

Chapter 8: Entrainment

The “dissonance, the dephasing, the complementarity of the between” is made palpable during an exercise at a workshop for dance scholars with *Duo* dancer Allison Brown.¹ I have invited Brown to teach us something from her practice of *Duo*, something without virtuosic movement so that my fellow scholars can join in. Brown asks us to find a partner. She gives the small group of dancers and scholars the task: “You go, I go, we go.” Without music, she asks us to improvise movement together accordingly, while moving from one side of the room to another. She lets us negotiate the transitions, some speaking, others sensing.²

The instructions render aspects of dancing William Forsythe's duet *Duo* palpable to those outside it and inexperienced in moving with others. True to the experience conveyed by Brown's assignment, *Duo* is a choreography that foregrounds the interplay of commitment to synchrony—not of timing mandated by an outside force but timing negotiated between people. In an interview with me, Brown described her memories of dancing *Duo* onstage as a continual interactional stream: “meeting, arising and coming to each other and being in unison and being out of unison, in aligning and dis-aligning but staying together, and this seeing each other with other senses and other body parts than the eyes.”³ This process of sensing betweenness and passing in and out of phase is the focus of this chapter, which explores how this practice is cultivated and asks how it produces subjects in relation. The concept given to name and explore this is *entrainment*: “the process that occurs when two or more people become engaged in each other's rhythms, when they synchronize.”⁴

1 Manning, *The Minor Gesture*, p. 61.

2 Allison Brown, workshop at the *Dancing Together* conference at the University of Bern, October 25, 2018.

3 Allison Brown, studio session dancing in Frankfurt, September 23, 2016.

4 William Condon, referenced in Hall, *The Dance of Life*, p. 177; see also Spier, “Engendering and Composing Movement,” pp. 142–43. Most dance and music are forms of entrainment. Entrainment may also feature in spectators' expectations of dance and lead to frustration when this is not met. For a discussion of the reception of *Jérôme Bel* (1995), see Lepecki, *Exhausting Dance*, p. 2.

Steven Spier has named *entrainment* as one of four factors important to Forsythe's work: "counterpoint, proprioception, entrainment, and authenticity."⁵ For Forsythe, proprioception is about experiencing oneself, whereas entrainment is about experiencing relation, a sort of empathetic kinesis of one's own and another's body. My aim in this chapter is to analyze my fieldwork studies for accounts of entrainment and to use these to reflect on how dancers experience time and order in choreographic process.

8.1 Synchronizing the First Step of *Duo*

The first movement of *Duo*, the movement called *showerhead*, is a delicate threshold in which synchronization takes place. The dancers begin the piece by performing this movement in unison. To do so, in the shift from backstage to onstage, the dancers increase their sensitivity to their bodies, time and their awareness of one another. They rely on their "spidey sense," dancer Jill Johnson joked with me, referring to the superhero Spider-Man's endurance, agility and the power to sense incoming motion and react before his body comes in harm's way. Another term for this, Johnson proposes, is *entrainment*, which she describes as a rhythmical acuity, based on longstanding practice, interaction and care.⁶

During the minutes before *Duo* begins, the dancers are separated backstage in the wings, waiting on either side of the stage.⁷ After the first piece on the program, the dancers would receive a signal from the stage manager, waving her flashlight to tell them to enter the stage and start. In the blackout, they would walk quietly through the darkness onstage to their starting position. Then the stage manager would cue the technicians to turn the fluorescent stage lights on. Cut: the lights come up and the audience sees the two dancers standing at the front of an empty stage, their arms resting at their sides. The women wait, with neutral expressions, focusing straight ahead. They listen. Since they face the same oblique angle and are separated by more than half the width of the stage, they cannot see each other's faces. They have to rely on other senses than their eyes in order to start the first movement together. After a consequent pause they inhale and begin the motion *showerhead*.

Duo starts by tuning into the virtual: the potential to synchronize, the process of *entrainment*. Listening, the sound of the dancers' mutual inhale pulls them into action. Aside from this little breath, there is no external musical cue to start. They entrain to one another, while also tuning into the audience: waiting for the audience to adjust to the new lighting conditions and become hushed. *Duo* dancer Allison Brown remembered this vividly:

[I remember] going out on stage in the dark. Trying to find your glow-in-the-dark mark on the floor and hoping that it's good, that we're in good alignment and we're ready. And the audience taking us in and us taking the audience in and this first moment,

5 Spier, "Engendering and Composing Movement," p. 135.

6 Jill Johnson, videoconference interview with the author, October 21, 2016.

7 I speak here of the Ballett Frankfurt version of *Duo* (1996–2004), not *DUO2015*.

standing naked there basically. And yeah, I remember the whole thing actually, in lots of different places, and lots of different times, and in lots of different bodies.⁸

Bodies on the move and changing, fragile to others through their visibility. Brown gets in a rhythmic narrative groove remembering the multiplicity of enacting *Duo*, nakedly, across bodies and time.

Movement complicates the triad of volition, intentionality and agency, writes philosopher and dancer Erin Manning. She proposes: “experience cannot be reduced to individual volition. It is collective—ecological—at its very core.”⁹ *Showerheading* demonstrates that the dancers’ sensitivity to the audience was enacted through their first decision: when and how to start moving. How was this decision made and by whom? Studying different video records of this history of beginnings, I watch variations: more or less synchronous starting movements, bigger and smaller stages, more or less light, quieter versus more animated audiences. In my interviews with the dancers, I learn that some pairs planned which dancer would initiate. Others did not designate a leader; instead the togetherness was intuitively mutual. Some told of an unspoken hierarchy of letting the more experienced dancer take initiative, and the insecurity involved in working to get things right. In just a few seconds, in a moment of pregnant anticipation, togetherness was already at issue.

8.1.1 Stretching Moments

The audience’s attention *precipitates* the dancers’ delicate motion. The dancers’ testimony, such as Johnson’s below, illustrates that even when one dancer was designated to start, the process was collective and ecological (that is, tuning into the space of performing and the signs of the audience’s mutual attention). Drawing upon the terminology of performance scholar Erika Fischer-Lichte, *Duo* dancers sense the audience as a resonator of attention, as “co-presence.” The spectators’ sounds and motions provide a “feedback loop” to the envelope of interaction on stage.¹⁰ In *Duo*, these reactions are amplified because the environment is so quiet. Like the tiny sounds in the middle of the night, the audience’s little shifts in their chairs and vocalizations (sniffs, coughs, whispers with a neighbor) are very audible.¹¹ Though the spectators do not share the longstanding history of the co-performers in *Duo*, they may still become caught up in the time-making sensitivity and the intensity of motion anticipation, entraining with them. They may participate, with their breath, their focus, and attention. They might also decide to participate *differently* than the artists. Catcalls, the dancers remember, also occurred, voicing male spectators’ response to women in “diaphanous” costumes,

8 Allison Brown, interview with the author, Frankfurt, September 23, 2016.

9 Manning, *The Minor Gesture*, p.117.

10 Fischer-Lichte provides a historic overview of how these practices of participation have shifted in western theater, from the deliberate suppression of spectators’ response in the late 18th and 19th century, to experiments in the early 20th century seeking to organize and compose this “feedback loop.” See Fischer-Lichte, *The Transformative Power of Performance*, in particular pp. 38–41.

11 Music scholar Ian Biddle’s study of tiny sounds shows that they are a rich and politically strong realm of affectation. See Biddle, “Quiet Sounds and Intimate Listening,” in particular pp. 206–7.

showing much of their bodies, including their breasts.¹² This was part of the risk each night and the dancers' vulnerability. The attunement of entrainment made this tangible from the first second of the dance. Entrainment as the tuning into the emergence of organization in time.

"I gave that cue."

Videoconference interview with *Duo* Dancer Jill Johnson, June 28, 2018.

LIZ: When you are on stage and about to begin motion. Was there a cue for that?

JILL: I gave that cue. And it was to spend some real time—in other words, not choreographed time, not the two of us getting to our first places and waiting for two [musical] eights, before we started. It was ... we waited for the audience: for the two of us to settle and kind of feel each other. But also, there was always a response from the audience, in part because we were so close to them, and they weren't necessarily expecting that. There was always a bit of like (*she vocalizes, similar to a sigh*) "ahm." In Frankfurt, with our home audience, they were like "oh, ok." And it settled pretty quickly. In Orange County [Los Angeles, a tour in 2003] for example, where we were (*pause*) restricted because there was quote "nudity"—it was a conservative bubble ... there was all kind of (*she vocalizes*) "flaahflahflahhh" and we had a heckler, you know? So it varied, with where we were. But a time when we could really feel that it settled. And then a borderline, not pushing the audience, but let's see how far we can (*pause*) have this moment be ... just being with each other (*she inhales, starting showerhead*) and then start. [...] You would feel the audience finally in real time settle, and then you take a real long second or five and then start.

Duo dancer Jill Johnson's stunningly detailed reflection upon cueing the start of *Duo* shows how pregnant one moment can be. Like a conductor, Johnson describes her role modulating communal attention. The process involves acuity in listening to the audience's settling, and then an extra nudge—a trust in prolonging that time. Johnson's perception illustrates that time is in this way "real" and shared at the beginning, in search of a sort of "being."¹³ Her mastery of negotiating time intimately, through detailed somatic attention, shows the way that time in *Duo* is much more than just skill or discipline. Rather, it is a way of negotiating expectations and intimacies of sharing time with the audience and then modulating these intensities and qualities. Johnson also describes how this varies on tour, suggesting it is based to some degree on shared experience and history. The "home" audience of Frankfurt could more quickly settle

12 Jill Johnson, videoconference interview with the author, October 21, 2016. Allison Brown, video elicitation in Frankfurt, September 23, 2016. Johnson reflected further: "To my mind, a see-through, black, fine-mesh top is different than being bare-breasted. It could be said that the issue at hand here is that the diaphanous costumes which showed much of our bodies (including breasts, torso, arms and legs) were often seen through a sexist focus on breasts and the shock/offense/sexualization of women's breasts." Johnson, email to the author, September 14, 2020.

13 Jill Johnson, videoconference interview with the author, June 28, 2018.

with them; conversely, it was more difficult when the audience became uncomfortable because of their closeness and nakedness.

Some dancers found the first moments of *Duo* challenging: the neon lights were harsh and at times one's heart was fluttering in anticipation of performance.¹⁴ The bare costume might make one feel vulnerable. Also, one is very far away from one's partner (over ten meters), a separation at odds with the intimacy of the piece. In his first few performances dancing *Duo*, Watts—who inherited Johnson's role and took responsibility for initiating the first cue—focused more on his partner than the audience. He explains his approach:

I know Brigel [Gjoka, my partner] is listening to my cue, and from a distance I have to feel that he is ready to begin. It is our job to imagine the connection between us, and sometimes I would imagine a phantom limb connecting us between our shoulders. I try to imagine, what does [he] feel like right now? What does his body look like? Can I feel what his body feels like? Only when I feel that we are sufficiently connected do I audibly exhale and begin the first movement.¹⁵

In our interviews, Watts used the terms entrainment, connection and rhythmic connection interchangeably. Once he spoke about “telepathy”—entrainment as the “super-power” to communicate at a distance, as if they could read what one another were thinking, another term for Johnson's “spidey sense.”¹⁶

While Watts learned the Ballett Frankfurt version of *Duo*, which begins by synchronizing *showerhead*, the version of *Duo* that the dancers toured extensively (*DUO2015*) was modified with a new beginning. Instead of starting *showerhead* together out of silence and stillness, they began by building connection through an open improvisation.¹⁷ The curtain rose in the middle of this process, showing the dancers already moving without music. Though their improvisation varied from performance to performance, they generally moved with light gestures, predominantly of the upper body and arms. They performed side-to-side, sometimes while walking or shifting place—playing with similar rhythmical movements of their arms, precise directions of gaze (on ‘my’ body, on ‘your’ body, in the space forward, below, up and back), as if grooving together on common themes and sharing some common music. This window of improvisation progressed for a few minutes until a commonly designated alignment, precipitating unison. The game, a way into the material through their rhythmical connection in play, was also a practice of *entrainment*.

In my conversations with the *Duo* dancers I asked: What enabled them to entrain? When did their synchronization begin? And what supported or harmed it? Jill Johnson

14 Regina van Berkel, interview with the author, Frankfurt, April 22, 2017.

15 Riley Watts, videoconference interview with the author and Bettina Bläsing, January 14, 2014.

16 Riley Watts, interview with the author, Bologna, October 25, 2017. Jill Johnson, videoconference interview with the author, October 21, 2016.

17 This is described in the opening passage of my Introduction. By open improvisation I mean an improvisation without a defined task. Forsythe initially asked the dancers to mark the movement, meaning to perform the movement at a smaller scale, with less force and energy. While Forsythe occasionally gives open improvisations to his dancers, in my experience as a dancer, the majority were task or proposal based.

explained to me that, in her view, the opening movement in *showerhead* was not the start of entrainment. Rather: “The entire trajectory of the piece [*Duo*] stems from the intimacy and entrainment between the dancers from preparations prior to the piece, to the moment we would walk on stage in the dark, dance the piece together and even beyond the bows and finishing the piece.”¹⁸ What this suggests is that the entrainment of movement is based on more longstanding shared experiences—histories of practice and shared understanding.

8.2 The Scientific Discourse of Entrainment

Entrainment in music frequently involves play, groove and pleasure—although few musicians use the scientific term of entrainment. Musicologist and jazz scholar Charles Keil writes of musicians: “We use this word/concept ‘groove’ because it is used in common parlance to name the broad range of phenomena we want to understand well enough to foster. ‘Entrainment’ is a technical term from physics favored by some ethnomusicologists who may be uncomfortable using African American slang, but why burden an organic life process with a physical mechanical model?”¹⁹

The gap between the theory and practice of human entrainment is a large one. The phenomenon is studied across a wide range of fields, reflecting a history of the concept migrating from physics to the biological sciences, systems theory and most recently sociology and ethnomusicology.²⁰ Entrainment has come to name the phenomenon whereby independent, coupled rhythmical oscillators interact and stabilize—producing synchronized or rhythmically related activity.²¹ Beyond the groove of jazz musicians or dancers, entrainment is taking place, for example, when humans synchronize their biological clocks to day and night, when fireflies blink simultaneously and cicadas pulsate rhythmically; even, intriguingly, when pendulums, hanging from a common beam, synchronize their swing.²² The common element here is order and organization, perceived by a human.²³ Entrainment is not one common mechanism, especially one occurring

18 Jill Johnson, email to the author, June 28, 2017.

19 Keil, “Defining ‘Groove,’” p. 1.

20 Reviewing this literature across disciplines, including the limited literature on entrainment in dance, see my writing in Waterhouse, “In-Sync.” The verb ‘to entrain,’ from the French *entraîner* (16th century), means to drag away from oneself, or to draw as an accompaniment or consequence. In the late 19th century, the word was used colloquially to describe entering a railway train. Source: *The Oxford English Dictionary of English Etymology*, p. 317 and *The Second Edition of the Oxford English Dictionary*, p. 303. Today, in contemporary French, the word *entraînement* means to train oneself, such as the movements that one might perform in the gym.

21 The first recorded observation of this phenomenon is traced to Dutch physicist Christiaan Huygens (1629–1695), who described this in a letter to the Royal Society of London (1665) as the “odd kind of sympathy” between two pendulums suspended on the same beam. Huygens, cited in Czolczynski et al., “Huygens’ odd sympathy experiment revisited,” p. 1.

22 Clayton, “What Is Entrainment?,” p. 49.

23 Massumi and Manning consider a spectrum of experience between entrainment and entertainment, advocating respect for neurodiversity. They associate entrainment with Whitehead’s “causal efficacy” noting how neurotypical western persons can target affordances and punctually use,

ideally in humans; rather, it designates a suite of things that humans find similar across biological and mechanical systems: when coupled systems appear to sync up.²⁴ It is a term that we use to name what we describe as “coordinated rhythmic movement.”²⁵

Occasionally, experimental research into human entrainment has disregarded factors of history and culture—identifying the social as just what passes between people, as lacking its complexity of formation, context and material. Frequently this coincides with valiant though constraining empirical methodology, intended to measure events of synchronization for the purpose of refining a hypothesis. By contrast, within the pioneering work in ethnomusicology, the term has helped to differentiate approaches to timing in music across genres and cultures.²⁶ Some of this work has been notably interdisciplinary,²⁷ overcoming the tendency to think about sociality and bodies as rhythmic signals and receivers, involving power plays of *Zeitgeber* (time-givers) controlling time-perceivers.

My fieldwork examining *Duo* has taught me that entrainment, as distinct from the apparent perfection of being co-timed, is a thick maelstrom of living bodies—bodies that are processual, with ambiguities of inside and outside, and betweenness—all aspects central in dance science and the humanities. Thus, rather than trying to further enter and build upon the entrainment literature, as I attempted in previous publications,²⁸ in this chapter I venture a fresh approach, studying entrainment inductively by investigating the dancers’ testimonies. In doing so, I think of entrainment as “an ecology of practices,” to borrow a concept from philosopher Isabelle Stengers. This implies:

mount and speak. Entertainment they understand through Whitehead’s “presentational immediacy” which is relational in its inframodal dreaming: “the relational quality of a welling environment that dynamically appears in a jointness of experience.” Manning and Massumi, “Coming Alive in a World of Texture,” pp. 7–8; see also *ibid.*, footnote 12 pp. 155–56. My understanding of entrainment in *Duo* considers it as a fusion of causal efficacy and presentational immediacy, so that relational components come to the fore.

- 24 Clayton specifies that entrainment is a process in which independent rhythmical systems interact and stabilize. Their interaction occurs through coupling (i.e., a material connection or perception causing a feedback loop). When entrained systems are perturbed they return to rhythmical relation. The mathematics of systems theory models this definition. Clayton, “What Is Entrainment?,” p. 49.
- 25 Phillips-Silver et al., “The Ecology of Entrainment,” p. 3.
- 26 See Clayton et al., “In Time with the Music.”
- 27 Wonderful examples using blended methodology are: Doffman’s study of jazz musicians’ experience of groove, hybridizing ethnographic and psychologically informed empiricism; Clayton’s critical exploration of scientific methods of timing measurement and ethnography; Hahn and Jordan’s research, which also blends ethnographic methods and cognitive neuroscience to propose a multi-scale view of entrainment within Japanese dance pedagogy; lastly Ancona and Waller’s ethnographic study of software teams’ working activities as a dance of rhythmical enmeshment to shifting paces of different sorts. See Doffman, *Feeling the Groove*; Clayton, “Entrainment, Ethnography and Musical Interaction”; Hahn and Jordan, “Anticipation and Embodied Knowledge”; and Ancona and Waller, “The Dance of Entrainment.”
- 28 Waterhouse, “In-Sync”; Waterhouse, “Entrainment und das zeitgenössische Ballett von William Forsythe”; Waterhouse et al., “Doing *Duo*.”

[...] the demand that no practice be defined as ‘like any other’, just as no living species is like any other. Approaching a practice then means approaching it as it diverges, that is, feeling its borders, experimenting with the questions which practitioners may accept as relevant, even if they are not their own questions, rather than posing insulting questions that would lead them to mobilise and transform the border into a defence against their outside.²⁹

To explore these layers, I now clarify how the *Duo* dancers’ practice of entrainment is situated in the ecology of the dancers’ activities and histories with ballet.

8.3 The Conventions of Entrainment in Ballet

In the studio, western dancers use the term *unison* to describe dancing the same movements at the same time, usually to music supporting that synchrony.³⁰ Ballet dancers regularly perform in unison while facing the same direction, at times with symmetric variations (as a group, some dancers facing right and some to the left, etc.); they strive for exactness in this practice, which is achieved through rehearsal and is supported by listening to the music.

Ballet dancers master dancing in unison. Balletic unison is part of the performance aesthetic, featuring spatial formations of dancers performing as one body, as well as a pedagogical strategy lingering in the daily technique of training (that is, exercises perfected all together in groups). The spatial patterns of dancers in ballet choreographies are derived from European court dances. The co-joining of bodies in harmonious movements and symmetric formations was later named the *corps de ballet*, literally the body of the ballet, like the *corps d’armée* (from the 16th century). As a dance form produced through the body-politic of French king Louis XIV, his staging of ballets required the participation of his court. To rectify the imperfections of courtiers and gain control over competition, in 1662 Louis XIV established a Royal Academy of Dancing. Dance scholar Mark Franko describes this as when ballet was established a “discipline,” what Michel Foucault defines as methods making “possible the meticulous control of the operations of the body, which assured the constant subjection of its forces and imposed upon them a relation of docility-utility.”³¹ Not only did the institution, according to Franko, “strike at unwanted or offensive movement potentials,” but through the schooling of ballet, dancers formed themselves into useful, masterful and obedient movers.³² Ballet was thereby linked with the power to rule, and the power to define what was proper and improper—and to make this visible in performance. Aesthetic perfection and discipline were entwined. Synchronization *subjected* bodies.

29 Stengers, “Introductory Notes on an Ecology of Practices,” p. 184.

30 The word presumably has been adapted from the field of music, with origins in the Middle French *unisson* (16th century) or Medieval Latin *unisonus*: “of the same sound as something else.” *The Second Edition of the Oxford English Dictionary*, p. 75.

31 Franko, “Archaeological Choreographic Practices,” p. 98; Foucault, *Discipline and Punish*, p. 137; see also Franko, *Dance as Text*, pp. 108–12.

32 Franko, *Dance as Text*, p. 111.

Over 300 years later, one might question the extent to which such history is relevant to dancers in *Duo*—how it comes to be passed down, in techniques of training and performance, now distant from their historic origins. It is my thesis that the heritage of balletic synchronicity and its alignment with discipline and the hierarchy of imperial rule remained important, both to the aesthetic appearance of synchronization in Forsythe's choreographies, and the dancers' real lives in this work. To develop my argument, I will now consider an example: the well-known ballet *Swan Lake*.

8.3.1 Entrainment in *Swan Lake*

Classical ballets manifest virtuosic patterns of coordinated grace, inspiring what William Forsythe has called, “the joy of the evident.”³³ The quintessential example of *Swan Lake* is a staple of ballet companies internationally.³⁴ Performing this ballet involves contributions from dancers partitioned by rank—the *corps de ballet* dancing mostly in unison and the stars shown as individuals and partners. The female *corps de ballet* of the swans has become integral to the aesthetic look and training of ballet, in which female dancers wear identical white tutus and perform movements in unison—also holding long poses. All the dancers entrain to the music, their movement a visual manifestation of the rhythmic patterns it contains. The protagonists of the ballet, Princess Odette (transformed into a swan) and Prince Siegfried who falls in love with her, frequently stand out in relief against this mobile landscape of women—a constellation that echoes and frames the soloists' action. They also explore their partnership, dancing the *pas de deux*. Touching one another, the man assists the women to bend, float and rise off the ground.³⁵ The female villain, a black swan Odile (performed by the same dancer who plays Odette), moves—unlike the harmony of the graceful swans—with dynamism, rhythm and vigor. Here the fable is quite clearly narrated through entrainment modes: defining casts of animals, persons and royalty, dynamics of male and female, and morals of good and evil. Intertwining cultural codes, beauty is constructed by entrainment of dance to music and a highly ordered cosmos of participants.

Contemporary European dance, including the work of Ballett Frankfurt, has taken issue with norms of dancers courteously synchronizing to choreography and music, staging many experiments with choreographic form and presentation. Across Forsythe's repertoire there is investigation of and through entrainment. Forsythe has taken the sensorimotor proclivities of dancers who have learned to entrain in their ballet education, together with the conventions of entrainment in classical ballet, and staged a new and critical range of synchronizing and de-synchronizing dynamics. These become a compositional field: entrainment varies in scale (within the one body,

33 Forsythe speaking in Figgis, *Just Dancing Around*, 10:55–11:05.

34 With choreography usually referring back to the imperial version of 1885, choreographed by Marius Petipa and Lev Ivanovich Ivanov, which was performed at the Mariinsky Theatre in Saint Petersburg, Russia.

35 A short synopsis of this “sexual division of labor,” which Novack rightly categorizes as guiding, supporting, carrying and manipulating the women, is found in Novack, *Sharing the Dance*, pp. 125–32; citation p. 128.

dyadic, group or between groups), rhythmic complexity (unison rhythms versus hierarchical or polyrhythmic relations, symmetric versus asymmetric), synchronizing mediums (sound, light, movement), and ranges from planned to improvised.³⁶ I agree with dance scholar Heidi Gilpin: “Rather than retrieving and reproducing classical balletic forms that are fixed entries in the roster of movement, Forsythe bursts open these forms so that previously hidden moments in balletic movements are made plainly visible. In doing so, not only are movement and form given a new life and a new set of possibilities, but so is ballet in general.”³⁷

8.3.2 Individualization in the Hierarchy of Ballet

Ballett Frankfurt’s repertoire explored a range, or ecology, of synchronizing and desynchronizing. This involved many links of cooperation: relations between dancers, between dancers and musicians, between the dancers and moving elements of the set, between dancers and changing lights, and between all of these and the audience. The dancers entrained through touching, listening, watching, breathing-sounding, speaking and moving rhythmically. Entrainment congealed alignments between movement, light, material and sound—producing “relationscapes” of emergent experience.³⁸ The entire team working on the performance had to synchronize their efforts to modulate light, sound and space *together*. The audience attuned to this vacillating field of emergent organization, perceiving rhythmically, expectantly with the unfolding performance.

Entrainment in these works is an aesthetic *process*—not only producing artistic works but a manner of being artful and explorative, with unusual bundles of perception, signs, communication and sense. Entrainment *may* be beautiful; but such tastes are complex and culturally constructed, based upon much common understanding about their meaning. What the scientific literature has largely missed is how entrainment is a spectrum of manifestations of force and power. Forsythe’s choreographies recognize and stage this critically.

Working with harmony and causing chaos, Forsythe has been accused of ruining or critiquing the norms of classical ballet—including the notion that pleasing harmony or synchrony is beautiful and good and should thus be visible, whereas chaos and irregularity are vulgar and should be hidden.³⁹ The Ballett Frankfurt’s work also decentered ballet, from the symmetry and axis of organization controlled by one person, to or-

36 For further exploration of this argument via a consideration of dancers’ experiences of entrainment in Forsythe’s choreographies *Artifact* and *Eidos: Telos*, see Waterhouse, “Entrainment und das zeitgenössische Ballett von William Forsythe,” pp. 199–200. On these categories of entrainment, see Clayton, “What Is Entrainment?,” pp. 50–52; Phillips-Silver and Keller, “Searching for Roots of Entrainment and Joint Action in Early Music Interactions,” p. 3; see also Waterhouse, “In-Sync,” pp. 66–67.

37 Gilpin, “Aberrations of Gravity,” p. 122.

38 I take the term “relationscapes” from Erin Manning, which she uses when exploring various ways that movement, material, sensation, thought and dreaming enmesh. See Manning, *Relationscapes*, pp. 153–83.

39 Cf. Nugent, “Seeking Order and Finding Chaos in the Choreography of William Forsythe.”

ganization produced with many personal and spatial centers, through collaboration.⁴⁰ By doing this, Forsythe's team explicitly critiqued the hierarchical framework of the classical ballet ensemble and the entire promotion system framed around de-synchronization in the form of soloist parts. In contrast, their work revealed dancers in complex constellations of interaction, and often in mutual partnerships, as in *Duo*. Forsythe has described the last decade of his projects as work that "tries to make the audience aware of its own attention."⁴¹ Instead of entertainment, as the "the joy of the evident,"⁴² the audience is included or provoked into the process of deciphering: what is going on here? In this way, Forsythe's choreographies reinvent their own heritage, exploring the potential of entrainment as *relation*.

When I exposed a draft of this argument to some peers from The Forsythe Company,⁴³ my ideas resonated in particular with Italian *Duo* dancer Roberta Mosca. She responded that in the ballet company of Teatro alla Scala in Milan, a *corps de ballet* dancer contractually has no opportunity to dance as a soloist—to make his or her movements individual or to desynchronize from the others. From her remarks, I was reminded that my argument needed to further emphasize that entrainment is not only a representative matter in performance, but part of the dancers' professional culture and careers. De-synchrony figures in promotion: the career of a successful ballet dancer involves the hope for individualization, through exiting the communal *corps de ballet*. Via de-phasing, standing out from the others, an individual ballet dancer becomes highlighted and recognized. Thus, ballet dancers are trained paradoxically, both to conform (as rules require) and also to stand out (as promotion lures). Rehearsal of the *corps de ballet* involves a director telling each individual how to better fulfill the common form of unison, often requiring the dancer to look at him or herself in the mirror to diagnostically conform to their peers. For ballet-trained members of Forsythe's companies, this history is part of their bodies, their disposition and tendencies, and their sense of right and wrong (as such, their *habitus*). The group-subject of the *corps de ballet* is devalued compared to the individualization of the star—who is more respected, dances more and earns a greater salary. This is why *Duo*'s staging of entrainment is so critical: performing movement with mutual and not hierarchical entrainment.

Complementary ethnographic fieldwork has added credence to my observation that entrainment features strongly in dancers' *habitus* and daily work. In her fieldwork exploring the contribution of the dancer, Tomic-Vajagic assesses the challenges of setting Forsythe's ballets within other companies, observing the differences of ballet ensembles' occupational cultures. She finds: "The manner of negotiating the mutual space with a

40 Spier, "Engendering and Composing Movement," pp. 140–41.

41 Tusa, "Interview with William Forsythe." In an interview from 2001, Forsythe explains similarly: "[...] if you're looking at something very hard, if you're trying to watch very carefully because it's somewhat obscured, you tend to be a more careful viewer, to ask 'what are we doing there?' Are we teaching people the aesthetics at hand? No, we're teaching them about watching, about being a viewer. I'm not trying to refine someone's taste, I would like to make people who watch dancing better dance viewers." Forsythe cited in Vass-Rhee, *Audio-Visual Stress*, p. 146.

42 Forsythe speaking in Figgis, *Just Dancing Around*, 10:55–11:05.

43 Thank you to PACT Zollverein for the opportunity to give a presentation of this text during a HOOD residency, April 26, 2017.

larger group on stage is not so typical for the soloists in the hierarchical construct within international repertory ballet companies.”⁴⁴ Substantiating this view is her interview with principal dancer Zdenek Konvalina of the National Ballet of Canada about his role in Forsythe’s *the second detail*. Konvalina recounted:

And so, I think I always wanted to be part of that group-movement and make sure that I’m on the same music, on the same rhythm as the other people ... Being a soloist, usually you don’t have to be with anyone ... So, I feel that there is a double challenge here—in a way you want to stand out because you are supposedly a principal, you should be better. But in some way, it’s a challenge saying, “no, you know, I can do that—I can be a part of the group” ... so I think *the second detail* was more about community, and how to be a part of that.⁴⁵

The argument that I would like to draw from this examination of ballet’s aesthetics of entrainment and hierarchal working modes more generally, is that Forsythe’s choreography challenges the proclivities of his ballet-trained dancers to reference, surpass and reinvent synchronization as *relation*. Forsythe and the dancers believe that contemporary performance of unison must evolve and achieve a new expression of its classical principles—requiring investigation of the obedience of individuals in-concert and the consumption of this product by spectators. When entrainment was called upon, it explored not a “docile” utility but an active pact of taking part—even and especially when the dancers performed in unison.⁴⁶

8.4 The Dancers’ Entrainment

Within the changing manifestations of *Duo* across the project’s history from 1996–2019, each new set of partners has nurtured their manner of intimate listening as they dialogue about the movement sequence that they have inherited. Entrainment remains essential, though its appearance and sound may change. Each *Duo* pair has found their way of being musical with one another, negotiating the timing of complex twists and turns of the choreographic material. This is visible and audible in their rhythmic signatures of breathing-movement: common phrasing, preferred places to accelerate or decelerate and flexibility to prolong or shorten movements in order to surprise one another. Nervousness was cited as a block to connection and entrainment—as was holding one’s breath or fixing one’s head on the spine, limiting the acuity needed to turn and attune to one’s partner.

Though dancing in unison was a significant part of the dancers’ learning practice, the majority of the piece is not performed in unison.⁴⁷ In addition, the dancers move

44 Tomic-Vajagic, *The Dancer’s Contribution*, p. 184.

45 Ibid., p. 185.

46 Foucault cited in Franko, “Archaeological Choreographic Practices,” p. 101.

47 Unison accounts for approximately a third to a half of the choreography. See section 9.2 Charting the History of *Duo*.

rhythmically, have solos, turn-take and pause. These are all modes of entrainment, sutured together to make a complex structure. Entrainment in *Duo* involves learning how to measure and forecast this rhythmical material, so that dancers come in and out of alignment at the right time. The structure of *Duo* devises intensities of relation, connecting and then distancing the performers—not only literally in space, but through their shared attention to co-movement and breath.⁴⁸ Underscoring the nuance of this co-performance, dancer Riley Watts has described *Duo* as pertaining to “the art of elastic temporal integrity,” in which the pair plays elastically with these coming and goings of relation.⁴⁹ His partner, dancer Brigel Gjoka, explained entrainment pointedly in the French sense of training and practice as “a form of progressive work, reaching a level of interrogation on how connections, composition, rule-breaking and listening can create a dialogue between individuals.”⁵⁰ When Watts and Gjoka teach *Duo* they let students self-direct rehearsal and develop their partnership, to achieve these dialogic timings.⁵¹

Unlike the hierarchical precision of rhythms enforced within the ideology of ballet, the dancers’ testimonies taught me that *Duo*’s entrainment is pliant and filled with the liveness of indeterminacy. It emerges ecologically, with the audience and with (rather than to) the music. Rather than being perfectly in-sync, what was important for the dancers was what was “done with synchronicity.”⁵² Attempting to dance only with identical tempo and rhythm to one’s partner would remove the elastic temporal integrity and delight of dancing *Duo*. Instead, the partners engaged holistically: challenging and pushing one another, enjoying moments of lilt and surprise.⁵³

Particularly in *DUO2015*, the dancers’ interpretation allows for considerable liberty. Not only are there more passages of improvisation, but both the phrasing and the position of the dancers on stage can be adapted spontaneously during performance—leading to subtle variations of the choreography in which the performers may accelerate through a passage, skip a beat, make a variation upon a movement, pause suddenly or change their facing. This is done in order to surprise the other, knowing that the surprises will ideally elicit a reaction and enliven the play. The tools the dancers use for this are similar to those of jazz musicians: “to push,’ ‘to cook,’ ‘to lock up’ or ‘interlock,’

48 Anthropologist Marilyn Strathern observes, echoing my remarks on *Duo*, that in some cultures relations are felt as connection in the polarity of connecting/linking/merging as well as splitting/separating/dividing, see Strathern, “Kinship as a Relation,” in particular pp. 47–48.

49 Riley Watts, interview with the author and Bettina Bläsing on January 14, 2014. See also Waterhouse et al., “Doing *Duo*,” p. 8.

50 Gjoka, “Workshop *DUO2015*.”

51 Fieldwork observation, *DUO2015* Workshop in Bologna, October 23–27, 2017.

52 Riley Watts, email to the author, May 9, 2013.

53 Mark Doffman and Charles Keil have also noted the importance of imperfections for jazz musicians. Keil calls them “participatory discrepancies,” the millisecond differences in time between attack and release: See Keil, “Defining ‘Groove,’” p. 3. Doffman also reports of “anecdotal experiences of jazz musicians who often speak of a certain elasticity in the timing between players for the music to work.” Doffman, *Feeling the Groove*, p. 64. As described previously, elasticity is central to Manning’s understanding of relational movement: “The in and of movement folds. Elastic, we feel the becoming-form of movement’s shape. In the amodal tactility of elasticity, force is stored and then released. Elasticity acts on the movement.” Manning, *Relationscapes*, p. 34; see the prior discussion in section 7.2.

'to take it higher,' 'to get down,' 'to funk it up,' 'to get down on it.'"⁵⁴ By comparison, the Ballett Frankfurt version of *Duo* involves far less funk and much more sustaining of alignment through "spidey" sensing: intuiting, supporting, observing and listening. The dancers remembered: "I'm there for you," "I hear you," "I will wait for you," "I see you," "I feel you," "I'm with you," "I change it with you," "I answer you."⁵⁵ In both cases, the dancers engage relationally with the virtual potential to co-create—perceiving micro-variations and nuances.

Tuning to the collaborative, what Rudi Laermans defines as "the always contextually embedded, at once partially realized and still virtual potential to co-create," entrainment became stretchy, consensual, and dialogic.⁵⁶ The dancers in *Duo* understand that they could never be perfectly identical. More important than achieving perfect unison is how the dancers choose to play or engage time, using dynamic musical strategies based on their collaborative duet relationship. Beyond just sharing the intention to synchronize, the dancers work toward the more complex shared goal of enjoying their interaction and communicating, based upon their shared knowledge of the choreography—as *play*.

The consent of togetherness is a series of agreements. It is a process of affirmative dialogue: a succession of cues and negotiations, embedded within a posture of listening. Rather than imagining entrainment (in *Duo*) as rhythmic synthesis, I view it as an ongoing synthesizing. The dancers' entrainment has a forward momentum and a thickening, to borrow metaphors from Richard Sennett.⁵⁷ The dancers' practice of sustaining consent is one in which the productive friction of difference is generative. Consent and listening must thereby be preserved through continual attunement. Processing entrainment in *Duo* shows a stability of synchronization through a flexible maintenance of attention and care. It is active, even when the dancers' practice enables it to feel light and even effortless; it is active because it requires listening.

Viewing any single performance of *Duo* might preclude perceiving how entraining both holds the piece together and allows it to vary through the choreography's becoming. This overview reveals elasticity, an agency of inventing around the margins of attunement. Ethics and novelty are at stake here: the ethics of making sure it is satisfying and playful for both dancers, and the novelty of letting iterations continually reimagine the old. The word that I would like to suggest for this is *virtuosity*: both in the sense of virtue and of excellence. Serial or chronological analysis of multiple performances could potentially grasp this virtuous choreographic multiplicity. It would show the structures holding the work together, as well as the variation. Dance scholar Kirsten Maar understands, as I do, that Forsythe's composition of entrainment: "seeks to develop not a formed but a dynamic multiplicity of (re)acting bodies."⁵⁸ From my study of entrainment in *Duo*, I have clarified how order does not come from the outside; rather structure

54 See Keil, "Defining 'Groove'," p. 2.

55 Regina van Berkel, interview with the author, Frankfurt, April 22, 2017.

56 Laermans, *Moving Together*, p. 387 (italics in the original).

57 Here I draw from Richard Sennett's illuminating discussion of dialectic and dialogic conversations, see Sennett, *Together*, pp. 18–20.

58 Maar, "Uncanny Connections," p. 257.

emerges dynamically through interaction and agonisms—through feeling entrainment burgeon—a feeling of relational betweenness.

Having developed the thesis that *Duo* dancers' movement was constituted relationally, through practice richly explorative of one's individual (historicized, embodied, changing) self in mutual dialogue with one's partner, this chapter turned to the aspect of *entrainment*—the time- and rhythm-sensitive aspects of moving together. Entrainment can be provisionally understood as processes sustaining synchronization and rhythmical relation. Section 8.1 relied on ethnographic analysis to describe the dancers' accounts of entraining in the first movement of *Duo*: the movement *showerhead*, which was the focus of chapter 6. Section 8.2 positioned the discussion within the entrainment discourse. Section 8.3 outlined the conventions of entrainment in ballet through analysis of the example of *Swan Lake*. Turning back to *Duo*, section 8.4 analyzed the forms of entrainment manifested in *Duo's* choreography, outlining how entrainment entwines skill, dispositions and subjectivity.

