibson. Like Lewin, Gibson was influenced by the Gestalt psychologists, and, although a scientist and not a philosopher, his research does come close, in some areas, to Merleau-Ponty's phenomenology of perception.[27] The reason why I introduce Gibson here is that he uses the field to

24 M. Merleau-Ponty, *Sense and Non-Sense* (Evanston, IL: Northwestern University Press, 1964), 9–25.

25 Käufer and Chemero, *Phenomenology*, 88.

26 Ibid.

27 Cf. ibid., 145: "Unlike a great deal of philosophy, the ideas of phenomenologists are sufficiently specific and consequential to be explored scientifically, and they have been explored, and often confirmed - scientifically. [...] Like Merleau-Ponty, Gibson saw himself as developing a new framework for understanding perception from the ground up, and he struggled against the fundamental problems he saw in Kant's distinction between concepts and intuitions. That said, Gibson's ideas do not come from Merleau-Ponty or other phenomenologists, but from decades of applying the functionalist tradition in psychology to our perceptual experience."

get to grips with the *perception* of space, whereas Lewin, as we have seen, uses it mainly to explain behaviour. Rethinking the concept of vectors and valences, Gibson comes to the conclusion that they are not merely conceptual tools for perceiving the intertwining of a person and his or her environment, but in fact objective and permanent qualities of the environment itself. He calls these qualities "affordances"[28] to express how they 'offer' something to the animal or person within that environment. This means that an environment has countless latent affordances that are activated, so to speak, by the needs and abilities of the creature within it. The affordances of the field themselves, however, are constant and do not change depending on the state of mind or situation of the person in the field. He writes: "The gestalt psychologists recognized that the meaning or the value of a thing seems to be perceived just as immediately as its color."[29] This leads him to claim that the perception of a thing is influenced, even determined, by its value in terms of the action it invites or prohibits. As we only learn to know what a thing is by using it, that is, by interacting with it, this potential for action continues to colour our perception of it. In other words: we can only recognise a thing if we know what to do with it. Gibson's concept of affordances expresses this: "The concept of affordance is derived from these concepts of valence, invitation, and demand but with a crucial difference. The affordance of something does not *change* as the need of the observer changes."[30]

The opportunities for action are always there, even if momentarily nobody is present to act on them or take them up. In terms of perception, a mountain is perceived as climbable and can exude an invitation to climb it – even if I do not want to climb it at that very moment. I have said before that Gibson comes close to Merleau-Ponty's phenomenology of perception in some areas,

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28 James Jerome Gibson, *The Ecological Approach to Visual Perception* (Hillsdale, NJ: Lawrence Erlbaum Associates, 1986, c1979), 127: "The *affordances* of the environment are what if *offers* the animal, what it *provides* or *furnishes*, either for good or ill. The verb *afford* is found in the dictionary, but the noun *affordance* is not. I have made it up."

29 Ibid., 138–39.

30 Ibid.

and here is an example:

> Even what are called obstacles to freedom are in reality deployed by it. An unclimbable rock face, a large or small, vertical or slanting rock, are things which have no meaning for anyone who is not intending to surmount them, for a subject whose projects do not carve out such determinate forms from the uniform mass of the *in itself* and cause an orientated world to arise - a significance in things. There is, then ultimately nothing that can set limits to freedom, except those limits that freedom itself has set in the form of its various initiatives, so that the subject has simply the external world that he gives himself.[31]

To sum up, lived space – the space that we are analysing here in relation to theatre – can be thought of as a dynamic field of vectors offering, guiding or opposing actions. Perception, in turn, can be characterised as patterns of interaction with this field. We form a system with our environment and our psychological make-up is determined by this relationship. The field is dynamic, that is, each part depends on all others. Any change in any one part of the field will influence all the others. The field can be visualised as a 'force field' around a person – the sum of all possible actions and movements. In this way it then becomes clear that this force field has to take into account the body as well as the environment: space is always already oriented, both from the room or architecture inwards and from the body outwards. At the same time, there is a similar force field around all objects and architectural elements; they, too, are surrounded by vectors and lines of action and inhibition.

The final term to introduce here was introduced by Lewin to describe the pathways running through such complex field full of vectors and valences: He describes the process of moving through such a dense field as 'pathfinding' and asserts that the resulting field is therefore "hodological", or path-dependent, space.[32] One of the most important characteristics of the field is thus that there are pathways running through it. The architectural phenomenologist Christian Norberg-Schulz suggests the phrase, 'space of possible

31 Merleau-Ponty, *Phenomenology*, 507.
32 "The distinguished path may for example be interpreted as the 'cheapest', the 'fastest', the 'least unpleasant' or the 'safest' path.", quoted in: Bollnow, *Human*, 185.

movement' as a translation for Lewin's term and writes: "Rather than straight lines, hodological space contains 'preferred paths' which represent a compromise between several domains such as short distance', 'security', 'minimal work', 'maximum experience' etc."[33]. In relation to the space of the stage as hodological space we can say: it matters how you get to a certain position. Just as Lewin describes the various pathways through a field as for example the shortest, the safest, the cheapest, the loneliest or the prettiest, there are pathways through the field of the stage that can be described as the most powerful, the most or the least confrontational, the most secretive, the funniest, and so on.

The Stage as a Field

In his text on "The Landscape of War", Lewin talks about the 'directional power'[34] of objects in a landscape. It is a term that can also be applied productively to analyse the effects of objects or scenographic elements on the stage. They, too, can result in the stage becoming a directed space, for example when a screen is angled in such a way as to create a hidden corner harbouring a secret. Even a piece of furniture such as a chair or a bed can exert directionality during a scene by organising people or flows of movement around it.

It is unfortunate that the most evocative text on spatial orientation, offering the most interesting and versatile concepts, is about such a brutal and deadly topic as the First World War. I do not want to trivialise the experiences and impressions described by Lewin, but I cannot help seeing the parallels to my own field, particularly as such models have not been provided anywhere else with the same clarity. If I can make one more direct comparison before leaving the text in peace and moving on to more general,

33 Christian Norberg-Schulz, *Existence, Space & Architecture* (London: Studio Vista, 1971), 22. The text he is referring to is Kurt Lewin's "Der Richtungsbegriff in der Psychologie. Der spezielle und allgemeine hodologische Raum", *Psychologische Forschung* 19, 1934.

34 Lewin and Blower, "Landscape", 207. In the German original the phrase is "ihre richtende Kraft", Kurt Lewin, "Kriegslandschaft," in Dünne; Günzel; Doetsch; Lüdeke, *Raumtheorie*, 138.

less extreme theoretical framework: Lewin describes the spatial experience of a soldier moving towards the front through a series of zones, denoting increasing degrees of danger. If, without too much disrespect, the two distinct landscapes of war and peace could be compared to a theatre building's two states of 'performance mode' on the one hand, and 'rehearsal' or 'not-performance mode' on the other, the concept of 'danger zones' appearing around the stage as a radiating centre of energy is certainly an experiential reality. The spaces on the boundaries or outskirts of this central field of the stage are zone of approach: Warning lights. Doors that must remain closed at all times. Zones of darkness and silence to avoid bleeding of light or sound. Nervous energy. Blind spots, that enable you to stand hidden while watching what is happening on stage in 'safety'. Lines not to be crossed. Front of house spaces could, in fact, be described in similar terms, if less charged: Ushers with flashlights. Also a blocking out of sound and light. A shift of orientation towards the front/centre stage as the lights go down.

The empty stage, like any architectural space, can be described as a static field, with directions, vectors, pathways etc defined by architectural elements. Once this static field is inhabited by a person or body, the field becomes a dynamic field, both for the spectator, and even more for the person inhabiting the field. It is not uncommon in theatre scholarship for the space of the stage to be referred to as a field, although usually without invoking the technical characteristics of field theory. Thea Brejzek, for example, in her contribution to Arnold Aronson's publication reflecting the 2011 Praque Quadrennial, writes: "Elsewhere, I have called the acts and processes of the staging of space, the making of space, and of scenography *the production of an expanded field of presence* and it is within this expanded field that the construction of meanings takes place."[35] An earlier, untranslated, example of the same term being applied to the stage is recounted by Jan Mukařovský in his 1977 essay "Structure, Sign and Function": He quotes a section

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35 Thea Brejzek, "Scenography or: Making Space," in *The Disappearing Stage: Reflections on the 2011 Prague Quadrennial*, ed. Arnold Aronson (Prague: Prospero, Arts and Theatre Institute, 2012), 17, original emphasis.

from a book by his Czech compatriot Otakar Zich, who calls the stage a force field whose lines of power can be made visible in performance:

> Dramatic space is not identical with the stage or with three-dimensional space in general, for it originates in time through the gradual changes in the spatial relations between the actor and the stage and among the actors themselves. [...] This is why Zich speaks about stage space as a set of forces: 'The characters represented by the actors are certain centers of power of various intensity according to the significance of the characters in the given dramatic situation; their dramatic relations provided by this situation are then like lines of force which unite and disunite among the characters. The dramatic stage, filled out by a net of these lines of force and by the motor paths caused by them, is a kind of power field, changeable in its shape and in the force of its individual components.'[36]

The most visually striking illustration of such a force field and the net of lines that run through it was created by Oskar Schlemmer during his time at the Bauhaus. Two of his drawings from the essay "Man and Art Figure"[37] show on the one hand how a person in the field is affected by the architectural shape of the space, and on the other how the space is affected by the presence of the person within it. The figure in the first diagram is fixed by the geometric lines, planes and angles given by the cubic stage space: caught in a strict system of vertical, horizontal and diagonal axes, the figure seems to become part of the architecture itself. It is situated in a geometry of perspectives that suggest power, seeing and being seen.

36 Jan Mukařovský, *Structure, Sign, and Function: Selected Essays* (New Haven: Yale University Press, 1978, c1977), 213–15. The text he is quoting from is Otakar Zich's *Estetika dramatického umění* (The Aesthetic of Dramatic Art) of 1931, a founding document in Czech theatre studies.

37 Oskar Schlemmer, "Man and Art Figure," in *The Theater of the Bauhaus*, ed. Oskar Schlemmer et al. (Baltimore: Johns Hopkins University Press, 1996, c1960); First published in 1925 as "Mensch und Kunstfigur.".

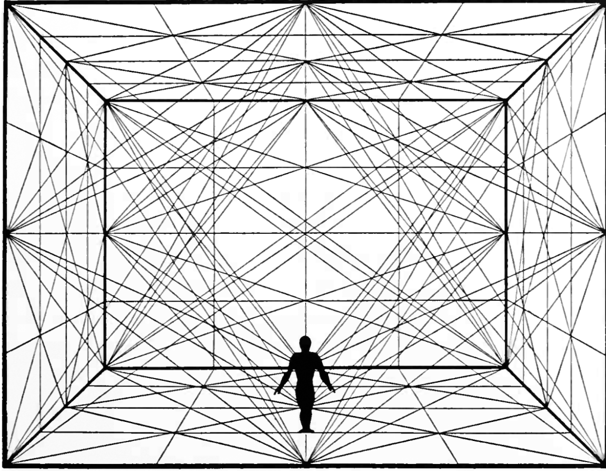

Fig. 3

Schlemmer, describing his drawing, emphasises the inherent opposition between human and geometric space, but also concedes that the geometries and proportions of this abstract space do correspond in some way to the proportions of the human body:

> Man, the human organism, stands in the cubical, abstract space of the stage. Man and Space. Each has different laws of order. Whose shall prevail? [...] The laws of cubical space are the invisible linear network of planimetric and stereometric relationships. (See above sketch.) This mathematic corresponds to the inherent mathematic of the human body and creates its balance by means of movements, which by their very nature are determined *mechanically and rationally.*[38]

The second sketch shows the lines of the field as emanating from the figure itself, continuing its curves and ellipses into infinity and creating a field of implied movement and dance. Human physicality and movement is inscribed into a (theoretically) neutral field of space.[39]

38 Oskar Schlemmer et al., eds., *The Theater of the Bauhaus* (Baltimore: Johns Hopkins University Press, 1996, c1960), 22–23.

39 Cf. Margret Dietrich, "Der Mensch und der szenische Raum," *Maske und Kothurn* 11, no. 3 (1965): 202, doi:10.7767/muk.1965.11.3.193. Dietrich here stresses that Schlemmer's diagrams are theoretical diagrams, depicting the extreme poles of an idea. In reality both are always simultaneously and

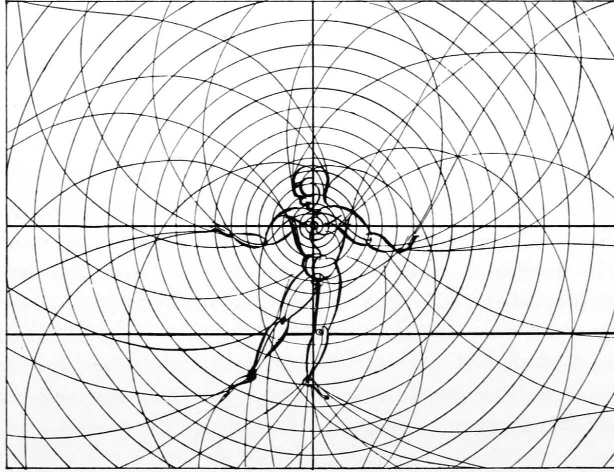

Fig. 4

Schlemmer, himself a choreographer, writes about this dancing figure:

> The laws of organic man, on the other hand, reside in the invisible functions of his inner self: heartbeat, circulation, respiration, the activities of the brain and nervous system. If these are to be the determining factors, then their center is the human being, whose movements and emanations create an imaginary space. [...] *Invisibly involved with all these laws is man as Dancer* (Tänzermensch). *He obeys the law of the body as well as the law of space; he follows his sense of himself as well as his sense of embracing space.*[40]

The space is here conceived by Schlemmer as a potentiality of the body, or for the body to move. Marcia Feuerstein writes that, "Architectural space for Schlemmer was less a container for the body than an aspect of the body transformed. The entirety of Schlemmer's oevre speaks of space filled with, through, and as body."[41] Part of his and his students' theatrical experiments was to

complementarily present: "[Es sind] freilich zwei *theoretische* Diagramme, die theoretische Grenzfälle zeichnen – in der Wirklichkeit unmaßgeblich; denn die Realität auf der Bühne aktiviert beide Kraftfeldkapazitäen und läßt sie innig einander durchdringen und ergänzen."

40 Schlemmer et al., *Bauhaus*, 25, original emphasis.

41 Marcia F. Feuerstein, "Body and Building inside the Bauhaus's Darker Side: On Oscar Schlemmer," in *Body and Building: Essays on the Changing Relation of Body and Architecture*, ed. George Dodds, Robert

divide up the stage space into linear sections defined by axes and diagonals in order understand how they affect the performer's body situated within them.[42] Schlemmer describes how, by means of wires, they created in the cubic volume of the stage space a model of such a field to test its effects: "By means of taut wires which join the corners of this cubical space, we obtain its mid-point, while the diagonal lines divide it stereometrically. By adding as many such aerials as we wish, we can create a spatial-linear web which will have a decisive influence on the man who moves about within it."[43]

In what follows, I want to imagine how theatrical and spatial experimentation such as that undertaken by Schlemmer and his students might be developed further, and what kind of insights might result from it. I will attempt to describe examples of the field properties of the stage, and of the affordances and orientations it offers to performers and spectators. But first I want to mention an alternative interpretation of the stage as field that has been proposed by a number of theatre scholars: Briefly, this is the orientation of the fictional world of the stage, that is, the idea that the situation or world in which the dramatic characters find themselves forms a social field with its own orientations. In realistic or naturalistic styles of theatre, particularly plays or productions that aspire to the status of milieu studies, the production's aim is often to make visible by scenographic or directorial choices the social situation of the dramatic character, exemplifying power structures between characters, force fields of attraction, or even making obvious larger societal patterns as they affect the protagonists. Some of the best analysis of this kind is by Stanton Garner in relation to plays by Pinter and Beckett, delineating the hierarchical and contested habitational field in which the charac-

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Tavernor and Joseph Rykwert (Cambridge, MA: MIT Press, 2002), 229.

42 These spatial experiments at the Bauhaus, at least in Schlemmer's class, were concerned primarily with the space of the stage (a fairly traditional proscenium arch stage at that), leaving aside the larger structure of the building. This is perhaps surprising given the status and priority of architecture at the Bauhaus school, and particularly the presence of the visionary theatre architect Walter Gropius.

43 Schlemmer et al., *Bauhaus*, 92. The translator here omits Schlemmer's original description of the performer within this web becoming a "raumbehextes Wesen", a 'being bewitched by space'. Cf. Oskar Schlemmer, "Die Bauhausbühne: Erstdruck: Das Werk. Schweizer Monatsschrift für Architektur, Kunstgewerbe, Freie Kunst 15 (1928) H. 1. S. 8-13," in *Texte zur Theorie des Theaters*, ed. Klaus Lazarowicz and Christopher Balme (Stuttgart: Reclam, 1991), 446 for the German original.

ters of, for example Pinter's *The Caretaker* are caught up in.[44]

My argument, however, is that the field of the stage exists not only in terms of a fictional situation, but also abstractly and performatively, that is, as the concrete situation of the performer on stage. The stage itself as an architectural space, even without a fictional identity of a certain imaginary 'place', is already a coherent field of movement with an orientation and a range of affordances: For example, there are the wings, openings at the side that offer a promise of something appearing, possibly doors, a far-near opposition defined by the upstage-downstage dichotomy, diagonals offering even further distances, and a central spot or area that already vibrates with importance, seemingly calling out to be occupied.

Jacques Lecoq, in his influential book about the methods used in his school of physical theatre, describes how points for entrances and exits seem to 'appear' to performers: a performer can 'feel' or know where to enter from and where to position him- or herself in order for the stage appear balanced. The exercise used for practicing this at the Lecoq schools is called 'a balanced stage': "It consists of a game of balancing or unbalancing the stage by moving the actors around."[45] A single actor in the central area of the stage is in balance. When he or she moves away from that central area, it becomes unbalanced. A second actor can then enter and position him- or herself so that it is re-balanced. And so on, with more and more actors entering or some leaving:

> Balancing the stage demands a very high level of concentration; the exercise cannot be sustained for more than an hour at a time. Numerous variants can be brought in, with different playing styles going from the most everyday realism to masked transformations. Certain deviations always attract my attention: 'the person who leads in someone else's place'; 'the person who robs someone else of his entrance'; 'the person who believes, mistakenly, that he is in the right place'; the person who won't give up his place'; 'the person who has no sense of time passing'; 'the person who hesitates and

44 Stanton B. Garner, *Bodied Spaces: Phenomenology and Performance in Contemporary Drama* (Ithaca, NY & London: Cornell University Press, 1994), 110ff.

45 Jacques Lecoq, *The Moving Body: Teaching Creative Theatre*, with the assistance of Jean-Gabriel Carasso, and Jean-Claude Lallias (London: Methuen Drama, 2009, c2000), Translated by David Bradby, 132–33.

> finds his place is taken'; 'the person who comes on stage when there is no place for him', etc. Each of these deviations produces a small disturbance of the balance and upsets the game.[46]

Note that none of these occupations of the field of the stage yet imply a concrete narrative situation. It is easy to see, therefore, that a similar principle applies to abstract dance. The choreographer Anne Teresa de Keersmaeker of the dance company ROSAS confirms this when she speaks of dancers who have an intuitive understanding of how to enter and leave a space, as well as of the problems that arise for dancers who do not intuit the 'needs' of the space in the same way:

> During that one second of entering or exiting, you can read most clearly how the dancers relate to the action on the stage. There, you can feel the clarity of confusion in their bodies and also in their heads. Possibly even more so when they exit: how do you leave behind the space you have just been occupying? Do you close it, or do you leave it open? How do you relate to the people who get left behind in the space? Either way, it cannot be done unconsciously. You have to think about it, leaving nothing to chance, this counts even more for an exit that for an entrance. It also requires a lot of 'maintenance work' – it's the first thing that becomes sloppy or slack in a production.[47]

Once a stage is populated by performers, the process of 'balancing' and 'unbalancing' the field continues. Garner talks about the "perceptual magnetism of the stage center, and the secondary attraction of the stage edges that border this center"[48], and he argues that objects or bodies located off-centre, not in these two poles, create a field of "strong visual instability"[49]. The context for Garner is the inherent spatial dramaturgy of Beckett's plays, but the point he makes is transferable. Visual instability and the experience of 'magnetism' is employed by many directors; in narrative terms it can be used to depict power structures as well as the destabilising of power structures (many of Shakespeare's plays, to give a classic example, contain scenes featuring traitors stalking

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46 Ibid., 136.
47 Anne T. de Keersmaeker, "Between Heaven and Earth: An Interview," in *Theaterschrift II: The Written Space / Der Geschriebene Raum*, ed. Marianne van Kerkhoven (Brussels: Kaaitheater, 1992), 184–86.
48 Garner, *Bodied*, 77.
49 Ibid.

the periphery of a display of established power, see for example Richard III). In terms of meaning, however, this principle is not restricted to symbolic illustrations of fictional realities. The field created by moving bodies, with its areas of proximity, distance and magnetism, is in itself already meaningful, as a simple experiment can show: Observed during a workshop for emerging choreographers[50], the experiment involves a group of people (actors, dancers, or choreographers), each of which is asked to make up a short sequence of movements, gestures or basic actions. These sequences are then performed to the group, not one after the other, but staggered, so that two performers are sharing the space at any one moment, as in a relay. When one person finishes their sequence and leaves the space, another enters and begins, joining the person still in the space. Once everybody has performed, the group – who have of course been watching each other – describe and discuss what they have seen.

One of the key observations emerging from this discussion is the dominant impression that what happens in the space, although devised in isolation, becomes associated and appears linked, even sometimes causally so – ‘person B does something because of an impulse received by person A’. Knowing that this is not in fact possible, as no prior communication between the two performers sharing the space has taken place, does not affect this strong impression. The experiment shows how proximity creates areas of magnetism: Both in time (‘because one thing happens after another, you think it happens because of it’) and in space (‘because two people are close to each other, they themselves as well as their actions appear to be linked’), proximity creates areas of magnetism, of attraction. In terms of the field, this phenomenon could be described as a making-visible of forces of connection.

This magnetism, or ‘belonging together’ can also be interpreted in terms of Gibson’s affordances: To those watching the scene, the

50 This was the “Sadler’s Wells Summer University”, a course led by choreographer and author Jonathan Burrows and held at Sadler’s Wells for two weeks each summer between 2011 and 2014 for the same group of fifteen emerging choreographers. I attended sessions intermittently as an outside observer.

presence of the respective other person in the field appears naturally as an affordance for the first person in the field. Not only the presence of that person, but also each of their movements and actions are affordances again. Each gesture is perceived as charged with potentials for response and action; in this sense its affordances can also be described as possible points of contact. Phenomenological theorists of perception would argue that we are incapable of perceiving anything without also seeing these potentials for action it offers.[51] Imagining all these points of contacts and potentials for action should make it obvious how dense such a field of affordances is – both in everyday life and on stage.

The Stage-Auditorium System as a Field

"In the second place, its *orientation* or aspect. The little cube is open on the spectator's side. It faces him. It exerts a force over him, a dynamic force in a horizontal plane pointing like an arrow into the hall."[52] Etienne Souriau's classic 1952 essay on theatre architecture sets up a dichotomy between the proscenium arch space – the 'cube' described in the above quote – and the amphitheatre or thrust stage model, where the stage sits in the centre of the audience crowd: "No stage, no hall, no limits. Instead of cutting out a predetermined fragment in the world that is going to be set up, one seeks out its dynamic center, its beating heart, the spot where the action is emotionally at its keenest and most exalted. This center is permitted to iradicate its force freely and without limits."[53]

What is very clear from these two descriptions is that the two architectural (arche)types of theatre spaces are oriented in very different ways. It therefore makes a lot of sense to expand the idea of the theatre as a field of orientation to encompass the entire

51 Cf. Maaike Bleeker, Jon F. Sherman and Eirini Nedelkopoulou, eds., *Performance and Phenomenology: Traditions and Transformations* (New York: Routledge, 2015), 8: "Phenomenology considers our experience and any understanding of it to be located in actions that acquire meaning through repetition, and can thus be said to imagine a world that is fundamentally performative. The world must be *done* in order to be experienced."

52 Etienne Souriau, "The Cube and the Sphere," *Educational Theatre Journal* 4, no. 1 (1952): 13, doi:10.2307/3204036, original emphasis.

53 Ibid.

stage-auditorium system, particularly when viewed from the perspective of a spectator. One of the basic requisites, as mentioned earlier on, of describing lived space or the space as it appears in a phenomenological way, is to be true to the perspective one is writing from. Garner confirms this when he writes that the phenomenological orientation of theatre space depends on the embodied perspective of the spectator: "The stage and its elements are now situated in terms of such variables as frontality, angle, and depth; to the extent that I allow myself to inhabit the point of actual perception, theatrical vision is now implicated in [...] the fact of my embodiedness."[54] The fact of a spectator's embodiedness necessarily includes factors such as his or her position in relation to the stage, the question of sightlines and perspective, opportunities for movement or interaction, comfort or discomfort, sitting or standing, light or darkness, and many others. Arguably the orientations of this extended field, encompassing the actual space that is inhabited by the spectator as well as that of the stage, are even more strongly felt by those watching than those of the field of the stage alone – they are, in any case, what is experienced initially, before the field of the stage in performance is even activated.

Considering the layout of the auditorium as an orientational field, we can identify its characteristics in terms of affordance and pathways: Real or implicit barriers separating stage from auditorium, prohibitions and limitations in terms of movement (– what, for example, is stopping me from walking on to the stage?), are examples of negative affordances in the field. This point is not, however, entirely straightforward. This is because while in terms of orientation the proscenium stage is with the auditorium so as to 'afford' perfect visual access, it is equally positioned in such a way as to prohibit physical access.

Part of this constellation for spectators is the fact of 'fixedness'; the situation of being immobile (more or less) in front of a place of disclosure that gives affordances for viewing but not moving.

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54 Garner, *Bodied*, 46.

Audiences in a proscenium arch space in particular are fixed in a position of frontality. The architectural theorist Jonathan Leatherbarrow offers a view of the frontal perspective of an architectural structure that is helpful in this context: "Frontality is a special condition in architecture. Obliquity, by contrast, is the norm. The settings we inhabit are always excessive and deficient, they infiltrate (and prejudice) our sense of the locations for qualities they require but do not possess."[55] What he is implying is that in our usual interactions with architecture, we are able to move in and around the structure, and so learn to interpret it in relation to movement and touch, thus implicitly completing the 'picture' we see of the building with information that is missing from this visual picture itself. Frontality in the theatre is thus a condition or orientation that separates the experience of sitting in a proscenium arch theatre from everyday experience.

What is the effect of such fixedness in a situation of frontality? Importantly for the transformational potentials of the stage space, it gives a sense of unreality to whatever happens on stage, because it is not verifiable by other sense organs. We cannot go up and touch the objects we see on stage to check if they really are what they seem. The implications of this are that the sense of depth on stage is more manipulable than it is in real life, because many of the mechanisms available to us in ordinary perception are switched off due to this position of frontality and fixedness. The illusion of depth and distance can therefore be simulated on stage by various means, and because of the orientation of the rest of the auditorium, such illusions are often remarkably convincing. Stage-auditorium systems characterised by frontally positioned audiences and the presence of a proscenium arch – a separation of stage and auditorium – thus prohibit certain perceptual processes of depth perception, thereby masking some of their true spatial properties. Viewed much like a screen, they are able to evoke for example supernatural phenomena (such as ghosts, visions or flashbacks) by playing with

55 David Leatherbarrow, *Architecture Oriented Otherwise* (New York: Princeton Architectural Press, 2009), 267.

the stage's depth.

But not all theatre buildings are shaped by orientations of frontality and fixedness. As Souriau so evocatively describes, the other archetypal shape of the stage-auditorium system – the sphere – is characterised by a strong central focal point. How does this influence the field as inhabited by the audience? Seeing faces instead of backs of heads, sitting at an angle to the stage rather than directly opposite it, maybe hanging from high up on the wall and looking down on a large volume of inhabited space, a teeming mass of which I am an integral part, straining to see what is happening, above me, below me, or around me... In a circular or semi-circular amphitheatre, with the centre rather than the front being the focus, the orientations of the field are very different. Opportunities for watching other parts of the room rather than the stage alone can be interpreted as positive affordances in terms of interaction and freedom of movement (even if this only restricted to the freedom of the gaze). It is worth noting that this dynamic is created primarily through focus, that is, focus on a central point, rather than by the shape of the architectural enclosure. The previously quoted experiential study on the psychological and physiological effects of different types of theatre architecture on audience members (undertaken in the mid-1970s) goes into some detail on this. Rikard Küller writes:

> Enclosedness implies the sense of enclosure - the feeling of being in a room. [...] It is, however, a mistake to believe that the walls and ceiling completely decide the degree of experienced enclosure. They are not even necessary for its appearance. Place yourself on a large stone in a field and let all the neighbourhood children seat themselves around you. Read a story aloud. You now find yourself in a room where the stone in the centre makes up the central point and its boundaries are decided by how many children live in the neighbourhood. When evening nears you light a small fire next to the stone and as dusk approaches the feeling of enclosure increases. The crucial thing apparently is not walls nor ceiling, but the presence of a focal point and a feeling of togetherness. We will stipulate that in the theatre hall, only one focal point must be present at any given moment. Whenever this condition is fulfilled we will be able to speak of o n e room.[56]

56 Rikard Küller, "Psycho-Physiological Conditions in Theatre Construction," in *Theatre Space: 8. World Congress, Munich, 18 - 25 September 1977*, ed. James F. Arnott (Munich: Prestel, 1977), 167.

There exist many productions in non-theatre spaces, that illustrate this principle, and that could be productively analysed in terms of their spatial dynamics using the concept of the field.

Having so far concentrated on the situation of the spectator in relation to the field of the stage-auditorium system, I conclude by turning to the situation of the performer. For it is the performer, in such types of theatre buildings characterised by a central focal point, who is standing (and operating) in this point. The difference between the two types could be described thus: Frontally oriented proscenium arch spaces tend to draw the audience into their world, while centrally oriented spaces seem to propel the performer standing on stage outwards into the auditorium.[57] David Taylor, who documented the restoration process of the only surviving (and still working) Regency playhouse in Britain, Theatre Royal at Bury St Edmunds, confirms this:

> Whenever I have stood on the forestage, I have been struck by the optics of the lit auditorium, which presses towards the actor to such a degree that the backs of the dress boxes seem within touching distance. The architectural organization of the theatre collapses the space between the actor and audience, so that rendering the interplay between the two becomes not merely possible but unavoidable.[58]

The Globe Theatre, too, has an element of this, and it follows (as I have had the opportunity to observe) that the perspectives from the standpoints of performer and spectator are entirely different; they cannot, in fact, simply be described as 'the reverse' of each other. Looking out from the stage it is a totally different experience than looking the other way; they are fundamentally different in terms of their orientation. If you were asked to guess the distances from both ways, the two estimates would be very much out of synch: from the stage outwards you think you are very close, whereas looking from the auditorium to the stage it feels

57 Cf. Iain Mackintosh, *architecture, actor, and audience* (London & New York: Routledge, 1993), 155. "The magic and the balance of raked stage to tiered auditorium is best appreciated by walking downstage on the centre line in just such a house: as one moves closer to the yielding curves of a fine horseshoe-shaped auditorium one is instantly made aware of the potential for the performer to fly forward, to penetrate the awaiting audience."

58 David F. Taylor, "Discoveries and Recoveries in the Laboratory of Georgian Theatre.," *New Theatre Quarterly* 27, no. 3 (2011): 240–41.

farther away. From the perspective of the performer on stage, the entire universe of the theatre seems to be oriented towards them.

Chapter III

Embodied Space

My skin, physiologically, defines the space of my body. Within this corpus, spaces exist as internal loci or fields. Such spaces may be felt concepts, such as the anatomical positions of organs never seen, only represented in books. A space can also manifest itself as a sensation, intensity, or desire within my body that demands its presence even though it might be difficult to describe, locate, or draw a boundary around.

ELIZABETH WATERHOUSE

The body, our only means of perceiving space, is itself a space – a spatially extended object and a conscious being that occupies, moves in, and inhabits space. It can therefore (as Elizabeth Waterhouse does in the epigraph above) be imagined as a section of the more general space of the world, carved out and enclosed by a barrier of skin which delineates the boundary between its inside and the outside. This barrier is a sort of filter; it is permeable not impenetrable; it does not close off the body from the world around it but allows the space of the body to be mutable, constantly shifting, morphing, expanding and contracting. This happens in very real, material ways, through processes such as breathing, eating, or growing. It also happens in purely immaterial ways when, for example, the emotional or psychological state of a person affects how the space that his or her body takes up is subjectively experienced – how big or small, light or heavy, tight or loose, free or restricted.

Epigraph:
Elizabeth Waterhouse, "Dancing Amidst The Forsythe Company – Space, Enactment and Living Repertory," in *Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater*, ed. Gabriele Brandstetter and Birgit Wiens (Berlin: Alexander, 2010), 155–56.

The purpose of the term 'embodied space' is exactly to express this: we are not separate but intrinsically part of the space we are perceiving. It is thus a conceptual term, used, for example, by the anthropologist Setha M. Low to theorise the complicated intersection of body and space. Conceding that "researchers need theoretical formulations that provide an everyday, material grounding and an experiential, cognitive, and/or emotional understanding of the intersection and interpretation of body, space, and culture."[1], she explains why 'embodied space' is useful as just such a formulation:

> ... spatial analyses often neglect the body because of difficulties in resolving the dualism of the subjective and objective body and distinctions between the material and representational aspects of body space. The concept of embodied space, however, draws these disparate notions together, underscoring the importance of the body as a physical and biological entity, lived experience, and a center of agency, a location for speaking and acting on the world.[2]

There are several ideas here which will be explored in the course of this chapter. For now, however, it should suffice to say that the concept of embodied space is a further development of the idea which constitutes the starting point of this thesis, namely that lived space is space as experienced from an 'inside' perspective. In the previous chapter we looked at the implications of taking such an inside perspective from the point of view of visual perception. We talked about lived space in terms of perspective, which is predominantly visual: how viewing an architectural space from a particular perspective and situation (such as the situation of being an audience member, a performer, or the situation of being in the wings) orients the perceived space. We have not, so far, looked at other ways of perceiving, and being conscious of space. This chapter now does this: It shows that lived space is not only oriented but also embodied, that lived space is bodily space, that the entire body with all its sensory faculties is involved in the spatial experience of theatre, and that performers and spectators both participate in this experience.

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1 Setha M. Low, "Embodied Space(s): Anthropological Theories of Body, Space, and Culture," *Space and Culture* 6, no. 1 (2003): 10, doi:10.1177/1206331202238959.

2 Ibid.

A Note on 'Embodiment' and the Limitations of the Term

It is worth noting at this point that the term 'embodied space', or 'embodiment' in the more general sense, is not the only way of expressing the concept of consciousness being spatially extended and therefore distributed across and intertwined with the entire body. Using it as I have so far in this study implies that the term has an established, universal meaning. While it is certainly a widely used expression, there is nothing near unanimity about its use and meaning. This has partly to do with the fact that in a great variety of fields, researchers are trying, from a variety of different angles, to get to grips with the relationship between consciousness and the body. These fields range from philosophy to neuroscience and cognitive psychology all the way to theatre, dance, and performance studies, anthropology and the social sciences. Those studying embodiment do not form a field that can be described as entirely at one with itself: there are many disagreements, conflicting views on what embodiment is, means, and how it is best described. In this section, which forms a kind of 'aside' to the main argument of this chapter, I give a short description of some of the other terms in circulation, as well as the reasons for keeping to my own use of the term 'embodiment'.

Most prominent among those who reject the term 'embodiment' out of principle is the philosopher, dance scholar and phenomenologist Maxine Sheets-Johnstone.[3] She criticises those who do and in the process convincingly explains her reservations against the term. I will quote her at length, as unfortunately there is no brief way of quoting Sheets-Johnstone:

> The penchant to talk about and to explain ourselves and/or aspects of ourselves as embodied - as in "embodied connectionism" (Bechtel, 1997),

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3 Her work is interdisciplinary, ranging from dance scholarship to movement and corporeality, from the philosophy of cognitive science to evolutionary biology and ethics, while always remaining rooted in a deep concern with the body and its kinaesthetic intelligence. Cf. Maxine Sheets-Johnstone, "Taking Evolution Seriously," *American Philosophical Quarterly* 29, no. 4 (1992); Maxine Sheets-Johnstone, *The Primacy of Movement*, 2nd ed. (Amsterdam & Philadelphia: John Benjamins Pub. Co., 2011); Maxine Sheets-Johnstone, *The Corporeal Turn: An Interdisciplinary Reader* (Exeter: Imprint Academic, 2009).

> and even as in “embodied mind” (Varela, Thompson, and Rosch, 1991; Lakoff and Johnson, 1999), “embodied schema” (Johnson, 1987), “embodied agents”, “embodied schema” (Johnson, 1987), “embodied agents”, “embodied actions” (Varela, 1999), and “phenomenological embodiment” (Lakoff and Johnson, 1999) - evokes not simply the possibility of a disembodied relationship and of near or outright tautologies as in “embodied agents”, “embodied actions”, and “the embodied mind is part of the living body” (Lakoff and Johnson, 1999, p. 565), but the spectre of Cartesianism. In this sense, the term *embodied* is a lexical band-aid covering a three-hundred-fifty-year-old wound generated and kept supporating by a schizoid metaphysics. It evades the arduous and (by human lifetime standards) infinite task of clarifying and elucidating the nature of living nature from the ground up. Animate forms are the starting point of biological evolution. They are where life begins. They are where animation begins. They are where concepts begin. They are where emotions are rooted, not in something that might be termed “mental life” (e.g., Canabac, 1998, p. 184: “emotion is a mental feeling”), a “mental” that is or might be embodied in some form or other, but in animate forms to begin with. *Embodiment* deflects our attention from the task of understanding animate forms by conceptual default, by conveniently packaging beforehand something already labeled “the mental” or “mind” and something already labeled “the physical” or “body” without explaining - to paraphrase Edelman (1992, p.15) – “how ‘the package’ got there in the first place”.[4]

In this paragraph from the essay “Emotion and Movement” she forcefully argues that mind and body should never have been conceived of as separate entities and processes, and that even the word embodiment, designed to overcome the mind/body dichotomy, only serves to reinforce this dualism even further.

In defence of the term, however, it might be said that even though this dualism does not, or should not, exist,[5] it is so deeply entrenched in our cultural and social understanding of ourselves as human beings that it seems unlikely that a better understanding of the intertwining of body and mind will come about without a supporting theoretical framework. Arguably the reason why Sheets-Johnstone does not need such a term is that she is exceptionally adept at describing the bodily basis for thinking and action – more so than almost any other writer I have encountered. She does however use alternative terms such as ‘consciousness-body’[6],

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4 Ibid., 215.

5 Cf. Bruce McConachie, who speaks of “a dualism that does not exist’. Bruce A. McConachie, *Theatre & mind,* Theatre& (New York, NY: Palgrave Macmillan, 2013), 30.

6 Maxine Sheets-Johnstone, *The Phenomenology of Dance* (Philadelphia: Temple University Press, 2015,

and 'the mind-full body'[7] which could be seen as just another word for 'embodiment', albeit with a different emphasis.

Another alternative to embodiment is the word 'Leib', borrowed from German and sometimes used in philosophical texts. It comprises the sentient body, the body that feels and perceives; the lived body that we *are* rather than the body-as-object that we *have*.[8] Richard Shustermann translates 'Leib' as 'soma' and calls the philosophical theory of the aesthetics of bodily experience that he has developed 'somaesthetics'.[9] However, outside Shusterman's circle, this term is not (yet) widely used.

Embodied, lived space might also be described as 'senso-motor' space to highlight its dependence on the human perceptual and proprioceptive apparatus. This term, *sensomotorischer Raum* in German, was for example proposed by Thomas Fuchs in his phenomenological and psychological study of the relationships between body, space and personality.[10]

In theatre, Bruce McConachie points out that practitioners have long sought ways to overcome the dichotomy of mind and body, to reconcile the two (instinctively knowing that theatre needs both), and find ways of articulating this. He explains how Konstantin Stanislavsky and Jacques Lecoq, for example, developed their own terminology to describe the relationship between body and mind:

> Stanislavski knew that actors needed to bridge the mind/body divide and coined the term 'psycho-physical' to describe his approach to performance training. Other western acting teachers and theorists, including Michael Chekhov and Jacques Lecoq, have also understood the need for actors to integrate mind-full bodies with body-full minds. Such is the pull of the mind/body dualism on our language and on our ways of writing about

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c1966), 17: "Consciousness-body knows itself to be spatially present in-the-midst-of-the-world, not through a factual kinesthetic perception of its parts, but through a pre-reflective awareness of itself as a spatially present totality."

7 Quoted in: McConachie, *Theatre*, 31.

8 The Leib/Körper distinction was originally formulated by Helmuth Plessner in 1928, and the term 'Leib' remains at the core of discourses of embodiment in German.

9 Richard Shusterman, *Thinking through the Body: Essays in Somaesthetics* (Cambridge & New York: Cambridge University Press, 2012).

10 Thomas Fuchs, *Leib, Raum, Person: Entwurf einer phänomenologischen Anthropologie* (Stuttgart: Klett-Cotta, 2000), 151: "[...] den von leiblichen Richtungen durchzogenen und strukturierten Richtungsraum oder sensomotorischen Raum."

> acting, however, that even these practitioner-theorists have not always found locutions that avoid the dichotomy.[11]

The term 'embodiment' is certainly such a locution and even if it has not been able to avoid the dichotomy, it at least seeks to bring the two elements closer together. Among the alternatives surveyed above I see no better term than 'embodiment'. I continue to use it – even in the thesis title and this chapter heading – because it is a useful reminder of the body's foundational role not just in doing, but also in thinking, knowing, learning and understanding.

The Spatiality of the Body

I began this chapter by highlighting the fact that many theorists, from Merleau-Ponty onwards, describe body and space to be not only intertwined, but essentially *of each other*.[12] This has important implications for how the perception of space is understood to work. In particular it invalidates the concept of space as something 'out there' and external to the body and to consciousness. Instead, both the body and consciousness – that is, the sentient body, or 'Leib' – must be thought of as spatially extended and hence as part of space in the larger sense.

Sheets-Johnstone speaks of consciousness as a "pre-reflective awareness of itself as a spatially present totality"[13], by which she means that bodily presence is not something that we have to call to our attention or reflect on. There is no need to ascertain the position of the body in space, or even most of the time its various parts. Nor is it necessary to somehow tell our body to start being conscious of something that is happening, for example, near our left knee, or directly above us. We are simply already *there*, as a 'body-consciousness'. The fact that this consciousness is spatially

11 McConachie, *Theatre*, 30–31.
12 Cf. David Morris, *The Sense of Space* (Albany, NY: State University of New York Press, 2004), 4, and also Tim Ingold, *Being Alive: Essays on Movement, Knowledge and Description* (London & New York: Routledge, 2011), 12: "... since the living body is primordially and irrevocably stitched into the fabric of the world, our perception of the world is no more, and no less, than the world's perception of itself - in and through us."
13 Sheets-Johnstone, *Phenomenology*, 17.

extended accounts for what phenomenologists and theorists of embodiment see as the way of overcoming the mind-body duality of cognitivist thinking: the mind is not somewhere *in* the body, it *is* the body.[14] It follows that consciousness is both bodily (embodied) and spatial.

The sculptor Antony Gormley engages with the body both through his artistic practice and intellectually, and articulates the problem of its spatiality very clearly: In a lecture entitled *body:language*,[15] he spoke of his fascination with the body as a thing and a space, an object and the site of consciousness. This distinction is helpful. The body is both a thing and a space – always and at the same time. Best known for the bronze or iron casts of his own body which are exhibited not only in gallery spaces but also in urban spaces and various landscapes, Antony Gormley also produces work for the theatre. He has worked with the choreographer Sidi Larbi Cherkaoui and contributed scenographic elements and set designs for, among others, the dance pieces *Zero Degrees* (2005), *Sutra* (2008), and *Babel* (2010).

Recalling his work on *Zero Degrees* during the lecture, he explained: “In *Zero Degrees* especially, the scenography wasn’t the real challenge, it was the question of how to show the body as thing and as space, as object and as the space of consciousness.”[16] The eventual scenographic solution for this idea of the body as a space and as an object was the creation of two life-sized bodies – which came to be known as ‘the dummies’ – moulded out of white, flexible plastic as exact replicas of the bodies of the two dancers, Sidi Larbi Cherkaoui and Akram Khan. The piece is based on a true story and centres on an encounter with a dead body: Akram Khan’s first experience of seeing a corpse, on a train, during his

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14 And more. Alva Noe explains how current developments in neuro- and cognitive science tend towards an expanded idea of consciousness that exceeds the brain or body and should instead be conceptualised as the interaction between body and world: “What emerges from this discussion is a new conception of ourselves as expanded, extended, and dynamic. [...] Language, tools, and collective practices make us what we are.” Alva Noë, *Out of our heads: Why you are not your brain and other lessons from the biology of consciousness* (New York, NY: Hill & Wang, 2010), 67–68.

15 The *body:language* talk between Antony Gormley and dramaturg Guy Cools took place at Sadler’s Wells on 9th December 2013. Here and in the following I quote from my notes.

16 Ibid.

first trip to India. There is thus a sense of mirroring and doubling that is explored and brought to several conclusions by the choreography and the dramaturgy of the piece. Gormley described it as "choreography that relates to the living and the dead – also the idea of the corpse, finally the body as only object."[17] All four bodies on stage, the two dancer's bodies and their two dummy doubles, oscillate between being mere objects and conscious, animate beings.

Fig. 5

The body as corpse shows the potentiality of the living body to become an object again, and only an object. This led Gormley to reflect on what he called in the lecture the "darkness of the body – because it is so obscure to us."[18] The space taken up by the body, even while being the site of consciousness, is to large parts inaccessible to that consciousness. He described how the process of making the 'dummies', which involved putting both dancers in full-body plaster casts, gave a sense of what it means for this living bodily space to become closed off, fixed in space and immobile: "The moment when you are being cast, when you are completely enclosed, is very frightening."[19] It fixes the place that is the body, but it also demonstrates that life happens in the interchange

17 Ibid.
18 Ibid.
19 Ibid.

between body and world; that it is an unstable boundary and that the body would not survive if its outer boundaries were closed or fixed.

This example shows that lived space as bodily space depends on a free-flowing interchange between it and the larger space of the world around it. Lefebvre characterises the relationship as a mutually productive one:

> Can the body, with its capacity for action, and its various energies, be said to create space? Assuredly, but not in the sense that occupation might be said to 'manufacture' spatiality; rather, there is an immediate relationship between the body and its space, between the body's deployment in space and its occupation of spaces. Before *producing* effects in the material realm (tools and objects), before *producing* itself by drawing nourishment from that realm, and before *reproducing* itself by generating other bodies, each living body *is* space and *has* its space: it produces itself in space and it also produces that space.[20]

He emphasises not so much the spatiality of the body itself or the intertwining of body and world in perception, but the fact that perception of space is related to action in space.

Space Perception as a Bodily Activity

Phenomenology is described, among other things, as the study of perception. One of its major contributions to this field of research is a re-evaluation of the extent to which perception is an active process involving the entire body – an activity of the body requiring skills, which have to be learnt and practiced. This understanding of perception stands in opposition to the Cartesian perceptual model of the 'camera obscura', which imagines the human brain as a mere screen on which a detailed image of the world is projected and which then only has to be viewed (or read) by the 'mind's eye' in order to know and understand the world.[21] Even today, despite the

20 Henri Lefebvre, *The Production of Space* (Oxford & Cambridge, MA: Blackwell, 1991, c1974), Translated by Donald Nicholson-Smith, 170.

21 Cf. David Wiles, *A Short History of Western Performance Space* (New York: Cambridge University Press, 2003), 4–5: "Visual sensation, Descartes considered, passed through the optic nerves to be mapped onto this gland in the middle of the brain [the pineal gland], where the mysterious ego could study the image. What Descartes installed in the centre of the skull was effectively a miniature theatre where the self could contemplate reality and decide how to deal with it, before sending appropriate messages down

joint achievements of philosophy, empirical psychology, neuro-, and cognitive science in highlighting the equivalence of perceiving and 'doing', the more passive Cartesian model remains deeply rooted in the popular understanding of what perception is and how it works. Patrick Heelan, for example, writes: "The Cartesian structure of visual perception is something so familiar and so transparently evident that we regard it as normative for ordinary observations."[22]

In the following I give an account of how the theory of perception put forward by phenomenology and its related scientific disciplines translates into an idea of how the perception of space works. Particular care will be taken to relate this idea of perception as a bodily practice – the 'production' of spatial perceptions if you will – to the entire range of activity available to the body. By this I mean the fact that perception happens not only via the five primary sense organs, but that it is a whole-body activity. It is also a reminder of the basic phenomenological principle that what is perceived is determined as much by the perceiving body, its physical form and inherent abilities, as it is by the lived space of the surrounding world. The two form an inseparable system.

In comparison with the apparent stability and longevity of much of objective knowledge, perceptions are fleeting and ephemeral. It is not surprising, therefore, that in processes of perception, unstable sense impressions are replaced as soon as possible by more solid, objective forms of knowledge. Knowledge of this kind is more readily remembered and can be communicated more easily, thus acting as a perceptual short-cut, while awareness of the actual process of perceiving the object fades into the background.
This has been described as the 'transparency' of perception in lived experience – its disappearance, even. The philosopher David Morris for example writes that "everyday things hide this reflection of my look; I see the coffee cup, rather than seeing how I look at the coffee cup."[23] Merleau-Ponty calls this elision of seeing with the

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the hydraulic system to the body."

22 Patrick A. Heelan, *Space-Perception and the Philosophy of Science* (Berkeley: University of California Press, 1983), 1.

23 Morris, *Sense*, 43.

thing seen the ‘experience error’[24], explaining that “instead of attending to the experience of perception, we overlook it in favour of the object perceived.”[25] He writes:

> We think we know perfectly well what ‘seeing’, ‘hearing’, ‘sensing’ are, because perception has long provided us with objects which are coloured or which emit sounds. When we try to analyse it, we transpose these objects into consciousness. We commit what psychologists call ‘the experience error’, which means that what we know to be in things themselves we immediately take as being in our consciousness of them. We make perceptions out of things perceived. And since perceived things themselves are obviously accessible only through perception, we end by understanding neither.[26]

A useful example for explaining this experience error in perception is the depth of field experience, or the perception of depth. There is a common conception that we are able to perceive depth because we have two eyes set a short distance away from each other, both of which produce a slightly different image of the visual field. Combined by the brain, the discrepancies in these two overlapping images allow us to calculate where we are in relation to the image, using a process of triangulation. While such stereoscopic seeing certainly plays a role in how we perceive depth under certain circumstances (that is, at a certain distance, under certain lighting conditions), it is by no means the whole answer. Gibson, for example, has pointed out that horses, unable to triangulate for depth due to the position of their eyes, certainly have a very good sense of depth of field and are able to accurately calculate distance.[27]

A fuller picture of how depth perception works thus has to take into account a far wider range of factors. Viewed from the perspective of phenomenology and its affiliated branches of empirical psychology and keeping in mind that perception is an activity, it becomes clear that the perception of depth and the ability to gauge

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24 He is not the only one to use this phrase, as David Morris points out. Thinkers such as William James and John Dewey, as well as psychologists such as James J. Gibson, also speak of the experience error. ibid., 5.
25 Maurice Merleau-Ponty, *Phenomenology of Perception* (London & New York: Routledge, 2002, c1945), 4.
26 Ibid., 5.
27 James J. Gibson (1979), quoted by: Morris, *Sense*, 9. See also Edward T. Hall, *The Hidden Dimension: An Anthropologist Examines Humans’ Use of Space in Public and Private* (New York: Anchor Books, 1982, c1966), 73.

distance are bodily processes and skills that have to be learned in early childhood. At the very least they involve vision, whole-body movement, and memory of both previous instances of vision and movement, as well as the ability to put all these together. Gibson puts it thus: “We are told that vision depends on the eye, which is connected to the brain. I shall suggest that natural vision depends on the eyes in the head on a body supported by the ground, the brain being only the central organ of a complete visual system.”[28] The fact that a variety of elements have to be put together to arrive at something that can be called ‘vision’ leads, for example, Edward T. Hall to the conclusion that seeing is a ‘synthetic practice’, something that has to be mastered:

> The theory that talking and understanding is a synthetic process is easier to accept than the idea that vision is synthesized, because we are less aware of actively seeing than we are of talking. No one thinks he has to learn how to “see”. Yet if this idea is accepted, many more things are explainable than is possible under the older, more widespread notion that a stable, uniform “reality” is recorded on a passive visual receptor system, so that what is seen is the same for all men and therefore can be used as a universal reference point.[29]

So how is space perception learnt in early childhood? A study undertaken by Richard Held and Alan Hein in the 1950s used newborn kittens to test whether it is possible to learn how to see in the absence of bodily movement. Raised in the dark, one group of kittens was exposed to light for limited amounts of time but allowed to move about freely during these times. Another group of animals was exposed to light for the same amount of time in the same environment as the first group, thus sharing the same experience in purely visual terms. However, they were not allowed to move around by themselves but were carried about, to keep them entirely passive physically. The result of the study, as Francisco Varela reports, showed that when “the animals were released after a few weeks of this treatment, the first group of kittens behaved

28 James Jerome Gibson, *The Ecological Approach to Visual Perception* (Hillsdale, NJ: Lawrence Erlbaum Associates, 1986, c1979), 1.
29 Edward T. Hall, *The Hidden Dimension* (New York: Anchor Books, 1982), 69.

normally, but those who had been carried around behaved as if they were blind: they bumped into objects and fell over edges."[30] Although their eyesight was intact, their ability to see had been compromised. Current thinking in neuro- and cognitive science is thus informed by the attitude that perceptual ability is not given but learnt, and furthermore shaped decisively by the environment in which such learning takes place.[31]

The theatre scholar Donald Kaplan, in his eccentric text "Theatre Architecture: A Derivation of the Primal Cavity"[32] (which attempts to formulate a theory of the space of the theatre as a 'primal cavity' designed to replicate experiences of early childhood), links our ability to see to the ways in which small children explore the world around them with their mouths:

> … the frequent and complex operations of the primal cavity will inform the sensations of the maturing visual apparatus and educate them into *perceptions*. By the eighth month of life, the activity of the primal cavity will have established a visual perception that discriminates the living from the non-living. Though we *see* with our eyes, what we actually *perceive* depends upon the memory of numerous senses other than vision.[33]

The conclusion to draw from all this is that when we think we are 'seeing' a space, what we are actually doing is seeing, hearing, moving around in, feeling textures, being touched by air flows, remembering moving around in, remembering what it feels like to grasp, lick and crawl over it etc. As the kittens experiment shows, the most crucial of these seems to be the sense of movement: kinaesthesia. Re-thinking perception as a synthesising of disparate sense impressions, as well as a lifetime of memories of engaging with the same or similar things, means that perception should be understood as a dynamic set of knowledge that incorporates the space. The world only begins to make itself known to us as we become able to do things. If we did not engage with the world

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30 Francisco J. Varela, "The Reenchantment of the Concrete," in *Incorporations*, ed. Jonathan Crary and Sanford Kwinter (New York, NY: Zone Books, 1992), 331–32.

31 Cf. Noë, *Out*, 49–50: "The neonatal mammal, we learn is plastic and open; in a very real sense the environment itself produces in us the conditions needed to experience that environment."

32 Donald M. Kaplan, "Theatre Architecture: A Derivation of the Primal Cavity," *The Drama Review: TDR* 12, no. 3 (1968).

33 Ibid., 113.

through practice, we would not know what it is that we are seeing.

A consequence of this, worth mentioning here, is that what is perceived necessarily depends on the perceiving body, its size, shape, orientation, skills and abilities. The qualities and characteristics of things are thus not absolute, but relative to the source of perception: The same thing might therefore be perceived as 'small' (that is, 'graspable') by a very large body, and 'big' (that is, 'ungraspable', or even 'climbable') for a very small body. Merleau-Ponty writes:

> The thing is big if my gaze cannot fully take it in, small if it does so easily, and intermediate sizes are distinguishable according as, when placed at an equal distance from me, they cause a smaller or greater dilation of my eye, or an equal dilation at different distances. [...] It is therefore quite true that any perception of a thing, a shape or a size as real, any perceptual constancy refers back to the positing of a world and of a system of experience in which my body is inescapably linked with phenomena.[34]

Not only is the perceiving body inescapably linked with the phenomena it is perceiving; it is also constantly alive to its environment in a multitude of sensory and kinetic ways. Perception is thus best characterised as a form of responsivity, or 'readiness to respond', rather than a disinterested interpreting of information.[35]

The reason why all of the above is important for analysing the perception of theatrical space is that the experience of watching theatre is still too often understood to be a passive state, rather than an activity involving multiple perceptual channels. Even sitting motionless in a seat in the theatre, the eyes will move, the neck will crane, the muscles of the eyes will adjust and produce sensory information of nearness, closeness, calculate size and distance. The intensity and quality of such activities produce different qualities and intensities of whatever is seen. How things appear visually depends in very real ways on the process and

34 Merleau-Ponty, *Phenomenology*, 353–54.

35 Cf. Sheets-Johnstone, *Corporeal Turn*, 60: "If responsivity is a near universal characteristic of life, if perception is a preparation to respond, if the fundamental nature of organisms is not to be neural repositories of information, much less information-processing machines, but to be kinetically alive to, and in, their respective worlds, then it is readily understandable why thinking in movement is a built-in disposition of animate forms."

quality of looking. Alva Noë suggests the following exercise to call to attention the relationship between the activity of looking and the thing seen: “Approach an object and it looms in your visual field. Now turn away: it leaves your field of view. Now shut your eyes: it is gone. Walk around the object and its profile changes.”[36]

An example from theatrical practice might help to illustrate this point. The piece “The Visible Men”, made by the experimental dance-comedy duo *New Art Club* in 2007, highlighted and parodied the perceptual work done by audiences during theatrical performance.[37] Instead of using lighting effects such as blackouts, they asked their audiences in the piece to close their eyes whenever a blackout was necessary, and then open them again following a certain signal, revealing a newly reconfigured stage picture. The comedy of this approach lay to a large extent in how well it worked, and how unnecessarily cumbersome the technological apparatus of mainstream theatre suddenly seemed. The action of opening your eyes alone makes something appear, and closing them makes it disappear.

‘There-and-gone’ is one of the perceptual schemata that has to be learnt and practiced in early childhood, by playing and discovering what kinds of actions make things appear or disappear. Another, closely related, schema is the ‘in-out’ principle, which is learnt by experimenting with objects that can fit into or contain other objects, or by attempting to insert things into inner-body spaces such as the mouth or a closed fist. Of all the schemata and relations put forward by theorists of embodied perception, it seems that these two are the most important and relevant for theatre: The acts of hiding and revealing, entering and exiting, opening and closing of curtains, doors, boxes, trapdoors... are some of its most basic building blocks.

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36 Noë, *Out*, 50.

37 *New Art Club* was founded in 2011 by Tom Roden and Pete Shenton, two performers, choreographers and theatre-makers with a background in contemporary dance. They are currently performing both on the UK comedy circuit and on the fringes of the contemporary dance scene.

The Multiplicity of Embodied Space

Perception has been characterised above as an activity, but it would perhaps be better to speak of 'activities' in the plural, given the multiplicity of ways in which the body performs these countless perceptual operations. In the same way we could speak of the multiplicity of perceptual *spaces* in the plural, rather than of *space* in the singular, although the separating-out of such multiple spaces necessarily remains a conceptual exercise. In the reality of lived experience they are, most of the time, too intimately interlinked as to be evaluated separately. For the sake of the idea, however, I will in the following attempt such a theoretical separating-out of the bodily spaces of lived experience. Visual space being the most dominant of these, and having already been discussed in the context of depth perception and field theory, will be largely excluded from this list, to avoid further reinforcing the common misconception that space somehow *is* visual space.

All the same, I begin with a form of visual space that is only rarely considered in any detail: **Peripheral space**, which, according to the architect Juhani Pallasmaa, is perceived kinetically and only to a small extent visually.[38] Things or movements located just outside of or on the periphery of the field of focused vision remain indeterminate, but they in fact make up the largest part of the visual field. Emphasising the importance of peripheral space in architecture, Pallasmaa writes that "the quality of an architectural reality seems to depend fundamentally on the nature of peripheral vision, which enfolds the subject in the space."[39] While focused visual space is located directly 'in front' of the perceiving subject, peripheral space seems to follow and envelop it, slipping away when looked at directly, but even so providing a strong sense of situatedness.[40]

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38 Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Chichester: Wiley-Academy, 2007), 13.
39 Ibid.
40 Cf. ibid.: "Peripheral vision integrates us with spaces, while focused vision pushes us out of the space, making us mere spectators."

Periodically, visual space becomes **dark space**, as the psychiatrist and phenomenologist Eugène Minkowski has pointed out.[41] Such night-time (or artificially produced) dark space has different qualities and properties than either focused visual space or peripheral space. The perceiving body is completely surrounded by dark space; there is no front or behind, nor even near or distant – things are either touching me, or they do not exist. Minkowsky describes the quality of depth in dark space as quite unlike that of visual (light) space:

> Contrary to light space, it will have no 'beside' or distance, no surface or extension, properly speaking, but there will nonetheless be something spatial about it; it will have depth - not the depth which is added to length and height but a single and unique dimension which immediately asserts itself as *depth*. It is like an opaque and unlimited sphere wherein all the radii are the same, all having the same character of depth. And this depth remains black and mysterious.[42]

In terms of location, the perceiving body always feels itself to be at the centre of dark space, irrespective of the objective shape of the room or space in which it finds itself.

In this respect, **aural space** is not unlike dark space: Here, too, the perceiving body is at the centre of an acoustic field that stretches out equally in all directions. The front is not dominant as it is in visual space, and what may be experienced as a boundary to the space in visual terms (such as walls surrounding a small room) can be breached by sound, often making aural space the largest space that we are in. Barry Blesser and Linda Salter, in their book on aural architecture, *Spaces Speak, Are You Listening?*[43], explain this phenomenon: "Because visual and aural boundaries are independent means of enclosing a space, our visual and aural experience of size, the space between boundaries, may

41 Eugène Minkowski, *Lived Time: Phenomenological and Psychopathological Studies* (Evanston, IL: Northwestern University Press, 1970), Translated by Nancy Metzel, 405.

42 Ibid., 430.

43 In it, they identify an imbalance in the scholarly literature on acoustics: "Although there is a vast body of scholarly work both on the physical acoustics of enclosed spaces and on perceiving acoustic parameters, the literature is relatively silent on the subject of how people experience aural space. We know much about measuring acoustic processes and sensory detection, but less about the phenomenology of aural space." Barry Blesser and Linda-Ruth Salter, *Spaces Speak, Are You Listening? Experiencing Aural Architecture* (Cambridge, MA: MIT Press, 2007), 11.

not be consistent. For example, glass is an auditory partition but not a visual one, and a black curtain is a visual partition but not an aural one."[44] Our ability to sense space aurally is often underestimated or taken for granted, so that most people are unaware of how acute and precise a means of orientation it really is. Different architectural spaces are more or less resonant depending on their shape and materials, but they all provide immediate aural feedback of human presence: We move, they throw back our footsteps; we speak, and they return an echo. Without such responsivity, we would quite literally be lost in space.

Both aural and dark space are an integral part of the spatial experience of attending and performing theatre, and will be revisited later on in this thesis in a more practical context. Less directly relevant for theatrical practice but still important to consider in an architectural context is **tactile space**, which is located very close to the body. Tactile space becomes more defined and intricate nearest to the hands and fingertips, the mouth, and in certain situations (or cultural contexts), also the soles of the feet. It is thus experienced as being distributed across certain areas of increased sensitivity – it is decentralised.

Finally,[45] there are two kinds of perceptual spaces which are particularly important for the experience of architecture, and even more so for theatrical performance practices including dance: **proprioceptive** and **kinetic space**, both sub-sections of tactile space. Proprioception is the sense of inner-body awareness, balance and movement, while kinaesthesia is the sense of the body's movement in space. Both come into play when sitting, standing or moving in architectural space, and can be described as internally experienced bodily spaces, involving muscular and vestibular reactions to shifts in relation to gravity. Vertigo, for example may be felt as a turning or pulling sensation located in the hollowness of the stomach. Height and angles of architectural spaces, such as the

44 Ibid., 21.
45 I omit olfactory space from this list, as it is only very rarely impacts the spatial experience of theatre architecture. But it is worth noting that Lefebvre discusses the spatial qualities and rhythms of smell in a beautiful section of *The Production of Space*: Lefebvre, *Production*, 228.

height of (or drop beneath) gallery spaces and balconies in theatre auditoria, affect us proprioceptively. Factors that play a part here include questions of whether the floor is visible beneath you, or the ceiling structure above, or whether the pathways offered by the building seem safe, logical and secure to move along, as well as considerations such as the texture of the floor and walls (solid, treacherous, or slippery, for example) or a space's ease of orientation. The architect and performance scholar Beth Weinstein gives a vivid phenomenological account of proprioceptive space in her description of what she calls a "geometrically ungraspable space"[46], Jean Nouvel's futuristic foyer design for the Opéra de Lyon:

> Conflicting proprioceptive and visual information about distance, particularly the distance to the ground below one's feet, triggers a sensation in the gut - vertigo. Nouvel is a master of vertigo as exemplified in the Opera de Lyon's dizzying and disorienting alternation between physically engaged motion and passive motion, compressive space and immeasurably expansive space. The perception of unfathomable depth through the perforated surfaces of the gangways, the vibration of these gangways underfoot, the inverted and distorted reflections on the lacquered vessel, the indistinguishable edges of black-on-black volumes focus the theater-goers attention - proprioceptive, kinaesthetic, and retinal - on the sensing and negotiation of space.[47]

The disorientation she describes is the result of conflicting bodily spaces: They overlap, providing contradictory information of the same architectural space.

This leads back to the point made earlier, that these various manifestations of perceptually produced bodily space cannot, in lived experience, be separated. They flow into each other, one colouring the experience of the other. For theatre, this means that the dominant visual space experienced by spectators during a performance – despite being perceived as one space – still carries with it traces of kinetic and proprioceptive spatial memory and tactile experience. Perceptions are essentially and complicatedly synaesthetic. Merleau-Ponty describes how this overlapping quality

46 Beth Weinstein, "Turned Tables: The Public as Performers in Jean Nouvel's Pre-performance Spaces," in *Architecture as a Performing Art*, ed. Marcia F. Feuerstein and Gray Read (Burlington: Ashgate, 2013), 168–69.
47 Ibid.

of sense impressions also colours the language we use to describe them: "One sees the hardness and brittleness of glass, and when, with a tinkling sound, it breaks, this sound is conveyed by the visible glass. [...] I hear the hardness and unevenness of cobbles in the rattle of a carriage, and we speak appropriately of a 'soft', 'dull' or 'sharp' sound."[48] When analysing theatrical space in performance, it is therefore difficult to effectively separate how a particular impression is created, whether visually, through movement, or sound. Gertrude Stein in her special way puts it like this:

> What happens on the stage and how and how does one feel about it. That is the thing to know, to know and to tell it as so.
> Is the thing seen or the thing heard the thing that makes most of its impression upon you at the theatre. How much has the hearing to do with it and how little. Does the thing heard replace the thing seen. Does it help or does it interfere with it.[49]

The question of whether sound can change, or even 'replace' the things seen on stage is a particularly interesting one. Clearly sound can do powerful things in and to space, and the case study in Chapter V will look at an example of this happening in a performance: not of a 'thing heard' replacing a 'thing seen', but of a thing heard making a thing seen that was previously invisible. What is left to do here is to ask how the many forms of bodily space perception come to determine the experience of theatre architecture, or in other words, what it means to say that theatre architecture is embodied.

Embodiment and Theatrical Space

When applying the most important points raised in this chapter on embodied space perception and its essential multiplicity to the experience of theatre, two preliminary conclusions emerge: Firstly, to perceive spaces is to actively 'produce' them, and secondly, this

48 Merleau-Ponty, *Phenomenology*, 229–30. Joscelyn McKinney quotes this section in her essay, Joslin McKinney, "Scenography, Spectacle and the Body of the Spectator," *Performance Research* 18, no. 3 (2013), doi:10.1080/13528165.2013.818316.
49 Gertrude Stein, *Lectures in America* (London: Virago, 1988, c1935), 101.

production happens on multiple bodily 'channels'.

Beginning with the first, there is in fact nothing new or groundbreaking in the statement that the activity of making theatre includes the production of spaces – architectural spaces *for* theatre as well as scenographic or bodily spaces *of* theatre. Theatrical space production includes among other things the imagining and building of sets, the construction of dramaturgical architectures, the composition of spatially evocative soundscapes, and not least the building or inventing (or appropriating) of theatre spaces in the architectural sense. However what the ideas and theories outlined above allow us to do is to conceptualise the perception of space itself as an activity. A synthetic effort on the part of spectators and performers equally, it is an activity that happens almost entirely on a pre-reflective level, only occasionally spilling over into conscious thought. My argument here is that theatre, can, and does, make such hidden, unreflected processes visible, as in the example of the 'low-tech' performance of the New Art Club mentioned previously.

Theatrical innovation has always closely followed insights into visual, aural, and embodied perception. Arguably the ability to create imaginative and fictional spaces requires an understanding of, or intuition for, how space is perceived and represented in everyday life. Throughout its history, theatre has engaged in an ongoing process of appropriating and developing new forms of spatial representation, which themselves often resulted from scientific breakthroughs in relation to bodily perception. An example of this is the illusionistic technique of central and two-point perspective drawing, which formed the basis for theatrical representations of space for several centuries and came about following a revolution in how 'seeing' was understood to work.[50] What I want to concentrate on here, however, is the way in which theories of embodied perception have informed the theorising and

50 See for example the early treatises on theatre architecture and scene-building by Sebastiano Serlio or Fabricio Carini Motta: Fabricio Carini Motta, *The theatrical writings of Fabrizio Carini Motta: Translations of Trattato sopra la struttura de' theatri e scene, 1676 and Costruzione de teatri e machine teatrali, 1688* (Carbondale: Southern Illinois University Press, 1987). Ulrike Haß argues that such theatres mirror the physiological construction (or topology) of an eye: Ulrike Haß, *Das Drama des Sehens: Auge, Blick und Bühnenform* (München: W. Fink, 2005), 67.

teaching of performance techniques, that is, of acting.

When the art of acting began to distance itself from its basis in a codified set of prescribed gestures and movements and evolved towards an understanding of itself as the art of reacting naturally and realistically to fictional situations, the question of how to 'create' or manufacture fictional perceptions also became more pressing. Theorists and practitioners, including Max Herrmann and most prominently Stanislavsky, developed ideas about how performers should pay attention to their bodily states, activities and movements in order to learn how to utilise and set them to work later, in rehearsal and performance. They emphasised the fact that perception involves the whole body and depends as much on previous experiences and memories of sensing and moving as it does on the physically present space. As Herrmann identified, different spaces engender different ways of moving and speaking: We walk and talk differently in wide open spaces than we do in tight enclosed ones, and social and cultural implications of different spaces again influence how we act: private or public, pleasant or oppressive, free or constricted, safe or dangerous, formal or squalid... It would follow, then, that by embodying these different ways of moving and reacting, the respective spaces should appear, and be perceivable to others. Sheets-Johnstone, for example, confirms that different qualities of movement can produce different kinds of spaces:

> movement *creates* the qualities it embodies and that we experience. In effect, movement does not simply take place *in* space and *in* time. We qualitatively create a certain spatial character by the very nature of our movement - a large open space or a tight resistant space, for example, a spatial difference readily suggestive of the distinctive spatialities of joy and fear.[51]

This is a productive thought for acting, as it suggests that it is the process of acting itself that makes the space, irrespective of scenography or even theatre architecture. Thinking back to the taxonomies of theatrical spaces reviewed in Chapter I, these

51 Sheets-Johnstone, *Corporeal Turn*, 207.

performatively produced spaces would fall into the categories of 'gestural' or 'presentational' space and arguably comprise the most interesting and versatile forms of theatrical space production.

But how exactly does this relate to space perception and embodiment? As sociologists and phenomenologists have pointed out, there are many socially and culturally conditioned ways of 'doing' the perceiving of space. Martina Löw argues, for example, that how we perceive space is part of our habitus and therefore dependent on issues of class, gender, and power.[52] For acting this means that the emphasis should be less on attempting to produce a certain space through movement, but to call to attention how a given space would be perceived by the person (or character) located within it. A space perceived by an actor as offering a range of opportunities for movement and action might be experienced by the dramatic character as a space full of taboos and restrictions.[53]

The close link between space perception and movement is even more evident in how dancers treat and think of space, and it also allows us to think about the production of theatrical space not in fictional, but in abstract terms. The qualities of spaces as they are perceived and produced through movement might not necessarily be accessible or describable intellectually, but still tangible on an emotional or kinetic or proprioceptive level. Particularly for dancers, but for performers generally, such bodily forms of spatial awareness that sometimes escape intellectual understanding are crucially important: Their spatial awareness and ability cannot just be visual, it has to be kinetic (for dancers) as well aural or vocal (for actors and singers). The perceptual skills needed to negotiate and control theatrical spaces encompass the full range of bodily processes, including the proprioceptive, muscular, and aural elements of the perceptual apparatus. Kinetic awareness and

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52 Martina Löw, *Raumsoziologie* (Frankfurt am Main: Suhrkamp, 2001), 209.

53 Cf. an exercise proposed by theatre director Declan Donnellan: "It is important first for Irina [the actor] to discover all that *Irina* can do in the space. Run, jump, kick, lean, leave, re-enter, thump, balance, dance, creep, roll, etc. etc. And once Irina has discovered the opportunities and limitations of her body in the space, only then can Irina set about the quite different task of discovering what the space will permit *Juliet* to do. Irina has one space and Juliet has another. Irina must not be a victim of the space, but Juliet must be the space's victim. Irina needs to discover what liberties and constraints the space permits and imposes upon Juliet." Declan Donnellan, *The Actor and the Target* (London: Neck Hern Books, 2005, c2002), 125–26.

responsivity can be learnt and habituated, but it is also a case of intuition, or perhaps a form of talent, as Anne Teresa de Keersmaeker suggests when she comments on the ability of some of the dancers in her company to 'spatially radiate':

> … the way they project, feel and charge the space is different for large or small spaces. That is something you can learn. Some people have an intuitive, natural way of spatially radiating, an awareness of the total space around them, but the problem is often that for many dancers their image of space is defined only by what they feel within their field of vision and not by anything behind them.[54]

The process of 'spatially radiating' could be imagined as a form of sonar perception: the body sends out waves or signals and becomes increasingly attuned to how they are reflected back by walls, volumes and objects, moving or still, in the space. Becoming aurally and kinetically attuned to a space is thus a process of expansion, of extending the body spatially beyond the boundary of its skin.

The Relationship between Location and Bodily State

I began this chapter by evoking a description of the body as a spatial form carved out of the more general space of the world. I want to end by exploring further the resonances and equivalences between this spatially extended form – the 'body-as-space', to use Antony Gormley's phrase – and some of the spaces and locations of theatrical practice.

One of these locations is the space directly adjacent to the space but hidden from the audience: Known as 'the wings', it is the very edge of the strongly oriented field of the stage, the place from which performers enter the space of the stage, where they prepare, and from which they launch their performance. Andrew Filmer has researched the ways in which such backstage spaces come to be embodied by performers and arrives at the conclusion that being 'in the wings' is more than just a physical location or a place. It is also

54 Anne T. de Keersmaeker, "Between Heaven and Earth: An Interview," in *Theaterschrift II: The Written Space / Der Geschriebene Raum*, ed. Marianne van Kerkhoven (Brussels: Kaaitheater, 1992), 182–84.

a situation that is experienced as a particular physical state:

> In performers' lived experiences the wings do not automatically connote an architecturally defined space. Instead, to be 'in the wings' is foremost to experience an embodied sense of temporal and, correspondingly, spatial proximity to performance. [...] In the context of an imminent performance and the prospect of exposure before an assembled audience, performers become aware that they are entering or 'in' the wings through the emergence of seemingly involuntary psychosomatic cues, often including an elevated heart rate, restriction of breath, increased perspiration, 'butterflies' in the stomach, and feelings of nervousness or muscular tension.[55]

The space of the wings, understood as 'proximity to the performance', is thus perceived in more ways than just through primary sense organs. It is translated into a bodily state of tension and effectively uncoupled from its fixed location and 'carried around' by the body for as long as the situation of 'being in the wings' lasts. Filmer's idea of taking the embodiment of space literally in this way is a productive concept that can be applied to other kinds of theatrical spaces. We could ask, for example, whether the space of the stage is embodied differently in rehearsal than it is in performance; and how this might change its perceived orientations and affordances. Filmer touches on this when he explores the journey from rehearsal to performance space as it is experienced by actors involved in a new production. In most contexts of theatre production, particularly in the commercial sector, this journey is fraught with tension as there is usually little time to rehearse on and get used to the stage compared with the amount of time spent in rehearsal rooms.[56]

By contrast, the ideal as expressed in most schools of acting and endorsed by practitioners generally still seems to be that the transition from rehearsal space to the stage is a process that should

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55 A. Filmer, "Minding the Gap: the Performer in the Wings," *New Theatre Quarterly* 24, no. 02 (2008): 160, doi:10.1017/S0266464X08000134.

56 Cf. Annemarie M. Matzke, *Arbeit am Theater: Eine Diskursgeschichte der Probe* (Bielefeld: Transcript, 2012), 251–52: "Die Probebühne kann die Bedingungen des Bühnenraums nur andeuten, aber niemals nachstellen. Die Raumkunst ‚Theater' wird in einem anderen Raum entworfen, in den der Bühnenraum (virtuell) projiziert werden muss. Dies schafft für die Arbeit besondere Schwierigkeiten – das, was im Probenraum erarbeitet wurde, muss für die Bühne angepasst, überarbeitet werden. Jeder Gang, jeder Schritt muss dem neuen Raum entwprechend überprüft werden. Die Transformation von einem in den anderen Raum ist daher mit der Angst behaftet, das Erarbeitete zu verlieren. Die ‚technischen Proben', als erse Proben auf der Bühne [...] werden deshalb oft als besondere Krisenszenarien beschrieben: Der erarbeitete Rhythmus muss dem anderen Raum angepasst werden."

take several weeks or even months, as it involves not just a change of location but also a change of bodily state. Performers have to be 'ready', physically and emotionally, to enter the altered state of effectively being able to embody the space of the stage. Filmer describes how performers describe their journey to reach this state in spatial terms, frequently employing orientational metaphors in relation to rehearsal spaces and processes:

> [...] there is a figurative and literal mapping of rehearsal space and embodied self. [...] In rehearsals we observed, practitioners organized the rehearsal spaces in terms of layers, where participants passed checkpoints to access the rehearsal room, and where that room featured the private inner sphere of rehearsal work. At the same time, practitioners spoke about themselves in just this way: as constituting a series of layers that must be penetrated to access the intimate depths of the actor's self required to develop character.[57]

What becomes clear from this is the extent to which the self – understood psychologically as a multilayered being – is spatially extended and organised as much as the body is. It is seen as having an inside and an outside, areas of 'innermost truth' and depth, as well as ways for these inner truths to be brought to the surface. Already Kurt Lewin identified spatially layered 'regions' within the person: "Dynamically the person appears as a 'stratified' system which has a definite structure and in which one can distinguish central and peripheral regions."[58] Different emotions, thoughts or psychological processes are seen to reside in certain regions more than others, and it makes a difference whether these regions are located closer to the 'centre' of the person or more on the periphery.

It is significant that in theatre practice the space where such processes of drawing out, or revealing, are first tried out, practiced and rehearsed is the space of the rehearsal room. Compared to the exposing orientations of the space of the stage, the rehearsal room is experienced as being safe and protected. It is also often described

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57 A. Filmer and K. Rossmanith, "Space and Actor Formation," *Theatre Research International* 36, no. 03 (2011): 230, doi:10.1017/S0307883311000460.

58 Kurt Lewin, *Principles of Topological Psychology* (York, PA: The Maple Press Company, 1936), Translated by Fritz Heider and Grace M. Heider, 50.

as an embodied space – a womb, for example – that allows for a piece to grow and develop in safety. The actor Juliet Stevenson describes the trauma of moving from the enclosed space of rehearsal to the stage, which suddenly appears disorienting, even disembodied: “You create a world within those four walls, living it. And then you move to a very large space where one of those walls has been removed. It’s as though the side of your house has been taken away and the whole world can see into your bathroom.”[59] In order then for the space of the stage to become lived, embodied space as much as the rehearsal room was previously, the embodied self has to learn to extend itself and resonate with this much larger, much more unpredictable space.

59 Juliet Stevenson, “Space and the Actor,” in *Making Space for Theatre: British Architecture and Theatre Since 1958*, ed. J. R. Mulryne and Margaret Shewring (Stratford-upon-Avon: Mulryne and Shewring, 1995), 109.

PART TWO

Practical Applications

Having in the first part of this thesis developed a range of phenomenological approaches for looking at theatre architecture as lived, oriented and embodied space, the second part will now apply these insights to three concrete examples from theatrical practice.

Chapter IV examines the phenomenon of 'Globe anthropomorphism': the fact that actors and practitioners working there consistently talk about the building as an animate, responsive being – a body. Such claims will be evaluated and interpreted with recourse to the discourses on embodiment outlined in Chapter III.

Chapter V looks at the bodily spaces created by dance and choreography, describing immaterial architectures of sound and movement as they appear during a performance. The question that will be of particular interest here is how such immaterial, performatively produced spaces interact with and change the orientations of the materially present architectural theatre space.

Chapter VI finally acknowledges the possibility that occasionally, the spaces occupied by theatre audiences are not perceived at all in direct lived experience, or only as an absence, a 'disappearance'. Sadler's Wells Theatre, designed to facilitate almost total absorption into the world of the stage on the part of the audience, will serve as an example to illustrate this.

Chapter IV

The Building as Body

Anthropomorphic Imagery at Shakespeare's Globe Theatre

... non murato ma veramente nato.
(... not built, but born.)
GIORGIO VASARI

An early morning in April. The ornate circular space of Shakespeare's Globe theatre feels slightly muted, its colours flattened by the grey London light. Bare and unlined with people, it also feels bigger than it does during evening and afternoon performance times. The group of actors I have just picked up from the hotel and accompanied here has recovered from the initial impact of entering the space; their first reaction was a dazed, or maybe awed, silence, which has now made way for exploratory action. Some, in tourist mode, are posing for pictures. Others have already climbed up onto the high platform stage – awkwardly, as the stage manager has not yet attached the wooden steps leading up to it – and are trying out movements or gestures, extending an arm, silently mouthing lines. They are adjusting their postures to the space, still hesitant, but already standing taller as they gaze outwards into the empty vertical tiers of the wooden amphitheatre. I interpret their actions as attempts to align themselves with the space, mirroring its shape and testing its reactions.

I am here as a researcher, but I am also part of the team of Globe staff and volunteers running the *Globe to Globe* festival. Over a period of six weeks it is bringing thirty-seven international theatre companies to London to perform all of Shakespeare's thirty-seven plays, each in a different language. If this seems like an

Epigraph:
Saying attributed to Vasari, purportedly to describe the Villa Farnesina in Rome, ca. 1550. Quoted by Geoffrey Scott, *The Architecture of Humanism: A Study in the History of Taste* (New York: W.W. Norton, 1999, c1914), 220.

Olympian endeavour, it is: The festival is part of the 2012 Cultural Olympiad, the arts programme accompanying the London Games.[1] The schedule is tight and each company only has one morning of stage rehearsal time before its first performance that same afternoon. A second performance will follow on the evening of the next day, by which time a new company will have already arrived and completed its morning rehearsal and matinee performance. This system ensures that every day of the festival sees two different productions in two different languages.

Back on stage, and the Globe's resident "Master of Movement"[2] arrives. She welcomes each actor individually, asking which part they are playing, making them feel as if they had been born to do just this. Eventually the group coalesces into a circle on the stage. Everyone holds hands. I am told to join in and we close our eyes. She speaks:

Below you are boards made of 400-year-old oak. Above you, in the painted Heavens, is the fire of Jupiter. Feel yourself growing into the floor, receive the light from above. The architecture of this theatre supports your entire structure. It asks only one thing of you: That you come with an open heart.[3]

The ritual I am participating in is called "Introduction to the Stage". It gives the newly arrived actors the opportunity to spend their first hour of stage rehearsals in the company of an experienced Globe practitioner and to explore the space through a series of exercises. She continues: "*The Globe is based on the proportions of your own body. If you stretch your arms out, the distance between your fingertips is the same length as your height. You form*

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1 The *Globe to Globe* festival took place from 21st April – 9th June 2012. It was part of the *World Shakespeare Festival,* which in turn was part of the 2012 Cultural Olympiad. Its resident academics were Susan Bennett and Christie Carson, who have since edited a book with reviews of all the performances in the festival from a variety of theoretical angles: Susan Bennett and Christie Carson, eds., *Shakespeare Beyond English: A Global Experiment* (Cambridge: Cambridge University Press, 2013).

2 Glynn MacDonald, teacher of Alexander Technique, movement and voice at the Globe since its opening in 1995.

3 Here and in the following I quote from my notes, which cover all the "Introduction to the Stage" rituals I attended during the festival. While the exact words used varied from day to day depending on factors such as the nature of the play, the responsiveness of the group or director, or whether a translator needed to be present, the references to circles, bodily proportions, and to the 'personality' of the Globe were a constant.

a perfect circle, like the Globe itself."[4] We spread out on stage, stretch out our arms to the sides and imagine a circle drawn around us, touching the top of our head, our fingertips and feet. "*Turn slowly around your axis and feel how the circle becomes a sphere. This is your personal space.*"[5] We walk around the stage in our spheres of personal space, taking care not to 'dent' the others' spheres. "*Can you feel the circle of the theatre embracing you? Trust it, it will tell you what to do.*"[6]

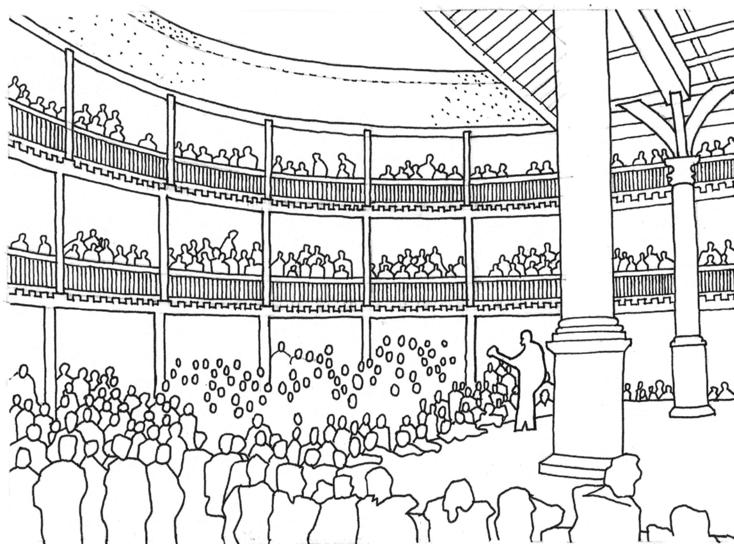

Fig. 6

4 Ibid.
5 Ibid.
6 Ibid.

I begin with this account of my experience of rehearsals at the Globe because it illustrates a particular, subjective way of relating to a theatre building. The actors and practitioners as I observed them working there treat their building not as a solid architectural structure standing immobile in absolute space, but as an active, responsive entity that is able to 'embrace them' or 'tell them what to do'. The example also illustrates some of the challenges posed by engaging in a scholarly way with the topic of architectural anthropomorphism. What does it mean to speak of a building as a body? If 'body' is taken simply to mean an object or material thing, then a theatre building is, of course, a body; but in the general use of the term it denotes more than that, being intuitively linked to the *living* body. (Interestingly, the fact that 'body' can also mean 'corpse' reinforces its association with liveness – in order for it to be a dead body it has to have been alive once.) In order to understand architectural anthropomorphism it is therefore not enough to ask what it means to speak of a building as a body, we also have to ask what it means to speak of it as a living body. On the one hand, the idea that the theatre building as a spatial structure shows signs of 'life' by being able to intervene in and direct performers' actions mirrors Lefebvre's dictum that "Space commands bodies, prescribing or proscribing gestures, routes and distances to be covered."[7] On the other, the leap from here to the image of a fully anthropomorphised theatre building – a communicative being able to embrace, to support, to disclose – is a large one. Yet it is a leap that is regularly made by theatre practitioners talking about their buildings, not just at the Globe.

The Royal Shakespeare Company's executive director Vikki Heywood, for example, has described the last performance on the old Royal Shakespeare Theatre's stage – a special 'farewell event before demolition crews moved in on it in 2007 – in distinctly

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7 Henri Lefebvre, *The Production of Space* (Oxford & Cambridge, MA: Blackwell, 1991, c1974), Translated by Donald Nicholson-Smith, 143.

anthropomorphic terms: “We wanted a ceremony, a moment when we put the theatre to sleep. The Company needed that.”[8] Peter Brook’s Bouffes du Nord in Paris, too, has consistently been spoken and written about as if it were a real person. To name but a few instances: The actress Natasha Barry claims, “It has its likes and dislikes. I‘ve seen it with certain outside productions when it sort of shrinks back into itself and becomes dismal and grey: it’s tempting to say the theatre isn’t happy.”[9] Peter Brook himself calls the cracks in the building’s walls its “wrinkles and pockmarks”[10], and Jean-Claude Carrière (who adapted the *Mahabharata* for Brook’s stage and film versions) describes their first visit to the derelict Bouffes du Nord as a magical Sleeping Beauty moment with the theatre as its protagonist: “There was a touch of the fairy tale about it - a space seemed to be waiting for us in a state of slumber, miraculously preserved from the demolitions of the 1970s which destroyed many sites in Paris. [...] The Bouffes was unimaginable for us: *it* told *us* what to do.”[11] Again, in the same way as at the Globe, the building is posited as an expressive structure that enters into communication with the human beings who inhabit it.

Traditional architectural discourses on the ways in which buildings signify only partially address this phenomenon, because they generally focus on buildings’ mimetic properties – how they can be read. Here, however, the question is slightly different. The theatres in the given examples are believed to not only represent something, but to also be able to *do* (i.e. embrace, sleep, shrink) and to *speak* (i.e. tell us what to do, or about their dislikes). What performers essentially describe when they use such imagery is their perception of being acted upon by the building or space: They feel

8 Vikki Heywood, interviewed in: David Ward, *Transformation: Shakespeare’s New Theatre* (Stratford-upon-Avon: RSC Enterprise, 2011), 4. In a three-year transformation process, the theatre in Stratford-upon-Avon was essentially gutted and re-built as a thrust stage, retaining most of the building’s listed outer shell of 1932.

9 Andrew Todd and Jean-Guy Lecat, *The Open Circle: Peter Brook’s Theater Environments* (New York: Palgrave Macmillan, 2003), 31.

10 “[...] the fact that it was materially wounded, with wrinkles, pock marks and signs of having passed through life.” Peter Brook in a lecture given to a symposium on performance space at Royal Holloway, University of London, September 1999, quoted in: David Wiles, *A Short History of Western Performance Space* (New York: Cambridge University Press, 2003), 263.

11 Jean-Claude Carrière, interviewed in: Todd and Lecat, *Open Circle*, 9, his emphasis.

somatically affected by it and choose (or are compelled) to articulate this sense of being affected in anthropomorphic terms. If they feel embraced by the space, the building must be doing the embracing. That such anthropomorphising even seems to be necessary points to a lack of vocabulary to accurately describe our somatic responses to the constructed environment in general. The building-as-body analogy is a way of addressing this imbalance, as it substitutes the static architectural structure for a living, moving body, allowing for active verbs to be used in relation to it ('it protects', 'it expects me to', 'it draws me in', 'it resonates', 'it forbids'). As this is an essentially phenomenological approach, the anthropomorphising of the theatre building requires a focus on how architecture is perceived rather than how it measures up in objective reality.

Perhaps because this sidelining (or bracketing) of objective reality feels odd for people unaccustomed to phenomenological thinking, the examples that I quoted earlier of theatre practitioners using the building-as-body analogy remain somewhat tentative. Reading the quotes in their larger contexts, it becomes clear that the idea of the theatre-as-body is rarely explored in much detail at all.[12] It is frequently alluded to as an evocative image, but instead of sustained engagement with the idea there usually follows a subtle shift towards discussions of the building's atmosphere, its sense of proportion, or its history. Indicative of the aforementioned lack of effective vocabulary to describe spatial experience, this reticence in developing the building-as-body analogy also appears to show a lack of conviction that a theatre's architecture should indeed be the cause of its perceptual, even emotional impact. It is much more common to ascribe this impact to a theatre's sense of history and tradition – to an implicit knowledge of a history that is closely connected to its architecture but not intrinsic to it. Specifically at the Globe, actors use the anthropomorphised image of the building as if its cause were the sense that the theatre is alive with (or

12 As the introductory examples show, the image of the anthropomorphized theatre building is predominantly used by performers and practitioners. Theatre scholars, including for example David Wiles and Catherine Silverstone, have on occasion commented on such anthropomorphising, but there currently exists no in-depth study of the phenomenon.

because of) the memory of Shakespeare.[13] My aim in what follows is to disentangle these intertwined, sometimes blurred discourses. I ask how the body of the building comes to be marked by history, and whether such markings contribute to, or are indeed the cause of, the building's ability to act with agency.

Most striking about the ritual and exercise described above is the unselfconscious ease with which complex theories of proportion and harmony are invoked, accepted and assimilated into a very practical context here. The first part of the exercise – creating an awareness of other's personal space while walking or running at different speeds – is a commonly used movement or warm-up exercise and not at all unusual to be performed at the beginning of a day of rehearsals. However here there is an added element to it which means that it is introduced (and treated by the participating actors) as a metaphysical experience rather than merely a physical training or warm-up exercise: the theatre building and its underlying geometry, philosophy and history are all brought into play, seemingly with the aim of achieving an intense experience of the surrounding space and building, and of establishing a relationship between it and the sphere of influence around the human body (its kinesphere, to use Laban's term). The name given to the exercise follows this logic; it is called "The Three Circles", consisting of 'my circle', 'your circle', and 'the circle of the theatre'. But even in the context of the 'three circles', it is difficult to pinpoint exactly how an increased awareness of the third circle of the building influences or changes what actors do on stage. Does it encourage them to project further than they would do otherwise, to enlarge their imaginary sphere of bodily influence and hence achieve 'bigger' performances? Or are there other, psychologically motivated, reasons for positing the building as a communicative presence of some sort?

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13 This sense of certainty in relation to Shakespeare at the Globe can sometimes be troubling. Gordon McMullan, for example, warns against being taken in by such confident displays of seemingly self-evident knowledge: "Essentialism threatens constantly to seep into the Globe experience – perhaps essentialism, in the end, *constitutes* the Globe experience – and correctives are needed." Gordon McMullan, "Afterword," in *Shakespeare's Globe: A Theatrical Experiment*, ed. Christie Carson and Farah Karim-Cooper (Cambridge & New York: Cambridge University Press, 2008), 231.

The theatre scholar Catherine Silverstone has argued, for example, that the anthropomorphising of the Globe is due to a profound experience of absence which has pervaded the architectural reconstruction project from the beginning – absence of Shakespeare himself, of authenticity – and that the physical theatre building has come to be seen as an Ersatz-source of presence for many of those working there.[14] I will re-visit her argument later in this chapter, in the context of my analysis of rehearsal languages and –visualisations that utilise anthropomorphic imagery. She identifies anthropomorphism as a problem; I will investigate its potential as a source of productivity – a possible solution to other problems.

Rebuilding the Globe: The Body as Measure

My aim in the following is to provide context and background to some of the claims I heard in rehearsal and outlined at the beginning of this chapter. Turning to Vitruvius's *De architectura libri decem* and also drawing on evidence from architectural and historical studies of the Globe theatre and the methods used to build it, I attempt to trace back statements made by Globe practitioners to their likely origins in Vitruvian theory. In doing this, an important aim is to balance the particular needs of theatre scholarship and performance practice – that is, respecting the performer's perspective and experience even if this means having to navigate some fairly esoteric propositions. Some of the phrases and statements I heard in rehearsals and introduced earlier are no more than fragments, quoted partially or out of context, of not just one theory but a whole web of theories and traditions, many of them ancient, religiously motivated or of religious origin, and not always perfectly compatible amongst each other. While spending time at the Globe I was almost under the impression that these theories were more compelling and useful for theatrical practice when

14 Catherine Silverstone, "Shakespeare Live: Reproducing Shakespeare at the 'New' Globe Theatre," *Textual Practice* 19, no. 1 (2005): 34, doi:10.1080/0950236042000329636.

viewed from a distance. By only hinting at them, by omitting complicated and cumbersome details, the most magical and evocative elements came to represent the entire theory (or tradition), potentially giving it even more authority than if it had been explained in full. The 'three circles' exercise, for example, hints at the image of the 'Vitruvian Man', the homo ad quadratum ad circulum described by Vitruvius to explain the reason behind the 'perfection' of the shapes of circle and square, and so famously illustrated by Leonardo da Vinci that it has become, in the popular imagination of today, a strange hybrid of Roman thought and Renaissance imagery. The drawing is now probably more recognisable and well-known than the section of the chapter it illustrates.

When Vitruvius writes that the principle of symmetry in a building or work of art depends on a "precise relation between its members, as in the case of those of a well shaped man."[15], he is describing a relationship, an organising principle, not a likeness to an actual human body. This is therefore a form of anthropo*metry*, not -morphism, even if it is rooted in a tradition that might very well be based on anthropomorphic practices. The architectural theorist Geoffrey Scott characterises Vitruvius' text as "less a theory of architecture than an encyclopaedia of knowledge, general and particular, in easy combination."[16], thus emphasising its eclecticism and sometimes odd juxtapositions of high theory and everyday workmanship. Indeed, the text is a collection, a setting-down of traditional knowledge, which means that the Vitruvian examples of anthropomorphic or anthropometric thinking point to practices that most likely pre-date him. Judging from the way he writes about the concept, it makes little sense to regard him as its originator, for he introduces it as an established rule rather than a new idea: "[...] it appears that the ancients had good reason for their rule, that in perfect buildings the different members must be in exact symmetrical relations to the whole general scheme."[17]

15 Vitruvius, *The Ten Books on Architecture* (Cambridge, MA: Harvard University Press, 1914), Translated by M. H. Morgan, III.I.1., my emphasis.
16 Scott, *Architecture of Humanism*, 195.
17 Vitruvius, *Ten Books*, III.1.4..

This thought is supported by linguistics, by the fact that some architectural terms share their etymology with certain body parts in various languages, as for example in the link between 'facade' and 'face' in languages derived from Latin, or between the roof ridge of a building and the human spine in Germanic languages (– Old English *hrycg* 'spine, crest', related to Dutch *rug* and German *Rücken*). Nowhere is this more distinctive than in the traditional Maori meeting house, the *Wharenui*, whose parts all have names that correspond closely to the parts of human or animal bodies: The word for roof gable is the same as the word head or face (*koruru*), the word for the roof ridge the same as the word for spine (*taahuhu*), and there are many further correspondences such as beams/arms, rafters/ribs and so on.[18] Perhaps anthropomorphism is therefore best understood not so much as an intellectually conceived theory but an underlying tendency, a practice rooted in lived experience and expressed through metaphors whose origins are already half forgotten.

The philosophical basis of Vitruvius's text is an underlying Platonism that posits a world ordered by certain mathematical patterns of proportion. These patterns form a pervasive system that can be experienced at the macro-level of the planetary cosmos as well as at the micro-level of the human body, influencing everything in between from the correct tension of catapult strings to the design of theatre buildings. Vitruvius works under the assumption that human beings have the ability to recognise, to perceive these patterns. The mechanism by which this is possible is the experience of harmony: If a body, object or sound is perceived as being symmetrical and harmonious, this must mean that it conforms to the underlying pattern of the universe. Harmony thus communicates a degree of similarity. In the context of architecture this means that there are structural and organisational similarities between body and building that account for the experience of

18 The link to Maori culture was pointed out in conversation by Christopher Balme. For a detailed discussion of the anthropomorphised Maori meeting house, cf. Toon van Meijl, "Maori Meeting-Houses In and Over Time," in *Inside Austronesian: Perspectives on Domestic Designs for Living*, ed. James J. Fox (Canberra: ANU E Press, 2006), 207.

harmony and beauty in a well-designed building:

> Symmetry is a proper agreement between the members of the work itself, and relation between the different parts and the whole general scheme, in accordance with a certain part selected as standard. Thus in the human body there is a kind of symmetrical harmony between forearm, foot, palm, finger, and other small parts; and so it is with perfect buildings.[19]

The 'certain part selected as standard' could be for example the length of a foot, which would make particular sense for designing steps, or, more abstractly, the diameter of a column. All other architectural elements in the building then have to be multiples of this basic measure. For Vitruvius such a design is not merely 'proper' in the sense that it is practical and efficient, but it is also an expression of a harmonious world where order and structure are pre-ordained; not created by human beings but followed by them. Harmony, in other words, is the experience of a 'cosmic connectedness' that is implicitly sensible. In basing the layout of the amphitheatre on the diagram of the zodiac, as Vitruvius does, he demonstrates this connectedness visually:

> The plan of the theatre itself is to be constructed as follows. Having fixed upon the principal centre, draw a line of circumference equivalent to what is to be the perimeter at the bottom, and in it inscribe four equilateral triangles, at equal distances apart and touching the boundary line of the circle, as the astrologers do in a figure of the twelve signs of the zodiac, when they are making computations from the musical harmony of the stars.[20]

Theatre historians including David Wiles have shown that not even all Roman theatres followed this rule to the letter and that Vitruvian theories were frequently modified to enable theatres to be built to fit into existing terrain or cityscapes.[21] Recognising this helps to also recognise Vitruvius's own inherent pragmatism, which seems to alternate with the more philosophical sections in his text. 'Vitruvius, the builder' continually makes appearances, for example

19 Vitruvius, *Ten Books*, I.II.4..
20 Ibid., V.VI.1..
21 Cf. Frank B. Sear, "Vitruvius and Roman Theater Design," *American Journal of Archaeology* 94, no. 2 (1990) and Wiles, *A*, 192.

when he qualifies his own ideals of perfect symmetry and proportion in order to better adapt a building to its end-uses. In the theatre chapters (III–IX of the fifth book) he describes how the width of an aisle or the size of a seating bench should be designed to fit the bodies of the people using them rather than being strictly proportionally dependent on the rest of the building:

> There are, of course, some things which, for utility's sake, must be made of the same size in a small theatre, and a large one: such as the steps, curved cross-aisles, their parapets, the passages, stairways, stages, tribunals, and any other things which occur that make it necessary to give up symmetry so as not to interfere with utility.[22]

Significantly, in all these exceptions it is again the body that is the measure of the architectural element, only this time in the pragmatic sense of a step having to relate to the size of a foot in order to be easily climbed. This often overlooked process of designing and constructing is thus not a departure from anthropometric theory, but on the contrary pits the building into a similarly close relationship with the human body as the Platonic theory of micro- and macrocosm does. The theatre historian John Orrell finds an evocative image for this: He draws attention to a section on shipbuilding in the *De architectura*, in which Vitruvius describes how the basic measure of a ship has to be the interval between its tholepins (or rowlocks), so that the entire structure of the ship is effectively dictated by the "size and reach of the unfortunate who is required to do the rowing."[23]

Looking beyond Vitruvius and to the theatre again, we could ask how this kind of human-scale design and its attendant enmeshment of functional and metaphysical motivations carries through to the theatre architecture of later eras. Iain Mackintosh for examples sees a long continuity of human-scale or human-centred design in theatre architecture that, according to him, only ends in the

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22 Vitruvius, *Ten Books*, V.VI.7.

23 John Orrell, *The Human Stage: English Theatre Design, 1567-1640* (Cambridge: Cambridge University Press, 1988), 137. The original in Vitruvius reads: "In the case of temples, symmetry may be calculated from the thickness of a column, from a triglyph, or even from a module; in the ballista, from the hole or from what the Greeks call the π; in a ship, from the space between the tholepins πμ; and in other things, from various members." Vitruvius, *Ten Books*, I.II.4.

nineteenth century with the invention of steel cantilevering. Steel, he argues, fundamentally alters the relationship of width to height in columns and support mechanisms and makes it possible for balconies and overhangs to jut out unsupported by columns, whereas traditional materials such as timber, brick, or stone depend for their stability on more compact relationships between the height of a supportive column and the span of a horizontal beam – a relationship not unlike the balance of weight in the human body:

> [...] pre-cantilever auditoriums had a human scale which, in its balance between the vertical (column) and the horizontal (closely decorated tier front), recalled the drawings by Leonardo Da Vinci or Alberti of the Man within the Square within the Circle. Man was still the measure of all things, including theatre architecture. But with the introduction of the steel cantilever [...] deep shelves of people could be packed one on top of the other.[24]

This argument becomes particularly interesting when we compare the experience of sitting in one of these 'shelves' of a steel-cantilevered nineteenth- or twentieth century auditorium[25] to that of sitting in a balcony or tier of an earlier Italianate theatre or amphitheatre. Imagining looking around the space of the former from the vantage point of our seat, we can observe that it is impossible to properly see any of the other sections of the audience. We are only sharing the space with the people in our own tier; the other parts of the 'audience body' are unavailable to us. The sense of the audience as one entity, a visual unity, is lost.[26] Earlier theatre buildings, by contrast, retain this sense of unity, of 'one space'. They are, according to Mackintosh, still part of the continuity of human-scale design: Greek or Roman stone structures, Elizabethan wooden amphitheatres and Italianate opera houses are all immediately comprehensible from every place in the auditorium.

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24 Iain Mackintosh, *architecture, actor, and audience* (London & New York: Routledge, 1993), 38.

25 Theatres with shelf-like tiers include most of Frank Matcham's theatres in the West End, such as for example the London Palladium, as well as many contemporary theatres. Sadler's Wells, too, is a prominent example.

26 As discussed in Chapter I, theatre architects have since sought to restore this sense of unity, particularly since the second half of the twentieth century when the thrust stage once again became an important architectural model.

Because the spatial unity of the original Globe theatre in particular is so absolute – conceived of as a perfect circle, a wooden O where every section of the audience, almost every person even, is visible from any position in the house – it has traditionally been seen to embody the Platonic cosmology and was even thought to have been designed according to Vitruvius's model of the zodiac. The historian Frances Yates, writing in the 1960s, calls it a 'cosmic theatre':

> To the cosmic meanings of the ancient zodiac, was added the religious meanings of the theatre as temple, and the related religious and cosmic meanings of the Renaissance church. The Globe Theatre was a magical theatre, a cosmic theatre, a religious theatre, an actor's theatre, designed to give fullest support to the voices and the gestures of the players as they enacted the drama of the life of man within the Theatre of the World.[27]

The fact is, however, that the historical, architectural and archaeological evidence that remains of the original Globe does not support her view of it being directly based on Vitruvius's cosmic Roman theatre. Despite many attempts of reconciling its actual foundations (or what remains of them) with the ideal of the Vitruvian ground plan and its astrologers' triangles, they ultimately do not fit. Not only do results from the archaeological excavation of the Globe remains speak against such a theory, but historians, too, conclude that it is unlikely that the masons who built the first Globe in 1599 were more than vaguely aware of an Italian fashion for someone called Vitruvius, let alone well enough versed in the language to follow his theories to the letter and base their theatre on a Roman ground plan. The scholarly consensus today is that the link is much more indirect. There certainly is a relationship between the text and the theatre, but it is looser, and in a sense much simpler than the notion of a genuine intellectual reading of or engagement with ancient theories.

My introduction of Vitruvius as not just a theoretician but also a craftsman was in preparation for this: If we understand that there was a way for his ideas to be transmitted in a non-literary,

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27 Frances Amelia Yates, *Theatre of the World* (Chicago: University of Chicago Press, 1969), 189.

non-intellectual way, through practice and the embodied knowledge of building methods handed down from master to apprentice for many generations, then we can see how the Globe can be 'so almost' a Vitruvian theatre without actually conforming to the correct ground plan or measurements. The argument put forward here is that traditional building methods are in fact a form of transmission of Vitruvian theory. In this I again develop an idea suggested by Mackintosh, who writes that "Harmonious proportions are the product either of the craftsman, who has received from his predecessors simple rules and simple tools, or of the trained mind of one who has studied beauty."[28] What he alludes to here is the fact that such tools might have been deceptively simple to use, but in their structure and organisation often drew on complex theories or mathematical formulas.

A case in point is the medieval measuring stick or rod, which is divided into five articulated sections based on anthropometric measurements.[29] Intimately connected to the body and its proportions for completely practical reasons, the modular organisation of this kind of tool enabled medieval masons to design, construct and cross-check buildings almost entirely through geometric operations. In this way they could achieve greater exactness and stability than would have been possible with the limited, unreliable numerical measuring instruments available at the time.[30] In the words of Lon R. Shelby, the method was "Very simple, very physical, and very non-mathematical."[31] This was important at a time when the role of the architect was practically unknown and building projects were being overseen by masons and master builders, and when books were scarce and levels of literacy low. Theory necessarily manifested itself in traditional craft more than in the written word or

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28 Mackintosh, *architecture*, 166.

29 For a detailed exploration of medieval measuring instruments, their functions and underlying mathematical principles, see: Francesco Abbate, "The Planning and Building Instruments of Architects in the Late Middle Ages," in *Proceedings of the Second International Congress on Construction History, Queen's College, Cambridge University 29th March - 2nd April 2006*, ed. Malcolm Dunkeld (Exeter: Construction History Society, 2006).

30 Exact numerical measurements only became truly possible with the adoption of the metre as a universal measure in 1791.

31 Lon R. Shelby, "The Geometrical Knowledge of Medieval Master Masons," *Speculum* 47, no. 3 (1972): 410.

number. For building practice this meant that the design process became virtually inseparable from the building process, with the final structure already and simultaneously arising out of the geometric operations necessary to ascertain its shape. John Orrell explains how geometry in the medieval and early modern period was primarily a way of 'doing' – a practice rather than a form of representation: "The system used in the Middle Ages was generally limited to the plan. [...] Elevations were not necessary in practice because the builders would use a series of geometrical constructions to raise the structure from the dimensions given in the drawing."[32] The plan can thus be conceptualised as a map, a 'score' that orchestrates the human activity needed to create a work of architecture. In this it differs from how modern architectural plans are usually thought of, as representations of the completed building. The medieval understanding emphasises the relationship between human action (or movement, or labour) and the built form. The former speaks of the result, the latter of process.

Orrell's research into medieval building methods was largely motivated by a desire to recover knowledge of how the original Elizabethan Globe theatre might have been constructed. He played an important role in the building process new Globe, which is largely based on his analyses of the surviving evidence. Together with Andrew Gurr he drew up the most likely ground plan and attempted to reconstruct the methods by which it had originally been built. His two books on the research process, *The Quest for Shakespeare's Globe* and *The Human Stage*, outline his theory of how traditional medieval methods and tools were used to construct all Elizabethan theatres (the Theatre, the first and second Globe, the Fortune, and the Rose), almost to a formula. He attaches special importance to the 'ad quadratum method' – the practice of inscribing circles into squares using Euclidian geometry – and proposes that the dimensions of the Globe can be most convincingly calculated using this method. The basic measure he identifies

32 Orrell, *Human Stage*, 208.

as the most likely foundation for the building is the length of the medieval three-rod line, one of the anthropometric measuring tools described earlier. Like a compass on the page, the three-rod line enables the builder to create complex patterns on the site purely by doing: Circles are drawn by pegging the line and running around it 'like a pony on a lunge'[33], and squares can be set out accurately by cross-checking the length of both diagonals. Then, smaller circles and squares can be inscribed into these original squares and circles by finding the point where diagonals cross and running the line from there to the perimeter of the original circle.[34]

Following Orrell's and Gurr's plans, the new Globe was designed and set out on the site using exactly these methods. The inner circle of the yard and the outer circle of building's perimeter are in an ad-quadratum relationship to each other, and the stage is formed by one half of the square that sits inside the inner circle, again in an ad-quadratum relationship.[35] 'Ad quadratum' describes the relationship between the diameter of a circle and the length of its inscribed square, which is also the relationship between the side of the square and its diagonal. In numerical terms it is an irrational ratio (1/√2) but in practical terms it is easy to work out with a compass. Already included by Serlio in his 1611 treatise on geometry and described by him as the ratio with 'no rule in number'[36], it is a geometric operation that favours practice over theory and delivers accurate results without the need for calculation or measuring instruments.

But practicality is not the only issue, particularly not at the

33 John Orrell, *The Quest for Shakespeare's Globe* (Cambridge & New York: Cambridge University Press, 1983), 116.

34 There are several terms for this kind of geometric practice. Lon R. Shelby calls it 'constructive geometry', Shelby, "Geometrical," 409, while Henry S. Turner prefers the term 'practical geometry'. He posits 'practical knowledge' as a distinctive epistemological moment in sixteenth-century England: "a pre-scientific epistemology that arose out of a convergence between humanist habits of reasoning inherited from classical rhetoric, dialectic, and prudence [...] on the one hand, and a growing interest on the part of the educated gentleman in technology and the practical geometrical fields of building, surveying, engineering, and cartography, on the other." Henry S. Turner, *The English Renaissance stage: Geometry, Poetics, and the Practical Spatial Arts 1580-1630* (New York: Oxford University Press, 2006), 14.

35 The Globe is not the only theatre designed with the help of ad quadratum operations. For further examples cf. Mark Howell-Meri, "Acting Spaces and Carpenters' Tools: from the Fortune to the Theatre Royal, Bristol," *New Theatre Quarterly* 25, no. 2 (2009) and Axel Burrough, "Theatre of Proportion," *Architectural Review* 184, no. 1099 (1988).

36 Sebastiano Serlio, *The first booke of architecture entreating of geometrie: Translated out of Italian into Dutch and out of Dutch into English* (Robert Peake, 1611), fol 11b.

Globe. The ad-quadratum diagrams of squares within circles within squares inevitably also evoke Vitruvius's description of the human body as a geometrically designed figure that fits perfectly into a circle as well as into a square.[37] We can now see why the diagram of the *Vitruvian Man* might be a suggestive visual model for Globe practitioners, and why actors might be asked to imagine themselves as the person at the centre of the circle and the square of the theatre. However, the square and the circle as described by Vitruvius (or even in Leonardo da Vinci's drawing) are not in truth in an ad-quadratum relationship, regardless of scale. Vitruvius describes how the human form can be inscribed into a circle or a square, but does not set these two shapes into any kind of relationship. Leonardo da Vinci does establish a relationship in his drawing, but it is more complex than ad quadratum, the centres of the square and circle being located at different points respectively. The diagram could not, therefore, be superimposed on to the Globe's ground plan, contrary to what is said to actors when they are first introduced to the stage at the beginning of the rehearsal process.

Only approximations remain: We have seen how the Globe's ground plan is similar to Vitruvius's plan of a Roman theatre, similar to the diagram of the Zodiac with its six equilateral triangles within a circle, similar to Leonardo's drawing of the man within a circle within a square – but not an exact match to any of these. Yet in everyday practice at the Globe these similarities are emphasized, while the discrepancies are ignored. Why is this so? It seems that there is an experiential quality to the building that 'wants' to be explained, that calls for some kind of higher interpretation, and these ancient theories seem to provide an explanation. Even a supposedly pragmatic architectural consultant such as Iain

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37 Vitruvius, *Ten Books*, III.I.3.: "[…] in the human body the central point is naturally the navel. For if a man be placed flat on his back, with his hands and feet extended, and a pair of compasses centred at his navel, the fingers and toes of his two hands and feet will touch the circumference of a circle described therefrom. And just as the human body yields a circular outline, so too a square figure may be found from it. For if we measure the distance from the soles of the feet to the top of the head, and then apply that measure to the outstretched arms, the breadth will be found to be the same as the height, as in the case of plane surfaces which are perfectly square."

Mackintosh displays a susceptibility this kind of thinking when he writes that ad quadratum, and by extension, the Globe, is endowed with a 'pure geometry' which is "not only a technical tool but also had then and still has a mystical significance which cannot easily be explained"[38]. He ultimately fails to explain, even identify, this metaphysical significance, but the fact that he attempts to do so places him in a long tradition of designers who have explored the connections between geometric and architectural theories and a building's resulting aura or atmosphere. We are back to the impression of the Globe as a structure that is, in some mysterious way, 'alive'.

Life and Death of the Building

One way to think of 'life' is in the sense of 'lifespan', that is, of history. And indeed, one of the ways in which theatres are seen to be more than merely objects is the fact that they are 'alive with history'. If this applies to the Globe then it is not because it is an old theatre building (- it is not), but because of the ancient traditions that it is believed to embody and that have been outlined above. It also applies, in a different way, to the Bouffes du Nord, the theatre so frequently spoken of in anthropomorphic terms by Peter Brook and his associates.

So how does the 'body' of a building come to be marked by history? The phenomenological approach of focusing on how the building is perceived allows us to say that it stands, as a body would, bearing witness to events. The philosopher Richard Shusterman attributes this impression to the experiential primacy of the lived human body, which functions as a "gestural template"[39] not just for architecture, but also for perception generally. Developing this idea further, we can say that the building-as-body tells us about the events it witnesses by displaying markings,

38 Mackintosh, *architecture*, 9.
39 Richard Shusterman, "Somaesthetics and Architecture: A Critical Option" (presentation, International Bauhaus Colloquium, Weimar, April 1-5, 2009), webcast, 17:20. Accessed November 20, 2014. https://www.youtube.com/watch?v=49xX6piR6gM.

weathering, wear, and sedimentation of different kinds on its outer surface, its skin. "Time does not pass in architecture, it accumulates,"[40] writes David Leatherbarrow, an architectural theorist and phenomenologist who has analysed the ways in which a building's surfaces can collect and harbour memories. He understands an expressive building to be one that absorbs and reveals traces of life, being shaped by use as much as it shapes patterns of action and behaviour.

Exemplary of this process of materials taking on a sense of time passing is the work of the Swiss architect Peter Zumthor. By paying attention to how certain materials react to environmental factors and employing them accordingly, he anticipates that timber steps will become worn down in a particular way, floorboards are made uneven by use, metals will become patinated or polished through everyday handling, and glass or varnish will be dulled and marked by innumerable small scratches.[41] All this is part of his design intention. As a result, his buildings seem to amplify their own ageing processes. They continue to develop and evolve under the influence of various forces, which Zumthor, unlike many architects, regards not as forces of corruption but as a continuation of his design. The body of the building offers active resistance to the flows of life and is marked in the process.

This concept provides the first useful model for thinking about how a theatre – particularly an old theatre building – can be understood to be communicative: its markings (or injuries if you will) trace past events, map flows of movement, and display patterns of use and behaviour. Theatre buildings can thus be said to communicate their past in a language composed of creaking boards, dark stained wood, chipped plaster, polished gold and fading velvet. Auratic markings such as the role-call of names carved into or scribbled on a backstage wall, or a particular groove in the surface of an old stage indicating a preferred spot for actors to stand are easy to understand and translate.

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40 David Leatherbarrow, *Architecture Oriented Otherwise* (New York: Princeton Architectural Press, 2009), 82.
41 Peter Zumthor, *Thinking Architecture*, 3rd ed. (Basel: Birkhäuser, 2010, c1998), 24.

But the theatre-as-body communicates in another way, too: As well as being acted upon and being marked in the process, it acts upon others. Historians and theatre practitioners have sought to use this insight, hoping that older forms of theatre and performance might be conserved in the active memory of spaces and buildings. Formulated by Lefebvre, the theory behind this hope involves an "animating principle," or presence, of an architectural body that "reproduces itself within those who use the space in question, within their lived experience."[42] This could be taken to mean that a given space will automatically elicit the same kinds of behaviour from any group of people. A building will tell us exactly and unequivocally how it should be used. The idea is particularly pertinent for the Globe and the Shakespearean performance traditions supposedly 'remembered' by it. As so few original traces remain of either, the idea that knowledge of Shakespeare's stage-craft may be recovered by learning how to re-inhabit the historical space that produced it in the first place remains a powerful one. The hope that Shakespearean performance traditions will "reproduce themselves" in the bodies of contemporary actors and audiences if only they (correctly) inhabit the correct Elizabethan architecture is still palpable. The theatre as it stands today is regarded by many as a Shakespearean 'personality'; an actor as much as a keeper of memories. My introductory examples of the ritual and exercises I observed at the Globe provide a sense of this expectation.

But there are problems. It would be a misinterpretation of Lefebvre to assume that a space will exactly reproduce cultural practices and forms of behaviour even when the times, society and culture have changed completely. The tendency of Globe practitioners to think that because their theatre is as close as possible a replica of the original building, it somehow 'knows' and can tell us about Shakespeare, has been sharply criticised by theatre scholars. Catherine Silverstone, for example, draws a direct connection

42 Lefebvre, *Production*, 137.

between the anthropomorphic imagery used by Globe practitioners in relation to their building and its lack of historical authenticity. She argues that the sense of presence that the building-as-body exudes is the result of a psychological conjuring trick, motivated by a profound experience of absence that has pervaded the architectural reconstruction project from the beginning: Absence of Shakespeare himself, of the original building, of authenticity. She asserts that the physical theatre building has come to be seen as an Ersatz-source of presence for many of those working there:

> [...] it seems a psychological necessity for those inhabiting the space to conceive of it in anthropomorphic terms. Motivated by a desire to reconstruct and invoke the absent Globe, and by extension Shakespeare, the project's participants are ultimately satiated by the sense of presence they crave (and even demand).[43]

I would not go that far. There is no question that the building is present and, through its architectural reality, exudes a sense of presence. Just because the Globe is not a witness able to authentically speak of Elizabethan times – as we have already established – does not mean that it cannot tell us about other things, and the danger of categorically dismissing any form of anthropomorphism is losing sight of those things that it *can* tell us. Before offering an answer to what these things might be, I briefly turn to another example of anthropomorphised theatre buildings and their complicated relationship with history and memory.

While the Globe, as a replica that is barely twenty years old, lacks the sedimentations and markings that might otherwise have spoken about its history, the theatres most associated with Peter Brook are bodies heavily marked by the forces of time and decay. Explicitly described by him as 'wrinkles and pockmarks', these markings and injuries have been carefully preserved and even sometimes exaggerated, to show how much the building has lived through.[44] Repeating a process first developed at the Bouffes du

43 Silverstone, "Shakespeare," 33–34.

44 See note 10 for citation. The contrast between the Globe and Brook's theatres is striking: The new Globe *looks* pristine, with no attempts having ever been made to make it look older than it is. It will of course, with time, acquire markings, but they will speak of its 21st century history and be very different from those

Nord, the Majestic Theater in Brooklyn, now BAM Harvey Theater, was discovered as a ruin in 1987 and renovated in such a way so as not to lose the aesthetic of the ruin. A contemporary review in the *New York Times*, entitled "Restoring a Theater to its Decrepit State", could not resist exaggerating the irony of this process: "Paint crumbles from walls. Fragments of friezes are chipped and mottled. Ducts are exposed. Decades of dirt encrust the proscenium. A rare plaster disease invades the ceiling. This is the "new" Majestic Theater in downtown Brooklyn. Its restoration cost $5 million."[45] Another review titled, "Putting Old Wrinkles Into a Theater's New Face"[46], picked up on Brook's anthropomorphising of the theatre, equating its cracked wall with an aged face and even layering the image further, evoking the intensely theatrical trope of the actor with old-fashioned stage make-up of painted lines and wrinkles. The sense of history that was inscribed to the space here is not entirely false – it is, after all, a historical building – but nevertheless manufactured, belying, if nothing else, its recently-renovated state. David Wiles writes that "[i]t is a feature of successful performance spaces that a sense of the past is inscribed in the present"[47], and this seems to justify a certain level of dissimulation.

So what do these markings of time, both contrived and real, do and what is their relationship with the animate being of the theatre building? The haunting, almost morbid, quality of the conjuring of old age, physical injury and disease that characterised the *New York Times*' description of the Brooklyn Majestic suggests that its markings are read as ghostly signs of a dead past. Marvin Carlson has coined the term "ghosting" for the process whereby the theatrical aesthetic comes to include the experience of being haunted by layers of memories of texts, bodies and spaces.[48] The idea of the ghost as the animating principle of the anthropomorphised theatre building, however, is paradoxical, as it assumes

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on an original Elizabethan building.

45 Susan Heller Anderson, "Restoring a Theater to Its Decrepit State," *New York Times*, 13th October 1987.

46 Michael Kimmelman, "Putting Old Wrinkles Into a Theater's New Face," *New York Times*, 25th October 1987.

47 Wiles, *Short History*, 59–60.

48 He calls the theatre building "one of the most haunted of human cultural structures." Marvin Carlson, *The Haunted Stage: The Theatre as Memory Machine* (Ann Arbor: University of Michigan Press, 2003, c2001), 2.

that the sense of presence that is felt by audiences and performers as they inhabit the building is due to an absence, a negative of presence – the ghost. An example describing such a haunting presence is offered by David Williams, who, writing about the Bouffes du Nord, compares the theatre's back wall to a "Turin shroud", an imprint of a long-dead face:

> The towering back wall, over 50 feet high, is scarred and pitted by the wear and tear of the years, like an aged human face, but the only sign of the former stage and its machinery is a wide horizontal band traversing the wall and the dark square stain above, framing the old stage picture, like a Turin shroud for a dead form of theatre.[49]

The anthropomorphised image of the theatre building and the idea of architectural suffering come together here in a powerful evocation of the theatre as an oracle of the past. And yet, as an explanation for the sense of presence and agency felt and described by theatre practitioners in relation to their theatre buildings, this interpretation of the animating principle as a "ghost" does not go far enough. It focuses too much on what is absent and not enough on what is materially present.

Animate Materials

Instead of explaining the sense of presence and agency that anthropomorphised theatre buildings exude in terms of ghostly absences, it makes makes sense to look at the ways in which they are actually present. In order to do this we have to pay attention first of all to what exactly is present, and secondly to how these things act, or have agency. An approach to this task that offers an alternative to both Carlson's 'ghosting' and the essentialism of some Globe supporters is proposed by the anthropologist Tim Ingold in his discussion of animism, outlined in his book *Being Alive*[50].
He identifies a poverty of language in Western culture to accurately

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49 David Williams, "'A Place Marked by Life': Brook at the Bouffes du Nord," *New Theatre Quarterly* 1, no. 01 (1985): 40, doi:10.1017/S0266464X0000141X.

50 Tim Ingold, *Being Alive: Essays on Movement, Knowledge and Description* (London & New York: Routledge, 2011).

capture and describe how supposedly static, inanimate objects (including buildings) act on us – as perceptually they undoubtedly do. He argues that animistic cultures are more advanced in this sense, conceiving of objects as “hives of activity”[51]. A building’s agency and sense of animacy is not the result of an external ghost or spirit that is somehow magically added to it, but is already intrinsic to it, rooted in its composition and materiality: “Bringing things to life, then, is a matter not of adding to them a sprinkling of agency but of restoring them to the generative fluxes of the world of materials in which they came into being and continue to subsist.”[52]

The key word here is ‘materials’: Objects are understood not as stable entities but to be “pulsing with the flows of materials that keep them alive.”[53] Ingold argues that it is by attending to an object’s materiality that we can understand its agency: how it interacts with us and the world. Materials degrade, vibrate, oxidise, shrink--they *move*. For buildings this means that their active bodies are a combination of materials and form, in other words: their architecture. We saw how the architect Zumthor highlights the yielding, shifting quality of his materials and how the architectural bodies of theatres can draw us in, amplify, resonate, hide, reveal. But this kind of engagement with buildings as active forms remains underdeveloped and poorly articulated, as the lack of confidence in the image of the anthropomorphised theatre building shows. Even though theatre scholars speak about ‘materiality’ and have been conscious, since theatre studies’ emancipation from literature in the early twentieth century, of the importance of analysing the material reality of the art form, we are still some way away from having properly defined theatrical materials in any great detail. What, for example, are the properties and components of dust? How does oak resonate with the human voice compared to plaster or concrete, and why? What is the materiality of a spotlight – what is it made of, how does it behave? And how do dust and spotlight

51 Ibid, 29.
52 Ibid.
53 Ibid.

interact when they meet on stage?

My interpretation of the anthropomorphising of theatre buildings by practitioners (and sometimes audiences) is that it is a first step towards answering such questions, because as an image it requires us to think of the building as a body being capable of concrete actions. What is more, it prompts us to go into much more detail in equating the building's architectural and material elements with bodily parts and their functions – the stage as the heart, for example, and its entrances and exits as systole and diastole, pumping the life-blood of its actors through it.[54] The analogy's main potential lies in how it directs attention to what architecture *does*. However, as I have demonstrated, there is still a general tendency to attribute a theatre's sense of animacy to what it *knows*: to memories and ghosts of the past haunting its structures. Buildings are acted upon and marked by the forces of time, and these markings are often read as the reason for their expressiveness. But in fact it is the architecture itself – its material reality, form and character – that makes theatre buildings able to 'tell us what to do'.

Resonating Bodies

One of the most important qualities of materials as they relate to theatrical practice is their ability to resonate acoustically. Already Vitruvius describes the Greek amphitheatre as a building that is attuned to, and resonates with, the human activities happening inside it – a building that can thus be understood as an instrument, a resonating body, to be played by the performer.[55] Vitruvius' chapter "V.V. Sounding Vessels in the Theatre" describes a peculiar but in this context fascinating device: Large bronze *echo vases*,

54 The image of the Globe stage as a pumping heart comes from David Bradley: "The doors are thus the systole and diastole of the great heart-beat of the Elizabethan stage as it fills and empties, fills and empties, [...]". David Bradley, *From Text to Performance in the Elizabethan Theatre* (Cambridge: Cambridge University Press, 1992), 29.

55 This idea also very much applies to concert halls. See for example Blesser and Salter's book on aural architectures: "When a musical space is considered to be an extension of musical instruments, rather than an independent manifestation of aural architecture, it becomes a tool to be used by composers, musicians, and conductors." Barry Blesser and Linda-Ruth Salter, *Spaces Speak, Are You Listening? Experiencing Aural Architecture* (Cambridge, MA: MIT Press, 2007), 7.

proportionate in size to the theatre building itself, which he reports as having been found in Greek amphitheatres (although this was never verified, as no physical evidence remains of them) were placed at regular intervals under the tiers of seating in the auditorium, tuned to resonate with the performers' voices in order to amplify them at certain frequencies. David Wiles pinpoints the significance of this: "The tragic actor, who is now essentially a singer, should play the auditorium as if it were a musical instrument."[56] The Globe, built of resonant timber instead of acoustically dead stone, is its own sounding vessel, with no need for additional amplification.

Conceptualised as an instrument, the theatre building still has to be played – brought to resonate, so to speak – and this is something that does not happen by itself. Performers have to learn how to play it. The body of the performer and the building have to enter into a relationship with each other, as part of which vibrations and resonances are passed between them. The performer is the initiator in this process – the actor or singer not only 'plays' his or her own body, but ideally has a somatic awareness also of the larger resonating body of the building.

The exercises I observed at the Globe could thus be re-interpreted as 'tuning exercises', aimed at helping to train actors to utilise the theatre building as a technological structure designed to amplify their voice and expressive stature. A voice exercise, which I also observed but have not so far described, makes this even more clear: "The Arrow"[57] asks of actors to stand in a wide stance, feet firmly planted on the floor, holding an imaginary bow, and then to lift it up and point it in the direction of the auditorium. With the other hand they are then to take an invisible arrow from the quiver on their back (which is also imaginary). The arrow represents their

56 Wiles, *Short History*, 182.

57 Observed also, like the other exercises, during the Globe to Globe festival 'Introduction to the Stage' rituals and quoted from my notes. It is not easy to trace back training exercises to their true origins, as so many versions exist and are constantly appropriated to fit new contexts. As Dick McCaw writes in the preface to Dymphna Callery's book on physical theatre: "[w]ith exercises you don't have creators but carriers." Dymphna Callery, *Through the Body: A Practical Guide to Physical Theatre* (London: Nick Hern Books, 2001), ix. A version of the arrow exercise can for example be found in Meyerhold's biomechanics. There, however, the emphasis is on detailed articulation of movement rather than on voice projection.

first line in the play they are about to perform. In three distinct steps they are directed to draw the bow – take aim – and shoot! At the same time as shooting the invisible arrow into the auditorium, they say their first line of dialogue, aiming it at the back wall of the galleries and visualising it as flying and landing with force. The exercise creates a mental image for the connection between body, voice, and the distance that the voice has to carry to, highlighting the experience first of expansion (drawing the bow, i.e. the ribcage and the lungs), and then of focus and direction. Shooting an arrow is intermodal: the shooter sees the target with her eyes, but her hands and arms shoot the arrow. The exercise at the Globe is intermodal in the same way; it connects two different senses and organs, the eye and the voice. By means of gesture, the actor measures the space that needs to be covered by the voice. What the image of the arrow does is equate the voice with a string that is plucked. From here the step to the image of the body as instrument is a very small one: it is an instrument of voice production, consisting of a vibrating string surrounded by a resonating body.

Voice amplification relies in the first instance on bodily techniques, as neither the human body nor the theatre building are instruments that will play themselves. Actors learn how to 'place' the voice, sending it into different spaces or corners of the room, as Dymphna Callery explains: "Sending sounds into imagined spaces encourages you to think of sound in terms of shape, and helps in training to place the voice. Sending a sound through a wide tunnel or a narrow tunnel, across the sea or up a mountain, makes different demands on the breath and facial muscles."[58] Peter Brook also emphasises the link between training and attunement when he writes that "An untrained body is like an untuned musical instrument [...]"[59]. Echoing him, Glynn MacDonald, Master of Movement at the Globe, describes her own role within the theatre as that of a 'tuner of instruments'; although interestingly, not in an acoustic

58 Ibid., 137.
59 Peter Brook, *There Are No Secrets: Thoughts on Acting and Theatre* (London: Methuen, 1993), 20–21.

sense but relating to movement and body tonus.[60] She works with actors in rehearsal and has spoken of the ideal of a daily class for all company members, as it is common practice in dance companies (though difficult to achieve in the more fragmented working reality of theatre companies, where actors seldom have contracts lasting for longer than one production)[61]. The ideal informing both her and Brook's statements seems to be that actors should learn to embody the space of the theatre so completely that they become attuned to ever more specific details of it, until it feels almost like they have incorporated it into their own body. 'Playing the house' or 'playing the building' means playing one's own body in such a way that it is aware of and reacts to many different impulses from outside the body, including other players, audience members, volumes of empty space, as well as imaginary spaces and locations. By extending the boundaries of their own selves to encompass the entire playing area, including the auditorium, the anthropomorphised theatre building becomes not just any human body – it becomes an extension of the performer's own body.

Merleau-Ponty describes a similar phenomenon when he writes about the football player on the pitch: "The field itself is not given to him, but present as the immanent term of his practical intentions; the player becomes one with it and feels the direction of the 'goal' for example, just as immediately as the vertical and the horizontal planes of his own body."[62] In the same way the aim of performers has to be for the theatre space to become immanent to

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60 In conversation. She uses the same term to describe her work on her personal website: "She sees her role as that of a tuner of instruments and uses her drum to help them keep time. 'There are no understudies at the Globe and the runs are long. We don't want too much tension in the actors' bodies so they become sharp. Nor do we want them so loose that they become flat.'" (http://www.glynnmacdonald.com/globe.htm).

61 Cf. Gay McAuley, *Space in Performance: Making Meaning in the Theatre* (Ann Arbor: University of Michigan Press, 2000), 78: "[...] all these practitioners need to learn to play the instrument that is the stage, just as a musician needs to learn to play the instrument. Knowledge of a particular form of stage can be lost, especially where so little craft knowledge is written down, for in an oral culture like that of the theatre it takes only a couple of generations for knowledge to be lost. In the contemporary theatre, in which actors are usually hired for the given production only, in which there are very few ensemble companies occupying their own theatre, in which directors and designers tend increasingly to be freelance, and the most prestigious travel from city to city, even country to country, rarely staying in any one theatre for more than a single production, and in which theatres are constantly being demolished, rebuilt, or remodeled, it is difficult for any group to gain an intimate knowledge of a particular instrument."

62 Maurice Merleau-Ponty, *The Structure of Behaviour* (London: Methuen, 1965), Translated by Alden L. Fisher, 168–69.

them, for them to play it as they are playing themselves. Seen in this light, the anthropomorphising of the building and the exercises described at the beginning of the chapter can be interpreted as ‘training figures’ - a quicker, more efficient way of getting performers attuned to the building than explaining the principle in a more technical way. The ‘three circles’ exercise, for example, reminds actors that although the stage is large and square, it is oriented by the surrounding circle of the audience, and that mirroring this circle in their movements – by playing along diagonal axes and moving in curves rather than straight lines – acknowledges the audience and thereby creates a more inclusive performance than static or frontal playing would.

The value of such not entirely rational ways of engaging with the world – the anthropomorphising of buildings, or evocations of ancient theories of cosmic connectedness – is that they can be surprisingly efficient form of knowledge. The architectural historian Marco Frascari, in his study of architectural anthropomorphism entitled *Monsters of Architecture*, calls this ‘the concept of limited rationality’: “Here myths are approached as anecdotes that are perceived as more efficient forms of thought than abstract notions.”[63] Seen in this way, the image of the anthropomorphic Globe theatre makes sense as a figure of thought for performers learning to embody it, both vocally and in movement.

63 Marco Frascari, *Monsters of Architecture: Anthropomorphism in Architectural Theory* (Savage, MD: Rowman & Littlefield, 1991), 8.

Chapter V

Architectures of Bodily Movement

Space Production in William Forsythe's *I Don't Believe In Outer Space*

Dance treats space in a very concrete way: dancers follow trajectories, move volumes of space, play with energy, fill up the void "between heaven and earth". The space can be empty because they become the space themselves.

MARIANNE VAN KERKHOVEN

Two men are playing ping-pong. Gradually and in near silence, the game moves from far upstage to the centre of the stage, and then closer to the front. Equally gradually, I notice oddities. One of the men is holding two bats, while the other is empty-handed. I then realise that there is no ball. Only sound effects – created by the two men as they play and amplified by the sound system – ping to and fro, followed by my eyes and no doubt many others in the auditorium. The man with the two bats begins to stretch and warp the space of the game: Once, he keeps the nonexistent ball in the air slightly too long, waiting for it to drop back down from the fly space above the stage. Then, it seems to bounce into the auditorium, causing me to look behind me. More balls seem to appear as the game speeds up; they are flying far and wide, suddenly changing direction or speeds. Time and space expand as the man bats his final ball into the wings in slow motion. And then, the space explodes into loud music and darkness. A shaft of light slanting across the stage changes the orientation of the entire space. It exerts a pull that affects me all the way into the auditorium; we, the audience, are suddenly no longer centrally placed in relation to what is happening on stage. The man with the ping-pong bats, who

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Epigraph:
Marianne van Kerkhoven, ed., *Theaterschrift II: The Written Space / Der Geschriebene Raum* (Brussels: Kaaitheater, 1992) Jan Jors Lamers, 23–24.

up to now seemed in control of the space around him, is swept along by a wave of forces that pull him towards the side of the stage and out of sight.

The performance I am watching is William Forsythe's *I Don't Believe In Outer Space*, danced by The Forsythe Company[1] at Sadler's Wells in London in February 2011, and it is affecting my perception of a theatre space that I think I know very well. The space where this game is happening is not quite 'right'. The stage, usually a screen-like expanse located opposite to me, now seems to creep into dark corners behind me, so that several times I turn to check if something is moving there, or has been sent flying from the stage into the auditorium. But each time the impression has only been caused by a sound effect, or by a speck of movement from one of the dancers ricocheting off somewhere. The performance illustrates how things happening on stage can create a perceived space in the theatre that is different and independent from the actual spaces of stage and auditorium.

Although any theatre or dance performance can achieve a state of oscillation between the fictional world on stage and the 'here' of the theatre building itself, I am interested in this production particularly because it does not set out to create such a fictional world. The immaterial spaces created by the production are not imaginary in the sense that they are motivated by a narrative – at no point do I feel 'transported' to an imaginary place. Instead, they are perceptually tangible on a more basic level that does not involve reflection or a conscious act of imagination. At certain points these spaces become so dominant that they distort and even eclipse the space of the theatre itself. This chapter explores the bodily and, to a lesser extent, technical means by which such spaces are created. It looks at how movement and particular dance techniques create their own spaces, and how these spaces can be characterised as bodily architectures. Because of the importance of sound in this production, and generally in Forsythe's later work, it

1 The performance I saw took place on 22nd February 2011 at Sadler's Wells theatre. The Forsythe Company has since been renamed Dresden Frankfurt Company following the departure of William Forsythe in 2015.

will also look at how ‘sound architectures’ are created and perceived in the context of theatre space. And while the example of the ping-pong game in *I Don’t Believe In Outer Space* is thus treated to some extent as a jumping-off point for thinking about theatrical space production in a wider sense, I will keep returning to the piece, not least because several members of the cast, including Dana Caspersen and Elizabeth Waterhouse, have written insightfully on the ways in which dancers engage with space. Actors and other performers engage with space, too, of course, and it is increasingly difficult and even perhaps unnecessary to draw strict boundaries between dance and theatre, as the two are becoming more entwined in contemporary practice. There are many areas of overlap even in this piece: Much of what the dancers do here would not be called dance in the traditional sense, and several of them regard themselves as actors primarily and dancers only in the second instance (or formerly, in a ‘previous life’). Although dance in the traditional and classical sense is one of the clearest and most useful examples for demonstrating how spaces, or architectures, can be produced by movement alone, I at no point claim that other forms of theatrical performance cannot do the same. I do argue that the kinetic ability and awareness of trained dancers ‘bodies forth’ a codified spatial system that is kinetically real for the dancers themselves as well as visually tangible for spectators.

I Don’t Believe In Outer Space is a good starting point not only because it creates and manipulates such spaces, but also because it could also be said to have space as its subject matter. It explores the nature of space both as material and as metaphor. Forsythe was sixty when he made the piece and speaks about it as an exercise in thinking about mortality, attempting to grasp the fact that things and people are here despite the certainty that one day they will not be here anymore. His metaphor for this physical and psychological state (i.e. certain knowledge of one’s own mortality) is space – the contingency, infinity and at the same time ungraspable-ness of space. Life and space are conceived of as a flux of forces, and some

of these manifest themselves on stage during the piece. It oscillates between depicting space in the sense of empty space and space as the 'matter' of our universe. There is a cosmic quality not only to the time- and space-warping ping pong game, but to the stage itself, which is littered with black balls made out of scrunched-up gaffer tape, referencing meteorites or black holes. The performer Dana Caspersen provides a voice-over to many of the scenes, linking the idea of space to the existence and possibility of coincidence. Acoustically illustrating the concepts of 'far' and 'close' by alternately holding the microphone far away from her and close to her mouth, she talks about "*... something which was very very far in the distance, suddenly becoming incredibly close. And then far, and the close, and far and close and far and close, and then suddenly, just disappearing. Disappearing altogether, as if by chance. As if by chance, one group of things which had apparently disappeared, suddenly reappearing in an entirely different position....*"[2] There is an echo here of Doreen Massey's characterisation of space as "the sphere of the possibility of the existence of multiplicity"[3], and one might suspect that Caspersen is describing the unpredictable space of a relativistic universe at the same time as (or as a metaphor for) the more immediate experience of personal contingency.

Learning to Inhabit (or *Become*) Space through Dance Technique

One of the reasons for choosing a dance example to demonstrate the principle of bodily architectures being created through movement is that dance techniques use highly codified spatial systems that are more legible, and thus definable, than the less distinctive systems of theatrical space production. It may be true that different acting techniques produce different spaces, but it would be difficult, even for experts, to recognise different schools of acting in the way

2 Quoted from a recording of a different performance than the one I saw at Sadler's Wells. There is a clip available of the scene online: https://www.youtube.com/watch?v=-c_m0p6O82g.
3 Doreen B. Massey, *For Space* (London & Thousand Oaks, CA: SAGE, 2005), 9.

that the spatial systems of for example ballet, Graham, or Cunningham techniques are immediately recognisable and distinguishable. Graham technique produces a dense landscape of curved lines and squat, grounded volumes, while the spatial system of Cunningham technique is airy, made up of points that are widely and randomly dispersed in space. Although in contemporary dance today the strict boundaries between these different techniques are largely being dissolved as dancers increasingly learn to switch between and mix different techniques – just as the boundaries between dance and other forms of theatrical performance are also becoming more fluid – one style of dance remains apart: Classical ballet still has the most highly codified and easily recognisable spatial system of Western dance forms, and it is worth briefly giving an account of this system here in order to explain how such spatial architectures are taught, learnt and embodied. Because most contemporary dancers do also at some point learn or train in ballet, the technique has acquired the status of a basic shared vocabulary that can be developed, manipulated, or simply used as a form of common ground in an otherwise disparate collection of techniques and approaches. William Forsythe certainly, as well as the majority of dancers performing in *I Don't Believe In Outer Space*, have a strong foundation in ballet and use its spatial system to inform their current dance practice. Forsythe's style, or technique, has famously been described as the 'deconstruction' of ballet, although he has expressed his dissatisfaction with this description.[4] A better way of putting it may be that he is interested in challenging, or playing with the mechanics of the balletic system, putting it to new uses without wishing to negate its principles (as the term 'deconstruction' implies). The spatial implications of this are well described in the introductory text to a publication for dancers wishing to learn some of the improvisation techniques developed by Forsythe and his company. Jeffrey Shaw writes in the editorial:

4 Cf. Ann Nugent, "The Architexts of Eidos:Telos: A critical study through intertextuality of the dance text conveived by William Forsythe" (School of Performing Arts, University of Surrey, 2000), accessed accessed February 15, 2012, http://epubs.surrey.ac.uk/847/1/fulltext.pdf, 4.

> The history of art exemplifies a complex set of negotiations between body and space - negotiations between the actual domain of the viewer's real body and the real space he or she inhabits, and the virtual domain of the represented body and represented space. *The contemporary body in space is no longer the classical model. Ours is a vertiginous location* - suspended upside down (Georg Baselitz), launched into space (Yves Klein), declared as obsolete (Stelarc), and now apparently superhumanly re-embodied in cyberspace.[5]

This is the universe to which ballet technique has been exported by Forsythe and his dancers. But before going into detail regarding the vertiginous spaces of Forsythe's work, let us take a look at the classical model.

The aesthetic legibility of ballet[6] is grounded in its embodiment of a very particular historical and social situation: It was invented to represent and support an ideal image of absolute monarchy and power concentrated in a single body, and to take place in spaces that represented the same idea. Because of this, the space of ballet as it is embodied by dancers still today conforms to classical architecture and the laws of perspective, exemplifying the focus on one single point of perspective from which it should be seen. Its principles are centrality and symmetry. It follows that the architecture of spaces such as the palace or the imperial theatre remains the basis for and is reproduced in even the most basic exercises performed in ballet studios in everyday training. In other words: The dancing balletic body, its posture, the lines it follows and the ways in which it draws in and aligns itself with in space, creates centrally oriented and symmetric spaces reminiscent of an absolutist social system and hierarchy. Irrespective of where this dance takes place, the body already evokes a certain kind of architecture.

Both the dancer learning the technique and the spectator learning to read it thus come to see and understand more than just the positions of the body and the movements that connect them. The movements and positions are determined by a spatial system

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5 Jeffrey Shaw, Director of the ZKM | Institute for Visual Media (1991-2003), in: William Forsythe, Roslyn Sulcas and Nik Haffner, *Improvisation Technologies: A Tool for the Analytical Dance Eye*, 4th ed. (Ostfildern: Hatje Cantz, 2012), 8, my emphasis.

6 A term proposed by Arabella Stanger in her thesis: Arabella Stanger, "The Choreography of Space: Merce Cunningham and William Forsythe in Context" (Doctoral thesis, Goldsmiths, University of London, 2013), 266.

that organises, places and orders them. Without this spatial system, the movements would not make sense, be experienced as hanging 'in mid-air' and, from the point of view of the dancer, be more difficult to remember and reproduce. The crux of this argument is that the process of training in ballet is not in the first place about learning positions and how to move between them, but involves learning how to align one's body with an immaterial architecture in space.

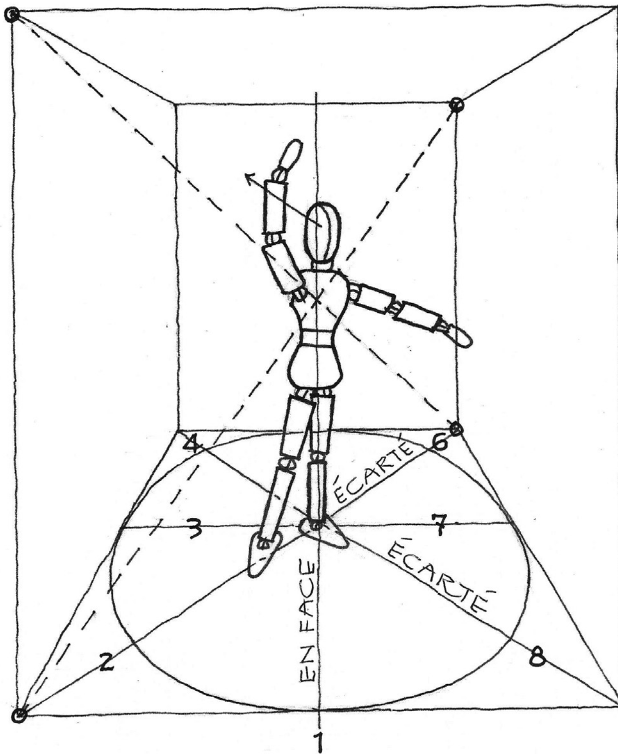

Fig. 7

This architecture is regular, centrally organised, and symmetrical. Of primary importance is the vertical axis running through the centre of the body, creating height and creating a connection

between floor and ceiling. Further there are eight directions of the body: front and back, both sides, plus the four corners at floor level. These lines form the basic system. The more advanced dancer will then learn the system of diagonals connecting all eight corners of the imagined cube surrounding him or her. These diagonal axes are imagined to connect, or converge, at the centre of the dancer's chest and are therefore 'felt' particularly in the area where the sternum is. The horizontal bodily axis connecting both shoulders (and thus imagined as running through or along the collar bones) aligns with these diagonal lines according to a principle called 'épaulement'. Derived from the posture of Renaissance statues characterised by counterpoint and torsion, it is the principle of counterpoising the body within itself to create a stable and yet complex system of articulation along several diagonals. The principal lines that are being opposed are those formed by the shoulders, arms, sternum, neck, and eyes. Épaulement is thus experienced within the body and at the same time as a characteristic of the surrounding space: As much as the diagonals are part of the external spatial system, they are also and simultaneously imagined as 'extrusions' from the body into the space. Each alignment and each diagonal has its own expressive potential, conveying for example openness and power (by stretching the body along a rising diagonal), guardedness (if the lines cross), or a downcast demeanour (following a falling diagonal). This is particularly important in relation to the line formed by the gaze. Highly regulated, the dancer's gaze aligns itself with the system of diagonals as much as limbs do.

Dana Caspersen, dancer in the Forsythe Company and the main protagonist of *I Don't Believe In Outer Space*, describes the experiential quality of balletic posture as a "series of curvilinear forms in angled relationships" in which the "strong, outwardly directed, linear gaze of épaulement reflects the angles of the body's inner directional refractions."[7] Elizabeth Waterhouse, who also

7 Dana Caspersen, "The Body is Thinking," Walker Arts Center: Performing Arts Blog, http://blogs.walkerart.org/performingarts/2007/03/09/the-body-is-thinking-the-body-is-thinking-by-dana-caspersen/.

performs in the piece, even writes about épaulement as an 'ecstatic practice' during which one enters into an emotional state as much as a space: "[...] perhaps for experienced dancers, épaulement is not enacted through focusing on knowledge of positions; rather movement bursts forth through an intentionality experienced as love or joy."[8] What this means is that once the spatial system or architecture of ballet has become fully embodied by the dancer and thus instinctively accessible, it is experienced as a tangibly present architecture also in the sense that the dancer can freely move around in it and even enjoy it, as Waterhouse asserts. The various positions with their French names such as *écarte, croisé, effacé*, or *ouvert* mirror this idea in that they are descriptions of architectural principles. The dancer is asked to imagine that he or she is 'looking around a corner', 'inviting in', 'throwing open', or 'turning outwards', using an inside-outside dialectic that applies as much to the spaces of the bodies itself as it does to the architectural spaces created by its movements. The important thing to emphasise here is that the balletic spatial system is experienced as being part of the body and at the same time part of the space outside of the body. The two become difficult to separate.

What happens in the process of dance training can thus be described as a reconfiguring of how one's own body is located in space, that is, the creation of a detailed and dynamic map of internal and external points, lines and spaces and their exact locations. This 'map' is directly accessible by the body in movement (i.e. the experienced dancer does not have to stop and think about it first). Only when learning and training does it need to be reflected upon and consciously thought about; once fully embodied, it is instantly available to the trained body without further reflection. Susan Forster, a choreographer and writer who has been building bridges between the two worlds of dance and scholarship for many years, describes this process:

8 Elizabeth Waterhouse, "Dancing Amidst The Forsythe Company – Space, Enactment and Living Repertory," in *Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater*, ed. Gabriele Brandstetter and Birgit Wiens (Berlin: Alexander, 2010), 165.

> Technique might visualize the body as a set of abstract lines running close to the bones, as a set of points or regions of the surface and interior, as a set of forces that lift, descend, expand or condense specified areas of the body. Dancers pull, tuck, extend, lift, soften and lengthen areas of the body throughout the duration of the technique class. They learn the curves or angles that body parts can form, and to place these in a particular shape at a given time. They learn to delineate rhythmic structures, to regulate the flow of effort from one part to another, to sculpt, trace and imprint these parts in space. [...] Over months and years of study, the training process repeatedly reconfigures the body: it identifies and names aspects or parts that were previously unrecognized, and it restructures the whole in terms of dynamic actions that relate the various parts.[9]

It should be noted at this point that the existence of such a dynamic map of the body's potential movements in space (termed 'body schema' by Merleau-Ponty and others following formulations made by the Gestalt School of Psychology)[10] is of course not dependent on training, dance training or otherwise, but necessarily present in any moving body. Training merely develops this schema and allows it to become more complex, articulated, and easily accessible. Movements and everyday tasks would be impossible without such an embodied map of kinaesthetic knowledge, as cognitive scientists make very clear. Angelo Maravita, a neuroscientist, writes for example that "body representation should not be considered simply as a static picture, or map, of one's own skin surface, but more as a dynamic representation of the *body in space*, whereby the body is a critical reference point for the representation of the external space adjacent to it."[11] The difference between dancers and non-dancers (or rather: people trained in some kind of movement practice and non-trained people) is clearly in degree, not in kind.

9 Susan L. Foster, "Dancing Bodies," in *Incorporations*, ed. Jonathan Crary and Sanford Kwinter (New York, NY: Zone Books, 1992), 483–84.

10 Cf. Maurice Merleau-Ponty, *Phenomenology of Perception* (London & New York: Routledge, 2002, c1945), 114: "If a need was felt to introduce this new word [body schema], it was in order to make it clear that the spatial and temporal unity, the inter-sensory or the sensori-motor unity of the body is, so the speak, *de jure*, that is not confined to contents actually and fortuitously associated in the course of our experience, that it is in some way anterior to them and makes their association possible."

11 Angelo Maravita, "From "Body in the Brain" to "Body in Space": Sensory and Intentional Components of Body Representation," in *Human body perception from the inside out*, ed. Günther Knoblich, Advances in visual cognition (Oxford & New York: Oxford University Press, 2006), 71.

The Body Outside Itself

Having described how dance technique involves making spatial points, lines and volumes located outside of the body accessible to the body in movement in a very precise way, it is possible to assert that bodily techniques such as dance – but not only dance – reconfigure the boundaries of the body as they are experienced in movement or action. Phenomenologists and those studying embodiment from other perspectives have long theorised and explored the phenomenon of the boundaries of the body becoming fluid, declaring it to be a feature of embodiment itself.[12] We are capable of incorporating objects and instruments into a bodily action schema to temporarily make them part of the body itself. Competent tool use, like riding a bike for example, already reconfigures the body in action in a certain way, or, as Merleau-Ponty puts it, 'dilates' our mode of being in the world to include the tool in question. He uses the skill of touch-typing to illustrate this idea, asserting that it is possible to know how to type without consciously knowing where each letter is on the keyboard: "It is literally true that the subject who learns to type incorporates the key-bank into his bodily space."[13]

This principle of 'dilution' or incorporation applies not only to objects and instruments, but also, as we have seen above, to the space surrounding the body. Dana Caspersen explains how such an 'incorporated' spatial system feels from the inside, that is, from the perspective of a dancer with a highly developed proprioceptive and kinaesthetic awareness. Such awareness, she argues, enables dancers to sense and imagine not only their bodies but also the space outside of them:

> Taking in information within the kinesphere - the space that the body's movement occupies - involves sensing the body where it cannot be seen. [...] This ability of the body to create an internal image of itself also allows for

12 A classic example of this kind of work is the research undertaken by early psychologists on phantom limbs – a topic frequently revisited by phenomenologists including Merleau-Ponty in order to theorise how a space that is not part of the body anymore can yet be experienced to be part of it.

13 Merleau-Ponty, *Phenomenology*, 166–67.

> the possibility that the body can create an image or sense of itself where it does not exist, or for it to imagine itself orienting along lines, planes, or volumes in ways that are not actually possible. [...] This ability to imagine multiple versions of the self, a proliferating, projective equation that moves out from where the body is to where the body might be, creates a situation where space seems to be inhabited by a complex, fluid matrix of potential motion and form, of which this body is part.[14]

The question then is about movement; whether movement is something that belongs to the body or that is experienced as being part of the space surrounding the body. One scene in *I Don't Believe In Outer Space* features a dancer pretending to be a hyperactive circa 1980s aerobics teacher, enthusiastically (though unsuccessfully) inviting the audience to follow the movement patterns she demonstrates. Each movement is given a name by her, which she loudly repeats every time she performs it in a bid to animate us to join in: *Christmas tree!* (as her arms move up and down to form a triangle). *Pineapple!* (arms moving outwards in a fan-shape), and so on. As the 'class' progresses in an increasingly energetic and chaotic fashion, more and more movement shapes populate the stage. There are laughs from the audience as people recognise mistakes: The dancer calls out names, but the movements she is performing do not match the names anymore; pineapples clash with Christmas trees.

What this example proves is that movement creates spatial shapes that are recognisable entities able to perceptually 'stand alone' in space, almost independently from the body performing them. This does not mean that these shapes are somehow tangible or visible – they disappear immediately, and yet they are perceivable. Sheets-Johnstone asks us to imagine a dancer describing a large circle on stage with her travelling movements. What is this circle? Is it a tangible sense impression, a trace left by the movement?

> To say that a dancer is moving in a circle means that we, as audience, are imaginatively apprehending the movement as a visual-kinetic form, a circle, which does not in fact exist. The circle does not exist except as it is imaginatively constituted by consciousness as a unified and continuous

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14 Dana Caspersen, "Decreation: Fragmentation and Continuity," in Spier, *William Forsythe and the Practice of Choreography*, 96.

> form, except insofar as there is a retentional knowledge of the circle as it is being drawn. We form an imaginative *Gestalt* of the movement by apprehending each moment of the circle as a spatial-temporal present in relation to a spatial-temporal past and future: the present is a flight out of the past toward a future. It is a transitory moment of an imaginative spatial-temporal whole and not an isolated present. Consequently, there is not a succession of images but a single and unbroken circular line.[15]

For the spectator, the experience of watching the dancer complete a circle amounts to a conflation of dancer in the space and circle in the space: the impression of not being able to separate the movement from the body from the space. Seeing the circle means seeing the dancer 'outside of herself', just as for the dancer 'feeling' the circle means feeling herself to be outside her body: "How does the dancer know that she has completed the circle, and how does she know that her movement has actually traced the imaginative circle?"[16] The answer, according to Sheets-Johnstone, lies in the fact that that the dancer's body has – through training – acquired the ability to kinetically incorporate the surrounding space: "The dancer has a fund of lived experiences of her body in movement, and consequently, a highly developed pre-reflective awareness of the moving spatial presence of her body. She is capable of performing many movements which non-dancers could not perform without a reflective awareness of their bodies."[17]

The moving spatial presence of the body is necessarily larger than the body itself, including its past and future states and locations. The resulting sense of the dissolution of boundaries is one of the reasons why dance can be experienced as an ecstatic practice. For the spectator, this translates into an impression of dance as something that slightly exceeds just seeing bodies in motion: Movement travels through the bodies of dancers but does not necessarily begin or end with them. Movement is thus experienced as being a quality of the space itself. The man playing ping-pong in *I Don't Believe In Outer Space*, for example, at first

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15 Maxine Sheets-Johnstone, *The Phenomenology of Dance* (Philadelphia: Temple University Press, 2015, c1966), 94–95.
16 Ibid.
17 Ibid.

seemingly in control of the space, appears to be overwhelmed ('swept away') by the space or its inherent forces as the lighting state changes and the music begins to play. His dancing and his movements do not look like they are coming from within him; many of the impulses for movement seem to come from without, as if by suction or a sense of pull in a sideways direction. Evidently, this impression is created by the dancer and his command of technique. In the following I want to look at how such techniques – including the appearance of not being in control of a space – can be understood. The balletic principle is control – creating a particular space and controlling it. Other dance techniques treat space differently, and consequently build different kinds of bodily architectures.

Movement Architectures

What almost all dance techniques have in common is that they do not think of space as a void or emptiness, but conceive of the architectures created by movement as solid, perceptually real and tangible 'stuff'. What differs is the shape and form that this stuff takes. In early forms of modern dance, such as for example the technique developed and codified by Martha Graham, the emphasis lay on transforming the balletic lines and axes into three-dimensional volumes. The architectural theorists Kent Bloomer and Charles Moore, in their book *Body, Memory, and Architecture*, use the example of Graham technique to make this kind of understanding of space available and accessible to students of architecture: "Martha Graham, the doyenne of modern dance [...], would regularly base a set of exercises on the haptic experience of space; her students were asked to hold, push, pull, and touch pieces of space and places in space."[18]

Even more explicitly than Graham, Rudolf Laban articulated the fact that dance and architecture are related disciplines and that

18 Kent C. Bloomer and Charles W. Moore, *Body, Memory, and Architecture* (New Haven: Yale University Press, 1978), 57–58.

the qualities of movement created in dance can be characterised as immaterial architectures: “Movement is, so to speak, living architecture - living in the sense of changing emplacements as well as changing cohesion. The architecture is created by human movements and is made up of pathways tracing shapes in space”.[19] The tools of spatial analysis developed by Laban are complex and continue to be applied productively to a wide range of movement practices also beyond dance. His dance works and choreography, by comparison, are less known or remembered today. Architectural and performance scholar Heidi Gilpin also qualifies the extent to which Laban’s system broke with the classical spatial model of ballet: “Although Laban was a proponent of his own form of free dance, which departed from the tradition and constraints of classical ballet, the theoretical premises of his systems draw significantly on the essentially axial model of ballet.”[20] Both Graham’s and Laban’s dance architectures can be said to remain close to the classical model in that they conceive of the body as well as the space of the stage as a unity, organised in a centralist and symmetrical way. They rely on an axial system and a vertical, centralised body.

It was Merce Cunningham who brought about the dissolution of this unified system. He adopted Einstein’s statement, “There are no fixed points in space”[21], as the fundamental principle of his work and set about dismantling the traditional spatial framework of classical and modern dance techniques: Orientational co-ordinates such as front, back, centre or periphery became obsolete, as any point in space was declared to be the possible centre or starting point of a piece.[22] The point of view of the observer, too, became

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19 Rudolf von Laban, *Choreutics* (Macdonald and Evans, 1966), Edited by Lisa Ullman, 5.

20 Heidi Gilpin, “Abberations of Gravity,” in Spier, *William Forsythe and the Practice of Choreography*, 118.

21 The sentence is often quoted in relation to Merce Cunningham and is used for example in the titles of several of his dance pieces, videos, and essays, but I have not been able to find the correct citation from Einstein’s own writings.

22 Cf. Merce Cunningham, “Space, Time and Dance,” in *Merce Cunningham: Dancing in Space and Time*, ed. Richard Kostelanetz and Jack Anderson (New York: Da Capo Press, 1998); Originally published in 1952., 37. His analysis of the spatial systems of earlier dance techniques shows how far his own understanding of space is removed from theirs: “The classical ballet, by maintaining the image of the Renaissance perspective in stage thought, kept a linear form of space. The modern American dance, stemming from German expressionism and the personal feelings of the various American pioneers, made space into a series of lumps, or often just static hills on the stage with actually no relation to the

arbitrary, as what happened on stage was not necessarily oriented towards a single, or even multiple perspectives. Cunningham's aim, in effect, was to create a relativistic spatial universe. In this, he was an important influence on Forsythe.

Significantly, even though both Cunningham and Forsythe have arguably gone furthest in dismantling the idea that movement architectures need to be characterised by unity and 'wholeness', they still primarily work (or worked, in the case of Cunningham) with classically trained dancers. The spatial system that they have supposedly overthrown or deconstructed thus remains corporeally present in their work, in the bodies of their dancers. Forsythe has never denied this; on the contrary. The movement architectures developed by him and his dancers take the classical system as a point of departure, a skill set or knowledge bank so to speak, generating new forms of moving by warping, torqueing, flipping, rotating, or dispersing its spatial co-ordinates. Asked about the dancers he works with in an interview he explains that they "have all the reflexes of the traditional ballet dancer, and they have essentially the same basic mental training, which lets them picture points in space very precisely. They orient their positions very quickly within those points. Of course, the mental images we use are not traditional."[23] These non-traditional mental images he refers to are perhaps best described as a catalogue of spatial and kinetic operations developed and practiced by the dancers in his company (and documented in the aforementioned publication *Improvisation Technologies*), allowing them to generate new forms of movement. Dana Caspersen describes one such operation, called 'shearing':

> It is a state that the body enters into where no physical or vocal action is ever made directly. For example, as we approach a microphone, or a person, our thoughts might move in that direction, but our bodies ricochet backward, off of the thought, in a series of oblique refractions. The body

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larger space of the stage are, but simply forms that by their connection in time made a shape." His own work, by contrast, aims to create "a space in which anything can happen": "Imitating the way nature makes a space and puts lots of things in it, heavy and light, little and big, all unrelated, yet each affecting all the others." Ibid.

23 William Forsythe, interviewed in: Paul Kaiser and William Forsythe, "Dance Geometry," *Performance Research* 4, no. 2 (1999): 66.

becomes a proliferation of angular currents, a state of complex, fragmented reaction.[24]

The idea behind such operations as shearing, tilting, folding or throwing is to bypass or interrupt the body's instinctive and habitual ways of moving and thus encourage it to move differently.[25] A simple example might be the task of performing a known movement or step while imagining that, say, the floor is tilted by ninety degrees, or that gravity has been inverted. The resulting movement will be unexpected even to the dancer; in a sense, the dancer has been moved by the space rather than the other way around.

The effect of this on the viewer is often a sense of vertigo. The movements performed by the dancers are not comprehensible in the same way that balletic or even the movement vocabulary of modern dance are experienced as logical, unified entities. Instead, they are vertiginous, continually disintegrating movement architectures characterised by extreme complexity, articulation and at the same time disarticulation. The aim, as Caspersen states, is to "be in multiple states at the same", "to act with precision and still be open to multiple inputs", and "to sense many different levels of motion and be able to switch directions mid-stream."[26] Increasingly, and as evident in *I Don't Believe In Outer Space*, the aim is also to create not only movement architectures but other kinds of bodily and technical architectures including those created by sound. This is a conscious move away from the balletic body, which traditionally is a silent body, and towards a fuller system that uses the body and person as a whole. The performers introduced so far – the man playing ping-pong, the enthusiastic aerobics teacher, and Dana Caspersen, who throughout the piece virtuosically switches between two different characters engaged in an escalating dialogue of menace and aggression – in no way conform to the silent balletic

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24 Caspersen, "The Body is Thinking". This operation, or approach, was developed during the rehearsal process for another piece, *Decreation* (2003), by the Frankfurt Ballet.

25 Cf. Paul Kaiser, who states that the two of the most striking aspects of Forsythe's work in his opinion are "how ingeniously he uses spatial transformations to generate new dance movements" and "how great a demand this places on his dancers' minds as well as their bodies". Kaiser and Forsythe, "Dance," 64.

26 Caspersen, "The Body is Thinking".

ideal. A better term for them might be 'entertainer bodies'; not objects to be looked at but complex, breathing, singing, screaming, technologically enhanced, thinking bodies engaged in a wide variety of physical and intellectual space production.

Sound architectures

The understanding of the dancer's body as not just a silent body made for moving, but a breathing, speaking, singing, thinking body made for all these activities has important implications for the kinds of bodily architectures that can be created by it. The piece *I Don't Believe In Outer Space* (and the work of The Forsythe Company more generally) is an example of the kind of work that results from such an understanding. As evident in the example of the ping pong game and other scenes described above, the company consists of a group of dancers who, although predominantly classically trained, are able to incorporate speaking, singing, acting and other somatic techniques such as for example martial arts into their performances. The approach is decidedly holistic.[27]

Of these, the element I want to concentrate on here is sound. Certainly in the example described at the beginning of this chapter, sound was the central element in unsettling the space as it was experienced in performance. Through sound, a type of space was created that was not the same as the physical theatre space. As discussed previously in the context of the multiplicity of embodied space, sound is spatially extended and also perceived as such, although in the general imagination it is often thought of simply as something that happens only in time, invisible and therefore not present in space.[28] However aural architects such as Blesser and

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27 In Forsythe's oeuvre this shift away from balletic techniques and towards more holistic forms of performance began to happen while he was still working with the Ballet Frankfurt, but started in earnest with the formation of The Forsythe Company, made up of a group of dancers particularly interested in pursuing such a wide approach to performance and improvisation. Former members and collaborators of the company including Elizabeth Waterhouse, Scott De La Hunta or Freya Vass-Rhee have in recent years begun to publish research on some of these methods.

28 Cf. also John Dewey, *Art as Experience* (New York: Capricorn Books, G. P. Putnam's Sons, 1958, c1934), 206–7: "Psychologists, until William James taught better, were accustomed to find only temporal quality in sounds, and some of them made even this a matter of intellectual relationship instead of a quality as distinctive as any other trait of sound. James showed that sounds were spatially voluminous as well – a

Salter particularly emphasise the spatial nature of sound, describing how it is able to delineate volumes geometries and textures, transcend visual boundaries (i.e. 'seep through walls') and even create virtual or illusionary spaces that do not actually exist, yet are perceptually tangible and real in the moment of listening: "While listening to recorded music in our homes, we experience a virtual space created by a mixing engineer who manipulated a spatial sythesizer in a recording studio. There never was a performance space."[29] With this in mind and moving beyond the traditional understanding of sound as a linear temporal form, it becomes possible to visualise aural volumes on stage as a dynamic landscape that dancers and performers move around in. This landscape is made up of constantly changing aural forms, volumes, textures and intensities which can be circumnavigated, entered into, moved with or against. A dancer may skim over a musical or acoustic form that is low and shimmering, or enter into one that is strong and towering, or, like the dancer in the introductory example, be swept away by a sudden gust of loud music. These volumes, experienced by performers as much as by those in the audience, can have different densities and textures, and they may also move or change location. The ping-pong ball that I imagined seeing pinging all over the stage, for example, was of course nothing but a sound made either by one of the dancers and amplified by a microphone taped to their body, or by a spatialised sound effect.

There is a natural relationship between the body in movement and certain sounds such as breathing, swishing, falling, thumping, plus of course the ability of the human voice to utter sounds. Forsythe increasingly uses such sound-scores and sound effects not to accompany or underscore the movement, but as a theatrical language in its own right. Movement is only seen as the means for creating these sounds, as dramaturg Freya Vass-Rhee explains:

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fact which every musician had practically employed and exhibited whether he had theoretically formulated it or not."

29 Barry Blesser and Linda-Ruth Salter, *Spaces Speak, Are You Listening? Experiencing Aural Architecture* (Cambridge, MA: MIT Press, 2007), 6.

> […] movement is translated into fully vocalized sound, producing an aural rendering of the dancing. This choreographic mode, which physically acknowledges the contiguity of the body's muscularity and inner and outer surfaces, dissolves the body's external-internal boundary, extending the conceptual domain of dancing to its interior spaces and presenting dancing in both visual and sonic form.[30]

Paradoxically for what is still understood as a 'dance piece', movement in such a piece is only conceived of as a product of sound production – the dancing body is understood as an acoustic medium or instrument, utilised in such a way as to create varied and intricate sound effects. Its movements are not specified in advance or even considered as primarily important, only coming about through aiming to achieve the desired sound.[31] The natural relationship between the moving body and the sounds that this body produces can also be, and often is, modified in Forsythe's work. This is particularly interesting to consider in relation to the larger spaces or buildings where such pieces are performed. Sound has a natural presence, or reverberation in the room or space in which it is produced, but its presence can also be enhanced or manipulated by technical means. And this necessarily changes the way that the space is perceived. If the sound is made larger, the space 'shrinks' in response, and vice versa.

What this means, effectively, is that the experiential space of the theatre can be manipulated through the use of sound.[32]
It is an important consideration for example when touring with a particular theatre or dance piece and performing in different venues. Forsythe has described, for example, how he amplifies the sound of dancers' breath in larger venues in order to replicate the intimacy of smaller spaces. Calling these subtle sounds 'breath scores', he asserts that they can bring the audience closer to the performance, acting as a kind of 'zoom-effect'. Their purpose,

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30 Freya Vass-Rhee, "Dancing Music: The Intermodality of The Forsythe Company," in Spier, *William Forsythe and the Practice of Choreography*, 79–80.

31 Cf. also Chris Salter, "Timbral Architectures, Aurality's Force: Sound and Music," in Spier, *William Forsythe and the Practice of Choreography*, 67.

32 There exists, for example, a variety of software ("max patches") for spatialising electronic sound, that is, for locating sound effects in particular locations around the room and even moving them around. The practice and technology will undoubtedly become increasingly important for theatre and deserve further critical and scholarly attention.

however, can be manifold: Breath scores might be used to emphasize the effort of dancing, but also sometimes to destabilise the experience - when it's slightly 'off' but too subtly wrong to be able to tell exactly why space and sound do not seem to match in terms of distance or intensity.[33] He also states that sound can overwhelm a performance when it remains at too high a level for too long. The proportional relationship between sound and performer becomes upset, making the performers seem ineffectual on stage, or in extreme cases even making them 'disappear'.[34]

Returning to the example of the ping-pong game, it now makes sense why I kept feeling that the space of the stage had begun to extend further than what I could actually see and why it seemed to be creeping up behind me. The sound effects creating the ping-pong balls were indeed spatially placed, effectively expanding the aural space of the stage far beyond its visual boundaries and into the space of the auditorium. Even though the performance took place in a frontally oriented proscenium arch space, the space created by the performers and performance spilled over from the stage, entering the depths of the auditorium and approaching the audience seated there from behind, above, and the side. The aural architecture of the production extended far into the auditorium, bridging the gap between performers and audience.

Intertwining of Produced Space and Theatre Architecture

The spaces created by theatre and dance productions – through movement, sound, but also by other means not elaborated here, such as for example through storytelling or lighting design – are more or less independent from the space of the theatre itself. Visual and kinetic spaces are most closely linked to the architectural space of the building and hence more dependent on it, whereas aural spaces, as we have seen, are relatively independent. The spaces

33 William Forsythe in an informal talk given to a group of emerging choreographers at Sadler's Wells in December 2006, which I attended as a guest. I here quote from my notes.

34 Ibid.

most detached or uncoupled from the architectural structure are the purely fictional or narrative spaces evoked by language.

To conclude this chapter I want to think a bit more about the relationship between such theatrically or corporeally produced spaces and the buildings containing them – how they sit within the space of a particular theatre, how they influence perceptions of the space of that theatre, and vice versa, how the theatre space affects the production of theatrical spaces within it. The second point I already touched upon when I said that while watching *I Don't Believe In Outer Space*, I felt unsettled in the very space that I knew so well. The configuration of stage and auditorium was being changed, or warped, through sound effects and movement, as well as very possibly through other effects that I was not able to put my finger on. Another example of this kind of influencing or warping is the use of breath scores described above, which are an example of a more general group of what might be called 'perceptual zoom effects' designed to bring performers closer to the audience. Such effects also include the use of spotlights to pick out details on stage such as for example a face, acting much like a close-up in film. If successful, they can occasionally achieve a sense of increased intimacy in a large theatre, overcoming the distance or void between performers and audience. It is also possible for the opposite to happen: Music or sound that is too loud, for example, or visual effects that are too large, can diminish performers, making them seem insignificant by comparison and lessen their ability to control the space.[35]

It is not enough, however, to simply say that the spaces created by production through such technical means change the architectural space. This is a given, for every theatrical production does this in some way, by building a set, for example, as well as by the more immaterial means of theatrical space production touched upon in the first chapter of this thesis, which result in diegetic, gestural, or performative spaces. We also have to take into account the ways in

35 This is sometimes the case in musical productions, where performers are miked-up and loudly amplified. The effect can be depersonalising rather than creating a sense of intimacy and closeness.

which the architectural reality of the theatre building affects the production and perception of such theatrical spaces – and in dance particularly, the production of bodily architectures. Can a theatre building 'get in the way' of this process, or on the other hand assist in it? It should be noted that this applies to performers and practitioners as much as it does to audiences. Perceiving and understanding a stage space is a mental and bodily activity on the part of the spectator, an active process of construction (or production), and architectural spaces may help this process or obstruct it, as well as affect spectators in various other ways.

The influence of the architectural space is particularly evident when one has the opportunity of seeing the same piece or production in different venues. Depending on the space, performances of the same production can appear as entirely different theatrical experiences.[36] Similarly for performers, the experience of transferring between venues or touring to a large network of 'receiving houses' can amplify the ways in which different spaces and buildings react to, or facilitate, performance. Some theatres may feel sympathetic while others obstruct or make it more difficult both to perform a certain piece and to watch it. Conversely, bodily or performative architectures may come into conflict with the architectural the space of the theatre, or they may 'work with' it. For performers particularly, the experience may be that the architecture helps or amplifies their internal system, that is, the space that they are working to produce. Dancer Elizabeth Waterhouse describes it compellingly when she compares the experience of dancing ballet in a space that is 'fit for it', such as an opera house or perspectival space that corresponds effectively with ballet's own spatial system, to dancing it simply in a studio or hall:

> The cavernous volume of a theater and its narcissist implications make ballet a new and rich experience, different from that within the studio or

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36 Juliet Rufford describes such an experience, seeing the same production of a Sarah Kane play once in the small studio space upstairs at the Royal Court Theatre, and then again in its larger main space. The cramped conditions in the studio space create a visceral response that allow for one interpretation of the play, while seeing it revived in the larger proscenium arch space re-frames and alters her perception, positioning the action as taking place in a distinct and separate world to that the of the spectators. Juliet Rufford, *Theatre & architecture,* Theatre& (Basingstoke: Palgrave Macmillan, 2015), 4.

classroom. While I may be in the theater as an agent, space also acts upon me. [...] Some spaces, as contexts, invite or compel movement. To me, the theater creates me, constitutes me, induces me to engage in ballet as a state of rapture.[37]

What this suggests is that the experience of perceiving a space happens not just through visual or aural or kinetic channels, but is also emotional. A space is known by registering its affective and emotional effects, that is, by attending to how it feels. Phenomenology has long stated that consciousness of something is not restricted to knowing, seeing, or understanding it, but includes other forms of intentionality such as loving, desiring or hating it.[38] The same principle applies to the perception of space. Frustration may be a common aspect of space perception among spectators in the theatre – frustration, for example, at not being able to see or hear better, or at not being able to bridge the distance to performers or achieving the desired closeness to the stage. Desire, it thus follows, can colour, even constitute, a spectator's perception of the space of the stage. Conversely, the way the space of a theatre is experienced may also manifest and express itself in an overwhelming desire to leave it.

Waterhouse characterises her bodily knowledge of the space of certain theatres as a 'bursting forth' of joy, caused by the experience of dancing in it. In the context of this project of describing how theatre spaces appear in bodily perception, it is helpful to remember that such perception may not in the first instance be visual or aural or deliberate at all, but primarily a burst of emotion, expressed kinetically.

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37 Waterhouse, "Dancing," 163–64.

38 Cf. Jean-Paul Sartre, "Intentionality: A Fundamental Idea of Husserl's Phenomenology," in *Routledge phenomenology reader*, ed. Dermot Moran (London: Routledge, 2002), accessed April 14, 2012, http://www.mccoyspace.com/nyu/12_s/anarchy/texts/03-Jean-Paul_Sartre-Intentionality.pdf, 383: "[...] for Husserl and the phenomenologists our consciousness of things is by no means limited to our knowledge of them. Knowledge, or pure 'representation', is only one of the possible forms of my consciousness 'of' this tree; I can also love it, fear it, hate it; and this surpassing of consciousness by itself – i.e., intentionality – finds itself again in fear, hatred, and love. Hating another is just a way of bursting forth toward him; it is finding oneself suddenly by a stranger in whom one lives, in whom, from the very first, one lives through the objective quality of 'hatred.'"

Chapter VI

The ‘Disappearing’ Theatre

How Theatres Hide or Make Visible the Audience: Comparing Strategies at Sadler’s Wells and the Globe

In ordinary life you walk and sit and talk and look, but on the stage you lose all these faculties. You feel the closeness of the public and you say to yourself, ‘Why are they looking at me?’ And you have to be taught all over again how to do all these things in public.

KONSTANTIN STANISLAVSKY

The gradual darkening of the auditorium at the beginning of Queen Victoria’s reign convinced the righteous churchgoer once again that the ‘pit’ of the theatre was well named.

IAIN MACKINTOSH

‘Storyboard P’ is the alias of a Hip Hop dancer from New York who specialises in an idiosyncratic improvisatory form of the street dance technique called ‘flex’. Flexing is a solo dance form that focuses on narrative, telling miniature stories or illustrating the words of a song, sometimes literally, sometimes weaving its own parallel pathway through the music. It is inspired by cartoons and stop-gap animation, using contortionist techniques and illusions of gliding (or moonwalking) to make the dancing body look like an animated figure or a fluidly moving robot. Storyboard P is known as one of the very best flexers on the scene, having won several titles including “King of the Streets”.[1] He calls his own freeform

Epigraphs:
Konstantin Stanislavsky, *An Actor Prepares* (New York: Routledge, 1989, c1936), 84.
Iain Mackintosh, *architecture, actor, and audience* (London & New York: Routledge, 1993), 37.

1 Cf. Jonah Weiner, “The Impossible Body: Storyboard P, the Basquiat of Street Dancing,” *The New Yorker*, January 6, 2014, http://www.newyorker.com/magazine/2014/01/06/the-impossible-body. There are many videos of Storyboard P online, dancing in various contexts such as in battle with other street dancers, in a practice context at home, or performing on stage or at competitions. One of the most watched and

approach to the technique "mutant flex". I have met but never properly spoken to Storyboard P and do not know if his own interpretation of the event I am about to describe coincides with mine. But as watching him dance on the Sadler's Wells stage clarified my own ideas in relation to the topic at hand, I will give an account of it here from my perspective, accepting that it might say more about my own experience and beliefs than it does about his. I watched Storyboard P perform at Sadler's Wells in 2013 as part of *Sadler's Wells Sampled*[2], a mixed evening of dance designed to showcase highlights from the theatre's artistic programme and to attract new audiences. An annual occurrence and best described as a 'teaser' event, it offers cheap tickets to see short excerpts of upcoming shows and an eclectic mix of styles including ballet, hip hop, tango, contemporary dance or flamenco all in one evening. Storyboard P had been invited to represent street dance that year and, as I was told by theatre staff later, arrived in London alone, with no entourage and just an iPod as his technical equipment. The only element of conventional pre-planning for his performance was to tell the stage managers which three songs to play. The rest would be improvised by him on the night.

Watching from the auditorium, knowing that he was improvising but unaware of the extent to which his performance was unplanned and unstructured, I saw an ethereal figure seemingly being transported and carried along by the music in an unbroken flow of expressive movement. Storyboard's style of moving is detailed and subtle and his stage presence delicate. His 'tricks', too, are understated and unsettling in their precision rather than flashily impressive. The songs he had chosen for the performance were restrained: no hard hip hop rhythms but gentler soul ballads, played from beginning to end rather than sampled together as is often the case in hip hop dance performances. The audience watched politely, applauding after the first song. Towards the

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impressive of these is his impersonation of a drug addict in the video *Chalk Walk*: https://www.youtube.com/watch?v=9CMKIVKbHbs.

2 The performance I saw took place on 28th June 2013.

middle of the second song, about five minutes into the performance, the stream of movement seemed to become less fluid, as Storyboard occasionally paused, faltered, or lapsed into what dancers call 'marking' (indicating a move rather than performing it full-out). As the third song started without significantly changing the energy of either the performance or the polite, distanced atmosphere in the auditorium, these pauses and instances of marking became longer and more frequent. At one point Storyboard sat down on the floor and seemed to say something, before resuming his dance. Not long after that he threw off his jacket, sat down and called out into the auditorium: "I'm tired, ok? I'm tired!" At this, the stage managers eventually reacted, fading out the music and ending his performance with a gentle blackout.

From my vantage point close to the stage I had already started to feel uncomfortable earlier on, near the end of the first song. The last two were difficult to watch, as it seemed like I was witnessing a person come adrift; the disintegration of an initially confident performance by an inspiring dancer. At the same time and because of this, the experiential quality of the space that I was in seemed to change during the performance, which is also the reason for using this example as an introduction to the chapter. Usually the orientation of a stage like the Sadler's Wells proscenium arch stage is such that perceptually it exceeds its own space, 'radiating' into the space of the auditorium.[3] This did not happen in this performance, or, to be more precise, it happened initially but then faltered as the distance between stage and auditorium, performer and audience, began to widen. An aim of strong performances is to control this distance, to bridge it energetically or to create the illusion that it does not exist. One of the aims of this chapter is to investigate strategies for how this can be achieved, by means of certain spatial and architectural arrangements and also performatively. In order not to overstate my case in relation to this introductory example I

3 Souriau, in a previously quoted expression calls it "a dynamic force in a horizontal plane pointing like an arrow into the hall." Etienne Souriau, "The Cube and the Sphere," *Educational Theatre Journal* 4, no. 1 (1952): 13, doi:10.2307/3204036.

want to make clear that Storyboard P's performance at Sadler's Wells Sampled was in no sense a complete disaster or an embarrassment. The audience in its reaction seemed to be appreciative of his skill and the beauty of his movement, and the unconventional and unexpected ending was glossed over to some extent by stage effects such as the liberal use of dry ice mist. All the same, the applause was muted and some of those who had seen him perform previously, or on video, conceded that something unusual or uncharacteristic must have happened during this particular performance, reducing its power of impact.

Interestingly, Storyboard P had already successfully performed at Sadler's Wells several months previously, as part of *Breakin' Convention*, its annual Festival of Hip Hop Dance Theatre. There, the circumstances had indeed been different: Breakin' Convention is attended primarily by a dedicated hip hop dance audience, and the social media advertising campaign in the run-up to the festival had built up Storyboard P as one of the highlights of the festival line-up. Existing videos were posted in preparation and evidently watched by members of the audience, who, on seeing him live, recognised and vocally appreciated certain signature moves and tricks. They thus kept the feedback loop between performer and audience going by supporting him throughout his performance, acknowledging feats of technique and significant moments of expression.[4] The more general and less prepared audience at the Sadler's Wells Sampled event did none such thing.

The interpretation of this event offered here is that the polite and silent dance audience with its waiting attitude, in combination with the spatial arrangement and sheer scale of the Sadler's Wells stage and auditorium, resulted in a temporary loss of connection between performer and audience. Described in terms of space, the

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4 A clip of Storyboard's performance at Breakin' Convention is available to view here: https://vimeo.com/49341081. While the 'gulf' between dancer and audience is clearly visible for example in frame 03:00, the vocal response from the hip hop audience throughout the performance is also evident (although faintly) in this video. Such support from the audience was missing in the other performance described above. To give a sense of how close and enveloping the audience can be in the non-theatre contexts in which Storyboard regularly dances, it is worth comparing the previous clip to the video *Storyboard-Heaven Freestyle* (https://www.youtube.com/watch?v=_-6jZOIC1kQ), which literally shows him within touching distance of his audience.

distance between the two increased – certainly as experienced from my own embodied perspective as a member of the audience, and possibly also in Storyboard P's own experience. Compared with the experience of performing eye-to-eye with your audience on the street, in clubs, or competing in dance battles tightly surrounded by a circle of spectators, the audience at Sadler's Wells might as well not have been there at all. The fact is that when you stand on the Sadler's Wells stage during a performance, you cannot see the audience; it is almost completely invisible.

Sadler's Wells: Designed to 'Disappear'

Sadler's Wells Theatre has been described by its artistic director as a space that is designed to 'disappear' in performance. By this he means that once the house lights go out, everything focuses on the stage – to the extent that the auditorium and the audience in it seem to disappear completely.[5] Phrased differently, one might say that the world inhabited by the audience, as well as the audience itself, is absorbed by the world created by the performance on stage.

This 'disappearing' auditorium, with its walls cladded in dark grey metal sheeting, is large and anything but delicate. Three layers of seating are stacked on top of each other, facing a proscenium stage. Futuristic-looking sheaths of perforated metal also surround the proscenium arch, tunnelling the view towards the stage even further. The ceiling is high but functional, containing grids for lighting equipment and further metal sheets slanting towards the stage, to enhance the acoustics. Sightlines are good from almost every seat in the house. Extraordinarily, the disappearing act seems to work: Even seated in the cheapest seats at the back of the second circle, perhaps after an initial sense of disappointment at

5 My first introduction to the theatre, before even seeing a performance there, was a daytime talk given by artistic director Alistair Spalding to a group of Goldsmiths MA students (of which I was one) in 2005. The talk took place in the empty auditorium as a technical get-in for a new production was happening on stage. In evaluating the effect of the metal-clad auditorium under bright working lights, Spalding said words to the effect of, 'It looks big now, but when the lights go out all this disappears and the only focus is the stage.'

how far away and how small the stage seems to be (it appears to be not much bigger than a TV screen), when the lights go out and the curtain opens, the stage indeed seems to grow and move closer as the auditorium space melts away. It is, therefore, by all accounts a well-designed theatre, which does what it was built to do.[6]

In the previous chapter we looked at the spaces created *by*, or *through*, dance. Sadler's Wells is a space designed specifically *for* dance. Its mission is to be 'a dance house' for London, welcoming the most important UK and international dance companies and artists. One of the important concerns regarding designing a space specifically for watching dance is the view of the floor (touched upon already in Chapter I, when Anne Teresa de Keersmaeker was quoted as saying that designers for dance should only really make floors). In order to be able to see the patterns created by group or solo dances against the floor, it is important to have a vantage point slightly above the level of the stage, in order to see the orientations of the stage floor. At Sadler's Wells this is the case – only the first few rows in the stalls are beneath the level of the stage and require people sitting there to look up rather than down.

Although designed for dance, it does not resemble the Italianate horseshoe-shaped opera houses designed to principles of a singular point of ideal perspective and thus corresponding with the spatial system of ballet described in the previous chapter. In other words, it is not one of the spaces described by Elizabeth Waterhouse as compelling you 'to engage in ballet as a state of rapture'[7] In such spaces with their semi-circular or oval rounds of shallow galleries, the lines of sight of those in the auditorium can converge on a point on the stage from many directions in the round, but they can equally scatter attention around the auditorium. Here, the rows and shelves of seating are only very slightly

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6 The current Sadler's Wells Theatre was built in 1998 to replace its predecessor of the same name, which had been in operation since 1931 but was eventually deemed unworkable for new productions and the needs of professional dance companies. The new building was designed by RHWL architects in collaboration with Nicholas Hare architects and theatre consultant Ian Albery.

7 Elizabeth Waterhouse, "Dancing Amidst The Forsythe Company – Space, Enactment and Living Repertory," in *Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater*, ed. Gabriele Brandstetter and Birgit Wiens (Berlin: Alexander, 2010), 164.

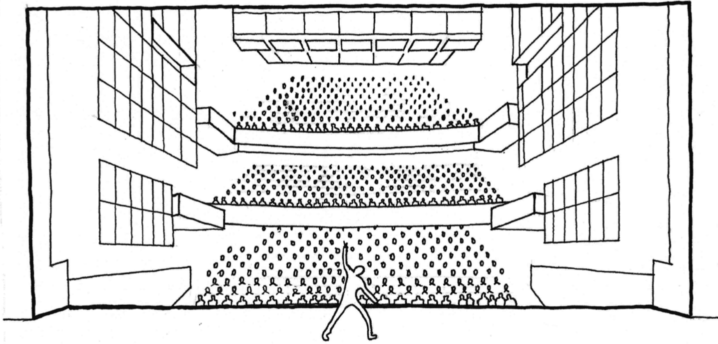

Fig. 8

curved – practically straight, in fact – and frontally oriented towards the stage. Lines of sight are thus all directed in the same direction: from the auditorium to the stage. If visualised as lines of force or vectors, they would not form spokes of a wheel but all run parallel in one direction, thus offering a perfect, uninterrupted and non-angled view of the stage. If, however, something interesting were to happen in the auditorium rather than on stage, it would be very difficult for everybody in the audience to see what was happening. For spectators as well as performers, this means it is very much a focused space, not unlike a cinema, with its emphasis on every seat having equally good sightlines. The seating arrangement is totally egalitarian; the separation of different social classes has been eliminated. The whole is designed so that nothing diminishes or distracts from the absolute focus on the stage and the ability of the auditorium to 'disappear' during the performance. The question that remains is: What does this mean for performers on stage? The illustration above gives a sense of the absolute focus on the performer that this particular auditorium offers, but it is not a real likeness of how the space appears to the performer during a performance. For performers, the auditorium is (usually) dark and the lights, rigged underneath the first and second circle tiers as well

as from the ceiling, tend to blind them to such an extent that they cannot see the faces or heads of members of the audience beyond the second or third row of the stalls. The entire auditorium beyond this line is nothing but an indistinct mass of darkness and light, which cannot be looked into directly for fear of being blinded by spotlights.[8]

The Black Hole

For the audience, what 'disappearing' theatre ideally means is that they are, for the duration of the performance, transported from the here and now to the world of the stage and become totally absorbed by and into it. This world does not have to be a fictional one – the example of dance proves that it can be an abstract or conceptual universe of movement and form. What counts is the total focus on and absorption into the world or image offered by the stage, free from distractions, even from other people sitting in the same auditorium. Perfect sightlines are considered of the utmost importance in this form of theatre. Its ideological antecedent is, as Matthew Smith argues, the Wagnerian principle of 'rigorous separation' between audience and spectacle. Wagner used features such as a deep proscenium arch, a darkened auditorium and, in the case of his Festspielhaus in Bayreuth, a hidden orchestra pit, to achieve this separation, yet his foremost intention was to achieve full imaginative envelopment of the audience by the performance on stage. He intended "to separate the audience from the spectacle, and at the same time so entrance the audience that the fundamental distance between spectator and spectacle would be overcome."[9] The separation, so the idea, was a necessary form of aesthetic distancing.

For performers on stage, a 'disappearing' auditorium produces

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8 This impression has been confirmed many times by performers speaking and writing about their experiences of standing on stage in large theatres such as Sadler's Wells. As a former dancer I have experienced this myself. I have also stood on the Sadler's Wells stage during performances (as an 'extra'), and can attest to the fact that the audience is in fact entirely invisible.

9 Matthew Wilson Smith, *From Bayreuth to Cyberspace* (New York & London: Routledge, 2007), 32.

a void, a black hole populated by people who are known to be there but invisible. Theorised since the advent of naturalistic theatre as the missing fourth wall, this void could be simply imagined as that wall; acting or performing would then be 'acting as if nobody was watching'. But it is very clear that this is not so – performers have described how the missing wall, or void, acts on them, none more penetratingly than Konstantin Stanislavsky, quoted in the epigraph to this chapter. Ever since that time, a tradition of mythologizing this dark 'absent' space left behind by the disappearing audience and an accompanying fear of this mythical void has developed. Many actors have described what it is like; Stanislavsky has done so in detail. In his semi-fictional writings he assumes the persona of a young acting student in what is assumed to be his own class and uses a first-person narrative device to enliven what are effectively teaching manuals. Because the writings are so nuanced in their descriptions of how fictional actor is acted upon by the space of the stage and what he calls the 'black hole' of the auditorium, it is worth quoting him at length and in some detail. They are, effectively, phenomenological descriptions of the space of the stage from the perspective of an actor. The first section to be quoted here describes the fictional acting student's first ever rehearsal on the 'real' stage, rather than on the rehearsal stage:

> I had hardly stepped on to the stage when there loomed up in front of me the immense hole of the proscenium arch, and beyond it an endless expanse of dark mist. This was my first impression of the stage from behind. 'Begin!' someone called. I was supposed to go into Othello's room, outlined by the cane chairs, and to take my place. I sat down in one of them, but it turned out to be the wrong chair. I could not even recognize the plan of our set. For a long time I could not fit myself into my surroundings, nor could I concentrate my attention on what was going on around me.[10]

On another occasion the student describes his experiences of the second rehearsal on the stage:

10 Stanislavsky, *Actor*, 6–7.

> When I stepped away from the darkness of the wings to the full illumination of the footlights, headlights and spotlights, I felt blinded. The brightness was so intense that it seemed to form a curtain of light between me and the auditorium. I felt protected from the public, and for a moment I breathed freely, but soon my eyes became accustomed to the light, I could see into the darkness, and the fear and attraction of the public seemed stronger than ever. I was ready to turn myself inside out, to give them everything I had; yet inside of me I had never felt so empty. The effort to squeeze out more emotion than I had, the powerlessness to do the impossible, filled me with a fear that turned my face and my hands to stone. All my forces were spent on unnatural and fruitless efforts. My throat became constricted, my sounds all seemed to go to a high note. My hands, feet, gestures and speech all became violent, I was ashamed of every word, of every gesture.[11]

But then, in the middle of being seized by such a sense of failure, he describes the relief of perceiving a small movement or murmur from the audience which seems to signal approval:

> [...] it almost seemed as though for a moment the listeners strained forward, and that through the audience there ran a murmur. The moment I felt this approval a sort of energy boiled up in me. I cannot remember how I finished the scene, because the footlights and the black hole disappeared from my consciousness, and I was free of all fear.[12]

His perception of his surroundings can be characterised as a series of different states of embodiment of the space of the stage, of various durations and sometimes following each other in quick succession. These stages, or states of embodiment, could be summed up in the following sequence: His initial impression of the proscenium arch from the 'other side', i.e. from the stage, is of an immense hole of nothingness. Being blinded by spotlights offers a momentary relief from the effect of this void and the illusion of being alone in the space. Sensing the audience again, but only as a vague, indistinct presence, increases his fear and alters the orientation of his field of action, transforming his lived, i.e. active, receptive body into an unresponsive, clumsy instrument. Only the definite sense of feedback and approval from the audience brings him out of this state of being frozen by terror or stage fright; presumably the void is no longer perceived as a black hole with

11 Ibid., 11.
12 Ibid.

powers to ‚suction' out his energy but as a site where many other people are present.

It seems plausible to interpret what happened to Storyboard P at Sadler's Wells as a modern-day example of such fear. Stanislavsky's quote in the epigraph describes the experience of losing the ability to do basic things, of not being able to walk, speak or even look around, when on stage. It is not surprising that the experience of an altered state of embodiment would also alter your ability to dance, particularly if there is no pre-rehearsed structure underlying the dance to fall back on. In phenomenological terms, the space of the stage is experienced as a strongly oriented field which affects how one moves and feels within it. When the orientation of the field changes radically, this necessarily affects how the body moves and reacts. But what is it exactly that creates such a strong orientation in the field of the stage? Judging from Stanislavsky's descriptions it is not the void itself – it is the gaze of the public, the knowledge, sense or feeling that one is being looked at. He describes this sense or knowledge as an attraction, but also as something to be feared. Theories of embodiment describe the body as both an object and as the site of consciousness, and the experience of being looked at activates both these experiences, makes them manifest. Knowing that we are being looked at brings into focus the experience and perception of one's own body as an object.

Merleau-Ponty describes the experience of seeing, or looking at, another person and realising that this other person can see me, too, as an existential, physical experience: "Round about the perceived body a vortex forms, toward which my world is drawn and, so to speak, sucked in: to this extent, it is no longer merely mine, and no longer merely present, it is present to x, to that other manifestation of behaviour which begins to take shape in it."[13] He continues by making a theatrical comparison / by evoking the theatre: In recognising the other as a conscious being with the

13 Maurice Merleau-Ponty, *Phenomenology of Perception* (London & New York: Routledge, 2002, c1945), 412.

same ability for seeing and knowing that I have, I imagine the world as perceived from this other perspective – I am a guest to this perspective, as if I were watching a performance. It follows that this perspective to which I am merely a guest now includes me, my own body, not as the site of my own consciousness, but as an object:

> Already the other body has ceased to be a mere fragment of the world, and become the theatre of a certain process of elaboration, and, as it were, a certain 'view' of the world. There is taking place over there a certain manipulation of things hitherto my property. Someone is making use of my familiar objects. But who can it be? I say that it is another, a second self, and this I know in the first place because this living body has the same structure as mine.[14]

The situation of the performer on stage can therefore be interpreted as an amplification of the everyday process of looking and being looked at – amplified, almost literally, by the number of people sitting in an auditorium.

Gaze and Embodiment

Phenomenologists and other theorists of embodiment have sought to clarify how the relationship between self and body is affected by the experience of being looked at by another person. Some of them also comment on what this means for the perception of lived space. David Morris for example, drawing on Merleau-Ponty and Sartre, describes the 'warping' of personal space that occurs as a result of encountering another's conscious gaze. Stating that it is impossible to mistake the looking other for an object in space, he writes, "if we are ever to encounter others as others, we must have a relation to others that is prior to a relation in an objective space. The look is one such relation, and it is experienced not as an optical occurrence within space, but as a contestation, a warping of our own space."[15] Phrased less philosophically one might say that the other's lived space 'explodes' into my own, and that because I know what

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14 Ibid.
15 David Morris, *The Sense of Space* (Albany, NY: State University of New York Press, 2004), 25.

it means to have an embodied perspective, I instinctively have a limited kind of access to the other's embodied perspective, too. The ambivalence of the experience lies in the fact that this other perspective which I am able to access also includes me, as if viewed from the outside. This means that by seeing somebody looking at me, I am reminded that my body, as well as being the sources of my consciousness, is also an object.[16] The act of looking always carries with it the potential for objectification.

Merleau-Ponty qualifies this. He argues that looking (or the gaze) only objectifies that which is looked at if this look is deliberately detached from normal forms of human communication; if the person who is looking mentally removes him-or herself from the situation and takes an objective, judging stance:

> The other transforms me into an object and denies me, I transform him into an object and deny him, it is asserted. In fact the other's gaze transforms me into an object, and mine him, only if both of us withdraw into the core of our thinking nature, if we both make ourselves into an inhuman gaze, if each of us feels his actions to be not taken up and understood, but observed as if they were an insect's. This is what happens, for instance, when I fall under the gaze of a stranger. But even then, the objectification of each by the other's gaze is felt as unbearable only because it takes the place of possible communication. A dog's gaze directed towards me causes me no embarrassment.[17]

It is a productive thought for theatre, because it allows us to differentiate between ways of looking, not simply asserting that a spectator looks at a performer but questioning how such a look may be motivated and perceived. Instead of positing the gaze primarily as an instrument of power and knowledge, as Foucault does,[18] Merleau-Ponty thus opens up the possibility of communication. It is also a productive idea for thinking about theatre space,

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16 Thomas Fuchs adds to this the thought that from my own perspective my body is only ever visible as a collection of details, never as a whole. Face and back in particular are impossible to see from an embodied perspective. Being looked at by somebody else and becoming conscious of my body as a unified object is thus doubly strange – my blind spot is exposed. The result of this, as Fuchs describes it, is the experience of being forcefully returned to and 'locked into' one's body. Thomas Fuchs, *Leib, Raum, Person: Entwurf einer phänomenologischen Anthropologie* (Stuttgart: Klett-Cotta, 2000), 283.

17 Merleau-Ponty, *Phenomenology*, 420.

18 Cf. Colin Counsell, "Traversing the Known: Spatiality and the Gaze in Pre & Post Renaissance Theatre," *Journal of Dramatic Theory and Criticism* 11, no. 1 (1996): 21, or Ulrike Haß, *Das Drama des Sehens: Auge, Blick und Bühnenform* (München: W. Fink, 2005), 32.

because it means that there is a difference between being looked at and seeing the person who is looking, and being looked at by someone who is able to withdraw, to hide in a darkened auditorium. The former allows for communication to happen while the latter can, under certain circumstances, be characterised as an 'inhuman gaze'.

Stanton Garner also applies phenomenological theories of the gaze to theatre, asking how the experiences of looking and being looked at determine the orientations of its perceptual field. He calls the space of the theatre "a field structurally destabilized by the same dynamic of intersubjectivity that characterizes perception outside the theater, whereby the Other represents the opening of an autonomous, differently oriented world within the perceptual boundaries of my own."[19] One of the implications of this is that the performer's body on stage can never be seen as one element among many, a semiotic entity similar to sets, costumes, props, or lighting. The body has a "privileged status" in theatrical representation, constituting "a subject point from which the other elements receive competing orientation."[20] This is of course true, but it is not all. The performer is a subject point not only in relation to what is on stage, but also in relation to the rest of the theatre, that is, the audience. If the architecture and spatial arrangement of the theatre allow it, there is always the possibility that the performer may look at, and see, a member of the audience: "Alone among the elements that constitute the stage's semiotic field, the body is a sign that looks back."[21]

Garner goes on to theorise what he calls the reverse-gaze, describing the experience of being 'caught looking' in the following terms: "The reverse-gaze catches me in the act of looking, challenging [...] the *ecstasis* by which I 'surpass' my corporeal boundaries through the outer-directedness of vision. In so doing, the reverse-gaze returns me to myself, forcing a corporeal self-consciousness

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19 Stanton B. Garner, *Bodied Spaces: Phenomenology and Performance in Contemporary Drama* (Ithaca, NY & London: Cornell University Press, 1994), 47.
20 Ibid.
21 Ibid., 49.

that registers itself in a physical discomfort and in the tingling of embarrassment on my face."[22] He concludes from this that the condition of 'embodiedness' is not a singular state but takes many forms, oscillating on a scale between being almost completely outside oneself (ecstasies) and feeling rooted in, or returned to, one's physical form. This latter state can happen through a "bodily upsurge in consciousness"[23] following the realisation that one is being looked at – 'caught looking' by a performer on stage, for example, who is suddenly returning this look straight-on. What happens, though, when the performer on stage cannot 'look back', because he or she cannot see anyone in the audience?

Two Strategies

Sadler's Wells exemplifies the type of theatre that, under normal circumstances,[24] prevents performers from looking back at their audience because the audience is hidden in darkness. The Globe, by contrast, is organised in such a way spatially and in terms of lighting that it not only allows the audience to be seen, but highlights (one might even say, celebrates) the presence of each person individually. Both are architectural structures built for seeing and being seen, but one hides the lines of gaze which organise its spatial structures whereas the other accentuates them. In the following I compare these two theatres as exemplary types – not in order to arrive at a general comparison, but specifically to explore how the space occupied by the audience is conceived. Sadler's Wells, as we have seen, makes this space 'disappear' in performance. The Globe, arguably, does the opposite.

Let us recap the architectural features of the auditorium space at Sadler's Wells: In darkness, the audience is hidden, to the stage as well as to itself. Even when the house lights are up it is difficult

22 Ibid., 50–51.
23 Ibid.
24 I say 'normal circumstances' because there are of course ways of subverting such traditional performance conditions and allowing visual as well as other contact between performers and spectators. The final section in this chapter will investigate some of the strategies being used to achieve this.

for members of the audience to see each other, and impossible to get a sense of the audience body in its entirety. The three tiers, stacked one above the other, offer no visual means of communication between each other. Within each tier, seats are oriented towards the front, which means that what can be seen of others in the crowd is the back of their heads. There is not much curve to the rows, and only a tiny minority of seats is angled at 90 degrees to the stage (the side galleries, a single row of twelve seats per tier). One of the main advantages of this kind of auditorium is that it offers a perfect view of the stage from almost every seat. In horse-shoe-shaped opera houses or playhouses, many of the more angled seats have views of the stage from which whole 'slices' are missing; sometimes up to half of its floor area. The architects' brief for the new Sadler's Wells building included the stipulation that a large majority of seats should offer good sightlines to all four corners of the stage floor.[25] This was considered particularly important because of the theatre's focus on dance: Patterns created by dance, so the idea, need to be visible against the stage floor.

Sitting in this auditorium during a performance, it is indeed possible to imagine oneself being alone at the centre of the experience; the dancers performing 'just for me'. But there are also disadvantages. For performers, it can be difficult to read an audience, or feed off its energy. The same applies to the audience itself – it is not always possible to get a sense of what the general reaction towards a performance is or what others may be thinking. Spontaneous mid-performance applause, for example, happens infrequently and does not travel easily across the entire auditorium. A further disadvantage is that any expectations of (or the desire for) intimacy and closeness between performers and audiences are seldom met. Of course this has partly to do with sheer size – a 1500-seat auditorium can hardly be expected to be intimate. However scale is not the whole story, as the contrasting example of the Globe shows. The Globe *is* experienced and frequently

25 Cf. the project description by RHWL architects (http://www.e-architect.co.uk/london/sadlers-wells-theatre).

described as an intimate theatre space, even though it holds the same number of people as Sadler's Wells, even slightly more.

If Sadler's Wells can be said to 'obliterate' itself in performance, the Globe remains very much present, imprinting its architectural features and identity onto every performance taking place within it. This is accentuated by the fact that performances take place in daylight or floodlit in the evening, illuminating the building, the audience, and the stage equally. Spectators are thus visible to each other as much as they are visible to the performers on stage. The theatre's near-circular shape is often interpreted as a further symbol of the sense of community created by it in performance. The playwright Howard Brenton, for example, whose plays *In Extremis* (2006), *Anne Boleyn* (2010), and *Doctor Scroggy's War* (2014) were written specifically for the Globe, attributes this sense of community in equal parts to the fact that audiences are lit and visible and to the dominating presence of the building and its architectural shape:

> At the Globe, the audience is much more powerful than in a conventional theatre. You can see each other. People walk about and come and go, without affecting the performance. They are also much more vocal: laughs are quicker, responses seem sharper. Eye contact between performers and spectators builds a sense of shared undertaking. Asides are powerful: that is why so many of Shakespeare's psychological insights are dramatised straight to the audience in soliloquies. Conventional theatres - by the dimming of house lights - try to obliterate themselves during a performance. At the Globe, the presence of the building dominates.[26]

This architectural presence magnifies and amplifies the gaze of those within it: At certain moments you can almost see the lines of sight and attention of hundreds of people converging on a single point. Feeling oneself become part of such a circular pattern of converging gazes can be a powerful experience, even just as one spectator among many caught up in a ripple of shifting attention and focus. For the performer at the centre of the attention, these visible lines of sight constitute a challenge and an opportunity, defining, to a large extent, the entire 'Globe experience'.

26 Howard Brenton, "Playing to the crowd," *The Guardian*, May 12, 2007, 14.

The Paradox of Shared Light

Actors performing at the Globe frequently talk about the shift in attitude that the theatre demands from them, and how different it is from conventional theatre buildings. Unlike Storyboard P, whose dance training took place in an environment where the circle is the norm – performer tightly surrounded by a group of spectators composed of colleagues, rivals and supporters – most of these actors train in contexts or schools that prepare them for styles of theatre where proscenium arches and darkened auditoria predominate. The transition to the open-air Globe stage and daylight performances can thus be a shock. Mark Rylance, the first artistic director of the Globe and a frequent actor on its stage, describes the challenge to actors in the following terms: "Mostly I think it challenges how we treat audiences in modern theatre architecture and practice. [...] This architecture does demand much more from an actor. It demands we get over our fear of the audience; that we convince them eye to eye of our reality, that we light our stage with our voices."[27]

His point about having to 'get over' the fear of the audience suggests that there is a common understanding shared by actors from Stanislavsky all the way to Rylance that the audience, and particularly the visible audience, is something to be feared. Indeed, when talking to actors about their experiences of performing at the Globe, you hear sentences such as, 'You can't hide on the Globe stage', 'It's like an arena – with lions.', or 'I feel really exposed'.[28] This is a curious paradox, as there is no tangible reason why performers, whose role it is to enter into situations where they are elevated, presented for viewing and thus exposed almost by definition, should feel this way. Practically speaking, it is the audience that is more exposed at the Globe, not the actors. And yet, the belief that they are somehow less visible (and 'safer') when

27 Mark Rylance, "Research, Materials, Craft: Principles of Performance at Shakespeare's Globe," in Carson; Karim-Cooper, *Shakespeare's Globe*, 108.
28 Quoted from my notes, taken during rehearsals and conversations with actors at the Globe to Globe festival in 2012.

they cannot see the audience watching them is consistently expressed by generations of Globe actors, seemingly oblivious to the inconsistency of the statement. In order to give a sense of this, I will quote from several of the "research bulletins" compiled by the Globe's research department in the early years (1997–2002), as well as from more recent interviews with actors, also published by the Globe's research team. These interviews, conducted internally and freely available online, are useful because they take the form of an ongoing conversation with actors, following the process from early rehearsals to the move to the stage, checking-in with them after the first previews and then once again towards the end of the run of performances.

A common theme in most of these interviews is the initial idea or impression of the Globe as a theatre to be feared. One actor calls it "an intimidating space when you first play in it"[29], while another actually differentiates between the stage itself and the audience, declaring them both to be equally terrifying: "Certainly when I arrived I considered the stage a monster and I was completely frightened of it. [...] Once you have conquered the stage, the last fear to overcome was the audience - you can actually see their faces when you walk on stage. I also have rarely worked in front of that many people, so it was petrifying."[30] The reality of being able to see people's faces and expressions is experienced both as frightening (because of the possibility of recognising and being hurt by negative reactions or boredom) and as a temptation, or invitation, to entertain, as the following two contrasting accounts show: Mariah Gale, who played Isabella in *Measure for Measure* in 2015, says, "Because you're in daylight, you can really see every muscle on people's faces, and [...] you protect yourself a little bit, because people leave sometimes, and you have to go, 'Okay.'"[31] Jem

29 Liam Brennan in: Jessica Ryan, Actor Interviews (2002), 2002, Globe Research, 14.
30 Peter Shorey in: ibid., 22.
31 Mariah Gale, "Actor Interview (Podcast): Playing Isabella in "Measure for Measure"," 23.07.2015 Shakespeare's Globe, http://www.shakespearesglobe.com/discovery-space/adopt-an-actor/archive/isabella-played-by-mariah-gale. It is not all negative, though. She goes on to say: "But then, equally the response sometimes, every time really, the response from the audience is unbelievably generous, [...] it's just this feeling of elation because people are just so so appreciative, especially if they've stood, [...], because they're also challenging themselves to do something that's quite hard."

Wall is less ambivalent: “The audience is a big draw, it’s quite something having 1500 people laughing at your jokes and hanging on your every word. This is very tempting to go there and sometimes we go there too much, I’m sure.”[32]

The conclusion that most of these actors seem to come to is that the audience is a partner in the performance and responds well to being treated as an equal and as a participant. Realising this, so the idea, also helps to overcome one’s fear of it. Rather than continuing to see the mass of heads and faces as a threat, the experience of seeing them smile, laugh, or simply react becomes a source of energy and supports the performance itself. One actor makes this point by comparing the experience of acting at the Globe to that of performing in a black box theatre, imagining that in such a space, it might not matter if the audience were even present at all: “I think in the Globe more than other theatres, the audience really are a crucial part of the performance whereas in a black box the play could perhaps live on its own. At the Globe there is no pretence that they are not there.”[33] Tom McKay (Brutus in the 2014 production of *Julius Caesar*) even speaks of the audience as the protagonist of any Globe performance:

> … the audience, who - at this theatre, more than any - are almost like the lead character in the show or in the experience at least. There’s such a great sense of completing the puzzle by having them there and actually in a really warm, lovely, uplifting, supportive way – […] You kind of stare out into the black abyss in a normal theatre and you assume that everyone’s rapt and having a great time, but that’s obviously in your imagination because you can only really see the first two rows. Here you can see every single person if you choose to look in any direction. That whole theatre - it just feels like one giant hug once it’s full and it almost contracts the space. It feels smaller and more intimate when it’s full than it does when it’s empty.[34]

Interestingly, McKay here repeats several points made previously in this thesis, such as the idea that the building can ‘shrink’ in perception as a result of focus, attention, or spatial orientation. He

32 Jem Wall in: Ryan, Actor Interviews (2002), 9.
33 Gary Lilburn in: ibid., 3.
34 Tom McKay, “Actor Interview (Podcast): Playing Brutus in “Julius Caesar”,” 3.7.2014 Shakespeare’s Globe, http://www.shakespearesglobe.com/discovery-space/adopt-an-actor/archive/brutus-played-by-tom-mckay.

also, typically, anthropomorphises the building. The most important statement in the context of this chapter, however, is his description of seeing the audience and experiencing its presence as 'warm, lovely, uplifting, and supportive'. Mirroring how the Globe is spoken about by almost everybody who works there, as well as by a majority of critics and commentators, he identifies as one of its greatest strengths the sense of community that it engenders. The style of communication is direct: Performers address spectators directly and make eye contact, and in turn see an immediate response. It might be worth mentioning here as an aside that none of the adjectives McKay uses to describe his audience could be said to have applied to the audience's attitude during Storyboard P's performance at Sadler's Wells. Direct communication and a sense of an immediate reaction from an 'uplifting and supportive' audience would almost certainly have helped him to complete his performance.

The practice of performing in shared light and in one shared space at the Globe has been theorised as a return to, possibly even the recovery of, an older model of theatre. This model is understood to be public rather than individualistic in nature, with audiences that are actively engaged rather than passively consumed, and subject matters that tackle societal questions rather than tell personal stories.[35] Although there is currently no sign of the Globe putting its powers of 'activating' or engaging audiences to any kind of political use, there is an argument to be made that perhaps a culture of political debate could be reawakened in a theatre of its shape and kind. Its spatial arrangement seems to be more conducive to such debate than proscenium arch theatres with their darkened, anonymous auditoria. Fischer-Lichte argues that the consequence of actors not being able to see their audience in darkened proscenium arch spaces, and thus acting as if they were alone, is to "degrade" the spectator, turning him or her into an

35 Cf. Christie Carson, "Democratising the Audience?," in Carson; Karim-Cooper, *Shakespeare's Globe*, 126: "It seems ironic that the free-market model which the Globe Theatre puts forward has somehow managed to develop a collective spirit of engaged public debate that has largely disappeared from the publicly funded theatres."

"indiscreet observer", a voyeur.[36] The consequence of this for theatre as an art form is that it "loses its ability to function as a form of the self-portrayal and self-reflection of society".[37] It effectively loses its public function. The hope seems to
be that the Globe and theatres like it could re-assume their public function and become a place where society reflects on and debates itself. Howard Brenton has expressed this hope in strong words. He calls for a 'new' theatre in the image of the Globe, which will lead to a new kind of playwriting inspired by collective engagement and public debate:

> By understanding how the Globe works, a new theatre can be imagined... It may encourage playwrights to turn from the solipsism of individual alienation that has dominated the best new writing of the past decade. If we follow the Globe rules in play-making, we can rediscover public optimism. Out of the old wooden theatre, something new.[38]

The lines thus seem clearly drawn: One kind of theatre encourages debate and societal self-reflection by bringing together an engaged community and arranging it in the shape of a circle. The other kind allows a silent majority to sit anonymously in dreamy darkness, unpolitical and passive. But is the dichotomy really so clear cut?

Shared Darkness

The purpose of this final part of the chapter is to complicate the dichotomy set up above, arguing that the relationship between a theatre's architectural form and the sense of community it engenders is not as clear cut as it was perhaps made out to be.

It was suggested that meaningful communication between performers and spectators, as well as between spectators among each other, is not possible in a proscenium arch space or in a darkened auditorium. The question that needs to be asked, then, is if it is really so isolating to sit in a darkened auditorium, and to not

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36 Erika Fischer-Lichte, *Semiotik des Theaters I: Das System der theatralischen Zeichen* (Tübingen: Narr, 1983), 141.
37 Ibid.
38 Brenton, "Playing".

be able to see the faces of audience members around you. Is it true that the space of the auditorium 'disappears' once the house lights go down? Do I disappear with it? As the answer to this last question must be 'no', it becomes possible to ask what it feels like to remain in such a dark, 'disappeared' space, knowing that the darkness is shared by others.

It is not true to say that because a space cannot be seen it does not exist, as space is perceived not by the visual sense alone but by the entire body. Dark space, primarily perceived haptically and aurally, has its own qualities and characteristics which have been described in great detail and with beautiful clarity by Eugène Minkowski. He identifies the ability of darkness to bridge distance, such as for example the distance between me and others, but also the distance between me and the tangible 'stuff' of space itself:

> [...] I no longer have the black night, complete obscurity, *before me;* instead, it covers me completely, it penetrates my whole being, it *touches* me in a much more intimate way than the clarity of visual space. [...] it is much more material, much more tangible, and even more penetrating than the limpid clarity of visual space.[39]

The idea of darkness not simply as 'not seeing' but as endowed with its own kind of materiality (and spatiality) allows us to re-think how a darkened theatre auditorium may function. Certainly it functions differently than for example the Globe auditorium with its visual dynamic, but nevertheless it may be able to bridge distances and build a certain sense of community or togetherness. Minkowski describes darkness as something that "touches me directly, envelops me, embraces me, even penetrates me, completely passes through me"[40], suggesting that the body, or ego, can almost dissolve in darkness ('become confused with it'[41], in Minkowski's words). Theatre artists have often made use of this tactile quality of darkness and its promise of bodily dissolution. It requires a state of perfect blackout, which is difficult to achieve by

39 Eugène Minkowski, *Lived Time: Phenomenological and Psychopathological Studies* (Evanston, IL: Northwestern University Press, 1970), Translated by Nancy Metzel, 405.
40 Ibid., 429.
41 Ibid.

technical means mainly because fire regulations stipulate that a certain number of exit signs need to remain illuminated throughout performances. However there are ways around such rules. Productions by for example Anne Teresa de Keersmaeker (*Partita 2*), Hofesh Shechter (*In Your Rooms*) or Trajal Harrell (*Antigone Sr./ Twenty Looks or Paris is Burning at the Judson Church*) include states of near or perfect darkness where things that are heard, such as Harrell's voice in *Antigone Sr.* or the sound of solo violin in *Partita 2*, have a different spatiality than if they were heard in light space. Sounds become more tactile in darkness, more enveloping as their source or location in space is obscured. Hofesh Shechter uses a slightly different strategy, creating a space through extremely loud music that achieves tactility almost literally by amplifying sound waves to such an extent that they are felt in the body. There are many more such strategies of playing with and unsettling categories of light, dark, aural and tactile space that are being used in contemporary theatre and dance practice; too many to list here. What can be said about most of them, however, is that they seek to connect. They demonstrate that while vision – seeing the rest of the audience in a circle around you – is a powerful source of a feeling of community, it is not the only one. As emphasised several times throughout this thesis, space is perceived on many perceptual channels – with the result that space as it is experienced, i.e. lived space, is composed of a multiplicity of spaces. All these spaces can be used or highlighted by theatre artists to create a sense of one shared space, even in buildings that are divided into separate stage and auditorium spaces.

The argument developed at the beginning of the chapter was that when the house lights go down in the auditorium, this amounts to a 'disappearing' of its space, and with it also the disappearance of a sense of community and shared undertaking within the audience. This argument depends on a privileging of vision that I would here like to correct. As embodied space is multiple, collective spatial experiences can manifest themselves in more ways than just through seeing. Comparing Sadler's Wells and

the Globe we have noted their differing approach to sightlines – one seeks to hide the audience (paradoxically while focusing on perfect sightlines) and the other seeks to highlight and amplify its presence. In discussing the psychological and perceptual implications of these two architectural types and the different relationships between audience and performers that they engender, two realisations emerged: The black hole of a 'disappeared' auditorium can be experienced as a thing to be feared, an existential void. A visually present (because lit) audience such as at the Globe is often initially described as frightening, too. Being watched by an invisible mass or seeing clearly who is watching you, feeling invisible or exposed – they seem to be equally terrifying. In the various accounts of performers' experiences consulted here (ranging from Stanislavsky to interviews with current Globe performers), the consensus seems to be that both kinds of audiences, visible or invisible, lose their sense of terror only once they are experienced as responsive and supportive. The space needs to be experienced as being a shared space, and the performance as a shared project or undertaking. The important point made in relation to theatres like Sadler's Wells with their 'disappearing' auditorium spaces, is that shared space need not necessarily be visually shared space. Taking into account darks space, tactile space and aural space, it became possible to give an alternative view of what shared space might mean.

Conclusion

The Theatre – an Organism Space – its Connecting Tissue

An idealist description of what architecture should be able to do, formulated by the architectural theorist Christian Norberg-Schulz, is to 'concretise' existential, or lived, space: "Ideally, there should be an isomorphic relation between existential and architectural space but, in practice, this is not fully achieved."[1] Theatre architecture, too, should ideally 'concretise' the lived space of performers and audiences, moulding itself to their needs and activities. In practice, however, this is not entirely possible, just as the ideal has not been fully achieved in architecture generally. As spectators, performers or producers of theatre we therefore engage with theatre buildings that are more or less imperfect concretisations of theatrical practice. We are acted upon and affected by them in a variety of ways, positively as well as negatively.

The purpose of this study has been to describe how theatre buildings appear to us in direct experience, tracing some of the ways in which they act on and affect us. The aim in doing so was to formulate a theory of how theatre architecture is experienced in, and as, lived space. This meant first of all taking seriously performers' and spectators' affective responses to the spaces in which they make or watch theatre, investigating claims such as the idea that a building can be supportive or uncooperative, that it can 'tell us what to do' as well as about its history, that it can compel movement or impart the desire to dance, that it exposes weaknesses or fears, and that it also sometimes allows us to forget ourselves and disappear into the fictional world of the play or production. The difference between engaging with theatre buildings in lived space as opposed to in objective space is that it is more difficult to get the

1 Christian Norberg-Schulz, *Existence, Space & Architecture* (London: Studio Vista, 1971), 37.

measure of them: Lived space is not measurable. Theatre buildings as they act or react in lived space – and particularly in performance – are, in fact, profoundly unknowable. Experienced from an embodied and spatially and temporally limited perspective, they are volatile, unpredictable entities. The reason for this is that lived space is never just the space itself, but can only be understood as the combination of, and relationship between, the space and the person perceiving it. The two chapters in this thesis concerned with oriented and embodied space aimed to make this clear by drawing on the work of mainly Merleau-Ponty, Lewin and Gibson. They all articulate, in different ways, how lived space is a complicated system in which body and environment are inextricably linked.

One way in which the volatile nature of lived space affects theatre architecture is the question of how the architectural features of theatre buildings are experienced and how, therefore, new theatres should best be built. It is a contested question and echoes of the various debates have found their way into this thesis at several points. There are those who argue for or against a thrust stage, vertical distribution of spectators, clear sightlines and so on. But because the functional approach to planning and building that seeks to find solutions for the needs of theatre practitioners and audiences often does not take into account the complexity of the body-space system, it does not always achieve what it sets out to do. Theatres are built but once finished do not 'act' as they are supposed to. Some do work well but are never loved by those who work in them or come to visit them. Others fail outright. The fact is that the undertaking of building a theatre cannot be reduced to a formula that 'will definitely work'. Peter Brook is one of the most outspoken enemies of this functional approach. He argues that the only way of arriving at a shape or a constellation that works is through experimentation in the space itself, taking into account the very specific situation and the relationship between performers and spectators.

> Out of that - again experimentally - one opens the question of how high, how far away, the audience can be; and eventually one can arrive through experience at a very precise notion of the point at which there are too many rows: that up to that number everything works, but if you add another five rows the experience is broken. All that can be analysed to a degree, but, the moment that this is applied like a formula, something in the living experience is very likely going to be broken or occluded.[2]

A similar idea is expressed more forcefully, and more angrily, by Declan Donnellan, whose frustration at having to work in spaces that he perceives as being entirely unsuitable for the kind of theatrical experiences he aims to create is palpable here:

> A piece of theatre changes completely according to the space it's in - a fact to which I have become increasingly sensitive, having spent most of the last twenty years on tour. This has often been a dispiriting experience: the increasingly prevalent cultural 'administrators' have tended to impose on us their latest 1,500-seat concrete bunkers, built to survive nuclear holocaust, replete with sleep-inducing armchairs. A suggestion that a 400-seater might be better is usually met with blank looks. In England at the National we have one vast space - the Olivier - which demands the energy of plutonium just to get things across to the front row, and is extremely constraining in spite of its size, and the Lyttelton with its audience cut in half on two shelves.[3]

Although both Brook and Donnellan certainly have very strong ideas on how a theatre should be built – ideas that might in themselves amount to a kind of formula – the fact remains that even 'perfect' or universally adored theatre spaces remain volatile and unpredictable in lived experience.

The sense that theatre buildings are subjects rather than objects, actively participating in the performance as equal partners, frequently leads practitioners to anthropomorphise their theatres. I used the example of the Globe to exemplify this, but it is not solely a Globe phenomenon. The actor Derek Jacobi talks about his impression that some (one might imagine, very experienced) theatres can 'judge' his performance almost before it has begun:

> Some theatres have acquired a personality of their own. They have become their own critics. You very soon know if the theatre is approving of you, and

2 Peter Brook, quoted in: Andrew Todd and Jean-Guy Lecat, *The Open Circle: Peter Brook's Theater Environments* (New York: Palgrave Macmillan, 2003), 251–52.

3 Declan Donnellan, in: ibid., 31–32.

> you respond to that. You get a feeling when you walk out on to a bare stage, a gut feeling about the space, about whether your work there is going to be successful.[4]

What is already clear from this statement is that he is talking about himself as much as about the theatre. And this is the crux of much of the anthropomorphism debate: It is, in fact, more about how actors and performers respond to the building and less about the space itself. My interpretation of the anthropomorphised Globe as a 'training figure' reached a similar conclusion, in that I showed how performers learn to embody the theatre space by attuning their movements and voices to its dimensions, textures and qualities.

To the extent that buildings are embodied in theatrical practices of attending and performing, they can be said to be organisms also in the sense of being made up of a collective body of people.[5] Such organisms include of course the people present in a building or space during a performance – the 'audience body', as it is sometimes called – but the idea of the organism can also be expanded. Working theatre buildings comprise of a wide range of people with different jobs, tasks and functions, experiences and skills. They exist and are active for a period of time and over this time develop processes, traditions, and certain ways of doing things, which amount to a history and a store of memory. In this sense, theatre buildings are knowing subjects; repositories of knowledge. McAuley emphasises this fact when she calls attention to the ways in which theatre buildings store and transmit collective forms of practical knowledge:

> The theatre building is [...] a very potent means of transmitting practical knowledge and performance traditions, for, as Edward Casey puts it, "a building condenses a culture in one place". The link with tradition and practice provided by the theatre building is particularly important in an art

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4 Derek Jacobi, "Space and the Actor," in *Making Space for Theatre: British Architecture and Theatre Since 1958*, ed. J. R. Mulryne and Margaret Shewring (Stratford-upon-Avon: Mulryne and Shewring, 1995), 111.

5 Dana Caspersen also for example speaks of dance companies and productions as bodies or organisms: "A company of performers and creators can be seen as a kind of body, and the work that a company creates can be viewed in the same way: as a body that is composed of our thoughts and the differing ways that our individual bodies are thinking." Dana Caspersen, "Decreation: Fragmentation and Continuity," in *William Forsythe and the Practice of Choreography*, ed. Steven Spier (London & New York: Routledge, 2011), 94.

> form in which so little is written down and which is to all intents and purposes a part of oral culture.[6]

Embodiment of a space or building is thus not restricted to performance technique alone but also encompasses the knowledge and skills of those working behind the scenes in a technical, artisanal or organisational capacity. This means that the theatre as it is experienced in performance is never just a shell of a building, but always an infrastructure, a collective of people who make it work.

If the theatre building is conceived of as an organism, then space – lived, oriented and embodied space – forms the tissue through which all the various members of the organism interact. The theoretical framework that has made it possible to think of space in such a way is phenomenology. From the beginning, space has been theorised by phenomenologists not as a void or emptiness, but as the means by which connection is made possible. Merleau-Ponty, for example, writes that "Space is not the setting [...] in which things are arranged, but the means whereby the position of things becomes possible. This means that instead of imagining it as a sort of ether in which all things float [...] we must think of it as the universal power enabling them to be connected."[7] This concept of space as a kind of 'stuff' that reacts to and can make visible the forces at play in a particular situation, that can be moved, shaped and manipulated through movement, or that transports sound waves through darkness, has proved to be a productive framework for the arguments put forward in this study. The common theme that emerged from my project of describing theatre buildings not as they objectively are but as they appear in lived experience was the sense of theatrical space as something that is always already part of me – a field of varying intensities, bridgeable by actions, movement, or gaze.

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6 Gay McAuley, *Space in Performance: Making Meaning in the Theatre* (Ann Arbor: University of Michigan Press, 2000), 38. She quotes Edward Casey, *Getting Back Into Place: Toward a Renewed Understanding of the Place-World*, 2nd ed. (Bloomington, IN: Indiana University Press, 2010, c1993), 32.

7 Maurice Merleau-Ponty, *Phenomenology of Perception* (London & New York: Routledge, 2002, c1945), 284.

Bibliography

Abbate, Francesco. “The Planning and Building Instruments of Architects in the Late Middle Ages.” In Proceedings of the Second International Congress on Construction History, Queen’s College, Cambridge University 29th March - 2nd April 2006. Edited by Malcolm Dunkeld, 111–25. Exeter: Construction History Society, 2006.

Alaimo, Stacy. Bodily natures: Science, environment, and the material self. Bloomington: Indiana University Press, 2010.

Alberti, Leon Battista. Ten Books on Architecture: edited by Joseph Rykwert. London: Tiranti, 1955. translated by Cosimo Bartoli and James Leoni.

Albright, Ann Cooper. “Situated Dancing: Notes from Three Decades in Contact with Phenomenology.” Dance Research Journal 43, no. 2 (2011): 5–18. doi:10.1017/S0149767711000027.

Alewyn, Richard. “Der Geist des Barocktheaters.” In Dramaturgie. Edited by Bernd Stegemann, 124–27. Berlin: Theater der Zeit, 2009.

Alfreds, Mike. Different every night: Freeing the actor. London: Nick Hern Books, 2007.

Algra, Keimpe. Concepts of space in Greek thought. Leiden, New York: E.J. Brill, 1995.

Allsopp, Ric and Scott deLahunta, eds. The connected body? An interdisciplinary approach to the body and performance. Amsterdam: Amsterdam School of the Arts, 1996.

Andermann, Kerstin and Undine Eberlein, eds. Gefühle als Atmosphären: Neue Phänomenologie und philosophische Emotionstheorie. Berlin: Akademie-Verlag, 2011.

Appia, Adolphe. “Darsteller, Raum, Licht, Malerei: Erstdruck: Acteur, espace, lumiere, peinture. In: Theatre populaire, Januar/Februar 1954.” In Texte zur Theorie des Theaters. Edited by Klaus Lazarowicz and Christopher Balme, 438–42. Stuttgart: Reclam, 1991.

Appia, Adolphe, and Richard C. Beacham. Adolphe Appia: Texts on Theatre. London & New York: Routledge, 1993.

Appleton, Ian. Buildings for the Performing Arts: A Design and Development Guide. 2nd ed. Amsterdam, Boston & London: Architectural Press, 2008, c1996.

Arnott, James F., ed. Theatre Space: 8. World Congress, Munich, 18 - 25 September 1977. Munich: Prestel, 1977; Der Raum des Theaters.

Aronson, Arnold, ed. The Disappearing Stage: Reflections on the 2011 Prague Quadrennial. Prague: Prospero, Arts and Theatre Institute, 2012.

Auslander, Philip, ed. Performance: Critical Concepts and Cultural Studies. London: Routledge, 2003.

Bachelard, Gaston. The Poetics of Space. New York: Penguin Books, 2014, c1964. Translated by Maria Jolas.

Baier, Franz X. Phänomenologie des lebendigen Raumes. 1992.

Balme, Christopher, ed. Das Theater von Morgen: Texte zur deutschen Theaterreform (1870-1920). Würzburg: Königshausen + Neumann, 1988.

——. Decolonizing the Stage: Theatrical Syncretism and Post-Colonial Drama. Oxford & New York: Clarendon Press, 1999.

——. “Die mediale Verfasstheit von Theater.” In Die Kunst der Dramaturgie: Theorie - Praxis - Ausbildung. Edited by Anke Roeder and Klaus Zehelein, 139–49. Leipzig: Henschel, 2011.

——. “Szenographie.” In Metzler-Lexikon Theatertheorie. Edited by Erika Fischer-Lichte, 322–25. Stuttgart & Weimar: Metzler, 2005.

——. The Cambridge Introduction to Theatre Studies. Cambridge: Cambridge University Press, 2008.

Basteri, Elena, Emanuele Guidi, and Elisa Ricci, eds. Rehearsing Collectivity: Choreography Beyond Dance. Berlin: argobooks, 2012.

Baugh, Christopher. Theatre, Performance and Technology: The Development of Scenography in the Twentieth Century. Basingstoke & New York: Palgrave Macmillan, 2005.

Bazin, André. “Theater and Cinema.” In Theater and Film: A comparative anthology. Edited by Robert Knopf, 110–33. New Haven: Yale University Press, 2005.

Beacham, Richard C. Adolphe Appia: Artist and Visionary of the Modern Theatre. Chur, Switzerland: Harwood Academic Publishers, 1994.

——. “Thinking with Things, Speaking with Spaces: The Enduring Legacy and Lessons of Appia’s “Expressive Elements“ in the Digital Age.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 38–59. Berlin: Alexander, 2010.

Belsey, Catherine. Critical practice. London &New York: Routledge, 2002, c1980.

Ben Chaim, Daphna. Distance in the Theater: The Aesthetics of Audience Response. Ann Arbor, Michigan: UMI Research Press, 1984.

Benjamin, Walter. Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit. Frankfurt am Main: Suhrkamp, 2007, c1939.

Bennett, Susan and Christie Carson, eds. Shakespeare Beyond English: A Global Experiment. Cambridge: Cambridge University Press, 2013.

Birkenhauer, Theresia. "Theater… Theorie. "Ein Unstoffliches Zusammenspiel von Kräften"." In AufBrüche - Theaterarbeit zwischen Text und Situation. Edited by Patrick Primavesi and Olaf A. Schmitt, 292–301. Berlin: Theater der Zeit, 2004.

Birringer, Johannes. Theatre, Theory, Postmodernism. Bloomington: Indiana University Press, 1993.

Bishop, Claire. Installation Art: A Critical History. London: Tate Publishing, 2005.

Bleeker, Maaike, Jon F. Sherman, and Eirini Nedelkopoulou, eds. Performance and Phenomenology: Traditions and Transformations. New York: Routledge, 2015.

Blesser, Barry, and Linda-Ruth Salter. Spaces Speak, Are You Listening? Experiencing Aural Architecture. Cambridge, MA: MIT Press, 2007.

Bloomer, Kent C., and Charles W. Moore. Body, Memory, and Architecture. New Haven: Yale University Press, 1978.

Blume, Torsten, and Christian Hiller. Human - Space - Machine: Stage Experiments at the Bauhaus. Leipzig: Spector Books, 2014.

Blumenberg, Hans. "Arbeit am Mythos." In Dramaturgie. Edited by Bernd Stegemann, 56–57. Berlin: Theater der Zeit, 2009.

Boenisch, Peter M. KörPERformance 1.0: Theorie und Analyse von Körper- und Bewegungsdarstellungen im zeitgenössischen Theater. München: Epodium, 2002.

Bogart, Anne, and Tina Landau. The Viewpoints Book: A Practical Guide to Viewpoints and Composition. New York: Theatre Communications Group, 2005.

Bollnow, Otto F. Human space. London: Hyphen, 2011, c1963. translated by Christine Shuttleworth and Joseph Kohlmaier.

——. Mensch und Raum. 9th ed. Stuttgart: Kohlhammer, 2000, c1963.

Brandstetter, Gabriele. Bild-Sprung: TanzTheaterBewegung im Wechsel der Medien. Berlin: Theater der Zeit, 2005.

Brandstetter, Gabriele and Birgit Wiens, eds. Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Berlin: Alexander, 2010; Tagung: Dresden, Festspielhaus Hellerau, 2007.

Brejzek, Thea. "Scenography or: Making Space." In The Disappearing Stage: Reflections on the 2011 Prague Quadrennial. Edited by Arnold Aronson, 14–24. Prague: Prospero, Arts and Theatre Institute, 2012.

Brenton, Howard. "Playing to the crowd." The Guardian, May 12, 2007.

Brett, Richard, ed. Theatre Engineering and Architecture: Architecture and Planning. London: Theatre Engineering and Architecture, 2002.

——, ed. Theatre Engineering and Architecture: Planning and Architecture. London: Theatre Engineering and Architecture, 2007.

Briginshaw, Valerie A. Dance, Space, and Subjectivity. Basingstoke: Palgrave Macmillan, 2009.

Brook, Peter. The Empty Space. Harmondsworth: Penguin, 1979, c1968.

——. There Are No Secrets: Thoughts on Acting and Theatre. London: Methuen, 1993.

Brown, Carol. "Making Space, Speaking Spaces." In The Routledge Dance Studies Reader. Edited by Alexandra Carter and Janet O'Shea. 2nd ed., 58–72. London & New York: Routledge, 2010.

Buber, Martin. "Das Raumproblem der Bühne: Erstdruck: Die Zukunft 21 (1913) Nr. 40 (5. Juli)." In Texte zur Theorie des Theaters. Edited by Klaus Lazarowicz and Christopher Balme, 428–33. Stuttgart: Reclam, 1991.

Buber, Martin and Maurice S. Friedman, eds. Pointing the way: Collected essays. Amherst, NY: Humanity Books, 1999.

Bullough, Edward. "'Psychical Distance' as a Factor in Art and as an Aesthetic Principle." British Journal of Psychology 5 (1912): 87–117.

Burrough, Axel. "Theatre of Proportion." Architectural Review 184, no. 1099 (1988): 75–81.

Burrows, Jonathan. A Choreographer's Handbook. London: Routledge, 2010.

Butcher, Rosemary, and Guy Cools. body:language #3: The Spatial Body. London: Sadler's Wells, 2012.

Callery, Dymphna. Through the Body: A Practical Guide to Physical Theatre. London: Nick Hern Books, 2001.

Camp, Pannill. "The Trouble with Phenomenology." Journal of Dramatic Theory and Criticism 19, no. 1 (2004): 79–100.

Carlson, Marvin. "Das Theater ici." In Politik des Raumes: Theater und Topologie. Edited by Erika Fischer-Lichte and Benjamin Wihstutz, 15–32. Paderborn & München: Fink, 2010.

——. Places of Performance: The Semiotics of Theatre Architecture. 2nd ed. Ithaca & London: Cornell University Press, 1992, c1989.

——. The Haunted Stage: The Theatre as Memory Machine. Ann Arbor: University of Michigan Press, 2003, c2001.

——. "The Iconic Stage." Journal of Dramatic Theory and Criticism 3, no. 2 (1989). https://journals.ku.edu/index.php/jdtc/article/view/1709/1673.

Carroll, Tim. "'Practising Behaviour to his own Shadow'." In Shakespeare's Globe: A Theatrical Experiment. Edited by Christie Carson and Farah Karim-Cooper, 37–44. Cambridge & New York: Cambridge University Press, 2008.

Carson, Christie. "Democratising the Audience?" In Shakespeare's Globe: A Theatrical Experiment. Edited by Christie Carson and Farah Karim-Cooper, 115–26. Cambridge & New York: Cambridge University Press, 2008.

Carson, Christie and Farah Karim-Cooper, eds. Shakespeare's Globe: A Theatrical Experiment. Cambridge & New York: Cambridge University Press, 2008.

Carson, Neil. A Companion to Henslowe's Diary. Cambridge & New York: Cambridge University Press, 2003.

Carter, Alexandra and Janet O'Shea, eds. The Routledge Dance Studies Reader. 2nd ed. London & New York: Routledge, 2010.

Casey, Edward. Getting Back Into Place: Toward a Renewed Understanding of the Place-World. 2nd ed. Bloomington, IN: Indiana University Press, 2010, c1993.

Caspersen, Dana. "Decreation: Fragmentation and Continuity." In William Forsythe and the Practice of Choreography. Edited by Steven Spier, 92–100. London & New York: Routledge, 2011.

Collins, Jane and Andrew Nisbet, eds. Theatre and Performance Design: A Reader in Scenography. London & New York: Routledge, 2010.

Cornford, Tom. “Reconstructing Theatre: the Globe under Dominic Dromgoole.” New Theatre Quarterly 26, no. 04 (2010): 319–28. doi:10.1017/S0266464X1000062X.

Corssen, Stefan. Max Herrmann und die Anfänge der Theaterwissenschaft. Tübingen: M. Niemeyer, 1998.

Counsell, Colin. “Traversing the Known: Spatiality and the Gaze in Pre & Post Renaissance Theatre.” Journal of Dramatic Theory and Criticism 11, no. 1 (1996).

Crang, Mike and Nigel J. Thrift, eds. Thinking Space. London & New York: Routledge, 2000.

Crary, Jonathan and Sanford Kwinter, eds. Incorporations. New York, NY: Zone Books, 1992.

Crisafulli, Fabrizio. Active Light: Issues of Light in Contemporary Theatre. Dublin: Artdigiland.com, 2013.

Csordas, Thomas J. “Somatic Modes of Attention.” Cultural Anthropology 8, no. 2 (1993): 135–56. doi:10.1525/can.1993.8.2.02a00010.

Curtis, Robin. “Einfühlung and Abstraction in the Moving Image: Historical and Contemporary Reflections.” Science in Context 25, no. 3 (2012): 425–46.

Curtis, Robin and Gertrud Koch, eds. Einfühlung: Zur Geschichte und Gegenwart eines ästhetischen Konzepts. Paderborn: Fink, 2008.

Czirak, Adam. Partizipation der Blicke: Szenerien des Sehens und Gesehenwerdens in Theater und Performance. Bielefeld: Transcript, 2012.

Daly, Ann. Critical Gestures: Writings on Dance and Culture. Middletown, CT: Wesleyan University Press, 2002.

Darwin, Charles. The Descent of Man: and Selection in Relation to Sex. New York: D. Appleton and Company, 1871.

——. The Expression of the Emotions in Man and Animals. 3rd ed. Oxford, New York: Oxford University Press, 1998, c1872.

Daston, Lorraine. “How Nature Became the Other: Anthropomorphism and Anthropocentrism in Early Modern Natural Philosophy.” In Biology as Society, Society as Biology: Metaphors. Edited by Sabine Maasen, Everett Mendelsohn and Peter Weingart, 37–56 18. Dordrecht & London: Kluwer Academic, 1995.

Dell, Cecily, Aileen Crow, and Irmgard Bartenieff. Space Harmony: Basic Terms. New York: Dance Notation Bureau Press, 1977.

Dessen, Alan C. “Globe Matters.” Shakespeare Quarterly 49, no. 2 (1998): 195–203.

Dewey, John. Art as Experience. New York: Capricorn Books, G. P. Putnam’s Sons, 1958, c1934.

Dietrich, Margret. “Der Mensch und der szenische Raum.” Maske und Kothurn 11, no. 3 (1965): 193–206. doi:10.7767/muk.1965.11.3.193.

Dodds, George, Robert Tavernor, and Joseph Rykwert, eds. Body and Building: Essays on the Changing Relation of Body and Architecture. Cambridge, MA: MIT Press, 2002.

Donnellan, Declan. The Actor and the Target. London: Neck Hern Books, 2005, c2002.

Donnellan, Declan, and Nick Ormerod. “Directing, Designing and Theatre Space.” In Making Space for Theatre: British Architecture and Theatre Since 1958. Edited by J. R. Mulryne and Margaret Shewring, 104–6. Stratford-upon-Avon: Mulryne and Shewring, 1995.

Döring, Jörg, and Tristan Thielmann. Spatial Turn: Das Raumparadigma in den Kultur- und Sozialwissenschaften. Bielefeld: Transcript, 2008.

Dössel, Christine. “Wellness im Unheilbad: Das schreit zum griechischen Nachthimmel über Epidaurus: Thomas Ostermeier geht mit “Othello” baden.” Süddeutsche Zeitung, August 9, 2011.

Drake, Scott. “A Well-Composed Body: Anthropomorphism in Architecture.” Doctoral Thesis, School of Environmental Design, University of Canberra, 2003.

Dramaturgische Gesellschaft, ed. Leben, Kunst und Produktion: Wie wollen wir arbeiten? Berlin: Dramaturgische Gesellschaft, 2014.

——, ed. Vorstellungsräume - Dramaturgien des Raums. Berlin: Dramaturgische Gesellschaft, 2010.

Dufrenne, Mikel. The Phenomenology of Aesthetic Experience. Evanston, IL: Northwestern University Press, 1974.

Dünne, Jörg, Sabine Friedrich, and Kirsten Kramer. Theatralität und Räumlichkeit: Raumordnungen und Raumpraktiken im theatralen Mediendispositiv. Würzburg: Königshausen & Neumann, 2009.

Dünne, Jörg, Stephan Günzel, Hermann Doetsch, and Roger Lüdeke, eds. Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften. Frankfurt am Main: Suhrkamp, 2006.

Eberlein, Undine. "Leibliche Resonanz. Phänomenologische und andere Annäherungen." In Gefühle als Atmosphären: Neue Phänomenologie und philosophische Emotionstheorie. Edited by Kerstin Andermann and Undine Eberlein, 141–52. Berlin: Akademie-Verlag, 2011.

Eliade, Mircea. The Sacred and the Profane: The Nature of Religion. San Diego & London: Harcourt Inc., 1987, c1961.

Englhart, Andreas. "Was ist ein Theaterbild? Überlegungen zum Phänomen des Bildes im Theater." In Welt - Bild - Theater II: Bildästhetik im Bühnenraum. Edited by Kati Röttger, 115–22. Tübingen: Narr, 2012.

Eriksen, Roy. The Building in the Text: From Alberti to Shakespeare and Milton. Pennsylvania: Pennsylvania State University Press, 2001.

Escolme, Bridget. Talking to the Audience: Shakespeare, Performance, Self. Oxford & New York: Routledge, 2005.

Etlin, Richard A. "Aesthetics and the Spatial Sense of Self." The Journal of Aesthetics and Art Criticism 56, no. 1 (1998): 1–19.

Falocco, Joe. Reimagining Shakespeare's Playhouse: Early Modern Staging Conventions in the Twentieth Century. Cambridge: D. S. Brewer, 2010.

Fensham, Rachel. To Watch Theatre: Essays on Genre and Corporeality. Bruxelles & New York: P.I.E. Peter Lang, 2009.

Feuerstein, Marcia F. "Body and Building inside the Bauhaus's Darker Side: On Oscar Schlemmer." In Body and Building: Essays on the Changing Relation of Body and Architecture. Edited by George Dodds, Robert Tavernor and Joseph Rykwert, 226–37. Cambridge, MA: MIT Press, 2002.

Feuerstein, Marcia F. and Gray Read, eds. Architecture as a Performing Art. Burlington: Ashgate, 2013.

Filmer, A. "Minding the Gap: the Performer in the Wings." New Theatre Quarterly 24, no. 02 (2008): 158–69. doi:10.1017/S0266464X08000134.

Filmer, A., and K. Rossmanith. "Space and Actor Formation." Theatre Research International 36, no. 03 (2011): 228–39. doi:10.1017/S0307883311000460.

Fischer-Lichte, Erika. Ästhetik des Performativen. Frankfurt am Main: Suhrkamp, 2004.

——, ed. Metzler-Lexikon Theatertheorie. Stuttgart & Weimar: Metzler, 2005.

——. “Politiken der Raumaneignung.” In Politik des Raumes: Theater und Topologie. Edited by Erika Fischer-Lichte and Benjamin Wihstutz, 133–50. Paderborn & München: Fink, 2010.

——. Semiotik des Theaters I: Das System der theatralischen Zeichen. Tübingen: Narr, 1983.

Fischer-Lichte, Erika and Benjamin Wihstutz, eds. Politik des Raumes: Theater und Topologie. Paderborn & München: Fink, 2010.

Fitzpatrick, Tim. Playwright, Space, and Place in Early Modern Performance: Shakespeare and Company. Aldershot & Burlington, VT: Ashgate, 2011.

Flemming, Willi. “Das Raumproblem des Theaters.” Studium Generale 5, no. 1 (1952): 28–37.

Fliedner, Hans-Jürgen. Architektur und Erlebnis - das Festspielhaus Bayreuth: (die architektonische Schematisierung des Erlebnisses der Ideen). Coburg: Synästhesie-Verlag, 1999.

Flusser, Vilém. “Räume.” In Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften. Edited by Jörg Dünne et al., 274–84. Frankfurt am Main: Suhrkamp, 2006.

Foellmer, Susanne. Am Rand der Körper: Inventuren des Unabgeschlossenen im zeitgenössischen Tanz. Bielefeld: Transcript, 2009.

Forsythe, William, Roslyn Sulcas, and Nik Haffner. Improvisation Technologies: A Tool for the Analytical Dance Eye. 4th ed. Ostfildern: Hatje Cantz, 2012.

Fortier, Mark. Theory/Theatre: An Introduction. London: Routledge, Taylor & Francis Group, 2004.

Forty, Adrian. Words and Buildings: A Vocabulary of Modern Architecture. London: Thames & Hudson, 2004.

Foster, Susan L. “Dancing Bodies.” In Incorporations. Edited by Jonathan Crary and Sanford Kwinter, 480–95. New York, NY: Zone Books, 1992.

Foucault, Michel, Daniel Defert, and Michael Bischoff. Die Heterotopien/Der utopische Körper: Les hétérotopies/Le corps utopique. Zwei Radiovorträge - France Culture, 7. und 21. Dezember 1966. Frankfurt am Main: Suhrkamp, 2005.

Fox, James J., ed. Inside Austronesian: Perspectives on Domestic Designs for Living. Canberra: ANU E Press, 2006.

Franck, Karen A., and R. B. Lepori. Architecture from the Inside Out: From the Body, the Senses, the Site, and the Community. 2nd ed. Chichester: Wiley-Academy, 2007.

Franko, Mark. “What Is Dead and What Is Alive in Dance Phenomenology?” Dance Research Journal 43, no. 02 (2011): 1–4. doi:10.1017/S0149767711000015.

Frascari, Marco. Monsters of Architecture: Anthropomorphism in Architectural Theory. Savage, MD: Rowman & Littlefield, 1991.

Freshwater, Helen. Theatre & audience. Basingstoke: Palgrave Macmillan, 2009.

Fuchs, Thomas. Leib, Raum, Person: Entwurf einer phänomenologischen Anthropologie. Stuttgart: Klett-Cotta, 2000.

Gadamer, Hans-Georg. “Wahrheit und Methode.” In Dramaturgie. Edited by Bernd Stegemann, 274–78. Berlin: Theater der Zeit, 2009.

Garner, Stanton B. “‘Still living flesh’: Beckett, Merleau-Ponty, and the Phenomenological Body.” Theatre Journal 45, no. 4 (1993): 443ff.

——. Bodied Spaces: Phenomenology and Performance in Contemporary Drama. Ithaca, NY & London: Cornell University Press, 1994.

Gener, Randy. “The further adventures of monsieur space: the French designer Jean-Guy Lecat ponders the living intricacies of space, design and performance.” American Theater 26, no. 1 (2009): 48–52.

Gerstner, Muriel. “Aus dem Raum heraus denken.” In Die Kunst der Dramaturgie: Theorie - Praxis - Ausbildung. Edited by Anke Roeder and Klaus Zehelein, 120–25. Leipzig: Henschel, 2011.

Gibson, James J. The Ecological Approach to Visual Perception. Hillsdale, NJ: Lawrence Erlbaum Associates, 1986, c1979.

Giedion, Sigfried. Space, Time and Architecture: The Growth of a New Tradition. 5th ed. Cambridge, MA: Harvard University Press, 1967, c1941.

Giesekam, Greg. Staging the Screen: The Use of Film and Video in Theatre. Basingstoke & New York: Palgrave Macmillan, 2007.

Gilpin, Heidi. “Abberations of Gravity.” In William Forsythe and the Practice of Choreography. Edited by Steven Spier, 112–27. London & New York: Routledge, 2011.

Goerge, Thomas. “Ich bin kein Prophet und kein Prophetenjünger, sonder ein Geißhirt bin ich und schlitze Maulbeerfeigen (Caprificus).” In Vorstellungsräume - Dramaturgien des Raums. Edited by Dramaturgische Gesellschaft, 13–15. Berlin: Dramaturgische Gesellschaft, 2010. Accessed June 15, 2012. http://www.dramaturgische-gesellschaft.de/wordpress/wp-content/uploads/mydata/42PDF/thomasgoerge-caprificus.pdf.

Gottlieb, Vera, Colin Chambers, and Alison Chitty. Theatre in a Cool Climate. Oxford: Amber Lane Press, 1999.

Greenfield, Jon. “Design as Reconstruction: Reconstruction as Design.” In Shakespeare’s Globe Rebuilt. Edited by J. R. Mulryne, Margaret Shewring and Andrew Gurr, 81–96. Cambridge & New York: Cambridge University Press, in association with Mulryne & Shewring, 1997.

——. “Timber Framing, The Two Bays and After.” In Shakespeare’s Globe Rebuilt. Edited by J. R. Mulryne, Margaret Shewring and Andrew Gurr, 97–120. Cambridge & New York: Cambridge University Press, in association with Mulryne & Shewring, 1997.

Gronau, Barbara. “Dynamische Räume: Genese und Form der Theaterinstallation.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 255–69. Berlin: Alexander, 2010.

Gruber, William E. Offstage Space, Narrative, and the Theatre of the Imagination. New York, NY: Palgrave Macmillan, 2010.

Gurr, Andrew. Playgoing in Shakespeare’s London. 3rd ed. Cambridge & New York: Cambridge University Press, 2004, c1987.

——. Rebuilding Shakespeare’s Globe. London: Weidenfeld and Nicolson, 1989.

——. “Staging at the Globe.” In Shakespeare’s Globe Rebuilt. Edited by J. R. Mulryne, Margaret Shewring and Andrew Gurr, 159–68. Cambridge & New York: Cambridge University Press, in association with Mulryne & Shewring, 1997.

Guthrie, Tyrone. “Theatre at Minneapolis.” In Actor and Architect: Publication of the University of Manchester’s “Theatre Week” Conference 1962. Edited by Stephen Joseph, 30–47. Manchester: Manchester University Press, 1964.

Hall, Edward T. The Hidden Dimension: An Anthropologist Examines Humans’ Use of Space in Public and Private. New York: Anchor Books, 1982, c1966.

Hallmayer, Petra. “Selbstvergessenheit verboten: Die Tanzwerkstatt Europa hat diesmal auch eine Choreographie des Theaterregisseurs Laurent Chétouane im Programm.” Süddeutsche Zeitung, August 5, 2009.

Hammond, Michael. Performing Architecture: Opera Houses, Theatres and Concert Halls for the Twenty-First Century. London & New York: Merrell, 2006.

Harvie, Jen. Theatre & the city. Basingstoke & New York: Palgrave Macmillan, 2009.

Haß, Ulrike. Das Drama des Sehens: Auge, Blick und Bühnenform. München: W. Fink, 2005.

——. “Horizonte. Bestimmen und Bestimmtwerden.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 106–29. Berlin: Alexander, 2010.

Hauptmann, Deborah and Bart Akkerhuis, eds. The Body in Architecture. Rotterdam: 010 Publishers, 2006.

Hauser, Beatrix. “Zur somatischen Erfahrbarkeit von Aufführungen.” http://www.sfb626.de/veroeffentlichungen/online/aesth_erfahrung/aufsaetze/hauser1.pdf.

Heelan, Patrick A. Space-Perception and the Philosophy of Science. Berkeley: University of California Press, 1983.

Heller Anderson, Susan. “Restoring a Theater to Its Decrepit State.” New York Times, 13th October 1987.

Herrmann, Max. “Das theatralische Raumerlebnis: aus: Beilagenheft zur Zeitschrift für Ästhetik und Allgemeine Kunstwissenschaft 25 (1931), S. 152-163.” In Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften. Edited by Jörg Dünne et al., 501–13. Frankfurt am Main: Suhrkamp, 2006.

Hildy, Franklin J. “Audience and Architecture: The Dynamics of Performance at Shakespeare’s Globe.” New England Theatre Quarterly 10 (1999).

Hiscock, Nigel. The Symbol at Your Door: Number and Geometry in the Religious Architecture of the Greek and Latin Middle Ages. Aldershot: Ashgate, 2007.

Hodges, C. W., Samuel Schoenbaum, and Leonard Leone, eds. The Third Globe: Symposium for the Reconstruction of the Globe Playhouse, Wayne State University, 1979. Detroit: Wayne State University Press, 1981.

Howell-Meri, Mark. “Acting Spaces and Carpenters’ Tools: from the Fortune to the Theatre Royal, Bristol.” New Theatre Quarterly 25, no. 2 (2009): 148–58.

Hubbard, Phil, and Rob Kitchin. Key Thinkers on Space and Place. 2nd ed. Los Angeles: SAGE, 2011.

Hunter, Lynette, and Peter Lichtenfels. Shakespeare, Language and the Stage: The Fifth Wall, Approaches to Shakespeare from Criticism, Performance and Theatre Studies. London: Arden Shakespeare, 2005.

Huschka, Sabine. "Mediale Transformationen choreographischen Wissens – Das Internetprojekt ‚Synchronous Objects' von William Forsythe." In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 182–204. Berlin: Alexander, 2010.

Husserl, Edmund. Ding und Raum: Vorlesungen 1907, Text nach Husserliana, Band XVI. Edited by Karl-Heinz Hahnengreß. Philosophische Bibliothek 437. Hamburg: Meiner, 1991.

Ingold, Tim. Being Alive: Essays on Movement, Knowledge and Description. London & New York: Routledge, 2011.

Irmer, Thomas. "Raumkunst für das Schauspiel: Beobachtungen zur Architektur im zeitgenössischen Theaterbühnenbild." DETAIL Innenräume, no. 5 (2003): 452–68.

Jacobi, Derek. "Space and the Actor." In Making Space for Theatre: British Architecture and Theatre Since 1958. Edited by J. R. Mulryne and Margaret Shewring, 110–11. Stratford-upon-Avon: Mulryne and Shewring, 1995.

Jay, Martin. Downcast eyes: The Denigration of Vision in Twentieth-Century French Thought. Berkeley: University of California Press, 1993.

Jeschke, Claudia. "Representing the Body: Strategies of Dramaturgy and Choreography in Dance." In The connected body? An interdisciplinary approach to the body and performance. Edited by Ric Allsopp and Scott deLahunta, 96–104. Amsterdam: Amsterdam School of the Arts, 1996.

Jöchner, Cornelia. "Wie kommt 'Bewegung' in die Architekturtheorie? Zur Raum-Debatte am Beginn der Moderne." Accessed April 24, 2012. http://www.tu-cottbus.de/theoriederarchitektur/wolke/deu/Themen/041/Joechner/joechner.htm.

Johnson, Mark. The Body In The Mind: The Bodily Basis of Meaning, Imagination, and Reason. 7th ed. Chicago, IL: University of Chicago Press, 2000, c1987.

Joseph, Stephen, ed. Actor and Architect: Publication of the University of Manchester's "Theatre Week" Conference 1962. Manchester: Manchester University Press, 1964.

Kaiser, Paul, and William Forsythe. "Dance Geometry." Performance Research 4, no. 2 (1999): 64–71.

Kaplan, Donald M. “Theatre Architecture: A Derivation of the Primal Cavity.” The Drama Review: TDR 12, no. 3 (1968): 105–16.

Kapust, Antje and Bernhard Waldenfels, eds. Kunst. Bild. Wahrnehmung. Blick: Merleau-Ponty zum Hundertsten. Paderborn: Fink, Wilhelm, 2008.

Katz, M. B. Leon Battista Alberti and the Humanist Theory of the Arts. Washington: University Press of America, 1977.

Käufer, Stephan, and Anthony Chemero. Phenomenology: An introduction. Cambridge & New York: Polity Press, 2015.

Keersmaeker, Anne T. de. “Between Heaven and Earth: An Interview.” In Theaterschrift II: The Written Space / Der Geschriebene Raum. Edited by Marianne van Kerkhoven, 168–97. Brussels: Kaaitheater, 1992.

Kern, Stephen. The Culture of Time and Space, 1880-1918. Cambridge, MA: Harvard University Press, 2003.

Kershaw, Baz. Theatre Ecology: Environments and Performance Events. Cambridge & New York: Cambridge University Press, 2009, c2007.

Kiernan, Pauline. Staging Shakespeare at the new Globe. Basingstoke: Macmillan, 1999.

Kimmelman, Michael. “Putting Old Wrinkles Into a Theater’s New Face.” New York Times, 25th October 1987.

King, Nancy. Theatre Movement: The Actor and his Space. New York: Drama Books, 1975, c1971.

Kolesch, Doris and Sybille Krämer, eds. Stimme: Annäherung an ein Phänomen. Frankfurt am Main: Suhrkamp, 2006.

Koneffke, Silke. Theater-Raum: Visionen und Projekte von Theaterleuten und Architekten zum anderen Aufführungsort, 1900-1980. Berlin: Reimer, 1999.

Kostelanetz, Richard and Jack Anderson, eds. Merce Cunningham: Dancing in Space and Time. New York: Da Capo Press, 1998.

Kruft, Hanno-Walter. A History of Architectural Theory: From Vitruvius to the Present. London & New York: Zwemmer; Princeton Architectural Press, 1994.

Küller, Rikard. “Psycho-Physiological Conditions in Theatre Construction.” In Theatre Space: 8. World Congress, Munich, 18 - 25 September 1977. Edited by James F. Arnott, 158–80. Munich: Prestel, 1977.

Kümmerlen, Robert. Zur Ästhetik bühnenräumlicher Prinzipien, oder Der Raum auf dem Theater. Stuttgart: Enke, 1929.

Kurzenberger, Hajo and Annemarie Matzke, eds. TheorieTheaterPraxis. Berlin: Theater der Zeit, 2004.

Laban, Rudolf v. Choreutik: Grundlagen der Raumharmonielehre des Tanzes. Wilhelmshaven: F. Noetzel, 1991.

Lacan, Jacques. “Die Topik des Imaginären: aus: Freuds technische Schriften, Seminar I.” In Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften. Edited by Jörg Dünne et al., 212–25. Frankfurt am Main: Suhrkamp, 2006; Auf der Grundlage der Seminarsitzung vom 24 Februar 1954.

Lakoff, George, and Mark Johnson. Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought. New York: Basic Books, 1999.

Langer, Susanne K. Feeling and Form: A Theory of Art. New York: Charles Scribner, 1953.

Latronico, Vicenzo. “A Bijection Can Also Be Referred To As An Equivalence.” In Rehearsing Collectivity: Choreography Beyond Dance. Edited by Elena Basteri, Emanuele Guidi and Elisa Ricci, 55–59. Berlin: argobooks, 2012.

Lawson, Bryan. The Language of Space. Reprint. Oxford: Architectural Press, 2005, c2001.

Lawson, Mark. “Are British theatres falling out of love with bricks and mortar?” The Guardian, July 24, 2015. Accessed July 25, 2015. http://www.theguardian.com/stage/2015/jul/24/are-british-theatres-falling-out-of-love-with-bricks-and-mortar.

Lazarowicz, Klaus and Christopher Balme, eds. Texte zur Theorie des Theaters. Stuttgart: Reclam, 1991.

Leacroft, Richard, and Helen Leacroft. Theatre and Playhouse: An Illustrated Survey of Theatre Building from Ancient Greece to the Present Day. London: Methuen Drama, 1988.

Leatherbarrow, David. Architecture Oriented Otherwise. New York: Princeton Architectural Press, 2009.

Lecoq, Jacques. The Moving Body: Teaching Creative Theatre. With the assistance of Jean-Gabriel Carasso and Jean-Claude Lallias. London: Methuen Drama, 2009, c2000. translated by David Bradby.

Leder, Drew. The Absent Body. Chicago: University of Chicago Press, 1990.

Lefebvre, Henri. The Production of Space. Oxford & Cambridge, MA: Blackwell, 1991, c1974. translated by Donald Nicholson-Smith.

Lewin, Kurt. "Kriegslandschaft." In Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften. Edited by Jörg Dünne et al., 129–40. Frankfurt am Main: Suhrkamp, 2006; First published in Zeitschrift für Angewandte Psychologie, 12, 1917.

——. Principles of Topological Psychology. York, PA: The Maple Press Company, 1936. Translated by Fritz Heider and Grace M. Heider.

Lewin, Kurt, and Jonathan Blower. "The Landscape of War." Art In Translation 1, no. 2 (2009): 199–209. doi:10.2752/175613109X462672.

Lewin, Kurt, and Carl F. Graumann. Kurt-Lewin-Werkausgabe. Bern & Stuttgart: Hans Huber & Klett-Cotta, 1981.

Libeskind, Daniel. "The End of Space." In Theaterschrift II: The Written Space / Der Geschriebene Raum. Edited by Marianne van Kerkhoven, 60–85. Brussels: Kaaitheater, 1992.

Limon, Jerzy. "Space is Out of Joint: Experiencing Non-Euclidean Space in Theatre." Theatre Research International 33, no. 02 (2008): 127–44. doi:10.1017/S0307883308003647.

Lipps, Theodor. Raumästhetik und geometrisch-optische Täuschungen. Amsterdam: Kloof & Bonset, 1966.

Löw, Martina. Raumsoziologie. Frankfurt am Main: Suhrkamp, 2001.

Lutterbie, John. "Phenomenology and the Dramaturgy of Space and Place." Journal of Dramatic Theory and Criticism 16, no. 1 (2001): 123–30.

Maar, Kirsten. Entwürfe und Gefüge: William Forsythes choreographische Arbeiten in ihren architektonischen Konstellationen. Bielefeld: Transcript, voraussichtlich 2016.

Maasen, Sabine, Everett Mendelsohn, and Peter Weingart, eds. Biology as Society, Society as Biology: Metaphors 18. Dordrecht & London: Kluwer Academic, 1995; Sociology of the Sciences Yearbook.

Mach, Ernst. Space and Geometry In the Light of Physiological, Psychological, and Physical Inquiry. Chicago: The Open Court Publishing Company, 1906. translated by Thomas J. McCormack.

Macho, Thomas. “Stimmen ohne Körper: Anmerkungen zur Technikgeschichte der Stimme.” In Stimme: Annäherung an ein Phänomen. Edited by Doris Kolesch and Sybille Krämer, 130–46. Frankfurt am Main: Suhrkamp, 2006.

Mackintosh, Iain. architecture, actor, and audience. London & New York: Routledge, 1993.

——. “Old and New: The Rejection of the Fan-Shaped Auditorium and the Reinstatement of the Courtyard Form.” Theatre Research International 4, no. 01 (1978): 1. doi:10.1017/S0307883300001632.

Maravita, Angelo. “From “Body in the Brain” to “Body in Space”: Sensory and Intentional Components of Body Representation.” In Human body perception from the inside out. Edited by Günther Knoblich, 65–88. Advances in visual cognition. Oxford & New York: Oxford University Press, 2006.

Marshall, Cynthia. “Sight and Sound: Two Models of Shakespearean Subjectivity on the British Stage.” Shakespeare Quarterly 51, no. 3 (2000): 353–61.

Massey, Doreen B. For Space. London & Thousand Oaks, CA: SAGE, 2005.

Matzke, Annemarie M. Arbeit am Theater: Eine Diskursgeschichte der Probe. Bielefeld: Transcript, 2012.

Mauss, Marcel. “Techniques of the Body.” In Incorporations. Edited by Jonathan Crary and Sanford Kwinter, 455–77. New York, NY: Zone Books, 1992.

McAuley, Gay. “Gebündelte Energie: Sydneys Theaterräume und die Entstehung einer‚Empfindungsmatrix’.” In Politik des Raumes: Theater und Topologie. Edited by Erika Fischer-Lichte and Benjamin Wihstutz, 93–108. Paderborn & München: Fink, 2010.

——. Space in Performance: Making Meaning in the Theatre. Ann Arbor: University of Michigan Press, 2000.

McConachie, Bruce A. Theatre & mind. Theatre&. New York, NY: Palgrave Macmillan, 2013.

McEwen, Indra K. Vitruvius: Writing the Body of Architecture. Cambridge, MA: MIT Press, 2003.

McKinney, Joslin. “Scenography, Spectacle and the Body of the Spectator.” Performance Research 18, no. 3 (2013): 63–74. doi:10.1080/13528165.2013.818316.

Meisenheimer, Wolfgang. Das Denken des Leibes und der architektonische Raum. Köln: König, 2000.

Menzer, Paul. Inside Shakespeare: Essays on the Blackfriars stage. Selinsgrove: Susquehanna University Press, 2006.

Merleau-Ponty, Maurice. Phenomenology of Perception. London & New York: Routledge, 2002, c1945.

——. The Structure of Behaviour. London: Methuen, 1965. translated by Alden L. Fisher.

Metzger, Stephanie. Theater und Fiktion: Spielräume des Fiktiven in Inszenierungen der Gegenwart. Bielefeld: Transcript, 2010.

Meyer, Jochen. Theaterbautheorien zwischen Kunst und Wissenschaft: Die Diskussion über Theaterbau im deutschsprachigen Raum in der ersten Hälfte des 19. Jahrhunderts. Berlin: Gebr. Mann, 1998.

Mielziner, and Jo. The Shapes of our Theatre. Ann Arbor, MI: Clarkson N. Potter, 1970.

Minkowski, Eugène. Lived Time: Phenomenological and Psychopathological Studies. Evanston, IL: Northwestern University Press, 1970. Translated by Nancy Metzel.

Moore, Carol-Lynne. The Harmonic Structure of Movement, Music, and Dance According to Rudolf Laban: An Examination of his Unpublished Writings and Drawings. Lewiston, NY: Edwin Mellen Press, 2009.

Moran, Dermot. Introduction to Phenomenology. London & New York: Routledge, 2000.

Morgan, C. L. An Introduction to Comparative Psychology. 2nd, revised. London: W. Scott, 1903 (c.1894).

Morris, David. The Sense of Space. Albany, NY: State University of New York Press, 2004.

Mukařovský, Jan. Structure, Sign, and Function: Selected Essays. New Haven: Yale University Press, 1978, c1977.

Mulryne, J. R. and Margaret Shewring, eds. Making Space for Theatre: British Architecture and Theatre Since 1958. Stratford-upon-Avon: Mulryne and Shewring, 1995.

Mulryne, J. R., Margaret Shewring, and Andrew Gurr, eds. Shakespeare's Globe Rebuilt. Cambridge & New York: Cambridge University Press, in association with Mulryne & Shewring, 1997.

Nel, Christof. “Sprünge – Verknüpfungen – Rahmen: Erinnerungs-Stücke von Gesprächen mit Hans-Thies Lehmann.” In AufBrüche - Theaterarbeit zwischen Text und Situation. Edited by Patrick Primavesi and Olaf A. Schmitt, 280–83. Berlin: Theater der Zeit, 2004.

Neumann, Jean. “Kurt Lewin – ‘Field Theory Rule’.” Accessed August 3, 2015. http://www.tavinstitute.org/projects/field-theory-rule/.

Noë, Alva. Action in Perception. Cambridge, MA: MIT Press, 2004.

——. Out of our heads: Why you are not your brain and other lessons from the biology of consciousness. New York, NY: Hill & Wang, 2010.

Norberg-Schulz, Christian. Existence, Space & Architecture. London: Studio Vista, 1971.

Nugent, Ann. “The Architexts of Eidos:Telos: A critical study through intertextuality of the dance text conveived by William Forsythe.” School of Performing Arts, University of Surrey, 2000. Accessed accessed February 15, 2012. http://epubs.surrey.ac.uk/847/1/fulltext.pdf.

Oberender, Thomas. Leben auf Probe: Wie die Bühne zur Welt wird. München: C. Hanser, 2009.

Odenthal, Johannes. Tanz, Körper, Politik: Texte zur zeitgenössischen Tanzgeschichte. 2nd ed. Berlin: Theater der Zeit, 2012.

Orrell, John. The Human Stage: English Theatre Design, 1567-1640. Cambridge: Cambridge University Press, 1988.

——. The Quest for Shakespeare’s Globe. Cambridge & New York: Cambridge University Press, 1983.

——. The Theatres of Inigo Jones and John Webb. Cambridge: Cambridge University Press, 1985.

Ortolani, Olivier. Theater als Reise zum Menschen: Der Regisseur Peter Brook. Berlin: Alexander, 2005.

Pakes, Anna. “Dance’s Mind-Body Problem.” Dance Research 24, no. 2 (2006): 87–104.

——. “Phenomenology and Dance: Husserlian Meditations.” Dance Research Journal 43, no. 02 (2011): 33–49. doi:10.1017/S0149767711000040.

Pallasmaa, Juhani. The Architecture of Image: Existential Space in Cinema. Helsinki: Rakennustieto, 2001.

——. The Eyes of the Skin: Architecture and the Senses. Chichester: Wiley-Academy, 2007.

Panofsky, Erwin. Gothic Architecture and Scholasticism. London & New York: Meridian Books, Thames and Hudson, 1957.

——. Perspective as Symbolic Form. New York & Cambridge, MA: Zone Books, distributed by MIT Press, 1997.

Papapetros, Spyros. On the Animation of the Inorganic: Art, Architecture, and the Extension of Life. Chicago: University of Chicago Press, 2012.

Pavis, Patrice. Analyzing Performance: Theater, Dance, and Film. Ann Arbor: University of Michigan Press, 2003. https://books.google.co.uk/books?id=c4iEcafdAPIC.

Pelletier, Louise. Architecture in Words: Theatre, Language and the Sensuous Space of Architecture. London & New York: Routledge, 2006.

Plato. Timaeus and Critias. Oxford & New York: Oxford University Press, 2008.

Polanyi, Michael, and Amartya Sen. The Tacit Dimension. 2nd ed. Chicago & London: University of Chicago Press, 2009, c1966.

Primavesi, Patrick and Olaf A. Schmitt, eds. AufBrüche - Theaterarbeit zwischen Text und Situation. Berlin: Theater der Zeit, 2004.

Pritchard, Barry. "Upon Reflection: The Architects' Account of the Restoration of the Old Vic Theatre." Bulletin of the Association for Preservation Technology 17, 3/4 (1985): 75. doi:10.2307/1494104.

Rayner, Alice. To Act, To Do, To Perform: Drama and the Phenomenology of Action. Ann Arbor: University of Michigan Press, 1994.

Read, Gray. "Theater of Public Space: Architectural Experimentation in the Théâtre de l'espace, Paris 1937." Journal of Architectural Education 58, no. 4 (2005): 53–62. doi:10.1162/1046488054026796.

Reardon, Michael. "Sacred Space and Secular Space." In Making Space for Theatre: British Architecture and Theatre Since 1958. Edited by J. R. Mulryne and Margaret Shewring, 25–27. Stratford-upon-Avon: Mulryne and Shewring, 1995.

Redmond, James, ed. Themes in Drama, Volume 9: The Theatrical Space. Cambridge & London: Cambridge University Press, 1987.

Rehm, Rush. The Play of Space: Spatial Transformation in Greek Tragedy. Princeton, NJ: Princeton University Press, 2002.

Reid, Francis. Theatre Space: A Rediscovery Reported. Cambridge: Entertainment Technology Press, 2006.

Rokem, Freddie. "Continuity and Disruption: Martin Buber, Hellerau and „The Space Problem in the Theatre"." In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 206–22. Berlin: Alexander, 2010.

Roselt, Jens. Phänomenologie des Theaters. München: Fink, 2008.

——. "Raum." In Metzler-Lexikon Theatertheorie. Edited by Erika Fischer-Lichte, 260–67. Stuttgart & Weimar: Metzler, 2005.

——. "Wandel durch Annäherung: Praktiken der Raumnutzung in zeitgenössischen Aufführungen." In Politik des Raumes: Theater und Topologie. Edited by Erika Fischer-Lichte and Benjamin Wihstutz, 177–88. Paderborn & München: Fink, 2010.

Rothfield, Philipa. "Differentiating Phenomenology and Dance." In The Routledge Dance Studies Reader. Edited by Alexandra Carter and Janet O'Shea. 2nd ed., 303–18. London & New York: Routledge, 2010.

Röttger, Kati, ed. Welt - Bild - Theater II: Bildästhetik im Bühnenraum. Tübingen: Narr, 2012.

Rufford, Juliet. "Haworth Tomkins' Young Vic Theatre: Remembering the Blitz… and Beyond." Contemporary Theatre Review 18, no. 2 (2008): 161–79.

——. Theatre & architecture. Theatre&. Basingstoke: Palgrave Macmillan, 2015.

Ryan, Jessica. Actor Interviews (2002). Globe Research Bulletin. Globe Research.

Rykwert, Joseph. The Dancing Column: On Order in Architecture. Cambridge, MA: MIT Press, 1996.

Rylance, Mark. "Playing the Globe: Artistic Policy and Practice." In Shakespeare's Globe Rebuilt. Edited by J. R. Mulryne, Margaret Shewring and Andrew Gurr, 169–76. Cambridge & New York: Cambridge University Press, in association with Mulryne & Shewring, 1997.

——. "Research, Materials, Craft: Principles of Performance at Shakespeare's Globe." In Shakespeare's Globe: A Theatrical Experiment. Edited by Christie Carson and Farah Karim-Cooper, 103–14. Cambridge & New York: Cambridge University Press, 2008.

Rylance, Mark, Paul Chahidi, and Yolanda Vasquez. "Discoveries from the Globe stage." In Shakespeare's Globe: A Theatrical Experiment. Edited by Christie Carson and Farah Karim-Cooper, 194–210. Cambridge & New York: Cambridge University Press, 2008.

Saleh Pascha, Khaled. ""Gefrorene Musik" das Verhältnis von Architektur und Musik in der ästhetischen Theorie." TU Berlin, 2004. Accessed April 12, 2012. http://d-nb.info/970647670.

Salter, Chris. "Timbral Architectures, Aurality's Force: Sound and Music." In William Forsythe and the Practice of Choreography. Edited by Steven Spier, 54–72. London & New York: Routledge, 2011.

Sartre, Jean-Paul. "Intentionality: A Fundamental Idea of Husserl's Phenomenology." In Routledge phenomenology reader. Edited by Dermot Moran, 382–84. London: Routledge, 2002. Accessed April 14, 2012. http://www.mccoyspace.com/nyu/12_s/anarchy/texts/03-Jean-Paul_Sartre-Intentionality.pdf.

Savigliano, Marta E. "Gambling Femininity: Tango Wallflowers and Femmes Fatales." In The Routledge Dance Studies Reader. Edited by Alexandra Carter and Janet O'Shea. 2nd ed., 236–49. London & New York: Routledge, 2010.

Schechner, Richard. "Theateranthropologie: Spiel und Ritual im Kulturvergleich." In Dramaturgie. Edited by Bernd Stegemann, 280–84. Berlin: Theater der Zeit, 2009.

Schlemmer, Oskar. "Die Bauhausbühne: Erstdruck: Das Werk. Schweizer Monatsschrift für Architektur, Kunstgewerbe, Freie Kunst 15 (1928) H. 1. S. 8-13." In Texte zur Theorie des Theaters. Edited by Klaus Lazarowicz and Christopher Balme, 442–47. Stuttgart: Reclam, 1991.

Schlemmer, Oskar, László Moholy-Nagy, and Farkas Molnár, eds. Die Bühne im Bauhaus. 3rd ed. Mainz: Bei Florian Kupferberg, 1985, c1925.

Schlemmer, Oskar, László Moholy-Nagy, Farkas Molnár, Walter Gropius, and Arthur S. Wensinger, eds. The Theater of the Bauhaus. Baltimore: Johns Hopkins University Press, 1996, c1960.

Schmarsow, August. "Das Wesen der architektonischen Schöpfung: Antrittsvorlesung Universität Leipzig, 8.11.1893." In Raumtheorie: Grundlagentexte aus Philosophie und Kulturwissenschaften. Edited by Jörg Dünne et al., 470–83. Frankfurt am Main: Suhrkamp, 2006.

——. "Raumgestaltung als Wesen der architektonischen Schöpfung." Zeitschrift für Ästhetik und allgemeine Kunstwissenschaft 9 (1914): 66–95.

——. "Rhythmus in menschlichen Raumgebilden." Zeitschrift für Ästhetik und allgemeine Kunstwissenschaft 14 (1920): 171–87.

Schmidt, Ulf. “auf dem weg zum agilen theater: Zusammenfassung des Vortrags von Ulf Schmidt.” In Leben, Kunst und Produktion: Wie wollen wir arbeiten? Edited by Dramaturgische Gesellschaft, 43–49. Berlin: Dramaturgische Gesellschaft, 2014.

Schormann, Vanessa. Shakespeares Globe: Repliken, Rekonstruktionen und Bespielbarkeit. Heidelberg: Winter, 2002.

Schouten, Sabine. Sinnliches Spüren: Wahrnehmung und Erzeugung von Atmosphären im Theater. Berlin: Verl. Theater der Zeit, 2007.

Schwarz, Robert L. “Body, Space and Idea.” In The connected body? An interdisciplinary approach to the body and performance. Edited by Ric Allsopp and Scott deLahunta, 77–81. Amsterdam: Amsterdam School of the Arts, 1996.

Scolnicov, Hanna. “Theatre Space, Theatrical Space, and the Theatrical Space Without.” In Themes in Drama, Volume 9: The Theatrical Space. Edited by James Redmond, 11–26. Cambridge & London: Cambridge University Press, 1987.

——. Woman’s Theatrical Space. Cambridge & New York: Cambridge University Press, 2004.

Scott, Charles E. The Lives of Things. Bloomington: Indiana University Press, 2002.

Scott, Geoffrey. The Architecture of Humanism: A Study in the History of Taste. New York: W.W. Norton, 1999, c1914.

Sear, Frank. Roman Theatres: An Architectural Study. Oxford & New York: Oxford University Press, 2006.

Sear, Frank B. “Vitruvius and Roman Theater Design.” American Journal of Archaeology 94, no. 2 (1990): 249–58.

Semper, Gottfried. Style: Style in the Technical and Tectonic Arts, or, Practical Aesthetics. Los Angeles, California: Getty Research Institute, 2004.

Sennett, Richard. Flesh and Stone: The Body and the City in Western Civilization. New York: Norton, 1996.

Serlio, Sebastiano. The first booke of architecture entreating of geometrie.: Translated out of Italian into Dutch and out of Dutch into English. Robert Peake, 1611.

Sheets-Johnstone, Maxine. “On Movement and Objects in Motion: The Phenomenology of the Visible in Dance.” Journal of Aesthetic Education 13, no. 2 (1979): 33–46.

——. “Taking Evolution Seriously.” American Philosophical Quarterly 29, no. 4 (1992): 343–52.

——. The Corporeal Turn: An Interdisciplinary Reader. Exeter: Imprint Academic, 2009.

——. The Phenomenology of Dance. Philadelphia: Temple University Press, 2015, c1966.

——. The Primacy of Movement. 2nd ed. Amsterdam & Philadelphia: John Benjamins Pub. Co., 2011.

Shelby, Lon R. “The Geometrical Knowledge of Medieval Master Masons.” Speculum 47, no. 3 (1972): 395–421.

Shusterman, Richard. Somaesthetics and Architecture: A Critical Option. Lecture at the International Bauhaus Colloquium 2009. Weimar, 2009. Video. http://www.youtube.com/watch?v=49xX6piR6gM.

Siegmund, Gerald. “Der Forsythe-Komplex: Ballett als ein System zum Verarbeiten von Information.” In Tanz.de: zeitgenössischer Tanz in Deutschland - Strukturen im Wandel - eine neue Wissenschaft. Edited by Johannes Odenthal and Inge Baxmann, 54–61 14. Berlin: Theater der Zeit, 2005.

——. “Körper, Heterotopie und der begehrende Blick – William Forsythes Preisgabe des Fluchtpunkts.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 130–52. Berlin: Alexander, 2010.

——. “Von der Katastrophe des Sehens.” In AufBrüche - Theaterarbeit zwischen Text und Situation. Edited by Patrick Primavesi and Olaf A. Schmitt, 368–70. Berlin: Theater der Zeit, 2004.

Siegmund, Gerald and Stefan Hölscher, eds. Dance, Politics & Co-Immunity. Zürich: Diaphanes, 2013.

Silverstone, Catherine. “Shakespeare Live: Reproducing Shakespeare at the ‘New’ Globe Theatre.” Textual Practice 19, no. 1 (2005): 31–50. doi:10.1080/0950236042000329636.

——. “Text, Space and the Performance of Death: King Lear: Workshop Report: Queen Mary University of London & Shakespeare’s Globe Collaboration.” 3 February 2010. Accessed August 23, 2012. http://www.shakespearesglobe.com/uploads/ffiles/2012/03/454018.pdf.

Slaby, Jan. “Möglichkeitsraum und Möglichkeitssinn. Bausteine einer phänomenologischen Gefühlstheorie.” In Gefühle als Atmosphären: Neue Phänomenologie und philosophische Emotionstheorie. Edited by Kerstin Andermann and Undine Eberlein, 125–40. Berlin: Akademie-Verlag, 2011.

Smith, Matthew W. From Bayreuth to Cyberspace. New York & London: Routledge, 2007.

Sobchack, Vivian. Carnal Thoughts: Embodiment and Moving Image Culture. Berkeley: University of California Press, 2004.

Sobchak, Vivian. The Address of the Eye: A Phenomenology of Film Experience. Princeton, NJ: Princeton University Press, 1992.

Sofer, Andrew. Dark Matter: Invisibility in Drama, Theater, and Performance. Ann Arbor: University of Michigan Press, 2013.

Solway, Diane. “How the body (and mind) learns a dance.” New York Times, May 28, 2007.

Sonntag, Nina. Raumtheater: Adolphe Appias theaterästhetische Konzeption in Hellerau. Essen: Klartext-Verlags, 2011.

Southern, Richard. “Unusual Forms of Stage.” In Actor and Architect: Publication of the University of Manchester’s “Theatre Week” Conference 1962. Edited by Stephen Joseph, 48–56. Manchester: Manchester University Press, 1964.

Spier, Steven. “‘Tight Roaring Circle’: Organizing the Organization of Bodies in Space.” New Theatre Quarterly 14, no. 55 (1998): 202. doi:10.1017/S0266464X0001215X.

——, ed. William Forsythe and the Practice of Choreography. London & New York: Routledge, 2011.

Stanislavsky, Konstantin. An Actor Prepares. New York: Routledge, 1989, c1936.

States, Bert O. Great Reckonings in Little Rooms: On the Phenomenology of Theater. Berkeley & London: University of California, 1992, c1985.

Stegemann, Bernd, ed. Dramaturgie. Berlin: Theater der Zeit, 2009.

Stein, Gertrude. Lectures in America. London: Virago, 1988, c1935.

Stevenson, Juliet. “Space and the Actor.” In Making Space for Theatre: British Architecture and Theatre Since 1958. Edited by J. R. Mulryne and Margaret Shewring, 108–10. Stratford-upon-Avon: Mulryne and Shewring, 1995.

Stewart, Nigel. “Re-Languaging the Body: Phenomenological Description and the Dance Image.” Performance Research 3, no. 2 (2014): 42–53. doi:10.1080/13528165.1998.10871607.

Strong, Judith. Encore: Strategies for Theatre Renewal. London: Theatres Trust Charitable Fund, 1998.

——. Theatre Buildings: A Design Guide. With the assistance of The Association of British Theatre Technicians. Abingdon & New York: Routledge, 2010.

Strongman, Luke. “The Anthropomorphic Bias: How Human Thinking is Prone to Be Self-Referential.” The Open Politechnic of New Zealand Working Papers, 4-07 (2008).

Styan, John L. Shakespeare’s Stagecraft. Cambridge: Cambridge University Press, 1967.

Suerbaum, Ulrich. Das elisabethanische Zeitalter. Stuttgart: Reclam, 1991.

Summerson, John. “Three Elizabethan Architects.” Bulletin of the John Rylands Library 40, no. 1 (1957): 202–28.

Svoboda, Josef. The Secret of Theatrical Space: The Memoirs of Josef Svoboda. New York, NY: Applause Theatre Books, 1993. Edited and translated by J. M. Burian.

Taylor, David F. “Discoveries and Recoveries in the Laboratory of Georgian Theatre.” New Theatre Quarterly 27, no. 3 (2011): 229–43.

The Theatres Trust, ed. Experiencing Theatres: 2009 Conference Report. London, 2009.

Thiis-Evensen, Thomas. Archetypes in Architecture. Oslo: Norwegian University Press, 1987.

Tigges, Stefan. “In den Raum der Bilder sehen. Ästhetische Maßverhältnisse in den Spiel- und Kunsträumen von Jürgen Gosch und Johannes Schütz.” In Welt - Bild - Theater II: Bildästhetik im Bühnenraum. Edited by Kati Röttger, 251–66. Tübingen: Narr, 2012.

Tiramani, Jenny. “Exploring Early Modern Stage and Costume Design.” In Shakespeare’s Globe: A Theatrical Experiment. Edited by Christie Carson and Farah Karim-Cooper, 57–65. Cambridge & New York: Cambridge University Press, 2008.

Todd, Andrew. “Grounding.” In Theatre and Performance Design: A Reader in Scenography. Edited by Jane Collins and Andrew Nisbet, 117–27. London & New York: Routledge, 2010.

Todd, Andrew, and Jean-Guy Lecat. The Open Circle: Peter Brook’s Theater Environments. New York: Palgrave Macmillan, 2003.

Todd, Mabel E. The Thinking Body: A Study of the Balancing Forces of Dynamic Man. Gouldsboro, ME: Gestalt Journal Press, 2008, c1937.

Tompkins, Joanne. Theatre’s Heterotopias: Performance and the Cultural Politics of Space. Basingstoke & New York: Palgrave Macmillan, 2014.

Tompkins, Steve. “Interview.” The Stage 12, no. 6610 (2007).

Traub, Susanne. “Die Dramatik des Raumes: “Plötzlich brichst du ein auf der Stelle, auf der du stehst.”” In AufBrüche - Theaterarbeit zwischen Text und Situation. Edited by Patrick Primavesi and Olaf A. Schmitt, 75–78. Berlin: Theater der Zeit, 2004.

Tribble, Evelyn B. Cognition in the Globe: Attention and Memory in Shakespeare’s Time. Basingstoke: Palgrave Macmillan, 2011.

Troller, Urs. “Plädoyer für die Guckkastenbühne: (Plea for the Italian Stage).” In Theaterschrift II: The Written Space / Der Geschriebene Raum. Edited by Marianne van Kerkhoven, 88–101. Brussels: Kaaitheater, 1992.

——. “Welche Bedeutung hat der Guckkasten für das Theaterspielen, da er immer noch da ist?” In Vorstellungsräume - Dramaturgien des Raums. Edited by Dramaturgische Gesellschaft, 7–10. Berlin: Dramaturgische Gesellschaft, 2010. Accessed June 15, 2012. http://www.dramaturgische-gesellschaft.de/wordpress/wp-content/uploads/mydata/42PDF/urstroller-welchebedeutunghatderguckkastenfurdastheaterspielendaerimmernochdaist_.pdf.

Turner, Henry S. The English Renaissance stage: Geometry, Poetics, and the Practical Spatial Arts 1580-1630. New York: Oxford University Press, 2006.

Turner, Victor W. From Ritual to Theatre: The Human Seriousness of Play. New York: Performing Arts Journal Publications, 1982.

Ubersfeld, Anne. Reading Theatre. Toronto: University of Toronto Press, 1999.

Ursprung, Philip. “Presence: The Light Touch of Architecture.” In Sensing spaces. Architecture re-imagined. Edited by Philip Ursprung, 39–53. London: Royal Academy of Arts, 2014.

van Kerkhoven, Marianne, ed. Theaterschrift II: The Written Space / Der Geschriebene Raum. With the assistance of Jan J. Lamers. Brussels: Kaaitheater, 1992.

van Meijl, Toon. “Maori Meeting-Houses In and Over Time.” In Inside Austronesian: Perspectives on Domestic Designs for Living. Edited by James J. Fox, 201–23. Canberra: ANU E Press, 2006.

Varela, Francisco J. “The Reenchantment of the Concrete.” In Incorporations. Edited by Jonathan Crary and Sanford Kwinter, 320–38. New York, NY: Zone Books, 1992.

Vass-Rhee, Freya. “Dancing Music: The Intermodality of The Forsythe Company.” In William Forsythe and the Practice of Choreography. Edited by Steven Spier, 73–89. London & New York: Routledge, 2011.

——. “Turning the Tables: William Forsythe’s Antipodes I/II.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 293–301. Berlin: Alexander, 2010.

Vesely, Dalibor. “The Architectonics of Embodiment.” In Body and Building: Essays on the Changing Relation of Body and Architecture. Edited by George Dodds, Robert Tavernor and Joseph Rykwert, 28–43. Cambridge, MA: MIT Press, 2002.

Vidler, Anthony. The Architectural Uncanny: Essays In The Modern Unhomely. Cambridge, MA: MIT Press, 1992.

Vitruvius. The Ten Books on Architecture. Cambridge, MA: Harvard University Press, 1914. Translated by M. H. Morgan.

Wagner, Kirsten. “Die Beseelung der Architektur: Empathie und architektonischer Raum.” In Einfühlung: Zur Geschichte und Gegenwart eines ästhetischen Konzepts. Edited by Robin Curtis and Gertrud Koch, 49–78. Paderborn: Fink, 2008.

——. “Vom Leib zum Raum: Aspekte der Raumdiskussion in der Architektur aus kulturwissenschaftlicher Perspektive.” Accessed April 24, 2012. http://www.tu-cottbus.de/theoriederarchitektur/wolke/deu/Themen/041/Wagner/wagner.htm.

Waldenfels, Bernhard. “Mimetische Differenz und Pathische Impulse.” In AufBrüche - Theaterarbeit zwischen Text und Situation. Edited by Patrick Primavesi and Olaf A. Schmitt, 62–67. Berlin: Theater der Zeit, 2004.

——. Ortsverschiebungen, Zeitverschiebungen: Modi leibhaftiger Erfahrung. Frankfurt am Main: Suhrkamp, 2009.

Walker, Craig S. “Reckoning with States on the Phenomenology of Theatre.” Journal of Dramatic Theory and Criticism XI, no. 2 (1997): 65–83.

Warburton, Edward C. “Of Meanings and Movements: Re-Languaging Embodiment in Dance Phenomenology and Cognition.” Dance Research Journal 43, no. 2 (2011): 65–83.

Ward, David. Transformation: Shakespeare’s New Theatre. Stratford-upon-Avon: RSC Enterprise, 2011.

Waterhouse, Elizabeth. “Dancing Amidst The Forsythe Company – Space, Enactment and Living Repertory.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 153–81. Berlin: Alexander, 2010.

Weimann, Robert. Author's Pen and Actor's Voice: Playing and Writing in Shakespeare's Theatre. Cambridge: Cambridge University Press, 2000.

——. Shakespeare and the Popular Tradition in the Theater: Studies in the Social Dimension of Dramatic Form and Function. Baltimore: Johns Hopkins University Press, 1987, c1978.

Weinstein, Beth. "Performance Space: Distributed v. Consolidated." In The Disappearing Stage: Reflections on the 2011 Prague Quadrennial. Edited by Arnold Aronson, 60–73. Prague: Prospero, Arts and Theatre Institute, 2012.

——. "Performing Architectures: Closed and Open Logics of Mutable Scenes." Performance Research 18, no. 3 (2013): 161–68. doi:10.1080/13528165.2013.818328.

——. "Turned Tables: The Public as Performers in Jean Nouvel's Pre-performance Spaces." In Architecture as a Performing Art. Edited by Marcia F. Feuerstein and Gray Read, 163–76. Burlington: Ashgate, 2013.

West, and Russell. "Perplexive Perspectives: The Court and Contestation in the Jacobean Masque." Accessed April 14, 2012. http://www.manchesteruniversity press.co.uk/uploads/docs/180025.pdf.

West, Russell. Spatial Representations and the Jacobean Stage: From Shakespeare to Webster. Basingstoke: Palgrave Macmillan, 2002.

Westphal, Kristin. "Text, Theater und Responsive Leiblichkeit." In AufBrüche - Theaterarbeit zwischen Text und Situation. Edited by Patrick Primavesi and Olaf A. Schmitt, 68–74. Berlin: Theater der Zeit, 2004.

White, Martin. "Research and the Globe." In Shakespeare's Globe: A Theatrical Experiment. Edited by Christie Carson and Farah Karim-Cooper, 166–74. Cambridge & New York: Cambridge University Press, 2008.

Wiens, Birgit. "Kreatives Licht: Appias Erbe und die intermedialen Szenographien von Hotel Pro Forma." In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 223–54. Berlin: Alexander, 2010.

Wilcox, Dean. "Ambient Space in Twentieth-Century Theatre: The Space of Silence." Modern Drama 46, no. 4 (2003): 542–57.

Wiles, David. A Short History of Western Performance Space. New York: Cambridge University Press, 2003.

Wilkins, Craig L. “(W)rapped Space: The Architecture of Hip Hop.” Journal of Architectural Education 54, no. 1 (2000): 7–19.

Williams, David. “‘A Place Marked by Life’: Brook at the Bouffes du Nord.” New Theatre Quarterly 1, no. 01 (1985): 39–74. doi:10.1017/S0266464X0000141X.

Wölfflin, Heinrich. Prolegomena zu einer Psychologie der Architektur. Berlin: Gebr. Mann, 1999, c1886. mit einem Nachwort von Jasper Cepl.

Wortelkamp, Isa. “Umwege | Abwege. Zur Choreographie des architektonischen Raums.” Accessed April 9, 2009. http://www.corpusweb.net/apc-umwege-abwege.html.

Worthen, William B. Shakespeare and the Force of Modern Performance. Cambridge: Cambridge University Press, 2003.

Yates, Frances A. Theatre of the World. Chicago: University of Chicago Press, 1969.

Zarilli, Phillip B. “Toward a Phenomenological Model of the Actor’s Embodied Modes of Experience.” Theatre Journal 56, no. 4 (2004): 653–66.

Zevi, Bruno. Architecture as Space: How to Look at Architecture. New York: Horizon, 1957.

Zinsmeister, Annett. “Modularisierung von Raum und Bewegung als ästhetisches Programm.” In Theater ohne Fluchtpunkt: Das Erbe Adolphe Appias, Szenographie und Choreographie im zeitgenössischen Theater. Edited by Gabriele Brandstetter and Birgit Wiens, 76–102. Berlin: Alexander, 2010.

Zöllner, Frank. “Anthropomorphism: From Vitruvius to Neufert, From Human Measurement to the Measure of Fascism.” In Images of the body in architecture: Anthropology and built space. Edited by Kirsten Wagner and Jasper Cepl, 47–75. Tübingen: Wasmuth, 2014.

Zug, Beatrix. Die Anthropologie des Raumes in der Architekturtheorie des frühen 20. Jahrhunderts. Tübingen: Wasmuth, 2006.

Zumthor, Peter. Thinking Architecture. 3rd ed. Basel: Birkhäuser, 2010, c1998.

Grafik & Satz: Paul Bowler