ON FEELING THE DANCE:
MOTOR RESPONSE AND ITS PLACE IN DANCE APPRECIATION

by

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Abstract

When we watch others dance, it has been claimed that we do not just use vision and hearing to appreciate dance, but that we also use motor responses. This has been a staple of thinking about dance and its appreciation since the early 20th century, but it has not drawn much attention in philosophy until recently. Recent advances in the sciences of the mind point to the existence of mirror system in the human brain, such that it seems when we watch movement, we are mirroring performing that movement in our brains. Barbara Montero proposed that this mirroring system could underlie motor response and allow us to appreciate dance. A resulting debate occurred between those skeptical of motor response in dance appreciation and those who were optimistic. I argue for a somewhat extreme version of optimism: that motor response is necessary for a full appreciation of most dances. I begin by examining and arguing against skeptical challenges to the place of motor response in dance appreciation. I then turn to the dance studies literature as my guide for how to go about understanding dance and motor response more fully. What is needed, I ask, for an account of motor response that does justice to the ways in which the danceworld understands it? Using insights gained from this delve into dance studies, I then turn to the existing accounts of motor response and find them wanting. I propose that existing automatic accounts of motor response need to be supplemented with an understanding of motor response as an activity. After defeating motor response skepticism and amending existing accounts of motor response, I set my eyes on answering how motor response is involved in dance appreciation. I argue that it is necessary for the appreciation of gracefulness, an aesthetic property that has been strongly associated with dance for most of its history. I further go on to argue that motor response could also be used to explain how dance can express emotion.
Lay Summary

Some people believe that dance is supposed to move the audience. Dance is not just supposed to tell a story through movement, nor is it just an assemblage of pleasant looking movements. Watching dance is supposed to make the audience feel moved, even though they sit still in their chairs. They are not going to get up from their chairs and start dancing, but they are supposed to move along with the dancers in their bodies. This has sparked a debate in philosophy, supplemented by work in the cognitive sciences, about whether motor response has a place in dance appreciation. I argue that it does, but I go one step further and argue that it is also necessary for a full appreciation of dance.
Preface

This dissertation is original, unpublished, independent work by the author, Ian Heckman. It has benefited greatly from the conversations and support of my peers and professors at UBC, but all claims and arguments are my own.
# Table of Contents

Abstract ........................................................................................................................................ iii

Lay Summary ............................................................................................................................... iv

Preface .......................................................................................................................................... v

Table of Contents ......................................................................................................................... vi

Acknowledgements ...................................................................................................................... ix

Dedication ..................................................................................................................................... xi

**Chapter 1: Introduction** ........................................................................................................ 1

1.1 “That’s Not Dancing. That’s Just Exercising.” ................................................................. 1

1.2 The Promise of Motor Response ....................................................................................... 3

1.3 The Controversy of Motor Response ............................................................................... 4

1.4 Layers of Skepticism ....................................................................................................... 6

1.4.1 Possibility Skepticism ............................................................................................... 6

1.4.2 Empirical Skepticism ............................................................................................... 8

1.4.3 Explanatory Skepticism ............................................................................................ 9

1.5 Keeping Our Eyes on Motor Response .......................................................................... 10

1.5.1 Motor Response Without Distractions .................................................................. 10

1.5.2 Empirical Methods? ............................................................................................... 12

1.6 Clashes and Coordination ............................................................................................. 19

**Chapter 2: Skepticism and Motor Response** ..................................................................... 22

2.1 The Privateness of the Body ......................................................................................... 23

2.2 Is Motor Response Too Subjective? .......................................................................... 27
2.3 The Causal Objection ........................................................................................................ 31
2.4 The Dance As Normative Practice Objection ................................................................. 35
2.5 Moving Forward ............................................................................................................... 37

Chapter 3: The Origins of the Idea of Motor Response ....................................................... 40
3.1 Motor Response in the Danceworld .............................................................................. 41
3.2 Theodor Lipps ................................................................................................................. 44
3.3 Early John Martin ............................................................................................................ 47
3.4 Late John Martin .............................................................................................................. 54
3.5 After Martin ..................................................................................................................... 60
3.6 Moving Forward .............................................................................................................. 63

Chapter 4: Contemporary Accounts of Motor Response .................................................... 67
4.1 Veridicality Account ....................................................................................................... 67
  4.1.1 Mirror Neurons ......................................................................................................... 69
  4.1.2 Dance Training .......................................................................................................... 73
  4.1.3 Cross-Modal Movement Perception ........................................................................ 76
  4.1.4 Common Problems ..................................................................................................... 79
4.2 A Paradox ....................................................................................................................... 82
  4.2.1 Resolving the Paradox .............................................................................................. 83
  4.2.2 Objecting and Revising ............................................................................................ 87
  4.2.3 Rethinking Veridicality ............................................................................................ 89
4.3 Pushing Forward ............................................................................................................. 92

Chapter 5: Moving for Grace ............................................................................................. 94
5.1 The Case for Kinesthetic Grace ....................................................................................... 96
5.2 Normativity ........................................................................................................ 102
5.2.1 Hedonic Normativity ....................................................................................... 102
5.2.2 Conceptual Normativity .................................................................................. 104
5.2.3 Dance Institutional Normativity ..................................................................... 108
5.3 Threefold Normativity ........................................................................................ 109
5.4 A Postmodern Problem ...................................................................................... 112
5.5 Contemporary Grace .......................................................................................... 114
5.6 The Significance of Grace ................................................................................... 117

Chapter 6: Moving for Emotion ............................................................................ 121
6.1 Is There a Problem of Dance Expression? .......................................................... 123
6.2 The Semblance Formulation and Resemblance ................................................... 129
6.3 Association Theories .......................................................................................... 133
6.4 Persona Theories ................................................................................................ 135
6.5 A Motor-Arousalist Proposal ............................................................................. 138
6.6 A Problem for Arousalism .................................................................................. 141
6.7 Wrapping up ....................................................................................................... 144

Bibliography ............................................................................................................. 146
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I began thinking about this dissertation and its topic began long before I decided to do a PhD. I began my secondary education in dance, among those who wished to become dancers and creators of dance. My dance professors furthered both my love of dance and how I thought about it. Bill Evans, Jim Hansen, Mariah Maloney, Suzanne Oliver, Karl Rogers, Juanita Suarez and Maura Keefe have all in various ways contributed to thoughts about dance that show up throughout this dissertation, and they have my deep gratitude for opening my eyes and my body. My philosophy professors also need to be mentioned. The department was small, but it fostered an abiding passion for philosophy, leading me down the pathway to discovering aesthetics and the philosophy of dance. These professors were Georges Dicker, Joseph Long, Gordon Barnes, and Kathleen Harbin. Also of special mention were the two professors I took graduate seminars with at the University of Buffalo. The paper I wrote for Carolyn Korsmeyer’s course was the earliest version of chapter three, which has gone through draft after draft since. But it was that paper which formed the seed for the entire dissertation. Jorge J. E. Gracia’s course inspired some of the methods I use in this dissertation, especially when I am dealing with skepticism about motor response.

More recently, I must thank my colleagues and faculty members at UBC. The classes I have taken, along with the many informal discussions we had, led to the development of many
aspects of this project. Of particular interest are Eric Margolis, Murat Aydede, Roberta Ballarin, and Paul Russell whose classes pushed my thoughts in new and interesting directions. Of course, gratitude must be extended to my two committee members, Christopher Mole and Evan Thompson for their help in furthering my project, and my advisor Dominic McIver Lopes, who has patiently waded through multiple drafts of this dissertation and its chapters and provided invaluable feedback.

On a more personal note, there have been many people here for me in more ways than I can describe. My dad raised me and my brothers with many sacrifices on his part, while still fostering my passions and interests that have led me to where I am today. Jerry Fisher and Joyce DeHaan provided encouragement and a sense of home and place for me as I developed intellectually. Tom Naylon provided inspiration, a person of unwavering passion and exploration into the arts and the senses. Hu Shun-Fu was a constant friend and intellectual companion. Sofia was a person who I walked through life with and who continues to provide me with much needed strength and support.

Some of the people who I have mentioned in these acknowledgements are no longer with us, and I wish to end with a moment of gratitude toward them. I hold fast to my memories of them as they drive me forward in life.
for Joyce M. DeHaan

whose grace inspires
Chapter 1: Introduction

1.1 “That’s Not Dancing. That’s Just Exercising.”

Growing up, I used to improvise around my grandparents’ house. I would often take the smallest amount of inspiration, perhaps a piece of music playing in another room, or just a random impulse, to move in a particular way. I would take these movements and develop them, weaving them together with future inspirations, and creating what I considered a dance.

When my grandmother asked me what I was doing, I replied, “Oh, I’m dancing.” Her response always was, “That’s not dancing. That’s just exercising.” Her response stayed with me. From my perspective, it was so obvious that I was dancing and not merely exercising. Exercising was that thing you did when you went to the gym, performing the same repetitive movements over and over in the hopes that you will be healthier in the end. That was not at all what I was doing around her house. The thought of becoming physically healthier never once crossed my mind.

There is some truth in what she was saying, however. Exercise is a large portion of what dancers do. Anyone who has spent hours at a ballet barre refining the different ways in which to bend their knees will know. And in a lot of ways, exercises are visibly imperceptible from dance. A triple pirouette performed in a class with the intention of improving one’s pirouette skills does not look all that different from a triple pirouette performed on a stage for an audience. So, we could reasonably ponder the questions: Why are these people performing exercises on a stage in front of us? And more importantly, why are we watching?

Replying that these movements can tell a story or that they express emotion does not help. It only prompts further questions. Why tell a story through movement when just normal theater or film will do? Why express emotions through dance when a poem can express the same
thing in a single page? These questions all end up being variations of the same question: Why dance? Dance is a peculiar art form for this reason. The value of it is not as evident as the value of many of the other artforms.

But this only applies to dance’s current art context, that is, when it is performed on a stage for the sake of an audience. There is nothing particularly peculiar about the value of people getting together on a dance floor to music and moving to the rhythms and melodies of the music. If anything, dancing in this way might seem like one of the most natural forms of human activity. When dance is participatory, its value seems to be much clearer. It gets us physically active. It allows us to let loose and move in ways that would seem ridiculous in our everyday life. It can be used to engage and strengthen social ties, and perhaps used in courtship between two current or potential lovers.

The familiarity of the value of participatory dance when contrasted with puzzlement surrounding the value of concert dance only calls for more questions, however. The asymmetry is itself puzzling: Why is participatory dance more obviously valuable to us than concert dance? One answer is that part of dance’s value is inherently participatory. When we are not active participants, we lose something integral to dance’s value. The fact that many avid appreciators of concert dance are themselves participators in the practice of concert dance, dancers, choreographers, and the like, only serves, I think, to reinforce this claim.

This claim is my starting point for this dissertation. There is a gap in the self-evidence of the value between participatory and concert dance. I am a dancer and a choreographer myself, and I even feel this gap. Part of what turned me to philosophy is this gap. Why was dancing so much fun, but watching it was not as obviously so? Why wasn’t the value of watching dance evident to me, even though I was pretty sure I understood the dance? Concert dance puzzles me,
and it puzzles a lot of people. I wanted to bridge this gap, to help myself and others understand the value of concert dance. And I think that philosophy is well poised to answer such questions.

1.2 The Promise of Motor Response

Motor response is a promise. It is a promise that such questions might be answered; maybe the mysteries of concert dance value are not as mysterious as they first appear. The progenitor of the concept of motor response was John Martin, a powerful dance critic who was responsible for the success of much of modern and contemporary dance in the United States.¹ Motor response was supposed to be the link that allows dance audiences to not just be spectators of movement they do not understand, but active participants in the process of the dance.

The influence of this concept on the danceworld is clear.² Most dancers and choreographers have probably heard something about how dance is supposed to move the audience. Dance is not just supposed to tell a story through movement, nor is it just an assemblage of pleasant looking movements. It is also supposed to move its audience. Watching dance is supposed to make the audience feel moved, even though they sit still in their chairs. They are not going to get up from their chairs and start dancing, but they are supposed to move along with the dancers in their bodies.

Motor response promises that it can help engage audiences as active participants in dance even though they remain unmoving participants to the visible eye. Perhaps moving internally can help audiences appreciate dance better in the same way that dancers appreciate dance while they


² It seems that Martin’s idea of motor response was quite influential within dance higher education, showing up in the writings of Margaret D’Houbler, an influential dance educator who founded the first dance department in the United States. I discuss this history in chapter two.
are dancing. It turns watching dance from a spectator activity into a participatory activity, thus allowing watching dance to have a more self-evident value than it has in the past.

Motor response also promises to give dance its own place in the world of the arts. At first glance, you might think dance can be reduced to other artforms. Dance is merely visual art with a bit of music and literature dashed in for good measure. Dance comprises moving visual forms, set to music, and sometimes tells a story, and has no independence from these other art forms. At best, all of dance’s attractions consist in the relation between these other art forms, e.g., visual forms interacting with music. At worst, it is just an excuse to enjoy all three at the same time, but never appreciate any one of them deeply. This is part of the original question: Why dance? If dance is just a conglomeration of other art forms, then why not just go to art galleries and music performances? Dance might need its own unique value to justify itself, otherwise other artforms are its rulers.

Hope comes in when motor response comes into play. Dance would have its own unique medium to work with, the kinesthetic. Dance, while still having these other components, could be an artform that works primarily on manipulating our kinesthetic responses to dance. It could be the artform that does this the best out of the other options. While music and visual art might have some kinesthetic properties, like a rousing beat of a piece of music making us want to tap our foot, it is not the main phenomenological qualities they are concerned with.

1.3 The Controversy of Motor Response

Despite its promises, motor response has evoked recent controversy in the philosophy of dance. Recent discussions have sparked two rough sides on whether motor response is part of dance appreciation. On the one side is skepticism, best represented by the writings of Graham McFee. He has dedicated significant space in his work on dance arguing for skepticism toward motor
response. He writes, “Even were there a kinaesthetic sense, it could contribute nothing to the artistic appreciation of dance.” Another writer proposing some versions of skepticism is David Best, whose work and arguments McFee frequently draws on. David Davies sympathizes somewhat with McFee but is not a skeptic about motor response. His sympathy lies with McFee’s pessimism about whether the scientific data by itself settles the question of whether motor response is part of dance appreciation, and that more needs to be said about the connection between motor response and dance appreciation beyond the scientific data.

On the other side of the debate are motor response optimists such as Barbara Montero, Noël Carroll, William Seeley, and Renee Conroy. Montero, Carroll, and Seeley all provide evidence from the sciences of the mind which support motor response and its involvement in our appreciation of dance. Montero also provides evidence from dance criticism which show various dance critics using the language of motor response. Conroy approaches optimism a bit differently, providing an interpretation of a dancework where its meaning would be missed if we motor response was not used in dance appreciation.

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1.4 Layers of Skepticism

McFee’s arguments against motor response in the face of the optimists’ evidence can seem a bit bewildering. Given that there is scientific evidence for motor response, and dance critics seem to have motor response incorporated into their language, what reason is there to be skeptical of motor response? McFee’s skepticism can seem flat, dragging us away from understanding the value of dance, rather than illuminating anything about dance. There is all this positive evidence for motor response and dance, so why not just surge ahead and put it into our theories of dance appreciation?

My answer to this is that I think that beginning with skepticism is a useful methodological starting point. It forces us to think deeply and examine our assumptions of what things are, how we talk about them, and how they work. But more importantly, it reveals to us questions that need to be answered, and by answering them, we can produce an enhanced understanding of them, and motor response skepticism has several layers of challenges to be answered.

1.4.1 Possibility Skepticism

Possibility skepticism is where most of McFee’s arguments are positioned. Even if all these scientists and dance critics are right, that there is motor response and it plays a role in how we perceive dance, he claims that motor response is still not part of dance appreciation. There are, he thinks, principled reasons for why motor response cannot be part of dance appreciation. This is the most extreme form of skepticism, and the hardest to defend. It flies in the face of all the best scientific and dance critical evidence we have, but McFee has put forth arguments defending it.
At least some of the skepticism about motor response is motivated by a long-standing hierarchy concerning the senses in aesthetics and philosophy in general. This hierarchy supposes that there are certain senses that are better than other senses. This has often been for epistemic reasons—vision is a more reliable truth teller than taste—not for aesthetic reasons. But the hierarchy has been extended to the aesthetic as well. Vision and hearing have often been claimed to be the only aesthetic sense modalities, with touch, taste, and smell considered too bodily to qualify.

There’s a reasonable question as to where motor response fits into this hierarchy. While it may not be a sense itself, if we conceptualize the hierarchy as putting conditions upon which any experience is apt for the aesthetic domain, then where motor response fits within the hierarchy is an appropriate question. However, it seems clear that it would not be rated very high. And in fact, it might even be rated lower than touch, taste, and smell. If motor response is just a physiological reaction to watching movement, then perhaps it is more along the lines of itches and twitches than anything even resembling a sense. It is inherently bodily, and, perhaps, problematically so.

Chapter two deals with arguments that seek to argue that motor response is on par aesthetically to twitches and itches. Motor response thus understood would not and could not have aesthetic significance for dance. A good portion of this seems to be because the requirements for some experience to be aesthetically significant is high. I shall look at these requirements and see whether motor response satisfies them, and whether motor responses really are just like itches and twitches.
1.4.2 Empirical Skepticism

Empirical skepticism is perhaps more reasonable. It says that given the state of our current evidence, motor response optimists are not actually warranted in proposing that motor response is involved in dance appreciation. This covers a broad range of possible skeptical stances. Perhaps skepticism is about whether our current state of evidence warrants positing the existence of motor response (Existence Skepticism). Perhaps what scientists have discovered about our perception of movement is inconsistent with what dance theory understands about motor response, and one can worry that scientists are not tracking the same phenomenon that dance theorists have talked about (Changing the Subject Skepticism).

Davies, as well as Carroll and Seeley, have seen the strength of empirical skepticism. While Davies remained what he called a moderate pessimist regarding the existing empirical evidence supporting motor response’s place in dance appreciation, Carroll and Seeley used the shortcomings of existing empirical evidence to search for other empirical evidence to ground motor response.

Chapters three and four are engaged in Carroll and Seeley’s process as well. I am worried specifically about Changing the Subject Skepticism, though Existence Skepticism also takes its hold. Chapter two takes a deep delve into the origins of motor response in dance theory and how it developed over time. It looks at what dance theorists and critics thought motor response was supposed to do in dance appreciation, and theoretical struggles that needed to be surmounted. I draw several conclusions as to what is needed for an adequate account of motor response, and then in chapter three, I find existing accounts unable to accommodate these needs. I then look to alternative empirical evidence to try and build an alternative account of motor response.
1.4.3  Explanatory Skepticism

Explanatory skepticism is a version of skepticism that philosophers have not explored in relation to motor response, but it is arguably the most important form of skepticism. Let us assume for a moment that motor response is in fact part of dance appreciation. So what? Why should we care? How does it change how we engage with dance? How does it inform us about dance? What role does it play in our appreciation? Is it just a curious fact of our perception of movement, or is it informative of dance and our appreciative practices of dance?

I suspect that possibility skepticism is motivated by explanatory skepticism, even if it is never explicitly addressed. One part of possibility skepticism is that the following sentence cannot be completed, “One should appreciate dance via motor response, because___.” Reducing motor response to itches and twitches is supposed to show that such a sentence cannot be completed. Explanatory skepticism, on the other hand, grants that such a completion is possible, but demands the optimist to deliver the goods. “Show us,” the skeptic says, “that it is in fact completed.”

At the bottom of possibility skepticism, I believe, is the explanatory skeptic wanting answers, but not being provided them. Chapter four provides them. I argue that not only is motor response involved in the appreciation of dance, but that it is necessary to appreciate central aesthetic qualities of dance, such as gracefulness. Not only is motor response part of dance appreciation, but it is also necessary to appreciate dance fully, with the caveat that not all dances will require motor response for their full appreciation. Chapter five also proposes that motor response might be involved in explanations of how dance can express emotions.
1.5 Keeping Our Eyes on Motor Response

The current debate about motor response can be bewildering, and there are many layers to it. Even in the way that I’ve explained empirical skepticism, for example, there are several different kinds of layers within empirical skepticism alone. Skepticism can take hold in many places. But I think it is important not to get too bogged down in some of these debates if we want to make progress.

There are two methodological discussions I want to make before we proceed. First, we need to begin with a thin account of motor response to avoid initial skepticism regarding accounts of motor response rather than motor response in general. Then, we need to deal with methodological questions about philosophy and its relationship with empirical evidence. Whatever our methods are while proceeding, we need to prioritize methods that result in enlarged understandings of the phenomenon we’re interested in. Getting mired in debates about what constitutes proper philosophy does not further that goal. We need to keep our eyes on motor response.

1.5.1 Motor Response Without Distractions

Some debates about motor response are not so much about motor response as a general phenomenon but about the specifics of motor response. A good portion of the existing debate about motor response focuses on whether motor response or proprioception is a sense. Proprioception is roughly understood as the sense of our own body and its position in space. Montero ties her account of motor response strongly to proprioception, to the point of arguing
that motor response is an extension of proprioception’s ordinary functions.\textsuperscript{7} McFee then argues that proprioception as a whole is not a sense and we can know and understand where our bodies are in space from a combination of director’s knowledge (I know my arm is at my side because I put it there) and visual reference (I know my arm is at my side because I can see it in the mirror).\textsuperscript{8} This debate, however, is only important insofar as we tie the nature of motor response to the sense status of proprioception. Sidestepping these debates is important because we do not just want to evaluate specific accounts of motor response. We want to know whether motor response, regardless of what theory of motor response one provides, can be constitutive of dance appreciation.

The best way to get around these kinds of debates is, I think, to begin with a minimal account of motor response. That is, we are looking for a conception of motor response which is the least controversial and seems to capture the core of motor response. Here is my proposal:

\textbf{Motor Response} $\text{df}\rightarrow$ a human capacity whereby watching human movement causes one to have the usual visual phenomenology accompanied by motor phenomenology.

At this point, the definition is merely a useful tool to get a clearer grasp of what we are talking about and to strip away distracting debates. I have focused this definition on uncontroversial minimal conditions of motor response. I do not pretend that this is a fully worked out theoretical account of motor response, as later chapters will be devoted toward that aim.

What this does for us methodologically, is that it allows us to ask whether motor response, regardless of how we theorize about its specifics, can be part of dance appreciation.

\textsuperscript{8} Another debate that gets rehearsed here is whether dancers, in virtue of having been trained as dancers, have special insight into the appreciation of dance. This is again a debate that seems inessential to whether motor response can be a part of dance appreciation.
Notice that nowhere is it claimed that motor response is a sense or part of a sense. It is merely a response we have while watching dance. And the key part of the response is its motor phenomenology. This is, I think, where the key part of motor response skepticism takes hold. Can motor phenomenology be part of our dance appreciation as spectators?

We can then fill in the account later, once the most extreme and general skepticism is dealt with. But it gives us a blank canvas to work with that we can then use various resources, from dance theory and criticism to cognitive science, to build a more robust and informative account of motor response.

### 1.5.2 Empirical Methods?

I have said that we can use dance theory, criticism, and cognitive science to build a useful account of motor response that informs our understanding of dance appreciation. This is controversial. Some people like McFee seem to think that empirical evidence has no genuine place in philosophy, let alone in the philosophy of dance.

This is not skepticism about motor response. It is skepticism about empirical methods in philosophy and, like skepticism about specific accounts of motor response, it takes our eyes away from motor response. However, instead of narrowing our focus, it broadens our horizons past motor response. If empirical methods have no place in philosophy, not only are our specific accounts of motor response in question, but the most general account I gave above is in question. And it goes even further, no evidence concerning psychological processes can factor into our accounts of dance appreciation.

This debate does have a place, however. In a world where our empirical understanding of the world grows increasingly more expansive and refined, the question of how those fields relate to philosophy is more squarely in focus, especially as some philosophers use empirical methods.
But it is important to remember that if our goal is illumination on the nature of dance appreciation, we should be cautious of ruling out empirical methods from the beginning, and there is also good reason to think that empirical methods could help guide our accounts of dance appreciation.

Noël Carroll and William Seeley provide a simple argument which gives strong reason to think that empirical methods will help provide information about dance appreciation.⁹ They argue that because our engagement with artworks is ultimately perceptual, then descriptive facts about our perception are relevant to an account of the appreciation of artworks. Let me restate the argument more formally:

(1) Dance appreciation is a cognitive process.
(2) If dance appreciation is a cognitive process, then how consumers represent, transform, and manipulate information while watching dance is relevant to an account of dance appreciation.
(3) Therefore, how consumers represent, transform, and manipulate information while watching dance is relevant to an account of dance appreciation.

This argument gets at what I think is a key intuition many of us have about the relationship between the sciences of the mind and the appreciation of art. Since appreciating art is a process that humans do with their minds, then a better account of the mind is going to help us better understand how we appreciate art.

The problem is that (2) is a contentious claim. You might, for example, think that dance appreciation is something that critics accomplish but regular consumers of dance do not. Ludwig Wittgenstein argued, for example, that “there does not seem any connection between what

psychologists do and any judgment about a work of art.”  

Similarly, George Dickie argued that when psychologists study something like people’s pleasurable responses to larger paintings, they make a mistake to think this has to do with the artistic value of the paintings. Just because some people value larger paintings more, does not tell us anything about the actual value of those paintings. People’s evaluations may be mistaken. 

A way of putting this objection is that (2) is too strong. Not all facts about movement perception are relevant for developing an understanding of dance appreciation. Say we found out that watching a pirouette reliably causes a grumble sensation in our stomach every time we watch one. This would be considered a fact about the perception of dance; it seems unlikely, however, that this grumble sensation is a part of dance appreciation. Call this the underdetermination problem. The empirical evidence does not determine which empirical facts are relevant to dance appreciation and which are not.

Perhaps (2) is better when it’s weakened to (2*):

(2*) If dance appreciation is a cognitive process, then how consumers represent, transform, and manipulate information while watching dance as art is relevant to understanding dance appreciation.

And the conclusion is turned into (3*):

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12 On a more moderate note, Blake Gopnik, while agreeing with Wittgenstein and Dickie that science cannot really tell us much about artistic meanings and what is valuable about artworks, admits that artworks themselves rely on facts science can discover. There is some role for science here, but it does not play much of one. The primary role is given to philosophy and art criticism. See Blake Gopnik, “Aesthetic Science and Artistic Knowledge,” in *Aesthetic Science*, eds. Arthur Shimamura and Stephen Palmer (Oxford: Oxford University Press, 2012): 129-162.
(3*) Therefore, how consumers represent, transform, and manipulate information while watching dance as art is relevant to understanding dance appreciation.

The qualifier “as art” is an important one as it rules out intuitive counterexamples such as the grumbling sensation I described. It gets rid of the underdetermination problem by already specifying the kinds of relevant cognitive processes from the start. It is only the cognitive processes that consumers undergo while appreciating dance as art, or correctly, which are relevant to dance appreciation. The grumbling-while-watching-pirouette response will not be part of the artistic appreciation of dance, just an interesting cognitive response that occurs.

These two versions of the conclusion, (3) and (3*), are essential for understanding a confusion within these methodological debates. There is one version of the debate where (3*) is at issue. (3*) says given the fact that we are properly appreciating dance as art, the cognitive processes involved in that appreciation are relevant to dance appreciation. Sometimes it seems that what is at issue is (3*). This is a debate that centers around what is relevant for philosophy. Say we have an ideal perceiver of dance who accurately and completely understands the artistic properties of a dance. Proponents of (3*) will say that all cognitive processes of the ideal perceiver which are necessary for appreciating the dance will be relevant for dance appreciation. Those skeptical of (3*) could admit that some of the cognitive processes are relevant but only a certain subset. Only some of the cognitive processes are important for a philosophical account of dance appreciation.

This is the position that McFee seems to take regarding (3*). He does not go as far as to say that no cognitive processes of aesthetic experts are relevant for dance appreciation, as he thinks that some are. For example, McFee’s theory of dance appreciation makes use of claims
about categorization and how it affects our perception.¹³ The more knowledge of dance and its history one has, the more finely tuned our perception and the better off we are to interpret what dances mean. But he thinks that this finely tuned conceptual process is all that is needed to explain the cognitive process underlying the success of dance appreciation.

Philosophy is interested in something else, perhaps just the conditions under which one does understand or appreciate dance. Thus, they might argue, motor response, given that they are not part of the conditions necessary for appreciating dance, is just not relevant to a philosophical account of dance appreciation. It might be important for a cognitive science account, but not to philosophy.

This version of the debate is metaphilosophy. It is a debate about what constitutes philosophy, or what should constitute philosophy. Should philosophy embrace an approach which adopts a broad psychological understanding of what happens when we perceive art, as Carroll and Seeley argue? Or should it be limited to just understanding the conditions which are necessary for appreciating dance?

I do not have much to say about this debate. Carroll and Seeley put it in terms of a divide between a conservative Wittgensteinian conception of philosophy and an Aristotelian one.

This Wittgensteinian objection rests on a conservative and unduly narrow conception of philosophy of art. We argue, following Aristotle, that philosophy is a matter of constructing the most encompassing understanding of a target subject.¹⁴

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¹³ These descriptive claims are present in most of McFee’s writings about dance, and in fact, are sometimes treated as arguments against the use of other descriptive elements such as motor response.

¹⁴ Noël Carroll and William Seeley, “Kinesthetic Understanding and Appreciation in Dance,” Journal of Aesthetics and Art Criticism 71, no. 2, (2013): 183. They assert that the Wittgensteinian approach is more conservative, but this is a bit odd considering that they contrast it with a much older philosopher’s approach. I take it that they mean that the Wittgensteinian approach had become the dominant approach for a long time in the philosophy of art, eclipsing the Aristotelian approach. They are thus aligned with people who are engaged with reviving this approach.
This version of the debate takes our sights far away from motor response, and into long standing historical divides about the nature and aims of philosophy. My reply to the metaphilosophy debate will be basically a *modus tollens*. Given what I say, especially in chapters four and five, motor response does in fact enlighten us about the nature of dance appreciation. And my reasons for holding this include reasons provided by both our sciences of the mind and our dance critical literature. Thus, if someone wants to still hold onto the claim that empirical responses like motor response are irrelevant for philosophy, they need to defeat those arguments first.

There is an interesting question whether McFee, or any other philosopher, *should* be interested in a broad array of empirical understandings of dance appreciation.\(^\text{15}\) Perhaps what goes on in the brain has something enlightening and novel to tell us about proper appreciation of dance. It is a more complete or full account of dance appreciation in the sense of including a wider range of facts under the umbrella of dance appreciation. Including a wider evidence base as part of our philosophical purview is more likely to attune us to facts which are important for dance appreciation. It would thus be important to cast our net wide when we think of philosophy, including as many facts as we can, so that we can make our account of dance appreciation as complete and as accurate as possible.

This is, however, a claim about what would be most epistemically prudent. If we see a wide range of empirical facts as relevant for philosophy, then we are more likely to have an accurate account of proper dance appreciation. But this optimism is justified only if we can find a way to discriminate between the facts that are involved in proper dance appreciation and those

\(^{15}\) This “should” would also apply to philosophers who might argue for skepticism but ignore our best empirical science. Some philosophers such as Richard Wollheim and Robert Hopkins have written whole books about visual appreciation of paintings with no references to the sciences of vision. Richard Wollheim, *Painting as an Art* (Princeton: Princeton University Press, 1987); Robert Hopkins, *Picture, Image and Experience: A Philosophical Inquiry* (Cambridge: Cambridge University Press, 1998).
that are not. We do not in fact have access to the psychological facts that underpin only successful appreciations of dance. We have access to plenty of psychological facts that may or may not be a result of successful dance appreciation. And this is, I think, what is at the core of the Wittgenstein and Dickie objections I quoted above. Even if we limit our cognitive science to studying how critics understand dance, we still do not know if the critics have successfully appreciated the dance. Casting our net wide at this point is like sifting through a pile of clay and gold, but with no way of telling what the difference is between clay and gold.

This is where (3) is important and is really what I think is central to the debate. Let me reiterate it:

(3) Therefore, an understanding of how consumers represent, transform, and manipulate information while watching dance is relevant to understanding dance appreciation.

This is different from (3*) because it does not assume proper understanding of the dance when we watch it. When we are provided with data about cognitive processes while watching dance, the data are indiscriminate. If we are interested in whether empirical sciences can be useful to developing a philosophical account of dance appreciation, we need to discriminate between our empirical evidence of good understandings of dance and poor understandings of dance.

But, as demonstrated with the earlier stomach grumbling example, not all facts about movement perception are constitutive of dance appreciation. We face the underdetermination problem again. We need some way of determining what facts about perception are constitutive of dance appreciation and what are not. Presumably more facts about perception will not be illuminative as they will not delineate which facts are a part of dance appreciation and which are not, such as the stomach grumble. One needs some way of determining if motor phenomenology
that accompanies movement perception is on the same level as stomach grumbles that accompany movement perception.

This problem can be overcome, however. Knowledge of dance critical literature can help us discriminate between empirical evidence which is relevant and what is not relevant to dance appreciation. For example, this stomach grumble example is never mentioned within dance critical literature as having any kind of aesthetic relevance to dance. Motor response, on the other hand, has a long history within dance criticism. However, we should not just accept everything dance criticism says about dance uncritically. Dance criticism can be just as wrong as any other field of human enquiry. Perhaps dance criticism claims about motor response are just false. You might think that philosophy (or cognitive science) can help set it straight.

### 1.6 Clashes and Coordination

The clash between three different fields, philosophy, cognitive science, and dance criticism, is a persistent theme throughout my project. But where there is clash, there is also the possibility of harmony. Ideally speaking, I want an account that articulates the role motor response has in dance appreciation that is consistent with, and uses, our best philosophy, sciences of the mind, and dance criticism. This is in line with what Murray Smith talks about when he talks about the triangulation of different levels of evidence. Smith writes, “Each level of analysis taken alone is vulnerable: phenomenology is elusive and intangible; psychology ungrounded and
unconstrained; neuroscience blind and inert.”\textsuperscript{16} But each level, when taken in relation to one another, can make up for the other’s weaknesses.\textsuperscript{17}

I am not concerned with these levels of triangulation. But I am concerned about three different fields of study. Some philosophy is concerned with phenomenology. Some philosophy is not. A lot of dance critical literature is not concerned with phenomenology but is mostly concerned with history or commentary on dance cultural trends. Cognitive science is often concerned with both psychology and neuroscience at various times and may be concerned with phenomenology as well.

I am not as concerned with triangulating different kinds of evidence, but disparate fields of study. Philosophy, cognitive science, and dance critical theory do not usually talk much to one another, but in order to achieve a more illuminating account of dance appreciation, they can, and they should. They have different strengths that can work together. Dance theory understands much of dance and its history, its cultural influences, and its values. Cognitive science has refined and reliable tools for developing an understanding of the mind. Philosophy has the strengths of thinking through issues, concepts, and arguments with a certain nuance and perspective that the other fields do not.

I mentioned earlier that dance theory and history can help guide an account of motor response, especially because the concept is so prominent within thinking about dance. It has a history, and in its first incarnation, it was supposed to provide guidance to viewers and

\textsuperscript{16} Murray Smith, Film, Art, and the Third Culture: A Naturalized Aesthetics of Film (Oxford: Oxford University Press, 2017), 68.

performers of dance. As such, its goals and the ways it was theorized can provide us with clues as to what cognitive systems we are looking for when developing a theory of dance appreciation. Dance theory and history thus is a promising beginning for overcoming the underdetermination problem. It can help point us toward the cognitive science that can lay the grounds for a more informative account of motor response and dance appreciation.

That is the hope, anyway. There is a long way to go to accomplish this hope for harmony. Possibility skepticism is the biggest barrier for the moment. If possibility skepticism is right, then philosophical considerations bar motor response from playing a role in our accounts of dance appreciation. These considerations override any evidence from cognitive science or dance critics which counts in favor of the conclusion that motor response plays an important role in dance appreciation. If right, any optimism that the three fields can coordinate to enrich our understanding of dance appreciation is lost. So let us tackle this problem head on.
Chapter 2: Skepticism and Motor Response

Possibility skepticism holds that motor response cannot be part of dance appreciation, which roughly means that motor response cannot ground aesthetic judgements about dance. Just because you respond bodily to dance does not mean that your response grounds aesthetic evaluations such as that the dance was beautiful or ugly. Your bodily response is ill-suited for aesthetic judgements of dance. It just doesn’t contain the right properties to ground aesthetic judgements.

So, to be aesthetic, motor response needs to have certain qualities. What are those qualities, and why doesn’t motor response have them? An answer for this can be gleaned if we consider a traditional model of art appreciation and judgements about artworks. On this model, there is an artwork that is appreciated and a public which appreciates. Among the public, there are certain people who are particularly knowledgeable about the art form and can articulate its meaning. The rest of the public then look to them for guidance in understanding and appreciating the artwork.

For skeptics, the problem is that motor response is poorly suited for this process. People cannot use motor responses to guide the dance public into better appreciating and understanding the artwork, because this sentence is not able to be completed: “One should appreciate dance via motor response, because___.” There is no way for people to come to better understand or appreciate dance through motor response. Dance critics could not use motor response as a guide to help the public understand and appreciate dance better.

I believe there have been four main challenges to motor response which propose to make it ill-suited for this traditional model of the artworld and judgements about art. (1) Privateness worries that motor response is something that cannot be shared and meaningfully discussed
across different people, because no one can have access to anyone else’s motor responses. (2) Subjectivity worries that because motor responses are so idiosyncratic, and specific to individuals, that there is no real use for dance critics and other suitably informed dance viewers to give advice to watch dance via motor response. Your motor response is just your own and someone else’s is just their own. (3) The causal objection argues that studying the causes of our perceptions of danceworks does not help inform us on how to appreciate the dance. It just tells us how we are already viewing dance but not how to appreciate dance better. (4) The dance as normative practice objection holds that motor response does not help us understand and appreciate dance for what it is, a normative practice.

2.1 The Privateness of the Body

The current debate about motor response and its place in dance appreciation begins mainly in Barbara Montero’s article, “Proprioception as an Aesthetic Sense.”¹ She argues that proprioception, the internal awareness of our own body, is capable of grounding aesthetic judgements. By feeling our own bodies, we can detect whether our movements are graceful, clunky, awkward, forceful, among other aesthetic judgements. She then argues that proprioception can be used not only to ground aesthetic judgements of our own movements, but also of movement we see. Proprioception could be used to feel the gracefulfulness of dancers on the stage. This is what I have been calling motor response. We are watching dancers and

¹ There was, however, some existing skeptical writing from Graham McFee and David Best. Montero’s article was the first philosophical article that I know of that argued for motor response as having an important role in dance appreciation. But the positive proposal given by Montero sparked further reaction from McFee and inspired the Journal of Aesthetics and Art Criticism special issue on “Dance and Science” in 2013. For McFee’s and Best’s precursor skeptical work, see Graham McFee, Understanding Dance (New York: Routledge, 1992) and David Best, Expression in Movement and the Arts: A Philosophical Enquiry, (London: Lepus Books, 1974), 141-152. For Montero’s original article, see Barbara Montero, “Proprioception as an Aesthetic Sense,” Journal of Aesthetics and Art Criticism 64, no. 2, (2006): 231-242. For the main literature in response to Montero see Graham McFee, The Philosophical Aesthetics of Dance (Hampshire: Dance Books, 2011) and the special 2013 issue in the Journal of Aesthetics and Art Criticism.
receiving proprioceptive information to make judgements about the dancer’s gracefulness. However, what is most instructive for my purposes is the way in which Montero defends proprioception, the kind that is self-perception, as an aesthetic sense.

When Montero discusses if proprioception can be an aesthetic sense, she focuses on the issue that it is private. Proprioception is an experience where the object of the experience is only experienceable by the subject; the experience of our own body is only accessible to ourselves. No one else can experience the internal felt location of my arm or my leg. The problem then is that our proprioceptive experiences cannot be shared and cannot be discussed in the way the traditional model seems to demand. We are not discussing or advising others to appreciate the dancework in deeper ways. Whatever conversation or advice which occurs is about our reactions, not about the dancework.

Montero does not, however, seem to think this is an issue for motor response. When motor response occurs, we no longer proprioceive our own movement, but we proprioceive other people’s movement. Thus, motor response is not a private sensation because it is of a publicly accessible object, someone else’s movement. I think that this is too quick. It is not clear that what is happening in motor response is the proprioception of someone else’s movement. It could be that we are proprioceiving our body’s reactions to seeing someone else’s movement. The difference is the object of our perceptions. Is it the dancer’s movement? Or is it our bodily response to the dancer’s movement?\(^2\) If it’s the dancer’s movement, then we have overcome the privateness of motor response readily. However, if the object is not the dancer’s movement, but

\(^2\) It could also be both, but if it’s both, then the part of motor response that is of another is public while the part that is not is private. The issue at hand remains a problem.
our own bodily response, then it appears that motor response incurs the same problem of
privateness that proprioception does.

I do not think taking one side or the other here is one that will come easily. There are a
few positions you can take to defend the claim that motor response is public. You can argue that
all motor response is public; every time we respond bodily to someone else’s movement, we are
proprioceiving their movement. Take a simple example of a jump scare to see that this is too
strong. Say you’re in an avant garde dance performance. The music is filled with tension, the
dancers on stage are moving slowly, bringing you to the edge of your seat. You know that
something is going to happen, it’s only a matter of time. Suddenly, out of the corner of your eye,
you see something moving through the aisles. You jump suddenly in response to the movement.
This is clearly motor response, a felt bodily response to seen movement, but it doesn’t seem that
the jump response you are having is proprioception of the other’s movement, but rather your
own response. So, it seems that claiming motor response is always public is too strong.

You could alternatively make your requirements for aesthetic motor response more
stringent. Only the motor response of another’s movement can be aesthetic. This would require
the denial that the jump scare is aesthetic because no one else can have access to your jump scare
experience. This is not an ideal result. If people’s appreciation of horror movies is of any
indication, at least some people enjoy jump scares, and depending on how they are used, can be

3 If you were to hold, as Montero seems to do, that motor response is mirroring of seen movement in the sense that
our bodies are literally replicating the other dancer’s proprioceptive experience, then defending that motor response
is proprioceiving someone else’s movement comes easier. The problem with this, as we will see in the third chapter,
is that it misrepresents the mirror neuron literature. The literature does not support this interpretation, but rather the
interpretation that we mirror the other’s movement by feeling what it would be like for us to perform that
movement. If anything, this supports even further the claim that the object of motor response is our own bodies, not
the bodies we are watching.
a virtue or a flaw of the movie. Overuse of or poorly executed jump scares can be criticized, and a precisely done and well-executed jump scare can be praised.

All of this seems to point to the conclusion that the publicity requirement for being aesthetic is wrong. If a jump scare can be aesthetic and can even be used to criticize or praise an artwork, and jump scares are private bodily responses, then a response can be private and be aesthetic. Remember that what we mean by aesthetic here is that it can be used in discussion about artworks and that we can use it to get deeper insight into the artwork. Renee Conroy presents a similar challenge to the privateness objection that I have. She talks about a dancework where if one did not respond to it bodily, one would not be appreciating the dancework properly. And it seems that audiences could reasonably discuss the dancework in terms of the responses they had, and praise or even criticize the dancework because of it. It would be odd to hold that they could not do this, as their responses are clearly part of the intentions of the choreographer, much in the same way that jump scares seem clearly part of the intentions of horror movie directors.

Montero gives a thought experiment where music performers perform music in soundproof rooms independent of one another. Even though no one else has access to the experience of the same performance of the work, it seems that conversations and critical commentary about their performances can be had. Not only could they be had, but I also believe that this situation is not all that different from many of our conversations about performances. If you have ever heard musicians giving each other performance advice about the same work, you have probably heard musicians talking about this one section of a piece of music and how it is so

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hard to play. One performer may be much more experienced and has figured out several strategies to manage playing that section. They then explain those strategies, and the less experienced performer is grateful and goes back to the practice room to try and work on it given what the more experienced performer said to them.

It seems then that the privateness of motor response is not a problem, at least not in principle. The fact that our experiences are of something private is not in itself a barrier to conversation about artworks, and it does not seem to be a barrier to providing advice to appreciators or performers. What does seem necessary is common ground. For the more experienced performer to give advice to the less experienced performer, they need at least some shared understanding of performance practices, and they must perform within similar traditions. There needs to be something shared and understood between the two performers. So maybe a different way of understanding the privateness objection is not that the privateness is a problem in principle, but that our experiences of motor response are too idiosyncratic, too specific to ourselves, to have reasonable conversations about motor response across spectators. The problem is that motor responses are too subjective for us to discuss them reasonably and to give advice to one another. Montero’s example might be different from mine and Conroy’s examples in this way. But is motor response too subjective for the traditional model?

2.2 Is Motor Response Too Subjective?

Emotional and physical reactions to dance may not be the sorts of things that can ground aesthetic judgements.\(^6\) A choreographer who thinks that what is required to “get” the dance is to have an emotionally moving experience is mistaken. The choreographer cannot expect that other

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\(^6\) I think this is indeed something skeptics like McFee would deny, judging not just by his rejection of dualism in his most recent book but also his general theory of dance understanding he elaborated upon as early as 1992 in his first book on dance. He also seems to reject the use of imagination in dance appreciation.
people will have an emotionally moving experience to their work. They might be moved, and these experiences might confer some value onto the dance, but they are not part of what it means to appreciate dance. So, an audience member who correctly perceives the dance might also have intense experiences of motor phenomenology while watching the dance. But motor phenomenology cannot function as reasons for other people to see the dance via motor response, because we cannot expect to have similar experiences ourselves. The motor phenomenology that results from motor response is too personal, too individual, to really ground a claim that another person should see the dance because of it.

To draw this objection out further, imagine someone is reading dance criticism. They encounter two reviews of the same dancework by different critics. One of them describes the content of the dance, relates the dance to broader cultural themes, and puts it in its historical context. It provides an interpretation of the dance, perhaps claiming that the dance reflects some deep human struggle or as challenging some deeply held cultural norms. Does this type of criticism give one reason to see the dance? Presumably yes. Why? It gives audiences a sense of what the dance is about and can turn an otherwise incomprehensible dance into something meaningful for them. Moreover, they can check and evaluate for themselves whether the critic’s interpretation seems right.

The second dance criticism about the same work, on the other hand, is highly personal. Instead of providing the interpretive lens of the first, it provides an account of the experiences of the critic. The critic tries to capture through words his experiences of the movement he saw, making frequent reference to bodily sensations, and does so with great skill. Readers get a sense of the movement they see. It is almost like the critic took his experience of the dance and put it directly down in words.
Does this type of criticism give one reason to see the dance? Let us tentatively answer this no. Why? Because it seems to be more about the critic’s own subjective and personal world and not about the dance itself. It might give me reason to read more of the critic’s writing on dance, but it does not give me reason to see the dance itself. One might reasonably wonder upon reading that critic if there is anything to their responses that one would have themselves. And it does not seem like the reader can go to the dance and evaluate their own experience of the dance considering the critic’s experience. They cannot be the critic in the moment that the critic watched the dance. It makes little sense to think that the reader could reasonably aspire to the critic’s experience as they describe it. Thus, one might think that this more personal account of emotional and physiological reactions from dance cannot really function normatively.

Let me offer a third example of dance criticism, which combines the first two. Not only do you have a contextualization and an interpretation of the dance, but you also have a description of the critic’s internal experience of the dance. Perhaps the dance critic thought one moment is so affecting and moving, and they felt they needed to record that moment down.

Take, for example, Edwin Denby’s description of a ballerina’s leap:

The effect as we watch Markova’s pure flight can only be described as supernatural, as a strangely beneficent magic. It is an approach to those mysterious hints of gentleness that occasionally absorb the human mind. It is a spiritual emotion; so Nijinsky’s contemporaries described it, when he danced that way, and so did the Parisian poet Théophile Gautier when he saw first Taglioni and then Grisi take flight a hundred years ago.7

Denby gives an interpretation of the leap; he makes sense of it, “It is an approach to those mysterious hints of gentleness that occasionally absorb the human mind.” He contextualizes it

within the history of ballet, but he also makes direct reference to reaction, “The effect as we watch…can only be described as supernatural, as a strangely beneficent magic.”

Does Denby’s description of Markova’s leap give us reason to go see Markova jump? Yes, if we accepted the first form of criticism. Does it give us reason over and above merely the contextualization of the leap he gives us? I believe so. Markova’s leap might be understood as an approach to mysterious gentleness, and we might want to see it because of this. In addition, though, when Denby talks about how the leap has a supernatural effect on us, it seems we have more reason to see Markova jump. We want to have that supernatural experience, or at least some people want to have that experience. Can I expect that I will have that experience when I see Markova? Maybe not, but in this case Denby does not seem to be alone. It is not merely a personal experience. In addition, he gives explicit description earlier in the piece as to how this effect is achieved technically through ballet. Even though I should not expect to have the same experience, I know at least that the experience is not idiosyncratic to Denby’s psychology. And if it is not idiosyncratic to Denby, and it is an experience people have had through multiple generations of watching ballet dancers, I have some reason to go in the hopes that I might have a similar experience. In fact, one might also think that Denby description of the experience and leap in such detail is an attempt to help other people have similar experiences to ballet leaps like Markova’s. The criticism doesn’t just train our perception and detection of dance meanings, but also our emotional and physiological responses to the dance. In this way, even though we should not expect to be able to feel what Denby feels, just like we cannot expect to see what Denby sees in a dance, we might think we should train ourselves to feel what Denby feels.
2.3 The Causal Objection

The next two objections are focused around whether motor response is informative. In other words, if one takes the advice, to appreciate dance via motor response, will this lead to better dance appreciation? Given what I have said previously, it seems clear that the advice does help people appreciate dance better. Perhaps, however, the advice is not as helpful as it seems at first. This is where we consider the first objection directly from McFee against motor response: the causal objection.

It is best to start this argument off by reiterating a quote McFee uses from Frege, “error and superstitions have causes just as much as correct cognition.” The basic idea is that reactions such as motor phenomenology have causes. To show that dances cause us to have these reactions does not show that those reactions are correct. If we do not know whether our reactions to dances are correct, then it seems we would be misguided to tell others to appreciate dance via motor response.

To motivate this further, let us take the example of the stomach grumbling from the introduction. Say that whenever we watch pirouettes, our stomachs make a grumbling sound, much like when we are hungry. This is a causal response to watching dance, but it does not seem that just because it’s a causal response to watching dance, that it is going to be informative of the dance with the pirouette in it. What meaning could the grumbling sound possibly convey? And why would we advise people to appreciate pirouettes via their grumbling stomachs? It seems we would be hard-pressed to find an explanation for this.

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McFee seems to think that motor response is like stomach grumbling in this way. It is just a causal response that is like stomach grumbling or itches and twitches. There can be no real meaning that comes from motor response. A good portion of this analogy has already been defeated in a way. One of the reasons why you might think motor response is like stomach grumbling, itches, and twitches is that these responses are too bodily or too subjective to really be aesthetically significant. There is more to this objection, because we have not really shown how motor response is aesthetically significant. We have alluded to the conclusion that it is, without quite showing how it is.

It is not, for McFee, that all causes are irrelevant to dance appreciation. It is more that not all responses are created equal. On the contextualist account of dance appreciation that McFee himself proposes, appreciation of dance based on knowledge of the dancework’s origins and place in history is better than one that does not. This knowledge is a cause. If one did not have the knowledge, one would not appreciate the dance. It is not that all causes are problems, it is more that some causes are better than others. The cause alone is not enough to say that the reaction is good. However, the cause in conjunction with considerations about the art world and its values can enable us to judge which reactions to artworks, and therefore the properties detected, are good or poor. So, if motor response can be connected with these considerations, this is enough to allow motor response to be part of dance appreciation.

This move also explains why our hypothetical case of the stomach grumbling as a reaction to pirouettes seems intuitively wrong to put under the banner of dance appreciation. There’s nothing within our dance practices which refer to stomach grumbling. No one says, “Wow! Those pirouettes made my stomach grumble so well!” Granted, this is because I made this example up. But no one would also say, “Wow! Those pirouettes made my neurons fire so
well!” And this is because dance practices have nothing to say about these reactions. It might be that if the stomach grumbling example were in fact true, choreographers would find ways to exploit such reactions. Perhaps we would end up saying those pirouettes made our stomachs grumble well. And if that’s the case, it would most likely show up in our critical practices, and we would have reason to now converse about the grumbling and advise other people to use it for aesthetic judgements.

Do our dance practices refer to motor response? It seems they do. Barbara Montero quotes several dance critics such as John Martin, Edwin Denby, Alastair Macauley, and Louis Horst who call dances “kinesthetically affecting” and make other reference to motor phenomenology as being valuable in dances. Choreographers such as Elizabeth Streb refer to motor reactions as something valuable about their work. Also just speaking from my own experience, this is a common way of talking about the values of dances, as causing visceral experiences in the listener. Part of this might be merely the lingering influence of John Martin’s writing in which he characterized dance as uniquely having this effect on audiences. But it would seem odd for it to have persisted so long in the dance community if no one had motor experiences from watching dances.

McFee, however, does not seem impressed with this literature. At the end of a recent article, he appears to concede to Montero and others that motor response both exists and plays an important role in dance appreciation:

First, metakinesis or inner mimicry may offer a metaphor for a human power or capacity (namely the capacity to make sense of dance) without being a structural function of our

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10 In Elizabeth Streb, Streb: How to Become an Extreme Action Hero (Feminist Press: New York, 2010), she talks about how her pieces had these extreme visceral reactions from people where people would recoil from the works and want it to stop, while continuing to watch.
bodies…Further it has no specific bodily realization. But this does not render *talk* of it worthless, if suitably understood.\(^\text{11}\)

Even though it seems like he concedes that motor response both exists and is relevant for dance appreciation, his language is peculiar. Picking out some phrases from this passage and elsewhere in this section:

[dancers] *may well think* we can respond viscerally
[motor response] may offer a *metaphor* for a human capacity
does not render *talk* of [motor response] worthless\(^\text{12}\)

Use of the italicized words in these quotes seems heavily qualified for someone who is conceding the point to his opponents. Conceding the point seems even stranger considering that he spent so much time arguing about how it’s not relevant to the appreciation of dance without producing reasons for changing his mind.

McFee is likely trying to reconcile himself with artworld talk about motor response. What Montero, and others might say to him is something like, “Look McFee! You’ve spent all this time talking about how motor response is irrelevant to the appreciation of dance. But dancers, choreographers, and critics all *talk* about it! You can’t be telling us that they are wrong to do so!” And in response McFee would say something like, “I have no problems with critics talking about motor response. Just like I have no problem with Romeo saying, ‘Juliet is the sun’. Metaphors are useful, especially for communication. Talk about how dances are ‘kinesthetically affecting,’ is really a metaphor to talk about how we just generally understand and appreciate movement. There’s nothing more to it.” So, despite appearances, he still doesn’t think there’s any useful place for motor response in an aesthetics of dance.


\(^{12}\) My emphases.
On the one hand, you might think with McFee and Best that the danceworld is misguided or perhaps simply using metaphors to describe their experiences. On the other hand, you might think with Montero, Carroll, and Seeley that scientific data vindicates how the danceworld has described their experiences. The burden of proof here lies with the McFee and Best camp. Good reason is needed to reject the danceworld’s interpretation of their experiences as misguided now that they have been supported by the sciences of the mind. If there was only critical evidence from the danceworld, or only evidence from the sciences of the mind, one could reasonably dismiss motor response in the same way we dismissed the *pirouette*-stomach grumbling from earlier. With both together, motor response is much harder to dismiss, in the same way that *pirouette*-stomach grumbling would be harder to dismiss with both scientific and danceworld evidence. Are there any such reasons? We have one left to consider.

2.4 The Dance as Normative Practice Objection

McFee has one last objection that I think is relevant for our purposes. He argues that dances are a normative, human practice. He also holds that reactions such as motor responses do not help us understand and appreciate dance as a normative, human practice. This may sound odd at first, but perhaps an example which originates from McFee might help:

*Watching Chess:* You observe people moving pieces of wood across a white and black checkered piece of wood. You enjoy watching how the pieces of white move back and forth, up and down, and diagonally. But then you realize that they’re playing chess! Suddenly your knowledge of chess alters how you see everything. You now watch the chess board, recognizing what moves are being made and whether they are good or not. You are evaluating the moves. It seems reasonable that before you recognized the activity as chess you also did not appreciate it as chess, even though you might have been having a lot of fun watching it. Appreciating the chess game as chess requires evaluation and recognizing when a good or a bad move was made.

Chess is a normative, human practice. When you were just enjoying the game as a series of generic movements of black and white pieces of wood across a checkered board, it seems clear
that you were not appreciating the chess game as a normative human practice. But when you noticed you were watching chess, this shifted your attention. Instead of focusing on just how it looked to you, you focused on the rules of the game and recognized each movement as belonging to a category. This, one might think, exemplifies what occurs when one goes from appreciating objects and events generically to appreciating them as normative, human practices. One goes from seeing a whole bunch of movements to seeing a series of events which are ascribed values in relation to the norms of the practice. It does not matter so much if one’s vision is 20/20 or one’s vision is 16/12. So long as one has the broad capabilities to recognize the movements under their appropriate value categories, one is seeing and appreciating chess.

Similarly, it might not really matter what one’s reactions to each of these moves are. Say you are a friend of the person playing the white side. The person on the black side just made a move that you know will seal the game, making your friend lose. On the one hand, you know that it was a brilliant move. But on the other hand, you groan on the inside, and don’t feel pleasure because you really wanted your friend to win, and you feel sorry for your friend. You clearly recognized the move as good, even though you did not have the expected response to the move of pleasure and excitement. It also does not really matter if one experienced motor phenomenology while watching the game. One understood and appreciated the game just fine.

It seems that, like chess, dance is a normative, human practice. It is a practice done by humans and is subject to norms of goodness and badness, just like chess. If you take chess as your paradigm for what it is to be and appreciate a normative human practice, then it might seem reasonable to think that it is only those capacities which contribute to evaluating properties as good or bad are relevant for appreciating normative human practices.
However, why should we think that chess is the paradigm? And even if it is, why should we think that dance and the other arts are appreciated in the same way as the paradigm? This analogy is a mistake just like analogies between understanding language and understanding the arts which have also been used to reject motor response from dance appreciation.\textsuperscript{13} One can consistently admit that dance and the arts are normative human practices while holding that appreciating them does not just consist in merely seeing good and poor properties. To do so, one can hold that having appropriate reactions to dance is part of what it is to appreciate the dance properly. In this way, appreciating dance is normatively \textit{thicker} than appreciating a chess game. To appreciate the dance properly, one needs to not only know the rules of the game and apply them to the dance. One needs to also have some proper range of reactions to the dance. If a choreographer intends to give an audience a deeply moving and emotional experience through their dance, and the audience is left cold, then there is a problem somewhere. The problem might be with the choreography, the performers, or the audience. But regardless of where it lies, there is a problem, and therefore, there is some normativity applied to audience reactions.

\section*{2.5 Moving Forward}

This chapter has had two main purposes: negative and guidance. I put skepticism about motor response in its best light, going through multiple objections to its relevance to dance appreciation and arguing against them. While on this path, we have also learned some important lessons. When addressing the third argument for skepticism, the Causal Objection, I argued that independently taken, scientific and dance critical literature talking about motor response is easily dismissed. However, when they are both taken in tandem, their connection strengthens one

\textsuperscript{13} Such as in David Best, \textit{Expression in Movement and the Arts: A Philosophical Enquiry} (London: Lepus Books, 1974), 141-152.
another. I have only briefly addressed that both literatures seem to support motor response. That connection needs greater elaboration and coordination, because if there is an important disconnect between the two, then skepticism about motor response is strengthened. Since most arguments in favor of motor response typically only look seriously at scientific data, and only quickly brush the surface of dance criticism, this leaves the objection that these philosophers have merely changed the subject. Thus, to progress, we must take a serious look at the dance critical literature in order to coordinate them with the scientific literature. Motivated mainly by concerns about the consistency of mirror neuron work with dance literature about motor response, there has already been a move away from talk of mirror neurons in Montero’s work and toward an integrated visual-somato circuit proposed by Carroll and Seeley. This dynamic is helpful and will be more usefully explored through chapters three and four, when we get to both survey dance critical literature and develop an account of motor response in relation to scientific literatures.

It is also worth pausing a moment before going further. I am reaching for an ambitious claim about motor response and its attendant motor phenomenology. It is part of how we properly appreciate dance and is not just a descriptive claim about our psychology while watching dance. There are two lingering worries about this I will need to address as I progress throughout this project. The first is a worry about diversity. One seeming benefit to an account of proper dance appreciation which is thinner, the kind that seems to be proposed by McFee and the chess example, is that it does not tie reactions to the proper part of dance appreciation, is that the opportunities for being able to appreciate dance properly are more open. People can “get” the dance without reacting properly. For those with more non-normal cognitive abilities, the thinner the normativity, the better. I do not think this is true. It is important to note that the thinner
notion of normatively correct dance appreciation takes understanding dance to be cognitively burdensome. One needs to understand the meaning behind the movement, and even worse, requires one to be fully informed about danceworld concepts. Adding on a layer of normativity about reactions to dances adds to the opportunities to appreciate dance correctly even if it ultimately makes a full appreciation of dance harder. One can still appreciate the dance in some sense if one has requisite responses to the dance, even if one has not fully understood the meaning behind it.

The next worry is a question about the source of this normativity. I have asserted that we can have better or worse responses to dances. What makes those responses better or worse? In chapter five, I give some answers as to what grounds the normativity here. I deal with the question of the aesthetic property of gracefulness and whether having attendant motor phenomenology that “feels graceful” is a necessary part of detecting gracefulness. I will argue that it does, at least in most cases. But is it in some way grounded in the author’s intentions for audiences to have feelings of grace when they see these movements? Perhaps, though an alternative answer can also be found through considering refined art categories. When watching classical ballet, if we do not feel some sense of gracefulness phenomenologically at appropriate times, then there seems to be something wrong. Because gracefulness plays an important role in the expectations of that genre. It might not be grounded in the author’s intentions, but it is part of the nature of the genre. It also may have its source in the nature of our perception of gracefulness. Perhaps gracefulness as a concept is inseparable from motor response. We will see that I argue for a three-layered account of the normativity when we get to chapter five.
Chapter 3: The Origins of the Idea of Motor Response

The introduction proposed a general understanding of motor response:

**Motor Response** df→ a human capacity whereby watching human movement causes one to have the usual visual phenomenology accompanied by motor phenomenology.

As stated before, this was intentionally incomplete. We cannot elaborate more on it yet, but we are on our way. Now that general skepticism about motor response has been dealt with, we can begin the process of coming up with a fuller understanding of motor response. My starting point is dance studies literature. By this, I mean literature created within the dance world, including dance scholars, dance critics, choreographers, and dancers themselves. I start here, as opposed to starting with neuro or behavioral science, because I am primarily interested in dance and its appreciation. I have worries that starting with scientific literature, which is often uninterested in dance as an artform, can lead us astray.

There are four qualities that the dance studies literature associates with motor response: automaticity, activity, universality, and individuality. Roughly speaking, motor response is automatic if it occurs outside of our control. Motor response is an activity, by contrast, if it is susceptible to our will, i.e., if we can decide to respond bodily. At first glance, these two qualities seem to be at odds with one another. If motor response is automatic, then it is not active, and if it is active, it is not automatic. But we shall see that both Theodor Lipps’ motor response precursor and John Martin’s full exposition of motor response contains both automatic qualities and active ones. They reconcile these two seemingly opposing qualities by involving both active and automatic processes in their account of motor response.

John Martin adds universality and individuality to the mix. Universality is about the degree to which people will have similar motor responses given similar movement stimuli, while
individuality is the variety of motor responses given similar stimuli. We shall see that Martin tries to reconcile these two qualities as well. Martin believes motor response is both the simplest of all responses and is also something we need to discover.

The attempt to reconcile these opposing properties, automaticity and activity; and universality and individuality, is reflective of the tension of two underlying concerns: veridicality and flexibility. On the one hand, we want motor response to give us accurate representations of seen movement. On the other hand, we recognize there needs to be some flexibility in motor response, creating room for error. I will explore the manifestations of these properties and concerns in Lipps’ and Martin’s work, but some historical context will be helpful in situating why and how motor response became an important part of dance history and give some background as to why these opposing concerns are important.

3.1 Motor Response in the Danceworld

The turn of the twentieth century saw exciting and lasting changes for dance. The development of a new form of dance, typically referred to as modern dance, brought legitimacy to an artform struggling to carve out space for itself in the world. Dance was often considered to be too sensual or even sexual to be a legitimate form of artistic expression. Its reliance on the physical body easily subjected it to these criticisms, especially in a Western world grappling with predominantly Victorian or Puritanical worldviews.¹ The development of modern dance, in tandem with developments in the world of ballet, helped to dispel many misconceptions about dance, establishing dance as worthy of the same kind of respect we give to music, painting, and theater.

¹ For a good historical analysis of people disrespecting dance see Ann Wagner, Adversaries of Dance: From the Puritans to the Present (Urbana: University of Illinois Press, 1997).
One strategy used to legitimize dance was intellectual. Dance needed an intellectual framework to help an unfamiliar public engage with and appreciate the new artform. Rudolf von Laban developed a systematic approach to analyzing and notating complex movement which remains the predominant approach today.\(^2\) Another intellectual development was the articulation of an aesthetics of dance. People did not just need to have a vocabulary to describe and write down dance; they also needed to understand why the artform was valuable. What is a good dance? And how can one tell? These questions were of interest to the first modern dance critic, John Martin.\(^3\) His concerns regarding dance aesthetics were practical as well as theoretical, aiming not just to produce a theory of modern dance, but to educate a wider public about the values of this new art form.\(^4\)

The introduction of the concept of motor response was a result of these practical and theoretical aims and was one of Martin’s lasting contributions in the dance world. The concept went through multiple evolutions. He used the word “metakinesis” in his earliest work, *The Modern Dance*, and then switched to using the phrase “kinesthetic sympathy” in his more systematic treatment of motor response. “Motor response” is my term but captures what Martin had in mind through these transitions in terminology. Regardless of terms, however, the concept of motor response seems novel, at least in dance theory and criticism. Surveying some pre-Martin dance literature, it is surprisingly difficult to find mentions of phenomena resembling

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\(^4\) These practical and theoretical aims, I believe, are part of the source for the conflict between veridicality and flexibility in motor response, but I will have more to say about that in the next few sections.
motor response before him. One example can be found in the writing of an early modern dance pioneer, Isadora Duncan. About three decades before Martin, she wrote,

[while watching a dance based on flowers] people would say: it is a soul we see moving, a soul that has reached the light and found the whiteness. We are glad it should move so. Through its human medium we have a satisfying sense of movement, of light and glad things. Through this human medium, the movement of all nature runs also through us, is transmitted to us from the dancer. We feel the movement of light intermingled with the thought of whiteness.  

The key sentence is, “Through this human medium, the movement…is transmitted to us from the dancer.”

The apparent dearth of dance literature about motor response should not be too surprising, however. Dance was an artform that was rarely given its due time in intellectual pursuits, perhaps for the reasons we mentioned above: that dance was considered too bodily to be given much serious thought about. Motor response does, however, have precursors in the philosophical literature. In the philosophical literature, however, motor response was not typically considered in the context of dance. While some philosophers had written about dance, the connection between dance and motor response was never made. One can find something resembling motor response in the notion of sympathy from writings of seventeenth- and eighteenth-century philosophers such as David Hume and Adam Smith, but there is no real connection made between dance and sympathy.  

Motor response’s most direct precursor, however, is not sympathy, but *einfühlung*, a concept introduced by Robert Vischer and Theodor Lipps. Edward Titchener translated *einfühlung* into English as “empathy” which introduced the word into the English language. Despite initial appearances, this early twentieth century version of empathy was importantly unlike our contemporary concept of empathy. Literally translated, *einfühlung* means “feeling-into” and was primarily understood as a concept central to aesthetic experience. Empathy was thus originally a concept in aesthetics which was later modified and adapted as a useful tool for understanding other minds and others’ emotions.

It was empathy which most influenced Martin’s formulation of motor response. However, while Martin’s interest in motor response was a combination of theoretical and practical goals, embodying his role as dance critic, philosophers like Lipps were primarily interested in motor response on a theoretical level. They sought to explain phenomena. In Lipps’ case, he sought to resolve the problem of expression: how can inhuman objects be expressive of human emotions?

### 3.2 Theodor Lipps

Lipps describes *einfühlung* as a process whereby, “what I can feel only within myself I can again find or feel in something other than myself.” For Lipps, *einfühlung* is a process through which we impart our feelings into an object and perceive those feelings in the object itself. He also speaks of *einfühlung* in terms directly relevant to the discussion of motor response, “I see a man

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making powerful, free, light, perhaps courageous motions of some kind, which are objects of my full attention. I feel a sense of effort.”

Already we see the beginnings of the concept of motor response. Lipps assumes that when one fully attends to the movement of others, one will “feel a sense of effort.” But he goes even further in his characterization of *einfühlung*. He gives a lengthy discussion of how this can turn into *einfühlung*:

If I am entirely absorbed in contemplation of the movement, by that very fact I am entirely distracted…from all that is going on in my body…Still the sense of activity and effort persists in my consciousness…But this inward imitation happens for my consciousness only in the thing I see…So far as I thus feel myself active in the observed object, I at the same time feel myself free, light, proud, in it. This is aesthetic imitation and also aesthetic empathy.

He further characterizes *einfühlung* as feeling as if one is, “…transported into [the object]. So far as my consciousness goes, I am absolutely identical with it.”

This “feeling of identity” is supposed to overcome the divide of one’s own ideas of what it feels to do the movement, and the movement one sees.

There are thus two notable parts of *einfühlung*. One seems like an automatic causal reaction, and another requiring more, where one is “entirely absorbed in contemplation of the movement.” They then help to explain why we attribute expressive qualities to an external object. The object causes certain feelings of movement in us, the automatic causal reaction, and then because we are attending so wholly to the object itself and not ourselves, we attribute this movement to the object and not just a feeling in our own bodies. We feel ourselves inside the object.

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11 Ibid., 254.

12 Ibid., 254.
There are a few ways of interpreting Lipps. Least charitably, one could think of *einfühlung* as a rare phenomenon, where an object almost takes up the entirety of one’s consciousness. This seems most consistent with the passage quoted above. According to this interpretation of Lipps, expressive ascriptions would be scarce, and one could not understand this as an explanation for more everyday expressive ascriptions. It likely could not even be an explanation of how art critical experts make their expressive ascriptions, as it is unlikely the case that every time they ascribe expressive qualities to an artwork, they feel “transported into the object.”

More charitably, however, one can think of the entire absorption case as a paradigm where every day expressive ascriptions bear an important resemblance to the paradigm. In ideal cases, one’s attention is completely absorbed in the contemplation of the object, and thus one imparts their physiological arousal to the object and only the object. In imperfect cases, we might still be aware that the sensations are “in us” or we might be distracted. However, we still attend to the object, even if we do so imperfectly. We can still ascribe at least some of the reactions we are having to the object. Under this interpretation, when my attention is completely absorbed by the object, I cannot help but attribute my sensations to the object because there is nothing else occupying my consciousness. When I am distracted, however, there is some conscious room to ascribe the sensations to something else, say my body, or the person sitting next to me humming with the music. I could still ascribe my reactions to the object at hand though, because my attention is still attending to it, even if imperfectly.

Textually speaking, seeing the entire absorption case as a paradigm case requires going beyond what Lipps wrote. The more literal interpretation of the text, however, is exceedingly implausible on its face. To hold that one needs to be in such a state of rapt attention to be able to
detect and ascribe expressive properties in an object is too demanding given how casual many of our expressive ascriptions are. Thus, it should probably be thus endorsed as his considered position, as he also never said expressive qualities could only be detected in a state of total absorption. Rather, he saw it as an explanation for how expressive qualities could be detected and ascribed. Using total attentional absorption as a paradigm case still helps to explain the non-paradigmatic cases. In the non-paradigmatic cases, we still can detect and ascribe expressive qualities to objects because we still pay attention to them. The paradigm case then helps illuminate the non-paradigm insofar as the paradigm case is more evocative and clarifies what is going on in the non-paradigm.

I do not look to give a full defense of this interpretation. Doing so would take us too far afield. The purpose of this section was to illustrate important aspects of Lipps’ theory and to provide them some plausibility, as his writing was clearly influential in subsequent writings on dance. It should be noted that in both interpretations, there is still an automatic reactive mechanism whereby what we see causes motor phenomenology in us. At the same time, there is something active and conscious. We are attending or becoming absorbed in the object at hand. So, we have the first of the two opposing qualities within Lipps’ version of motor response: automaticity and activity.

3.3 Early John Martin

Martin, like Lipps, had his own terminology for motor response. Unlike Lipps, however, he used several terms that have often been understood to be motor response, including metakinesis, 13

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13 We know that Martin’s account of motor response was heavily influenced by Lipps, however. See Susan Leigh Foster, *Choreographing Empathy* (New York: Routledge, 2010), 155. We also know that Martin was influenced by Vernon Lee, who was also heavily influenced by Lipps. Vernon Lee, *The Beautiful; an Introduction to Psychological Aesthetics*, (Cambridge: Cambridge University Press, 1913).
kinesthetic sympathy, and inner mimicry. Martin’s interest in motor response also spanned several works and developed in different ways.

Foster interprets Martin’s ideas on dance meaning as developing from two distinct synchronous processes in his early work to one single process in his later work. According to her, Martin’s earlier work consisted of two different processes which work together.

Dance meaning was apprehended through the combination of kinesthetic sympathy, the experience of feeling what another’s muscles were doing, with metakinesis, the process through which intention was deduced or inferred from movement. Foster sees Martin’s earlier work as proposing a two-fold theory of dance meaning. As we see here, we have kinesthetic sympathy which is interpreted as an automatic response to seeing movement, and then there is metakinesis which is in process whereby we infer the meaning of movement, which would refer to motor response as an activity.

Foster has misread Martin’s earlier work, in that Martin never referred to metakinesis as a mental process. Rather, metakinesis is a property of movement to contain meaning which is not reducible to movement alone. Even in the quote Foster used to support her two-fold reading of early Martin, Martin clearly meant a property of movement, “This thought-conveying quality of movement…was called by the Greeks ‘metakinesis,’ or the overtones of movement, so to speak.” Earlier, in the same work, Martin wrote, “Movement…is a medium for the transference of an aesthetic and emotional concept from the consciousness of one individual to

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14 Susan Leigh Foster, *Choreographing Empathy* (New York: Routledge, 2010), 156.
15 Foster is not the only one to do so. Martin is often seen as using kinesthetic empathy and metakinesis interchangeably. See Renee Conroy and Julie Van Camp, “Introduction: Dance Art and Science,” *Journal of Aesthetics and Art Criticism* 71, no. 2 (2013): 167.
that of another. This should not be as strange an idea as it seems to be.” According to Foster’s interpretation of Martin’s idea of metakinesis, what Martin thinks is strange is that people can detect the aesthetic and emotional concepts of movement. But it is clear as we read on that what he thinks is strange in this context is not the detection, but the fact that movement can possess aesthetic and emotional concepts at all:

“Back as far as Plato…it has been toyed with by the metaphysical philosophers. Kinesis is the name they gave to physical movement; and in an obscure footnote in Webster’s Dictionary—so common a source of reference as that!—we find that there is correlated with kinesis a supposed psychic accompaniment called metakinesis.”

Martin is explaining the problem of dance expression, analogous to the more popular problem of musical expression: How is it possible for dance to be able to express emotions or ideas? Metakinesis is supposed to provide an explanation. Now returning to kinesthetic sympathy, Foster rightly interprets Martin’s kinesthetic sympathy as relatively simple motor phenomenology transfer in his early work. He first introduces it with the claim that, “Dancing has its effect on the spectator by means of very simple processes.”

This is clearly his endorsement of motor response being simple. However, Foster is wrong to see Martin as separating the process by which we muscularly imitate what we see and the association. Martin writes, “Instantaneously, through a sympathetic muscular memory you associate the movement with its purpose.” So, what Foster identified as metakinesis is really part of kinesthetic sympathy. The association of movement with its purposes is supposed to happen instantaneously, or in my chosen terminology, automatically.

18 Ibid., 13.
19 Ibid., 11.
In Foster’s defense, however, Martin does seem to go back on this view when summarizing his views later in the book. He writes,

movement is transferred in effect by kinesthetic sympathy to the muscles of the spectator, and because he is used to associating movement with intention, he arrives by induction at the intention of the particular movement under consideration.\(^{20}\)

This gives the impression that there are two processes. One of which is an instantaneous transfer of motor phenomenology, and the other is a process of intention recognition via induction. It could be that this is Martin pre-empting his later account of motor response where he adds in activity into the account, or it could be that the “induction” going on in this quote is not a rational process by which we use our motor phenomenology as evidence for a conclusion. It is more of a habit of mind whereby certain stimuli make us think of certain conclusions, and there is no justification or reflection. It just happens because we are used to associating movement with intentions.

Either way, it seems clear to me that early Martin inherited the more automatic part of Lipps’s account. He frequently refers to motor response as automatic, and the “simplest of all art responses.” The way Martin talks about it, also implies that motor response is universal. It is simple and therefore an inherent part of our perception of movement. But at the same time, he seems committed to the view that there is individuality to motor response. A look at Martin’s broader views about modern dance and its place in dance history unearth these commitments.

Martin believed there were four important discoveries of modern dance: movement as substance, movement as basic experience, dynamism, and dance-specific form. For our purposes, the first two are the most important to discuss. Movement as substance was, “the

\(^{20}\) Ibid., 85.
discovery of movement as the substance of the dance in the same sense that sound is the substance of music.”

Prior to modern dance, movement was not considered a primary constituent of dance. Visual design, stories, or music were considered more important than movement, and movement did not feature centrally as a medium for the artwork. The next discovery of modern dance was that movement itself, independently of narrative or pantomime, can express emotion or contain meaning. Both these discoveries place motor response at the centre for understanding modern dance. Movement became central to dance as a medium and movement could hold expressive qualities and ideas. This was only possible for Martin if we had some ability to detect these properties. This is where motor response comes in, this gives us the ability to detect the expressive qualities and other ideas of the dance which were central to its artform.

It’s important to emphasize that these were discoveries. At some point, we did not know that movement could contain meaning or that it could be the focus of dance. Implied within this would be that we did not know or did not utilize motor response to see this meaning. It is also worthwhile to reiterate what we observed early on in this chapter: motor phenomenology was not a part of dance critical literature until the first half of the 20th century, and rarely shows up before Martin. If motor response was always there and instantaneous, as Martin claims, it would seem odd that it took dance critics and choreographers until the development of modern dance to detect that movement could contain emotions and ideas, let alone give us motor phenomenology of movement. If motor response is just a natural part of how we watch movement, then it would seem odd to say that this was a discovery of modern dance. Furthermore, if kinesthetic sympathy

21 Ibid., 14.
were just an automatic response to motor stimuli, then one might wonder why Martin elaborated on kinesthetic sympathy in the first place. Remember that Martin had a practical goal in mind in these books, to inform audiences unfamiliar with modern dance how to look at it. If this was his goal, then telling audiences to look at dance the same way they have been looking at it this whole time is unnecessary. So, it seems that there is a tension in Martin where he wants to claim that motor response is both automatic and universal, but he must recognize that it is something we actively engage with and is something that can be different from person to person. Not everyone watching the same movement will have the same motor response, or even any motor response at all.

Martin may have detected this tension himself in his early work, as he was perfectly aware that not everyone understood modern dance. Martin gives an example that illustrates this:

Ask the man in the street who is sickened by a contortionist, why he is so affected. What does it mean? How can he be affected by something when he does not even know what it means? He will not be able to explain it to you, but he will perhaps consider you just a little bit cracked if you cannot explain to him why you are moved to tears by some dance which he does not “understand”

Martin points out an asymmetry in what a “common” person accepts as a valid or reasonable response to movement. On the one hand, it is in no way odd for a “common” person to experience visceral sympathetic reactions when watching the contortionist or watching someone en pointe. It is common to say, “That hurts me from just watching it.” This is accepted as part of ordinary, everyday experience. On the other hand, the “common” person would think a person

being moved to tears by a dance is in some way odd or requires explanation. There is a demand to explain why they were moved to tears. Part of the reason why this demand is placed is presumably because it is not part of ordinary, everyday experience for people. And importantly, modern dance does not typically exploit common responses to movement, especially for Martin who saw modern dance as chiefly concerned with the communication and expression of emotion through non-symbolic or gestural means. The modern dance pioneers were not trying to induce disgust or painful reactions in their audiences. They were trying to express ideas and emotions that were in some way escapable to words. As Martin said,

This makes all the more perplexing the question which is so often asked by the layman who does not know what dancing is all about. “What does it mean?” he will ask you; and the only answer you can give him is something like this: “My dear man, if I could tell you what it means there would be no need for So-and-so to dance it. He might much more easily write it to you.”

In this quote, as with the previous, there is a perceived gap between ordinary perception of movement and perception of movement as expressive. But at the same time, Martin still thinks that motor response operates via simple, automatic responses, even in the case of more complex expressive qualities. For whatever reason, Martin left this concern unaddressed in The Modern Dance. However, he clearly revised his view about motor response in Introduction to Dance, committing himself to an explicitly active account of motor response.

24 Ibid., 11.
3.4 Late John Martin

Last chapter, we dealt with McFee’s skepticism, but some of his arguments are made within the context of reconstructing Martin’s account of motor response.25 He argued that since the notion of an automatic motor response conflicts with Martin’s account of dance appreciation as a dance critic who is concerned with dance meanings, we should eschew the parts of Martin’s account which focus on automatic motor responses in favor of an account of dance appreciation which focuses on interpreting works in reference to a social and cultural framework.

I argued that McFee’s arguments do not properly understand the central focus that reactions to artworks play in the appreciation of art. What McFee might have been grasping onto is the tension I see between seeing motor and other phenomenological reactions as automatic, intrinsic parts of how we perceive art, and these reactions as instructive of an activity of how we should appreciate art. The good news is that in later work, Martin seems to address this conflict by proposing an account of motor response that still seems to understand these reactions automatically but also informatively.

Both McFee and Foster regard Martin’s later view of motor response as relatively unchanged from his earlier view. Foster perceives a change, but it is only because of a common misunderstanding that metakinesis was part of detecting of motor properties and not a property of the movement itself. She saw Martin growing from seeing metakinesis and kinesthetic sympathy as separate processes to merging them into one process inner mimicry. McFee, for his part, treats both early and late Martin as the same and draws quotes from them regardless of

time. What neither noticed is how his language changed, thickening his view to a more active version of this ability.

Martin begins his discussion of inner mimicry with a more general account of our experiences with inanimate objects,

[The] faculty for transferring to our own consciousness those motor experiences which an inanimate object before us would undergo if it were capable of undergoing conscious experiences…

He gives multiple examples such as the tendency “to elongate the body when we look at a tall building or tower and to spread ourselves broadly and comfortably before a low, wide structure.” He also believes that multiple other phenomena are explained through this ability, from ‘talking with our hands’ to referring to rocks with greater height than width as ‘standing’ and rocks with greater width than height as ‘lying down’. He then says that,

Since we respond musculoskeletal to the strains in architectural masses…, it is plain to be seen that we will respond even more vigorously to the action of a body exactly like our own. We shall cease to be mere spectators and become participants in the movement that is presented to us, and though to all outward appearances we shall be sitting quietly in our chairs, we shall nevertheless be dancing synthetically with all our musculature.

Clearly Martin thinks that metakinesis functions while watching other’s movement, especially in dance. He even goes as far as to say that “It is the dancer’s whole function to lead us into imitating his actions with our faculty for inner mimicry in order that we may experience his feelings.”

27 Ibid., 49.
28 Ibid., 53.
29 Ibid., 53.
By themselves, these quotes are consistent with the automaticity of motor response. They also show that Martin’s account of dance appreciation is derived from natural human capacities, ones we use while we look at nonhuman objects. Our responses to human movement are even more vigorous than these nonhuman objects, so it is just a natural way we watch movement. Thus, the tension still stands between Martin’s practical goal of helping people understand dance and the automaticity of this ability.

However, Martin sometimes talks about motor response as if it were an activity rather than just an intrinsic part of movement perception, “strange as it may seem, the spectator must employ movement in order to respond to the dancer’s intention and understand what he is trying to say.” The ‘spectator must employ movement’ is a much more active description of motor response than that of an automatic basic response. One must do something, not just look at the dance. And even more explicitly, Martin writes,

All too frequently the spectator is believed to have nothing to do except to bring himself into the general vicinity of a symphony, a painting, a dance, and let something mysterious called beauty or art pour itself over him as sunlight pours itself over a table that chances to be in its path. But if a man made no more active response to art than the table to sunlight he would experience no more reaction.

There is no clearer statement of motor response being an activity we engage in than this. Interestingly though, Martin just a few pages later still insists that inner mimicry is an automatic, simple response to dance. For some reason, Martin did not want to pursue the view that inner mimicry is an activity that we do and not just an automatic response. This time though, Martin explicitly addresses the tension I observed earlier:

30 Ibid., 31.
31 Ibid., 33.
Meantime, there remains an apparent contradiction to be reconciled. At the beginning of this chapter it was stated that the dance was perhaps the least generally grasped of all the arts, and now it is maintained that response to the dance is the simplest of all art responses. The tension Martin detects here is between individuality and the coupling of automaticity and universality. Martin wants to say that motor response is an automatic, universal response to dance, enabling dance appreciation. But he also says that dance is seldomly understood, that there is individuality in the appreciation of dance. Some people appreciate dance via motor response, but other people do not, and in fact, most people do not.

Martin puts forth a solution to the tension by claiming audiences are looking for the wrong thing.

[The audience member] goes to a dance performance looking perhaps for storytelling, or musical rhythms, or sex appeal, or with almost any other expectation except that of motor response. Obviously, under these conditions, it is all but impossible for the dancer to make an impression on him.

Instead of looking for motor response, audiences look for storytelling or sex appeal. This explanation does not appear justified. Why would it be nearly impossible for motor response to work just because one expected different things? Just because one went to the dance looking for storytelling does not mean that one would not be able to viscerally experience the movement while looking for storytelling. It would thus seem odd that Martin thinks that one’s motor response would be severely inhibited if one would be looking for storytelling. This is even odder when one considers that motor response was supposed to be the simplest of all responses. An expectation that expects a more complex response should not inhibit a simpler response, at least not without further explanation.

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32 Ibid., 54.
33 Ibid., 54-55.
The key to understanding Martin’s resolution of this tension is by noting that he does not merely say “the simplest of all responses” but “the simplest of all art responses.” One can read this as restricting the domain of comparison to only a specific class of responses, which result from engagement with art as art. This anticipates some of the remarks that McFee made from the last chapter where he argued that motor responses could not be a part of dance appreciation because they were not unique to appreciation of dance. I have already rejected that argument, but it is worth noting that Martin does think motor response is an art response and not just an ordinary one.

Thankfully we have a general idea of what Martin thinks of art responses. Recall that this was said at the end of a previous quote, “But if a man made no more active response to art than the table to sunlight he would experience no more reaction.” Thus art responses are not simple, passive responses to stimuli. They are something one actively does when one engages with art. There is something that one does when one engages with dance. What is that thing? Motor response. One must employ movement as an audience member to have the appropriate dance responses.

This can still be consistent with Martin’s claims that motor response is instantaneous and the simplest of all art responses because it is a comparative claim. It is only saying that inner mimicry is simple compared to other active art responses. But, even if it was an absolute claim of automaticity, it can still be automatic while doing the appropriate action, in this case perhaps the action of imagining that you are moving with the dancers, activates the automatic part of

34 Ibid., 33.
motor response. The automaticity of motor response is conditional on first actively responding to the dance in the right way.

Furthermore, this helps explain why expecting story telling or sex appeal from the dance would inhibit inner mimicry, and thus helps resolve the tension Martin perceived in his account. If you are going to dance expecting to figure out its story and being entertained by it alone, then you are not activating your motor response faculties. You are just doing the wrong thing, and thus the mysteries of the dance are closed to you.

Martin was engaged in a theoretical project, explaining how dance was valuable, combined with a practical project, enabling audiences to appreciate dance better. Martin’s theoretical approach to motor response was to argue that motor response was the simplest of all responses to dance. It was automatic and universal. Everyone would be swayed by dance if they saw it. However, his practical goals remained in tension with these beliefs. His wanted to help an audience come to appreciate the novel art form of modern dance. This implies that not everyone appreciated dance and that the process to appreciate dance was more complicated than just simply going to a performance and watching the dance. He thus attempted to reconcile these properties together, and one could debate about how successful he was at either his practical or theoretical goals. Nonetheless, his account of motor response was extremely influential within the dance world, with many dance theorists and critics utilizing the concept within their writings. We shall see that the four properties that Martin at various times claimed for motor response, automaticity, activity, universality, and individuality, show up as well.
3.5 After Martin

Margaret H’Doubler was an influential figure in the growth of American modern dance, especially regarding higher education. Before her, dance was typically a part of physical education instead of being its own major and field of study. She founded the University of Wisconsin at Madison dance department and was subsequently quite influential in dance education. In one of her writings, she discusses motor response as an important part of the choreographer’s toolkit, “[The] purpose [of dance as an artform] is to execute movements whose dynamics and body positions embody expression and have the power to arouse similar forces in the onlooker.”35 And she continues:

So the particular problem…of composing is…finding…movements whose patterns and tensions, acting as emotive forces, will cause similar stresses and strains in the observer. To this end the dancer employs distortion as a means to stimulate and heighten awareness of feeling states through the visual design of his movements.36

H’Doubler’s comments are notable in that they take the emphasis of motor response away from the audience member and more squarely on the choreographer who uses motor response as a tool. They also reveal an implicit understanding of motor response which has some rather complex components. There is automaticity. H’Doubler assumes that one needs to find the movements that are more likely to cause motor responses, and in particular, mirrored motor responses, in observers. But we also have an admission of individuality of motor response in that not all movements or combinations of movements will result in the mirrored motor response, one must choose the movements that do result in mirroring. But it still admits of generality

36 Ibid., 137.
because it seems to assume if you find the right combination of movements, people will mirror them.

The implications of H’Doubler’s comments for an account of motor response could be more thoroughly elaborated on, but it would take us too far away from our goals. It is most important to note that you have many of the qualities that Martin first theorized to be part of motor response in her account, automaticity, individuality, and generality. A quick survey of other dance scholars shows some inheritance from Martin as well. Valerie Preston-Dunlop wrote about the, “awareness empathetically of the kinaesthetic experience of another person (dancer): bridging the gap of awareness between one person’s movement and another’s perception of it as bodily experience.”37 (activity) Walter Sorell wrote about, “the inexpressible dialogue occurring between dancers, and between dancers and audience; the experienced sensation over and above what can be reiterated in words.”38 (activity and automaticity) Roger Copeland wrote, ”the brand of empathy that most directly unites the dancer and his or her audience”39 (automaticity) Francine Watson Coleman explored, “[a] way of appreciating dance works which is intimate and personal involving the spectators’ will to engage with the two intellectually, through kinaesthetic empathy, through emotional involvement and through allowing his imagination to respond to the work”40 (activity and automaticity) In Russia, Fedor Lupokhov wrote, “The art of dance is a

great art by virtue of the fact that it is capable of conveying real experiences through movement, but its effects are emotional, rather than visual.”⁴¹ (generality and automaticity).

The legacy of these and other attempts to tie dance with spectators’ motor phenomenology is evident in the writings of both choreographers and dance critics. Elizabeth Streb’s work arguably works directly through the stimulation of motor phenomenology in her audiences. Her work has a brutal and dangerous quality to it which often leads to extreme discomfort in the audience. Regarding a dancework where each of the dancers are locked in small transparent boxes stacked on one another, she speaks:

For a good month I was completely startled by the reaction of audiences, which was pretty vociferous. I didn’t understand that it wasn’t just a zany, weird thing. It had some kind of resonance for people in their lives, like, “Oh, my God, don’t do that, please!”⁴² Streb observed in her audiences an intense negative reaction, that was likely caused by audiences reacting in their own bodies what it would feel like to be locked up in that tiny little box.

Today’s dance critics also refer quite often to motor response. For example, New York Times dance critic, Alastair Macaulay, writes of Frederick Ashton’s choreography that in addition to being a master of ballet’s classical movement, he made dancers, “bend, arch, tip, and twist their torsos in ways… [that make] his style more kinesthetically affecting than any other choreographer’s.” He even says that while “watching [his choreography], you feel the movement so powerfully through your torso that it is often hard to sit still in your seat.”⁴³ Though these choreographers and critics do not speak much about motor response and its nature, one can reasonably assume that they have inherited similar understandings of what it is from the

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⁴¹ Fedor Lopukhov, Writings on Ballet and Music (Madison: University of Wisconsin Press, 2002), 70.
scholars like Martin who have theorized more extensively about it. One might ask what is important about these qualities. Is it important that our understanding of motor response is automatic, active, individual, or general? As I hinted at earlier, I think Martin’s use of all these qualities in his account of motor response was derived from practical and theoretical motives. There is more to be explored regarding these motives and what we are looking for in a sufficient account of motor response moving forward.

3.6 Moving Forward

Earlier we noticed and helped reconcile a tension in Martin’s account of motor response. He wished to use four different qualities in his characterization of motor response: automaticity, activity, generality, and individuality. The problem came when trying to assert that motor response was an automatic and general property of how we view movement, along with the acknowledgement that many people do not in fact experience motor response. Activity was a way of resolving the tension. The fact that we were not doing the right things led to the reason for people not experiencing motor response to dance, and by consequence, not understanding dance.

One question to ask is why we should include any or all four of these qualities in an account of motor response in the first place. What good are they doing? I think that we can divide them into two categories: veridicality and flexibility. Automaticity and generality would be placed under veridicality and activity and individuality would be placed under flexibility.

I want to say in advance that this categorization is not intended to be a conceptual truth. Just because motor response is automatic does not guarantee that our motor response is veridical. But it might be thought that it helps motor response be so. Taking veridicality for example, one might try to explain that motor responses give us truth about the world because they occur much
like sense perception. They are automatic. They happen independently of our will and occur whenever we look at movement. One might think that automaticity tends to be in line with accurate motor responses because, the reasoning is, if motor response is automatic, then it is less likely to be altered through subjective desires and imaginings, and therefore more likely to accurately represent the motor phenomenology of the actions we watch.

Motor response may also be general in some sense, in that they are a normal part of human perception of movement. While not directly tied with veridicality, generality is sought insofar as it enables agreement between people. If our motor responses were so particular to our own individuality, then motor responses will be likely more the subject for disagreement. For example, say we thought that the bourrées in Dying Swan were expressive of a profound, frantic sadness. And say the only way we could detect this sadness was through motor responses. If we all had different motor responses to these bourrées, then any attribution of profound, frantic sadness to the dance would be questionable. Thus, we would need an account of motor response that has reliability across multiple people.

The immediate picture we are given from an automatic, universal kinesthetic sense is that it is at odds with facts about people’s engagement with dance. Most people do not have automatic, regular motor responses to dances presented on stage. While it might seem desirable to have the same kind of veridicality in motor responses to dance, it just does not fit the facts. Furthermore, it might seem desirable to have our motor responses flexible; maybe how we should respond to a situation is not how we are initially inclined to. One might be initially inclined when seeing the dancer en pointe, to be a bit repulsed, to feel like it hurts one’s own feet. But this seems precisely the wrong kind of response to the ballet dancer. Responding
appropriately to the norms of ballet would require one to feel a sense of weightlessness while watching the dancer. Flexibility thus is also a desirable trait of an account of motor transfer, and flexibility can be facilitated by thinking of motor transfer as an activity. Motor transfer is an activity just in case it is the product of an active willing. If motor transfer is the result of an active will, then we can alter it and change it as we will, giving the range of possible reactions we can have to movement a greater range of flexibility. This is in direct tension with the desire for veridicality. Making room for active willings, imaginings, and the like, introduces room for error and permits our motor reactions to ‘float free’ of the actual motor phenomenology of the movement we see. Insofar as we wished to include automaticity as a part of motor responses for the purpose of making sure motor responses are accurate, adding in motor transfer as an activity is inconsistent with this.

Because of the flexibility gained through an active account, we also have the consequence that there will be increased individuality of motor phenomenology responses. The more control we have over how we react to movement, the more our own beliefs, desires, and values will be in play at altering them. And because our beliefs, desires, and values are specific to our own individual selves, the reactions we will have as a result will be specific to ourselves as well. This is again at odds with veridicality but this time with the aspiration that motor transfer be universal. Our reactions are no longer guaranteed to be widespread or similar from person to person. Not all normal humans will have similar reactions to movement if we add in significant flexibility.

As we move into the next chapter, we have a negotiation to make between meeting the demands of both veridicality and the demands of flexibility. We will look at existing accounts of
motor response which have come from philosophers recently, and see if they adequately handle these demands
Chapter 4: Contemporary Accounts of Motor Response

The last chapter extracted two concerns which need to be addressed in any theory of motor transfer: veridicality and flexibility. On the one hand, we want motor transfer to give us accurate representations of movement. On the other hand, we want there to be flexibility in the variety of representations movement can provoke. While one might be tempted to suppress the concern for flexibility, it flies in the face of empirical facts: people do often respond differently to the same movement. While some people might feel the soaring loftiness of the leap, others might not feel anything. While some people might find the contractions in Martha Graham’s dances graceful, others might find them awkward. Contemporary accounts tend to focus on guaranteeing the accuracy of our motor responses to movement, their veridicality. Flexibility is typically brought in as a secondary concern. In this chapter, I will argue that the emphasis should be reversed. We want an account of motor transfer that emphasizes how it can adapt and change our motor responses. Accuracy should only be of secondary concern. This is in part because actual veridicality seems too strong a goal. More importantly, however, I will argue that the veridicality of motor experiences is rarely of utmost concern. What we want is veridicality of kinesthetic properties, not veridicality of motor experiences. Sometimes these two may coincide, but often they will come apart. And in order to assure the veridicality of kinesthetic properties, we need a greater emphasis on the flexibility of motor responses.

4.1 Veridicality Accounts

As discussed in the previous chapter, there are two veridicality properties which have been given to motor transfer: automaticity and generality. Two main philosophical accounts today attribute these properties to motor response: Barbara Montero’s view and Noël Carroll and William
Seeley’s joint view. These two properties, when added to the general account of motor transfer considered thus far give us this account of motor response:

**Automatic and General Motor Response** df-> a capacity whereby any normal human watching human movement will automatically receive motor phenomenology, accompanied by the usual visual phenomenology.

This adds the notion that motor response applies to any normal human and that it occurs automatically. Of course, this is not enough to assure that motor response is veridical. The motor phenomenology gained, though automatic and general, may still not be accurate to what it is like to perform the movement we see. Added empirical assumptions must be made on top of that. For example, Montero’s appeal to mirror neurons is an attempt to show that the motor phenomenology is in fact mirrored by our brains when we watch dances. Furthermore, she typically uses the phrase “motor perception” when she is talking about motor response, implying that we are perceiving the motion accurately through our bodies. Carroll and Seeley appeal to evidence concerning point light displays and that our ability to detect accurately the movement seen is reliant on motor activation. Depending on how this evidence is read, one might think that the brain is interpreting the motion within the framework of what it would take to perform that movement.

As I said earlier, both accounts add in the flexibility of motor transfer as a secondary concern. They add in one of the two assurers of flexibility, particularity, while ignoring the other one, activity. This is presumably because they recognize the empirical claim that people have different motor reactions to the same movement. Montero puts forth the thesis that training in dance refines and develops motor response, which increases the accuracy of movement judgement. Carroll and Seeley are somewhat skeptical that training in dancing is required to
develop this repertoire and present evidence that sometimes just watching dance will be by itself sufficient to strengthen the ability for us to discriminate motion cues.

4.1.1 Mirror Neurons

Montero’s earliest piece on motor response focused mostly on whether proprioception can enable us to perceive aesthetic properties. The paper focused mainly on whether you could feel aesthetic properties like gracefulness while dancing, through proprioception. It then also argued that while watching movement, you could feel what it is like to perform that movement. Thus, proprioception could be used to feel vicariously what it is like to do movement you see. It just needed vision to be an intermediary. She argued further that this is still proprioception, it just needs vision to be involved to provide the body with sensations.¹ One way of putting this is that in motor response we are sensing the movement that mirror neurons transfer to our bodies while watching it.

Recall from the first chapter that this way of putting it leaves open the question of whether the motion our proprioceptive capacities detect are the properties of the motion we see or our own body’s interpretation of what it sees. Montero equivocates on this issue in her paper, especially when she says that we are, “proprioceiving the dancer’s movement.”² Are we really proprioceiving their movement? Or are we proprioceiving our bodies’ reinterpretation of their movement? Presumably she wants to say that because mirror neurons are supposed to replicate

¹ It is worth noting that this assumes a controversial metaphysical premise about how senses are distinguished, mainly that senses are distinguished by the type of content gained. In this case, it is that the content acquired is content about what is going on in our own bodies. Proprioception on her account would therefore be distinguished as the sense which provides this content. If, however, one looked to another way of distinguishing senses, such as a causal process account, where senses are distinguished based on the actual causal process that provides the content, then proprioception would not

what it would be like to perform the action, we are still proprioceiving their movement and not just ours. However, the scientists she quotes do not speak of mirror neurons in this way. They say, “by means of [the mirror neuron] system, the observer during action observation is placed in the same ‘internal’ situation as when actively executing the same action.”3 The authors do not say that the observer is placed in the same internal situation as the doer, but as when the observer themselves execute the same action. This is consistent with how these experiments are done on these monkeys. They track the neuron activation of a monkey when they perform an action and when they watch someone perform the action, then they record the similarities between the activation while doing it themselves and watching it. The similarity is not between the neuron activation of the mover and the moved. It is between the moved when they are watching and when they are doing. Talk of mirror neurons is misleading in that we are not mirroring the internal situation of others, but rather we are placed in the same internal situation as it would take for us to do the movement. Therefore, the view that we are in some sense perceiving others’ bodily sensations does not seem warranted from evoking evidence concerning mirror neurons. At best, we are perceiving our own body’s interpretation of what it would be like to perform the movement seen.

On another front, the research on monkeys is unclear as to whether mirror neurons will be activated while humans watch dance. You might think, along with Montero, that mirror neurons work in humans in the same way or in a similar way that they do with monkeys. Let us grant that claim: human brains mirror movement in the same way that monkey brains mirror movement. If this is the case, then it is not clear that mirror neurons will support dance

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appreciation. Researchers make it clear that for Macaque monkeys, mirror neurons do not activate when someone is only mimicking actions. As Gallese and their team of researchers put it:

Even when the monkey saw both the hand miming an effective action and an object appropriate for it,...[the activation of the neurons with mirroring properties] was absent when the action was not directed toward the object.4

If mirror neurons are only supposed to be activated when someone is doing something like grasping or manipulating objects, then it would seem odd to say that mirror neurons will be active while we are watching most dance. Solo dances without props are rarely going to include any interactions with objects. Some dance consists of touching and interacting physically with other dancers or props, but this is far from what people usually have in mind when they are talking about motor responses to dance. The effortlessly held and gracefully performed arabesque typically does not include other objects at all, let alone relating to them. Furthermore, dance is typically abstracted away from ordinary objects, so it is more like miming grasping movements than performing grasping movement with objects. Thus, it is doubtful that mirror neurons, at least as we have found them to work in Macaque monkeys, will have much relevance to the perception of most dance. There might be some limited relevance; say when we watch someone being lifted, the same neurons are activated that would be required to lift that person. However, this is hardly the full extent that motor responses are claimed to work in dance. Montero claims motor response is ubiquitous in our perception of dance, thus while mirror neurons might play a part in the story about how we respond bodily to dance, it can hardly be central.

On the other hand, you might think that mirror neurons work in different ways in humans than in monkeys. For example, David Davies and the scientists he draws on argue that human brains may not mirror in the same way that monkeys’ brains do. But this casts doubt on, rather than supports, the claim that we mirror the movement we see. One would have to say that mirror neurons still mirror in humans but work in different ways as well. By itself, this is a coherent view. Perhaps humans can recognize mimed movement and monkeys do not. The monkeys do not mirror mimed grasping, as they would never mime grasping. While humans can mirror mimed grasping, in part because they themselves mime grasping actions and other kinds of action. Miming grasping is something humans do but monkeys do not.

Why should we think that the differences end here though? Human engagement with the world and other people is much more complicated than monkey engagement with other monkeys. A wider array of other kinds of motor engagements than mirroring could be available to us. Maybe instead of mirroring a punch, we flinch internally as if we were at the end of that punch. Perhaps when we watch a ballet dancer bourrée-ing, we are not feeling the pain it would cause for us to perform such a feat en pointe, but we are feeling a sense of weightlessness and buoyancy. Neither of these cases seem far-fetched and in fact seem to be reflective of everyday experience with dance and movement. So, if monkey motor response is unlike human motor response, the difference will be reflected not just in the kinds of movement we respond to, but also in the kinds of motor response we have. Mirror neuron evidence from monkeys, then, cannot be a source of motor response veridicality.

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Montero’s claim that we are in any literal sense perceiving the internal situations of dancers while dancing does not appear to hold. Mirror neurons do not and are not theorized by scientists to replicate the internal situations of dancers. At best, they replicate what it would be like for us to do that movement. This is not a property of the movement we are seeing, but a property about ourselves. Furthermore, it appears that mirror neurons as they have been discovered only activate in a limited range of actions, mainly goal directed actions related to grasping and manipulating objects. Thus, mirror neurons cannot do the work of helping us vicariously sense movement, at least not without changing how they work. But if they change how they work in humans, then it casts doubt that they are still mirroring as well, and thus the veridicality of motor response is no longer supported, at least on these grounds.

4.1.2 Dance Training

Despite this, studies do show that portions of our brain associated with performing movement do activate while watching it. Also interestingly enough, this activation seems to increase if you have expertise in performing the movement. Montero fields a variety of experiments which all point to the conclusion that training in dance facilitates motor activation. For Montero, this is what permits flexibility despite veridicality. One’s capacity for motor response is supposed to be developed through training in that movement style. So, there’s an increased individuality of motor responses because there is a wider array of expertise in the given movement style.

I also believe that one can use these studies to establish veridicality for motor response. If the degree to which you receive motor transfer is proportional to whether you have experience performing those kinds of movement, then it stands to reason that your experience will be more accurate to the experience of moving in that way. So, this route can simultaneously explain why motor responses are often not experienced by audience members watching dance and why we
can think that motor responses latch onto what it really would be like to perform the movement. Montero even suggests that skepticism about motor response might be in part caused by lack of dance training:

Perhaps those who doubt the existence of kinesthetic responses to dance...should be open-minded, at least until they have had some dance training themselves since kinesthetic responses to dance are facilitated...by having danced oneself.  

In support of her view that dance training enables motor response, Montero cites three sets of studies. The first set are neuroscientific studies which show that those who have expertise in seen movement have greater activation in the areas of the brain associated with motor preparation. In one study, they compared the activation of experts in capoeira to the activation of experts in ballet. When watching motions of ballet, the ballet experts had greater activation in those areas than the capoeira experts. The opposite held true as well. A control group of nonexperts showed no difference.

Another study followed a group of dancers in rehearsal over a five-week period. Their brain patterns were routinely recorded in response to a series of movements, some of which were movements they were actively rehearsing. They recorded an increased amount of brain activity associated with movement over five weeks when watching movements, they were concurrently rehearsing compared to movements they were either not rehearsing or could not perform. Under the assumption that rehearsing movement increases your expertise in performing that movement, then it seems that the relationship between expertise and motor response is supported.

One might wonder, however, if this is a result of increased experience dancing the steps, or if it is just a result of watching those movements more. Ballet experts do spend more time watching ballet movements than capoeira movements and likewise. Dancers in rehearsal spend a lot of time watching these specific movements and have watched them many times recently. It would be no surprise if they have increased activation due to having more experience watching those movements.

Another study she cites controls for this by comparing ballet experts of different genders. They presented male and female ballet dancers with a series of videos, some of which display gender specific movements and the others are gender neutral. Their results indicated that, "experts had greater activation when observing the specific movements that they could perform than when observing movements that they were not used to performing." In addition, she also cited behavioral studies supporting the conclusion that nonvisual motor learning increased the abilities of people to visually discriminate movement. Thus it would seem reasonable to think that dance training increases the degree to which movement-associated parts of your brain activate while watching dance you are trained in.

These studies help to provide support for the view that there is motor response in human beings when watching movement. But most importantly, we now have some account of the flexibility of motor response and its veridicality. The reason, or at least a reason, why people have different responses to watching the same movement is because of their expertise.

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10 Ibid., 1907.
performing that movement. Those who are better trained in the styles of movement have greater motor activation in the brain than those who have little to no experience in it. The source of the flexibility of motor response is also presumably the source for its accurateness. It is what makes her account a relatively simple but powerful view. Our motor response differs because of our degree of expertise in performing the movement we see. The greater our expertise, the more our brain is activated. Since the main factor is the degree of capability of performing the movement, greater motor response would reflect greater accuracy of the response. The response is grounded in the viewer’s expertise in performing that movement, leading to a more accurate response in relation to its degree of activation. Whether that motor activation translates into a phenomenologically salient motor response is yet to be seen or argued for. I will have more to say about this after I have considered Carroll and Seeley’s view.

4.1.3 Cross-Modal Movement Perception

Carroll and Seeley opt for an account of motor response based on a cross-modal relationship between the sense of sight and the sense of proprioception.\(^\text{12}\) Cross-modal relationships between these two senses, as well as touch, are familiar in the philosophical literature.\(^\text{13}\) In this case, Carroll and Seeley claim that the visual perception of movement relies upon interaction between vision and proprioception. On their view, motor response is a way in which sight and proprioception work together. They argue this cross-modal capacity is required


...to generate and maintain representations of task-salient aspects of the perceptual environment, including the kinematics (trajectories) and dynamics (force) of perceived movements in the case of dance and action recognition.\textsuperscript{14}

In other words, they claim that to comprehend movement, one needs to use both vision and proprioception.

Behavioral and neuroscientific studies using point light displays support their claim.\textsuperscript{15} Point light displays are videos of movers that only show points of light on the joints of the movers. All other aspects of the visual appearance of the movers, including facial expressions, posture, body shape, and configuration of the limbs, are omitted from the videos. In these studies, viewers easily recognize the motion of human and animal movers in the displays. This is true for simple actions, goal-directed actions, complex social interactions, and even abstract dance movement. They also recognize qualities of the mover such as personality traits, affective states, and emotions of the movers. However, they have trouble recognizing movement when it is of abstract geometrical figures and when the points of light are located on non-joint parts of the body, e.g., the forearm or abdomen.

According to Carroll and Seeley, these studies suggest that the “kinematics of coordinated joint movements are alone sufficient to enable perceivers to recognize the behaviors of others and the expressive qualities of their movements.”\textsuperscript{16} Carroll and Seeley point to how this movement-recognition capacity affects parts of the brain and what occurs when one sense, proprioception or sight, is damaged. Watching point light displays for movement is associated

with increased activation in the premotor cortex, the area of the brain responsible for proprioceptive processes.\textsuperscript{17} So proprioceptive brain areas activate while watching movement.

The strong interdependence is indicated when one of the two areas of the brain is damaged. When one suffers from visual form agnosia, the loss of the ability to recognize objects and events from their shape, one can still recognize the movement displayed, despite being unable to recognize the person moving as my friend, or long-haired, or older than me. By contrast, the loss of proprioceptive capacities results in being unable to recognize the movement seen, though one can still recognize the mover as my friend, or long-haired, or older than me.

It appears, given the evidence, that Carroll and Seeley have pointed to a cross-modal capacity which could be taken to underlie motor response. Their view includes the veridicality-assuring properties of both automaticity and generality. They explicitly claim automaticity:

\begin{quote}
...sensorimotor processes are automatic causal-perceptual processes by which a perceiver involuntarily discriminates subconscious bodily cues diagnostic for the kinematics and dynamics of biological movements...\textsuperscript{18}
\end{quote}

Furthermore, given that the cross-modal relationship is a part of our ordinary perception of human movement, it is granted generality as well. They are also, like Montero, aware that there needs to be an account of the differences of reactions in human beings. They seem to be willing to take on Montero’s evidence of dance training affecting the activation of motor response, but they are hesitant because this limits its generality. If dance training is required for motor response, then most audiences will not be able to appreciate dance fully without it. Furthermore, the gendered nature of some of Montero’s evidence seems to conflict with how the dance


community seems to think about motor response.\textsuperscript{19} They point to some evidence that shows that visual familiarity with dance is sometimes itself sufficient to generate motor response.\textsuperscript{20}

For Carroll and Seeley, the veridicality of motor response is grounded because it is a basic feature of our perception of movement that we use brain areas related to movement to understand movement. With those brain areas damaged, we lose our ability to identify the movement. The veridicality is implied by the studies themselves. They also seem to think that the flexibility of motor response can be due to dance training but also provide evidence that watching dance can increase our motor response capacities. So, if they are right about this, not only does greater dance training strengthen the motor response, but also time spent watching dance. Thus, the evidence and accounts provided by all proponents of motor response seem consistent to one another, and could provide the basis for a coherent, complete account of motor response.

\textbf{4.1.4 Common Problems}

We have found that the same region of the brain is associated with reactions to two different situations: performing movement and watching movement. When we watch movement, the parts of our brain required to perform movement are also required to understand the movement. A question remains, however, as to whether there is any bodily \textit{simulation}, if by simulation we mean that the person is feeling what it would be like for them to perform the movement. It could merely activate a motor representation in that part of the brain that has no attendant bodily


experience. While watching a pirouette, the brain could merely be recalling the idea of performing a pirouette without providing motor phenomenology of the pirouette in the watcher’s body. There is nothing within the studies cited which implies that motor qualia are stimulated through watching dance. This is a problem that needs to be overcome when you are using scientific studies to support the existence of motor response. Recall that the most minimal definition of motor response required that watching movement gave rise to motor phenomenology. In order to claim that these scientific studies give support for the existence of motor response, you need to give some reason for thinking motor activation in the brain gives rise to motor phenomenology. Otherwise, your support risks “changing the subject” from what we talk about in the danceworld, motor responses which have qualia and are introspectively accessible, to only support for motor brain activation. While motor brain activation is an interesting claim for understanding how the brain works while watching dance, it is not strong enough to support the claim that this activation gives rise to motor phenomenology. This worry is important not just to the existence of motor phenomenology while watching movement, but also for understanding the relationship between brain activation and motor phenomenology. The goal of developing a better understanding of this relationship could be incorporated in experiments in the future such as through a self-rating scale. As is, however, the claim that these neurological activation supports the existence of motor response as understood by the danceworld is speculation.

Another problem with these accounts is that the flexibility condition is not truly met. As we saw, each view attempted to add flexibility into their accounts, Montero through movement expertise, and Carroll and Seeley through visual expertise in combination with movement expertise. Flexibility does not require just that there is some flexibility in accounts of motor
response, but that the flexibility accounts for the variety of actual experiences with watching movement. This is a problem that derives from the fact that they prioritize veridicality the way they do.

Neither Montero nor Carroll and Seeley account for the reason why the most dance audiences do not experience motor phenomenology while watching dance. Montero tries to account for this by claiming that dance experts have greater activation in areas of the brain associated with movement than nonexperts. But nonexperts still do have motor activation in their brain; they just don’t have as much. If activation is supposed to translate into motor phenomenology in a straightforward way, then nonexperts should still acquire motor phenomenology, just maybe do a weaker degree. Of course, you could add in a premise that you need a certain degree of brain activation to obtain motor phenomenology. But this premise as it stands is ad hoc and does not stand supported without additional evidence. If one wanted to pursue this line further, this gives additional reason to acquire information about the relation between motor brain activation and acquire motor phenomenology. However, it cannot be asserted with the evidence provided by proponents of motor response. As is then, these accounts do not provide an explanation for the variety of motor responses. While they provide for some flexibility and training of motor responses, they do not explain why the average person does not experience any motor phenomenology while watching dance.

Both worries, the motor phenomenology worry and the flexibility worry, are worries that are about the state of the current empirical evidence. And in line with David Davies’ understanding of the debate, you can be both pessimistic about what that evidence will eventually tell us or optimistic that it will clear the hurdle of these doubts. I think, however, there is a way to arrive at our conclusion, that motor response exists, without waiting for this
evidence. What is required though is rethinking our accounts of motor response and reconceptualizing motor response as an activity. This does not obviate the need for more empirical evidence on the concerns mentioned above either, but it does get us to the existence of motor response quicker and can be illuminating for those more skeptical of it.

4.2 A Paradox

Let us focus on the tension between the veridicality accounts and the tension with the lack of detected motor phenomenology among the general public. Let us put this tension in terms of a paradox. The first part of the paradox is a reiteration of the account of motor transfer which includes the veridicality properties of automaticity and generality.

**Automatic and General Motor Transfer** df-> a capacity whereby any normal human watching human movement will automatically receive motor phenomenology, accompanied by the usual visual phenomenology.

Then let us test this account by adding in two relatively safe empirical assumptions:

1. Humans regularly watch other people’s movements.
2. Humans are not typically aware of motor phenomenology while watching others’ movements.

The veridicality account offered above is in tension with (1) & (2). The veridicality account, if true, would predict that as regular watchers of others’ movement, humans would be typically aware of motor phenomenology of the seen movement.

We have seen that one way to try and get out of this worry is to add flexibility into the account. In this case, we have assumptions about how dance training or perceptual training can train one’s visually dependent motor responses. The evidence seems to point to the fact that
training strengthens our motor response, because it increases activation in motor areas of the brain.

The problem though is that (2) is not:

\( (2^*) \) Humans are only aware of minimal amounts of motor phenomenology while watching others’ movements.

The lack of dance and visual perceptual training could explain \((2^*)\), but they cannot explain \((2)\), the general lack of motor phenomenology. Remember that Martin was concerned exactly with this disparity. He thought that motor responses were the simplest of all art responses but felt he needed to explain why most people did not feel it to dance. This is still something that needs explanation, and it does not seem easily explained by existing accounts.

4.2.1 Resolving the Paradox

One solution to the above paradox requires incorporating a flexibility property into an account of motor response: activity. This property was neglected in how philosophers have been talking about motor response. The reason for this has to do with the tension between the goal of preserving veridicality and making motor response an activity we can do and control. If we want motor engagement with dance to provide automatic, consistent, and imitative motor phenomenology, then seeing motor response as an activity which we must control, do, and engage with, is at odds with that goal. If motor response is an activity, then our responses will less likely be veridical. They are more up to us, and we have a good degree of control over what responses we have to a given movement. Introducing this control makes motor response less perception-like and pushes it toward a more imaginative account. I will get back to this concern shortly after I have explained my positive account more fully.
Seeing motor response as active, and something we can control, resolves the central tension in the paradox. If motor response does not happen instantly and uncontrollably whenever someone watches movement, then this would explain why people do not regularly have the experience of others’ movement. If there is an active and controllable process by which motor response happens, then the reason why people do not have experiences of seen movement is because they are not doing the right things. This account proposes replacing the automatic quality of motor transfer with an active one, giving us:

**Active and General Motor Response** df-→ a capacity whereby any normal human watching human movement can act to receive motor phenomenology, accompanied by the usual visual phenomenology.

Motor response thus is not best conceived as automatic, but as an activity. We all have this ability; we just do not spend that much time thinking about it or actively engaging with it unless we become aware of it through engaging with human movement. There are two questions to answer at this point: Do we have reason to think such an active motor response exists? And given its existence, how do we access and refine this ability? If people have been unable to discover and access motor response, then a plausible account of it needs to point to ways we can access it. It also needs to give reason for the existence of it in the first place.

To do so, it is useful to look at two phenomena that are more widely discussed in both the philosophical and scientific communities. Let us call these two phenomena: mindreading and empathy. Roughly speaking, mindreading is the ability to see things from the points of view of other minds, and empathy is the ability to feel and understand the emotional states that other minds are in. We can see that mindreading and empathy are similar to motor response. Both mindreading and empathy attempt to gain access to what is going on in others’ minds, and motor response tries to do something similar. Motor response tries to gain a feeling of what it is like to
perform the movement we see, or to gain information about those internal sensations.

Mindreading is trying to get information about thoughts, empathy about emotions, and motor response about movement. But each one is trying to get information about others’ experiences.

Moreover, it seems that underlying neural mechanisms are similar as well. After all, part of the avid interest in mirror neurons originally was that it might give us insight into how reasoning about others’ minds is possible, as well as how empathy is possible. And this also makes sense if we think that what partially constitutes emotions are physical sensations.\(^{21}\) If empathy gives us a sense of what a person’s emotions are like, then given that physical sensations are constitutive of emotions, then we are also getting a sense of their physical sensations.\(^{22}\) These points about the similarity between motor response, mindreading, and empathy point to the conclusion that however they are structured, they likely have similar structures.

The way to access motor response then is to ask people to imagine themselves moving bodily in similar ways to the person we see. If I want to know what is going through someone else’s head, I try to imagine it from their point of view. (mindreading) If I want to know how someone is feeling, I try to imagine it given their situation and background. (empathy) So people can access motor response by imagining themselves performing movement patterns much like the dancers they are witnessing. Accessing, understanding, and developing our kinesthetic ability is going to be similar to how we develop these other capacities, through active practice.

\(^{21}\) This is a popular view about the emotions. See for example, Jesse Prinz, *Gut Reactions: A Perceptual Theory of Emotions* (Oxford: Oxford University Press, 2004).

\(^{22}\) It is also noteworthy that another term for motor response is kinesthetic empathy. I do not think it is an accident that the word empathy gets tagged onto the word kinesthetic.
Some evidence suggests that trained dancers will have easier access, given their wide range of experience moving in different ways. But this is similar to how empathy and mindreading works as well. Those who have experienced intense, passionate love are likely to be able to empathize with lovers’ actions, no matter how irrational they might seem from a third person point of view. Those who have some background in thinking philosophically are more likely to be able to understand where other philosophers are coming from than the philosophical novice who might think that these philosophers are focused on, and interested in, irrelevant questions. It appears then the analogies between these three human capacities are sufficiently close to justify aligning motor response with empathy and mindreading.

One thing that allows mindreading and empathy to be active and controllable, is that it utilizes the imagination. Part of engaging with them is being able to actively imagine and reason about others’ internal lives. They allow us to represent and see things which we ourselves are not undergoing. So, I think we should allow motor response to be connected to imagination in a very similar way.

Note then, if true, not only does the activity account resolve the paradox, but they also resolve the causal inference worry and motor phenomenology worry that were used to undermine the initial argument for motor response. We do not need to infer that movement is involved in watching dance from brain function associations, and we do not need to infer that there is motor phenomenology which results from the motor involvement. We get these properties for free, so to speak. It would be a hard sell to argue that we do not have the ability to imagine what it is like to perform the movement that we are seeing. And it would be a hard sell

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to argue that this imagining can’t result in motor phenomenology. Those are common properties that we would ordinarily attribute to imagination. And you would either need to doubt that imagination in general doesn’t exist or doesn’t afford phenomenology or you would have to think that there is some additional reason to think that motor imagination does not exist or does not afford phenomenology. Skepticism about brain data interpretations is a result of insufficient data to support one interpretation over the other in a decisive way. It is hard to come up with reasons to be skeptical of the idea that motor imagination would provide motor phenomenology. Skepticism about imagination in general requires you to be skeptical of a human capacity that is widely taken for granted, requiring a much larger skeptical edifice to motivate it. Arguing that motor imagination doesn’t afford motor phenomenology in the way that other modalities such as visual or auditory imagination does requires significant empirical work to support. Either way, it seems that pessimism about the existence of motor response has been put on the defensive.

4.2.2 Objecting and Revising

The reasons for preferring an active account of motor response are clear now. It explains why so many people watch dance and do not experience motor response and it overcomes the hurdles of reasonable pessimism. But now we encounter an objection from Montero:

I think that at times we very well may simulate the proprioceptive feelings of dancers in our imagination; however, I also think that...part of the experience of watching dance involves a more immediate or automatic proprioceptive experience.²⁵

What underlies this objection is that part of Montero’s and others’ experiences with motor response includes automatic, reflexive bodily experiences. If I use imagination as the main part of motor response, then it seems that I leave out experience which seems like motor response.

²⁵ Barbara Montero, “Proprioception as an Aesthetic Sense,” The Journal of Aesthetics and Art Criticism 64 no. 2 (Spring 2006): 238.
By identifying motor response solely with an activity, I would not be allowing for the variety of motor experiences people have to dance. Furthermore, not only am I leaving out experience, but I might also be restricting the scope of motor response as to render it useless. If I always need to actively imagine doing movement while watching a performance, then it is likely to be too demanding to do for an entire performance.

Responding to this objection is a further appeal to the analogy between motor response and empathy. One of the striking, and much discussed, features of empathy and mindreading, are that they consist of both active, controlled, considered actions of the mind and also automatic, unconscious, and quick actions.26 These are often thought to be understood as two different systems of the mind for mindreading and for empathy, but there is room for thinking that it is one continuous system which is used in two different ways.27 For my purposes, it does not matter much if you have a Two-Systems Account or a One-Systems Account. The point is that it is commonly accepted that these two actions of the mind have both automated and active components. I think that it is plausible enough to consider motor response as having both components as well. There is an automatic process that occurs below the level of consciousness and allows one to gain information about what it is like to perform movement.28 But there is also the more active, consciously controlled action which utilizes imagination to give us a feeling of the movement. Now I am leaving the exact relation between the two types of processes

28 Note further that this makes my account completely consistent with the empirical evidence brought into the discussion by Montero, Carroll and Seeley. Either empirical evidence could very well underlie the automatic aspects of motor response in my account. In fact, it is likely that both sets of empirical evidence will be important for the automatic aspect of motor response.
ambiguous, as the relation between the processes in empathy and mindreading are also contentious. But I do suspect that the more conscious, active process will be able to help pattern and correct the more unconscious one. Thus, we are left with an account of motor response that looks like this:

**General and Active or Automatic Motor Response** df-> a capacity whereby any normal human watching human movement can act to receive or can automatically receive motor phenomenology, accompanied by the usual visual phenomenology.

The disjunctive nature of this account might be inelegant, but it is there to allow for more empirical work as to the relation between the more active and automatic aspects of motor response. A fuller account of that relationship will be a boon to our understanding of motor response, but I shall leave that work to be done empirically. Reasonable pessimism about the automatic aspects of motor response remains. But they are just that now. They are pessimism about whether the empirical data can ground automatic motor response. They are no longer skeptical worries about whether motor response exist.

### 4.2.3 Rethinking Veridicality

One reason for focusing on activity in my account of motor response was to explain why most people while watching dance do not feel any motor phenomenology. If people were supposed to automatically gain motor phenomenology while watching dance, there was no room to explain the widespread lack of it among watchers of dance. It was to account for the flexibility and variety of experience. Automaticity is typically seen to aid the goal of veridicality. However, in my justification for automaticity’s inclusion, I included it based on flexibility. We want multiple routes to motor phenomenology. An active account of motor response by itself does not account for the variety of ways we acquire motor phenomenology. We need automaticity as well.
Where does this leave the goal of veridicality? Suppose one would agree with me that we need an account of motor response that has the looseness I have put into it, but still the overarching goal should be veridicality of motor response. When both actively engaging bodily with the movement, and when automatically reacting, we still want these responses to imitate or mimic the actual motor phenomenology of the dancers. My account is still consistent with veridicality being the main goal of motor response, it just makes this veridicality harder to achieve because of the addition of activity in the account. Just because there is more room to be wrong about motor response does not mean that we cannot be right. Similarly, just because there is room to be wrong about actively imagining what someone’s depression is like, does not mean we are always wrong, or we cannot be accurate in some more vague, looser sense.

I believe this is undesirable when it comes to appreciating dance. It may sometimes be important to the appreciation of a dance to have motor phenomenology that mimics what the dancer feels. For example, in a trio from Pina Bausch’s *Café Müller*, a woman is repeatedly elevated into a man’s arms and then dropped brutally to the ground, and it happens repeatedly, accelerating every time. If one did not feel some accurate sense of the harshness of that series of falls, one would be missing the point of the moment. Veridicality of motor response matters here. But the reason why we want that, at least in dance, is not because veridicality is itself of primary interest, but because sometimes the kinesthetic properties of the movement match what it would be like to perform the movement. The desire for veridicality is generated from the practical goal of understanding and appreciating the dance, not from its own intrinsic worth. The reason why one’s painful flinching in the *Café Müller* trio is desired is because it helps us make sense of the meaning of the dancework. Thus, veridicality understood as veridicality of motor phenomenology imitation is not of primary concern. The veridicality that is of utmost concern is
that you have the proper motor phenomenology reaction to the movement seen, one that responds appropriately to the movement, given the context of the dance. Thus, it is not veridicality of motor phenomenology that should be our concern in dance, it is veridicality of kinesthetic properties, the ones that are embedded in the dance.

This requires that there is at least sometimes an asymmetry between the actual motor phenomenology the dancers experience and the kinesthetic properties of the dance. If all kinesthetic properties of the dance were the actual motor phenomenology of what it takes to perform the movements, then veridicality of kinesthetic properties and veridicality of motor phenomenology would be extensionally the same, such that concern for one would entail concern for the other. This seems false. Often in dance, there is a disparity between what it feels like to perform the movement and the motor reactions we are supposed to feel. The dancer might not feel like they are floating as they are bourrée-ing across the stage. They will often feel that what they are doing takes enormous amounts of effort and concentration. It might even be painful if their toes are broken. Furthermore, audience members who do not have sufficient dance training would likely be in more pain if they tried to do it themselves. Thus, veridicality of motor response understood in terms of both accuracy to the dancers’ experience and accuracy in terms of what it would be like to perform it oneself, does not seem to be the goal of much dance. And this applies not just to ballet but to most forms of dance. Take the example of the Café Müller trio, for example, while it might appear that the falling is painful to us, causing us to flinch, the dancer might not be feeling much pain at all. In part this could be because of adrenaline and being in what might be called a “flow state” but it is also because dancers have learned how to fall properly such that falls like that do not hurt or at least not as much. Another example of this would be the work of Elizabeth Streb which relies on an illusion of pain to the
dancers. Her technique consists in part of dancers falling both forward and backward from a vertical to a horizontal position with no gracefulness whatsoever. They fall. There is a sense of strong impact, but the dancer is left unharmed. But her work in part is so enticing because of a perceived sense of danger and impact, even if that impact and harm is not real and only appears so.

Insofar as veridicality is an aim of an account of motor response, it is not veridicality of motor phenomenology, it is veridicality of kinesthetic properties which are embedded in the dance. Achieving that goal requires rejecting the aim of motor phenomenology veridicality. While sometimes we might want motor response to be veridical, this is not often the case, and it is never pursued, but rather as a means for understanding the dance better.

4.3 Pushing Forward

I have examined existing accounts of motor response in this chapter which seem to prioritize motor response’s veridicality over its flexibility. Flexibility was brought into these accounts to explain how some people could be better or become better at responding bodily to dance. However, they have problems explaining how most people while watching dance do not respond bodily. A different account which prioritizes flexibility explains this better. On this account, the reason why most people do not feel motor responses to dance is because they are not doing the right things. In Martin’s terms, they are not “employing movement” to understand the dance. An account of motor response with activity like what I have proposed, as opposed to a strictly automatic, reactive account, helps to give deliberative guidance to the audience member as to how they should appreciate the dance bodily. The advice to employ movement, to imagine what it would be like to move as seen, can help audiences to appreciate dances better, especially ones
which are more movement oriented, which previously had left them unmoved. This, in tandem with norms about genre, dance practices, and choreographers’ intentions, can help guide an audience into a better understanding of the dance.

To give a concrete example, someone says when asked about whether they like ballet, “I just cannot watch ballet. It hurts me to even think about how painful it is to go up en pointe like that.” A strength of an account like mine is that it does not need to direct the audience member to learning how to do ballet. It can say when they are imagining doing the movement they are seeing, they are focusing on the most painful aspects of the movement. My account can direct them to instead focus on what it would be like to do that painlessly, focus more on how the arms float, and expressive qualities contained within the dancers’ bodies. Even if the dancer is feeling pain, imagine it without it. Given that I know and understand the norms of appreciating ballet, I can help guide them toward a better appreciation of ballet on a motor level. They can even realize it for themselves as well that they are doing something that is hindering their appreciation of ballet and can then rectify how they are appreciating it.

It should be noted furthermore that understanding motor response as active renders many of McFee’s criticisms and skepticism of motor response inert. Being able to actively train and develop our kinesthetic abilities allows for a kind of normativity which is central to McFee’s aesthetics. His main criticism is that motor response, conceived as a sense, cannot provide for a useful, informative, and instructive, account of dance appreciation, precisely because it is automatic and uncontrollable. There is no way to appreciate a work of dance better for understanding motor response. It seems that on the active account there is a straightforward way in which this is possible. See Graham McFee, *The Philosophical Aesthetics of Dance* (Hampshire: Dance Books Ltd. 2011), 185-205.
Chapter 5: Moving for Grace

We can now say something about how motor response is involved with the appreciation of dance. In chapter one, I focused on overcoming skepticism at its most general. The question answered there was, “Can motor response be part of the proper appreciation of dance?” After dealing with skepticism, I answered affirmatively. However, I have not yet argued that motor response is in fact part of the appreciation of dance. This has been on the back burner as I have spent the past two chapters building an account of motor response from dance critical and scientific literature. Skepticism was only of tangential concern there. Let us bring it back into focus. At this point, the skeptic might admit that their arguments are inconclusive, but still have doubts that motor response is part of dance appreciation. I need to demonstrate that it is in fact part of dance appreciation and show how it helps us better appreciate dance.

I gave an initial argument in chapter one for motor response’s relevance to dance appreciation. I said if both scientific and dance critical discourse triangulated to say that motor response is part of dance appreciation, then we would have good reason to think it part of dance appreciation. That is still true. It provides a powerful buffer against skeptical arguments against motor response, a buffer I hope the past two chapters have demonstrated to exist. What is needed now is more detail. We do not just want to know that motor response is in fact part of dance appreciation, we want to know something about how it is so. Otherwise, we have not said much about dance appreciation, and moreover, skeptical worries lurk in the background.

One way of getting at this is to consider two people, a visual and a kinesthetic appreciator:

**Visual appreciator**—appreciates dance purely through visual and intellectual cues. Does not engage kinesthetically with the dance. But they can detect aesthetic properties reliably, such as gracefulness.
Kinesthetic appreciator—appreciates dance through visual and intellectual cues. However, they also engage kinesthetically with dance. Gracefulness and other aesthetic properties are not just seen and detected, but also felt through the body.

If the kinesthetic appreciator more fully appreciates dance than the visual appreciator, then we can say that motor response is an important part of dance appreciation. On the other hand, if there is no principled reason to say that the visual appreciator lacks an important dimension of dance appreciation, then motor response can be eschewed from any full account of dance appreciation. This chapter argues that certain aesthetic properties in dance require bodily response in order to appreciate them properly. Call these motor-aesthetic properties (MA properties).

My central argument looks like this:

(1) Motor-aesthetic properties exist.
(2) Motor-aesthetic properties are common in dance.
(3) If motor-aesthetic properties are common in dance, then to appreciate dance fully, one needs to utilize motor response in appreciating dance.
(4) Therefore, to appreciate dance fully, one needs to utilize motor response in appreciating dance.

I take it that (1) is the most controversial of the three premises. (2) is dependent in part on what motor-aesthetic properties exist. (3) is dependent on the claim that to appreciate an artwork fully one needs to appreciate all its aesthetic properties. I take this to be uncontroversial and leave it undefended. While there is room to doubt this, I take it that the skeptic is on the same page as me here. My strategy for (1) and (2) is to argue that certain common, uncontroversial aesthetic properties of dance are, in fact, MA properties. I believe there are quite a few different MA properties, such as awkwardness and forcefulness, as well as various expressive qualities. The one I wish to argue is a MA property, however, has historically been the most closely associated with dance: gracefulness.
5.1 The Case for Kinesthetic Grace

The prima facie case for grace being MA comes in noting how closely grace is tied with a sense of effortlessness. Some people might even take the two to be synonymous. When you ask someone why they thought a dancer was graceful, likely speaking, you will receive a reply along the lines of, “Oh they just seemed to be moving so effortlessly!” This tie between gracefulness and effortlessness is echoed in various philosophers of the past. Arthur Schopenhauer, for example, spoke about how “grace consists in every movement being performed and every position taken up in the easiest, most appropriate and most convenient way.”¹ Moses Mendelssohn wrote that, “since the movements of someone with [grace] glide naturally, nimbly, and gently into one another.”² Some of our most extensive accounts of grace, that of Henri Bergson and Herbert Spencer tie them closely together. Spencer notes linguistically how often grace is tied with easefulness. “That this generalization…[will] become obvious, on considering how habitually we couple the words easy and graceful.”³ He then proceeds to give examples where this connection seems clear, such as a soldier shifting quickly to attention being less graceful than when he is told to stand ‘at ease’, or a guest sitting with tension while being served gracefully and with ease by their host. Bergson identifies the perception of grace as consisting of three stages, the first of which is simply just the perception of ease in movement.⁴ Paul Souriau, who endeavored to discover the basis of all pleasure in moving and watching movement,

² Moses Mendelssohn, Philosophical Writings (Cambridge: Cambridge University Press, 1997), 226.
including grace, tied it to a sense of effortlessness. Thus given this consensus, and little dissent, it seems plausible to hold that a sense of effortlessness is necessary to proper and full appreciation of grace.

This initial case may be reasonably doubted, however. All it takes is to find some cases of grace where there is no attendant sense of effortlessness. Cases of grace prompted by something other than movement, such as graceful lines, are possible counterexamples. Lines in sculptural form, painting, drawing, and architecture are often referred to as graceful. These may be dealt with in a few different ways. One response would be to say that these are only metaphorically graceful, so graceful lines are interpreted as lines which are only loosely compared to graceful movement. Another response would be to say that the lines themselves evoke motor phenomenology, making them graceful. Our minds see and react to imagined or illusory movement in the lines, thus rendering these lines not as counterexamples, but as merely more examples of grace dependent on motor phenomenology. Certainly, this would be a plausible response given how, as I discussed briefly in chapter two, motor response to movement historically has been taken to be similar to motor response to inanimate objects.

Most counterexamples found outside of bodily movement can likely be dealt with using these two strategies. Either the grace is metaphorical, or it will evoke motor phenomenology without bodily movement. Thus, this strategy of doubting the claim is rather ineffective. Another way is to look for examples of grace in movement which are likely not a result of effortlessness. Counterexamples to this are more abundant than may be thought at first glance. Someone might raise their hand gracefully. They might walk gracefully. They might have a graceful déportment.

It seems plausible to doubt that a sense of effortlessness is involved in grace in these cases. In part, this has to do with the fact that it takes *more* effort to do those things gracefully.

Compare this to why a sense of effortlessness is involved in some ascriptions of grace. When we say that the dancer performed a *pirouette* gracefully, part of what we mean is that the *pirouette* is difficult to perform, and the dancer performed it without apparent effort. It feels effortless because we expect to see effort instead. However, someone walking gracefully, their movements smooth and sweeping, their shoulders down, necks long, and a look of pleasantness on their face, exerts more effort to act this way than required. They could perform the same movements in a less extended, artificial manner, exerting less effort. They could walk lazily and exert less effort, in a way that one cannot *pirouette* lazily. If one *pirouette*-s lazily, one is likely to fall, and thus, fail to perform a *pirouette*. The basis of the grace of a *pirouette* is the effort we expect to see is either hidden or not present. One feels a sense of effortlessness in contrast to the effortfulness they expect to see. No one expects anyone to walk effortfully in this way. Furthermore, since walking gracefully requires greater effort, the violation of expectation involved is reversed. Thus, the gracefulness of everyday movements cannot be derived from a sense of effortlessness. It must come from somewhere else.

This in part explains some of the implausibility in Spencer’s account of grace that Montero points to.6 Spencer thinks, “graceful motion might be defined as motion in curved lines. The sudden stoppages which angular movements imply, are its antithesis; for a leading trait of grace is continuity, flowingness.”7 On the face of it, if grace is to be understood as the perception of ease in movement, it would be odd to think that curved lines are the most easy ways of

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traveling from point A to point B. Intuitively, one needs to travel further, and thus expend more effort, travelling in a curved line instead of a straight one. An interpretive explanation of this is that Spencer has ice skating in mind when he says this, where intuitively, it might seem truer that motion in curved lines could be more effortless. It may be the case that ice skating in curved lines gives momentum to the movement, thus even though it required a longer distance to travel from point A to point B, one used less effort to get there because one could gain greater momentum. I am neither a physicist nor kinesiologist, and therefore unqualified to affirm or deny this, but even if true for ice skating, it would seem a mistake to generalize this to movement off the ice, as it appears Spencer does. At the same time, however, it doesn’t seem completely wrong to say that motion which travels in curved lines is more graceful than motion that travels in straight lines. Curvilinear motion is pleasing to our eyes, and curvilinear human motion is likely to be praised as graceful. But it’s not graceful because they are going from Point A to Point B effortlessly. It is graceful because they are putting the effort in to move from Point A to Point B in an exceptional way. Curvilinear motion blends into one another. It is not abrupt. It is predictable. This is in line with Mendelssohn’s above observation that grace is applied to movements which “glide naturally, nimbly, and gently into one another.” It also seems to take into account what Bergson identified as, “higher grace,” where our pleasure in grace is derived from the predictability of each successive movement: “If curves are more graceful than broken lines, the reason is that, while a curved line changes its direction at every moment, every new direction is indicated in the
Thus there seems to be two kinds of grace: one is a sense of effortlessness derived from the difference between expected and perceived effort, and the other is a stylized type of movement which requires extra effort. It may be that these often interact with one another in our perception of grace, as they are easily spoken of together. Ballet dancers are typically graceful in both senses, for example. They economize the effort taken to perform their movement, but at the same time they also add in extra stylized motion that they take to be pleasing to our eyes.

One may think that effortful grace reduces to effortless grace. Imagine a Paul Taylor dancer running like they do in certain parts of Esplanade (1975). Hips stay parallel to the ground, darting across the stage with directness and precision. They run in a stylized, graceful manner. Now imagine an untrained dancer trying to run similarly. They are likely to stumble, trip over themselves, or, in other words, they are likely to display effort. Yes, this possible objection goes, it requires more effort to walk in a graceful way. But if most people were to try and walk gracefully, they would show more effort than the dancer who knows how to walk in that way effortlessly. We still appreciate it because of the economy of effort. Thus, the second category of grace would just be reducible to the first.

There are a few ways of responding to this challenge. One of which is that while this might seem plausible in the case of Paul Taylor runs, it’s not as plausible in the case of someone standing gracefully or raising their hand gracefully. You might trip over yourself while running gracefully, but not while raising your hand gracefully. The other response is to say that the issue turns upon a difficult and, to my knowledge, undiscussed issue in the individuation of

movement. Let us put the question like this: Is running like a Paul Taylor dancer a different kind of movement from pedestrian running? Certainly, one can perform a *pirouette* both gracefully and awkwardly, and one would not say that one is performing a different kind of movement. It’s the same movement but performed in a different style or with different aesthetic qualities. Thus analogously, Taylor walks are walks performed with different aesthetic qualities from normal walks, not different kinds of movements entirely.

If the argument above is correct, we can see why Taylor-runs should not be seen as effortless, but as effortful. Seeing Taylor-runs as effortless requires individuating them at an overrefined level, requiring Taylor-runs to be evaluated across the group of Taylor-runs, not runs more generally. The level of appropriate individuation is in the general category of run, and we can see this not just through the analogous argument above, but through reflections about how we evaluate runs. It seems odd to compare the effortlessness of the different dancers performing Taylor-runs in *Esplanade*. While you could do so, it misses the significance of *Esplanade*. What is important in the piece is not that the dancers are performing Taylor-runs effortlessly, but that they are performing runs in the Taylor style. They are performing runs gracefully, not through a comparative effortlessness, but through stylized effortfulness. No one watching the piece thinks about appreciating the dancers for their ability to perform Taylor-runs, they evaluate it based on runs in general.

I believe that these two types of gracefulness, both stylized effortful grace and effortless grace, both require a feeling of a sense of effort on the part of the audience to detect. The former requires a sense of the exceptional effort used to produce the movement, while the latter requires a contrast between expected effort and the felt effort by the audience. I have only given a *prima facie* case for this claim, but if I am right, I believe I have covered all cases of gracefulness.
Either the perception of grace is through a sense of stylized effortfulness or through a sense of
effortlessness, an aesthetic property which is not evoked via these two senses, is not grace. I
leave it up to dissenters to come up with plausible counterexamples, as I think this is plausible
when it comes to both imaginable examples of grace and fits actual usage of applying the term
grace to movement.

5.2 Normativity

A question still needs to be illuminated: Why is it necessary to use motor response to appreciate
grace and other MA properties? I have given some prima facie reasons to think it is in fact
necessary, given how closely linked they are, and the lack of plausible counterexamples. But on
the face of it, one might wonder why it is necessary in the first place. What gives the necessity
its normative power? Another way of putting this is in terms of the visual appreciator’s
perspective: Why shouldn’t the visual appreciator respond to my argumentation thus far with a
shrug of their shoulders? “I’m appreciating the dance just fine as is. If you and other people want
to appreciate it with motor response, go right ahead.” There needs to be an answer to this if my
argument is to go through. If it is mere happenstance that we tend to associate grace with motor
phenomenology, then this will undermine any claim to necessity between them. Thus, one needs
more reasons which ground that necessity and its accompanying normativity.

5.2.1 Hedonic Normativity

Hedonic normativity gives the most straightforward answer to the question.\(^9\) Why should
someone appreciate dance via motor phenomenology when they seem to appreciate it just fine

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\(^9\) Hedonic normativity is possibly the most well-represented viewpoint about what is the source of aesthetic
normativity. It may even be thought of as a truism of contemporary aesthetics that has only recently been
questioned. One sophisticated version of hedonic normativity is proposed by Jerrold Levinson, “Hume’s Standard of
without it? Well, because doing so provides them with more pleasure. Pleasure, or more broadly, valuable experiences, does seem to be a motivating reason to do something, even if it is not an overriding one. The key to this response is to make the hedonic claim: that appreciating dance with motor phenomenology is in fact more pleasurable.

This is mostly an empirical question, and not one I am well-equipped to definitively answer. However, some support seems readily at hand. Just simply moving is often quite pleasant. Yawning and stretching in bed in the morning is pleasant. The feeling of something soft against one’s skin is pleasant. Taking a walk after sitting still at a desk for hours is quite pleasant. Performing a perfectly executed pirouette is pleasant. Soaring across the stage with lofty jumps is pleasant. Feeling like one is flying is pleasant. If moving can feel pleasant to us, then it is not a large leap to think motor response to movement could be pleasant as well. Both phenomenologies are motor, and there seems no reason to think that just because you’re sitting still, you couldn’t partake in similar pleasures as the person moving.

Furthermore, it does seem like there are common, identifiable, motor responses which afford pleasure to audiences. I think the most widespread of these come from our interactions with music. One example would be the feeling of the rhythm or the pulse of the music in our own bodies. It often feels like we dance in our own chairs while watching music with catchy rhythmic qualities. These rhythmic qualities can even be seemingly mundane that get people ‘dancing along’ in their seats. I once had someone come up to me after a dance piece I choreographed was performed, enthusiastically exclaiming about how they ‘could jam out all night’ to the piece. But the rhythms I used were just a constant regular beat that occasionally

commentary on the debate can be found in Servaas Van der Berg, “Aesthetic Hedonism and Its Critics,” *Philosophy Compass*, 15, no. 1 (2020).
faded in and out. There was not anything exceptional or particularly interesting about them. But still they exclaimed, in a way that indicated great pleasure, how the rhythms felt in their body.

Thus, it does appear that motor phenomenology, even when not prompted by moving oneself, can be pleasurable. Why is it necessary to respond bodily to dances to appreciate them better? One reason is that it’s more pleasant to do so, whether because it incurs a felt rhythm, helps the viewer get a vicarious sense of flying, or helps the viewer engage emotionally with the dancers on stage, leading to a finally valuable experience. Whatever the origin of these pleasures is, they give us reason to appreciate dance bodily.

5.2.2 Conceptual Normativity

Perhaps, however, there is more to the claim that motor phenomenology is necessary for the appreciation of dance. We should not bodily respond to dances merely because it provides us with additional pleasure. There is something more that compels us to do so. One thing which might be a source of the normativity is conceptual. Conceptual normativity holds that we should respond to dances bodily because certain aesthetic properties cannot be detected without motor response. To return to the example of grace, this kind of normativity would distinguish between grace and quasi-grace. The visual appreciator only detects quasi-grace, they do not detect the full quality of grace.

A way of understanding this is to think about it in terms of the acquaintance principle. The acquaintance principle has been traced back to Kant, but its contemporary form was articulated by Richard Wollheim:

A well-entrenched principle in aesthetics...which insists that judgements of aesthetic value, unlike judgements of moral knowledge, must be based on first-hand experience of their objects and are not, except within very narrow limits, transmissible from one person to another.  

The basic idea behind the principle is that if I say that the roses, I bought are beautiful, you cannot, purely by my statement, accept that they are beautiful. You must, “see them for yourself.” This seems to be the case for aesthetic judgements in a way that is not required for moral judgements or less value-oriented epistemic judgements. You can be told that there was a rainbow on campus and accept that as evidence for it as a rainbow, but it seems the further judgement that the rainbow was beautiful would require you to have seen it to believe it. Or at the very least, they should know what rainbows typically look like and judge them to be beautiful.

This principle is debated and discussed at length in the literature. I do not, however, want to focus on the debate itself. Instead, I want to use Dominic McIver Lopes’ recent discussion and conclusions about the debate to show how a version of the acquaintance principle could be used to support the existence of MA properties.

In contrast with most of the literature, who interpret the acquaintance principle epistemically, about explaining what we are warranted to know based on testimony, Lopes interprets it metaphysically as a requirement of transmissibility. For someone’s judgement to transmit an aesthetic property to another person, one must not just state that something was

\[\text{\textsuperscript{11}}\text{Richard Wollheim, Art and Its Objects (Cambridge: Cambridge University Press, 1980), 233.}\]
\[\text{\textsuperscript{13}}\text{Dominic McIver Lopes, Beyond Art (Oxford: Oxford University Press, 2014), 169-180.}\]
beautiful or graceful, one must represent the features that make the object beautiful or graceful. The aesthetic properties cannot be transmitted or represented independently of the features being transmitted. One cannot communicate or represent the rainbow’s beauty by saying, “The rainbow is beautiful,” because the sentence does not itself represent what makes the rainbow beautiful. A picture of a rainbow, a representation of a myriad of colors hanging in the sky in a bow-like shape, would be much closer to representing what makes the rainbow beautiful than a mere assertion of it.

Lopes provides this succinct summary of what it is to inseparably represent content:

\[ R \text{ represents } x \text{ as } F \text{ inseparably from its representing } x \text{ as } B = R \text{ represents } x \text{ as } F \text{ by and only by representing } x \text{ as } B, \text{ where } x\text{’s being } B \text{ would seem to make it } F. \]

So, for an MA property like graceful, his schema would say that:

\[ R \text{ represents a movement as graceful inseparably from representing the movement as sensibly effortless } = R \text{ represents a movement as graceful by and only by representing the movement as sensibly effortless, where the movement’s being sensibly effortless would seem to make it graceful.} \]

If I am right to suggest that MA properties are to be understood as cases of inseparable content, then MA properties which are represented independently of motor response are not actually representing the original MA properties. They are merely pseudo-correlates. If one recognizes the grace of a dancework independently of a feeling of effortlessness, then one is only seeing pseudo-grace, rather than the actual grace. Another way of understanding this is to say that visual experiences of dance grace without attendant motor responses are like using verbal testimony to determine the beauty of the rainbow. You need the attendant motor experience as well to truly judge the grace of the dancer.

Thus far, I have only talked about how to understand conceptual normativity. A property is an MA property just in case its content is inseparable from its motor response. Ascriptions of
MA properties without motor responses are thought to be analogous to verbal testimonies about the visual aesthetic properties of objects. But do we have any reasons to believe such a view?

I take that the *prima facie* case for grace’s MA-ness also lends support to this view. The fact that it is hard to think about gracefulness and independently of a sense of effortlessness is itself evidence that they are tied together conceptually. It’s hard to imagine cases of grace without a sense of effortlessness or a sense of stylized effortfulness, as argued above.

Another piece of evidence in favor of the conceptual link between certain properties and motor responses is the degree to which it is considered a virtue of dance critics to use kinesthetically loaded descriptions. One goal of dance criticism is not just to be able to visually evoke what the movement looks like in a reader’s imagination, but also to give the reader a visceral, kinesthetic sense of the movement. Certain dance critics like Edwin Denby are lauded for this ability. This point is furthered by the distinct possibility that the verbal descriptions of the kinesthetic feeling of watching the movement may be not just important, but more important than the pure verbal description. The feeling of what it is like to kinesthetically watch a dancer pirouette may very well be more important than a visual description of the dancer *pirouette*-ing.

Is it more important to describe what it looks like when the rose jumps out of the window at the end of *Le Spectre de la Rose*? Or is it more important to describe the visceral, kinesthetic feeling we get as we watch the rose soar in flight out of the window into the night? It seems like the latter is more important and is often more emphasized in dance criticism.

If this view is true, it also helps to explain why live performance is so important to us. I have argued elsewhere that we may experience less intense visceral sensations when we view a
recording of a performance compared to a live performance.\textsuperscript{14} If important dance qualities such as grace are inseparable from motor phenomenology, and there is a reduced sense of motor phenomenology when watching a recording of a performance, then a live performance is going to be valuable because it enables us to more vividly and easily perceive MA qualities.

5.2.3 Dance Institutional Normativity

Dance institutional normativity is the thesis that the reason we should appreciate grace and other MA properties via motor response is that the institutions of the danceworld have come to understand that proper dance appreciation should, at least at times, include motor response.\textsuperscript{15} This can be because the dance creators themselves specify that their dances need to be appreciated viscerally or because a general informal normative goal for appreciation has been established among the danceworld. Thus, you might think under this view, that without motor response, at least some of danceworks’ meanings are lost. Part of the meaning of the pirouette in the context of the dance is lost if it is only appreciated visually.

I take it that Graham McFee is most concerned about this kind of normativity. He wants it to be demonstrated that motor response contributes to the cultural meaning of danceworks. As many of his interlocutors have argued, his view is at odds with what dance practitioners, from choreographers to dancers to dance critics, seem to hold. Renee Conroy gave an interpretation of a dancework where to fail to attend to motor responses as an audience, you are missing an important dimension of the dancework.\textsuperscript{16} The fact is that talk of motor response in the danceworld is ubiquitous, at least within the Western danceart tradition. Martin’s theorization of

\textsuperscript{15} For a contemporary account of something like institutional normativity about aesthetic value in general, see Dominic McIver Lopes, \textit{Being for Beauty: Aesthetic Agency and Value} (Oxford University Press: Oxford, 2018).
motor response had profound and lasting impacts on choreographers, dancers, appreciators, educators, and critics in both the modern and classical dance traditions. It would be difficult to be one of those groups of people and get away with ignoring motor response, at least if you want to be the best kind of them as you can be. If you want to be a good choreographer, you need to consider the degree to which your work can be and will be responded to through the body. If you want to be a good dancer, you need to consider the degree to which the way you move might enhance or detract from kinesthetic responses in the audience. If you want to be a good appreciator, you need to consider how kinesthetic responses to the dance you are watching might or might not contribute to the meaning of the dancework.

5.3 Threefold Normativity

Thus far, I have only explained three different ways in which one might answer the question, “Why should one appreciate dance via motor response?” I have given some support to each of these three answers without supporting one answer over the other. The reason for this is that I am a pluralist about the source of normativity. I think it is possible, if not true, that all three of these answers are right. The respective answers are:

(1) One should appreciate dance via motor response because motor response provides more pleasure to the appreciator. (Hedonic Normativity)

(2) One should appreciate dance via motor response because motor response is conceptually tied with important dance qualities. (Conceptual Normativity)

(3) One should appreciate dance via motor response because motor response is an established important way that the danceworld thinks dance should be appreciated (Dance-Institutional Normativity)

I see no reason why (1), (2), and (3) cannot be conjoined together into one full theory. Of course, one could argue for the primacy of one and argue that the other two are derivative of the primary one. I do not think that this is right. I think that all three of these answers reflect different sources
of normativity in the arts and that it would be wrong to prioritize one over the others or to argue that one is not a source of normativity. Each answer meets a fairly fundamental human need, if not only in the arts, but in life in general. I shall explain each answer in reverse.

Dance-institutional normativity recognizes that to be a member of the danceworld is to be the member of a socio-cultural institution. One cannot create dance independently of this context. There is no creation of dance independent of institutions. No matter how removed from dance institutions one tries to be, it is hard to escape the fact that you are creating danceworks on usually trained dancers to a public who has seen dance before. We exist within a particular dance-culture milieu, and we are beholden to that context. We have duties to modify our behaviors in relation to the expectations of the culture we are in.

Conceptual normativity recognizes a more natural relationship between watching dance and motor response. Not only do we have duties to be part of a cultural institution and create and appreciate dance in ways that are accepted and encouraged by the danceworld, but we also have a duty to be aware of the ways watching dance just seem to naturally beholden us to appreciate them. Certain movements or ways of movements might more naturally cultivate and encourage motor response. We have a duty to allow ourselves to experience movement as naturally and we can, if only to explore and understand what these responses are. Choreographers can, as Margaret H’Doubler argued they should, then choose to exploit these natural responses or even try to engender new ways of perceiving movement.

Hedonic normativity recognizes that aesthetic agents are often not motivated sufficiently by cultural and institutional norms as well as norms related to the natural world. Many people get into and come to appreciate dances because of some intensely personal and pleasurable response to dance. Dance becomes a source for finally valuable experiences. Recognizing the
importance of finally valuable experiences for aesthetic agents is a way of recognizing that agents need and desire a life with art that is fulfilling in and of itself. Arguably, the experience of burnout may occur because dance institutional normativity is prioritized over hedonic normativity. Hedonic normativity, despite its emphasis on pleasure, is also a way of recognizing the personal nature of our engagement with art. We want a way of interacting with art that fulfills us, that caters towards our personal psychological needs. We have a duty to recognize ourselves and our own desires within our appreciation of art.

It will not seem obvious to everyone that all three of these kinds of aesthetic normativity are on equal footing. It might even seem by some that conceptual normativity conflicts with art-institutional normativity. (One is a duty to appreciate dance in the context of dance institutions while the other is a duty to appreciate dance in a way that’s independent of culture.) Such value inequality and conflicts are to be expected. Some people might think that our duty not to kill is stronger than our duty to help others. This does not imply that we do not have these duties. And just because our duty not to kill is sometimes in conflict with our duty to help others does not mean that we need to give up one duty in favor of the other. These are debates and conversations which are routine in the realm of ethics. Few people disagree that we have duties to help others and duties not to harm others. What is disagreed about is the prioritization among the duties, especially in specific circumstances.

Thus, I think that all three of these answers lend weight to the claim that any given audience member should watch dance via motor response. Not only is motor response necessary to appreciate dance properly, but the property can also have important weight. Watching dance with motor response may provide a more fulfilling experience, it may help provide insight as to
the meaning of the dance within a dance-institutional context, and it may help you see and appreciate more aesthetic qualities in movement.

Another reason to favor a threefold account of the normativity of MAness is that aesthetic normativity is generally not considered very strong, at least not in the way that moral normativity is often viewed. If grace is more pleasurable when perceived with motor phenomenology, that gives us reason to do so. If gracefulness is a kind inextricably tied up with motor phenomenology, that gives us more of a reason to perceive it with motor phenomenology. If there is a general norm of the danceworld to perceive gracefulness via motor phenomenology, the normativity is strengthened even more.

5.4 A Postmodern Problem

Dance in the 1970s developed an inquisitive and analytic framework towards dance. The Judson Dance Theater, composed of dance artists who were known for their avant garde work, questioned central tenets many people took as essential in dance performance. Of note for our purposes is Yvonne Rainer’s “No Manifesto”.17 This manifesto was a rejection of what could be called modern dance values. The last phrase of this manifesto, “No to moving or being moved,” can be interpreted as a rejection of motor response. Dance should not, according to Rainer, aim to “move” spectators. Of course, there is no argument for this, as this is a manifesto, not a philosophical treatment on dance. But it does bring up a challenge to my view. If I think that motor response plays an important, if not essential role in the appreciation of dance, choreographers like Rainer, who deliberately seek to undermine motor response as a part of dance appreciation, also undermine my view.

This version of the objection misrepresents my view. I am not trying to say that motor response is necessary for dance appreciation as a universal claim. Not all dances will require motor response to appreciate them. Perhaps Rainer’s work is a paradigm case of dance which does not require motor response. My claim is, given the fact that much dance exploits MA aesthetic qualities like gracefulness, it is necessary to use motor response to appreciate this kind of dance. My method in this chapter is to look at qualities which are commonly posited in dance, and to ask whether motor response is necessary to appreciate those qualities. I do not claim that those qualities are needed for something to be dance, or even good dance. There is space on my view for good dances without MA properties.

However, imagine this scenario. Yvonne Rainer has a disciple who wishes to take Rainer’s work and push it even further to the extreme. This Rainerite happens to read this dissertation one day and sees me defending the thesis that gracefulness requires motor response. They then set out to create a work which challenges this very thesis. They create a work which utilizes the properties of gracefulness but seeks to constantly undermine our otherwise normal motor response to gracefulness. I might say to this that this property is not grace, but it is pseudo grace. The Rainerite might insist that it is grace in its full form, and they might get a large group of people in the dance community to agree with them. The Rainerite has discovered what grace truly is. Perhaps what their work has shown is that grace is an artificial social construct, and the motor responses I have been arguing to necessarily accompany grace are just accidents, quirks of social hierarchies.

I admit that such a situation is possible in the sense that I might be wrong. There might be something about the argument I have given that has gone awry. Perhaps there is an assumption somewhere that I have overlooked. But until the Rainerite has done so though, they
have not shown that I am wrong. I have given an argument for why motor response is necessary for the appreciation of grace, and if the Rainerite gives a genuine counterexample, then it’s time to think about how to revise my argument or my thesis.

In fact, I invite the Rainerite to try and give such a counterexample. What happens as a result could affect the theory of grace I have proposed, and perhaps in interesting and unexpected ways. This invitation might seem surprising at first given that philosophers do not typically invite artists to falsify their theories. There is a saying that the search for a definition of art is littered with corpses. Proposing a theory that invites its own falsification is inviting its death. But really, what I am inviting is engagement. I do not know if the Rainerite truly is able to counterexample my claim that motor response is necessary for grace. As of now, the possibility is only the possibility that the Rainerite will attempt to refute my view with a counterexample, whether the Rainerite will succeed is a test of both their choreographic skills and my theory.

5.5 Contemporary Grace

I have focused my analysis in this chapter on what I take to be a paradigmatic MA property, grace. It should be clear, however, that I do not take grace to be the only MA property. I take aesthetic properties like forcefulness, awkwardness, limpness, and many others to also be MA properties. The reason I focus on grace is because of its central place in thought about dance, both historically and among audiences. But it has also become a frequently questioned aesthetic value. Many contemporary choreographers have deliberately eschewed classical aesthetic values such as grace preferring instead to search for other important MA properties.
Elizabeth Streb is one such example. Her book is not *How to Become as Graceful as a Sylph*, but *How to Become an Extreme Action Hero*.\(^{18}\) Her choreographic work reflects this focus and exemplifies what might be considered aesthetic values of an “extreme action hero.” Rather than trying to reduce effort to produce visions of graceful sylphs, she emphasizes the very extremes of physical effort. Nothing is about grace, it is all raw, physical and impactful. From her dancers getting dangerously close to being injured by swinging and spinning six-foot steel beams to dancers forced into cramp enclosed spaces and flinging themselves against the sides with abandon, there’s nothing hidden or graceful about most of what the dancers do. It does not make her work any less kinesthetically valuable, however, it just shifts the value from gracefulness to something more like extreme forcefulness.

It is notable, however, that grace does not seem to have disappeared from dance. Of course, it does not appear in the same way as 19th century France would have seen it, but an emphasis on effortlessness, ease, and aplomb while performing something difficult, has not gone away. One prominent strain of it is Release-based dance technique, which has replaced Graham technique in most modern dance-based training.\(^{19}\) One prominent strain is called Skinner Releasing Technique (SRT) which “addresses the releasing of muscular tension and effort in the body in order to re-pattern the neuromuscular system and create conditions for cultivating a multi-directional, mobile alignment.”\(^{20}\) SRT’s goal is in part to make movement more efficient, reducing the amount of tension we use to move. It is to make our movement easier and healthier,


so we do not harm our bodies as much, and is an extension of somatic practices. This goal reflects my earlier discussion of the effortless kind of grace. It is a search for an economy of effort.

Similarly, SRT has something akin to effortful grace as well. For SRT, the goal is not just a simple reduction of tension, but also something more active. There is something that results from all this reduction of tension, a certain stylized gracefulness. So, there is both the effortful and effortless grace. Presumably SRT thinks that the effortful grace is derived from the effortless grace, as their notion of effortlessness is thick. It is not just the economy of force done to enact the movement, but also a commitment to a sense of authenticity. The movement must be unblocked both in terms of physical effort, but also without psychological resistance. Release is not just about releasing tension, but also in a sense releasing a more inner bodily truth. But there are certain aestheticized aspects to this revealing. Elizabeth Dempster observed from Skinner’s students later in their careers, “…there was a lightness, a silvery, effervescent, light quality in their moving, and they all seemed to...have that.”21 In other words, the students did not just move with less effort, but that they had an additional stylized way of moving that made it seem silvery and effervescent, or in other words, graceful.

The importance of release techniques like SRT in contemporary concert dance should be emphasized, but it is also important to note that more popular forms of dance arguably retain gracefulness as well. Dancing and pushing the body to its limits is a common theme in popular media. Seemingly difficult technical feats adorn the movement routines in shows such as *So You Think You Can Dance?* It can be seen in techniques and movement styles such as breakdancing

and hip-hop as well. Contemporary concert dance has successfully moved past the original trappings of classical ballet, but it does seem that the property and value of gracefulness has remained but has been given different forms over the past century. It is no longer the Romantic conception of sylphs gliding through forests, but it is still prominent in how we think about, create, and watch dance.

5.6 The Significance of Grace

Gracefulness has remained an important part of how we understand and engage with spectator dance, despite attempts to move away from it. There is something to be said about the tenacity of this value both within contemporary concert dance and in the broader culture. One way of getting at it is to try and answer what links both effortful and effortless grace. On the surface it seems odd to think that gracefulness could be achieved through both a reduction of effort and an addition of effort. They do not seem intuitively all that distinct from one another and are often both used within the same practice. There’s nothing jarring about seeing a dancer walk with effort to appear graceful and then perform a double tour en l’air, with little visible effort. The two seem harmonious and complementary, not dissonant and contrapuntal. I think that the way to understand this consonance is through looking at the theological aspects of grace.

Consider a phrase such as “by the grace of God.” This phrase implies a special gift granted by a divine force. You have been graced by God if you have been given certain favors by God, perhaps your marriage was graced by God, or perhaps you were graced with exceptional talents. There is something supernatural about the idea of being graced by God. You have been chosen by this being and been conferred something those other humans do not get unless they themselves have been graced by God.
Now, the theological concept of grace and the aesthetic concept of grace are often discussed separately, as if they were two different things. However, in both effortful and effortless grace, there is an implication of excellence or a quality that goes beyond the natural. Effortless grace is an excellence that exceeds one’s natural expectations. It comes from a place like, “Normal humans just cannot move like that without stumbling over themselves.” For effortful grace, it may be acting and moving in such a way that connotes excellence. The dancers move in ways that are deemed in some way as special and elevated above normal human motion.

Further evidence of this connection between theological and aesthetic conceptions of grace might be found in the desires of Italian nobles to cultivate sprezzatura, or concealed effort.22 They wished to show to others that they were special by concealing any effort it required to do something, again giving the impression of divine providence or the feeling that their rule was justified by some natural or supernatural intervention. This would help to explain why gracefulness was and is still a prominent aesthetic quality in ballet. A prominent example would be Louis XIV who used one’s ability to dance as a gatekeeper to court life and featured himself in ballets as the ‘Sun King’.23

There’s also a moral notion of grace which is closely related to its aesthetic notion. One example of this is Friedrich Schiller’s discussion of grace and dignity.24 Schiller is influenced by Kant but tries to use the notion of grace to show how one could obey the moral law without effort. For Kant, obeying the moral law was something that required humanity to transcend itself. The

22 Paolo D’Angelo and Sarin Marchetti, Sprezzatura: Concealing the Effort of Art from Aristotle to Duchamp (New York: Columbia University Press, 2018).
moral law demands that we ignore our needs, desires, and motivations and obey the law even if we do not want to do it. Schiller thought that the concept of grace could be used so that obeying the moral law was no longer so effortful. Through practice in obeying the moral law, one could, over time, develop moral gracefulness, a notion which is similar to Aristotle’s understanding of virtue.

Here again we have the concept of excellence, and the exceeding of the ordinary bounds of human behavior, just in a moral format. We have an aestheticized grace, a theological grace, and a moral grace. All of them are seemingly distinct from one another, but there are similarities between all three.

The image of the Three Graces or the Three Charities is useful for understanding the relationship between danced grace, given grace, and acted grace. These are three Greco-Roman gods often depicted together; they simultaneously give, transfer, and receive, embodying a metaphor for social cooperation and interaction. They are also depicted doing all three while dancing: giving, transferring, and receiving gracefully through movement. There’s a theological aspect of the image, gifts are being given, taken, and transferred. There’s a moral aspect of the image, that of social cooperation. And then there’s the aesthetic aspect of the image, a gentle fluidity and easefulness through dancing.

The image represents how gracefulness could and likely does function in a spectator relationship with dance. The dancers we watch are gifted. They are trained. Most of the time they have rehearsed these movements repeatedly. We watch them perform feats we could not do ourselves, and we watch them transcend ordinary movement, representing a supernatural character. But they are not performing for themselves. It is not an egotistical performance to demonstrate the gifts for themselves. They are performing for us, the audience, and the
community. They are showing us their gifts and sharing them with us. Through motor response, we get a vicarious sense of those beyond human gifts. We might get a sense of what it would be like to fly, a personified rose leaping out a window at night, as in Le Spectre de la Rose. And then as audiences we return those feelings. We applaud. We cheer. We speak about it to our friends, encouraging them to come see these dancers, to engage in this exchange.

This exchange, I suggest, is central to understanding not only the past significance of gracefulness, but its continuing relevance to today’s dance world. The gifts may no longer be supernatural, no longer sylph-like, but they are beyond the everyday. This is part of the reason why dance technique is so important. Dancers spend years and years honing and refining their technique. It sets them apart; it makes them beyond the ordinary. It is part of what makes displays of technical feats so appealing. People want to experience a fantasy, a world beyond the ordinary and the everyday, grace, both the effortful and effortless varieties help to provide that feeling of being in touch with something beyond the ordinary. And it’s also part of what makes postmodern creators who work in everyday movement so subversive to the existing danceworld. Choreographers like Yvonne Rainer want to make dances which are mundane, stripping away all the spectacle. Other choreographers like Elizabeth Streb want to thrill and excite audiences through immediate visceral means. But it seems that the danceworld is not in a place to give up an important place for gracefulness as a value, and thus the centrality of motor response as well.
Chapter 6: Moving for Emotion

My project is mostly complete at this point. In chapter two I argued that motor response can be part of dance appreciation. Chapters three and four are where I built a partial theory of motor response. Chapter five is where I showed how motor response is important to dance appreciation by arguing that it is necessary for the appreciation of gracefulness. If my argument has been right thus far, I have shown that motor response is an important part of dance appreciation. There is still one more thing I want to tackle. I want to show how motor response may come into play when dealing with some traditional problems in philosophy of music and applying it to dance. The problem I have in mind is what is typically understood as the problem of expression.

In chapter two, I said that Lipps used motor response as an attempt to explain how objects could express emotion. Lipps’ work did not have dance in mind, but primarily inanimate objects such as architecture or willow trees. We often call willow trees sad, and they are commonly called “weeping willows.” But willow trees presumably have no emotional experiences. How could they be sad? How could they seem to weep? Similarly, the problem comes up for artworks such as pure music where there are no programs and no words sung; there are just notes that are arranged and played. How could music be expressive of any emotion if music is not a person or some other animate being?

Martin tried to use Lipps’ work to explain how dance could have effects on its audiences, including the expressiveness of dances. Mary Wigman, one of the first modern dance pioneers said that the audience, “should allow the rhythm, the music, the very movement of the dancer’s body to stimulate the same feeling and emotional mood within itself, as this mood and emotional
condition has stimulated the dancer.”¹ The notion that motor response played a key communicative role of emotion was quite popular. Similarly, there have been other attempts to explain how dance can be expressive of emotions, some of which are in line with proposed answers as to the expressiveness of music. I will survey some of those answers through the course of this chapter.

Even though there have been answers proposed as to how dance can be expressive of emotions, there has not been a lot of discussion about the nature of the mystery in dance. The most sustained literature about expression has focused on the problem of expression in pure music. It focuses on how something which is inanimate, musical tones and their arrangements, can express something which is animate, sadness. This version of the problem of expression does not easily apply to dance. Unlike willow trees, architecture, or pure music, dances are animate. They are performed and instantiated by generally human movers. It would seem unsurprising that a dancer could express sadness in the way that it seems surprising that willow trees can express sadness. In what follows, I argue that not only does the problem of expression apply to dance but doing so helps us to better formulate the problem at hand. The problem is not best formulated as how can an inanimate object have animate properties, but rather as how something can express an emotion even though the expressive phenomena are dissimilar to the emotion expressed. Thus, the problem is much broader than is typically thought. While some of my following criticisms apply to the problem of musical expression, the goal here is not to focus on developing a better account of that problem. My goal is to better articulate the problem of expression in dance, not music.

6.1 Is There a Problem of Dance Expression?

Let us begin with a formulation of the problem from Saam Trivedi, derived from Peter Kivy and Stephen Davies:

[musical expressiveness] is the problem of explaining how something without life and mental states such as music (an abstract art-form consisting of sets or sequences of sounds) can be heard readily, immediately, and willy-nilly by many people—both musicians and laypersons—as sad or happy, etc.2

As Trivedi has elaborated it, the problem of expressiveness has several parts. One concerns the more general issue of how these inanimate objects could be heard to be emotional. The next is that these emotional states are heard, “readily, immediately, and willy-nilly” as properties of inanimate objects. The third is that this ability is shared across both experts and nonexperts. Any successful account of musical expressiveness would thus have to explain all three of these things.

All three parts of the problem are not equal, however. If only experts could hear music as sad, the problem would still arise. It’s just as mysterious as to how musical experts could hear sadness in music. Similarly, even if it took time and effort to hear emotional states in music, it would still be a question as to how one could still hear it as emotional. I take these latter two to be additional empirical explananda for an adequate theory of expressiveness, rather than the central problem to be addressed. The central problem is how it is possible for us to properly ascribe emotion to an inanimate object. Then, any given solution must also explain the other two explananda to be empirically adequate for how we ascribe emotions to music. An explanation which required detailed criticism and argumentation for how a passage of music could be sad would thus be empirically inadequate, because this process does not fit with the typical

ascription of emotive qualities to music, which is typically done “readily, immediately, and willy-nilly,” and does not require such extensive intellectual processes.

So let us start with the central issue and come back to the empirical adequacy terms later. The problem of expression then is how can something without life and mental states like music be emotional? Or rather, how can something which is inanimate be thought to have animate properties like emotions? Call this the inanimate formulation of the problem of expression. On the face of it, this is a good way of putting the problem. It gets at what appears to be a contradiction. Musical phrases and willows have no emotional states, so how could we ascribe emotional terms to them? I think, however, that this formulation of the problem does not quite fit the problematic cases accurately.

One of Peter Kivy’s favored examples of expression is the face of a St. Bernard dog. It would be very common to say about a St. Bernard’s face that it is sad. But the St. Bernard is probably not sad at all. While a St. Bernard may be sad occasionally, we would say that the dog’s face is sad much more often than whenever the dog is sad. However, the dog is animate. Dogs are arguably capable of feeling sadness. With the St. Bernard, we are not ascribing an animate term to an inanimate object. We are instead ascribing an animate term to an animate being. The problem comes because the animate term does not seem justified in reference to the emotional states of the animate being. To the extent that there is a mystery in the case of the St. Bernard’s face being sad, it is not because the St. Bernard is inanimate, it’s that the St. Bernard is not sad. Thus, we have an alternative formulation suggested here for the problem of expression: the asymmetry formulation.

The asymmetry formulation says that what gives rise to the problem of expression is that there is a lack of symmetry between the emotion which we ascribe to an object and the emotions which are felt by the object. Another example which I think supports the asymmetry formulation over the inanimate one is the case of music itself. It is unclear to me that music is in fact as inanimate as many people in these debates seem to assume. I don’t want to tread too deeply into debates about the nature of music, but say, relatively uncontroversially, we assume that musical works are things which are performed by humans.4 Say, more controversially, that any expressive qualities a performance of a musical work has is dependent upon its performers. I am not claiming that the expressive qualities are dependent upon the emotions the performers are undergoing. I am claiming instead that whatever expressive qualities the performance of the music has are determined at least in part by the performers of the music. This requires at least some (if not complete) indeterminacy in the emotional properties of the music at the level of its score. To put it simply, notes are not expressive until they’re played expressively.

I do not want to defend this view comprehensively, but here are some initial thoughts to give it plausibility: rarely will a score be seen to be expressive of emotional qualities just by reading it. It takes significant skill and imaginative ability to read a score to this specific extent. Even then, you might think that the music has become performed in the minds of those who are “hearing it in their head.”5

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4 I’m leaving aside work like electronic music, which arguably lack the need for humans to be performed. But note that the central cases most people have in mind is not how electronic music can be expressive of emotions, but how orchestral music can be. I have yet to see anyone puzzling over how Conlon Nancarrow’s Piano Rolls can be expressive of emotion. (Or even any assertions that they are expressive of emotion!)
Note, furthermore, that even if emotions of the music are somehow written into the score, rendering them performance-independent, and it just takes a lot of expertise to see the emotions, then this is in direct conflict with one of the empirical adequacy conditions of the original expression formulation – that music is heard to be expressive by both experts and nonexperts. Amateur music listeners rarely know how to distinguish a C from an E, let alone see these emotional qualities in the score. They hear the emotions through a performance of them. To be clear, this is not an argument for the claim that music does not have performance-independent expressive qualities. The point is, even if it did have these qualities, it could not capture the mystery of why non-experts readily hear expressive qualities in music. Non-experts can’t hear the performance-independent expressive qualities without it also being performed, so it is animated for them. Thus, one cannot capture the full mystery of expressive music by restricting one’s formulation of the problem to experts only. These considerations, I think, favor the asymmetry formulation of the problem over the animate one, because what we hear when we ascribe emotions to music are animated sounds, not inanimate ones.

Cases like a willow tree being sad are also easily accommodated by the asymmetry formulation. All cases of inanimate objects being sad or happy satisfy the problem trivially. There is an asymmetry between the emotions the willow tree has, and the emotions expressed by the willow tree—no emotions in contrast to sadness.

This provides room for a problem of dance expression. Often in dance there is an asymmetry between the emotion expressed by the dancers on stage and what the dancers themselves are feeling. However, one might think that the answer to how the dancer expresses various emotions on stage is straightforward in a way it is not in pure music. One might think that the solution to the problem of expressiveness is simple. The solution is the same as the
Kivy’s St. Bernard dog example. Why is the St. Bernard’s face sad? Because his face resembles the face of a sad person, frowning. Analogously, how does the dancer express sadness? The dancer mimes sadness. The dancer mimics the kinds of behavior humans undergo when they are sad. The dancers are just faking it for the sake of getting across the emotions to an audience. So, like the St. Bernard, there is no big mystery to be explained when considering dance.

Under this straightforward solution to the problem of dance expression, dancers would express emotions in much the same way actors express emotions in theatrical works, insofar as their movements and facial expressions resemble sufficiently the same expressions one would do if they underwent those emotions in real life. Unfortunately, it is not this simple. Dominic Lopes has pointed out that expression in pictures does not rely only on the depicted figure’s expressed emotions. Other aspects of the picture, such as the depicted scene, might contribute to expression in pictures. This is even more the case in dance. Not only is there typically some kind of scenic design in dance, such as costuming, lighting, props, etc., but there are also often narrative elements which would contribute to a dance’s expressiveness, and most typically, music which accompanies the dance.

But even if we focus on the issue of the movement itself expressing emotion, thinking that dancers express emotions by imitating real life emotions does not really capture the wide range of dancerly expression. While dancers may express emotions similarly to actors, they also

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8 Interestingly enough, and relevant for this general project, Noël Carroll and Margaret Moore have argued that sometimes dance and music, through motor response, can serve to elaborate upon one another and use one another to express emotions. See Noël Carroll and Margaret Moore, “Feeling Movement: Music and Dance,” Revue Internationale de Philosophie 246 (2009): 413–55.
often express emotions through the body in other ways. This is particularly prominent in modern and contemporary dance but can be found in ballet as well. A good example of this is Michel Fokine’s *The Dying Swan* (1905). One striking thing about this piece is that the dancer spends at least 80% of her time *en pointe* and constantly *bourrée*-ing. *Bourrées* are rapid movements of the feet while *en pointe*, but in this piece, they seem to express some combination of hope, frustration, and despair. Considering that so few people can even perform a *bourrée*, let alone *en pointe*, the *bourrées* performed by the dancer certainly do not look like anything people in real life do to express hope and frustration—let alone a swan! In this way, much emotional expression in dance seems to resemble the more abstract emotional expression of absolute music, and thus requires similar questions to be answered.

One might worry that in a situation like I’ve described, it is not the movement itself that is expressive. It is everything around that movement that is expressive—the music, the dancer’s facial expression, the lighting, and the narrative of the piece. Pavlova’s *bourrées* are only derivatively expressive of those emotions. It is everything else that their expressiveness is dependent on. If this is true, then it renders the *bourrées* expressively inert, along with any other non-imitative movements.

That does not seem right. To see why, one needs to ask if any given non-imitative movement would have been just as expressive in *The Dying Swan*. Would merely walking have been just as effective? What about intricate *petite allegro* work? Probably not. It is hard to imagine something that would be more effective in the piece than watching the swan *bourrée* as she is lulled to death. The fragility of the movements, combined with its simplicity and rhythmic

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9 Lopes makes this point in *Sight and Sensibility* regarding depicted figures in Picasso’s work.
qualities, make them seemingly irreplaceable in evoking the emotions of the whole piece. Not any movement will do, and choreographers know this. There are reasons choreographers spend so much time making sure not just that they choose the right movement, but that the dancers perform it in just the right way. For those interested in expressiveness, it is because the well-performed movement conveys the emotion better than other movements or the same movement performed poorly.

I have thus shown the inadequacy of two formulations of the problem of expression: the inanimate and the asymmetry formulations. These formulations don’t include all problematic cases. The asymmetry formulation was better than the inanimate but it does not capture the issue in *The Dying Swan*. The issue there was not so much that there was an asymmetry between the dancer’s emotional states and the emotional state expressed. And in fact, in the case at hand, Anna Pavlova who the piece was choreographed on, was arguably very much inhabiting the emotional state of the swan and the narrative the swan was going through. She was a committed performer, not just in the display of emotion, but undergoing it herself. Let me suggest an alternative third formulation of the problem of expression: the semblance formulation. The semblance formulation says that the problem of expression is better understood as a problem of resemblance. So, what creates the mystery surrounding the swan’s *bourrées* is that *bourrée*-ing does not resemble what one does when feeling and struggling against the inevitability of death. The movements which express the emotions are dissimilar to what we would do if we were undergoing these emotions.

6.2 The Semblance Formulation and Resemblance

Given that the existing philosophical literature on musical expression assumes the inanimate formulation, existing theories on musical expression should be re-evaluated in light of the
semblance formulation when considering their applicability to the problem of dance expression. One popular theory, the resemblance theory, may lose its initial plausibility. Exemplified in the work of Peter Kivy, Stephen Davies, and Malcolm Budd, these theories argue that absolute music expresses in virtue of resembling more human qualities. Kivy and Davies claim music resembles vocal, bodily, and behavioral expression.\textsuperscript{10} Budd claims music resembles the feelings of emotions.\textsuperscript{11} But, in this formulation, the problem occurs when there is no apparent resemblance. Pavlova’s bourrées do not resemble ordinary bodily expression and neither do they resemble the feeling of emotions like frustration or struggle or hope. The initial plausibility of resemblance theories is dependent on the plausibility of examples which demonstrate a rather straightforward resemblance between an inanimate object and animate expression. Thus, examples such as Kivy’s St. Bernard or the resemblance to human voice do not seem to be problems. The explanation for why the St. Bernard’s face expresses sadness is that the St. Bernard’s face resembles a human face expressing sadness. There is no mystery to be explained, and it’s easily understood why the St. Bernard’s face expresses sadness. Similarly, if one hears an oboe sounding like a wailing human voice, and thus remarks on the sadness of the oboe, it is not hard to guess why, because it sounded like a sad human voice. Similarly, there are times in vocal expression itself when it’s said there is a ‘tear’ in the voice. The voice might then sound sad. Why? Because the voice resembles actual crying. However, I do not think these kinds of examples are the main ones people have in mind when they want to explain musical expressiveness.


\textsuperscript{11} Malcolm Budd, \textit{Music and the Emotions} (London: Routledge, 1985).
Let us go back to some of the examples of musical criticism that Kivy wanted to explain:

Here follows [in the first movement of Brahms’s First Symphony] a very beautiful passage of preparation for the second subject; a pathetic diminuendo, beginning angrily… and softening (while passing quickly through very remote keys) to tones of profound tenderness and pity…

What is at issue here is the reasonableness of a diminuendo being pathetic. How can the sound begin angrily and then how it can soften to profound tenderness and pity? What human expression is this supposed to resemble? Presumably the answer a resemblance theorist is going to give is that the sound is angry because it is loud and then it’s ‘profoundly’ tender and piteous because it’s soft. Loudness resembles anger and softness resembles tenderness and pity. One can sort of make sense of this if one ignores that one can also cry loudly and one can be angry softly. The resemblances conform to stereotypical behavior associated with loudness and softness. When one is angry, one’s speech is typically loud. When one is tender and full of pity, one’s speech is typically soft. But we also need to make sense of how the diminuendo can resemble patheticness. After all, expressive qualities are not solely about specific dynamics, such as loud and soft, but about whole phrases in music.

One question to have then is what human bodily expression is this diminuendo supposed to resemble? A diminuendo is a gradual (at least, gradual for the duration of the diminuendo) decrease in the perceived intensity of a sound. So given the analogy earlier, the bodily expression the diminuendo would resemble would be a slow shift from loud angry speaking to soft tender speaking. It’s hard to think of such an expression in our everyday life. Situations are hard to come up with. It’s easy to imagine someone becoming angry and bombastic with a kind

13 Or, as Kivy does, add in a conventional component to musical expression.
of quick and sudden energy and then slowly losing steam and getting slower and more lethargic over time. But that is not what is being expressed, what’s being expressed is a transformation from anger to tenderness. Perhaps a close example would be that of Othello who goes from an enraged jealous state, leading him to murder his wife, to a kind of pitiful sadness when he finds out his wife was never in fact cheating on him and that he’d killed his lover out of being misled.

This is where another explanans comes in. The more dissimilar the expressive quality is from normal human expression; the more reasoning and analysis is required to explain the expressive qualities perceived. Even if they are right that these resemblances exist, they don’t explain why these resemblances are quickly and easily heard in music. So, if they must argue at length and create a detailed analysis of resemblances between music and emotion, such as in the Othello example, then it would seem odd for them to also hold that these resemblances are perceived automatically and readily.

Of course, it may be the case that our minds perceive these resemblances but are not able to articulate them. And it’s only via analysis that this articulation comes to mind. Perhaps under this interpretation the similarities to human emotions are perceived, but we just cannot articulate them until we analyze the work more. While this is a possible explanation, it seems that the plausibility of the view is strained as it requires reference to explanations of perceptions of emotional similarities which are quite below the realm of consciousness. It also becomes more tenuous when you consider analyses like that of the Othello and diminuendo example. Of course, we might be implicitly aware of Othello-like emotional transformations at an unconscious level while listening to the diminuendo, but the more dissimilar the expressive qualities of the music are from ordinary human emotional life, the less plausible such explanations become.
If I am right, then this articulation of the problem poses a problem for resemblance-based theories – their solution amounts to a denial of the problem. They want to say: No, music actually does resemble human emotive life. I think that this denial of the problem echoes other criticism that resemblance-based theories have faced. Their biggest trouble is to articulate exactly how the Pavlova bourrées do resemble human emotive life. They have a strong empirical burden of proof here, because the resemblances must cover at least most cases of expression to be plausible.

The resemblance theorist could just say that the diminuendo is not actually expressive of patheticness. That’s something that is added to it by the critic. What’s important is the anger of the loudness and the tenderness of the softness. Those are the truly expressive qualities. The patheticness of the diminuendo is just critical fantasy. Music only expresses very basic emotions, and we can only reasonably ascribe to music emotions of this basic kind.

This is too hasty. Part of our job as philosophers is to make sense of and understand how we can reasonably say what we do about art. If there are other theories out there that can explain more complex emotional ascriptions like the pathetic diminuendo or the complex emotional states of Pavlova’s bourrées, then that would be a strong reason to prefer those theories. It seems like the resemblance theory will not do for a theory of dance expression. Historically, there have been several attempts to argue for various theories of dance expression. A quick review is thus in order before I turn to my positive proposal.

6.3 Association Theories

Most philosophical literature focusing on the nature of dance expression argues that dance expresses emotion through associations with concepts in language, even if metaphorical. Movement symbolizes emotions. This view has been expounded in various sophisticated ways
by Nelson Goodman, Suzanne Langer, and Joseph Margolis. In the dance world, this kind of talk about movement as language is prominent and perhaps gets its most clear expression in the work of Laban Movement Analysts, who think that movement has “effort life,” and effort life is what makes movement expressive. One notable example of this is Roderyk Lange who writes about how Laban has given us a way to objectively record expression in dance. In the music expression literature, it should come of no surprise that both Goodman and Langer are some of the most prominent exponents of symbolic accounts of musical expression, and thus that their views about musical and dance expressiveness parallel one another strongly.

These theories look at emotional expression and say that movement is emotionally expressive because we associate certain kinds of movements, and certain ways of moving with certain emotions. Note that these are distinct from resemblance theories because resemblance is supposed to be an objective property over and above associations. We might associate certain kinds of movement with the emotional expression they resemble, but there might also be other movements which are expressive which are not resemblance related but associated with concepts.

If we were to try to explain why Pavlova’s bourrées in virtue of this theory, how would it look? Well, it would say that the expressive qualities we see in the bourrées exist because of qualities in the movement that we associate with the expressive qualities. Perhaps we associate

16 In addition to Feeling and Form, see Langer’s earlier work Philosophy in a New Key (Cambridge: Harvard University Press, 1942), as well as her essay about dance’s expressiveness in particular, “The Dynamic Image: Some Philosophical Reflections on Dance” in Problems of Art (New York: Charles Scribner’s Sons, 1957), 1-12.
quickness in movement with anxiety, because many of us have had the experience of moving rapidly while under stress in somewhat jerk-like motions. Perhaps we see the fact that she’s moving from one side of the stage to the other as a representation of her moving closer toward death, and then struggling and moving back the other way, until she finally succumbs to the inevitability of her fate. We then associate those movements with that story. There are all sorts of ways that we can associate the movement Pavlova is performing with the expressiveness of an animal drawing closer to death.

6.4 Persona Theories

Early 20th century writers on dance also held variants of persona theories, that some person expresses emotion through the movement in the dance. Martin, for example, thought that motor response was a tool we used to recognize the emotion of the mover. A person expresses emotion, and we use motor response to detect the emotion expressed and be moved by it. Usually this focused on the dancer, instead of the choreographer. The dancer used their movement to reveal their internal states to audiences. And audiences would utilize motor response to feel what the dancer felt. The role of the choreographer was to design which emotional states were important for the dancers to embody and then express them.

This rather simple view about the relationship between dancers feeling and therefore expressing emotions incurs a variety of problems. One glaring problem is that we have above characterized the problem of expression in terms of the asymmetry between the states of the dancer and phenomenon expressing. It simply is not the case that the person dancing feels the same emotions that the movement appears to express. While one could pull a hard line to save this simple theory, e.g., claim that the expressions the audience detect are just incorrectly
perceived, or that what they are perceiving is a fabricated expression rather than a true one, it is unclear why the simple persona theory has any advantage over other alternatives which allow for the asymmetry of felt emotions and expressed emotions. Alternatives explain more of the expressive discourse without having to reinterpret most of it as falsely expressive or mistakenly expressive.

With the simple persona theory out of the way, there are contemporary persona theories that go beyond the simple denial of the asymmetry and explain how a person could express an emotion without the performers being in those emotional states. Three main contemporary defenders of persona theories in relation to music come to mind here, Bruce Vermazen, Jerrold Levinson, and Jenefer Robinson.\textsuperscript{17} Persona theories such as these owe most of their plausibility to the intrinsic connection there seems to be between the term ‘express’ and a subject which expresses. To many, it doesn’t make much sense to talk about the music expressing sadness unless there is person, real, fictional, or implied, which is expressing the emotion of sadness. In effect, they might agree with my reframing of the debate over the expressiveness of music. They think that music isn’t just an arrangement of sounds, but an arrangement of sounds which are the extension of some agent, and they are heard as such. When we say Chopin’s Nocturne in D sounds sad, we are not really saying that the tones and their arrangement sound sad, we’re saying that a person we hear in the music sounds sad, whether that’s Chopin himself, the performer playing, or some other implied person we hear.

Applying this to our paradigm case of Anna Pavlova’s \textit{bourrées}, there are at least four options. The \textit{bourrées} could express Fokine’s, the choreographer’s, sadness. They could also

express Pavlova’s sadness. Alternatively, they could express the fictional swan’s sadness, or some person they ‘see’ expressing that emotion through the movement.

In terms of these four options, the answer that most easily avails itself is that the bourrées express the fictional swan’s sadness. The swan is a character in the short ballet that Pavlova takes on. And the swan is not depicted in a realistic manner, but in an idealized, anthropomorphized, and feminized manner. The bourrées are an expression of a dying swan as if they were a ballerina. They could also be Pavlova’s sadness if she was this character, if Pavlova was indeed in a similar emotional state as a dying swan would be. And it is plausible that she did embody that emotional experience that deeply. It is less plausible that the sadness of the movement would be Fokine’s or some other implied person we see in the movement, given the piece’s narrative character. Resorting to authorial emotions or an implied persona would be more plausible in the case of more abstract dances, where the expressiveness of the movement is less connected to the embodiment of a character undergoing an experience. And in this way, persona explanations of expression for abstract dances are more likely to mirror explanations for absolute music.

However, one place of disanalogy is that in the case of dance, a performer-persona explanation is still plausible. In the case of absolute music such as a symphony, it is less plausible that a group of 60 people playing in a passage are collectively feeling similar emotions, and I would speculate that most audiences are not inclined to think that all the performers feel such emotions. But in the case of abstract dances, where there is no narrative nor characters that are embodied, dancers are much more likely to be seen as individuals with expressive qualities than in an orchestra. While members of an orchestra merge their sound together, dancers are quite likely to be seen as individual expressive agents, even with a performance of 60 dancers.
One can more readily discriminate between all the dancers on stage than between the ten flautists in the orchestra. Thus, a performer-centred expressiveness is more likely in the case of dance.\footnote{There are exceptions to this. String quartets and other kinds of chamber music are a greater possibility of individual expressiveness, as well as concertos. There are also cases of dances where there is less distinction between dancers. But while in dance it is a rare case that individuals are seen as more an amalgamation of movers; it is much more common in music.}

### 6.5 A Motor-Arousalist Proposal

Resemblance, associationist, and persona theories all have some explanatory power when it comes to dance expression. Resemblance, I’ve suggested, doesn’t have the power to explain hard cases of dance expression such as the Pavlova bourrées. These kinds of dance expression, where the emotion expressed does not resemble emotional behavior, are ubiquitous in contemporary dance, and therefore reveals the limitations of the resemblance theories. The associationist and persona theories fare better in this regard. I have told stories for how each theory can accommodate the Dying Swan case. But I think there is more to be said.

John Martin’s theory about dance expression was a hybrid theory. He argued that the success of dance expression was (1) dependent on the audience understanding the dancer’s emotion (a persona theory) and (2) dependent on the audience being able to feel, sympathetically, the dancer’s emotion (an arousalist theory). His view was then a persona-arousalist theory. There are other hybrid theories in the philosophy of music. Peter Kivy’s view is a resemblance-associationist theory.\footnote{Peter Kivy, \textit{The Corded Shell: Reflections on Musical Expression} (Princeton: Princeton University Press, 1980).} Saam Trivedi’s view is a resemblance-imaginist theory.\footnote{Saam Trivedi, \textit{Imagination, Music, and the Emotions} (Albany: SUNY Press, 2017).} My goal in this chapter is not to endorse one single theory of dance expression, but to suggest avenues for explaining dance expression. One such avenue is motor response.
I call this strategy motor arousalism. A pure motor arousalist theory would look like this:

Pure Motor Arousalism df→ x movement expresses y emotion if and only if x movement arouses a motor response related to emotion y in an audience z.

Pure motor arousalism, like the previous theories, has a straightforward understanding of how to explain the expressiveness of sadness in Pavlova’s bourrées. They’re expressive of sadness because they might evoke motion that are related in various ways to the feelings of sadness in us. However, the phrase related to brings up the question of, “How is motor response related to the emotion which is expressed?” As is, the property of relatedness is vacuous. Any given motor response is related to any emotion. Say I watch one of Elizabeth Streb’s dancers running around swinging cinder blocks and I flinch in response. The motor response of flinching is related to fear, such as if someone walks up behind us unexpectedly and suddenly announces their presence. It’s related to embarrassment, such as when we cringe at old videos of ourselves or listen to our own voices. It doesn’t even have to be a similar kind of response relationship. Flinching is also related to anger because if someone is trying to punch us while they’re angry, we’re likely to flinch. Here your emotion is fear, but your emotion and motor experience are being caused by someone who is angry. Your flinching is related to anger, even though your flinching was presumably not an expression of anger. Moreover, most emotions have relationships to all other emotions. Happiness is related to sadness in virtue of being opposite emotions. Opposition is a relationship. Thus, being related to is not enough to have a motor arousalist theory.

There are options for replacing relatedness with more substantive relationships. Most of them require hybridizing the theory. For example, one could replace relatedness with resemblance.

Resemblance Motor Arousalism df→ x movement expresses y emotion if and only if x movement arouses a motor response **which resembles** the motor experience of emotion y in an audience z.

This is different from a resemblance theory or a resemblance plus arousalism theory. A resemblance theory by itself says that a movement expresses an emotion because the movement resembles emotional behavior. There’s no arousal involved. The resemblance plays a secondary role, to determine the relationship between the motor response aroused and the emotion. Arousal is not added to accommodate the cases that resemblance does not handle. Arousal lies at the core of emotional attribution in this theory.

The above theory is in part inspired by Trivedi’s hybrid imaginist-resemblance account of expression in music. This theory applied to dance holds that what is involved in dance expression is an imagined resemblance between the movement seen and the emotion expressed in the dance. We imagine the movement to be similar to emotions. One could then create an Imaginist-Resemblance Motor Arousalism theory and replace “which resembles” with “which is imagined resembling.”

One could further adapt hybrid versions of persona theories and associationist theories into motor arousalism. The point is that motor arousalism needs an explanation as to the relationship between the motor response aroused and the emotion expressed, and there are options. There are a wide variety of options that I do not have the space to discuss and evaluate. The question remains as to whether motor arousalism, or arousalism in general, can really be an important part of expression at all, in any of these forms.
6.6 A Problem for Arousalism

A problem people have posed toward arousalism is that it seems to change the topic.\textsuperscript{22} Arousalism looks at expressive phenomena and gives an analysis of what it is to be expressive in terms of physiological or emotional arousal in the audience. They think what the arousalist is doing is not giving an analysis of expression, but an analysis of arousal. And these are two different things. Let us call this the problem of reduction.

To begin with, this problem, if it is a problem, applies to practically all theories of expression, except perhaps the simple persona theory. To show this, look at a simple statement we want to explain, “the music is sad.” What does it mean to say, “the music is sad?” Or in other words, what conditions would have to hold for it to be true? Each of the various theories we have considered take that statement and analyse it in other terms. The resemblance theorist interprets it as, “the music is perceived as resembling sadness.” The associationist sees it as, “the music is associated by perceivers with sad things and experiences.” The persona theorist interprets it as, “the music is heard as expressed by a sad person.” And the arousalist interprets it as, “the music arouses similar emotional experiences to sadness.”

One potential issue with this response is that it could be argued that the arousalist has a harder time than these other theories. The gap between the emotions aroused by the music and the sadness of the music is larger than the others, given that the object which is emotional has been shifted. For the arousalist, it seems it is no longer the music that is sad, but the listener. None of the other theories appear to have the same problem. All the other ones are response-dependent to a degree, but they still locate the emotion in the music, not in the perceiver of the

\textsuperscript{22} Trivedi particularly pushes this objection.
music. Thus, it would seem there is an inappropriate gap between emotion aroused and emotion in the music.

I do not think this to be a big problem for the arousalist, in part because this is a common thing humans do. They take a reaction to an object as being indicative about something about the object. If I were to say, “I am enjoying the coffee,” I’m saying something partially about myself, that I get some pleasure from the coffee, and I am saying something about the coffee itself, that it has the property of offering some enjoyment. So, when I say that, “the music is sad,” for the arousalist, I am saying something about myself, that I am moved to sadness by the music, and the music as well, that the music causes my sadness. The arousalist does account for the sadness being in the music, despite appearances to the contrary. Thus, an arousalist would likely hold a dispositional theory analogous to those proposed in the philosophy of perception regarding color.

This dispositional analysis of expressive properties would thus be a plausible avenue to responding to the claim that the arousalist has shifted the object of analysis from the music’s emotional properties to the listener’s emotions. It seems arousalism is on the same level as the other views regarding changing the subject. However, the issue of changing the subject is still here. We wanted an analysis of what it is to say the dance is sad or of another emotion. What we are giving as an answer is that the dance is sad because it tends to cause sadness in its listener. A way of conceiving this gap is: What links (1) arousal and (2) the emotionality of dance? There is a “no-brainer” answer available: that the emotion which is aroused is the emotion ascribed to the dance. But why is this the case? Why is it that this is linked to the emotionality of dance, and not anything in the other competing theories?
This question highlights the different ways in which theories of emotion in art could be decided between. It asks for a link between the *explanandum* and the *explanans*. It could be that the link is an empirical one, whenever we ascribe emotion to art, it is because it arouses sadness in us. When we say that the dance, or another art piece, is sad, we are saying that it arouses sadness in us, and that we attribute the sadness to its origin in the dance. What would make it the case that this is a better theory than alternatives would be that it more adequately explains the empirical phenomena. It fits how people ascribe emotions to dance.

Another, less accidental, set of options are open to us, however. Recall that in the previous chapter, I was concerned with what makes it necessary for us to appreciate dances via motor response. The answer was that for many aesthetic properties of dance, one could not appreciate them fully without motor response. And what made this the case was several layers of normativity: hedonic, conceptual, and dance institutional. This could give us additional grounds for deciding between competing theories of emotion in art. Empirical adequacy would still be important, but it would bring several other factors into play and may override empirical adequacy.

For example, the challenge to the arousalist I’ve been considering in this section is on conceptual grounds. The problem says that even if arousalism perfectly explained how people ascribed emotion to dance, it doesn’t capture our ideas of emotion being in dance accurately. Emotion is in the dance, not in the perceiver of the dance. I have since shown how this challenge can be met, by proposing a dispositional account of the emotion. But the point to notice is that the theory, even if it was empirically adequate, could be overridden by these conceptual points.

You could thus think about theories being empirically adequate, conceptually adequate, or art institutionally adequate. There is some room for thinking about hedonically adequate
theories, such as a theory’s aesthetic-hedonic values having normative pull, but hedonic reasons are likely not to feature strongly in terms of reasons to favor certain theories over others. They certainly wouldn’t feature strongly in philosophical debates about them. Empirical, conceptual, and art institutional adequacy all have firm footing to draw on in choosing certain theories of expression over others.

6.7 Wrapping up

I have argued that, despite first appearances, the problem of expression can reasonably be applied to dance. Even though dance is an animate artform, performed by mostly humans who have expressive life, problems of how to explain dance expression still show up. I used this to motivate a re-conceptualization of the problem of expression for dance. The problem, I argued, is best understood as a semblance problem. The expressive phenomena do not resemble the emotions which are expressed.

After showing that the problem of expression does apply to dance, I reviewed several of the existing theories to show how they could apply to solving the problem. My goal was not to endorse or reject any of them wholeheartedly, but to show some virtues as well as shortcomings of some of them. Resemblance theories fared the worst, precisely because of the way I re-conceptualized the problem of expression. If the problem of expression is to be understood as a lack of resemblance between the expressing phenomena and the emotions expressed, it’s hard to argue that resemblance explains the problem. Associationist and persona theories fared better. They could explain a hard case like the Dying Swan bourrées with little effort.

I then proposed a motor arousalist theory. Pure motor arousalism has the problem of being too broad, given that it simply says that the motor response aroused by the dance need merely to be related to the emotion expressed. Motor response needed to be supplemented with a
stronger relationship, thus allowing us to draw on hybridized theories, where we include something like resemblance in our arousalist account.

Arousalism incurs many other problems, however, and is generally not a popular theory when it comes to explaining musical expressiveness. The main challenge, that arousalism changes the subject from explaining musical expressiveness to explaining listener expressiveness, ultimately applies to all theories of musical expressiveness. They all seek to explain one phenomenon in virtue of another phenomenon, thus bringing the charge of changing the subject into focus for them as well. It seems that arousalism is on no shakier ground than competing theories for this reason.

In the end though, I have not given an argument for any theory of dance expressiveness. The most important lessons we have learned is that the problem needs to be reformulated for the purposes of explaining the mysterious cases in dance expression. Starting from the problem of how it’s been formulated in the philosophy of music literature makes it appear as if there is no problem for dance. I have also given some hints as to how to answer this question, including defending the possibility of including motor response as a significant part of a theory.

This brings the project to a close. We began with skepticism, learned from John Martin, engaged with contemporary literature in light of this, and then sought to understand gracefulness and expressiveness in dance. While one might reasonably agree or disagree with most of what I have written, I hope that the main value of this project has been in the way it has put several different literatures, dance theory, philosophy, and cognitive science, in dialogue with one another. I have sought throughout to re-orient and clarify many of the existing debates and have argued for my own opinions on them. I do hope that anyone reading this will find such clarifications to be illuminating, even if they disagree.
Bibliography


