

Musical Affordances and the Transformation Into Structure: How Gadamer can Complement Enactivist Perspectives on Music

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This paper investigates the phenomenological status of musical affordances through a Gadamerian focus on human communication. With an extra emphasis on Reybrouck's much-cited affordance-driven theory, I locate fundamental premises in the affordance concept. By initiating a dialogue with Gadamer's perspective, I suggest a slight yet important shift of perspective that allows us to see an autonomous, transformative, and intrinsically active 'ideality' potentially emerging in music. In the final section, I try to demonstrate how Gadamer's perspective is supported by recent empirical studies on communicative musicality and child development, and allows us to see how protoversions of the transformative 'ideality' are already present at the beginning of human life.

1. Introduction

Few would doubt that music plays a crucial role in human lives. But how should music perception be approached theoretically? In contemporary discourses, the enactive paradigm is popular (Gallagher, 2017, 2020). While there are ongoing discussions about how the enaction is to be conceived, there is broad agreement that music is not something that just happens to musicians; it is *acted out*—by real, phenomenal bodies (Høffding and Schiavio, 2019; Krueger, 2011b; Matyja and Schiavio, 2013; Noë, 2012; Reybrouck, 2005, 2012, 2021; Schiavio, 2016; Schiavio and Høffding, 2015; Schiavio and De Jaegher, 2017; Schiavio, van der Schyff, Cespedes-Guevara et al., 2017; Schiavio, van der Schyff, Kruse-Weber et al., 2017; Solli, Aksdal and Inderberg, 2021; 2022; Solli and Netland, 2021). Even merely listening to music is a form of enaction (Krueger, 2009; Noë, 2012).

Within the enactive paradigm, many authors describe music and musical behaviour in terms of *affordance* (Cano, 2006; Clarke, 2005; Kronsted and Gallagher, 2021; Krueger, 2011a, 2014, 2019; Menin and Schiavio, 2012; Mooney, 2011; Reybrouck, 2001a, 2005, 2012, 2015, 2021; Schiavio and De Jaegher, 2017; Schiavio, van der Schyff, Kruse-Weber et al., 2017; Steenson et al., 2015; Windsor and de Bézenac, 2012). Music is a *sound-time phenomenon* (Reybrouck, 2012, p. 399), a resounding and temporally organized art (Reybrouck, 2019), and it unfolds by affording specific practical opportunities for the enactive listener. As an auditory and temporally organized phenomenon, music offers

possibilities and restraints regarding how the listening subjects act out the music from moment to moment.

The purpose of this essay is to investigate the phenomenological status of *musical affordances* (MAs) through a Gadamerian¹ focus on *human communication*. This might puzzle the reader. Except for a brief actualization by Solli and Netland (2021), Gadamer's perspectives are virtually absent in the contemporary enactivist literature. His tradition-oriented terminology is foreign to the empirically informed discourses on enaction. Gadamer is less interested in describing the empirical developments that lead to an event wherein understanding occurs and is more interested in the fulfilment of the process (Figal, 1996). Moreover, while Gadamer takes an interest in aesthetic experience (1993b, 2004, pp. 1–171), he is no music philosopher, nor does he offer phenomenological analyses of embodiment, at least not in the contemporary sense of the word.² Instead, this German philosopher is associated with the linguistic turn in philosophy. He claims that language [*Sprache*] is an all-encompassing feature for the human being: 'Whoever has language "has" the world' (Gadamer, 2004, p. 449). Notwithstanding these facts, I will evoke this hermeneutical concept and another of Gadamer's key concepts that seem to have been forgotten in contemporary debates on musical enaction (save for Solli and Netland, 2021): Transformation into Structure [*Verwandlung ins Gebilde*] (TiS). TiS brings attention to the autonomous, transformative, and intrinsically active 'ideality' potentially emerging in art products (Gadamer, 1993a, 2004, pp. 110–119).

To exemplify the affordance theory, I will keep a special focus on Reybrouck's much-cited and well-elaborated theory (2001a, 2005, 2012, 2013, 2015, 2016, 2019, 2021). Reybrouck has been critically reviewed by Menin and Schiavio (2012) and Korsakova-Kreyn (2018) for using unclear criteria for separating MAs and general perceptual affordances (GPAs); that is, for failing to distinguish appropriately between aspects of musical behaviour and aspects of perceptual behaviour in general. By contrast, I will go through Reybrouck to show how Gadamer's TiS can complement the contemporary discussions of MAs. I will not so much argue that Reybrouck and the other MA theorists are wrong; rather, I will try to suggest a slight shift of focus that allows us to see a profound and irreducible dimension of the musical phenomenon.

The point is this: on the one hand, I wholeheartedly buy the enactive framework, and I applaud Reybrouck's and the MA theoreticians' initiatives to dissolve traditional dichotomies such as mind/body, intra-/extra-mental, subjective/intersubjective, nature/nurture, cognition/emotion, and productive/receptive. With some nuances pointed out below, most of these initiatives sit well with Gadamer's philosophy, which is also non-dualistic by kind. While this is not my present concern, the novel descriptive enterprises can even fill out lacunas in Gadamer's broad and transpersonal approach to human experience.

1 My Gadamer reading is indebted to Grondin (2001a, 2001b, 2002). I am also inspired by Benson (2003) in the application of Gadamer's ideas into the musical context.

2 There is a track in Gadamer's philosophy going back to Augustine that emphasizes the embodied dimension of human experience (see Gadamer, 2004, pp. 417–426). To avoid unnecessary complexity, I leave this out in the current discussion.

On the other hand, what concerns me is the apparent disappearance of traits that Plato (1995), Kant (2000), and (here, especially) Gadamer (1993a, 2004) conceptualized in association with *beauty*. While this might sound overly archaic, we can hear what is at stake if we put on some excellent music, say, the part of ‘Blue and Green’ wherein John Coltrane solos (Davis, 1959). Everything sits *just right*. The music is improvised, and it is enacted first by the musicians and then, some decades later, by us, the listeners. Yet something lasting seems to emerge *in* the music. One might call it a potential structure—from which the music seems to flow easily and stringently as if from an independent source. And this flow *feels relevant*, to me, existentially, as it has felt for millions of other listeners (isn’t that why the album is regarded as a definite classic?). The music evokes something in my body, something I cannot put into words, but which nevertheless is *there—both in me and in the music*. While I find this enigmatic and independent dimension adequately conceptualized in Gadamer’s TiS, and while Solli and Netland (2021) have explored some aspects thereof with a focus on the semi-autonomous nature of rhythm, I cannot see the dimension fully conceptualized in the affordance-driven theories of musical enaction.

Indeed, my hunch is that the affordance concept itself stands in the way of proper conceptualization. In Section 2, I outline key traits in Reybrouck’s perspective on MA. In Section 3, I bring in Gadamer’s perspectives and start the dialogue between the two ways of conceptualizing musical experience. In Section 4, I try to draw out the limits of the MA concept. In Section 5, I indicate how Gadamer’s perspective allows us to see protoversions of TiS in contemporary studies on child development and communicative musicality. Let’s see how it goes.

2. Affordances and the Sonic Environment

In his latest book, Reybrouck (2021) articulates a methodological consideration that we need to keep in mind in the following presentation. He tacitly follows what he calls the tradition of methodological solipsism or methodological individualism, meaning that he views the musical experience from the privileged perspective of the subject while also acknowledging the limits of this perspective (Reybrouck, 2021, p. 159). Moreover, Reybrouck’s MA analysis is only one aspect of his broader theory of musical sense-making. His theory is a rich and complex conglomerate of ideas and analytical nuances, most of which I need to leave unvisited. Consequently, this section does not claim to justify Reybrouck’s theory as a whole, but only to expose some fundamental premises for his MAs. A good way of considering these points is to have a brief look into Gibson’s original descriptions of GPAs, which are frequently cited by Reybrouck and other theorists dealing with MAs.

With his prime focus on visual perception, Gibson (1966) invented the term *affordance* to describe a complementarity of animals in general (hereunder humans) and the environment: ‘The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill’ (Gibson, 1979, p. 127, italics original). An affordance cuts across the dichotomies of the subjective and the objective, the psychological and the physical, and the intramental and the public.

An affordance is neither an objective property nor a subjective property; or it is both if you like. ... It is equally a fact of the environment and a fact of behavior. It is both physical and psychical, yet neither. An affordance points both ways, to the environment and to the observer. (Gibson, 1979, p. 129; cited in the MA theories of Reybrouck, 2001a, 2005, 2012, 2015, 2021; Krueger, 2011a; Windsor and de Bézenac, 2012)

In Gibson's analysis, affordances are *qualitative features* of a specific animal–environment interaction. Each species has the functional characteristic of its niche, and each niche implies a set of affordances that are determined less by *where* the animal lives than by *how* it lives (Gibson, 1979). The ways in which the animal moves about and interacts with its environment are more important than *what* the animal does.

This is not the time or place to discuss Gibson further (see Heft (2001) and Chemero (2003) for critical analyses). But we can now see how Reybrouck imports Gibson's ideas more or less directly into the context of musical activity. Reybrouck explains that 'music perception ... can be conceived in terms of *organism–environment interaction*—with the music user as an organism and the music as environment—and the related notion of “coping” with the world' (2005, p. 36). The qualities of an unfolding piece of music constitute a 'sonic landscape': it consists of distinct 'sonic biotopes which resemble the natural biotopes of an interesting landscape', each with their own 'activity signatures' (Reybrouck, 2005, p. 39). In direct comparison with how organisms generally act out environmental affordances of locomotion, concealment, manipulation, nutrition and social interaction, Reybrouck ascribes the same intermediary features to MAs that Gibson ascribes to GPAs: MAs are neither subjective nor objective, and neither intramental nor public. They, just like GPAs, are equally a fact of behaviour and a fact of the environment. That is, MAs designate traits that are equally relevant to the enacting subject (i.e. listener or musician) and the enacted object (the music). (A similar move is at work in Krueger (2011a, 2014) and Windsor and de Bézenac (2012)).

With this move, Reybrouck seeks to develop an ecological and biosemiotic approach to the musical experience. Combining Gibson with von Uexküll (1957, among other titles), he investigates the sensitivity of human and non-human organisms to the functional characteristics of their environment (Reybrouck, 2021, pp. 90–91). In arguing for a kind of analogy between MAs and affordances that refer to environmental sounds in general, Reybrouck (2021) also leans heavily on the pragmatic philosophy of Dewey (1958) and James (1976), who both stressed the importance of having an experience. Thus, Reybrouck can explore the biological conditions of musical activity while preserving and developing the perspective that music is a lived and experienced phenomenon. (See also Reybrouck, 2018.)

Encircling the functional characteristics of MAs further, Reybrouck operates with a broad and generic conception of musical enaction, which he describes as *dealing with music*. Dealing with music means dealing with all

traditional musical behaviors—such as listening, performing, improvising and composing—as well as more general 'perceptual' and 'behavioral' categories, such as exploring, selecting, and focusing of attention on the perceptual side, and actions,

interactions and transactions with the (sonic) world on the behavioral side. (Reybrouck, 2012, p. 393)

Dealing with music can have a cognitive component of sense-making and unfolds at a higher hierarchical level than mere sensory processing of the sounds. However, seeking the underlying mechanisms of musical behaviour, Reybrouck holds that dealing with music depends on a level of *direct perception*. Direct perception unfolds the lowest level of information attunement. It implies presentational immediacy, direct contact with the stimuli, and immediate reactivity to the demands of the environment. Coping with sounds or any other percepts goes on without any form of cognitive or symbolic processing.

At the lowest level, there is mere ‘reactivity’ to the sound without any cognitive mediation by the mind. This is the level of ‘causality’ with specific stimuli eliciting specific reactions. It involves a reactive machinery that functions as a kind of lock-and-key—with wired-in and closed programs of behaviour that trigger reactions in a quasi-automatic way. (Reybrouck, 2005, p. 28)

However, Reybrouck does not support the idea that musical practice is merely a causal reaction to stimuli. He argues that what separates the functional characteristics of humans from other organisms is how human activity merges immediate information pickup with abstract symbolic information processing. He believes that ‘there is a tension between wired-in reactivity to the (sonic) environment—with reactions that behave like lock-and-key—and mediate reactions which are the outcome of learning processes and cognitive mediation’ (Reybrouck, 2005). In an extension of Gibson’s view, Reybrouck claims that cognitive mediation does not just involve intramental capacities but also the enactive skill of categorizing and representing what one learns. Humans can extract complex acoustic properties from the sonorous landscape and identify them for themselves and others. Humans can also transform the stimuli into objects by using different temporal representations, from real-time versions to extremely compressed representations that are ‘outside time representations’ (Reybrouck, 2001b, p. 124, citing Godøy, 1997). Categorization implies providing the maximum amount of information with the least cognitive effort, allowing the perceiver ‘to render discriminably different things equivalent, to group objects and events and people around us into classes, and to respond to them in terms of their class membership rather than their uniqueness’ (Reybrouck, 2005, p. 10).

Humans can also transform stimuli into *signs*, as Reybrouck demonstrates (2005, 2006, 2015, 2021). Both musical and linguistic activities draw on the capacity to follow the indicated direction of objects or events towards designated objects, and thus on the ability to perceive what others show or indicate by gazes and gestures. In contrast to linguistic activities, however, musical activities unfold self-referential or internal semantics. ‘Musical sounds—and combinations of them—do not refer to something outside of the music. Music, therefore, is self-reflective in referring only to itself, thus emancipating the sounds from any external and denotative

meaning' (Reybrouck, 2015, p. 10, italics altered). Dealing with music is learning to cope with the various self-referential indications of the relevant musical system.

2.1. *Musical Affordances*

As we can see, Reybrouck's Gibson-inspired analysis indicates a continuum between GPAs and MAs. Whatever MAs are, they do not merely come into play at the symbolic abstract level but are valid already at the level of perceptual immediacy. The qualitative niche of musical functioning is a subset of the qualitative operations that can be associated with GPAs. The music is the projection or mapping out of the organism's internal organization onto the outside world (Reybrouck, 2015, p. 6).

However, seeking to illustrate the more specific nature of MAs, Reybrouck initially refers to three domains (Reybrouck, 2012, 2015). The first is the production of musical instruments out of sounding material. This involves the whole history of musical instrument building and the continuous search for new materials. The second (and here Reybrouck leans on Godøy, 2001) is the development of playing techniques to produce musical sounds—for instance, in developing actions like hitting, stroking, kicking and blowing, or more complex or compound activities like drumming rhythmic patterns, sliding up and down a melodic contour, or sound-producing actions in terms of slow, fast, up and down, or *martellato*, *tenuto* and *legato*. The third is the shaping of the sound by using modulatory techniques, thus exemplified by Reybrouck:

Strings, e.g., can be plucked or bowed, but within the action category of bowing, there is a whole spectrum of techniques for modulation of the sound. The same holds true for a singer who uses his/her technique to shape the sounds that result from the air supply provided by the lungs. Singing involves not merely the production of vowels and consonants: it involves aspects of intonation and common ways of emotional expression such as timing, articulation, dynamics, tone onsets and vibrato. (Reybrouck, 2012, p. 404)

Reybrouck's three domains primarily refer to productive aspects of MAs: 'They take as a starting point the raw material and what it affords for musical sound production' (Reybrouck, 2012, p. 404). However, Reybrouck also suggests the possibility of going beyond the productive level. That is, rather than viewing MAs merely as a productive feature, he includes the listening perspective that is always implied in musical activities. Construed thus, MAs 'embrace perceptual qualities, mood induction qualities and sociocommunicative qualities, invoking aspects of sense-making, emotional experience, aesthetic experience, entrainment and judgments of value' (Reybrouck, 2012, p. 404, citing Windsor, 2004; Krueger, 2009, 2011a).

Reybrouck brings together productive and experiential aspects of MAs as things that induce what he calls *ideomotor resonance*. In short, this term designates the phenomenon whereby the listener experiences the sounds as if s/he is involved in their production, regardless of whether s/he actually produces them or not (Reybrouck, 2001b). That is, rather than taking manifest motor behaviour as a criterion in the analysis of dealing with

music, Reybrouck argues that the listener's motor 'intention' can also be considered simulated action. Manipulating the musical sense implies the imagining of action:

Not all perception ... is reducible to motor components, but motor components are involved in perception and are an integral part of it. ... Even if they are not manifest, they operate at virtual levels of imagery and simulation—also called ideomotor simulation—with motor behaviour being manifest only at an ideational level of mental representation. (Reybrouck, 2012, p. 405)

From this perspective, acting out MAs implies the possibility of moving in a reaction to the sounding music but without necessarily moving one's own body. Movements initiated by the music *can* be specific and articulate (such as when music stimulates dancing, rhythmic swaying or nodding). But they can also relate to more general levels of motor induction experienced as 'forces' and 'energies' inherent in musical structures, which account for the perception and imagination of tension, resolution, and movement (Reybrouck, 2012, p. 405).

3. Gadamer's Conception of Language

The previous section began outlining specific traits of Reybrouck's theory that emerge with or around his conception of MAs. I will soon include more perspectives. But first, I want to begin the discussion with Gadamer's philosophy and see how he can complement Reybrouck and the other MA theorists. I need to untangle the perspectives gradually, starting with Gadamer's idea introduced above, suggesting that language is an all-encompassing feature in human life. How shall we understand this?

It might be tempting for a contemporary reader to believe that Gadamer's *language* connotes propositions and propositional knowledge. But this would be a misunderstanding. Gadamer's concept is much more comprehensive.³ In fact, to the extent that a privileged focus on propositions and propositional knowledge excludes non-propositional modes of being in the world, Gadamer's philosophy can be read as a critical revision of these tendencies fostered in Western philosophy. Based on Plato, Aristotle, Augustine, Hegel and Heidegger, Gadamer (2004) develops a dialectical and horizontal (e.g. historical, transpersonal, and categorial) conception of language. Coarsely paraphrased, language designates the language we use in everyday life and *all* cultural forms—musical forms included. It encompasses formal and informal institutions that make up a society—everything from motherese, soothing songs, and children's games (Gadamer, 2000) to folk music and artistic expressions associated with fine art and instruments (Solli, 2021). From a historical perspective, it includes the first historical evolution of language, the building of shelters and ploughing of the earth, and the formation of knowledge, laws and ideas of human freedom. Even an ontological dimension resides in language: '*Being that can be understood is language*' (Gadamer, 2004, p. 470, italics original; for discussions, see Schmidt, 2000).

3 Gadamer's linguistic phenomenon somewhat parallel to the perceptual phenomenon displayed by Merleau-Ponty (2012). For discussions of similarities and differences between Gadamer and Merleau-Ponty, see Solli (2017).

Language is an intermediary feature between humans, and between humans and the extra-human world. In short, language designates specifics of the lifeworld in which each of us lives in, reflecting cultural and ontological understanding. (Gadamer's concept of understanding equals is not an intellectual understanding but comprises the practical and emotional peripety wherein things just fall into order and make holistic sense; see [Grondin, 2002](#)). *We live it*; language is as natural to us as the air we breathe ([Gadamer, 1993c](#)).

Curiously, summarized thus, we see that Gadamer's conception of language covers much of the same ground as Reybrouck's human-specific GPA and MAs. Language is neither subjective nor objective, nor intramental nor public, but intermediary by kind. Language, too, has to do with the ways in which we, the humans, establish a home in the world, a human 'niche'. Moreover, language is also primarily a qualitative feature. *How* we, humans, communicate about things is of primary importance in how we perceive the world. Finally, Gadamer's concept also covers what Reybrouck just called *dealing with music*, in so far as these dealings emerge as part of a society developing its physical and cognitive resources for personal and artistic communication. Even what [Reybrouck \(2005\)](#) describes as the categorization providing the maximum amount of information with the least cognitive effort can fall under Gadamer's concept.

3.1. Linguistic Freedom

But the similarity is superficial. Two points launch us into a more nuanced conception. First, Gadamer's starting point is distinct from Reybrouck's and the other MA theorists. While the latter import a concept developed to describe animal behaviour (e.g. Gibson's affordance) into the contexts of distinguished *human* enaction, this move is foreign to Gadamer: 'For to live in a linguistic world, as one does as a member of a linguistic community, does not mean that one is placed in an environment as animals are' ([Gadamer, 2004](#), p. 449). The reason evolves in this observation:

Animals can leave their environment and move over the whole earth without severing their environmental dependence. For man, however, rising above the environment means rising to 'world' itself, to true environment. This does not mean that he leaves his habitat but that he has another posture toward it—a free, distanced orientation—that is always realized in language. ([Gadamer, 2004](#), p. 442)

From Gadamer's perspective, the word *environment* means categorically different things in the animal and the human contexts. 'The concept of *world* [Welt] is . . . opposed to the concept of environment, which all living beings in the world possess' ([Gadamer, 2004](#), p. 441). While non-linguistic creatures have an environment in the sense of *Umwelt*, our symbolic species⁴ implies a crucial freedom from—or freedom in relation to—the environment [*Umwelfreiheit*]. More precisely, the 'conversation that we ourselves are' ([Gadamer, 2004](#), p. 370) gives us the capacity for the freedom of conduct. Language gives us the transformative

4 Gadamer's position on this is backed up by [Deacon \(1997\)](#), [Tomasello \(2003, 2010\)](#), [Thompson \(2007\)](#), [Di Paolo \(2009\)](#), and [Merleau-Ponty \(2011\)](#).

power to ‘rise above’ the environment (see [Schmidt, 2000](#)). This does *not* mean humans leave the sensual–perceptual experienced world in favour of skull-internal abstract symbolic formulas, an idea that would be antithetic to Gadamer’s philosophy. It only means that we find ourselves *at home in this world*, in a biologically conditioned yet almost unlimited number of ways. ‘Man’s freedom in relation to the environment is the reason for his free capacity for speech and also for the historical multiplicity of human speech in relation to the one world’ ([Gadamer, 2004](#), p. 441). Humans build shelters, houses, laws, and other formal and informal institutions that enable us to develop our abilities to express ourselves freely in shared media of communication. I will refer to this freedom as *linguistic freedom*.

Second, unlike Reybrouck, Gadamer holds that there is no level of perceptual immediacy beneath human communication. Human communication is all-encompassing. He writes: ‘It is from *language as a medium* that our whole experience of the world, and especially hermeneutical experience, unfolds’ ([Gadamer, 2004](#), p. 452, italics original). [Heidegger \(1979\)](#) formulates the same conception thus (granted that we appreciate that the word *talk* currently designates a similar complexity as I just tried to articulate in Gadamer’s conception of language):

Our outmost rudimentary perceptions and conditions are already expressed, or, in a specific sense, *interpreted*. We do not primarily and originally see the object and things, instead we first talk about them. More precisely, we do not talk about what we see, but contrariwise, we see *what one says about the thing* [*was man über die Sache spricht*]. ([Heidegger, 1979](#), p. 75, italics original. Similar points made in [Merleau-Ponty, 2011, 2012](#))

If our mission were to criticize Reybrouck, these two observations would have a weak impact. Starting with the latter point, Reybrouck stresses the tensions between perceptual immediacy and immediate knowledge (2021, p. 69), suggesting that his perceptual immediacy is not absolute but a dynamic tension between immediacy and immediacy’s abstract symbolic interpretation. As for the distinction between animal and human enaction, one cannot say of Reybrouck that he blurs it.⁵ The MAs are meant to conceptualize the symbolic and communicative dimension unique to human social life. Like [Krueger \(2011a, 2014, 2019\)](#), [Menin and Schiavio \(2012\)](#), and [Schiavio and De Jaegher \(2017\)](#), [Reybrouck \(2013\)](#) both situates the musical enaction in the human social life and emphasizes the human-relational dimension of the musical practice.

What matters ... is not merely the accurate acquisition of information from the [musical] environment, but the correlation of modes of perception between individuals, which are interacting in the same cultural system... [Users engage in] games of social interaction and this brings us to the *social aspect* in dealing with music. ([Reybrouck, 2013](#), 601, my italics)

This cultural dimension is in play in both the receptive and the productive dimension of music-making touched upon above, as well as the perceptual and mood qualities, the emotional experience and aesthetic experience, the entrainment, and the judgements of

5 For discussion of theories that do blur the distinction between human and animal behavior in the analyses of musical enaction, see [Solli and Netland \(2021\)](#).

value (Reybrouck, 2012, p. 404). These are sociocommunicative qualities unfolding between human individuals. Besides, more strongly than some of his fellow MA proponents (Krueger, 2011a, 2014, 2019; Menin and Schiavio, 2012; Windsor and de Bézenac, 2012), Reybrouck brings this sociocommunicative dimension into a conception of the performing musician as a skilled person enacting novel musical sense. The MAs' abstract symbolic dimension allows for a productive establishment of new relations between possible objects of sense-making and vehicles for meaning intrinsic to the musical system (Reybrouck, 2013, p. 112). A performing musician works between two modes of temporality, which Reybrouck calls 'in time' and 'outside time' (Reybrouck, 2019). The musician is 'in time' in so far as the ongoing enaction of meaning is a continuous process, wherein sounds are produced successively. But the musician is also 'outside time' because redundant material is available in the motor memory and the musical system accumulated by the community.

However, we need to pay close attention to how Gadamer's starting point in language and the rejection of a level of perceptual immediacy allow him to suggest a kind of radical intersubjectivity; in fact, it is so extreme that Gadamer himself refrains from using the word (Gadamer, 1995). In his view (outlined in a discussion of Husserl), 'intersubjectivity' implies a residue of a Cartesian and Attic reflecting subject standing over the object. Be that as it may, for Gadamer, the fact that language is all-encompassing and that there is no such thing as perceptual immediacy thereby mean 1) that a dimension of human *Umweltfreiheit* is implied all the way, and 2) that *human freedom of conduct is mediated by kind*. Everything from the most rudimentary percept emerging for the human gaze to the most complex human product, such as a piece of John Coltrane or Johan Sebastian Bach, or music from the Indian raga or Japanese Gagaku traditions, embeds human freedom of conduct. We—the humans, and the humans only—manifest freedom in objects outside our heads and bodies.⁶ For Gadamer, language is the ontological emblem of this all-inclusive bottom-up and top-down intermediary linguistic freedom. Language takes up and transforms the human world and the extra-human nature, and it accumulates a multiplicity of possible perspectives on the world. Whereas seeing things in the world implies a limited point of view wherein each perspective excludes the other, 'in the case of the shadings of the verbal worldviews, each one potentially contains every other one within it—i.e., each worldview can be extended into each other' (Gadamer, 2004, p. 445).

Against this backdrop, Gadamer escapes the critique of advocating a mere *human-made* conception of language. Language is thoroughly human *and* thoroughly non-human in the sense that it takes up and transforms the behavioural structures of the non-human environment as well. 'The other world we encounter is not only foreign to us but is also related to us. It has not only its own truth *in itself* but also its own truth *for us*' (Gadamer, 2004, p. 439, italics original). Language is an intermediary, dialectical, and emergent feature that plays itself out between human beings and between the human world and the extra-human nature. It embodies—or *is*—the complex dialectic of the intermediary. For the same reason, language harbours for Gadamer an all-important dimension of enabling potentiality. Language enables us to *think*, *speak*, and *act* because it embeds an inexhaustible surplus of sense (*Sinn*), which is *never* developed by *one* person alone. It is *always* by a

6 Following Hegel, Merleau-Ponty (2011) elaborates on this point in terms of *work*.

community of people, each having *their* singular perspective on the world, yet also *sharing* the things (*Sachen*) being discussed. ‘Reaching an understanding in language places a subject matter before those communicating like a disputed object set between them. Thus the world is the common world between them’ (Gadamer, 2004, p. 443).

Herein evolves the change of perspective heralded in the Introduction. But to see it, we need to return to the overlap between Reybrouck and Gadamer and locate how the hermeneutist suggests a complementary view.

4. Transformation into Structure: Intermediary ‘Ideality’

Now Reybrouck and Gadamer currently agree on this: music is a sensual–perceptual phenomenon. It is a *sound-time phenomenon*, as Reybrouck stated, a resounding and temporally organized art. Music also unfolds something like self-referential or internal semantics, in that musical sounds—and combinations—do not refer to something outside the music. In terms used by Reybrouck, music is something like a self-reflective system, emancipating the sounds from any external and denotative meaning (as pointed out above; Reybrouck, 2015, p. 10). While Gadamer does not use these words, he has a concept of direction sense (2004, p. 358) that seems compatible with Reybrouck’s description: to listen to a piece of music, or participate in producing it, is to be able to understand the possible directions latent in the music—that is, its unfolding as a self-reflecting system. Finally, Reybrouck and Gadamer also agree that there is continuity between everyday and aesthetic/musical experience (although the continuity is conceived differently, as we soon will see).

Simultaneously, the way Gadamer’s language conception has encircled the musical phenomenon with language and linguistic freedom currently allows us to think a certain perceptual and dialectical depth in the music, unparalleled in the MA-driven theories, as far as I can see. For Gadamer, when we hear and understand a piece of music—a fortiori when we listen to music worthy of the classification *art* (which in Gadamer’s perspective means all music with a certain richnesses of quality and content, emancipated from mere ritualistic use, see 1993a)—we hear and participate in the whole complexity of language potentially looming *in* the musical meaning. And paradoxically, while this might sound like Gadamer’s perspective, calls upon an extra-musical dimension in the music, the opposite is, in fact, the case. Precisely by being ‘taken up’ and carried out in the artistic medium, the ‘world’ stands out anew, as transformed, cut loose from everything that led up to the event. This is what Gadamer calls *TiS*: ‘Something is suddenly and as a whole something else’ (2004, p. 111). Something of the surplus of sense belonging to the moral world is taken up, articulated, and embedded in the media of *that* specific art form used by the artist. Something in the dialectical and relational back and forth of language is taken up (*Aufgehoben*) and understood for its own sake, instituting a self-dynamic force in the sensual–perceptual medium.

From this perspective, neither the enacting musician nor the subsequent listeners *own* the musical structure emerging in the music; it has a legitimacy of its own. And yet, despite its foreign character, we can identify a human and personal relevance in the musical structure. A human communicative dialectic of the human *Umweltfreiheit* gathers form

and ‘stands out’ in the musical organization. Differently put, we can allow a dialectic to emerge between *us*, on the one hand, and the artistic phenomenon, on the other. This dialectic transformation embeds the continuity between everyday and musical experience: We recognize ourselves in the artistic expression. (With his slightly ocular terminology, Gadamer (1993a, 2004) calls it ‘*Sehen als ...*’.)

From Gadamer’s perspective, hearing and recognizing this independence and surplus in the music and the dialectic it creates vis-à-vis ourselves as individuals means that the musical sense is fulfilled and ‘grasped in its essence, detached from its accidental aspects’ (Gadamer, 2004, p. 114). Thus, as we might see, there is a Platonic and Aristotelian dimension looming in Gadamer’s view, paired with Gadamer’s revised version of the Kantian beauty (Gadamer, 2004, pp. 67–70). More precisely, to the extent that we speak about music qua art, the music harbours a dimension of human-relevant and yet human-transgressive beauty, both in the Attic senses of Plato’s and Aristotle’s *kalon* and in the modern sense of *Schönheit* (Kant, 2000), all of which express an inseparable relation between the sensual–perceptual appearance of the phenomena, and the moral world of the human being (see Gadamer, 2004, pp. 469–484). The dialectic moral world of the human ‘shines’ in beauty perceived, and it ‘stands out’ as a thick perceptual sense intermingled with the ontological structures of the world. Differently put, the dialectic of the world ‘stands out’ as something *understood*, brought forth in the sensual–perceptual material. *The gap between sonorous appearance and ‘idea’ disappears in the musical structure.* The emergent feature in the music ‘is certainly an “idea”’, Gadamer would say—the emergent structure ‘belongs to an order of being that rises above the flux of appearances something constant in itself. But equally certain is that it is itself that appears’ (Gadamer, 2004, pp. 481–482).⁷ A normative force, transcending us as subjects, gains shape in the sensual–perceptual phenomenon. It *institutes* a new way of being in the world. *It increases being.*

Boldly put, I believe that *this* ‘ideality’, potentially embedded in the musical structure, is the border of the MA concept in general.⁸ I do not think we can conceptualize the transformative and normative power of music. But these are empty words unless I can demonstrate where and how the descriptive power breaks down.

4.1. *Limits in Description*

Reybroeck feeds the interactional aspect of music-making with everything from neurological findings suggesting the synchronizing power of mirror neurons (2021, p. 157) to the distinguished extra-bodily reality of participatory sense-making (2021, pp. 159–161). Participatory sense-making is the widely accepted thesis initially launched by De Jaegher and Di Paolo (2007), stating that interactive processes can take on a form of autonomy. The intermediary phenomenon—be it music, the dialogue between friends or a mother with her child, as well as the synchronization of the walking pace—can constitute emergent autonomous organizations in the domain of the relational dynamics (De Jaegher and

7 Gadamer’s perspective is in line with Heidegger (1976) and Merleau-Ponty (1993).

8 Following Gadamer, I will refer to the ‘ideal’ dimension in music in quotation marks.

Di Paolo, 2007, p. 493). These intermediary emergent organizations both enable and constrain the enaction of the respective parties. They can stabilize into patterns or other forms of ongoing interactional dynamics, ‘whereby individual sense-making processes are affected, and new domains of social sense-making can be generated that were not available to each individual on her own’ (De Jaegher and Di Paolo, 2007, p. 497; cited in Reybrouck, 2021, p. 160).

The response from Gadamer’s perspective is this: *yes*, these are important traits of the musical enactive event, yet *Reybrouck and the other MA theorists do not push the communicative dimension of musical enaction far enough and with sufficient nuances*. They do not push it to the point where the musical phenomenon is emancipated from the human action for real and stands out as something *understood*, something that enacts back upon the listening subjects, as it does even to the musicians that are creating the music in the first place. One sign of this is the fact that Reybrouck (2021), when addressing the dimension of participatory sense-making, imports points meant to describe synchronization of human enaction *in general* (which is the focus of De Jaegher and Di Paolo, 2007) seamlessly into the context of musical interaction (MA). That is, analogous to how Reybrouck imported Gibson’s idea seamlessly into the human context (Section 2), Reybrouck now juxtaposes everyday non-musical forms of human enaction, like walking at the same pace with distinguished musical enaction. But from Gadamer’s perspective, the banal fact that music just is not the same as walking *is very important*. Unlike walking, music implies a communicative and expressive understanding embedded in the medium itself, which is to say, the musical language. The music is always *for* someone. Even the pianist playing alone in the chamber relates expressively towards a listening instance, if only his/her inner ear (as Gadamer starts calling it in the post-1960 essays gathered in 1993b).

Krueger (2009, 2014) and Schiavio and De Jaegher (2017) are more precise in this regard. Explicitly separating the musical enaction from other activities, they single out more unique structures of the current enaction. However, as for Krueger (2009, 2014), he does not consider music as a communicative phenomenon *for its own sake*; he advocates instead an instrumental view of music, exploring what we do when we *use* music for extra-musical purposes. Even the ‘deep-listening’ described by Krueger (2009) seems to be an activity carried out in order to achieve certain states of mind (underscored with reference to cannabis; p. 109). But as Gadamer points out, ‘coming to an understanding is not a mere action, a purposeful activity’ (2004, p. 443). That is, while music, of course, *can* be used for purposes described by Krueger, there is still something looming in the music that escapes these purposes, according to Gadamer’s perspective. All musical forms, even the non-artistic high-energy music used to puff up one’s energy or revitalize a party (Krueger, 2019) or the *muzak* played in the elevator, harbour a dimension of inter-human communication and understanding. The music is *made* to reach other human beings, as potential listeners out there, analogous to how a text is written to a potential reader (Gadamer, 1993d). This process just cannot be reduced to *use*. ‘Coming to an understanding as such ... does not need any tools, in the proper sense of the word. It is a life process in which a community of life is lived out’ (Gadamer, 2004, p. 443). This coming to an understanding evolves in the ‘ideality’ embedded in the musical structure.

As for Schiavio and De Jaegher's study on participatory musical sense-making (2017), there is no conception of the 'ideality' embedded in music—especially in high-quality music defining the field we call *art*. They speak of 'operational closure' in the music (p. 487), but they do not consider how this closure might take up, express and transform the hermeneutic world in which the music is part. Similarly, Reybrouck's concept of ideomotor resonance leaves the music with the status as *sound* with abstract symbolic and self-referential systematic qualities. But the *ideo* in Reybrouck's 'ideomotor resonance' never transforms into something *more* than sounds produced or received by the enacting subject. It never transforms into an actual independent structure emerging in the communicative event. In their role to establish new relations between possible objects of sense-making and vehicles for meaning intrinsic to the musical system, the MAs never transform into a kernel of multiple possible perspectives latent *in* the resounding music.

Finally (and related to the previous points), recall how Reybrouck brings together productive and experiential aspects of MAs as things that induce the ideomotor resonance. The listener experiences the sounds as if s/he is involved in their production, regardless of whether s/he actually produces them or not (Reybrouck, 2001b). The music 'prompts the listener to experience the sounds as if he or she were involved in their production' (Reybrouck, 2012, p. 404). Herein evolves the virtual dimension of the sonic environment (e.g. the music): we start acting out features in the music, constructing musical sense due to our own sensitivities and symbolic capacities. Simultaneously, Reybrouck insists that there is a level of 'reactivity' to the sound without any cognitive mediation by the mind, a level of 'causality' with specific stimuli eliciting specific reactions. It involves reactive machinery that functions as a kind of lock-and-key—with wired-in and closed programmes of behaviour that trigger reactions in a quasi-automatic way. This, in turn, generates 'images of movement [that] seem to be deeply embedded in our perception and cognition of music' (Reybrouck, 2021, p. 127). There is a motor-mimetic element in music perception and cognition, meaning that we mentally imitate sound-producing actions when we listen attentively to music, or that we may imagine actively tracing or drawing the contours of the music as it unfolds. (Reybrouck, 2021, p. 127),⁹

But *why* does the music trigger the level of 'reactivity' to the sound in the first place, and how does this 'reactivity' convert into the virtual construction of the music? Why does anything *in* the sounds unfolding in time pull the perceiving subject into an active tracing and drawing of contours? As far as I can see from Gadamer's perspective, the MA concept cannot answer the question properly. While the MA concept can explain traits in how the enactive body acts out the music according to reactive machinery etc., it cannot explain why the music feels existentially relevant to the enacting organism (the human). It cannot explain why we are 'triggered' by the sounds and start filling in the musical sense beyond the motor-mimetic element. It cannot make sense of the holistic, existential meaning that the music has in our lives, and why we are *drawn* into it, often for no specific reasons or purposes apart from the joy and liveliness of it.

9 Reybrouck cites Godoy, 2003, p. 318. Godoy's concept of motor-mimetic music cognition is part of a larger exposition of musical cognition, which I cannot discuss further in this context (see Godoy, 2001, 2003).

As far as I can see, the reason for this limitation evolves in the perspectives outlined above: since the MA concept is built up not through a thick conception of human linguistic freedom but through general notions of enaction associated with the GPA, the concept cannot convey the human dialectic latent in the music. Moreover, whereas Gadamer's perspective illuminates the continuum between everyday and aesthetic/musical perception as a dialectic and transformative event, the MA concept seems to rest upon a direct analogy between the two. That is, instead of conveying how human understanding transforms and emancipates from its environment with the artistic media, the MA appears to build on seamless comparisons between general and musical perceptual experience.¹⁰

5. Communicative Musicality

Starting with Reybrouck's theory, the previous sections tried to discuss the phenomenological status of the MA in light of a Gadamerian focus on human communication. But how do we know that Gadamer's perspective is *right*? One of the 'disadvantages' of the perspective is that we cannot *prove* its correctness. As Kant (2000) pointed out, perception of artistic phenomena has to do with aesthetic taste, and taste just cannot be proven in rules or objective data. Nor can we play a tune and *point* to the potential structure in the music. One person might hear it; another just will not. And that is just part of the dialectical nature of the musical sense.

What we can do, however, and what I will try to do in this final section, is to use Gadamer's perspective to indicate how it makes sense in the interpretation of empirical studies on child development, part of which is also reflected in the MA-driven theories (for instance, Krueger, 2014; Reybrouck, 2021). My underlying claim is now that if we are to see and develop the potential of these perspectives, we need to set aside the MA concept in favour of Gadamer's *TiS*.

According to Trevarthen (who Reybrouck (2021) cites extensively), *communicative musicality* is an innate and universal power intimately associated with the vital drive for imitation and cultural learning. 'Even though few in any society may be known as musicians, professional story-tellers in sound, all of us are ... "musical" from birth' (Trevarthen, 1999, p. 157). 'The core of every human consciousness appears to be an immediate, unrational, unverballed, conceptless, totally atheoretical potential for rapport of the self with another's mind' (Trevarthen, 1993, p. 121; see also Malloch and Trevarthen, 2009).

'The core of every human consciousness appears to be an immediate, unrational, unverballed, conceptless, totally atheoretical potential for rapport of the self with another's mind' (Trevarthen, 1993, p. 121; see also Malloch and Trevarthen, 2009). From Gadamer's perspective, we should not interpret the Trevarthian immediate as a perceptual level 'beneath' symbolic communication (as Reybrouck's perspective would suggest). Instead, we can see it as a thoroughly dialectical and intermediary field, wherein the human world of language and linguistic freedom is about to gain shape for the infant. The proto-linguistic freedom is embedded in the relatively independent, transformative structures that emerge between the parties.

10 Granted the inspiration Reybrouck (2021) takes from Dewey in the understanding of musical affordances (Section 2, above), it can be mentioned that I read Dewey a little differently. While Reybrouck seems to view Dewey's 'heightened vitality' in art experience (1958, p. 19) as expressing a direct continuity between everyday and aesthetic experience, I see a dialectic and transformative moment in Dewey's descriptions.

To see what this implies, we can focus on rhythm. Rhythmic perception—not in the same sense as the complex beats acted out by accomplished jazz musicians, but in the sense of relatively autonomous temporal contours—is the first sign of fundamental communicative musicality. Even in the womb, a foetus registers temporal and qualitative contours of events (Stern, 1998, 2010; see also Beebe and Lachmann, 2013; Manning, 2013). The temporal contours are always embedded in other qualities, such as melodic intonation, prosody and sound as timbre. Yet *how* an event begins, flows through, and ends stands out for its own sake, and becomes part of the child's initial formation of proprioceptive abilities. Rhythmic perception intensifies in the baby's postnatal primary imitation when the child engages in what Trevarthen (1998) calls protoconversation, or narration without semantic content. A few weeks after birth, the baby shows signs of meticulously exact responses to his or her caretaker's initiatives. The baby's mind is not a mere receiver of time; it is itself a *generator* of time (Trevarthen, 2005, p. 92). The baby initiates responses from the caretaker with a high level of precision. She or he modulates behaviour vis-à-vis the caretaker in what Trevarthen describes as 'fine and rapid ... glides and leaps of pitch or volume of voice, eye-brow flashes, prebeat syllables, suffix morphemes, rhythmic details and embellishments, rapid hand gestures, quick head moves, shifts of gaze' (Trevarthen, 1993, p. 151). Temporal contours are also embedded in the 'fundamental beat of repeating movement, short bursts of expression, repetition of rhythmic groups of movement, exaggerated dynamic expressive 'sentic' forms, and precise modulation of the intensity or force of expression in a moderate to weak range' (Trevarthen, 1993, p. 135).

At this point, we see that the primary imitation is embedded in the intermediary medium used by the partners. The mimetic aspect gluing oneself onto the behaviour of the other, and the emerging rhythms are sides of the same phenomenon. The qualitative nuances of rhythmic communication embed the syncretic bond that is potentially established between the child and its caretaker (Merleau-Ponty, 2010). When the qualitative nuances are understood in this way, developing a sensitivity for rhythms and a relational competence are sides of the same formative process. The child learns to express her or himself, vis-à-vis another person, while simultaneously learning how to be sensitive to how others express their moods by the audible and temporal qualities of their voice and their breath, gaze and gestures. By the age of 7–9 months, this learning will develop into the ability to pay joint attention (Tomasello, 2003)—that is, the power to pay attention to the caretaker but also to follow the direction of the caretaker's gaze and to make pointing gestures towards objects of shared interest. Eventually, this will lead to the development of linguistic categorization and abstract symbolic behaviour (Stern, 1998).

However, from the very first weeks of an infant's life, the jointness, the indicative aspects, and the 'categorization' are present in the rhythmic behaviour as protoversions of themselves. The rhythms are acted out *with* the other; they *have* direction in the sense that the qualitative contours *lead* somewhere in the interaction with the other; they are 'abstract' or 'symbolic' in the sense that they unite multiple events in generalized forms of behaviour. The unity goes both 'inwards' and 'outwards' at the same time. It goes 'inwards' because, for the child, the rhythmic interaction has to do with the development of a sense of self, a sense of bodily unity, and a sense of coherence in perception (Stern, 1998, 2010). Rhythms emerge not just in one sense modality but across the various sense modalities. The unity goes 'outwards' because the unity is 'out there' too. It is *in* the caretaker's behaviour and *in* the rhythm emerging *between* the child and the

caretaker. The two-way imitational play typically forms what we could call *intermediary thirds* (Benjamin, 2004), or intermediary, dynamic and relatively autonomous perceptual structures. Since neither of the parties controls the encounter of perspectives but contribute and attune to the other's ways of understanding, the intermediary is allowed to play itself out, according to its intrinsic norm. These thirds often come with the precise organization of *introduction, development, climax and resolution, and coda* (Trevarthen, 2017), and they propel behaviour in both partners (Fuchs and De Jaegher, 2009). In other words, rhythm qua intermediary thirds is not just enacted in real-time communication; in a certain sense, the thirds *act back*.

The enactive conception of intermediary thirds sits well with Gadamer's exposition of *play*. 'Play appears as a self-movement that does not pursue a particular end or purpose so much as movement *as* movement, exhibiting so to speak a phenomenon of excess, of living self-preservation' (Gadamer, 1993a; translation from 2002, p. 23). More important than the conceptual overlap, the thirds are protoversions of the 'ideality' associated with the TiS. The thirds embody and transform the intentionality and direction of the human sense. They are 'out there', yet their mimic aspects convey deep affective connections between mother and child. The rhythmic structures embed an 'ideality' that transforms the communicative situation. More precisely, the rhythmic structures are the transformed organization. The soothing impact of the rhythmic protoconversation is vital to create a safe environment; the rhythmic interaction creates a wholeness in the baby's life, from where it makes sense to approach all other aspects of the spatiotemporal realities of the surroundings. In other words, the rhythm transforms the environment into a human world that is primarily shared with other communicative human beings (Gadamer, 2000, 2004; Heidegger, 2010; Merleau-Ponty, 2011, 2012).

Finally, as the reader will now know, in my view, this dynamic just cannot be captured in terms of MA. The intermediary dialectic order, and with it the human historicity that becomes articulate in the structure, does not 'just' afford enaction. It demands action. It institutes a human world. And it is this fundamental institution that draws us to music later in life. It makes us 'recollect' traits of the vital communication that once propelled us into the human lifeworld (Gadamer, 2004, pp. 113–114).

5.1. Concluding Remarks

If music—generally and primarily—unfolds by addressing itself *to the human ear*, as Kierkegaard once pointed out (1959, pp. 66–67), I believe that phenomenology and other theoretical disciplines should use approaches that preserve the aural communicative dimension rather than distorting it. The approaches should be phenomenologically apt—that is, suited to the phenomenon they are meant to describe.

In this regard, I believe Gadamer's perspective should get the attention it deserves in the creative spirit of the new enactivist framework. Reflected in Gadamer's philosophical hermeneutics is the surplus of insights into the profundities of human life, developed in tradition and still as valid today as they have always been. While a lot remains to be said about the enacted relationship between everyday and musical experience, I believe the dialectic and transformative dimension articulated in Gadamer's TiS can manifest a fruitful path forward. That said, Gadamer's philosophy will also benefit from being

challenged by the enactive approach and concretized into enactive structures. Let this be an invitation to future research.¹¹

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