Chapter 19

Music and Empathic Spaces in Therapy and Improvisation

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ABSTRACT

The term empathy (*Einfühlung*) is rooted in philosophical aesthetics. It was used by German philosophers toward the end of the nineteenth century to describe our ability to imaginatively "feel into" works of art, which speak to us in a certain humanlike way insofar as they contain traces of what Mikel Dufrenne calls a "quasi-subjectivity" (1973, 393). In this chapter, rather than looking to art as an *object* of empathy, we instead consider art—and more specifically, music—as a resource that can *facilitate* empathy. More precisely, we turn to two cases in which music seems to establish spaces that enable and sustain empathic connectedness, as well as the ability to explore and experiment with different forms of social understanding and affective sharing.

The first case comes from the music tradition of free improvisation. Based on ethnographic fieldwork with the saxophone player, Torben Snekkestad, we become acquainted with an approach to performance that does not concern music primarily as an aesthetic product, but as a shared process of communicating and connecting nonverbally with others—a process that is essentially about exploring and experimenting with different forms of intersubjectivity and empathy. The second case comes from music therapy and autism, which can involve listening, singing, or joint music-making. We discuss studies indicating that musical interventions positively address core impairments in capacities required for empathy: for example, joint attention, social reciprocity, and verbal and nonverbal communication, as well as comorbidities of atypical perception, motor performance, and behavioral problems.

Although these two cases are different, they share the trait of using music to establish spaces of nonverbal communication and empathic understanding. Drawing on these two cases, this chapter analyses how musical-empathic spaces emerge and how these spaces solicit the integration of both low-level affective and bodily resonance mechanisms as well as high-level acts of meta-reflection, imagination, and planning that contribute to different forms of empathic understanding.

Keywords: music, empathic spaces, Lipps, rhythm, resonance, free improvisation, autism, music therapy

INTRODUCTION

Playing and listening to music performances is uplifting, inspiring, and perhaps even empowering. A live rock concert for instance can establish bonds of imaginative empathy associated with having had a significant shared aesthetic experience. Looking beyond such immediate aesthetic pleasure and zooming in on the process of playing music, however, another decisively empathic dimension emerges. Beyond and before the production of an aesthetic product, playing-or more specifically improvising-music together can ground and enhance communicative and empathic forms of mentality, expanding our interactive repertoire, whether among professional musicians or in a music therapist working with autistic individuals. At least, that is what we purport to demonstrate in this chapter. At the same time-moving from the level of live musical experience to that of fundamental theorizing on aesthetics and empathy—at the outset about 150 years ago, the term, *empathy* (*Einfühlung*) was coined as a term concerning aesthetic objects and processes. It is in itself a source of fascination that empathy, which in our everyday understanding has come to indicate an ability to comprehend and live well with others, originally concerned processes of aesthetic judgment. What we have then, is theoretical work and as well empirical cases making aesthetic or musical practices essentially bear on and develop aesthetic capabilities.

Our chapter first introduces the point of origin of aesthetic empathy with Lipps's work. Asking how Lipps might describe the metal process involved in a live musical event, we isolate three core concepts from his rich work, namely rhythm, resonance, and activity, and we trace their operation in our musical cases. At this point, it becomes evident that Lipps is a thinker of interaction and should perhaps be reassessed as a proto-enactivist rather than a *prügelknabe* reduced to simulationist and projectivist theories of empathy, as is often the case.

Our two cases are of rather different origin. The first builds on Høffding's earlier work with the improvising saxophone player Torben Snekkestad in the form of ethnographic observations and "phenomenological interviews." The second relates to Krueger's theoretical work on empathy, enactive musicking, and autism studies. Though based on different kinds of empirical backgrounds, both cases show how music improvisation can enable and enhance both basic and sophisticated empathic processes—what we call "empathic spaces"—that most likely would be otherwise inaccessible. Further, the aim of opening these spaces, we believe, constitutes a kind of ethical practice. These considerations in turn allow us to reconnect with Lipps showing how some empathic and aesthetic processes, notably resonance and rhythm, are inherently intertwined and mutually supportive.

EMPATHY AND AESTHETIC EXPERIENCE: A BRIEF HISTORICAL SKETCH

The term *empathy* dates to German aesthetics. It originates from the German noun einfühlung, which literally translates into "feeling-into." In 1911, the psychologist Edward Titchener developed the neologism empathy to introduce the term to English-speaking audiences. The use of empathy to account for aesthetic experience can be traced back to the Enlightenment and Romanticism, where prefiguration is to be found in poetic as well as philosophical texts as a form of animation of nonhuman objects occurring through projection.¹ In his habilitation On the Optical Sense of Form (1994), the philosopher Robert Vischer introduced empathy as a technical term. Drawing on findings generated by the then-novel sciences of physiology and psychology, Vischer described empathy as a kind of objectification of the body into spatial forms resulting from kinesthetic reproduction of external stimuli (1994). According to Vischer, this reproduction generated sensations of movement, which by entering into relation with the emotional and imaginative life of the person effected a "spiritual sublimation of the senses" in which "the entire body subject is moved" (p. 99, translation modified).² Vischer's account is important for several reasons. Not only did it provide an account closely aligned with a tendency within nineteenth-century German aesthetics toward thematization of the psycho-physical conditions for the experience of a beauty. It also provided an account in which empathy was not reduced to other mental functions, such as association, as had been attempted by thinkers like Gustav T. Fechner (1876) and Paul Stern (1898). Situating empathy within a psychological and physiological context, and insisting on its specificity,³ Vischer would eventually furnish the psychological ground for the field research that would later become known as *empathy aesthetics* (Friedrich & Gleiter, 2007).

Sharing the basic assumption with Vischer that investigations of empathy could elucidate the psychological grounds from which experiences of aesthetic pleasure arise, a range of scholars set out to investigate the relation between empathy and aesthetic experience. The point of departure for their investigations was the general question: *How is it possible that a nonhuman object can appear with human sense*? (Geiger, 1911, see also Lipps, 1900, p. 416). For a period of approximately fifty years, with a peak around the end of nineteenth century and the beginning of the twentieth century, a diverse range of theories of aesthetic empathy emerged, most of which are not known to contemporary debates on empathy and aesthetics.⁴

Before presenting the concepts of *activity*, *rhythm*, and *resonance*, we will have to make a short detour around Lipps's conception of beauty. That is because a brief exposition of the relational nature of beauty shall help us make a convincing case that low level aspects of aesthetic empathy solicits basic affective and communicative processes, and importantly does so within an intersubjective awareness of the spectator.

THEODOR LIPPS ON THE RELATIONAL NATURE BEAUTY

Lipps (1903) defines beauty as the ability of an object to evoke a particular kind of feeling, a so-called *feeling of beauty* (*Schönheitsgefühl*). Beauty is thus conceived as an emotional effect (*Wirkung*) experienced by the person. As the science of beauty, the aim of aesthetics was, for Lipps, to describe, analyze, and explain the lawful nature of this effect: on the one hand, the objective features that an object must possess to evoke feelings of beauty; and on the other, the subjective conditions that allows for such emotional evocation within the subject. Accordingly, beauty for Lipps is neither an intrinsic quality of the object nor a quality that can be accounted for by the subjectivity of the person alone. Rather, it is a co-constituted, relational, and in-between phenomenon; it is emotionally enacted in "reciprocity," "interaction," or "dialogue" with the object, as Lipps puts it (Lipps, 1903, p. 191, cf. Lipps, 1909).

Engaging with the work of art, the spectator experiences being receptive to expressed feelings and is motivated to reproduce and re-experience the feelings of another human. This reproduction is described by Lipps as an affirmation of the other which becomes joyful by simultaneously confirming the vitality of the spectators own being as a human. When enacting the feeling of beauty, the spectator comes to experience a positive ground of being, shared by every human being. The experience of beauty is therefore at its core an experience unfolding as an intersubjective relation. The spectator not only experiences feelings, but the feelings of another human; it is as Lipps (1906, p. 112) puts it, an experience in which an echo of the other reverberates in me.

According to Lipps, the *body* holds the key to the understanding of beauty (1903, p. 102). Through its perceptual appearance-its form, color, actions, behavior, utterances, and so on-the body becomes manifest as the bearer of human life. Importantly all of these bodily expressive appearances can be symbolized aesthetically in music, poetry, painting, sculpture, and so on. Sensitivity to this expressiveness of vitality is, according to Lipps, an ability initially developed through a reciprocal relation of self- and other-experiences, the nexus of which are impulses of imitation (1903). As Karsten Stueber (2006, p. 7) writes, this means that "our aesthetic appreciation of objects in the end is grounded in seeing their form in analogy to the expressive quality of human vitality." The crucial point here is that aesthetic empathy occurs analogously to the type of empathy that allows us to experience, develop, and understand the life of other persons. For Lipps, then, the way from the latter form of empathy (i.e., in relation to others) to the former (i.e., aesthetic empathy) is therefore not far. Although the objects are different in the two cases, they both nevertheless follow the same dynamic patterns of activity.⁵ It is this similarity that makes Lipps's analysis interesting to the question of how music as an art form facilitates empathy. The experience of beauty thus proves to be a relational experience in the dual sense, as founded in intersubjective awareness and progressing through interactive and interaffective processes. We will demonstrate how the low-level aspects of aesthetic empathy that Lipps calls activity, rhythm, and resonance, which together constitute the relational character of our aesthetic experiences, can help clarify how music can establish we-spaces that facilitate empathetic connectedness, social understanding, and affective sharing.

ACTIVITY AND FEELING IN BASIC EMPATHY

Lipps (1900) divides aesthetic empathy into two levels: a primary and general level he calls "basic empathy" and secondary and specific level he calls "sympathetic empathy." Though feelings of beauty first arise at the latter level, it is at the first level that the relational and rhythmic-dynamic basis for the experience of resonance is laid bare. In opposition to sympathetic empathy, which in Lipps's use refers to co-experiencing, sharing and importantly also a joy of such sharing that primarily occurs in relation to works of art or other persons, he considers basic empathy a function of consciousness occurring in relation

to natural objects, sounds, and even simple spatial objects as lines. According to Lipps, an aesthetic object experienced through empathy is the product of two factors: the sensuous demand (*Forderung*) of the object on the one hand, and the activity of the person on the other.

Lipps also describes the experienced object as the result of a co-constitutive process (1909) as well as a product of interaction or a dialogue between the person and the object (1903, 1905).

Through this interaction the person and the object are mutually affected. To understand this affective transformation, we will have to delve into the basic feelings arising in the dialogue between the object and the person, between demand and activity, which is the feelings that Lipps calls feelings of activity (*Tätigkeitsgefühle*; e.g., Lipps, 1906, 1909).

In its most fundamental sense, activity can be determined as any inner mental work (Lipps, 1906). Lipps describes it dynamically, as an inner striving movement toward the termination of a conscious act. By virtue of its inner nature, this movement is not a spatial movement, rather, it is a movement between different qualitative episodes unfolding in consciousness (Lipps, 1907, p. 19). To speak of activity without its phenomenological manifestation as the feeling of being active is as Lipps writes an abstract idea (1905). He therefore also emphasizes that the meaning of the term *activity* is best understood by reference to the way it is experienced rather than to bodily or kinesthetic sensations. To capture the felt aspect and eventually the full sense of activity, Lipps employs the term feeling of activity. Here is a felt sense of inner striving, the work toward the termination of any act, as such, be it a bodily action, or reflexive acts of perceiving, imaging, reflecting or even willing (Lipps, 1907, 1905, 1909).⁶ Feelings of activity can also be described as the felt sense of the I's movement toward the termination of an intended act and, hence, articulate the basic sense of vitality of the I (Lipps, 1909, p. 38). From there, Lipps goes on to describe feelings of activity as feelings of life (Lebensgefühle,) as well as feelings of self (selbstgefühle).

Importantly, the movement between a qualitative episode, which makes up the activity and provides it with its felt sense, is not determined exclusively by the person. As noted, the aesthetic object is an achievement of a co-constitutive process involving the sensuous demand of the object and the activity of the person. That the object enforces a sensuous demand on the person simply means that its appearance is not completely independent on the constituting achievement of the person, but that the object asserts and preserves its "right" to be experienced as that what it is (1909). This means that I cannot experience the object as just anything but that the I is required or requested to experience the object exactly as *this object* (Lipps, 1906, p.16). It is in recognition of this basic reciprocity that Lipps also describes the object and the feelings it gives rise to as products of "interaction," "dialogue," (Lipps, 1903, 191) or "co-operation" (Lipps, 1905, p. 191). Though feelings of activity, always are felt states of the person, their origin in this basic dialogue means that they are simultaneously characterized by a basic relatedness (Lipps, 1909). In emphasizing this basic relatedness, Lipps also describes activity as way of experiencing oneself as attuned (gestimmt; Lipps, 1907, p. 18). Lipps's account of this basic constitution of attunement circles us back to the idea that both person and object are transformed affectively. Whereas the person comes to feel herself as attuned in the feelings of activity, the objects, as the cofounder of the activity, simultaneously appears as the bearer of the activity. As Lipps writes: "it is my movement and my activity. It arises not spontaneously, but is given through the object, tied to it. As such, it appears as something belonging to the object, and belonging to it with necessity" (Lipps, 1908, p. 358). Eventually the person and the object are affectively intertwined in activity: on the one hand that object is "permeated by the person's activity," and on the other hand, the person comes to find herself attuned in her feeling of activity and eventually her basic sense of self.

RHYTHM AND FEELING: THE MEDIUMS OF JOINT NEGOTIATION

The way in which the person comes to experience a feeling of activity and eventually also her engagement with the aesthetic object is determined by the progression of the inner movement of the activity, that is, its particular rhythm (1909, p. 38). Lipps provides us with two determinations of rhythm, both of which must be considered if we wish to understand the specific sense of resonance he tries to carve out and how it relates to the basic affective aspects of feelings of activity as they appear in aesthetic empathetic experiences of music. The first determination is narrow, rather simple, and specific to music: the successions of beats and tones (Lipps, 1903). The second is wide, complex, and expresses a core psychological concept: the progression of a given psychic event, what Lipps also characterizes as "the varying movements of psyche" (Lipps, 1900, p. 442). We saw that activity was described as a movement. According to Lipps, this movement is made up of a flow of elements, successively following on each other (p. 444). The temporality following from such succession gives the activity a linear character (Lipps, 1909). The linear character does not mean that the movement follows a straight line, however. Rather, the flow of elements constitutes a stimulation (erregungsweise) particular to the event. For instance, when listening to a piece of music, the highlighted tones capture our apprehension more strongly and permanently than do the moderated tones. According to Lipps, the interaction between these different modes of appearance of the tones

generate a variation of dynamic qualities of "forwards striving and calmness, or between tension and relaxation, conflict and overcoming, opposition and balance" (Lipps, 1900, p. 442). These dynamic qualities are, psychologically considered, the matter of fact of rhythm as inner or mental movement. So, when listening to music we experience a duality of rhythms: the rhythm of the succession of beat and tones, along with the simultaneous awareness of the rhythms of our mental movement *in response* to these beats and tones. To speak of two rhythms is to draw an analytical distinction. Experientially the rhythm of the music and the analogue actualized mental rhythm are fused into an experiential unity. Thus each mental event is not only characterized by its particular rhythm, it is also characterized by a particular affective correlate or emotional response, which Lipps also describes as "reflex of consciousness" (*Bewusstseinsreflex*; Lipps, 1909, p. 316).

RESONANCE

As such, the mental rhythm and its dynamic qualities can have an effect beyond the apprehending activity itself. This effect Lipps describes as the "law of psychic resonance of the like" (1900, p. 442. see also Lipps 1903, p 419ff). To follow up on the example with music, the apprehension of regularity of a beat may motivate analogue bodily movements, as when we tap our foot along the rhythm of the beat of some song. Lipps claims that such tapping cannot be explained by saying that each single tap is a motor impulse motivated by the single beat. Rather, the mental rhythm of apprehension, as he writes, "awakens the rhythm of movement . . . I am not responding to the single beats, but I am repeating a basic rhythm, retained within succession of beats." (1903, p. 420). As Lipps also notes, it is curious that such awakening can take place because motor impulses and auditory impressions of beats pertain to two different sense modalities the content of which cannot be reduced to one nor the other. When the rhythm of the beat shares an intuitive similarity with bodily movement, this is according to Lipps so, because the former as actualized mental rhythm constitutes a rhythmic pattern which shares a similarity with the actualized rhythmic patterns of movement, and this to such an extent that they can have an effect on each other.⁷ In Lipps's account, resonance is exactly the establishment of this similarity across these domains as well as the following mediation of sense from one domain to the other, wherefore he also refers to the law resonance as the law of radiation (1900, p. 442).

If we return to aesthetic empathy, resonance is important because it, in Lipps's use, describes how the rhythm resulting from the interaction between the demand of the object and the person's activity can extend to and activate other domains of psyche. Resonance thus allows for the attunement occurring in activity, to develop into more pervasive state, what Lipps also describes as saturating mood characterized by depth and harmony.⁸

ENACTIVE ASPIRATIONS OF AESTHETIC EMPATHY

Given the preceding exposition, it is curious that Lipps has been framed as a simulationist in modern cognitive neuroscience. Because of this simulationist or projectivist reading has been set up as prügelknabe throughout the history of phenomenology from Husserl and Stein to Zahavi and Gallagher (cf. Zahavi 2010). Based on the exposition of activity, rhythm, feeling, and resonance it should be clear that Lipps's notion of empathy does not articulate a subjective projectivism, nor is reducible to a matter of imitation or simulation. Indeed, it seems more fitting to interpret Lipps's account as being in line with enactive perception that, as Gallagher (2011, p. 104) writes "is perception for interaction and-rather than simulation." Importantly, this interaction was shown to be a dynamic process unfolding through *rhyhtmification* of consciousness the experiential correlates of which is a kind of feeling-so called activity feelings. As such, the interactive process occurring in aesthetic empathy is simultaneously an interaffective process, which mediates feelings between the object and the spectating subject. This mediation can also be described as an aesthetic affect attunement. This allows for feelings to be experienced simultaneously as both mediated/communicated and felt (i.e., as a shared and *resonant* state enhancing both self and other-awareness). The summary of Lipps's position vis-à-vis his framing as simulationist and criticisms hereof does not constitute a proper argument and presentation of the relevant debates. The purpose of presenting this reading of Lipps is to prepare the ground for thinking about our cases, and a full exposition of his potential as a proto-enactivist must be left for another occasion. Now, we will apply Lipps's account of the relational or co-constituted basis of aesthetic empathy to two musical practices. Here we will see how various kinds of turn-taking constitutive of intersubjective patterns of communication can be used in scaffolding musical we-spaces.

CREATING EMPATHETIC SPACES IN THE MUSICAL LANDSCAPE: THE CASE OF FREE MUSICAL IMPROVISATION

Even if trends in musicology and the philosophy of music have started to look at music as a process rather than as an aesthetic object (for instance with Small's [1998] influential notion, "Musicking"), it is fair to assume that most musicking has aesthetic aims. In some sense, and as this section of our chapter demonstrates, this is not straightforwardly so for the musicians in free improvisation. Though they certainly do explore aesthetic dimensions with their improvisations, the main exploration seems to concern an intersubjective, communicative process.⁹

To accomplish this demonstration, we have to first give a brief overview of free improvisation as a genre and then, also briefly, present the method and case study that produced the empirical material supporting the claim.

The reader might initially associate free improvisation with some kinds of jazz improvisation. But that hinders rather than clarifies the nature of the former. Jazz improvisation, even in avant garde forms, will usually be based in a chord progression, a key, a melody or even just a certain rhythm to improvise from. Relative to such structures, free improvisation starts from scratch. Musicians who might meet for the first time on stage, simply begin to play without any explicit agreements. This makes for an unusual kind of music, so unusual that "listening guides" (Corbett 2016) have been written to help the audience in their search for form (i.e. in their effort to make sense out of the tones coming at them).¹⁰ Snekkestad's style is associated with what the Modern American music icon George Lewis calls the "European free improvisers" (Lewis 1996, p. 112) performing alongside artists such as Joelle Léandre, Barry Guy, Agusti Fernandez, Nate Wooley, and Evan Parker. Snekkestad is an accomplished saxophonist, mastering all "Western" styles from classical to jazz standards. He, however, has a special affinity for free improvisation, because of its communicative potential, and excels in solo improvisation, exploiting a number of "extended techniques" (Høffding & Snekkestad 2021).

The following presentation and analysis are based on empirical, qualitative data in the form of "phenomenological interviews" (Høffding & Martiny 2016) contextualized by ethnographic field observations. Snekkestad and Høffding started discussing issues of musical absorption and improvisation in 2017. In 2018, they did an exploratory, thorough interview of about ninety minutes. To get a contextually informed understanding of Snekkestad's practice, Høffding attended a number of concerts and eventually followed him on tour in the Ruhr district in Germany for seven days. Here he observed concerts every evening, experienced the daily life and culture around the free improvisation community, and conducted another five hours of interviews. This chapter relies explicitly on the 2018 interview.

There are many approaches and methods describing how to combine qualitative data and phenomenological analyses.¹¹ This one is based on a combination of ethnographic criteria of validity and phenomenological analyses as described by for instance Ravn (Legrand & Ravn 2009; Ravn 2021) and

Høffding and Martiny (2016). This form is particularly useful for understanding expert practices (Ravn & Høffding 2016; Ravn 2021). The interviews seek to elicit as many rich and detailed descriptions from the interviewee as possible. The focus on descriptions seeks to move the interviewee's focus away from opinions, theories and explanations. For it is exactly the job of the researcher to use the interview data to arrive at such explanations and theories. And here phenomenology, as the philosophical tradition initiated by Husserl, comes into play. The analysis of the interview aims at getting beyond the mere content of various past experiences to the structure of those experiences (Gallagher & Zahavi 2008, p. 28). When it comes to musical absorption (and also artistic absorption in general), the interplay between habitual, bodily, pre-reflective acts, one the one hand, and reflective acts, on the other hand, as well as changes in one's sense of agency, are particularly enlightening. For this chapter, however, we want to investigate the data from the phenomenological perspective of empathy with the idea that a central purpose of free improvisation is to establish *empathic spaces* or communicative processes. Here, we show how two different groups engage in this space and process. The first group is the musicians themselves, while the second group consists of both musicians and audience. For both groups, we see Lipps's core concepts operate, insofar as musicians as well as audience are perceived as making demands and offering artistic possibilities inaccessible for instance when practicing on one's own. This activity structure of the performative situation obviously relies on both of Lipps's notions of rhythm and as such enact a space of resonant mental-musical activity.

Most of the interviews with Snekkestad concern how he communicates in these groups and what tools he has to influence and be influenced by his co-players and audience members. Remember, when no musical agreements are made in advance, performing on stage is not merely a matter of deciding on the spot what to play given what the others are playing. Simultaneously, Snekkestad must find out how to establish patterns of communication in order to agree on where to go in the music. Snekkestad call this a "negotiation":

A free improvisation concert is more about that everyone is in an open process and can monitor closely how the spontaneous communication between musicians change the trajectory of the music, how they are sort of negotiating the material along the way. And here we are into this, which is about human communication and relation, it is about all sorts of emotions and aesthetics you are negotiating when you are in that space. Not that it has to be about something in particular. It is a way of being together.

Improvising freely is an art of learning to surprise oneself, or rather learning to let one's fellow musicians open a space of surprise and playfulness that one

can enter into. "Negotiating" in just the right way, can allow for a "pulling of the rug":

For instance with a really good drummer, who can align himself very closely with your playing and ideas, and then suddenly create a friction. Suddenly he can perhaps stop playing at the moment where it is most predictable that we're building to a climax and in that way *pull the rug from underneath your feet*, in order to create those openings in the music where something can happen. Create new paths in the music, create new forms. Create that moment where you lose control, were you have to reorient yourself in the musical landscape.

Snekkestad's preferred metaphor for the music he performs is a "landscape" with different "zones." When the ensemble manages to pull the rug in just the right way—which is far from always the case—new landscapes and zones are opened almost as epiphanies. In this way, and much in the style of 4E cognition,¹² interactions with other musicians enable or scaffold individual transformative experiences together with new musical abilities and visions. Considering free improvisation in this way, gives it an idealistic ring: Together the musicians enable one another to expand their consciousness, by supporting and challenging each other. This, however, requires a finely attuned sensitivity and an empathic intentionality. To work, it also presupposes technical mastery over one's instrument.

The audience members of course do not play on stage, but they nevertheless play a central role in the shaping of the music, because Snekkestad is intent on communicating with them as well. His empathetic stance toward the audience is clearly seen in the following:

A concert is more about [the fact that] that everyone [musicians and audience] is in on that process—can follow, can see the communication the musicians are going through—how you are sort of negotiating the material, whether you are in on this journey. And here we are into this, which is about human communication, relation—it is about all sorts of emotions you are negotiating when you are in that space. Not that it is about something in particular. It is about a way of being together.

This democratic ideal of sharing and co-developing the musical space is also found in the following:

When playing improv music, I have a strong feeling that we all are in the same place. It is not like "I possess this dramaturgy and can manipulate you," it is not that kind of situation. You observe a process we are searching for, we are looking for something together, we are together, we are in the same space when this happens. What we consistently learn from Snekkestad is that even though he has refined aesthetic preferences and savor exploring new musical zones, the music ultimately is a means to engage in a certain kind of communication. It is a way to express and receive, a tool of attunement and Lippsian resonance.¹³

It is an empirical question how often and to what degree the audience members perceive this communicative intention. It is, however, beyond doubt that these ideals of attunement or responsivity are widely shared in the free improvisation community. The famous guitarist Derek Bailey, mentions that, "to improvise and not to be responsive to one's surroundings is a contradiction if not an impossibility" (1993, p. 44). And music theorist, David Borgo, so nicely sum up the essence of free improvisation:

Free improvisation, it appears, is best envisioned as a forum in which to explore various cooperative and conflicting interactive strategies rather than as a traditional "artistic form" to be passively admired and consumed. Improvisation emphasizes process over product creativity, an engendered sense of freedom and discovery, the dialogical nature of real-time interaction, the sensual aspects of performance over abstract intellectual concerns, and a participatory aesthetic over passive reception (2002, 184)

This brief exposition of free improvisation shows its functioning as an empathic space, providing a finely attuned room for experimentation, playfulness, and care. The communicative and interactive intension built into the free improvisation mentality, effectively transforms the music from an aesthetic product to an empathic space full of jointly perceived rhythmification and resonant possibilities. We will leave the last word to Snekkestad, who fundamentally perceives of his musical practice as an ethical commitment: "Improvisation is not solely an intuitive art form, but a socially engaged ethical practice that directly influences [my] ability to make creative decisions, engage in critical dialogue, and take risks that allow for the discovery of new insights and changed social relationships." (Høffding & Snekkestad 2021, 165)

CREATING EMPATHETIC SPACES IN THE MUSICAL LANDSCAPE: THE CASE OF AUTISTIC SPECTRUM DISORDER MUSIC THERAPY

We now apply this Lippsian perspective to a second case study: an analysis of how musical empathy develops in the context of musical therapy and autistic spectrum disorder (ASD). As with the case of free improvisation analyzed previously, we show that within these therapeutic spaces, shared episodes of musicking create opportunities for interactive experimentation, playfulness, and care. In short, they similarly involve an ongoing *negotiation* of shared aesthetic space. This is because within a therapeutic context, these spaces are not simply spaces where music is performed and experienced. More than this, they become rich spaces of empathy—spaces of shared experience and social connection that are, as Snekkestad helpfully puts it, "about human connection and relation, about all sorts of emotions and aesthetics you are negotiating when you are in that space."

While this focus on ASD and music therapy continues themes considered in the previous section, it also brings something new to the table. It highlights some *ethical* dimensions of musical-empathic spaces. It does so for two reasons: first, insofar is it concerns forms of sensitivity and responsivity to others, it foregrounds music's role in shaping the *quality and richness* of interpersonal relations within that space; second, it emphasizes the need to develop more *inclusive* spaces in everyday life, spaces more finely attuned and responsive to the needs—including the sonic needs—of neurodivergent ways of being in the world. Following the Lippsian perspective we've been developing, we argue that musical spaces in ASD music therapy potentially scaffold the development of rhythm, resonance, and responsivity among participants. Consequently, these spaces enable autistic persons to connect with others to a degree and with a felt richness that they may struggle to achieve outside of these musical spaces.

First, some brief background. ASD spans a range of impairments that are wide-ranging and vary by individual. These impairments tend to cluster around social, communicative, and imaginative difficulties (Frith 2003). Autistic people¹⁴ often prefer order, predictability, and routine and can become preoccupied with specific subjects, activities, and habits. They may also have various communication difficulties, struggle attuning to others' emotions and intentions, and find it challenging to flexibly respond to shifting social environments (Bader 2020; Krueger and Maiese 2018).

It is still widely assumed that social difficulties in autism result from neurocognitive differences found in all autistic individuals (Chapman 2019). These differences are said to cluster around a specific trait: a diminished capacity for empathy, or *mentalizing*, when compared to neurotypicals (Baron-Cohen 1995). The core idea is that social difficulties in autism arise because autistic people struggle to cognize the existence of other minds. This empathy deficit leads to difficulties interpreting and predicting others' behavior and smoothly integrating with the shared practices and environments that make up everyday life.

What is important for our purposes is that many therapeutic strategies reflect this cognitivist assumption. With names like "mind-reading training," "picture-in-the-head teaching," and "thought-bubble training," they are designed specifically to help individuals develop and refine their mentalizing capacities so that they can more effectively represent the mental lives of others. However, recent work challenges this cognitivist approach (e.g., De Jaegher 2013; Gallagher & Varga 2015). Two shortcomings are highlighted: First, this approach overlooks the key role *embodied and interactive* factors play in shaping social impairments in ASD and offers few resources for addressing these features. Second, it presupposes that social impairments in ASD consist in a failure to conform to normative expectations of neurotypicals, without acknowledging or offering resources to address the *two-way nature* of some of these impairments.

This is where music therapy, which can involve listening, singing, or joint music-making, may help. Music-based interventions are attractive for individuals with ASD for at least three reasons (Srinivasan & Bhat 2013). First, they can address core impairments in joint attention, social reciprocity, and verbal and nonverbal communication, along with comorbidities of atypical perception, motor performance, and behavioral problems. Second, children with ASD often have enhanced pitch processing abilities and musical memory compared to typically developing children and, therefore, may find these interventions particularly pleasurable (Heaton 2003). Third, music-based activities can provide non-intimidating contexts to interact with musical instruments and other people by engaging in predictable, musically guided interactions with social partners (Darrow & Armstrong 1999).

Evidence suggests that these kinds of musical interventions positively impact various forms of development, including communicative, social-emotional, and motoric development. For example, music therapies can facilitate verbal and gestural skills in children with ASD; enhance social skills such as eye contact, joint attention, mimicry, and turn-taking; and support the improvement of fine and gross motor skills (Srinivasan & Bhat 2013). These effects can help subjects with ASD to strengthen their ability to gauge fine-grained social cues and their capacity for "body-reading." In a musical setting, subjects do rely on bodily expression to communicate—but eye contact, bodily expressions, and mimicry tend to be more exaggerated than in standard neurotypical settings. And because they are punctuated by changes in musical tone and rhythm, these expressions are easier for subjects with ASD to detect.

In this way, musical activities like listening, singing, and joint music-making can enhance patterns of rhythm, resonance, and responsivity among participants. Musical activities furnish regulative contexts in which children with ASD can work with neurotypicals to co-construct alternative musically guided forms of social connection. Musically generated auditory and rhythmic signals can regulate attention and movement in several ways: by influencing the timing of motor neuron discharge; decreasing felt muscle fatigue; facilitating automatic movements by providing predictable temporal cues; improving reaction time and response quality through facilitated responsive anticipation; and providing auditory feedback for proprioceptive control mechanisms (Thaut 1988, 130). In this way, music can serve as scaffolding for the development of selective attention and strengthen subjects' ability to detect social cues (van der Schyff & Krueger 2019). As participants lock into these shared rhythms and play an active role in shaping their development and character, they feel a deepened sense of resonance with one another, as well as a heightened responsivity to what the other is doing on a moment-to-moment basis as the music guides their interaction.

Musical spaces in a therapeutic context can have empathy-enhancing effects in other ways, too. The opportunity to interact in a musical setting may help counteract the tendency of some subjects with ASD to withdraw from social interaction. Because subjects with ASD are sometimes overreactive and feel overwhelmed by visual or auditory stimuli, they may avert their gaze, put their hands over their ears, or avoid interaction with others (Shanker 2004). Similarly, McGeer (2001) suggests that to manage sensory experiences, subjects with ASD might feel the need to shut out other people; however, that makes it difficult for them to develop social and communicative skills. The more a child with ASD avoids interaction with others, the more he or she is deprived of the sorts of experiences needed for social development.

Musical spaces provide a flexible and inclusive place where individuals with ASD can come together with other people and begin to develop an intuitive understanding of what others are thinking and feeling. Coordinated musical improvisation, for example, may help give participants a felt sense of being part of meaningful shared activity. There are often moments in music therapy where there is a palpable energy or "buzz" between the two players, for example when they spontaneously come together at a cadence point or somehow know when to end or where to go next (Maratos et al. 2011, 92). This kind of collective, communicative musicking allows participants to experience forms of social connection and emotional sharing that are different than talking, and yet offers them an avenue to overcome social isolation. In addition, it allows those who feel alienated from or out-of-sync with the social world to get back into the bodily groove of interacting with others.

Finally, the relational efficacy of music therapy—and the comfort and confidence people with ASD often exhibit within these shared musical-empathic spaces—has ethical significance. It reminds neurotypicals of the role they play in shaping the character and intensity of social impairments of ASD (Krueger 2021). A lesson of these relational therapies, we suggest, is that to better connect with autistic people, neurotypicals should move beyond attempts to "fix" the heads of single individuals (e.g., such as we find in cognitivist approaches) and instead consider ways of adjusting and recalibrating material and normative features of the social world. These strategies can include constructing more inclusive ASD-friendly spaces that consider how things like colors, lights, textures, sounds, and smells may negatively impact ASD styles of embodiment and sensory processing, and potentially impede their ability to find their way. It may involve social skills training not just for autistic persons but also neurotypicals—for example, sensitizing the latter to characteristic ASD patterns of interaction (e.g., delayed conversational response) to become more flexible and responsive to such differences. Finally, it may also involve exploring alternative (i.e., noncognitivist) forms of therapeutic interventions such as music therapy.

CONCLUSION

Among artists, and perhaps more widely held in the population, one can trace a folk-psychological idea that engaging with art, or more specifically music, makes one a better person and enhances one's empathic capacities. Few studies have been able to justify just an inch of that romantic notion.¹⁵ We are certainly not advancing such a general claim. Rather, we believe that our analyses justify a narrower claim, namely that certain specialized forms of musicking, not least some of those associated with improvisation, highlight interaction and open empathic spaces that are otherwise hard to enter.

For Snekkestad, he can move from a low-level gut feeling of forcing the musicians to change musical direction to enable different artistic or aesthetic spaces to emerge. Or he can do so by accessing a rich repertoire of reflective processes to adjust the level of unpredictability of the music, feeding off impulses and perceived expectations from audience or musicians. The therapist improvising together with an ASD client can likewise play with the level of rhythmic and melodic predictability nudging interaction and exploration and thus helping and explicating otherwise normal interactive processes of turn-taking or rhythmical gesticulation. In both cases, musicking is used as a means of communication, speaking the same language as empathic processes.

If we revisit Lipps, we understand that this refurbishing of aesthetic means for empathic ends is possible because the two domains from the outset share significant characteristics or engage the same mental structures characterized by activity, rhythm, and resonance. Opening oneself to the demand structures of the other, be it artwork or human, while preserving one's sense of identity, enables rhythmic processes of turn-taking and resonance. When these are impaired as is the case in ASD, they can be explicated and partially restored by making aesthetic improvisatory practices a kind of placeholder. And when operating normally, they can be stretched, challenged, and further attuned in even more sophisticated performative practices, essentially making free improvisation musicians experts of interaction. We certainly expect similar parallels to exist in other artistic or improvisatory practices, but the language of rhythm and resonance is particularly applicable in our musical cases.

NOTES

1. See, for instance, Herder, 2011, part four, especially pp. 78 and 81, as well as Novalis, 1837, p. 99, Cited in Stern, 1898, p. 3).

2. The original texts says *der ganze leibmensch wird ergriffen*. (Vischer, 1873, p. 11)

3. This is a thought that would later appear more explicitly in the work of Lipps, Husserl, and Stein; cf. Stein (1989, p. 11) where she characterizes empathy as a *sui generis* form of intentionality.

4. See for instance, Currie, 2011, for descriptions of this neglect. For two reviews of the different positions within the empathy aesthetics see Meumann, 1908, and Geiger, 1911.

5. In Husserl's *Phenomenological Psychology* (1977, p. 84). we find descriptions of cultural objects, which suggests something similar. Consider for instance the following passage: "The sense (the mental significant sense expressed by cultural objects) is not found next to the matter which expresses it; rather, both are experienced concretely together. Thus, a two-sided material-mental object again stands before our eyes. Therefore, there is an analogy between the way these objects are experienced and the way in which in experiencing fellow-man, we experience a unity of body and psyche."

6. Lipps points out that bodily activity is of a special significance since the feeling of being active in bodily movement is central to the constitution of the I and the body as unity, or what he refers to as the Body-I (*Körper-ich*; Lipps, 1901, 1909). By body-I is an immediate organ of volitional activity, through which the I can engage actively with the things of the world. As Lipps notes, the active body plays a significant role in establishing the awareness of competence of activity or ability (*Tätigkeitskönnen*), that is, the awareness of being the master of the body and as such of having the power to make change through the body (Lipps, 1909, p. 41, see also Lipps 1901). The phenomenological importance of this account was recognized by Husserl in *Ideas II* (1989, p. 270) where he in his description of the "I-can" refers to Lipps as the one who first presented this fundamental discussion.

7. Consequently, we might say that Lipps's account of mental rhythm provides a theory of *sensus communis*.

8. Lipps's concepts of depth and mood are central to the experience of aesthetic and ethical value. In chapter 18 of this book, titled "Affective Depth and Value: On Theodor Lipps's Theory of Aesthetic Empathy," Hansen and Roald have described these aspects of Lipps's theory in more detail.

9. Høffding has written a number of pieces, describing and analyzing free improvisation. For a detailed presentation of the exact techniques employed in the art form, see Høffding & Snekkestad, 2021. For more theoretical analyses focused on exploration and 4E cognition approaches to free improvisation, see Høffding & Schiavio 2021, Høffding & Satne 2019; Ravn & Høffding 2021.

10. To get a sense of such music, here is a link to a concert with Torben Snekkestad, https://www.youtube.com/watch?v=W6DCnMLSYns

11. The most well-known will be Giorgi's "phenomenological psychology," van Manen's "hermeneutic phenomenological interview" or "Interpretive Phenomenological Analysis." See Heimann, Høffding, and Martiny (in press) for an overview.

12. For lovely 4E takes on music, see Wheeler 2018; Linson & Clarke 2017; Torrence and Schumann 2019; and Krueger 2009, 2014.

13. As argued elsewhere, this is the case even in solo-improvisation (Høffding & Satne 2019).

14. We here follow the terminological preferences of neurodiversity proponents who endorse identity-first language ("autistic persons") instead of person-first language ("persons with autism") to stress the connection between cognitive styles and selfhood (Pellicano and Strears 2011).

15. See, however, Zelechowska et al. (2020).

REFERENCES

Bader, O. (2020). Alterations of Social Attention in Mental Disorders: Phenomenology, Scope, and Future Directions for Research. *Consciousness and Cognition*, 79, 102884.

Bailey, D. (1993). Improvisation: Its Nature and Practice in Music. Da Capo Press.

- Baron-Cohen, S. (1995). *Mindblindness: An Essay on Autism and Theory of Mind.* MIT Press.
- Borgo, D. (2002). Negotiating Freedom: Values and Practices in Contemporary Improvised Music. *Black Music Research Journal*, 22(2), 165–88.
- Chapman, R. (2019). Autism as a Form of Life: Wittgenstein and the Psychological Coherence of Autism. *Metaphilosophy*, 50(4), 421–40.
- Corbett, J. (2016). *A Listener's Guide to Free Improvisation*. University of Chicago Press.
- Currie, G. (2011). Empathy for Objects. In A. Coplan & P. Goldie (Eds.), *Empathy: Philosophical and Psychological Perspectives*. Oxford University Press.
- Darrow, A.-A., & Armstrong, T. (1999). Research on Music and Autism Implications for Music Educators. Update: Applications of Research in Music Education, 18(1), 15–20.
- De Jaegher, H. (2013). Embodiment and Sense-Making in Autism. *Frontiers in Integrative Neuroscience*, 7(15), 1–19.
- Dufrenne, M. (1973). *The Phenomenology of Aesthetic Experience*. Northwestern University Press.
- Fechner, G. T. (1876). Vorschule Der Aesthetik. Druck und Verlag Breitkopf und Härtel.
- Friedrich, T., & Gleiter, J. H. (2007). *Einfühlung und phänomenologische Reduktion: Grundlagentexte zu Architektur, Design und Kunst.* LIT Verlag Münster.

- Frith, U. (2003). Autism: Explaining the Enigma. Wiley-Blackwell.
- Gallagher, S. (2011). Aesthetics and Kinaesthetics. In H. Bredekamp & J. M. Krois (Eds.), *Sehen und Handeln* (pp. 99–113). Akademie Verlag.
- Gallagher, S., & Varga, S. (2015). Conceptual issues in autism spectrum disorders. *Current Opinion in Psychiatry*, 28(2), 127–32.
- Gallagher, S., & Zahavi, D. (2008). The Phenomenological Mind: An Introduction to Philosophy of Mind and Cognitive Science (2nd ed.). Routledge.
- Geiger, M. (1911). Über das Wesen und die Bedeutung der einfühlung. Bericht über den IV. Kongress für experimentelle Psychologie, 29–73.
- Heaton, P. (2003). Pitch Memory, Labelling and Disembedding in Autism. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 44(4), 543–51.
- Heimann, K., Høffding, S., & Martiny, K. (in press). "Working with Others' Experiences: Theory, Practise and Application." Special Issue of *Phenomenology and the Cognitive Sciences*.
- Herder, J. G. (2011). Sculpture: Some Observations on Shape and Form from Pygmalion's Creative Dream. University of Chicago Press.
- Husserl, E. (1977) *Phenomenological psychology*. Lectures, summer semester, 1925, (Scanlon, J. Trans.) Martinus Nijhoff.
- . (1989) Ideas Pertaining to a Pure Phenomenology and to Phenomenological Philosophy. Second Book. (R. Rojcewics and A. Schuwer, Trans.) Kluwer Academic Publishers.
- Høffding, S. (2019). A Phenomenology of Musical Absorption. Palgrave Macmillan.
- Høffding, S., & Martiny, K. (2016). Framing a Phenomenological Interview: What, Why and How. *Phenomenology and the Cognitive Sciences*, 15, 539–64.
- Høffding, S., & Schiavio, A. (2021). Exploratory Expertise and the Dual Intentionality of Music-Making. *Phenomenology and the Cognitive Sciences*, 20, 811–29.
- Høffding, S., & Snekkestad, T. (2021). Inner & Outer Ears—Enacting Agential Systems in Music Improvisation. Dance Improvisation and the Metaphysics of Force. In. S. Ravn, J. McGuirk, & S. Høffding (Eds.) *Philosophy of Improvisation: Interdisciplinary Perspectives on Theory and Practice*. Routledge.
- Krueger, J. (2009). Enacting Musical Experience. *Journal of Consciousness Studies*, 16(2–3), 98–123.
 - . (2014). Affordances and the Musically Extended Mind. *Frontiers in Psychology*, 4, article no. 1003: 1–13. doi: https://doi.org/10.3389/fpsyg.2013 .01003
- Krueger, J., & Maiese, M. (2018). Mental Institutions, Habits of Mind, and an Extended Approach to Autism. *Thaumàzein*, 6, 10–41.
- Krueger, J. (2021). Finding (and Losing) One's Way: Autism, Social Impairments, and the Politics of Space. *Phenomenology and Mind*, 21, 20–33.
- Legrand, D., & Ravn, S. (2009). Perceiving Subjectivity in bodily Movement: The Case of Dancers. *Phenomenology and the Cognitive Sciences*, 8(3), 389–408. https://doi.org/10.1007/s11097-009-9135-5
- Lewis, G. E. (1996). Improvised Music after 1950: Afrological and Eurological Perspectives. *Black Music Research Journal*, 16(1): 91–122.

- Linson, A., & Clarke, E. (2017). Distributed Cognition, Ecological Theory and Group Improvisation. In E. Clarke & M. Doffman (Eds.), *Distributed Creativity: Collaboration and Improvisation in Contemporary Music* (pp. 52–69). Oxford University Press.
- Lipps, T. (1900). Aesthetische Einfühlung. In Zeitschrift für psychologie und Physiologie der Sinnesorganen, 22, 415–50.
 - . (1901). Das Selbstbewusstsein; Empfindung und Gefüh. Weisbaden: Verlag von J. F. Bergmann.
 - ——. (1903). Ästhetik: Psychologie des Schönen und der Kunst. Erster Teil: Grundlegung der Ästhetik. Verlag von Leopold Voss.
 - . (1905). Bewußtsein und Gegenstande. In Lipps, T (Ed.) Psychologische Untersuchungen. Vol 1, 1–203
 - . (1906).. Einfühlung und ästhetischer Genuss. Die Zukunft, 54, 100-114.
 - . (1907). Vom Fühlen, Wollen und Denken. Versuch einer Theorie des Willens. Zweite Völlig umgearbeitete auflage. Verlag von Johan Ambrosius Bart.
 - ——. (1908). Ästhetik. In P. Hinneberg (Ed.), *Die Kultur der Gegenwart. Ihre Ent wicklung und ihre Ziele. I. Teil, Abt. 6: Systematische Philosophie*, 351–88. Druck und Verlag von B.G. Teubner.
 - . (1909). *Leitfaden der Psychologie* (Dritte teilweise umgearbeitet Auflage). Verlag von Wilhelm Engelmann.
- Maratos, A., Crawford, M. J., & Procter, S. (2011). Music Therapy for Depression: It Seems to Work, But How? *British Journal of Psychiatry*, 199(2), 92–93.
- McGeer, V. (2001). Psycho-Practice, Psycho-Theory and the Contrastive Case of Autism. How Practices of Mind Become Second-Nature. *Journal of Consciousness Studies*, 8(5–6), 109–32.
- Meumann, E. (1908). *Einführung in die Ästhetik der Gegenwart*. Verlag von Quelle und Meyer.
- Pellicano, E., & Stears, M. (2011). Bridging Autism, Science and Society: Moving toward an Ethically Informed Approach to Autism Research. Autism Research: Official Journal of the International Society for Autism Research, 4(4), 271–82.
- Ravn, S. (2021). Integrating Qualitative Research Methodologies and Phenomenology—using Dancers' and Athletes' Experiences for Phenomenological Analysis. *Phenomenology and the Cognitive Sciences*. https://doi.org/10.1007/ s11097-021-09735-0
- Ravn, S., & Høffding, S. (2016). The Promise of 'Sporting Bodies' in Phenomenological Thinking—How Exceptional Cases of Practice Can Contribute to Develop Foundational Phenomenological Concepts. *Qualitative Research in Sport, Exercise* and Health, 9(1), 56–68.
 - . (2021). Improvisation and Thinking in Movement: An Enactivist Analysis of Agency in Artistic Practices. *Phenomenology and the Cognitive Sciences*. https://doi.org/10.1007/s11097-021-09756-9
- Shanker, S. (2004). The Roots of Mindblindness. Theory & Psychology, 14(5), 685-703.
- Small, C. (1998). *Musicking—The Meanings of Performing and Listening* (Music/Culture Wesleyan).

- Srinivasan, S., & Bhat, A. (2013). A Review of "Music and Movement" Therapies for Children with Autism: Embodied Interventions for Multisystem Development. *Frontiers in Integrative Neuroscience*, 7(22), 22.
- Stern, P. (1898). Einfühlung und Association in der Neuren Ästhetik—Ein Beitrag zur Psychologischen Analyse der Ästhetischen Anschauung. Verlag von Leopold Voss.
- Stueber, K. R. (2006). *Rediscovering Empathy: Agency, Folk Psychology, and the Human Sciences*. MIT Press.
- Thaut, M. H. (1988). Rhythmic Intervention Techniques in Music Therapy with Gross Motor Dysfunctions. *The Arts in Psychotherapy*, 15(2), 127–37.
- Torrance, S., & Schumann, F. (2019). The Spur of the Moment: What Jazz Improvisation Tells Cognitive Science. *AI & SOCIETY*, 34, 251–68.
- van der Schyff, D., & Krueger, J. (2019). Musical Empathy, from Simulation to 4E Interaction. In A. F. Corrêa, ed., *Music, Speech, and Mind*, 73–108. Associação Brasileira de Cognição e Artes Musicais.
- Vischer, R. (1873). Ueber das optische Formgefühl. Ein Beitrag zur Aesthetik. Hermann Credner.
- Wheeler, M. (2018). Talking about more than Heads: The Embodied, Embedded and Extended Creative Mind. In B. Gaut &M. Kieran (Eds.), *Creativity and Philosophy*, 230–50. Routledge.
- Zahavi, D. (2010) Empathy, Embodiment and Interpersonal Understanding: From Lipps to Schutz. *Inquiry*, 53(3), 285–306.
- Zelechowska, A., Gonzalez Sanchez, V., Laeng, B., Vuoskoski, J., & Jensenius, A. (2020). Who Moves to Music? Empathic Concern Predicts Spontaneous Movement Responses to Rhythm and Music. *Music & Science*, 3, 1–16. doi: 10.1177/2059204320974216