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# Music and the ideological body

### - The aesthetic impact of affect in listening

Music is sometimes said to be ideological – if not outright propagandistic, at least to the extent that it implicitly sanctions certain kinds of actions and activities at the expense of others. Such a line of thought about music can be traced back to Plato's doctrine of *ethos*, and more recently, writers such as Theodor Adorno, Philip Tagg and Susan McClary have variously tried to show ways by which music communicates or reinforces certain ideological views.<sup>1</sup>

Whereas Adorno et al. can be said to trace in the various levels of music (tonal systems, formal structures and musemes) homologues with different social phenomena, sociologists of music have argued for music's role in the socialization of human beings and in the shaping of identities, from the individual to the cultural.<sup>2</sup> Rather than music being simply a way of expressing social values and identities,<sup>3</sup> Simon Frith has argued that music actively partakes in the production of these identities. "Identity", he says, "is not a thing but a process – an experiential process which is most vividly grasped as music".<sup>4</sup> Accordingly, it is not the case "that a social group has beliefs which it then articulates in music, but that music, an aesthetic practice, articulates in itself an understanding of both group relations and individuality, on the basis of which ethical codes and social ideologies are understood".<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Theodor W. Adorno, *Philosophy of Modern Music*, trans. A.G. Mitchell and W.V. Blomster (London: Sheed and Ward, 1987); Susan McClary, *Feminine Endings: Music*, Gender, and Sexuality (Minnesota: University of Minnesota Press 1991); Philip Tagg, Kojak. 50 Seconds of Television Music: Towards the Analysis of Affect in Popular music (Göteborg: Skrifter från musikvetenskapliga institutionen 1977).

<sup>&</sup>lt;sup>2</sup> Even Ruud, "Music and Identity", Nordic Journal of Music Therapy, 6:1 (1997)

<sup>&</sup>lt;sup>3</sup> Keith Roe, "Swedish Youth and Music: Listening Patterns and Motivations", Communication Research, 12:3 (1976).

<sup>&</sup>lt;sup>4</sup> Simon Frith, "Music and Identity", in S. Hall and P. du Gay (ed.) Questions of Cultural Identity (London: Sage Publications 1996, 110).

<sup>&</sup>lt;sup>5</sup> Ibid., 110 f.

Music enacts this social role in various cultural contexts, from adult upper-classes, as exemplified by the Friday afternoon concerts of the Boston Symphony Orchestra which have "long been regarded as an obligation of the Boston Social Elite",6 to youth cultures for which music enables an "emotional discharge" and the possibility for the solitary listener "to feel a range of internal states and try on alternative identities, both desired and feared",8 to a musical culture such as the Venda of South Africa, for which "performance of even the most elementary polyrhythmic structures [are] political acts, in which people [can] receive and feel personal power through a shared, culturally prescribed action".9

I have argued elsewhere, 10 that what happens in all these cases, including those discussed by Adorno, et al, is that music articulates particular verbal discourses that the listener has already internalized, or comes to internalize. And the verbal discourses are ideological in that they sanction certain kinds of actions at the cost of others. What I will do in the following is argue that these internalized discourses are affectively articulated through music. With a slight change of emphasis I will add to Frith's claim by saying that in hearing, as we all do, music affectively articulating our moods and emotions, our bonds to the music, its style and style adherents are intimated and strengthened. Music attended to, for better or for worse, creates a meaningful backdrop for one's personal self and its mental states. Music, when it functions socially, acts as a mediator of social relations. The listener becomes a "friend" (or "enemy") with the music, and by extension, (potentially) with others.

Thus, in addition to being indissolubly tied up with a discursive context, the listener also knows, or at least has good reason to intuit, that others also have invested in an affective relationship with the music heard. So whether the verbal content is something the listener already knows or if it is something that he or she gets to know along with the musical style, the important point is that the music affectively articulates this content against and with the listener's personal feelings. How, then, shall we understand the notion of affect in music?

<sup>&</sup>lt;sup>6</sup> Paul DiMaggio and Michael Useem, "Social Class and Arts Consumption: The Origin and Consequences of Class Differences in Exposure to the Arts in America", *Theory and Society*, 5:3: (1978), 153.

<sup>&</sup>lt;sup>7</sup> Reedi Larson, "Secrets in the Bedroom: Adolescents' Private Use of Media", Journal of Youth and Adolescence, 24:5 (1995), 540.

<sup>&</sup>lt;sup>8</sup> Ibid, 547.

<sup>&</sup>lt;sup>9</sup> John Blacking, J"The Context of Venda Possession Music: Reflections on the Effectiveness of Symbols", *Yearbook for Traditional Music* (1985), 66.

<sup>10</sup> Ulrik Volgsten, Music, Mind and the Serious Zappa: The Passions of a Virtual Listener. (Stockholm: Studies in Musicology 9, 1999).

In order to develop a notion of affect in music, I will refer to a theory formulated by developmental psychologist Daniel Stern. What is of particular interest here are the notions of "vitality affect" and "affect attunement" (both of which will be clarified below), on which he elaborates hypotheses about the development of the human beings sense of a self, as articulated against an other. What I shall try to do is regard Stern's developmental trajectory for the human being's sense of a self as a parallel of the human being's sense of that other which is excluded by the self - especially music. Put differently, I will suggest that Stern's model can be regarded as a parallel to a model of how we come to experience music. This will allow us to regard the role of affect in music differently from a view such as Leonard Meyer's, according to which music is "an art which is essentially without external referents a more or less closed system".11 The notion of affect suggested here implies that music is much more than just "the logical expression" of the "morphology of feelings", as Susanne Langer had it, 12 more than some sensory stimulus for us to cognitively respond to.13 In short, it will enable us to regard the affective experience of music as a way of situating the listening body in the world.

Ι

The notions of "vitality affect" and "affect attunement" are developed by Daniel Stern within a theory of the child's developing ability to discriminate between itself and the outer world. The basic idea was foreseen already in René Spitz' discussion of the newborn's non-differentiated perception, limited to the distinction of pure *differences*, which Spitz described as "primarily visceral". What he had in mind was a bodily experience enabling response to abstract qualities of stimulus changes such as "rhythm, tempo, duration", <sup>16</sup> and

<sup>&</sup>lt;sup>11</sup> Leonard B. Meyer, *Emotion and Meaning in Music* (Chicago: The University of Chicago Press 1956), 89.

<sup>&</sup>lt;sup>12</sup> Susan K. Langer, *Philosophy in a New Key* (New York: The American Library of World Literature 1984), 176, 193.

<sup>&</sup>lt;sup>13</sup> Cf. Lars-Olof Åhlberg, "Susanne Langer on Representation and Emotion in Music", *British Journal of Aesthetics*, 34:1 (1994).

<sup>&</sup>lt;sup>14</sup> Daniel N. Stern, The Interpersonal World of the Infant: A View From Psychoanalysis and Developmental Psychology (New York: Basic Books 1985).

<sup>&</sup>lt;sup>15</sup> Renée Spitz, The First Year of Life (New York: International Universities Press 1965).

<sup>&</sup>lt;sup>16</sup> ibid., 135.

to which we can also add changes in intensity and shape.<sup>17</sup> This appreciation of various abstract quality changes Stern calls *amodal* perception, since it does not distinguish between different sensory modalities (amodal perception thus differs from qualia). What is particularly important with amodal perception of affective qualities is that it functions as a "common sense" that enables at an early developmental stage the comparison between sensory stimulation of different modalities (cf. the notion of *imagination*, as discussed by Mark Johnson).<sup>184</sup>

Whereas phenomenologically these abstract quality changes are experienced as affect (Stern often uses the more specific "vitality affect" to avoid confusion with the emotions), physiologically, they "could consist of a temporal pattern of changes in density of neural firing. No matter if the object was encountered with the eye or the touch, and perhaps even with the ear, it would produce the same overall pattern of activation contour". <sup>19</sup> For instance, Stern says,

whenever a motive is enacted (whether initiated internally or externally, as in drinking when thirsty or receiving and adjusting to bad news), there is necessarily a shift in pleasure, arousal, level of motivation or goal achievement, and so on, that accompanies the enactment. These shifts unfold in time and each describe a temporal contour. The temporal contours, although neurophysiologically separate, act in concert and seem to be subjectively experienced as one complex feeling.<sup>20</sup>

In the development of a sense of self, the amodal qualities of sensation to which the newborn child attends, constitute the earliest temporally organized islands of coherence and coordination in an otherwise non-differentiated chaos. These experiences, Stern claims, serve as the earliest points of reference between which significant relationships can subsequently be inferred. Most notably, the child will increasingly experience the difference between events that it may enact itself and events that are beyond the limits of its own immediate volition. The events over which the child has no authority are to a large extent actions directed towards the child itself in ministration and play, resulting in recogniz-

20 Ibid.

<sup>17</sup> Adrew N. Meltzoff, "Imitation, Intermodal Co-Ordination and Representation in Early Infancy", in G. Butterworth (ed.) Infancy and Epistemology: An Evaluation of Piaget's Theory (Brighton: The Harvester Press 1981); David J. Lewkovicz and Gerald Turkewitz, "Cross-modal Equivalence in Early Infancy: Audio-visual Intensity Matching", in Developmental Psychology 16:6 (1980).

<sup>&</sup>lt;sup>18</sup> Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason* (Chicago: The University of Chicago Press 1987).

<sup>&</sup>lt;sup>19</sup> Daniel N. Stern, The Motherhood Constellation: A Unified View of Parent-Infant Psychotherapy (New York: Basic Books 1995), 84.

able affective experiences. While the experience of being the agent of certain coherent events but not of others gives the child a first sense of *self versus other*, <sup>21</sup> the regulation of the infant's affective state by another's ministrations lead the child on to a second level, to a sense of *self with other*. <sup>22</sup>

This notion of affect, as it functions within the development of a sense of self with other, can be exemplified by Stern's reference to a common suspense game, "I'm gonna getcha":

The parent, often the father, says, 'I'm gonna getcha', while moving his face closer and walking his fingers up the baby's belly step by step. He pauses and starts over. He says it again with even more vocal drama, stretching the suspense by progressively retarding the beat, until after the last pause he finally says 'Gotcha!' at an unexpected moment and tickles the baby under the chin. The baby then explodes with laughter. In this case the baby's affective experience is the subjective contour of his cresting waves and troughs of excitement, suspense and pleasure. A kind of meaning in the form of a feeling shape has been added to the pure temporal beat.<sup>23</sup>

The baby's affective experience is regulated by the father's own activity, and thereby constantly varied. However, as the baby comes to expect the "Gotcha!", it assigns a generality to the affective experience, and a first amodal category is formed. Thus, Stern concludes, it is the inevitable variations of the parent's repeated activity that enables the child to infer an *other*. Consider the contrary, if the parent were to repeat exactly, every time, the above activity, then "the infant could not be sure to what extent his or her feeling state was an invariant property of self or of [the parent's] behavior since both would invariably accompany this feeling".<sup>24</sup>

This togetherness feeling – which is radically different from the earliest non-differentiation and symbiosis with the mother – is further enhanced through affect attunement. In affect attunement the more or less unconscious communicative behavior depends on the amodal similarities between the infant's behavior and the mother's. Without necessarily being aware of the fact the mother attunes to the child's activities, but she does so not by imitation, but by performing an analogous action, an action which retains the amodal properties of the action attuned to. This attuning activity performed by the mother shares with the child's activity the underlying affective contour.<sup>25</sup> That is, both

<sup>&</sup>lt;sup>21</sup> Stern, The Interpersonal World of the Infant, 69ff.

<sup>&</sup>lt;sup>22</sup> Ibid., 100ff.

<sup>&</sup>lt;sup>23</sup> Ibid., 85.

<sup>&</sup>lt;sup>24</sup> Ibid., 106.

<sup>25</sup> Ibid., 53ff;156ff.

activities are proprioceptively similar to the respective agents with regard to the amodal qualities of shape, rhythm and intensity. Here are some of Stern's examples:

A nine-month-old girl becomes very excited about a toy and reaches for it. As she grabs it, she lets out an exuberant "aaaah!" and looks at her mother. Her mother looks back, scrunches up her shoulders, and performs a terrific shimmy with her upper body, like a go-go dancer. The shimmy lasts only about as long as her daughter's "aaaah!" but is equally excited, joyful, and intense.

A nine-month-old boy bangs his hand on a soft toy, at first in some anger but gradually with pleasure, exuberance, and humor. He sets up a steady rhythm. Mother falls into his rhythm and says, "kaaa-bam, kaaaa-bam," the "bam" falling on the stroke and the "kaaaa" riding with the preparatory upswing and the suspenseful holding of his arm aloft before it falls.

An eight-and-one-half-month-old boy reaches for a toy just beyond reach. Silently he stretches toward it, leaning and extending arms and fingers out fully. Still short of the toy, he tenses his body to squeeze out the extra inch he needs to reach it. At that moment, his mother says, "uuuuuh...uuuuuh!" with a crescendo of vocal effort, the expiration of air pushing against her tensed torso. The mother's accelerated vocal-respiratory effort matches the infant's accelerating physical effort.<sup>26</sup>

Similar to the case with the suspense game, Stern makes a point about affect attunement not being imitative. Mere imitation in the same sensory modality would not guarantee the underlying affective experience, whereas an analogous behavior does point to such a common experience. But is the child really aware of these attunements? None of the examples say anything about any response from the infant that would indicate any awareness of the mother's behavior. However, further experiments show that whenever the mother mis-attunes, for instance by exaggerating intensity or showing no sense of rhythmical timing, the child reacts with confusion or by becoming upset.<sup>27</sup>

One consequence of this "analogous translation from perception of another person's behavior [into] feelings [through] the transmutation from the perception of timing, intensity and shape via cross-modal fluency into felt vitality-affects in ourselves", as the sense of a self in relation to others develops, is an intuitive understanding of other people's affective states.

For instance, we may gather from someone's arm gesture the perceptual qualities of rapid acceleration, speed, and fullness of display. But we will not experience the gesture in terms of the perceptual qualities of timing,

<sup>&</sup>lt;sup>26</sup> Ibid., 140.

<sup>&</sup>lt;sup>27</sup> See Ibid., 149ff.

intensity and shape; we will experience it directly as 'forceful' – that is, in terms of a vitality affect. 28

We should pay attention here to Stern's cautious use of inverted commas when speaking of "forceful"; it is still too early to speak about conventional labels, or of culturally-encoded emotions. Nevertheless, this experiencing of affective contours — "perceived in another's overt behavior becom[ing] a virtual vitality affect when experienced in the self" — now points further from the level of self versus other to the level of a subjective self. At the level of a subjective self, actions acquire social significance. It is only at this level that affective contours become related to the context of purposeful interaction, whereas earlier amodal perception was merely affective. It is at this level that a sense of intentionality should occur, the self having already been articulated against and with an other; now this relationship takes on a rudimentary dimension of subjective purposiveness. This development is furthered by the affective contours coming to function in succession as protonarrative envelopes, articulating the earliest sense of desire and motivation, which adds a narrative-like structure to the perceived world:

The elements of plot get temporally distributed on a line of dramatic tension. And the dramatic line of tension is invariably synchronous with the temporal feeling shape. This is natural, since the motive-goal-tension is played out in terms of temporal shifts in arousal, pleasure, motivational strength, and goal attainment. In a sense, the perceived plot is superimposed or rather dispersed along the temporal feeling shape, which then acts as the line of tension to carry the narrative.<sup>31</sup>

With their function as protonarrative envelopes, affective contours experienced as linked together proffer their service as a supportive scaffold for the narrative distribution of perceived and successively denominated objects and events. Subsequently language and narrative itself provide unifying themes that further extend the affective contour. Along with the acquisition of language, the sense of a subjective self will help to shape the child's beliefs about its personal history and character, eventually enabling a sense of a *verbal self*.<sup>32</sup>

The verbal self is the final level in Stern's model of self-development. But as Stern says, the role of language for the verbal self "is not primarily

<sup>&</sup>lt;sup>28</sup> Ibid., 158

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> Ibid., 138.

<sup>31</sup> Stern, The Motherhood Constellation, 91.

<sup>&</sup>lt;sup>32</sup> Stern, The Interpersonal World of the Infant, 162.

another means for individuation, nor is it primarily another means for creating togetherness";33 the uniqueness of language is that it

ultimately brings about the ability to narrate one's own life story with all the potential that holds for changing how one views oneself. The making of a narrative is not the same as any other kind of thinking or talking. It appears to involve a different mode of thought from problem solving or pure description. It involves thinking in terms of persons who act as agents with intentions and goals that unfold in some causal sequence with a beginning, middle and an end.<sup>34</sup>

### TT

The empirical observations upon which Stern bases his ideas mainly consider vision and bodily gesture, and might therefore seem to be of quite limited interest for any speculations about auditory perception and affective experiences of music. Nevertheless, there are important findings in the field explicitly dealing with infants' perception of sound.

At two months after birth babies react differently to different kinds of prosodic speech patterns: falling speech melodies soothe, rising melodies attracts attention, bell-shaped and falling melodies maintain attention, while bell-shaped and unilevel voice melodies discourage ongoing behavior (the effects are similar both in American English and Mandarin Chinese.<sup>35</sup> Even earlier than that, within the first three days of life, a newborn baby is capable of distinguishing its mother's voice from other female voices. It not only recognizes its mother's voice; it shows a clear preference for it. This has been shown by letting neonates suck on a non-nutritive nipple connected to a tape recorder. Depending on the tempo of the sucking activity, the tape recorder played back either the mother's voice or that of another woman. Irrespective of whether the babies had to suck fast or slowly they preferred to suck so as to hear their mothers<sup>36</sup>.

<sup>&</sup>lt;sup>33</sup> Ibid., 173.

<sup>34</sup> Ibidi.

<sup>&</sup>lt;sup>35</sup> See Mechthild Papousek, et al., "The Meanings of Melodies in Motherese in Tone and Stress Languages", Infant Behavior and Development, 14 (1991).

<sup>&</sup>lt;sup>36</sup> Anthony J. DeCasper and William P. Fifer, "Of Human Bonding: Newborns Prefer their Mother's Voices", *Science*, 208 (1980).

Part of an answer to the question how the infant comes to prefer its mother's voice has been offered by Sandra.<sup>37</sup> With reference both to the various attention-invoking dispositions of different types of speech contours (we are talking about the exaggerated way of speaking that is sometimes referred to as baby talk, or motherese) and to the soothing capacity of lullabies, Trehub has suggested that these patterns form prototypical "basic-level" categories. Basic-level categories are easily encoded and remembered; they have similarly perceived overall shapes and show high intracategorical similarity and intercategorical dissimilarity.<sup>38</sup> Trehub suggests that prototypicality of basiclevel categories is accounted for by gestalt principles such as similarity, proximity and common direction. In particular she refers to the law of good continuation. The rising and falling contours, as well as the bell-shaped contour, are said to display good forms, which make them particularly easy to perceive by the infant. What is more, the child will also notice deviations from such good patterns more easily than it will notice deviations from less good patterns.

Trehub suggests that this might explain how the mother's voice comes to be recognized. The idiosyncratic deviations from the prototypicality of good patterning that the mother's speech displays captures the child's attention, and makes it possible for the child to categorize first the contour properties of the basic level, then subordinate aspects of the mother's voice: "It is possible", Trehub says, "that infants go beyond a contour processing strategy, encoding the precise extent of the mother's pitch excursions or intervals. This would provide them with a basis for recognizing the mother by her unique yet familiar tunes, which may also be presented in a personalized set of rhythms". 39

We may further assume that it is the amodal properties of the mother's voice that the infant perceives. As tests show, neither frequency nor amplitude in isolation is recognized by the infant, leaving as the only available parameter of significance the characteristic prosody of the mother's voice, the amodal properties of its melodic contour.<sup>40</sup> This shows that the amodal qualities of

<sup>37</sup> Sandra E. Trehub and Laurel J. Trainor, "Rules for Listening in Infancy", in . J.T. Enns ed., *The Development of Attention: Research and Theory* (North Holland: Elsevier Publishers 1990); Sandra E. Trehub and Anna M. Unyk, "Music Prototypes in Developmental Perspective", *Psychomusicology*, 10 (1991).

<sup>&</sup>lt;sup>38</sup> See also Eleanor Rosch and Catherine B. Mervis, "Categorization of Natural Objects", *Annual Review of Psychology*, 32 (1981).

<sup>&</sup>lt;sup>39</sup> Trehub and Trainor, Rules for Listening in Infancy, 108.

<sup>&</sup>lt;sup>40</sup> Anna Fernald and Patricia Kuhl "Acoustic Determinants of Infants Preference for Motherese Speech", *Infant Behaviour and Development*, 10 (1987); Jacques Mehler, "Infant Recognition of Mother's Voice", in *Perception*, 7 (1978).

sensation to which the newborn child attends in its early development of a sense of self, and which constitute the earliest temporally organized islands of coherence and coordination in the otherwise non-differentiated chaos, might very well include auditive stimulation. It even indicates that the process of categorization may be under way already in utero where only lower partials of the sound spectrum are available, and where the timbre of the mother's voice cannot be the salient feature - it seems more reasonable to assume that the timbre of the voice is a property perceived only after birth, in order to distinguish the mother's voice from others'. 41 The fact that Trehub considers lullabies in her study brings the issue of music to the fore. It is therefore of particular interest to note that at four and a half to six months of age, babies can be shown to prefer certain phrasing in music. In one study Mozart minuets were divided into temporally-separated segments that either did or did not correspond to the phrase indications of the score. 42 The infants examined faced the loudspeaker playing the versions in which temporal separation occurred between phrases significantly longer than they faced the differently placed loudspeaker out of which came versions that had pauses inserted within phrases. Although we may not be innately "hard wired" to prefer correct Mozartean phrasing to stylistically-deviant versions, there seems reason to believe that the similarities of phrasing in both classical music and motherese is what makes infants attentive to deviations of the former.

Considering music, we may further assume that it is at this early stage of self development – the development of our senses of self versus other, as well as self with other – that perception of musical phrasing begins. That we experience short musical phrases as cohesive gestalts would in other words depend on the same principles for basic level categorization as does the child's preference for its mother's voice. To carry the parallel further to Stern's sense of a subjective self, the affective substrate of these vocal phrases, amodally perceived, would then be what enables the inference of an affective core underlying the other's behavior, leading to an intuitive understanding of the other person's affective states. Stern likens this to art in general, which "translates" into feeling. It would thus be the affective contour of a musical phrase that makes us

<sup>&</sup>lt;sup>41</sup> J.-P Lecanuet, "Prenatal Auditory Experience", in I. Deliège and J. Sloboda ed., *Musical Beginnings* (Oxford: Oxford University Press 1996); cf. also Melanie J. Spence and Anthony J. DeCasper, "Prenatal Experience with Low-Frequency Maternal-Voice Sounds Influences Neonatal Perception of Maternal Voice Samples", *Infant Behaviour and Development*, 10 (1987).

<sup>&</sup>lt;sup>42</sup> Caroli K. Krumhansl and Peter W. Jusczyk, "Infants' Perception of Phrase Structure In Music", in *Psychological Science*, 1:1 (1990).

experience it "directly as forceful". And as affect attunement (together with the linguistic competence of a verbal self) is employed, it subsequently makes it possible for us to denote the phrase in terms of being "masculine" or "feminine", of being "happy" or "sad", or of being expressive of any other kind of emotion.

Attunement to the affective properties of melodic contours could also explain the personal character of perceived contours. The individual prosody of the mother's voice was already detected by the newborn, although it could not be said to have any social significance; it was not yet associated with meaningful action. However, the significance of affective contours, acquired through affect attunement, leads Stern to talk about personal *styles* of behavior. In the example with the suspense game, the repetition of the affective contour functions as a theme with variations enabling the child to identify the father on the basis of his individual style of varying the repetitions. As behavior is successively categorized, conventional behavior and action can be ascribed to particular agents on the basis of the personal style-code of its performance. Hence vitality affects also

concern the manner in which conventionalized affect displays such as smiling and other highly fixed motor programs such as walking are performed. This is where the exact performance of the behavior, in terms of timing, intensity, and shape, can render multiple "stylistic" versions or vitality affects of the same sign, signal, or action.<sup>43</sup>

The relation to music and the arts is obvious here: "In spontaneous behavior, the counterpart to artistic style is the domain of vitality affects"<sup>44</sup>. In addition to, or analogously to this stylistic variation of conventionalized 'sign behavior', conventionally expressive phrases of music may also be emotively altered. Phrases that are conventionally judged to be expressive of the 'basic' emotions – happiness, anger, fear and sadness<sup>45</sup> – may be played in emotively distinct and identifiable ways. It has been shown that irrespective of training, listeners judge the emotive expressions of musical phrases on the basis of multiple cues with a probabilistic relation to the judgments. The consequence of this is that "two performers can be equally successful in communicating a particular emotion, despite differences in how they use the expressive cues". <sup>46</sup> In brief, happiness is

<sup>&</sup>lt;sup>43</sup> Stern, The Interpersonal World of the Infant, 159.

<sup>44</sup> Ibid.

<sup>&</sup>lt;sup>45</sup> Peter Kivy, Music Alone: Philosophical Reflections on the Purely Musical Experience (Ithaca: Cornell University Press. 1990). 394.

<sup>&</sup>lt;sup>46</sup> Patrik N. Juslin, "Emotional Communication in Music Performance: A Functionalist Perspective and Some Data", Music Perception, 14:4 (1997).

associated with fast tempo, high sound level and staccato articulation; sadness with slow tempo, legato articulation and low sound level; anger with high sound level, fast tempo and legato articulation; whereas fear is associated with low sound level, staccato articulation and slow tempo. Different performers may thus choose different cues when expressing the same emotion, and they may play either "with" or "against" the conventionalized meanings of the melodic contours (or "musemes").<sup>47</sup>

Now, in contrast, consider a whole piece of music, or at least an extensive part or period offit, experienced as a continuous whole, rather than as a number of disconnected phrases placed one after another. We can easily imagine how protonarrative envelopes, of various durabilities, underlie melodic lines as well. The "elements of plot" in such cases would be the short melodic phrases and motives of the melody, with their own affective contours, while the protonarrative envelope would be the affective contour of the melody in its entirety, whether this melody is a simple children's song or a complete symphonic movement (or just a brief section thereof). This, I believe, is what Michel Imberty has in mind when speaking about the "macro structure" of a musical work, and it seems to share affinities with Fred Lerdahl's and Ray Jackendoff's "prolongational reduction", according to which tension and relaxation in a well-formed tonal piece is said to occur in a hierarchy of structural levels, the topmost of which embraces the entire piece (though their theory lacks an account of the affective nature of short phrases).<sup>49</sup>

A final level of Stern's developmental model that I would like to consider is the sense of a verbal self. Language is a means of socially and culturally specifying one's self, its history and character, etc. Of course, Stern is not alone in emphasizing language's role for our self-knowledges. Language, to use one of Daniel Dennett's vivid metaphors, establishes a self as its source:

These strings or streams of narrative issue forth as if from a single source – not just in the obvious physical sense of flowing from just one mouth, or one pencil or pen, but in a more subtle sense: their effect on any audience is to encourage them to (try to) posit a unified agent whose words they are, about whom they are: in short, to posit a center of narrative gravity.<sup>50</sup>

<sup>&</sup>lt;sup>47</sup> Cf. Tagg, Kojak.

<sup>48</sup> Michael Imberty, "Can One Seriously Speak About Narrativity in Music?", in Proceedings from the Third Triennial ESCOM Conference (Uppsala: Department of Psychology 1997).

<sup>&</sup>lt;sup>49</sup> Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge [Mass.]: The MIT Press 1983).

<sup>&</sup>lt;sup>50</sup> Daniel N. Dennett, Consciousness Explained (London: Penguin Books 1991), 418.

But, once again, we are not primarily interested in the various versions of selfhood; we are interested in the development of a "sense of music" and insofar as the sense of music as something other develops along a simultaneous route as that taken by our selves, we have here an outline of its trajectory. One of the points I have been moving towards is that a full sense of music - music as a human cultural artefact - is an analogue to our verbal selves (a sense of self that presupposes and includes the earlier levels of self against and with an other, as well as a subjective self). Not that we always have such explicit ideas about the music we hear as we do about ourselves, but we always have something to say about what we hear that assumes culture-specific knowledge of music, which the denoting of certain musical phrases as "forceful" or "masculine" indicate (I have discussed elsewhere the role of "superordinate categories" for our experiences of music.)<sup>51</sup> And even if our musical experiences to a large extent parallel those of our non-verbal senses of ourselves - that is, music experienced more or less amodally - they never do so exclusively when we are consciously aware of them.

### $\Pi$

We can see then, that Stern's developmental trajectory has relevance for at least three aspects of music. First, affect attunement enables the experiencing of musical figures with affective content, such as figures of anger, happiness, sadness, etc. Affective contours have a personal character that enables the infant to not only recognize its mother's voice, but also recognize personal styles of musical performance and emotive alteration of musical phrases with preestablished emotional significance. Second, successions of affective contours that take on thematic consistency may expand into protonarrative envelopes. As such, they provide the underlying affective structure for more extensive musical unfoldings, as well as lead to expectations of resolution (cf. Rosner and Meyer, 1986). Third, the full sense of self, the sense of a verbal self, suggests that a full sense of music involves culture-specific verbal discourses about itself.

In addition, we have seen that affect attunement in the early mother-infant dyad can be regarded as a sort of proto-music. Through the amodal per-

<sup>&</sup>lt;sup>51</sup> Volgsten, Music, Mind and the Serious Zappa.

ception of shape and timing, the child experiences the world in a way that is fundamental for our ways of experiencing music. The ideological impact of this should be obvious: the fundamental basis for our ways of experiencing music is derived from the earliest social interaction encountered by the human being. What we attune to is a form of life. 52 Of course, attunement is present in any temporal experience of the outer world,53 and at an early age there is no hardblown distinction between the animate and the inanimate (my oldest daughter used to wave to the tree outside our bedroom window), but Stern's lesson should be clear: affect attunement - which is in no way absent in our musical experiences - is stylistically much more complex and enables significant prediction of behavior and ascription of motives and intentions of the agent. (A willow might be expressive of sadness, but we will never be able to relate this expressiveness systematically to any reasonable events in the history of the particular tree, and we will never find the willow attuning to us.) Affect attunement adds the existentialist experience of being-for-an-other.54 Thus, by being based on an expressive substrate of sound towards which we can affect attune through our bodies, one which is artistically manipulatable, music always becomes ideological.

But even though the listener may sense that others also have invested in an affective relationship with the music heard, I am not saying that everybody would somehow dance around humming We are the world! for themselves when listening to music. What I have tried to suggest is that every musical experience draws on basic human capacities initially developed in mother-infant interaction, and in the subsequent development of our selves. Just as "within a particular mother-infant dyad a kind of ritualization of vocalization occurs, such that certain shared meanings can be said to take on a conventional form within a very limited social domain", 55 so also in other, more or less limited, musical domains.

<sup>&</sup>lt;sup>52</sup> Ludwig Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe (Oxford: Basil Blackwell 1968).

<sup>&</sup>lt;sup>53</sup> M.J. Jones and M. Boltz, "Dynamic Attending and Resposnses to Time", Psychological Review, 96:3 (1989).

<sup>&</sup>lt;sup>54</sup> Cf. C. Guignon, "Moods in Heidegger's *Being and Time*", in C. Calhoun and R.C. Solomon (ed.) *What is Emotion?* (Oxford: Oxford University Press 1984).

<sup>&</sup>lt;sup>55</sup> Anne Fernald, "The Perceptual and Affective Salience of Mother's Speech to infants", in L. Feagans, et al. (ed.) The Origins and Growth of Communication (Norwood (N.J.): Ablex Publishing Corporation 1984), 91.