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Rhythm, Preceding Its Abstraction

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Discussions of musical rhythm often begin *after* an abstraction of its auditory, tactile, and temporal feel has taken place. This common process of abstraction turns rhythmic phenomena into a crystallized gestalt. Thus, thought on rhythm usually begins where the phenomenon of rhythm itself ends—at the point where it turns into a representation, at the fringes of its experience. Rhythm as the product of analysis is carved out by intellect and fixated into sequences of long and short durations of material and their orderings and groupings. Likewise, notated durations as we know them in Western classical compositional and interpretational practice are already congealed into symbols, frozen into images, broken up into units. Temporal experience and its cohesion have at these stages become curiously attenuated, obscured, and fragmented—at the periphery of where rhythm resides.

Chris Hasty's finely worked-out distinction, in this book, between two understandings of rhythm is driven, I think, by the same concern to avoid this hypostasis.[1] What Hasty calls "an . . . order (of isochronous division or of fixed pattern)" is what I refer to as the end product of an abstraction and intellectual carving out. What, in turn, Hasty calls "*flow* . . . as . . . the active and characterful creation of things or events," bringing the "subjective, idiosyncratic, and evanescent" sense of rhythm, is one way of describing rhythm at the level of experience. What's more, Hasty's call for a reversal of value to promote *performance* and to question the power of form as timeless agents of perpetual identity, with his distinction between fixed, abstract rhythm (R2), and its living origin, flow (R1), heads into the same direction as my call for a revaluation of our experiential knowledge about rhythm.

In this chapter, I offer an alternative approach to the understanding of musical rhythm, not dissimilar from Hasty's, by beginning non-reductively where rhythm centrally resides: in *doings* and *happenings*, in our bodies and between each other. Andy Hamilton is one of the few authors to have done essential work in this regard, along with the other authors cited in this chapter.[2] I claim that rhythm is an

[1] See Chapter 15, "Complexity and Passage: Experimenting with Poetic Rhythm."

[2] Hamilton, "Rhythm and Stasis," develops a projective account of rhythm, in which experiences of the rhythmicity of human behavior are, on the one hand, present in musical performance, and, on the other, imaginatively projected upon it. Hamilton qualifies his account as *dynamic*, with its essential recourse to human movement, and how the rhythm literally moves (37–41), as an essentially embodied phenomenon; and as *humanistic*, in contrast to abstracting accounts that treat rhythm as "essentially a pattern of possibly unstressed sounds and silences" (36).

experiential phenomenon that is manifested when we *attend* to sound, movement, and action felt or seen, or to other perceptions and self-perceptions, like feelings of pain, or pleasure. Lived rhythm, unlike conceptualized rhythm, exists where empathy unfolds as one makes or hears sounds made by someone else. Even silence can brim with our continued attention. In it, we may find ourselves living through the qualities of the sounds made in its vicinity.

The current chapter is motivated by experiences of playing with various improvisers in duos and trios in recent years. Because the performances took place within the framework of a research project, I consciously took note of these experiences, which might otherwise have passed by as moments of superb correspondence, or simply as musical curiosities. We achieved a noteworthy series of improvisations in the sense of a shared, corporeal sense of time and temporal composition, epitomized during my work with Berlin-based alto and baritone saxophonist Simon Rose.[3] In one of these pieces, the first track on the recording (titled *between, part 1*), Rose and I approach a very slow shared pulse within the events progressing from the initial material—a single, long-held six-note middle register piano cluster, played *mf*, with an emphasis on the B^{b}, followed by a sustained, internally varied multiphonic on B^{b} by Rose. The setting was exploratory and unpremeditated, although we analyzed our experience and observations *after* playing and before entering the next set of improvisations, which primed the subsequent playing. After initially playing the sounds separately (piano cluster, sax multiphonic, piano cluster), next came a combination of the two sounds, melting into a single sustained unit, twenty-six seconds after the very first piano cluster. We returned to the combined single action about twenty-three seconds onwards.

There is much to say about how we composed a piece of nearly seven minutes out of these very sparse initial elements, adding only a handful of other elements in due course. For the current purpose, however, it is the timespan of twenty-three seconds that is particularly noteworthy. That span reappears throughout the piece—immediately after the first instances, but also on various occasions throughout, even in the final two sonic instances with which the piece ends. Although the piece is one of unmetered, "floating" time—no counting is involved, no sections establishing metric subdivisions—what is striking is that we spontaneously found a shared sense of time at a level of very slow pulsation. The most likely explanation for this temporal orientation is *breathing*. A slow exhalation (literally present as causing and driving the sax multiphonic), followed by a correspondently quiet inhalation, plus a phase of holding the breath, might take this long. A very slow body rotation, or a combination of upper body retraction and extension could also take this duration. Here, any further rhythmic structure within the piece seems closely—and organically—related to the shared pulse that seems equivalent in length to a deeply relaxed breathing cycle. The piece, *between, part 1*, is a concrete example of how

[3] Peters and Rose, *Edith's Problem*.

musicians enter rhythm from bodily durations, prior to any intellectual or symbolic abstraction from the psychological experience of those durations.

The line of thought I develop stems from a number of related observations concerning how rhythm comes into being via interpersonal and self-attention, which I summarize in the following seven propositions. (1) Duration can be something we live through, creating it through our embodied existence, and it is therefore expressive; (2) in listening, we sense or imagine a "doing," the presence of which forms itself differently depending on the somatic or intellectual orientation and depth of our interpretation that is part of active perception; (3) rhythmicity forms in direct relation to interpersonal attention which shifts between self and other (embodied or imagined), an attention that drifts loosely and gradually between the extremes of utter concentration and complete detachment; (4) the qualitative experience of rhythm, and the process in which it establishes itself or vanishes, also depends on the kind of music making and listening engaged in (improvisation, composition, rehearsal, performance, first or repeated listening); (5) there seems to be a striking correlation between *sonic* togetherness—when two players' individual temporal senses fuse into one—and *somatic* togetherness, a jointly felt long-range pulsation; (6) rhythmicity spreads over various levels of detail, order, and scopes, as we indulge in feats of attention; (7) musical silence is not a void. I shall now analyze these seven observations.

1. No body, no rhythm

Rhythm is not simply duration, it is duration *made*. Durations and proportions can be abstracted into numerical values; but the result cuts out the sense of immediacy with which rhythm is shared between one person and another, or between a natural event and an observer, or between a musical event and a listener. With the sense of immediacy being lost, common reflections on rhythm face the challenge of deducing rhythmic immediacy from an intellectual response to rhythmic phenomena. Acknowledging that musical rhythm arises through our embodied existence in a space and on an instrument, it is instantly clear that durations are one with their bodily making—including resonant bodies—and that relations between durations are temporal and spatial relations between bodily acts and undergoings.

Connected to this, and also an aspect of rhythm, is the expressivity of duration. A long-held note at the top of a climactic vocal gesture in a performance of Fado,[4] for example, is not merely a long note. It is *upheld*, sustained by the fervor of an emotional disclosure, of, for instance, despair, rebelliousness, or hope. Not only is the note's *tone* one of despair, for example, but its extent is too; were it shorter, it would not be as despairing, rebellious, or hopeful (which is not to imply a direct

[4] To give but one example: instances abound in a performance of "Alfama" by Carminho at Podium Mozaiek in Amsterdam, 2011. See https://www.youtube.com/watch?v=h8YfA7FL05M.

relationship between length of tone and intensity of despair). Thus durational expressivity arises not only from one duration's numeric difference to another, but from a note's realization *by* the body *for* this length.

As it is made bodily, duration can be adverbially expressive, to use Peter Goldie's felicitous concept.[5] It is the despair, the rebelliousness, or the hopefulness with which it is sung—in Goldie's sense, colored in by an emotion from a different context—that give the note its tone and its length. Again, this is not to be understood in the sense of an isomorphic relation between duration and expressive content, but, when we do hear rebelliousness in a note, we hear it, in part, in its duration. Duration bears emotional expressivity despite the opacity of the intentional object of the singer's emotion. By the music alone, without text or dramatic context, we do not know the despair, rebelliousness, or hope. Due to this opacity, and since duration encompasses bodily resonances that extend human instrumental actions, there is an additional aspect to the making of duration involving the imagination, to which I turn next.

2. Perceptual enactment, attention, and hermeneutical models

Just as duration is achieved through the body when making music, it is also enacted in imagination as part of perception when listening to music—even when evoking it in one's "inner ear." There are two complementary aspects of this enactment; neither is necessarily conscious, but each can be focused on consciously and distinctly. One aspect is that of cognitive attending, the other that of bodily attending. On listening to a passage of minimalist music, for example, an accented note may come to my attention, and I may *notice* that I am briefly turning my attention to it, catching myself in the act of attending, sustained perhaps only for the duration of this very accented note. This would be conscious cognitive attending. Or, as I hear the accented sound, I may become aware of a short tensing around the stomach or a brief fluctuation in the solar plexus area, a trace of a movement in the larynx. This is conscious bodily attending. Such bodily attending can occur even with imagined music, as when imagining an intense beginning of an emphatic gesture. In attending I might also make a small or extended physical movement, involuntarily or intentionally, but this is yet another matter.

Roland Barthes, in one of his inspired music-related essays, reveals his bodily attending:

> In Schumann's *Kreisleriana* (Opus 16; 1838), I actually hear no note, no theme, no contour, no grammar, no meaning . . . No, what I hear are blows: I hear what beats in the body, what beats the body, or better: I hear this body that beats.[6]

[5] Goldie, *The Emotions*, 133–4.
[6] Barthes, "Rasch," 299.

In stark contrast to the intellectuality of grammar or meaning, the "blows" Barthes describes are somatically present to him as listener. With this, Barthes captures the interpersonal goings-on in musical experience, since, clearly, *someone* is inflicting these blows.

Who is this someone? Barthes refers to three beating bodies. One is Schumann's:

> Here is how I hear Schumann's body (indeed, he had a body, and what a body! His body was what he had most of all) . . .[7]

This is, of course, an imaginary body: Schumann's body as imagined by Barthes through his musical experience of its creative agency, and expressivity, located most of all, for Barthes, at points of accent.[8] Barthes points out that

> The beat—corporal and musical—must never be *the sign of a sign*: the accent is not expressive.[9]

This does not contradict the rhythmic expressivity I argued for in Section 1 (No Body, No Rhythm), as Barthes refers to *linguistic* expressivity. His word for the somatic expressivity I refer to is enunciation:

> What does the body *do* when it enunciates (musically)? And Schumann answers: my body strikes, my body collects itself, it explodes, it divides, it pricks, . . . it stretches out, it weaves . . .[10]

The second body Barthes considers is the performer's:

> The beats are played too timidly; the body which takes possession of them is almost always a mediocre body, trained, streamlined by years of Conservatory or career, or more simply by the interpreter's insignificance, his indifference.[11]

For Barthes, the interpretive tradition represses Schumann's body as he envisages it. He carefully gauges his emphasis on physicality: "the body must pound—not the pianist."[12]

Yet Barthes also refers to a third body that is indeed literal—the listener's very real body:

7 Barthes, "Rasch," 299.
8 Barthes, "Rasch," 303.
9 Barthes, "Rasch," 303.
10 Barthes, "Rasch," 305–6.
11 Barthes, "Rasch," 303.
12 Barthes, "Rasch," 303.

> It is not a matter of beating fists against the door, in the presumed manner of fate. What is required is that it *beat* inside the body, against the temple, in the sex, in the belly, against the skin from the inside, at the level of . . . "the heart."[13]

Barthes coalesces these three bodies in the unified experience of the "Schumannian" body:

> There is a site of the musical text where every distinction between composer, interpreter, and auditor is abolished.[14]

That bodily site—given through bodily attending—is thus marked by an interpersonal dynamic.

Barthes' description of the somatic dimension of his listening experience shows that the rhythmicity of musical events can be literally felt by a listener. At its somatically most pronounced, then, rhythm can be felt as an event of the order of bodily contact and presence. For this to eventuate, the listener would have to be encultured to or else have acquired an openness to a bodily hermeneutic, as Barthes clearly has. Not all hermeneutic stances are like this of course. For instance, Martha Nussbaum's exquisite, dreamlike evocation of musical experience is far removed from throbbing or voluptuous bodily experience.[15] Likewise, Eduard Hanslick's hermeneutic of the acousmatically moving forms of music, shifts, if taken to the extreme of many of his interpreters, into a visual, touchless frame.[16] Rhythm, if listened to under Barthes' bodily hermeneutic, is a felt encounter with the world's vitality, an encounter which can be enjoyed or abhorred at this very level of bodily experience, and an encounter which may have the gripping immediacy of a physical interpersonal encounter.

3. Mobility of attention

In the process of listening to music our attention isn't fixed; it travels. We are not fully in control of the way our attention moves, yet, since we may direct it, it is not entirely involuntary either.[17] As our attention lingers, shifts, or is suspended, we do not simply follow or react to predetermined musical events that call for or compel our attention; we also half create the musical events we perceive by anticipating specific sonic qualities, or by finding them noteworthy. This partly bound, partly free, changing, retaining, and retreating of attention marks the perceptual process. As our attention zigzags across certain detail through the full spectral complexity

[13] Barthes, "Rasch," 302.
[14] Barthes, "Rasch," 303.
[15] Nussbaum, *Upheavals of Thought*, 265–71.
[16] Hanslick, *On the Musically Beautiful*.
[17] Our attention can either be drawn toward something, like a specifically articulated sound; or, in listening out for something, we can turn our attention toward it, like a particular detail within a texture.

of the heard; as it narrows and widens, zooming in and out of textures; and as it oscillates between following distinct gestalt features and drifting, it moves, falls apart, reassembles.

One must also distinguish between widened attention, e.g., of a polyphonic texture in its entirety, and peripheral attention, e.g., vaguely perceiving some sonic occurrence, a particular melodic line, say, or a particular sonority within a texture, though this is outside the main focus. The ability to distinguish individual strands of events from other sonic events, involving the very ability to discern subtle coherence, depends on skill and on the chosen, or simply habitual, mode of listening. Attention forms the entry to such discernment. I can attend to something unfathomable without discerning it, without relating it to its context and noticing its distinctness; but I cannot discern something without attending to it, since I cannot notice anything specific about something I fail to notice per se.[18]

As attention travels between the voluntary, self-induced, and the involuntary, other-induced, it travels toward and away from the other as manifest in the instrument, the performing actions, and the personalities (real and imagined) unifying those actions. The perceived "overall" rhythmicity which arises from these interpersonal attentional meanderings is co-constituted. Performer and listener form a duo,[19] in which durations are lived, and out of which the listener's sense of time spontaneously ensues. A listener might at first not be aware of any regularity within attentional movements between a convolution of lived durations. Musical time at this point—remote from analyzed durational patterns—is fluid and flexible. The way in which a rubato stretches and condenses time sequentially or even between different textural parts evinces this primordial flexibility of temporal perception. During the course of listening, and as our awareness of timbral and gestural coherence grows, our sense of the agency and situatedness of durations as thing made grows too, combining composed, performed and (somatically) imagined agencies, substantially contributing to the rhythmicity we perceive. Time, in this view, is generated from social interaction, paralleling Norbert Elias' striking conception of social time.[20] A heard vitality in music thus bears witness to this dialogical enactment of time which clings to the emergent rhythmicity of interpersonally marked and created musical events. Some music *can*, however, counteract this vitality and enforce a rigid sense of time or remove it altogether. Such music may, at the extreme, be heard as "cold," "dead," or as transcending time, like Scriabin's Prelude, Op. 74, No. 2.

[18] I discuss a special case of remembering and backtracking what one has formerly failed to notice below, in Section 6.

[19] Schütz, "Making Music Together," 172.

[20] Elias, *Essay on Time*, argues against a reified conceptualization of time (as found in naturalistic positions), understanding time instead as a symbol for a "socially learned synthesis" (24). His "synthesis" signifies the cognitive combination of various perceived processes, in which one (e.g. the ebb and swell of the tide or the coming and going of sun and moon) forms a reference to the other. Timing, as referencing between "socially standardised continua of changes" (39), is a socially acquired skill and actually orients and historically (and culturally) alters, Elias argues, human experience of time. In the view I unfold in this chapter, joint rhythm-making is an instance of the shared creation of timing in Elias's sense.

4. Experiential variance

One can encounter rhythm from different stances or as part of distinct activities, and rhythm appears differently from within these. As an improviser, my experience of generating rhythm is unlike that of a listener, in that I am free to vary durations as I live through them. It is also unlike that of a performer who is beginning to encounter an unknown score. It *can*, however, be compared to the experience of a performer who is performing an intimately familiar work, the interpretation of which she has raised to an artistic level by synthesizing the individually notated units back into a balanced and plastically shaped, refined, gripping and telling musical whole. In duo improvisation, rhythm has a different role, and experiential character, than solo playing. And in listening to a performance more than once, particularly when listening to a recording, rhythm reveals itself in various guises and stages, as discussed in Section 3, on the continuum between liminal and utterly distinct awareness.

5. Pulsation, togetherness, and super-individual fusion

Alfred Schütz, in his classic essay "Making Music Together," proposes that musicking is a paradigmatic case of social interaction, in which the "inner times" of composers, performers, and listeners synchronize in a "mutual tuning-in."[21] Distinguishing the measurable clock time of the "outer world" from a non-measurable, musically constituted temporal sense, Schütz calls music "a meaningful arrangement of tones in inner time."[22] This inner, musically given sense of time is, Schütz affirms, shared by all participants related to a specific work, who thus enter a state of being in the same temporal flow of events:

> Although separated by hundreds of years, the [listener] participates with quasi simultaneity in the [composer's] stream of consciousness by performing with him step by step the ongoing articulation of his musical thought. The beholder, thus, is united with the composer by a time dimension common to both.[23]

Schütz further notes that performers, in playing together, achieve a pinnacle of shared consciousness and flow, which they actively establish by spontaneous negotiation and mutual anticipation, and hence share "in vivid present the Other's stream of consciousness in immediacy."[24]

[21] Schütz, "Making Music Together," 170, 173. Although he refers to Bergson's concept of *durée* in defining his concept of inner time, he does not require this inner time be *private*, as the shared "stream of consciousness" that composers, performers, and listeners "live through in simultaneity" to him is *identical*, i.e., without the qualitative difference the idea of a truly private time would entail.
[22] Schütz, "Making Music Together," 170.
[23] Schütz, "Making Music Together," 171.
[24] Schütz, "Making Music Together," 171.

Schütz's understanding of a musically given sense of time is remarkably consequent:

> The coperformers may have recourse to these devices [viz. counting, metronome, the conductor's baton] when for one reason or another the flux of inner time in which the musical content unfolds has been interrupted.[25]

This confirms that he takes "the flux of inner time" to be constitutive for the production of synchronized action, rather than a synchronization with an external timekeeper, a separate time-keeping entity. This strikes me as a very attractive feature of his view. Yet, on the downside, Schütz does not seem to be aware of temporal variance in the case of listening. His idea of the listener being a co-performer is that of a *precise* re-creator of the composer's temporal experience. But this is contrary to the phenomenology of listening, and discounts the roles attention and the perceptual making of duration play in the emergence of rhythmicity, for if one hears the same work a number of times, its temporal perception sometimes changes. For example, up-tempo works can start to feel slower upon closer acquaintance. This is often the case with virtuosic literature, such as Rachmaninoff's *Etudes-Tableaux*.

There is not, therefore, a *singular, fixed* sense of time that necessarily emerges, even in a single listener's multiple listening instances. Contra Schütz, it is thus unlikely that listeners are in the same stream of consciousness as the *composer*. Surely enough, *were* this the case, there could not be different interpretations of a single work. What is entirely possible, however, is an alignment of a listener's temporal sense with that of a current performance. Yet again, the emergence of a shared temporal sense in the fullest, literally reciprocal sense, occurs *between* performers, if anywhere. What is arguably most interesting about Schütz's notion of mutual tuning-in from an aesthetic point of view, is that its *mutual*, bidirectional, symmetrical, dialogical form might indeed take place between performers. Here, two senses of time are genuinely being negotiated into a single shared sense of time; or, alternatively, a single, shared sense of time really emerges interpersonally as the activity of two beings, without two entirely separate senses of time being in place. Thought on this subject is elaborated and refined in recent work on entrainment, to which I turn next.

Schütz's argument raises a familiar question: How do performers entrain? Does entrainment presuppose an inner, biologically based and skilfully refined timekeeper of *measured* time, a sort of mental clock capable of temporally guiding movement so as to *produce* well-kept time in performance? Or could, alternatively, the body be capable of producing precise regular movement on its own accord, without any distinct inner timekeeper as a guide? Would, further, an inter-corporeal production of such movement be conceivable? Differently put: that two performers have to negotiate a shared sense of time, as Schütz elucidates, does *not* show that

[25] Schütz, "Making Music Together," 176.

they have individual senses already in place; the sense of time might emerge between them, in the very interaction. The negotiation only shows that *if* individual senses are established and kept in place, they can also *differ*, which difference can be upheld, and is audible to all participants.

Martin Clayton's work shows that entrainment takes place *despite* differences in individual senses of time, and even despite their intentional upkeeping.[26] To Clayton, every participant "knows that the process of sharing the temporal flow may be a *rewarding* one,"[27] which is, ultimately, what he appeals to when claiming that "Musical rhythm is irreducibly social in nature . . . Musical rhythm originates in both endogenous physiological rhythms *and* the dynamics of interaction between individual human beings."[28]

I shall complicate Clayton's advanced understanding of togetherness by recounting an intriguing phenomenon I encountered during duo and trio improvisations, namely, a particularly long bodily pulsation. The bodily rush, visceral widening, briefly increased subcutaneous flow, almost an inner combustion at times, can, when deliberately exaggerated, be externalized as a full body contraction and expansion, like a conductor's full-body gesture of phrasal emphasis. It is a *feeling*—like a throb of pain, aggravation, or lust is a feeling—and though sometimes accompanied by a conscious realization, it is not necessarily accompanied by a thought. I can produce this feeling at will outside a musical context. Multiple instances can be periodical, if I set my mind to it, with pauses (or bodily silences) between the individual pulses being of two or more seconds in length. Those pulsations can occur without metric subdivisions, yet they are rich with the feelings of suspense, anticipation, impact, and retention. They seem to me to be of the phrasal length observed by Nikki Moran,[29] and by Clayton in his analysis of unintentional periodicity between tanpura players.

Now, I can confirm these bodily pulsations can also occur unintentionally, when improvising with others. Remarkably, as I experienced them arising in free improvisation, they are not cognitions that relate to an *external* timekeeper. None of the musicians openly established a common metric structure. Yet I experienced durationally extended pulsation; and the other players experienced them too, at exactly the same time as myself, as turned out in numerous post-performance discussions and listening analyses. This, as far as I can see, would be an impossible thing in a free, non-metric duo improvisation, i.e., without a reference timekeeper, unless we *generated* time together.

While this observation accords with Clayton and even Schütz, it changes the interpretation of "inner time." Given neither by external reference only, nor simply by biological disposition, inner time arises within a mutually empathic act between players. This shared, inner time allows even a small deviation from the temporal

[26] Clayton, "Observing Entrainment."
[27] Clayton, "Entrainment and the Social," this volume, 195.
[28] Clayton, "Entrainment and the Social," this volume, 196.
[29] Cited in Clayton, "Observing Entrainment," 29.

fusion to become audible, as an ever-so-slight disjointedness, a *disagreement*. This is not a case of synchrony; there are not two clocks, but just one fused sense of time. That sense of time is fused by way of musicking: anyone who has ever performed unison passages[30] will know that this cannot be achieved by counting, or by attention to meter alone. Such growing and flowing temporal fusions in an ensemble do not feel as if they can be intended. Instead, they feel like they arrive, or arise, and can be encouraged by preventing interference, i.e., by release rather than inhibition. Importantly, however, they *are* upheld by a sort of attention, as any distraction will risk their vanishing. Thus they are not inner in any "private" sense. Schütz speaks of a "We" as the emergent form of social interaction.[31] I claim that this "We" exists, not as the sum of single individuals, but super-individually, in temporally fused moments of musicking. Time, in these moments, is interpersonally found and founded.

Despite the significant observation of the genuinely interpersonal genesis of such shared temporal experiences, it is not foundational for rhythm per se, but rather a point of epitomized rhythmic experience. Yet from the interpersonal side of the constitution, the *affectivity* of rhythmic intricacy might plausibly be seen to take root. This is recognized by Peter Nelson, who theorizes an "emotional and aesthetic binding" inherent in rhythm.[32] This binding is social in going beyond a simple, perceptual binding into the realms of bodily interaction and interpersonal negotiation. To Nelson, to "grasp a rhythm" is "to abandon conscious control . . . to the physical engagement of the body with sound . . . which is always, inevitably engagement with another body."[33] Nelson also refers to how durational space is distributed between sound makers, e.g., between mother and infant, and in African polyrhythm.[34] Nelson conceives out-of-timeness within a shared durational space as the medium for expressivity in "the actual flow of the rhythmic narrative," in his example, mother–infant interaction, where "minute alterations can have huge significance."[35]

While Nelson's line of thought helps elucidate the social ontology of rhythmic *behavior*, it only hints at potential causes of the affectivity of rhythm. He argues that Colwyn Trevarthen's findings on mother–infant interaction, Gaston Bachelard's thought on the significance of duration, and Pierre Bourdieu's theory of gift exchange all support the idea that the "temporal spaces between sounds or actions . . . are pregnant with meaning"—a meaning derived from the social juxtaposition of those involved in the exchange. Yet Nelson does explicitly analyze the concrete link between such rhythmic meaning and affect; perhaps because he adopts Trevarthen's notion of pulse, whereby pulse is *exteriorized*, and expressed in

[30] E.g. the first movement of Schubert's Trio Op. 99 D 898; the second movement of his Trio Op. 100 D 929; or the fourth movement of his String Quartet No. 14 D 810, *Der Tod und das Mädchen*.
[31] Schütz, "Making Music Together," 17.
[32] Nelson, "Social Theory of Rhythm," 151.
[33] Nelson, "Social Theory of Rhythm," 151.
[34] Nelson, "Social Theory of Rhythm," 153.
[35] Nelson, "Social Theory of Rhythm," 153–4. In taking *temporal* dissonance to be socially meaningful, Nelson thus develops a point that recalls Adorno's idea of expressive melodic and harmonic dissonance.

actions.[36] Nelson treats pulse as "socially constructed 'instants which stand out,'"[37] and these instants remain, at least in his account, curiously disconnected from the body, such that listeners "think [rather than feel] *one* at the same time as another person."[38]

When, however, one consistently understands rhythm as *felt*, such as in Andy Hamilton's humanistic conception, sources of affectivity abound. One can then immediately spell out, for example, that the negotiation of temporal space and its occupation is charged with issues of power, dominance, submission, struggle, intimacy, and rejection not only in intellectual, symbolical terms, but in terms of felt experience. Towardness and union, or aversion and disjunction exist on a somatic plane, and become psychologically active *through* it.

This reflection on jointly created pulsation shows how analyses of entrainment might be even further connected to analyses of social and psychological meaning; and, complementing Schütz's and Clayton's reasoning, and similar to Hamilton's idea of projection, how bodily imagination must be accounted for in attempting to understand interpersonal rhythmicity.

6. Rhythmic events, gestural levels, and attentional habits

When rhythm enters one's attention, it does so in constituting sonic events and chains, linear, and layered. The consistency and cohesion of these events develops and clarifies itself during the course of a piece, in listening as much as performing. Something that from a standard score analytical point of view clearly is a motive might not appear so at its incipient sounding; its motivic identity forms as it reappears, each time altering and enriching its durational expressivity, as relations to other sonic events begin to be heard, and as proportions articulate. Further, some events one initially or loosely hears as single may be made up of hundreds of tiny actions, such as the whizzing and flickering textures and the densely clustered but permanently transforming sonic fields in Friedrich Cerha's *Spiegel VI*. Still, I go on to hear them as singular events, with the event character being gestural and flowing, from its appearance through to its disappearance. Whenever such gestural events are layered and arise from the lower threshold of audibility, I may attend to them only long after their inception. They can appear suddenly, when attention shifts to them; and retention may bring their prior presence into consciousness.[39] Some gestures may consist of smoothly interwoven actions that are in themselves events at a smaller scale, so attending to the subtleties of a texture may reveal intricate

[36] Nelson, "Social Theory of Rhythm," 152–3.
[37] Nelson, "Social Theory of Rhythm," 153, quoting Bachelard.
[38] Nelson, "Social Theory of Rhythm," 155.
[39] To listen out for moments of gestural appearance and disappearance can make for an exquisite experience. A listener so inclined may choose to savor the borders of musical material, drifting away from other current sonic events if they are below a certain markedness. Here, the rhythmicity of the fuller sonic constellation can remain underarticulated.

rhythmicity on various levels, intra-gestural and inter-gestural—a rhythmicity that sometimes requires us to listen out for it. The striking motoric passages often found in Stravinsky or Prokofiev, or, radically, the gradually accumulating, massive orchestral "stomping" in Friedrich Cerha's *Spiegel VI*, are protruding, sonic events of the "beating" sort, which might capture our focal attention initially, only to recede as we attend and bodily interpret the sonic and affective space *between* them.

As listening progresses, especially during repeated listening, attentional habits might form, and existing ones might be challenged and altered. All of this plays into rhythmicity as it concretizes and recedes. On the aesthetic level, it might never reach the crystalline structure a score analysis suggests. In other words, the discreteness of abstracted rhythm is not thoroughly audible in the way pitch or timbre are. As with other psychological phenomena, rhythm has a dimension in which it is obscure, shrouded, submerged, only to emerge into consciousness at particular points of attending.

7. The expressivity of silences

I return briefly to the affective space between instances of orchestral "stomps" in Cerha's *Spiegel VI*. Not only are these silences charged with the threatening character of an advancing large mass of marching bodies, congealing into a single, massive body, they also are convoluted around the edges, diffused by the imprecision of a forming horde. Thomas Clifton is one of the few authors to have written with subtlety about the experiential shades of the diverse ways in which silences are musically situated.[40] Clifton distinguishes between temporal, spatial, and gestural silence.[41] He also distinguishes between the time of a musical work and "our bodily time"; between silence "ridged by the perception of continuing pulses" and "pulseless silence"; and "gapping" silences and silences "in which melodic motion carries itself right through."[42] His examples show a delicate sensibility to how dedicated, attentive, active listening fills silences affectively. To this I add the experience of riveting silences in improvisation, in mid-gesture, and particularly at the moment where for a certain duration the decision over whether the piece ends *now*—or whether pulsation demands its being carried on and through—hovers between two or more players. These examples remind that silences, like sounds, have a lived duration, are an equally important part of rhythmic experience, and that any sophisticated concept of rhythm should not be deaf to their phenomenological nuances.

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[40] Losseff and Doctor (eds), *Silence, Music, Silent Music*, offers a few more examples of such rare work.
[41] Clifton, "The Poetics of Musical Silence," 164.
[42] Clifton, "The Poetics of Musical Silence," 165, 167, 174, 178.

These thoughts are preliminary and invite extensive unpacking.[43] Additional ground has been cleared in support of some specific revisionary approaches to the idea of rhythm as named in this chapter. Rhythm, in these revisionary views is clearly an interpersonal phenomenon. To this I add that rhythmicity comes to the fore and to itself as attention negotiates the presence of others with and within our own, in ways that can be both felt and cognized. While rhythmic durations as found in scores, formal analyses, and abstract conceptualizations are thin, thick durations are made durations and are experienced accordingly. Behind such made durations stand identities that are expressed in the coherence of the durations' very making, i.e., the performer's or composer's identities, and the listener's, plus—via instrumental and stylistic practices and instruments as cultural artifacts—collective identities, identities worldly and imagined. The expressive counterpoint of those rhythmically interwoven identities stands out at its most articulate in performances that manage to find a *shared* rhythmicity, where the sharing extends to and includes ensemble, and listener. Rhythmic resistances become intricately expressive where a fundamental rhythmic correlation exists; without such a correlation individual parts disengage (this disengagement may itself be generally expressive of aversion, alienation, or disinterest). Rhythm, preceding its abstraction, then, is the experience of a felt, dialogical hermeneutic at work between people, environment, and imagined agencies.[44]

Works Cited

Barthes, Roland, "Rasch," in *The Responsibility of Forms*, tr. Richard Howard (Berkeley, 1991), 299–312.

Carminho [Maria do Carmo Carvalho Rebelo de Andrade], "Alfama," at Podium Mozaiek in Amsterdam, 2011: https://www.youtube.com/watch?v=h8YfA7FL05M.

Clayton, Martin, "Observing Entrainment in Music Performance: Video-Based Observational Analysis of Indian Musicians' Tanpura Playing and Beat Making," *Musicae Scientiae*, 11.1 (2007), 27–59.

Clayton, Martin, "Entrainment and the Social Origin of Musical Rhythm," in Peter Cheyne, Andy Hamilton, and Max Paddison, eds, *The Philosophy of Rhythm: Aesthetics, Music, Poetics* (Oxford, 2019), C12.

Clifton, Thomas, "The Poetics of Musical Silence," *The Musical Quarterly*, 62.2 (1976), 163–81.

Elias, Norbert, *An Essay on Time* ([1984]; Dublin, 2007).

Goldie, Peter, *The Emotions: A Philosophical Exploration* (Oxford, 2000).

Hamilton, Andy, "Rhythm and Stasis: A Major and Almost Entirely Neglected Philosophical Problem," *Proceedings of the Aristotelian Society* 111.1 (2011), 25–41.

Hanslick, Eduard, *On the Musically Beautiful: A Contribution towards the Revision of the Aesthetics of Music*, tr. Geoffrey Payzant ([1854]; Indianapolis, 1986).

[43] Foreseeably, questions of the nature of meter, accent, beat, and other aspects of rhythm might reconfigure themselves from the newly gained view, rather than being elements out of which an understanding of rhythm needs to be uncomfortably construed.

[44] Research for this chapter was funded by the Austrian Science Fund FWF: P25061-G15.

Hasty, Christopher, "Complexity and Passage: Experimenting with Poetic Rhythm," in Peter Cheyne, Andy Hamilton, and Max Paddison, eds, *The Philosophy of Rhythm: Aesthetics, Music, Poetics* (Oxford, 2019), C15.

Losseff, Nicky and Jenny Doctor, eds, *Silence, Music, Silent Music* (Aldershot, 2007).

Nelson, Peter, "Towards a Social Theory of Rhythm," in Jean-Luc Leroy, ed., *Topicality of Musical Universals/Actualité des Universaux musicaux* (Paris, 2013), 149–56.

Nussbaum, Martha, *Upheavals of Thought: The Intelligence of Emotions* (Cambridge, 2001).

Peters, Deniz and Simon Rose, *Edith's Problem*, CD LR 812, audio recording (Newton Abbot, 2017).

Schütz, Alfred, "Making Music Together: A Study in Social Relationship," in Alfred Schütz, *Collected Papers II: Studies in Social Theory*, ed. Arvid Brodersen (The Hague, 1976), 159–78.