

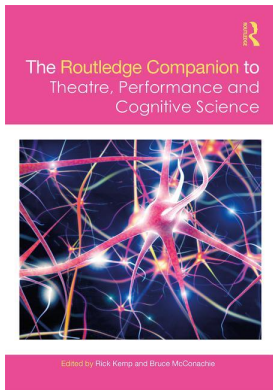
This article was downloaded by: 10.3.98.93

On: 16 Jan 2019

Access details: *subscription number*

Publisher: *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



The Routledge Companion to Theatre, Performance, and Cognitive Science

Rick Kemp, Bruce McConachie

Embodied Cognition and Shakespearean Performance

Publication details

<https://www.routledgehandbooks.com/doi/10.4324/9781315169927-6>

Darren Tunstall

Published online on: 05 Sep 2018

How to cite :- Darren Tunstall. 05 Sep 2018, *Embodied Cognition and Shakespearean Performance* from: *The Routledge Companion to Theatre, Performance, and Cognitive Science* Routledge
Accessed on: 16 Jan 2019

<https://www.routledgehandbooks.com/doi/10.4324/9781315169927-6>

PLEASE SCROLL DOWN FOR DOCUMENT

Full terms and conditions of use: <https://www.routledgehandbooks.com/legal-notices/terms>

This Document PDF may be used for research, teaching and private study purposes. Any substantial or systematic reproductions, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The publisher shall not be liable for an loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

4

EMBODIED COGNITION AND SHAKESPEAREAN PERFORMANCE

Darren Tunstall

The theory of embodied cognition has underpinned a broad and expanding field of inquiry within cognitive studies since the mid-1970s (see Lakoff 2012: 773–5). It has also received attention from those theatre scholars who, since the early 1990s, have been exploring the topics of embodiment and cognition in relation to Shakespearean production, actor training and methods of rehearsal. A by no means exhaustive list of such pioneering scholars would include Mary Thomas Crane (2001), Bruce McConachie (with F. Elizabeth Hart 2006; see also 2008, 2013, 2015), Rhonda Blair (2008), Amy Cook (2010), Rick Kemp (2012, 2017), Evelyn Tribble (2011), John Lutterbie (2011) and the contributors to *Embodied Cognition and Shakespeare's Theatre* (Johnson, Sutton and Tribble 2014). In this chapter, I mean to outline what embodied cognition is, single out some aspects of it that pertain to performance theory and practice and relate these aspects to different strategies for the Shakespearean text that I have modelled upon some influential theatre practitioners. In doing so, I'm not suggesting that all of these practitioners were precursors or proponents of embodied cognition; rather, the intention is to see what light an understanding of embodied cognition might shed upon rehearsal methods. Thus, I aim to move from the general to the particular, from the theoretical to the practical.

What is embodied cognition? It can be understood as the proposition that an individual's cognitive and bodily processes should be seen as interdependent. As George Lakoff and Mark Johnson (1999) demonstrated, this conception marks a radical break between 'first generation' cognitive science, which tended to consider thinking as disembodied – a computational activity somehow separate from the material reality of the human brain – and 'second generation' cognitive science, which sees thinking as grounded in both neuroanatomy and bodily (sensorimotor) experience. There are variations of emphasis within the field, from the somewhat guarded claims of Alvin Goldman (2013) that an individual's cognition is embodied to a significant degree, to the 'extended mind' hypothesis of Andy Clark (2008), who argues that the idea that cognition is embodied may be applied beyond the human frame into features of the environment itself, such that (to use Clark's most famous illustration) a person's notebook can be seen as playing the role of a biological memory. Differences aside, it is the focus upon brain physiology combined with bodily experience that gives embodied cognition its radical uniqueness. Many experiments have demonstrated that people's engagement with the environment through their senses, and even the behaviour of their internal

organs, affects what and how they think. For example, it has been shown that our thought patterns are influenced by tiredness, by hunger, by carrying weight, by cold or heat, by the shape, by relative hardness and roughness of an object we are holding, by the posture we happen to be in and so on (see e.g. Williams and Bargh 2008; Zhong and Leonardelli 2008; Jostmann, Lakens and Schubert 2009). Evolutionary processes have resulted in human brains that are adapted to seek out and to respond actively to external cues (called *affordances* by the perceptual psychologist James J. Gibson), or to internal physiological events, in terms of their relevance to our needs and their functional usefulness. Humans actively perceive the environment in terms of what it can do for them (or against them) in every moment. Indeed, more than any other animal, we imagine and construct objects and environments that furnish us with affordances.

We might see such an engagement as a kind of adaptive priming effect. Some psychologists have considered this priming effect to be an indication that humans suffer from implicit bias in their judgements. For example, we might feel that on a pleasantly sunny day we are more disposed to be generous towards someone who asks us for help. The next day, if the weather is downright miserable, we might not be in the giving vein. On the surface, this behaviour seems to be a mistake; after all, the person who asks for our help is the same whatever the weather, and the person may think the worse of us because our behaviour appears arbitrary. However, we shouldn't necessarily think that embodied cognition causes us to be deluded in our decisions. For one thing, it seems unlikely that millions of years of evolution would lead to such maladaptive behaviour. Perhaps there is a hidden logic to the workings of embodied cognition even if information from the environment leads us into counter-factual thinking. On a pleasant day, when it is relatively easy to stay warm and dry, you may feel that you have enough energy to spare to help someone out; on a cold, rainy day, you may feel that many activities are more demanding in terms of time and effort since you have the weather to deal with, and thus you feel the need to devote more energy to yourself.

Nearly everything that goes under the name of embodied cognition happens under the radar of conscious awareness. Our thoughts pop into our head, and it hardly seems relevant to wonder how they got there. This is also a trick of evolution, designed to keep us focussed on what matters to us. After all, if you are facing danger and you get an impulse to run for your life, it probably won't benefit you to stop and reflect upon what mental process led to that impulse; you're more likely to survive if you just run. Conscious or not, embodied cognition makes sense when it is set against a backdrop of evolutionary constraints and motives. Some research into the evolutionary drives that undergird it has unearthed intriguing results. An important paper by Klein, Cosmides, Tooby and Chance (2002), for instance, demonstrates how priming helps us understand other people's behaviour by introducing boundary conditions into our judgements. Since behaviour can change according to the situation (e.g. the weather), it follows that personality traits cannot be set in stone. So, in order to understand what someone is like, we draw upon general information from semantic memory ('this person is usually helpful and friendly') and specific instances from episodic memory ('this person wasn't helpful and friendly when it was raining yesterday'). In any human interaction, it's usually necessary to make quick inferences on the basis of what are unlabelled signals, because most behaviour doesn't arrive with a signpost declaring its meaning. It is because cognition is embodied that we are able to determine not just the unchanging facts about a person but those aspects of their behaviour that can serve as more or less reliable signals, and in this way embodied cognition feeds forward into decision-making.

There is a useful connection to be made here to Lisa Zunshine's concept of 'embodied transparency' (Zunshine 2012). Zunshine draws upon a range of examples from poetry,

films, television comedies, paintings and novels to build an intriguing argument: that cultural products trade on our eagerness to read people's minds on their bodies. At the same time, though, since people tend to agree that 'the body speaks,' we attempt to hide the potentially compromising or threatening signals of our own inner lives by adopting behavioural masks. For Zunshine, the power of fiction lies to a considerable extent in its capacity to provide representations that offer privileged moments of access to the thoughts and feelings of characters: 'We get to see fictional characters at the exact moment when their body language betrays their real feelings. This is in contrast to real life, in which there is always a possibility that we will misinterpret seemingly transparent body language, particularly in a complex social situation, or that people will perform transparent body language to influence our perception of their mental states' (Zunshine 2012, xix).

This strikes me as a particularly successful application of embodied cognitive science that helps to clarify what is often vaguely labelled as 'truthfulness' or 'authenticity' in acting.

Zunshine was among the first wave of path-breaking scholars mentioned earlier. Two recent examples give a flavour of the ways in which newer scholars are building upon their explorations. A 2016 collection of essays edited by Rhonda Blair and Amy Cook, *Theatre, Performance and Cognition: Languages, Bodies and Ecologies*, contains pieces by Neil Utterback and Christopher Jackman on actor training, by Edward Warburton on dance and by Laura Seymour on *Julius Caesar*. Seymour draws upon the work of George Lakoff and Mark Johnson in her discussion of the significance of gestures such as kneeling for relations of political power in the play. And an edition of the journal *Connection Science* devoted to 'Embodied Cognition, Acting and Performance' (2017) seeks, amongst other things, to broaden the discussion into the situation of conservatoire training (for example, in Ysabel Clare's essay on Stanislavsky's system as 'enactive cognitive embodiment'). On that subject, it may seem as though there's nothing especially new about the principle of embodiment in itself. For example, in the field of actor training, during the 1990s, many conservatoires in the UK latched onto the continental traditions of movement-based practices championed by pedagogues like Jacques Lecoq – although conservatoires tend to be selective in their delivery of Lecoq's curriculum. There was also a rethink of Stanislavsky's model of realism in acting in the wake of interventions by scholars like Sharon Carnicke (1998/2009). And along with that has come a promotion of the work of those disciples who took issue with their master Stanislavsky – most notably Vsevolod Meyerhold and Michael Chekhov – as well as practices adopted from other disciplines such as martial arts. Thus, much conservatoire training – at least, in the UK – has led to a renewed focus on the 'psychophysical' resources of the actor. However, it is one thing to declare that actors must find ways to embody their characters, and quite another to adhere to the more radical principle that all cognition is inherently embodied. It is not uncommon for actor trainers to insist upon embodiment while clinging stubbornly to the kinds of mystical ideas about a nonmaterial mind, self or spirit that were a feature of the world-views of canonical ancestors like Stanislavsky and Laban. Here too, Zunshine's argument applies, since such still-prevalent mind-body dualism speaks of the common human desire to be accorded privileged status as an expert in mind reading.

Of course, artists have always wanted to get out of the body, and the yearning to do so has resulted in some extraordinarily beautiful art. But, to repeat, embodied cognition theory stresses that every idea that comes to us is grounded in our bodily anatomy and experiences – including the very idea that we would yearn to get out of the body. We simply cannot think, we cannot imagine, we cannot yearn, outside the body. According to Lakoff and Nunez (2000), even the most rarefied abstract thinking, such as higher mathematical reasoning, has its origin in basic physical facts such as our bilateral symmetry and our sense of spatial orientation.

It's time to see how we might apply such an idea to the performance of a play by Shakespeare. Since earlier I was talking about how the weather affects people's thoughts, why not *King Lear*, a play well known for attempting to put a thunderstorm on stage:

KENT: Who's there, besides foul weather?

GENT: One minded like the weather, most unquietly

(3.1.1–2)

How do we rehearse these opening lines to the scene? Here are some, by no means exhaustive, possibilities for two actors playing Kent and the Gentleman, who I shall refer to as 'you':

1. Sit around a table with the script and talk through what it means. You might try speaking the lines a few different ways, using intonation patterns to communicate different meanings. Then stand up and say the lines whilst moving about in the rehearsal space away from the table. Perhaps another person reacts to what you do, gives instructions, offers direction, ideas and encouragement, and so on.

On the surface, this 'table talk, then on your feet' approach doesn't *seem* like the most embodied way of starting work on the script. However, embodied cognition theory reminds us that all experiences are processed through the body, and that includes sitting around a table talking about the play. So as soon as you sit down at a table, your thought processes will be affected; the issue is then whether or not the kind of embodied experience you're having will help you in performing the text (and perhaps it might). The relative hardness of the chair you sit in will impact what you imagine and feel about the text, as will the shape of the table, the distance between you and the other people around the table, where you sit at the table (e.g. at its corner, in the middle), along with any objects placed on the table...along with what you were already feeling when you sat down (for example, you were hungry). If this table and these chairs, and this physical relationship to the other people, are not actually relevant to the staging of the scene, you could make inappropriate choices in your intonations and gestures. There's a possibility that the scene will fall into a kind of passive state. The moment an actor sits in a soft chair, for instance, the effort to resist gravity is reduced and the result is often a loss of projected energy in the body and voice as the actor begins to sink into the furniture.

Arthur Glenberg and colleagues have developed a strategy to help children read, called 'Moved by Reading,' which draws upon a simulation theory of language comprehension. In Glenberg's words, 'we understand language much like we understand situations: in terms of the actions the situation, or described situation, affords' (Glenberg 2011: 7). The situation described in the text is simulated using our neural systems of action, perception and emotion. In my experience, actors who are inexperienced or not confident with Shakespearean text can be helped further at the stage of 'table talk' using an approach based on Glenberg's strategy. The actors are presented with toys to play with, representing the characters and the environment. In the first reading, the actors act out the situation by physically manipulating the toys on the table (as if they were puppeteers, or directors creating an action plan for the scene using a model box). In the second reading, the toys are removed and, while speaking the text, the actors imagine moving them in the same way. Of course, there is nothing new about asking an actor to create mental imagery; the difference is that by using toys at the reading stage, the actor – like the child learning to read – is, in Glenberg's words, 'likely to engender a significant motor component in addition to visual imagery' and this motor component 'increases the range of information encoded' (ibid: 12).

2. Learn the lines in advance of rehearsal. Stand in the rehearsal space and, without discussing what the lines mean, move about in the space saying the lines to your scene partner.

Here, you've put the script down so your hands are free for gesturing; you're working out what the scene is about on your feet rather than being potentially stuck in a physical posture like sitting. Perhaps you move with what you sense as changes of thought or intention. The voice coach Cecily Berry used to teach actors a preparation exercise for that: you walk and talk, and change direction every time you hit a punctuation mark in the script. It might begin to seem as if your feet are doing the thinking. The notion that different parts of your body can do the thinking, which I have borrowed from Michael Chekhov, has been explored by Tom Cornford (2012). The strategy tends to require, though, that you have either done your homework or you are experienced at handling Shakespeare's language.

3. On your feet, improvise verbally around the content of the scene before moving onto the text.

This exercise bears a resemblance to what Stanislavsky called 'active analysis.' With each pass, you move closer to using the actual words written in the script. Meanwhile, the physical actions of the scene are being worked on in ever greater detail.

One variation of this strategy is to render the text into your own words first. You might do this around a table (with or without toys as you see fit). Then speak your contemporary prose version with a commitment to an intonation pattern that suggests the purpose behind the speech. At the same time, you are invited to make gestures that illuminate the purpose still further:

KENT: (*holding up a hand as if to stop the GENTLEMAN*) Who's out *there* in this awful *weather*?

GENT: (*holding up his hands in submissive greeting*) I'm *feeling* like the weather – very *troubled*.

Having worked out a pattern of intonation and movement which makes sense of your response to your partner, return to the script and perform as far as possible with the same intonation and the same movements:

KENT: (*holding up a hand as if to stop the GENTLEMAN*) Who's *there*, besides foul *weather*?

GENT: (*holding up his hands in submissive greeting*) One *minded* like the weather, most *unquietly*.

Having performed this to your satisfaction, the next stage is to eliminate the gesture, but perform as though you are making the gesture in your imagination. The gesture takes on something of the quality of what Michael Chekhov called Psychological Gesture (Chekhov 2002), an internalised representation of something essential about the character; it also bears a resemblance to the second part of Glenberg's reading strategy. The results of this exercise can be very encouraging if you stick to the game of performing the script with the same purposeful intonation and gesture patterns as your personalised version of it, and if you commit to the stage of performing the gesture in the imagination while speaking. It's useful to have a director in the room to insist that you don't alter the intonation as you move towards internalising. The psycholinguist and gesture scholar David McNeill, in an interview I conducted with him by email, wrote about my adoption of this exercise:

Gesture and prosody are so alike, and the gesture would orchestrate it most directly. Then, at last, they move into a mode of secure performance where the gesture seems to have dropped out (though I suspect it is present internally).

(*Tunstall 2016: 158*)

Gestures embody the speaker's mental imagery, and furnish evidence for the proposition of Lakoff and Johnson (1999) that thinking happens through the body. It follows from this that, as McNeill contends, a composed written structure like *King Lear* contains within its language hidden gestures that are in principle recoverable; in this exercise, the actor is attempting to unearth them and make them visible. In a similar vein, Rick Kemp shows how gesture analysis can support 'the common practice in rehearsing Shakespeare of identifying the "active" word in a line, and consciously executing a gesture to accompany it. This gesture may or may not be carried through to performance, but serves to enrich the actor's physical experience of the text, thus integrating written language with speech and gesture' (Kemp 2012: 36–7).

4. You have a bamboo cane about four feet long. You hold one end of it, and your scene partner holds the other, with one finger or in the palm of your hand. You move together, keeping the stick between you, pushing and being pushed around the space through the stick, and you explore this relationship for a while. Then you play the same game whilst speaking the dialogue. After a while, remove the stick but continue playing with an idea of physical influence, of pushing and pulling with your partner, at the same distance. The possibilities of the game with respect to timing, synchronicity, mimicry, force, scale and so on can be developed as you play with the text.

Here, a game derived from Jacques Lecoq is used to bring you, the actor, into a conscious awareness of how your body moves in relation to the affective dynamics of the scene. The patterns of movement can be as large, expansive and stylised as you please. Other games from the traditions of 'movement-based' performance can be used in a similar manner, such as the viewpoints approach of Anne Bogart (Bogart and Landau 2005), or the choreographic language of Rudolf Laban (see Bradley 2009). As with rehearsal exercise 3, the movements can be reduced, disguised or even dropped altogether while you continue the game in your imagination. The style of performance may be wedded to a behavioural verisimilitude, but there would still be an intensified awareness of your body in its relation to your partner's body, coupled with mental imagery.

These are just four approaches to rehearsal drawn from various practitioners that suggest ways in which attention may be placed upon the body's primary role in the creation of meaning. Of interest to me, following the conception of embodied transparency coined by Lisa Zunshine, is how Shakespeare's dialogue offers Kent (and the audience) immediate access to the inner life of the Gentleman, a character we know nothing about. In doing so, he accomplishes many other things: he reinforces any offstage sound effects or onstage body language attempting to conjure up the weather for the audience; he puts us in Kent's shoes as the character who is doing the mindreading; he creates the potential for a trusting relationship between the two men; and, in suggesting how the weather influences people's thoughts and feelings, he reinforces the cosmic metaphorical significance of the storm.

But here I want to stress that the agenda is not to make Shakespeare's writing appear more embodied than it is; on the contrary, it's hard to imagine a verbal structure more intensely engaged with embodiment than his dramatic language. My crude paraphrasing of the lines of Kent and the Gentleman reveal this – I have failed, for instance, to find an acceptable

substitute for the almost offhand manner in which Shakespeare embodies the foul weather. It becomes a person with an unquiet mind, a personification that the scene amplifies as it continues:

KENT: I know you. Where's the king?

GENT: Contending with the fretful elements:

Bids the wind blow the earth into the sea
Or swell the curled waters 'bove the main,
That things might change or cease.

(3.1.3–7)

In the ensuing scene, the weather is amplified still further into an apocalyptic assembly:

LEAR: Blow winds and crack your cheeks! Rage, blow,

You cataracts and hurricanoes, spout

Till you have drenched our steeples, drown the cocks!

(3.2.1–3)

The weather gods behave like vengeful, destructive people, and as Zunshine would say, they get inside your head. Lear cannot think of the weather in a disembodied way, because no thinking is disembodied. As one works through any play by Shakespeare, one finds this over and again: the words are full to the brim of 'body-ness.'

I have discussed embodied cognition in terms of individuals responding subconsciously, and yet actively, to the environment. This response is not the product of a brain that is a blank slate. As the work of James Gibson and Ulric Neisser (2014) revealed, we do not look at the world with unprepared eyes. To return to an earlier theme, we perceive the world with sensory equipment that has been primed by evolution to discover what the environment may offer us by way of affordances. Further, we try to construct a world that will furnish us with those affordances we, largely unconsciously, seek. With that in mind, there is a fifth rehearsal strategy to be added, one which owes something to the utilitarian methods of Meyerhold (see Paavolainen 2012: 53–92) and which finds an interesting parallel in Rhonda Blair's description of working on Anton Chekhov's *Three Sisters* by inviting her actors to make sculptures out of human bodies (Blair 2008: 100–3):

5. Learn your lines before you enter the rehearsal room. Then, using objects, sound and light, construct an environment in the room which affords you opportunities to move, to manipulate the objects, and/or to relate to your scene partner in different ways. This world and the things in it may not necessarily bear any obvious relation to the world described by the playwright. They need only provide stimulating challenges to your senses. Now – play.

References

- Blair, Rhonda (2008) *The Actor, Image, and Action: Acting and Cognitive Neuroscience*. Abingdon and New York: Routledge.
- Blair, Rhonda and Amy Cook, eds. (2016) *Theatre, Performance and Cognition: Languages, Bodies and Ecologies*. London and New York: Bloomsbury.
- Bogart, Anne and Tina Landau (2005) *The Viewpoints Book: A Practical Guide to Viewpoints and Composition*. New York: Theatre Communications Group.

- Bradley, Karen K. (2009) *Rudolf Laban*. Abingdon and New York: Routledge.
- Carnicke, Sharon Marie (1998/2009) *Stanislavsky in Focus*. Abingdon and New York: Routledge.
- Chekhov, Michael (2002) *To the Actor*. Abingdon and New York: Routledge.
- Clare, Ysabel (2017) 'Stanislavsky's system as an enactive guide to embodied cognition?', *Connection Science* 29 (1): 43–63.
- Clark, Andy (2008) *Supersizing the Mind: Embodiment, Action and Cognitive Extension*. Oxford: Oxford University Press.
- Cook, Amy (2010) *Shakespearean Neuroplay: Reinvigorating the Study of Dramatic Texts and Performance through Cognitive Science*. Basingstoke and New York: Palgrave Macmillan.
- Cornford, Tom (2012) 'The importance of how: Directing Shakespeare with Michael Chekhov's technique', *Shakespeare Bulletin* 30 (4): 485–504.
- Crane, Mary Thomas (2001) *Shakespeare's Brain: Reading with Cognitive Theory*. Princeton, NJ and Oxford: Princeton University Press.
- Glenberg, Arthur M. (2011) 'How reading comprehension is embodied and why that matters', *International Electronic Journal of Elementary Education* 4 (1): 5–18.
- Goldman, Alvin I. (2013) *Joint Ventures: Mindreading, Mirroring, and Embodied Cognition*. Oxford: Oxford University Press.
- Johnson, Laurie, John Sutton and Evelyn Tribble, eds. (2014) *Embodied Cognition and Shakespeare's Theatre: The Early Modern Body-Mind*. Abingdon and New York: Routledge.
- Jostmann, Nils B., Daniël Lakens and Thomas W. Schubert (2009) 'Weight as an embodiment of importance', *Psychological Science* 20 (9): 1169–74.
- Kemp, Rick (2012) *Embodied Acting: What Neuroscience Tells Us about Performance*. Abingdon and New York: Routledge.
- Kemp, Rick (2017) 'The embodied performance pedagogy of Jacques Lecoq', *Connection Science* 29 (1): 94–105.
- Klein, Stanley B., Leda Cosmides, John Tooby and Sarah Chance (2002) 'Decisions and the evolution of memory: Multiple systems, multiple functions', *Psychological Review* 109 (2): 306–29.
- Lakoff, George (2012) 'Explaining embodied cognition results', *Topics in Cognitive Science* 4: 773–85.
- Lakoff, George and Mark Johnson (1999) *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.
- Lakoff, George and Rafael E. Núñez (2000) *Where Mathematics Comes from: How the Embodied Mind brings Mathematics into Being*. New York: Basic Books.
- Lutterbie, John (2011) *Toward a General Theory of Acting*. Basingstoke and New York: Palgrave Macmillan.
- McConachie, Bruce (2008) *Engaging Audiences: A Cognitive Approach to Spectating in the Theatre*. Basingstoke and New York: Palgrave Macmillan.
- McConachie, Bruce (2013) *Theatre & Mind*. Basingstoke and New York: Palgrave Macmillan.
- McConachie, Bruce (2015) *Evolution, Cognition and Performance*. Cambridge: Cambridge University Press.
- McConachie, Bruce and F. Elizabeth Hart, eds. (2006) *Performance and Cognition: Theatre Studies and the Cognitive Turn*. Abingdon and New York: Routledge.
- Neisser, Ulric (2014) *Cognitive Psychology*. Classic Edition. London and New York: Psychology Press.
- Paavolainen, Teemu (2012) *Theatre/Ecology/Cognition: Theorizing Performer-Object Interaction in Grotowski, Kantor and Meyerhold*. Basingstoke and New York: Palgrave Macmillan.
- Tribble, Evelyn (2011) *Cognition in the Globe: Attention and Memory in Shakespeare's Theatre*. Basingstoke and New York: Palgrave Macmillan.
- Tunstall, Darren (2016) *Shakespeare and Gesture in Practice*. London and New York: Palgrave Macmillan.
- Williams, Lawrence E. and John A. Bargh (2008) 'Experiencing physical warmth promotes interpersonal warmth', *Science* 322 (5901): 606–7.
- Zhong, Chen-Bo and Geoffrey J. Leonardelli (2008) 'Cold and lonely: Does social exclusion literally feel cold?', *Psychological Science* 19 (9): 838–42.
- Zunshine, Lisa (2012) *Getting Inside Your Head: What Cognitive Science Can Tell Us about Popular Culture*. Baltimore, MD: Johns Hopkins University Press.