

Music, Mind and the Serious Zappa
The Passions of a Virtual Listener

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Preamble

'This is a hard one to play', Frank Zappa once remarked about one of his pieces. The piece in question, *the Be-bop Tango*, is a rhythmically complex miniature to which he brought people from the audience up on stage to (try to) dance. Of course they failed, which Zappa was soon to point out in the same wry manner that he publicly blamed his musicians when they did not play 'all the right notes'. However, Zappa's music was hard to pull off for another reason as well. More often than not he would juxtapose musical material and stylistic patterns that according to normal standards doesn't blend very well. Zappa's music was (and still is) something of a stylistic chaos.

Perhaps one can say something similar about this thesis. On the one hand, the particular themes that are dealt with are rather complex, and on the other, the way they are brought together is unconventional. In other words, this is a "multidisciplinary" work. Now, in contrast to Zappa, I am not a specialist in all the fields that I deal with, which means that a professional philosopher, psychologist or ethnomusicologist is quite likely to find some "wrong notes" here and there. For instance, it may in the end turn out that the argument in part one about the role of language for music fails because I have failed to pay attention to some crucial aspects of the theories, which I call upon as support. But whether the hypotheses prove successful or not, I still hope that my bringing together of some rather odd gloves will point in a fruitful direction for further discussion.

While working with this thesis I have benefited from helpful comments and received a lot of helpful material from many persons. Not all have agreed with me, forcing me to try to improve and clarify my claims. Whatever their contribution, I would hereby like to express my thanks to: Per-Erik Adamsson, Owe Ander, Arved Ashby, Bobby Aynsley, Daisy Benson, Jonathan Bernard, Per-Erik Brolinson, Steven Brown, Sten Dahlstedt, Jacob Derkert, Chris Ekman, Katarina Elam, Johanna Ethnersson, Marta Grabocz, Katrin Hauger, Holger Larsen (supervisor), Richard Littlefield, Susan Long, Dan Lundberg, Henrik Lundgren, Colin Martindale, José Luiz Martinez, Björn Merker, Magnus Michaeli, Ruth Millikan, Multi Kulti, Jon Naurin, Hans-Åke Ohlsson, Henrik Román, Göran Rossholm, David Rothenberg, Per Sandberg, Chris Smith, Ingrid Svensson, Göran Sörbom, Eero Tarasti, Pontus von Tell, Folke Tersman, Joakim Tillman, Torbjörn Tännsjö, Anita and Gunnar Volgsten, Kendall Walton, Nils Wallin, Johan Wikberg, Åsa Winther, Malcolm Woodward, Lars-Olof Åhlberg, the staffs at SMB, KB and SPPB.

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Foreword to the second edition

Looking back after ten years I still find my thesis valid. Recent research on “mirror neurons” could probably strengthen it further (on this matter, check out Björn Vickhoff’s doctoral thesis from 2008, “A Perspective Theory of Music Perception and Emotion”, University of Gothenburg). In this second and slightly revised edition I haven’t added any new findings or arguments. Changes are limited to minor corrections and some new chapter headings. A bunch of darlings have been sentenced to footnotes, others have been cold heartedly killed. A couple of chapters in part one have changed place in order to clarify the logic of my argument. But mostly this is the same book as the one I presented as my doctoral thesis in 1999. Hope You enjoy it!

Stockholm, summer 2009
Ulrik Volgsten

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Part I

Chapter One

Music is always a commentary on society

According to Frank Zappa, 'Music always is a commentary on society'.¹ What does it, or could it possibly, mean that music is such a commentary – and is it true? That art mirrors society is a common Marxist doctrine, but Zappa certainly was no Marxist, and although there was often an anarchist touch to his work, he became more of a self-made libertarian, even aiming to run for the United States presidency (though he turned down an offer to run for the Libertarian Party).² Against this background the statement might seem rather ambiguous, particularly since its context offers no further clue about what Zappa had in mind. Therefore, and despite the risk of contradicting Zappa's own view of music (he spoke of his music as being sociological rather than political),³ I will provide some novel sense to the statement and turn it into a thesis of my own.⁴ For this thesis I suggest two lines of argument, which I hope will be both original and suggestive.

The thesis states that music is always ideological. Although there may be many ways by which music is ideological, I will argue first that it is always so because of language. More specifically, I claim that language – verbal communication – is a *necessary condition* for music, and, further, that language is always ideological. A possible counterargument will be examined. This is the claim that the aesthetic properties of music can be analysed objectively with regard to their perceptual and cognitive conditions, without reference to the subjective reports of any listener. Against this counterargument I argue that for any scientific analysis of

¹ Quoted from J. Hopkins. "Frank Zappa", in *The Rolling Stone Interviews*, vol 1. p.83. Warner Paperback Library, New York 1971.

² See M. Davis. "Frank Zappa The Blunt Way", in *Creem*, July 1988.

³ See P.W. Salvo and B. Salvo. Interview in *Melody Maker*, January 4, 1974.

⁴ Although the main hypotheses of this thesis can be found in some form or other in more contemporary work (such as J. Shepherd and P. Wicke. *Music and Cultural Theory*. Polity Press, Cambridge 1997), the constellation of arguments that I present is, as far as I know, original.

music with such pretentious, verbal reports of listening experiences always have epistemological priority over more technical observations. Trivial as it may seem (though its consequences are not, as we shall see), what listeners say they hear is the ultimate evidence we can have as to what they in fact do hear. No reference to acoustics, formal analysis, or whatever will ever provide stronger evidential support than verbal reports for what a listener hears, what music he or she experiences. But this does not entail that what somebody says about the character or properties of a piece of music cannot be disputed.

For the claim that music is always ideological to be intelligible, we need an account both of the notion of ideology, and of the notion of music. While some people identify music and musical works more or less with musical experiences, or the intentional objects thereof,⁵ others stress the creative act of composing or playing, and still others emphasize the objective outcome of these processes.⁶ Most thinkers, though, to some extent acknowledge all three areas, that is, the poetic process of music making, the objective work or performance, and the aesthetic experiences of the listener.⁷ What I will do is accept this tripartition provisionally as an account of music as a 'total musical fact',⁸ although the arguments for the present thesis will primarily lie within the bounds of music as experienced. When speaking about music, I therefore take this as referring primarily to music as experienced by a listener (including composers and performers). Moreover, I accept as music any sounding phenomenon that anyone would reasonably call music (which, as said, does not rule out disputes over what shall and shall not be regarded as music).⁹

The language requirement means that the contents of musical experiences must be shareable among the participants of a group. Indications of the experiences have to be observable from a third person perspective. Musical experiences must be ascribable by an observer to a listener. How can we tell that a person has, or has had, a musical experience? By observing this person's behavior: the person may hum, whistle, sing or play; tap feet, clap hands or even dance. There is yet another way of telling, namely by focusing on what the person says. The person may disclose his or her listening experiences by either verbally describing them, or by verbally describing the music that is believed to

⁵ See R. Ingarden. *The Work of Music and the Problem of Its Identity*. Macmillan Press, 1986; M.C. Beardsley. *Aesthetics. Problems in the Philosophy of Criticism*. Hackett Publishing Company, Indianapolis 1981; D.C. Dennett. "Memes and the Exploitation of Imagination", in *Journal of Aesthetics and Art Criticism*, vol. 48 1990; J. Rahn. "Aspects of Musical Explanation", in *Perspectives of New Music*, vol. 17(2) 1979.

⁶ See N. Goodman. *Languages of Art. An Approach to a Theory of Symbols*. Hackett Publishing Company, Inc. 1976; J. Levinson. "What a Musical Work is", in *Journal of Philosophy*, vol. 77 1980; R. L. Martin. "Musical Works in the Worlds of Performers and Listeners", in *The Interpretation of Music. Philosophical Essays*. Ed. M. Krausz. Clarendon Press, Oxford 1993.

⁷ Cf. J.-J. Nattiez. *Music and Discourse. Toward a Semiology of Music*. Trans. C. Abbate. Princeton University Press, Princeton 1990. Nattiez suggests the terms *poietic* and *esthetic* to emphasize that the issues are not limited to poetry and the beautiful.

⁸ *Ibid.* p.ix;42.

⁹ Cf. B. Nettl. *The Study of Ethnomusicology. Twenty-nine Issues and Concepts*, p.24. University of Illinois Press, Urbana, Chicago and London 1983.

have caused the experiences. What I argue is always ideological are our ways of propositionally “fixing the contents” of our listening experiences, and these ways require language.

The language requirement means that not only the subjective aspects of our listening experiences must be shareable; so must the objective properties of them. When speaking about the effects that a cause has on us, the stimulating cause must be observable by others in some way or other. There must be *some* intersubjective consensus of what the objective contents of our listening experiences are, for any discourse about the subjective contents of these experiences to be meaningful. Put more simply, for talk about inner experiences to be understandable, these experiences must stand in some relation to commonly observable phenomena. That this must be so is a fundamental requirement of linguistic communication (to be discussed further in chapter eight), which entails that the objective and the subjective cannot be completely divorced in any discourse about music.

Both subjectively- and objectively-focused discourses may be more or less concerned with, or more or less remote from, the perceptual qualities of our listening experiences. Discourses describing the objective stimulus may focus on the compositional process or inaudible structural relationships lacking in any perceptual significance. Likewise, discourses about the subjective contents of musical experiences may be concerned more or less exclusively with the personally associative or emotive effects that the music may have on us.

Whereas the former types of discourse are by convention distinguished as musical theory and analysis, the latter are often rebutted under the flag of the non-disciplinary and “extramusical.” As this brief account indicates, I do not subscribe to any such evaluative hierarchy. Considering the point of intersection, where the subjective and objective are assumed to meet, there is reason to believe that it is a floating point, or rather, a dynamic field. Psychologists distinguish between different levels of categorization (some of which, as we shall see in chapter thirteen, require language). In part two I shall discuss this further and argue that human beings are endowed with an innate *basic level of sound categorization* in terms of so called *affective contours* (although I will not assign epistemological priority to this psychology of categorization).

Discourses about music may nevertheless be regarded as a negligible aspect of our relationship with music. Language can at best capture only a faint fragment of our musical experiences. Or so it seems. However, as I will argue, discourse about music is nothing that we can do away with, nothing we can put “within brackets,” as it were.¹⁰ On the contrary, I will try to show that our talk about music is an irreducible aspect of music being a *human cultural phenomenon*. Discourse about music is exclusively

¹⁰ Cf. L. Ferrara. *Philosophy and the Analysis of Music. Bridges to Musical Sound, Form, and Reference*. Greenwood Press, New York 1991.

human (no other species talk about the sounds they make) and *speaking about music influences our listening experiences in ways that would otherwise be unattainable*.

We may not have much to say about music in technical detail, but even the most “naive” listener is capable of rudimentary categorization in verbal terms of what is heard. Names of songs, genres and performers may be all the lay listener have to say about the music; it may be the only terms that he or she can use to propositionally fix the content of the musical experience, but it (the words) nevertheless involve ideological assumptions. And these ideological assumptions are not reducible from the musical experience.¹¹ By the same token, aspects of experiences that cannot by any means be labeled verbally, not even by circumscription or paraphrase, are not aspects of music in the exclusive sense argued for here.

This is not to say that the cultural, verbalizable, aspects of musical sounds are what primarily make people care for music. What makes us take interest in music may very well be those ineffable characteristics that language seems unable to capture.¹² Neither is this to say that one can always verbalize one’s experiences easily, or with any great detail; it is only to say that verbalization is an irreducible aspect of music as a part of human culture (it is enough to be able to point to instances, such as “the sound of this or that singer’s voice,” or even “the song such and such,” *etc.*). Moreover, propositionally fixed musical experiences may be ascribed to listeners unable or reluctant to verbalize. It is often enough that someone responds to music by singing, playing or dancing in certain ways for the ascription to this person of a musical experience to be valid. However, as we shall see in chapters fourteen to nineteen, the important ideological significance of propositionally fixed listening experiences is that they open the door for more extensive discourses.

Although necessary, language is not a sufficient condition for music. Neither do we usually experience music “verbally,” whatever that would mean; our verbalizations of music and our experiences are separate phenomena, the former fixing the content of the latter. Therefore, in part two, I begin by suggesting how our musical experiences may have no fixed content at all, though still be dependent on previous verbally mediated content fixations. Then, as a second line of argument for the thesis, I claim that the non-verbal aspects of music may also fulfill ideological functions by being fundamentally social. In this second part I sketch the outlines for a theory about the foundation of our musical experiences, aiming ultimately to show how musical sounds (the objective), passionate reactions (the subjective), and verbal reports

¹¹ I think this makes my thesis stronger than those similarly stressing the importance of language for the interpretation and understanding of the visual arts. See for instance, A.C. Danto. “Interpretation and Identification”, in *The Transfiguration of the Commonplace*. Harvard University Press, Cambridge (Mass.) 1981; M. Baxandall. “Introduction: Language and Explanation”, in *Patterns of Intention. On the Historical Explanation of Pictures*. Yale University Press, New Haven and London 1985.

¹² Cf. D. Raffman. *Language, Music, and Mind*. The MIT Press, Cambridge (Mass.) 1992.

(discourses) interrelate. Put differently, a theory showing *how music can sound the way we say that we think it does*.

The aim of the thesis is thus twofold: to explore how our musical experiences are determined by verbal discourse—whether by a listener, player, composer, or scientific observer—and how verbal discourse about music is ultimately provoked by passionate reactions to musical sounds and the cultural context in which these sounds are encountered. In other words, how the ideological impact of music depends on our passionate reactions to it.

Finally, in part three, I will variously describe and analyse different aspects of Zappa's "serious" musical output. In line with the main argument in part I & II, these verbal descriptions and analyses can be seen as content fixations of a *virtual listener's* musical experiences (rather than scientifically objective analyses of musical works). The choice of Zappa's music is not least motivated by its stylistic diversity, as well as by the composer's outspoken interest in various socio-political issues.

Before moving on to a discussion of what others have said about ideology and music, something should be said about the way I understand "ideology". Like music, ideology is one of those words that have been interpreted and used in different ways.¹³ There is the "Marxian" view that ideology amounts to a false theory of the world, a false world view, which could and should be replaced by a true one. There is also the "Nietzschean" view that any theory of how the world is (since it necessarily omits other points of view) is false and thereby ideological.¹⁴ Neither of these views accord with the one chosen here, which would instead claim that any world view is ideological, but that this does not imply that every or even any world view is necessarily false.¹⁵

Using a more restricted but general approach, I will regard ideology as a pattern of beliefs and attitudes sanctioning certain actions at the expense of others, as *culture*: the 'standards for deciding what is, standards for deciding what can be, standards for deciding how one feels about it, standards for deciding what to do about it, and standards for deciding how to go about doing it.'¹⁶ But rather than choosing any cognitive anthropology as point of departure, my account of ideology will build on the notion of a world view, or *web of belief*, as it has been developed in post-analytical philosophy.¹⁷ And to the extent that ideologies are theories about the world, or world views, these theories and views can be observed in what people say (or do not say) about the world.

¹³ See D. Hawkes. *Ideology*. Routledge, London 1996.

¹⁴ See F. Nietzsche. "Om sanning och lögn i utomoralisk mening", in *Artes*, vol. 4 1984. Trans. M Holmqvist.

¹⁵ Thus the presumed "death" of the ideologies is of no concern here. Cf. F. Fukuyama. "The End of History?", in *The National Interest*, Summer 1989.

¹⁶ W.H. Goodenough. *Culture, Language, and Society*, p.62. The Benjamin/Cummings Publishing Company, Inc. Menlo Park 1981.

¹⁷ Cf. also L. Meyer. *Style and Music. Theory, History, and Ideology*, p.156f. University of Pennsylvania Press, Philadelphia 1989.

Chapter two

Three levels of ideological significance

According to John Shepherd, 'It can be asserted that because *people* create music, they reproduce in the basic qualities of their music the basic qualities of their thought processes', and therefore, 'If it is accepted that people's thought processes are socially mediated, then it could be said that the basic qualities of different styles of music are also socially significant.'¹⁸ Given these premises—that people reproduce the basic qualities of their thought processes in the basic qualities of their music and that people's thought processes are socially mediated—similarities between social structure and musical structure can be viewed as *homologues*, originally a biological notion meaning that similarities observed are more than mere analogues since they share the same causal ancestry. In this case the causal ancestry of both social and musical structure is to be found in the "basic qualities" of people's thought processes. Shepherd does not give any detailed arguments for his premise but quotes Claude Lévi-Strauss' structuralist doubt that there could be 'no connection at all between what the mind is doing on one level, and what the mind is doing on another level'.¹⁹ The purpose of this chapter is not to provide such argument (it will appear later), but instead to give some examples of how music has been said to convey ideological significance.

The musical structures that catch Shepherd's interest are the modal pentatonicism of medieval plainchant (Gregorian chant), and the successively evolving functional tonality that later came to replace pentatonicism. These two systems are said to be direct homologues to the social structures of their respective historical periods. As Shepherd says, 'the largely implicit world sense of early medieval society was articulated musically through structurally implicit monody', and 'as classic feudalism gradually broke down and began to give way to increasing urbanization, mercantilism and incipient forms of capitalism, so, too, the implicit monody of plainchant began to disintegrate and state, harmonically and explicitly, the internal conditions of its structure'. Then, 'as the intellectual preconditions necessary for the development of industrial capitalism became fully established during and after the Renaissance, the emerging explicitness of late medieval and early Renaissance polyphony gradually syncretized into the homogeneous and explicit functional tonality'.²⁰

In particular, it is the homology between the lack of hierarchy in both the feudal and pentatonic systems that gives the latter ideological significance, and similarly the homology between the strongly hierarchic

¹⁸ J. Shepherd. *Music as Social Text*, p.12. Polity Press, Cambridge 1991.

¹⁹ *Ibid.* p.11.

²⁰ *Ibid.* p.96f.

nature of functional tonality and industrial capitalism. The feudal lord had a direct and immediate relation to his vassals, who were never reduced to anonymous cogs in the system. Similarly the stressing of a tenor or a tonic in pentatonicism is said to be a matter of melody rather than of harmony, of inequality rather than of hierarchy: 'The fundamentals of pentatonicism are complementary and mutually dependent. They are also centres without margins in the sense that the relations they form are made *directly* with other fundamentals, something that is not the case with functional tonality. Inasmuch as one note of the pentatonic structure may be stressed more than others, [the] statement that feudal society was "unequal ... rather than ... hierarchical" could equally be applied to the structure of pentatonicism found in medieval music'.²¹

In addition to this change from the non-hierarchical to the hierarchical, the change from the modal to the tonal is also said to involve a change in the sense of time, which parallels that of the prevailing world view. This change could perhaps be described as one from cyclical process to linear progress. Whereas the medieval sense of time was one of continuous repetition of preestablished patterns, the industrial sense of time, also articulated in the tonal music of its time, involves a sense of goal-directed, teleological progress, an 'impulsive movement towards the centres provided by the structures of industrial society'.²² In tonal music these centers are provided by the hierarchical structure as tonal centers, which are not immediately available, but have to be approached in an orderly fashion: 'Whereas the intrinsic nature of the relationships between the interlocking fundamentals of medieval music is partially responsible for its tendency towards temporal simultaneity, the sense of magnetic pull in functional tonality is achieved by utilizing the hierarchy of fundamentals in such a way that the fundamental of each chord—as used in relation to the other notes of that chord—plays an explicit and *retrospectively* predetermined part in the passage towards a final and irrevocable statement'. Thus 'Functional tonal music is about sequential cause and effect—a cause and effect which depends, in the fashion of materialism, upon the reduction of a phenomenon into "indivisible" and discrete, but contiguous constituents that are viewed as affecting each other in a causal and linear manner'.²³

It is not impossible to apply Shepherd's approach to musical systems other than the two mentioned. Indeed, even before Shepherd, Theodor Adorno offered a similar analysis of twelve-tone music. The emancipation of dissonance in twelve-tone music, according to Adorno, is not equivalent to complete emancipation of the individual, as it might first seem to be, but to the suppression of the individual subject by an objective order, an order where the preconditions for everyday life and work are governed not by democratic procedures but by abstract economic

²¹ *Ibid.* p.109. Shepherd quotes M. Bloch. *Feudal Society*, p.443. Routledge and Kegan Paul, London 1961.

²² *Ibid.* p.123.

²³ *Ibid.* p.124.

principles which are unassailable by individual means. The musical counterpart, the twelve-tone row, is established before its component parts are elaborated into individual compositions. In its subordination of composition, the abstract twelve-tone row (which is seldom audible in its original outline) thus resembles the objective economic order of society.²⁴ Whereas in a classical sonata movement the musical themes are stated in the exposition before further development, in twelve-tone composition the main theme, the row, is never heard, it has become an objective principle, and the resulting music is turned into a variation form; but rather like a pre-classical variation it fails in providing an ultimate utopian goal for the dynamic development of its subject.²⁵

Adorno's views on music are far more complex than the above would suggest, and I will return to some of his ideas as we go on. What we have seen now is how a very abstract view of the musical material, that is, the very basic systems of tones of which some types of music are put together, can be regarded as a carrier of ideological content. But the same can also be argued about less abstract levels of musical material. According to Susan McClary, the ideological significance of the tonal system is brought to its peak during Viennese Classicism in the sonata form. While tonality sorts the scale steps, chords and keys in an achronic, hierarchical relation to a tonic center, sonata form directs the diachronic unfolding of the composition. And while tonality determines the degree of dissonance and deviance of a note, chord or key in relation to a tonic center, sonata form articulates the material as two contradictory key areas, the second of which (usually the dominant) after requisite development has to capitulate to the first (the tonic).

To see how tonality and sonata form reinforce each other's ideological content, McClary starts off by quoting Arnold Schoenberg: 'For [our forebears] the comedy concluded with marriage, the tragedy with expiation or retribution, and the musical work "in the same key." Hence, for them the choice of scale brought the obligation to treat the first tone of the scale as the fundamental, and to present it as Alpha and Omega of all that took place in the work, as the patriarchal ruler over the domain defined by its might and its will: its coat of arms was displayed at the most conspicuous points, especially at the beginning and ending. And thus they had a possibility for closing that in effect resembled a necessity.'²⁶ Consonance, the ultimate goal for music, is conceived by Schoenberg as a patriarchal principle. What exactly does this mean? To get McClary's point on this matter we have to invoke yet a third level of musical material, one less abstract than the previous two (tone system and form). This is the level of conventional signs, or *figures*, in music.

²⁴ See T.W. Adorno. *Philosophy of Modern Music*, p.132. Trans. A.G. Mitchell and W.V. Blomster. Sheed and Ward, London 1987.

²⁵ See *Ibid.* p.95ff

²⁶ Quoted from S. McClary. "Narrative Agendas in 'Absolute Music'", in *Musicology and Difference. Gender and Sexuality in Music Scholarship*. Ed. R.A. Solie. University of California Press, Berkeley 1993.

Musical figures are certain kinds of melodic phrases, rhythms, chords or timbres capable of creating easily recognizable and common associations among the listeners of a culture or social group. For instance, when analysing a symphony like Brahms' Third, McClary points out that its loud and forceful opening brass motto displays a "heroic" quality [which] most listeners can easily recognize ... as belonging to a family that would also include Richard Strauss's Don Juan, Franz Liszt's triumphant Faust, or John Williams's Indiana Jones'. These figures are activated within a formal grid (of which the sonata principle is the most ingenious example) enabling them to play out, as it were, a complete musical *narrative*. The propelling force of this narrative is the initial exposition of two contrasting key areas, themes, or, most effectively, a combination of both. Turning these contrasts into contradiction necessitates a resolution, a recapitulation of the patriarchal principle that has been upset. This time McClary quotes Adolf Bernard Marx: 'The second theme ... serves as contrast to the first, energetic statement, though dependent on and determined by it. It is of a more tender nature, flexibly rather than emphatically constructed—in a way, the feminine as opposed to the masculine.'²⁷

The basic principles of nineteenth-century music are thus seen by McClary as articulating such conceptual dichotomies as self-other, masculine-feminine—resulting in a "masculine" tonic ... predestined to triumph, [and a] "feminine" Other to be ... "grounded" or "resolved."²⁸ The Brahms symphony, as heard by McClary, exemplifies how the second, feminine, theme dutifully fulfills its predestined role: 'The score marks this one *grazioso* (in contrast to the opening theme's *passionate*). A dancelike meter emerges, with an arabesque tune in the clarinet that weaves around teasingly over a static, nonprogressing bass. This bass drone contributes ... a "pastoral atmosphere," especially after the intellectual torments of the opening ... Its alignment with "nature," stasis, seduction and the physicality of the dance indicates that this theme already occupies a position on the "feminine" side of nineteenth-century cultural semiotics.' McClary insists that this dichotomous coding, between tonic and dominant, consonant and dissonant, masculine and feminine, was not just some accidental denomination by some obscure theorists (at least one of which, Schoenberg, was consciously trying to avoid any hierarchical dichotomies in his own music); these codes were common property—then, as they still are very much today. However, this does not mean that a composer such as Brahms uncritically accepted them, as McClary's further analysis of the symphony aims to show.

We shall not go any further into McClary's analysis. Instead I want to pause at McClary's mentioning of John Williams, the contemporary composer of movie scores, since it hints that similar codes would still exist

²⁷ Quoted from S. McClary, *Ibid.*

²⁸ S. McClary. *Ibid.*

today, at the end of the twentieth century. This suspicion gains credibility in the vignette music to the TV series *Kojak*, as analysed by Philip Tagg. According to Tagg, 'there existed a considerable programmatic and illustrative tradition of composition from the operas and tone poems of the Romantic era which proved highly usable in cinema'.²⁹ Because of the classical training and European descent of many early Hollywood composers, 'the formative years of illustrative soundtrack composition were marked by a uniformity of musical language based on the idiom of the late nineteenth century art music', and therefore 'this musical code is still part of the average film goer's or TV viewer's cultural heritage'.³⁰ What is perhaps the most interesting aspect of his analysis, besides the fact that the music is cast in a common ABA form described in terms of 'an exposition, ... a contrasting section and ... an abbreviated recapitulation',³¹ is that the *Kojak* theme mixes both contemporary and more traditional clichés. Whereas the main melodic figure, played by French horns, is traced back by Tagg, via similar figures in Sibelius' *Kullervo*, Wagner's *Ring*, Strauss' *Heldenleben*, and Beethoven's *Eroica*, to old post and hunt signals as once blown by men from galloping horsebacks,³² the electric bassline is strongly evocative of funk or modern jazz, expressing the 'unrest, unquiet, threat, danger and jerky, jabbing unpredictability' of a large American city. And in addition to 'the broad bold confidence of virile heroic, martial action',³³ expressed by the French horns, this network of cultural associations, enables the *Kojak* theme to reinforce 'a basically monocentric view of the world [in which] the negative experience of a hostile *Umwelt* can be overcome by individual action only'.³⁴

In brief, then, we have noted three different levels of musical material, the descriptions and analyses of which are all said to carry ideological content. The first and most abstract level was that of different modal or tonal systems. The second was the level of form, where the sonata principle enabled the enactment of an entire tonal narrative with development and recapitulation by positing the two different tonal areas as contradictories. This narrative can be further articulated by employing a third level of material, that of musical figures. By juxtaposing conventional musical figures according to contradictory themes, the sonata form can be heard as an explicit ideological statement, functioning as a reinforcement of a particular world view. To add a further touch to the picture, we shall now look at how music has been said to question the basic ideologies that it is said to express.

²⁹ P. Tagg, *Kojak. 50 Seconds of Television Music: Towards the Analysis of Affect in Popular Music*, p.58. Skrifter från musikvetenskapliga institutionen, Göteborg 1979.

³⁰ *Ibid.* p.58.

³¹ *Ibid.* p.102.

³² *Ibid.* p.125ff.

³³ *Ibid.* p.147ff.

³⁴ *Ibid.* p.231.

Chapter three

Opposition and subversion

As deep rooted as the masculine narrative mentioned above might seem, it is not immune to subversion and opposition. According to Shepherd, many subcultures tend to articulate their own identities within the general symbolic environment that functional tonality constitutes. Hence, for instance, 'The dirty timbres and inflected notes articulated *within* the harmonic-rhythmic frameworks of much Afro-American music ... speak of a less alienated, more intimate relationship both to self and others'.³⁵ But although the musical utterances of such a sub-culture 'tend to be personal and immediate, rather than global and abstract' (like those of the hegemonic tonal system), they 'have minimal effect on the contextual, social-musical framework'.³⁶

The subversive potential of African-American music is not given any high ranking by Shepherd. A more positive account of music's oppositional potentialities is offered by McClary in her analyses of two Madonna videos: *Live to Tell* and *Like a Prayer* (there is no space here to go into McClary's analysis of Madonna's visual appearance, her appeal as temptress and *femme fatale*). Put briefly, McClary locates the means by which Madonna 'offers musical structures that promise narrative closure, and at the same time ... resists or subverts them',³⁷ in the ways the pieces contrast different key areas. Basically they both start in D – in the first case open fifths over a D pedal, and in the second case D minor – and then move into the contrasting mediant F major. But instead of establishing D as a tonic center and ending there, both pieces choose different routes to something *other*. In *Live to Tell* the music fades while oscillating between the two key areas, while in *Like a Prayer* D is relegated in its role as tonic in being reached only through deceptive cadences. In other words, neither of the keys is used to dominate the other, 'they become two flickering moments in a flexible identity that embraces them both'.³⁸

By thus creating songs that refuse to choose between identity and Other – that invoke and then reject the very terms of this schema of narrative organization – Madonna is engaged in rewriting some very fundamental levels of Western thought. In "Live to Tell," the two clear regions of the traditional narrative schema seem to be implied. Semiotically, the unyielding fifths are "masculine," the lyrical, energetic refrain, "feminine," and the early part of the piece reveals that the fifths are formally designed to contain the excess and relative freedom of the refrain. But to the extent that identification with the feminine moment in the

³⁵ J. Shepherd. *Op cit.* p.134.

³⁶ *Ibid.* p.136.

³⁷ S. McClary. "Living to Tell: Madonna's Resurrection of the Fleshly", in *Feminine Endings. Music, Gender, and Sexuality*, p.154. University of Minnesota Press, Minnesota and Oxford 1991.

³⁸ *Ibid.* p.165.

narrative spells death, the piece cannot embrace this space as reality without losing strategic control. Thus the singer risks resisting identification with “her own” area, even if it means repeated encounters with that which would contain her. In a sense, she sets up residence on the moments of the harmonic context that fluctuate between desire and dread on the one hand and resolution on the other. Rather than deciding for the sake of secure identity (a move that would lapse back into the narrative of masculine subjectivity), she inhabits both and thus defuses closure.³⁹

According to McClary, Madonna questions the modern industrial male-governed tonal narrative by refusing to accept its basic principles (a similar tendency is eventually ascribed to Brahms’ Third Symphony). The patriarchal principle is invoked only to be rejected. In addition to the outspoken opposition of Madonna that McClary traces, there is yet a more subtle way to criticize the prevailing world order, while still remaining within its bounds. For Adorno it is the mark of great music (of which popular music is emphatically not part) that it questions its fundamental principles through the very articulation and employment of them. However, Adorno does not speak about any patriarchal principle, as does McClary. Adorno’s focus is on the principle of *autonomy*.

At least since the end of the eighteenth century there has been a tendency to view musical works as autonomous objects, that is, as objects severed from any functions outside the music “itself:” in contrast to ritual, religious or dance music, art music is believed to be freed from extramusical determinants. This has an ethical parallel in the enlightenment notion of the autonomous subject, according to which nature can be explained in purely mechanistic terms such as cause and effect, whereas man is equipped with a free will that escapes explanation and prediction in nomological terms. Though medical science is able to treat human bodies as being of a mechanistic nature, the will of the human soul is inviolably free. Adorno’s project is to show how music offers a way for the subject to survive, while the myth of subjective autonomy is cast into doubt.

In Adorno’s view, music is a cognitive activity in which the aesthetic and ideological views of cultural history are sedimented like layers of unconscious knowledge. Music, in a rather more subliminal way than the spoken or written word, functions as a way of externalizing the human subject from itself through an act of self-reflection. In addition, aesthetically “true” music is capable of freeing this same subject from its ideological bonds by questioning the seeming natural-givenness of its own appearance, by displaying the disparate elements of its concordant harmonies. The foremost example of this, Adorno says, is the music of Beethoven. In a sonata recapitulation, the first subject, or motif, of the exposition is repeated. But rather than being just an identical restatement, Adorno sees the recapitulation of the first subject in Beethoven’s middle-

³⁹ *Ibid.* p.160f.

period pieces as a critical reflection by the subject itself. With regard to the emphasis on the development section, where the motif is dissected into its constitutive parts and thereafter reassembled in various ways, Adorno is able to claim that the motif, that which is designed to appear as a natural given, or a result of divine inspiration—the autonomous subject—turns out to be not an immaculate gift from the muses but a rational construction (the process of which can be traced in Beethoven’s abundant sketch books).

In this way the music itself is said to question the autonomy of its own subjectivity. That which is believed to be given by nature—subjective expression (as ideally manifested by the autonomous first subject)—turns out to be preformed by cultural conventions and objective tonal rules. Conversely, while the sonata form imposes a rational objective order on the subjective motifs, the latter are allowed to develop across the sectional boundaries, while the static recapitulation is designed to work against its determinate rational order of style, supporting instead the dynamic freedom of the subject. For Adorno, this reflects the fundamental moral dilemma inherent in the view of the human individual as an autonomous, free subject that cannot be thrown under the yoke of a heteronomous or subordinating system (such as feudalism) without the human rights of free individuals being violated. In treating every other subject as equally free, the individual thus has to impose limits on his or her own freedom and subjective dynamism. As Adorno summarizes the point, ‘the deadlock between the dynamic and the static [the subjective diversity and objective unity of the sonata as handed down by Haydn and Mozart] coincides with the historic instant of a class that voids the static order and still cannot yield, unfettered, to its own dynamics without voiding itself.’⁴⁰

It is worth noting that Adorno deliberately focuses on the compositional process (as labour) and the work as aesthetic object, rather than on the way the music is perceived by any audience. Paradoxical as it may seem, Adorno is interested in locating those moments in music where the struggle for freedom of the autonomous subject is advanced. This, he claims, occurs when, as in Beethoven’s music, the subject self-reflectively questions its mythical origin in nature.⁴¹ In the compositional process and the resulting work, the objectivity of the historically pre-formed musical material and compositional procedures are confronted with the subjective expressivity of the composer, which thereby reveals their mutual dependence. The dichotomy between objectivity and subjectivity, between the rational and the irrational, is thereby also called in question by the music. Insofar as music adapts to a rational order, to formal convention, it is not as a means to any end whatsoever, but in an irrational process (reminiscent of Kant’s “purposeless purpose”).

⁴⁰ T.W. Adorno. “Mediation”, in *Introduction to the Sociology of Music*. Trans. E.B. Ashton. Continuum, New York 1989. Cf. M. Paddison. *Adorno’s Aesthetics of Music*, p.233ff. Cambridge University Press, Cambridge 1993. My reading of Adorno is largely based on Paddison’s.

⁴¹ Cf. M. Paddison. *Op cit.* p.92.

This is where Adorno finally allows the much-questioned subject an undebated resort, a fundamental if fluctuating (one is tempted to say metaphysical) basis. The subject survives in Adorno's analysis because it is capable of partaking in an irrational imitation of the rational forces of society. As an illustrative paradox, the irrational turns out to be the only strategy available for the subject to cope with the objective world order. By adapting to the rationality of aesthetic form, music subscribes to an irrational 'shamanist formula,' which allows an 'identification with the aggressor', and which provides the composer, player and listener with the enemy's otherwise superior powers.⁴²

Chapter four

Ideology and music

In a discussion of the sociological problems of music, Peter Martin has remarked that 'the task is not—as Adorno saw it—the “deciphering of music” so as to show how it is determined by the social circumstances of its production, but rather to understand the processes by which sounds are creatively organised, and invested with meanings by listeners, musicians, composers, critics, promoters and so on. It is thus not so much a matter of taking meanings out, as of seeing how they get put in.'⁴³

According to Martin, it is not the duty of the sociologist to determine what music means (aesthetics and criticism can perhaps do this), but rather to study how various social groups come to experience music the ways they do. This will be my task as well, but instead of inquiring into the particularly sociological conditions of such productions of meaning, I shall try to say something about the more general philosophical and psychological conditions for people to be ideologically affected by music at all (only in part three shall I engage in criticism, and then mainly for the purpose of exemplifying the claims in parts one and two).

I have stated that one condition for music is language. Let me relate this claim to the work of Shepherd, Adorno, McClary and Tagg. These writers enable us to distinguish three main levels of significance in the music. The levels are those of the basic material (the tone systems), of musical form (sonata form, *etc.*) and of musical figures. Each level is considered by at least some of the authors to have ideological significance. But how do these levels get their ideological meanings through to the listener? For Shepherd and Adorno, that music is ideologically significant is a result of its being a productive outcome of an activity. It is the production, the

⁴² M. Cahn. "Subversive Mimesis: Theodor W Adorno and the Modern Impasse of Critique" in *Mimesis in Contemporary Theory*, vol 1. Ed M. Spariosu. John Benjamins Publishing Company, Philadelphia and Amsterdam 1984; See also M. Paddison. *Op cit*, p 140ff.

⁴³ P.J. Martin. *Sounds and Society. Themes in the Sociology of Music*, p.124f. Manchester University Press, Manchester and New York 1995.

poetic process, that renders music meaningful, since (at least this is how I understand their arguments) human beings tend to reproduce the “basic qualities” of their thought processes in the structures of their products, whether these are social hierarchies or musical works.

For McClary and Tagg, the emphasis is more on the perceiving listener. The musical structures (which are never questioned as such) are conventionally coded by the cultures in which they are consumed. Whereas Adorno explicitly demands that the listener be an expert (with insight into the conditions of musical production) to decipher the artistic content of a musical work, McClary and Tagg are interested in how the vast audiences of lay listeners are affected by what they hear.⁴⁴ Whereas Shepherd and, at times, Adorno seem to claim that the ideological significance is somehow objectively given in the structures of music, Tagg and McClary more openly regard the significance of music as a conventional matter; the same music may mean different things to different listeners in different cultures.

But, as I insist, any of these meanings in or of the music requires verbal language, irrespective of whether the focus is on the composer, musician or listener. To what extent do the conventional figures of music require language? Certain conventional and cultural interpretations and evaluations of the distinctions between masculine and feminine, self and other, nature and culture, foreign and familiar, *etc.* are said by McClary and Tagg to be *affectively* articulated in and by music. According to McClary, ‘The viability of apparently autonomous instrumental music depends on the powerful affective codes that have developed within the referential domains of vocal music.’⁴⁵ Likewise, Tagg labels his inquiry an ‘analysis of affect in popular music’.⁴⁶ But what does it mean to say that music is affective? How should we interpret Tagg and McClary when they claim that the ideological significance of the music in their studies is due to *affective* codes? What should we make of the claim that the networks of cultural associations by which music is experienced by an audience are said to be mediated or determined by the way the music relates to aspects of the way the listener *feels* when hearing the music? Unfortunately neither McClary nor Tagg offer any clarifying theories or hypotheses of what this would mean. In general they rest content by alluding to the *Affektenlehre* of the eighteenth century (though Tagg briefly refers to Leonard Meyer).

Despite the quasi-scientific status of the theories referred to under the name of *Affektenlehre* I shall argue, in part two, that part of what makes music such an effective ideological operator has to do with its ability to affect the listeners’ moods, emotions and feelings, in short, (what I call) their passions. Music does so by causing *affective contours* in the attentive listener, contours that may be similar to the affective contours underlying

⁴⁴ On Adorno’s view of the listener, see chapter thirty-eight.

⁴⁵ S. McClary. “Narrative Agendas in ‘Absolute Music’”.

⁴⁶ See n.25.

passionate speech, body movement and gesture. This affective core of music and other types of passionate behavior promotes music in its function as ideological expression, *even when the musical experience is not propositionally fixed by the listener.*

In this light it can be of interest to note a trace of the affective in Adorno's work. Schoenberg, Adorno says, is able to save the free subject from being absorbed by subordinating objectivity through the imitation of 'gesticulatory force'.⁴⁷ Thus, as a remnant of its ritual ancestry, Schoenberg's late twelve-tone compositions are said to mediate between the opposites of rational (objective) order and irrational (subjective) freedom, the dichotomy of which is what constitutes musical expression.⁴⁸ Still, I have claimed that language is a necessary condition for music. Whereas the main task of this first part of the inquiry is to argue for the necessity of language, a subgoal is to see to what extent language is involved in our passionate experiences of music. As we shall see, language is to a large extent responsible for culture-specific determinations of emotions. We may therefore ask to what extent music may partake, through its expressive powers, in the promotion of such ideology-laden emotions.

Equally important, the very making of a distinction between material (substance) and form also requires language. It is not only the case that in order to make the distinction we need language; language is also a requirement for there to be anything of such kinds to distinguish. Without language, in an important sense, there *are* no tone systems and hierarchical formal structures. There are no such systems or structures objectively given in the acoustic substrates of music. By focusing on the process of composition, Adorno is able to situate the notion of autonomous structure (that which identifies the musical work) in a dialectic relationship between what is handed down by tradition to the composer as objectively given form and the subjective creativity of the individual artist. The very statement that the structure is objectively given would then be of deepest ideological significance (at least insofar as musical analysis aspires to scientific status, it would seem to demand a clear-cut object of study).

But if there are no objectively given structures in the music, if only the elements of these structures may be so given, we must ask to what extent the listener naturally imposes structure on the sounds that he or she hears (what Mary Louise Serafine calls *music cognition*: 'the activity of *thinking* in or with sound', in contrast to 'the perception of the physical entities of sound').⁴⁹ Although I shall not attempt to give a full answer to this question, I will argue (in part two) for a "basic perceptual level" of sounds. An important feature of the sound categories at this basic level is

⁴⁷ T.W. Adorno. *Philosophy of Modern Music*, p.103.

⁴⁸ Cf. T.W. Adorno. *Aesthetic Theory*, p 167. Routledge and Kegan Paul, London 1986.

⁴⁹ M.L. Serafine. *Music as Cognition. The Development of Thought in Sound*, p.69. Columbia University Press, New York 1988.

their affective character. It is on the basis of their affective character that we come to categorize sounds in the first place. But how do we get from such a basic level of sound categorization, to musical tone systems, forms and figures?

'In general, we understand more abstract and less well-structured domains (such as our concept of reason, knowledge, belief) via mappings from more concrete and highly structured domains of experience (such as our bodily experience of vision, movement, eating, or manipulating objects).'⁵⁰ The claim is Mark Johnson's, who argues that much of our abstract, theoretical knowledge—of which I include music—is derived metaphorically from experiences of bodily origin. Metaphor would then be an important "basic quality" of our thought processes that is operative not only in the extension of bodily (read affective) experience to more abstract levels, but also between various abstract levels. Thus, we may regard the metaphors used to describe and categorize music as the same as those used to describe and categorize social phenomena. It is what people say—about music and about society—that has homologous structure.

In addition we may regard Shepherd's, Adorno's, McClary's and Tagg's analyses as inquiries into the social significances of the metaphors used to describe music. For instance, Shepherd shows how structural descriptions of tone systems resemble structural descriptions of medieval and modern society; McClary, with her analyses of Brahms and Madonna, shows how the world views conveyed by such metaphors can be cast into doubt through music; McClary and Tagg both show how descriptions of musical form may serve as a narrative basis for the characterization of musical figures in emotional terms, serving thereby to favor certain types of emotional characteristics (and by implication the actions motivated by such emotions) at the expense of others. Finally, Adorno can be said to show that the definition of musical works from the classics on builds on the same descriptive repertoire as that of the ruling world view at large, namely that of autonomous individuals.

I do not pretend that the authors themselves would agree with this reading. A more interesting issue is in what ways so-called scientific analyses of musical form can be read similarly, how they can be said to be ideological. One answer is that any discourse (whether about music or not) is always ideological insofar as language always is. A more specific account is Shepherd's claim, that a theory such as, for instance, that of Leonard Meyer, hailing as it does the suspension and delay of need gratification,⁵¹ reflects the demands of capitalist society on its laborers to endure the delayed gratification of their toil.⁵² Thus similarly, there might

⁵⁰ M. Johnson. *Moral Imagination. Implications of Cognitive Science for Ethics*, p.10. The University of Chicago Press, Chicago 1993.

⁵¹ See L.B. Meyer. "Some Remarks on the Value and Greatness in Music", in *Music, The Arts, and the Ideas. Patterns and Predictions in Twentieth-Century Music*. The University of Chicago Press, Chicago and London 1967.

⁵² J. Shepherd. *Op cit*, p.137ff.

even be a parallel between pitch-set analysis and structuralist semiotics on the one hand and the social engineering of its time on the other—both hoping to come to grips with human activities through scientific methods—though such a relationship still awaits analytical explication. Instead of speculating on this issue, we now turn to consider the antithesis of the present work, that the subjective content of music can be analysed objectively.

Chapter five

Can subjective content be analysed objectively?

A serious objection to the hypothesis that music is always ideological is the claim that the aesthetic properties of music can be described and explained “objectively,” without the influence of human interests of any kind. The way to do this is through analysis, the decomposition of the musical object into its elementary parts, to show how the parts relate to each other, how they together make up a musical whole. In its extreme form it aims, as Shepherd put it, to show how the constituent parts of the musical object determine each other ‘in a causal and linear manner’.⁵³

But what is meant by “the musical object” and “a musical whole”? Do the elements uncovered by analysis, those elements the theory claims fit together according to a certain set of principles, belong to the realm of the poetic, the aesthetic, or something in between? According to Nicholas Cook, a considerable number of analytical methods with claims to scientific objectivity are based on assumptions about the cognitive capacities of the listener. They aim to uncover the ‘causes of which the listener’s response is the effect’.⁵⁴ In other words, the theories are psychological, and their common aim is to find procedures that do away with the individual for the sake of generality and universality. As Leonard Meyer says, ‘once the norms of a style have been ascertained, the study and analysis of the affective content of a particular work in that style can be made without continual and explicit reference of the listener or critic. That is, subjective content can be discussed objectively.’⁵⁵

Cook mentions several other theorists, among them Hans Keller, Benjamin Boretz, Fred Lerdahl and Ray Jackendoff, who all subscribe to the same psychological premise, *viz.* that the sound of music in some way serves as a means for conveying or communicating a formal plan, a unified structure which in its turn is the conscious or unconscious source

⁵³ *Ibid.* p.124.

⁵⁴ N. Cook. *A Guide to Musical Analysis*, p.223. Oxford University Press, Oxford 1987.

⁵⁵ Quoted from N. Cook. *Music Analysis and the Listener*, p.12. Garland Publishing, Inc., New York and London 1989.

of the listener's musical experience. For these theorists, the structure has become the musically and aesthetically significant object of study (replacing earlier interests in the emotional effect of musical sounds on the listener). Boretz even goes so far as claiming that 'we need not *ever* construct sounds to construct music, regardless of their indispensability for its transmission, for once we have exhausted their full burden of significant relational information ... we have no further *musical* use to put them to.'⁵⁶

The aim of the analytical methods is scientific objectivity: Once the unified structure has been laid bare, the aesthetic response of the listener, the contents of the listener's musical experiences can be deduced. In case a listener's response were to be at odds with the predicted outcome, it could easily be explained away as an instance of stylistic ignorance: 'You might call this the "deletion of the listener" as a free agent; he is replaced by a theory which correlates the material properties of the music with the appropriate aesthetic response'.⁵⁷ The ideal scientific situation is one where the listener need not interfere with the analysis, an ideal that Cook traces back at least to the pioneering works of Heinrich Schenker and Arnold Schoenberg.

Schenker, for instance, argued that the unity of musical sounds in time is only perceptible by human listeners if unity is retraceable to an achronic principle, his famous *ursatz*: 'in nature sound is a vertical phenomenon [that] art horizontalizes [because] man ... within his own capacities can experience sound only in succession'.⁵⁸ Once this psychological premise is accepted, the task is to devise a method for analysis showing how great music is a well-structured *prolongation* through time of the natural properties of sound as evident in the overtone series. By a similar token, Schoenberg believed that the human listener is only capable of perceiving ordered sound: 'The adaptation of what the artist really wants to present, its reduction to fit the boundaries of form, of artistic form, is necessary only because of our inability to grasp the undefined and unordered.'⁵⁹ Given that formal order is obtained through harmonic structure, it becomes Schoenberg's task to show how a unified piece of music is retraceable to a single unifying principle, to show how 'the relation of all events to a fundamental tone is made possible'.⁶⁰

What makes these approaches—Schenker's and Schoenberg's, as well as those of Meyer, Lerdahl and Jackendoff, *et al.*—fail as scientific theories is, Cook claims, that the elements of the postulated structures to a large extent lack perceptual significance. The notational categories of the analysed scores, from which musical experiences are to be deduced, constitute 'no more than an approximate guide which misrepresents or

⁵⁶ Quoted from N. Cook. *Ibid*, p.133f.

⁵⁷ N. Cook. *A Guide to Musical Analysis*, p.224.

⁵⁸ Quoted from N. Cook, *Music Analysis and the Listener*, p.130.

⁵⁹ Quoted from N. Cook, *Ibid*, p.25.

⁶⁰ Quoted from N. Cook, *Ibid*, p.28.

omits information crucial for the effect the music makes on the listener'.⁶¹ As psychological experiments show, perception of pitch varies with timbral and dynamical, as well as contextual and intonational, factors within the specific pieces.⁶² Hence, Cook continues, 'To perform detailed, deductive analysis upon categories representing the actual values of musical pitches and other musical parameters in so approximate a manner, therefore, must result in analytical models owing more to the formal conventions of notation than to either the physical or the psychological properties of the music in question'.⁶³

Moreover, as Cook also points out, it seems to be the case that listeners in general do not hear formal structures in music the way formal analyses would predict. Even the tonal form of a classical sonata is very likely to go unnoticed by a majority of listeners.⁶⁴ As one of Cook's own studies shows (and similar findings have been reported by Bengt Edlund), first-year college students in music, when confronted with pieces from the classical and Romantic periods, do not notice or pay any attention to versions that are tonally modified, thereby ending in a different key than the original versions (the listeners were exposed to both the original and the "false" versions).⁶⁵ The listeners, Cook says, were 'perceiving it not as a sonata but as a kind of extended rondo-like form, in which materials recur in various patterns but in which there is no overall formal closure'.⁶⁶ As a further example, several of the research findings which Lerdahl and Jackendoff refer to as support for their theory's claim about the hierarchical constraints on grouping (or segmentation) of musical sounds into coherent shapes or gestures, show nothing more than that both trained and untrained listeners alike group the sounds of music on the basis of such aurally salient criteria as change of texture, dynamics and register. That is, the listeners group the sounds of music on criteria that are in no sense specifically tonal or formal.⁶⁷ One should keep in mind Charles Rosen's observation on the formal aspects of Classicism here: 'The difference', according to Rosen, 'between the Baroque movement toward the dominant and the classical modulation is not only one of degree: the classical style *dramatizes* this movement—in other words, it becomes an event as well as a directional force.'⁶⁸

⁶¹ N. Cook. *Ibid.*, p.148.

⁶² See *Ibid.* pp.130f;137ff. for references.

⁶³ N. Cook. *Ibid.* p.149.

⁶⁴ "After all, tonal integration, though effortlessly reconstructable on paper, is often almost impossible to follow in the reality of music perception", C. Dahlhaus. *Nineteenth Century Music*, p.381. University of California Press, Berkeley and Los Angeles 1989.

⁶⁵ See N. Cook. "The Perception of Large-Scale Tonal Closure". *Music Perception*, vol. 5(2), 1987; "Musical Form and the listener", in *The Journal of Aesthetics and Art Criticism*, vol. 46, 1987; See also B. Edlund "Tonal Closure—Fact and/or Fiction" in *Proceedings from the Third Triennial ESCOM Conference*. Uppsala University, Uppsala 1997.

⁶⁶ N. Cook. *Music, Imagination, and Culture*, p.57. Clarendon Press, Oxford 1990.

⁶⁷ See N. Cook. "Perception: A Perspective from Music Theory", in *Musical Perceptions*. Ed. R. Aiello and J.A. Sloboda. Oxford University Press, New York 1994. The experiments referred to were conducted by Deliège, Serafine *et al.* and Clark and Krumhansl.

⁶⁸ C. Rosen. *The Classical Style*, p.70. Faber and Faber, London 1976. Italics added

Any sound event may be described in different ways, emphasizing different properties of it. And this relativism increases when we consider the proposed structural relationships between different sound events. For instance, a recent study of different “listener’s guides” found at least two exclusive ways of “correctly” understanding the relationship between the two themes, or thematic groups, of the sonata movement: either as one of ornamental contrast or as one of dramatic conflict. Whereas the first view regards the exposition as an area of stability, a stability disrupted only in the development, the second view locates destabilizing tension in the exposition.⁶⁹ In other words, the same music, the same sounds, can be understood and experienced in contrary and exclusive terms – in this case, whether a certain relationship is one of tension demanding resolution or not.⁷⁰ Thus language may identify and enhance our awareness of structural elements, and, equally important, *characterize the nature* of the structural relationships in question.

So instead of assuming, with the formal analyst, that the common function of musical sounds is to communicate structural relations between the well-defined denotata of precise notational categories, Cook argues that ‘the truth would appear to be more nearly the reverse: that is to say, the function of the notational categories is to communicate sonorous values whose precise determination is a matter of purely aural judgment.’⁷¹ What analysis actually boils down to is the creation of ‘an image that represents the sound as a structure’.⁷² Musical analysis presents a way of coherently conceiving, or imagining, heard sounds with the aid of formal structures. Thus Cook concludes that the effect of different analytical methods is not so much ‘to derive strict deductions from undeniable premises, as to persuade the listener to “hear” or “see” the music in a certain way’ – seduction rather than deduction.⁷³

⁶⁹ See P.J. Rabinowitz. “Chord and Discourse: Listening through the Written Word”, in *Music and Text: Critical Inquiries*. Ed. S.P. Scher. Cambridge University Press, Cambridge 1992. Works referred to which advocate the first position, W.J. Henderson. *What is Good Music? Suggestions to Persons Desiring to Cultivate a Taste in Musical Art*, New York 1899; H.E. Krehbiel. *How to Listen to Music: Hints and Suggestions to Untaught Lovers of the Art*, New York 1896; and the second position, R. Erickson. *The Structure of Music: A Listener’s Guide*, New York 1955; H.L. Kaufmann. *You Can Enjoy Music*, New York 1940.

⁷⁰ In philosophical terms the discussion may concern the characterization of dissonance as contradiction to consonance or as a ‘coming to be.’ See J. Hughes. “Idealist Thought and Music Theory in Nineteenth-Century Germany: K.C.F. Krause, Dissonance, and ‘Coming-to-be’”, in *International Review of the Aesthetics and Sociology of Music*, vol. 27(1) 1996.

⁷¹ N. Cook. *Music Analysis and the Listener*, p.18.

⁷² *Ibid.* p.208. In line with Cook’s claim that analytical methods provide us with, or rather prescribe, ways of imagining music (and that a musical culture is a way, or a set of ways, of doing so), Kendall Walton speaks of hearing the intermittently sounding pedal tone of the Prelude to Bach’s G-major Cello Suite as sounding continuously, and he refers to Joseph Kerman’s proposal that we hear the instruments in some of Beethoven’s late quartets (the *Heiliger Gedankensang* and the *Grosse Fuge*) as “outdoing” themselves. Walton even extends this idea to encompass Meyer’s “law of affect” (see further, ch. 24) by suggesting that our expectations of what will follow in music may also be imaginative. We make-believable expect that the music will follow a certain course, although we know, after many hearings, that it will not. See K.Walton. Listening with Imagination: Is Music Representational?, in *Journal of Aesthetics and Art Criticism*, vol. 52(1) 1994. This emphasis upon imagination and the fictional also bears some resemblance to Roger Scruton’s claim that in order to hear sounds as music we must metaphorically hear them as movement in a sounding space. Even though the normative is not as central in Walton’s account as it is in Scruton’s, it might be more apt to speak of metaphorical, rather than fictional, truths when considering music. See R. Scruton. “Understanding Music”, in *Ratio*, vol. 25(2) 1983.

⁷³ *Ibid.* p.175.

In line with Cook, I therefore suggest that the musical score be seen *not* as a strictly notational system, the identifying structure of which is revealed by the analyst (since the characters of the score are semantically ambiguous); rather, the analyst wants us to hear the pitch constellations of the musical sounds as metaphorically, or even metonymically, *exemplifying* signs, between which formal relations hold (somewhat like Picasso replying to the complaint that one of his portraits did not look like the model, “don’t worry, it will!”).⁷⁴ Given the multiplicity and ambiguities of formal analyses that would supply us with identifications of musical works, the musical work is therefore more likely to be found in the class of events that exemplify the verbal label “musical work such and such”. This, of course, is simply another way of stating the hypothesis that language is a necessary condition for music (conceived as object), for which I shall present a more extensive argument in chapter seventeen. I now continue the criticism of so-called objective analysis by claiming that it implies what philosophers call *scepticism of the senses*.

Chapter six

Music and scepticism of the senses

The fact that Cook dismisses the scientific pretensions of formal analysis does not mean that he rules out the possibility of finding the psychologically relevant categories necessary for deducing contents of musical experiences. His only reservation is that it would be ‘difficult’ and that it would be ‘hard to imagine that such a microscopic involvement in musical sound would ever allow of an ascent to the larger scale of musical form’.⁷⁵ For Cook, nomological deduction still seems within reach (at least in principle), though he does not say how such a theory about musical experiences would be confirmed. What Cook does not consider is that scientific constraints will not primarily concern the nature or “size” of the structural categories. Whether the elements of music are said to be retraceable to a notational score or be found in a spectrogram of the sound waves, or to an EEG or PET graph showing the neural activity of a listening subject is irrelevant, I claim, as long as we do not know how to validate the deduction. Even if we could identify all the experientially significant components of sound, I insist that the ultimate verdict on the outcome of such a deduction be the verbal report of the listener. Here is my argument.

Imagine a microscopic involvement (to use Cook’s phrase) in music, where we have access to the pattern of sensory firings of the listener’s

⁷⁴ See N. Goodman. *Op cit*.

⁷⁵ N. Cook. *Music Analysis and the Listener*, p.18. Cf, however, *A Guide to Musical Analysis*, p.228, where Cook explicitly rejects such a view.

nerve endings at the surface of the auditory system, somewhere inside the ear. This seems to me as objective as can be. If we could overcome all practical obstacles and observe the pattern of sensory firings when the subject heard a particular piece of music, could we thereby also determine the subject's listening experience? The scientific problem occurs when we want to affirm our hypotheses. Our theory may hypothesize that when a listener hears a triplet, that is, when he or she is exposed to a triplet and reports experiencing one, he or she will display the neural pattern y (this is the pattern a triplet causes on our own sensory surface). We expose the listener to a triplet and ask what he or she hears. The answer we get is *triplet*, all right; however, our neuron-pattern detector does not show any pattern y , but the pattern x . What are we then to say—with scientific certainty—about the content of the listener's experience?

According to the present view, regarding musical analysis as equivalent to deduction of experiential content would be something of a category mistake. A musical analysis may at most yield an empirical hypothesis open to verification or falsification. This might seem a trivial remark, since after all the latter seems to be the conventional approach in the psychology of music. Neither have I considered the possibility of the aesthetic assumptions of these theories being replaced by a poetic one—after all, analysis to a considerable extent grew out of compositional treatises.⁷⁶ However, if we take a closer look at Lerdahl and Jackendoff's theory (which has been widely influential among a host of scholars and which will be further discussed in part two), we find at the heart of their theory just the kind of confusion that might imply scepticism of the senses.

Lerdahl and Jackendoff's *Generative Theory of Tonal Music* aims at 'a formal description of the musical intuitions of a listener who is experienced in a musical idiom',⁷⁷ more specifically the tonal idiom of Western classical music. The problem here is the notion of musical "intuition." An intuition, according to the *GTTM*, is the 'unconscious knowledge' that enables the listener 'to organize and make coherent the surface patterns of pitch, attack, duration, intensity, timbre, and so forth'.⁷⁸ Because this knowledge 'is to a great extent unconscious, much of it cannot be transmitted by direct instruction'.⁷⁹ We can compare this notion of intuition with our ability to speak a language. Though one may be a fluent speaker of a language, one need not know anything about the specific grammar of the language. Rather, the grammar may be seen as a way of accounting for the linguistic competence that a competent speaker has (though grammars were not originally conceived to do this). Similarly

⁷⁶ See I. Bent and W. Drabkin. *Analysis*. Macmillan Press, Basingstoke and London 1987. However, already on the first page the authors propose that 'Underlying all aspects of analysis as an activity is the fundamental point of contact between mind and musical sound, namely musical perception'.

⁷⁷ F. Lerdahl and R. Jackendoff. *A Generative Theory of Tonal Music*, p.1. The MIT Press, Cambridge (Mass.) 1983. Italics omitted.

⁷⁸ *Ibid*, p3.

⁷⁹ *Ibid*. p.4.

we have musical intuitions that we need not know anything about although we may be competent listeners of music. The intuitions thus account for our musical competence, and Lerdahl and Jackendoff's theory is an attempt to explicate these assumed intuitions in terms of an elaborate grammar.

Nevertheless, when the authors describe how 'in the course of developing the theory we discovered examples for which our musical intuitions did not conform to the predictions of our then-current set of rules',⁸⁰ one has reason to wonder what they really mean by the notion of intuition—here it seems either that an intuition is some sort of musical experience, or, contrarily, that musical intuitions, as a set of grammatical rules, are something that the experienced listener does have a grasp of, in which case they indeed should also be part of the musical experience (there is no doubt that the authors are experienced in the tonal idiom). The problem is this: if musical intuitions are both experiential and verbally untransmittable (because they are unconscious) the *GTTM* becomes a theory about something of which neither cause (soundwaves, sensory firings, *etc.*) nor effect (musical experience) could be observed by the analyst. If neither cause nor effect is available to the theorist, it becomes hard to see how the theory could ever be verified or falsified. To deduce the contents of a trained listener's musical experience from the score according to the rules of the *GTTM*, on the premise that the grammar describes unobservable innate principles of a musical faculty in our minds, as the authors sometimes seem to do,⁸¹ is to leave the door wide open for scepticism.

It may seem that this is simply a methodological issue, but as I will argue, it is not: it is a matter of principles rather than practice. Above all, a devaluation of listener's reports when it comes to musical experiences will in the end lead to the scepticist position where we could be wrong in all our beliefs about our own musical experiences. The absurdity of such a position may seem obvious to most readers and may also be what Cook has in mind when he says at the end of his inquiry, that to "delete the listener" is to cease talking about music at all.⁸² However, the epistemological role of the listener's own report is not at all obvious when encountering the major music theories of the twentieth century, which, as Cook shows, do pertain to musical experiences.

⁸⁰ *Ibid.* p.xii.

⁸¹ Cf. R. Jackendoff. *Consciousness and the Computational Mind*, p.213ff. The MIT Press, Cambridge (Mass.) 1987.

⁸² N. Cook. *Music Analysis and the Listener*, p.156.

Chapter seven

Ideology and the webs of scientific belief

The previous chapter concluded with the hypothesis that in deciding on the aesthetically or perceptually relevant aspects of music, objective analyses of musical structure have no epistemological priority over subjective reports about how the music is experienced, lest we admit scepticism. In the following chapters I will show how scientific statements are part of our larger “webs of belief”, and that what we regard as truths is very much dependent on the total make-up of these webs of belief. In chapter seven I argue that there can be no scientific method beyond interpretation to determine what sentences held true by a speaker actually “mean” (a further argument against scepticism). In chapter eight we shall see how the very act of interpretation involves what I call ideological “subjection”. The two chapters that follow (nine and ten) then show how interpretation is “narratologically” structured, and how emotions function in our interpretations of other peoples’ actions (including speech-acts). Once we have made it this far we will have a thorough understanding of the notions of *ideology* (“music is always ideological”) and *verbal communication* (“language is a necessary condition for music”). We shall then see how all this affects our musical experiences.

Now, it may already have become clear that the epistemological premises of the present thesis differ not only from those of Lerdahl and Jackendoff (and much of the present “cognitivist” camp), but also from positions such as that of Adorno. There is no place to go into details of these different kinds of approaches, but a brief mention of Adorno’s can illuminate the difference.

Concerning Adorno, whereas I have overtly stated a thesis, the truth of which will be argued for, theory construction is regarded by Adorno as an instrument of force enabling totalitarian political systems—which for a world that has experienced Auschwitz and Hiroshima is perhaps the strongest reason for a rejection of any truth claims. Instead Adorno attempts to supersede theorizing by a kind of parasystematic discussion which approaches its thematics beating about the bush, as it were. By presenting constellations of diverging fragments rather than fully fledged arguments, the analysed objects may, in his view, preserve their individual characteristics, which traditional theorizing otherwise tends to reduce by subsuming them under general categories.⁸³

Of course, I do not subscribe to any absolutist view according to which there could be statements whose truths and meanings are determined independently of how they are understood and interpreted by ordinary language speakers, or that there are truths somehow residing in the objects and entities of the world, ready for the philosopher or scientist to

⁸³ See T.W. Adorno. “The Actuality of Philosophy,” in *Telos*, vol 31 1977.

discover (if anyone ever held such a view).⁸⁴ On the contrary, a certain amount of relativism will be accepted. The pragmatic dictum that has encouraged this work holds that theories are underdetermined by the totality of available empirical data, meaning roughly that two contradictory theories may be supported by the same evidence.

That theories of whatever kind are underdetermined is a claim made most notably by Willard Quine in a paper called *Two Dogmas of Empiricism*.⁸⁵ The title refers to the distinction between so called “analytic” and “synthetic” statements. A statement is said to be analytic when its truth is determined solely by its meaning, whereas a synthetic statement depends for its truth both on its meaning and the way the world is. Quine’s disapproval of the distinction springs from the difficulties in unambiguously explicating analyticity. Referring to the synonymy (or sameness of meaning) of terms in a statement such as “All chordeophones are string instruments” as a way of explaining analyticity only transfers the problem of explication to synonymy. And saying that “chordeophone” is defined as “string instrument” would be to put the cart before the horse since definitions depend on synonymies, rather than *vice versa*.

The truth is rather that there are no analytic statements whose truth depends solely on their meaning. The distinction between analytic and synthetic statements is an empiricist dogma (‘a metaphysical article of faith’), Quine claims, and it goes hand in hand with a second one: semantic reductionism. Semantic reductionism states that any synthetic statement that is not about a directly observable fact or an ‘immediate experience’ of an observable fact should be reducible to such an observation statement. A statement such as “The dominant is resolved,” if it is to count as a scientific statement in an analysis, should be reducible to statements about observable pitch constellations (and the analytic rules of functional harmony). So while the first dogma claims that there are meaningful statements which are devoid of empirical content and whose truths depend solely on language, this second dogma claims that the truth of non-observational synthetic statements must be reducible to simple observation sentences (if they cannot be so reduced they must be rejected as non-sensical).

Here Quine retorts that we cannot look at single statements in isolation to find their empirical content; instead we must look at the whole of language and the ways statements interrelate. Scientific theories are but a more explicit and formalized part of man’s common-sense theories and world views. This web of belief forms a more or less coherent system, a ‘conceptual scheme’, where observational statements and theoretical statements cannot be separated from each other without stripping them of much of their sense. On the other hand, a logical consequence of this thesis is that it is always possible to stick to the truth of a particular statement as

⁸⁴ Cf. B. Allen. *Truth in Philosophy*. Harvard University Press, Cambridge (Mass.) 1993.

⁸⁵ W.V.O. Quine. “Two Dogmas of Empiricism”, in *The Philosophical Review*, vol. 60(1) 1951. The musical examples are mine, not Quine’s.

long as we are willing to give up the truth of others. The truth of our theories is underdetermined by empirical data. John Cage's 4'33" may serve as an example. Four minutes and thirty three seconds of tacet. Is 4'33" really a piece of music? Cage says it is—4'33" is truly a piece of music—and that we must revise our ideas about music to include it.

But if we insist that music is, or necessarily involves, tonally moving forms or organized sounds we will simply have to reject Cage's venture and regard it as a philosopher's pun, or a madman's paucity of proper sense. What counts in the end is not whether 4'33" "really" is a piece of music or not, but whether the claim, with all its implications, coheres with enough of the rest of our theories about the world (exactly where the enough-of boundary is to be drawn in the end is another question; nobody's web of belief is likely to be wholly consistent through and through). This is how Quine formulates his point:

The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. ... A conflict with experience at the periphery occasions readjustments in the interior of the field. ... Re-evaluation of some statements entails re-evaluation of others, because of their logical interconnections—the logical laws being in turn simply certain further statements of the system, certain further elements of the field. ... But the total field is so underdetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to reevaluate in the light of any single contrary experience. ... If this view is right, it is misleading to speak of the empirical content of an individual statement—especially if it is a statement at all remote from the experiential periphery of the field. Furthermore it becomes folly to seek a boundary between synthetic statements, which hold contingently of experience, and analytic statements, which hold come what may. Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision. Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and the shift whereby Kepler superseded Ptolemy, or Einstein Newton, or Darwin Aristotle?⁸⁶

In sum, then, there can be no fact of the matter determining which sentences are true and which are false in advance of their use by speakers in a "live" situation. On the other hand, the systematic demand that the truth or falsity of any single statement cohere with the rest of a speaker's or interpreter's beliefs rules out total relativism, since what is said will not make much sense taken in isolation. We all know from our daily lives that people who are inconsistent in their everyday talk are unpredictable and therefore often dismissed as either untrustworthy or out of their minds (or

⁸⁶ *Ibid.*

both). Concerning moral statements, we would not call an imperative that we ought to do such and such in a certain situation a moral statement unless the person uttering it would also admit an obligation to do the same, were he or she in the same situation (do unto others as you want them to do unto you).⁸⁷ On a larger scale, when Quine says that the physical objects of science are epistemologically comparable to the gods of Homer, that the difference is one of degree and not in kind, this does not mean that one can unproblematically hover between both and choose whatever suits one's present situation. This is so because any belief is integrated in larger systems of beliefs likely to contradict each other at a rather elementary level, which will lead to inconsistency and tension as time goes by. Quine says he chooses 'the myth of physical objects' of practical reasons, because 'it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience' (a structure, Adorno would add, particularly apt for large-scale mass murder).

Chapter eight

A third dogma of empiricism – the ethnomusicologist's rebuttal

Scientific theories are but a more explicit and formalized part of our common-sense theories and world views ('We are working up our science from infancy onward').⁸⁸ The truth of scientific statements cannot be analysed in terms of the analytic-synthetic distinction. Truth is underdetermined by empirical evidence. That our conceptual schemes are in fact to a large extent structured as theories has also been argued in developmental psychology by showing that even the preverbal child's cognitive capacities are governed by coherence, explanatory and predictive force, as well as paradigmatic shifts.⁸⁹ However, theory construction is but one aspect of our capacity for coming to grips with the world. Other strategies that have been proposed in addition are metaphor and narrative (to which we shall return below).⁹⁰ Furthermore, there are strong indications that our conceptual schemes do not function as completely consistent wholes; rather they should be viewed as loosely interconnected "fragments" of memory, where each internally consistent fragment may concern a distinctive topic or thematics.⁹¹

⁸⁷ See R.M. Hare. *The Language of Morals*. Clarendon Press, Oxford 1954.

⁸⁸ W.V. Quine. *The Roots of Reference*, p.138. Open Court, La Salle (Ill.) 1974.

⁸⁹ A. Gopnik and A. Meltzoff. *Words, Thoughts and Theories*. The MIT Press, Cambridge (Mass.) 1997.

⁹⁰ Cf. L.O. Mink. "Narrative Form as Cognitive Instrument", in *The Writing of History: Literary Form and Historical Understanding*. The University of Wisconsin Press, Madison 1978.

⁹¹ For a discussion of different psychological models, see M. Martin. "On the Induction of Mood", in *Clinical Psychology Review*, vol. 10 1990. See further G.V. Jones. "Fragment and Schema Models for Recall", in *Memory*

Now the issue in this chapter is not the exact modelling of our conceptual schemes, but to decide whether Quine really manages to avoid scepticism. Before we can do this we must take a look at another line of argument for the notion of underdetermination, an argument that focuses on the conditions of our everyday linguistic behavior rather than on scientific discourse. Imagine a field linguist, or, more suitable for our present purpose, an ethnomusicologist facing an unknown culture. Before describing the role music plays in this society, the ethnomusicologist must learn to communicate verbally with the informants. The ethnomusicologist's first job is thus to translate as many musical terms as is possible from this completely foreign language into the ethnomusicologist's own.⁹² Is such a project at all possible? Quine thinks it is. We need not know anything about the language in advance but can succeed in communicating with the foreign musicians and listeners in a Robinson Crusoe-and-Man Friday fashion and slowly build up a musicological vocabulary of the unknown language. What the ethnomusicologist must do to get along with his work is to try, from scratch, to formulate hypotheses about the translations of the utterances heard, calibrating these with observable phenomena, and then, like in experimental science, checking the hypothesized translations against repeated observation.⁹³ Only thereafter can the ethnomusicologist start to form hypotheses about more theoretical, non-observational, statements localizing them in the more central parts of the conceptual web. However, there is a great deal of latitude for alternative translations as long as the translated sentences form a fairly consistent set. Not only may theoretical sentences relate variously to observation sentences; the way the latter are decomposed into referential and non-referential terms (the nodal points that tie observation sentences and theoretical sentences together) is also underdetermined by evidence.

How, then, are the hypotheses to be verified? Hypotheses about theoretical statements are checked with regard to their relations to observational statements, as to how well they cohere with the latter. Hypotheses about observational statements, on the other hand, are checked by asking yes-or-no questions about commonly observable phenomena, in what one takes to be the foreign language. This is the only way for the ethnomusicologist to empirically test the observational hypotheses in the field. Assent or dissent to queries is regarded by Quine as observable conditioned behavior and is therefore the only evidence the ethnomusicologist can rely on.⁹⁴ But it is important to note that this is only a practical limitation on the part of the ethnomusicologist. Theoretically

and Cognition, vol. 12 1984; and D.E. Broadbent. "The Maltese Cross: A New Simplistic Model for Memory", in *Behavioural and Brain Sciences*, vol. 7 1984.

⁹² Cf. W.V.O. Quine. *Word and Object*. The MIT Press, Cambridge (Mass.) 1960. In having to translate only a musical vocabulary, the ethnomusicologist's job is quantitatively less than that of Quine's field linguist, who has to translate the entire language, but they will both face the same principal obstacles.

⁹³ See *Ibid.* p.28.

⁹⁴ See *Ibid.* p.29f.

(at least), it would be possible for the ethnomusicologist to gain evidence for his or her hypotheses by establishing the causal relationships that hold between what the native says, the way his or her sensory receptors are triggered and commonly observable phenomena.

Scientific theories are couched in language and the evidence for their claims to truth are to be found in the causal relations between sensory stimulation and the observation sentences used, the point where the fabric of beliefs impinges on the edge of experience. Each observation sentence, therefore, must be 'firmly associated' with stimulation of the right sort.⁹⁵ For instance, the statement "Lo, a triplet!", would have to be nomologically related to the specific pattern of stimulation on the eardrum of the speaker. Only those sentences with the proper causal connections would count as observation sentences. Although he differs from earlier empiricists in his view on what makes statements true, Quine remains within tradition in his ambition of seeking evidence for the truth of the observation sentences, those sentences that are the translator's entering wedge to the foreign language. We shall therefore see how Quine's pursuit of evidence leads him right into the troubles of scepticism.

The case against Quine has been formulated most strongly by one of his followers, Donald Davidson. According to Davidson, the problem with Quine's view resides in the problematic distinction between a theory, or language, and an uninterpreted content (the latter of which in Quine's case is supplied by stimulation of sensory nerve-endings; the distinction could also be put in terms of cognition, that is, concepts, thought and the like, and perception). If this division is admitted, the translation of a foreign observational term into "Lo, a triplet!" is correct if it is connected with a sensory pattern that is identical between speaker and translator. However, Davidson claims, this does not rule out the possibility that identical patterns may be caused by different objects in the world. And, by the same token, the same object may cause dissimilar sensory patterns in different individuals. Davidson mentions deafness, astigmatism and more fantastic examples like brains in vats as conditions that may ensue in such situations.⁹⁶

To see the serious consequences, consider the following. When the native listener is exposed to a triplet and reacts to it in a consistent way by distinguishing it from, say, an eight note and two sixteenth notes pattern, he or she may as a result of some sensory idiosyncrasy very well have the same pattern of stimulation that the ethnomusicologist would have were an eight note and two sixteenth notes played. Had the ethnomusicologist access to this evidence (the microscopic level envisioned by Cook) and were he or she to rely on it, he or she would have to reinterpret it as "eight note and two sixteenth notes," although only a triplet was heard by him or

⁹⁵ W.V. Quine. *Pursuit of Truth. Revised Edition*, p.3. Harvard University Press, Cambridge (Mass.) and London 1992.

⁹⁶ See D. Davidson. "Meaning, Truth and Evidence", in *Perspectives on Quine*. Ed. Barrett and Gibson. Oxford 1990.

her (perhaps timbral confusions are easier to imagine, but the problem is the same). If such discrepancies were systematically multiplied, and we insisted that neural patterns determined the content of our sensory experiences, the ethnomusicologist would have strong reason to doubt his or her senses.

Providing evidence for assented observation sentences through the establishment of fixed relationships between language and sensation is the ultimate project for an empiricist science. And it is only through such relationships that any strictly objective theory about musical experiences could get off the ground. Only through the establishment of fixed relationships between the observational parts of our conceptual schemes and the ways our senses are stimulated would it be possible to tell, with irrefutable empiricist certainty, what experience of music a certain listener would have on a certain occasion. What speaks against such an account of knowledge is the scepticist conclusion it entails, namely, that we would have to 'allow that a great many—perhaps most—of the sentences we hold to be true may in fact be false'.⁹⁷

Now the objection might be made that no musical theories refer to such neural evidence, and thus the problem of scepticism does not arise. However, if a purportedly scientific and objective analysis of a piece of music resulted in the claim that the aesthetically relevant aspects of the music were such and such, and an experienced listener—judged so by some non-scientific standard—or even a musical expert (to use Adorno's term) would insist that he or she did not experience these aspects but something completely different, should we then have to disqualify the listener as unmusical, by *scientific* standards? Although some hard-core analysts might not hesitate to do so, it should be quite obvious that a scepticist view is counter to most of our basic intuitions.

So what shall we recommend to the ethnomusicologist (or any other musicologist) then? Following the path opened here, the only possibility is to interpret the utterances of a listener as beliefs about the music heard (which is what the ethnomusicologist in all likelihood does already). In Davidson's view, the only access we have to the semantic relations between another speaker's sentences is attending to the speaker's attitudes towards his or her own sentences. While Quine regarded assent or dissent as objectively observable behavior, Davidson takes assent or dissent as expressions of belief, interpreted as such by the interrogator. An assent to a query is an expression of the attitude to the queried sentence that the sentence is true. To hold a sentence true is to believe in its content, or meaning. Any hearer, or interpreter (rather than translator), in Davidson's view, is capable of intuitively interpreting an utterance heard as a sentence held true, that is, as an expression of a belief about a commonly observed phenomenon, and this observed attitude (the truth holding) towards the

⁹⁷ D. Davidson. "A Coherence Theory of Truth and Knowledge", in *Truth and Interpretation. Perspectives on the Philosophy of Donald Davidson*. Ed. E. LePore. Basil Blackwell Ltd, Oxford 1986.

sentence constrains subsequent interpretation of other sentences. Holding a sentence true 'is an attitude an interpreter may plausibly be taken to be able to identify before he can interpret, since he may know that a person intends to express a truth in uttering a sentence without having any idea of *what truth*'.⁹⁸

Understood as a sort of hermeneutic primitive, the attitude of holding true is capable of guiding interpretation in that assigning the predicate true to a sentence enables a decomposition of the sentence into logical constants and referential terms.⁹⁹ It thus imposes a certain amount of logical consistency as well as causal relatedness to a commonly observable world on the speaker's utterances. But considering any definitive evidence whatsoever for the beliefs thereby interpreted, that is, sentences held true, Davidson is negative. Not only is the exact constitution of sensory receptors bound to vary between different subjects; so, even more, are the individual stimulations that would have to count as evidence for one and the same subject. Neither does anybody have access to the kind of evidence Quine advocates. But even if we did have such evidence, even if we really had access to another person's sensory stimulations and this person still did not believe that he or she had the sensation our evidence tells us that the person has, who should we trust: the speaker or our access to the speaker's sensation?

We seem to be facing a dilemma. Either one follows Quine in the search for empiricist evidence and gets the sceptic's mad scientist as companion; or one opts for a truth-based theory of interpretation along Davidson's lines but has to do without any ultimate evidence for the belief that one's own beliefs, as well as those of others, are largely true. But this is not a real dilemma, Davidson says. If speakers are interpreted along the lines described above, 'it is bootless for someone to ask for *further* evidence; that can only add to his [*i.e.* the interpreter's] stock of [previous] beliefs'.¹⁰⁰ We have and constantly form beliefs about the world, but there can be no further evidence for our beliefs than further beliefs. Our sensory receptors are causal intermediaries between the objects of the world and our beliefs about them (and as such they are not infallible), but primarily our beliefs are about phenomena, not sensations. 'What stands in the way of global scepticism of the senses', Davidson says, 'is the fact that we must, in the plainest and methodologically most basic cases, take the objects of a belief to be the causes of that belief. And what we, as interpreters, must take them to be is what they in fact are. Communication begins where causes

⁹⁸ D. Davidson. "Radical Interpretation", in *Inquiries into Truth and Interpretation*. Oxford University Press, Oxford 1984.

⁹⁹ See *Ibid.* p.134; *passim*. Davidson proposes a "reversal" of Alfred Tarski's semantic theory, the latter showing how an infinite amount of true sentences can be generated by a finite number of rules applied to a finite stock of fixed referential terms serving as axioms, see A. Tarski. "The Semantic Conception of Truth", in *Philosophy and Phenomenological Research*, vol. 4/1943-44.

¹⁰⁰ D. Davidson. "A Coherence Theory of Truth and Knowledge".

converge: your utterance means what mine does if belief in its truth is systematically caused by the same events and objects.¹⁰¹

The evidence available to an interpreter for the truth of a sentence, if spelled out, would be other sentences of the form “The native listener holds true the utterance ‘Gitarristen spelar ett solo’ on Friday night when the guitar player is playing a solo” (we imagine the interpreter is doing field research in Sweden). But why should we assume in advance that the speaker is right? The guitar player might just be accompanying a keyboard solo, or it might just be the bass player showing off. What justifies this procedure, Davidson claims, ‘is the fact that disagreement and agreement alike are intelligible only against the background of massive agreement’.¹⁰² It is only against a background of interpreted true beliefs that a mistake or a false belief on the part of the speaker would make any sense: ‘If we cannot find a way to interpret the utterances and other behaviour of a creature as revealing a set of beliefs largely consistent and true by our standards, we have no reason to count that creature as rational, as having beliefs, or as saying anything’.¹⁰³

This strategy has been called the principle of charity, and it is what ‘endows the speaker with a modicum of logical truth [and] a degree of true belief about the world’.¹⁰⁴ An important consequence of this principle is that any appeal to an extreme relativism regarding knowledge is also bound to fail. Whether the claim is for cultural relativism, that is, the idea that the conceptual scheme of a different culture could be so different in its structuring of sensory givens that it would be theoretically impossible for us to understand what speakers of that culture said, or whether it is for so-called incommensurable paradigms of scientific evolution,¹⁰⁵ one simply puts too heavy a load on the notion of interpretation. Nothing could be interpreted as a belief if it was not also possible in principle to ascribe a meaningful content to it. What we do when we understand somebody – at home or abroad – is not some sort of identification with the workings of the speaker’s brain (as some proponents of cognitive semantics seem to suggest),¹⁰⁶ enabling us to know exactly what the speakers of our own language means. ‘The trick is not to get yourself into some inner correspondence with your informants’, as Clifford Geertz said.¹⁰⁷ Exactly, in this context, becomes relative to interpretation, and interpretation is always underdetermined.

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

¹⁰³ D. Davidson. “Radical Interpretation”.

¹⁰⁴ D. Davidson. “Three Varieties of Knowledge”, in *A.J. Ayer. Memorial Essays*. Ed. A.P. Griffiths. Cambridge University Press, Cambridge 1991.

¹⁰⁵ Cf. T.S. Kuhn. *The Structure of Scientific Revolutions*, p.148. The University of Chicago Press, Chicago 1970.

¹⁰⁶ Eg. R. Jackendoff. *Semantics and Cognition*, p.30f. The MIT Press, Cambridge (Mass.) 1985. Jackendoff explains successful interpretation with reference to the ‘genetic inheritance’ and ‘similar cognitive structure’ of human beings.

¹⁰⁷ C. Geertz. “On the Nature of Anthropological Understanding”, in *Culture Theory. Essays on Mind, Self, and Emotion*. Ed. R.A. Schweder and R.A. LeVine. Cambridge University Press, Cambridge 1984.

Extreme relativism thus curiously seems to share a basic premise with empiricism, namely, that of a private conceptual scheme structuring the speaker's beliefs. While extreme relativism sees private conceptual schemes as a source for important (and incommensurable) individual and cultural idiosyncrasies, empiricism sees it as the cause of individual false beliefs that may thereby be dismissed as erroneous. But the idea of a conceptual scheme facing 'the tribunal of sensory experience',¹⁰⁸ as Quine has it, turns out to be nothing more than a 'third dogma' of empiricism, 'and perhaps the last', Davison says, 'for if we give it up it is not clear that there is anything distinctive left to call empiricism'.¹⁰⁹

Chapter nine

Sympathy and subjection

Beliefs condition the truth of beliefs (and are thus not of a kind that would transcend human capacities).¹¹⁰ But does this mean that we have restored some kind of Cartesian *a priori* truths? No—since Davidson retains the underdetermination thesis of Quine: the causes of belief are not the causes of a scientific standard,¹¹¹ but the causes it would be *rational* for the interpreter to infer, and beliefs about such causes are subject to underdetermination. Moreover, Davidson regards knowledge of one's own mind (that which Descartes aimed to base on the *a priori*) to be unavoidably tied up with knowledge of other minds and objective phenomena. Knowledge about the content of any mind, one's own or somebody else's, presupposes language, and language is a social phenomenon that depends on a commonly observable object world. 'The three sorts of knowledge form a tripod: if any leg were lost, no part would stand.'¹¹²

This triadic interrelatedness may also explain the inevitable intermingling of topics in the previous chapter, between on the one hand scientific knowledge of the world and, on the other, linguistic interpretation of other persons' beliefs. Nonetheless, if one finds Davidson's ideas plausible, there can be no hope for an empiricist science of sensory experiences, whether musical or otherwise. But, as was said earlier, this does not mean that just anything goes, not in musicology (which can still be *empirical*), nor otherwise.

¹⁰⁸ W.V.O. Quine. "Two Dogmas of Empiricism".

¹⁰⁹ D. Davidson. "On the Very Idea of a Conceptual Scheme," p.189. in *Inquiries into Truth and Interpretation*. Oxford University Press, Oxford 1984.

¹¹⁰ Cf. M. Dummett. "What is a Theory of Meaning (II)", in *Truth and Meaning*. Ed. G. Evans and J. McDowell. Clarendon Press, Oxford 1976.

¹¹¹ Cf. S. Kripke. "Naming and Necessity". In *Semantics of Natural Language*. Ed. G. Harman and D. Davidson. D. Reidel Publishing Co., Dordrecht 1972; Cf. also H. Putnam. "The Meaning of 'Meaning'", in *Mind, Language and Reality. Philosophical Papers, vol. 2*. Cambridge University Press, Cambridge 1975.

¹¹² D. Davidson. "Three Varieties of Knowledge".

What I will now try to do is show how language, or perhaps more accurately, interpretation, is always ideological—where ideology is taken in a broad sense to mean the sanctioning of certain actions at the expense of others. This will be done by first suggesting that interpretation to a greater or lesser extent always involves the subjection by the interpreter to a foreign set of beliefs (the speaker's), and then showing that this web of belief necessarily involves desires and attitudes, which is what motivates and rationalizes action. Whereas this chapter introduces the notions of sympathy and empathy, both of which (as we shall see in chapter thirty-five) are also operative in certain ways of experiencing music, the next chapter will introduce the notion of desire, which together with belief is a fundamental component of emotion. Emotion, needless to say, is a central component of music for many listeners. So whereas the purpose is first to show how language is always ideological since it is never value-neutral, we shall later see to what extent these values partake as elements in our emotional experiences of music (more specifically, I will show how both sympathy and empathy, in their respective ways, necessarily adds to certain emotional experiences).

But for the ideological aspect, let us recall the principle of charity. As Quine puts it, his translator 'will depend early and late on psychological conjectures as to what the native is likely to believe':

This policy ... will continue to operate beyond the observational level, deterring him from translating a native assertion into too glaring a falsehood. He will favor translations that ascribe beliefs to the native that stand to reason or are consonant with the native's observed way of life. But he will not cultivate these values at the cost of unduly complicating the structure to be ascribed to the native's grammar and semantics, for this again would be bad psychology ... Practical psychology is what sustains our radical translator all along the way, and the method of his psychology is empathy: he imagines himself in the native's situation as best he can.¹¹³

What I want to focus on is Quine's description of the principle of charity as a way of imagining oneself in another's situation as best one can (and this is equally important for interpretation). Let us retain Quine's naming of this aspect of the principle as *empathy*. The way empathy works is by enabling the interpreter to imagine the beliefs he or she would have were the interpreter in the speaker's shoes, and by subsequently ascribing these beliefs to the speaker. Empathy is a way of imagining oneself in an other person's situation. In addition, there is also an aspect of the principle of charity that we may call *sympathy*. In contrast to empathy, sympathy involves, not the imagination of the beliefs one would have in another's situation, but the imagining of a different set of plausible beliefs than oneself would have in the other's situation (social psychology makes a similar distinction with a somewhat different terminology when discussing role-taking, whereas ethnography has its "thick descriptions"

¹¹³ W.V. Quine. *Pursuit of Truth*. p.46.

of the other).¹¹⁴ Sympathy is like imagining oneself being another, not merely being in another situation; it is intimating rather than projecting, an erasing of distance.¹¹⁵ (Whether these aspects of the principle of charity require tacit theorizing or “off-line” simulation, I leave for others to decide.)¹¹⁶

The way I conceive of sympathy closely resembles the way it has been taken to function in fictional discourse. For instance, Wayne Booth has argued that for a novel to be fully appreciated, the beliefs of the reader must ‘coincide’ with the author’s beliefs. Booth makes the point that ‘In most works of any significance, we are made to admire or detest, to love or hate, or simply to approve or disapprove of at least one central character, and our interest in reading from page to page ... is inseparable from this emotional involvement.’¹¹⁷ We have to be emotionally engaged by the characters of the story, and if there is no central character (or at least an implied point of view) to sympathize with we will lose interest in the story and quit reading: ‘Regardless of my real beliefs and practices, I must subordinate my mind and heart to the book if I am to enjoy it to the full. The author creates, in short, an image of himself and another of his reader; he makes his reader as he makes his second self, and the most successful reading is one in which the created selves, author and reader, can find complete agreement.’¹¹⁸ In other words, the author offers a certain perspective, or point of view, regarding the presented topic which the reader is assumed to share.

That something similar is also presumed by Davidson’s account of interpretation is perhaps most obvious in his discussion of the *prior* and *passing theories* that both speaker and interpreter have to come up with in order for communication to be successful:

For the hearer, the prior theory expresses how he is prepared in advance to interpret an utterance of the speaker, while the passing theory is how he *does* interpret the utterance. For the speaker, the prior theory is what he *believes* the interpreter’s theory to be, while his passing theory is the theory he *intends* the interpreter to use. ... The passing theory is where, accident aside, agreement is greatest. As speaker and interpreter talk, their prior theories become more alike; so do their passing theories. The asymptote of agreement and understanding is reached when passing theories coincide.¹¹⁹

Although Davidson construes his model to argue that there will always be a difference in prior theories between speaker and interpreter,

¹¹⁴ See R.D. Enright and D.K. Lapsey. “Social role-taking: A review of the constructs, measures and measurement properties”, in *Review of Educational Research*, vol. 50 1980. Cf. also R. Grandy. “Reference, Meaning, and Belief”, in *The Journal of Philosophy*, vol. 70(14) 1973. C. Geertz. “Thick Description: Toward an Interpretive Theory of Culture” , in *The Interpretation of Cultures*. Basic Books, New York 1973.

¹¹⁵ Cf. L. Wispé. *The Psychology of Sympathy*, p.78ff. Plenum Press, New York 1991.

¹¹⁶ Cf. the debate in *Mental Simulation. Evaluations and Applications*. Ed. M. Davies and T. Stone. Blackwell Publishers Ltd., Oxford UK and Cambridge USA 1995.

¹¹⁷ W.C. Booth. *The Rhetoric of Fiction*, p.129f. The University of Chicago Press, Chicago and London 1961.

¹¹⁸ *Ibid*, p.138.

¹¹⁹ D. Davidson. “A Nice Derangement of Epitaphs”, in *Truth and Interpretation. Perspectives on the Philosophy of Donald Davidson*. Ed. E. LePore. Basil Blackwell Ltd, Oxford 1986.

irrespective of how well they know each other, and consequently, that there is 'no such thing as a language ... no such thing to be learned, mastered, or born with', that there is only 'the ability to converge on a passing theory from time to time',¹²⁰ the fact that he argues that speakers and interpreters always formulate prior theories before and while engaging in communicative intercourse, entails that empathy will only suffice as long as there is a good deal of sharing of beliefs by the interlocutors. When beliefs are not shared, communication will require an amount of sympathy, although one might not need to imagine being the other; one needs only to imagine what the other idiosyncratically believes. These differences in belief are most likely to be located in the interior of the web, and, as we shall see in the next chapter, they are largely a matter of *values* and *attitudes* to the various objects of belief.

Now, I do not take sympathy to be any more primitive an aspect of the principle of charity than empathy; rather the contrary. Research in developmental psychology shows that the ability of (what I call) sympathy is a matter of age, maturation and mental development.¹²¹ The point I wish to make is that we, as interpreters, must always, to a greater or lesser extent, imagine a foreign set of attitudes and beliefs. The more foreign the web to be inferred, the more sympathetic interpretation needed in place of empathy. However, as Davidson claims, 'most of the time prior theories will not be shared',¹²² requiring that the interpreter will have to infer a difference in beliefs and attitudes: the interpreter will have to sympathize, in order to come up with a passing theory. As our communicative experiences grow, so do our abilities for sympathetic theory construction, that is, the prior imagining of a set of beliefs and attitudes that is foreign to us. And to imagine such a different web of belief is to subject oneself to it, however tentatively.

Of course, there is also a constraint upon the speaker. The speaker cannot just go on speaking, taking for granted that the interpreter does all the communicative labor. As Davidson shows, both speaker and interpreter have to adjust their theories to succeed. Although 'communication does not demand that any two people speak the same language', the speaker has to have both the 'intention that it [what is said] will be interpreted in a certain way, and the expectation that it will be so interpreted'.¹²³ Thus, an important ideological issue is the question of who the speaker is, the authority assigned by the interpreter to the speaker, and so forth.¹²⁴ Nevertheless, there is an even more basic sense in which language is always ideological, as we will see in the next chapter.

¹²⁰ *Ibid.*

¹²¹ See M.L. Hoffman. "Interaction of Affect and Cognition in Empathy", in *Emotions, Cognition and Behavior*. Ed. C.E. Izard, J. Kagan and R.B. Zajonc. Cambridge University Press, Cambridge 1988.

¹²² D. Davidson. "A Nice Derangement of Epitaphs".

¹²³ *Ibid.*

¹²⁴ See. P. Bourdieu. "Vad vill det säga att tala. Det språkliga utbyttets ekonomi" Trans. P. Ölund *et al.*

Chapter ten

Belief, desire and the explanation of action

True beliefs, Davidson says, are 'an essential part of the scheme we all necessarily employ for understanding, criticizing, explaining, and predicting thought and action'.¹²⁵ To take a simple example, 'if a composer adds a contrabassoon to the orchestration of his new symphony with the intention of strengthening and giving color to the bass, he must have set some positive value on strengthening and giving color to the bass, and must believe that by adding a contrabassoon to the orchestra he has a chance of achieving his aesthetic end'.¹²⁶

What Davidson shows here is that explanation refers to two categories: belief (the bass lacks color, adding a bassoon will add color), and desire (the composer values a colored bass). Thus, by referring to the beliefs and desires (towards that which is positively valued) of the composer, the action is judged rational and thereby explained and understood. Had we prior information that the composer favored a strong and colorful bass and that he believed the adding of a contrabassoon was the only way of achieving the goal, we would even be able to predict the composer's action in advance with some certainty.

As in the case with sympathy, we can again find a parallel to fiction and narratology. Tzvetan Todorov points out that 'an ideal narrative begins with a stable situation which some force will perturb. From which results a state of disequilibrium; by the action of a force directed in a converse direction, the equilibrium is reestablished; the second equilibrium is quite similar to the first, but the two are not identical.'¹²⁷ In other words, the parts of a narrative describes an experienced lack or loss of a valuable thing or capacity (the stable situation perturbed by some force); the obstacles confronted in order to overcome this initial loss (converse action); and then the more or less happy outcome of the confrontation (reestablishment of equilibrium). This is the form, or scheme, for an "ideal" narrative, parts or the whole of which an actual narrative might instantiate.

The crucial point in the explanation of action, whether fictional or not, is that the reported experience of a lack or loss is a negative experience which gives rise to a desire for a different state of affairs to obtain. It is this desire that motivates and gives reason to the (converse) action, in addition with the belief of the agent that the action will bring about the desired state of affairs. Desire and belief makes the action goal-directed. If the story does not tell about any experienced lack or loss, if the first part is

¹²⁵ D. Davidson. "The Structure and Content of Truth", in *Journal of Philosophy*, vol. 87(6) 1990.

¹²⁶ D. Davidson. "A New Basis for Decision Theory", in *Theory and Decision*, vol. 18(1) 1985.

¹²⁷ T. Todorov. *Introduction to Poetics*, p.51. University of Minnesota Press, Minneapolis 1981.

missing, or is not otherwise implied, the action in the second part will seem arbitrary (since no goal can be inferred) and the outcome of the third part uncalled for. (This explanatory scheme may also explain the interpreter's interest in the unfolding of a text as a desire for narrative closure.)

Belief and desire thus rationally motivate action. When our beliefs about the world do not correspond to our desires, we have reason to act; the act is rationally motivated. Belief and desire can both be described as *propositional attitudes*. A propositional attitude is an attitude directed towards a "that-clause", a proposition. One may believe, desire, fear, doubt, *etc.* that the bass lacks color. We believe it is true, but desire it not; therefore we experience a slight fear (the première is approaching), which may be a rational motive for various types of actions. A proposition, on the other hand, is the predication of an attribute (color, say) to an object (bassoon).

A belief, then, is the attitude of holding true directed towards a proposition; it is true that the object possesses the attribute. Similarly, desires are also directed towards propositions. For instance, we desire the bass to be colorful. However, the term attitude is sometimes used in a slightly different way. In this other use, the term attitude resembles that of a desire, with the difference that whereas desires concern evaluated objects (events, states of affairs, *etc.*) in particular, attitudes concern them in general.¹²⁸ We desire particular objects and events, particular subjects and activities; our attitudes concern them in general. Attitudes can therefore be seen as dispositions to have certain desires.¹²⁹ An important consequence of this is that the notion of a web of belief has to give way to the notion of a web of beliefs *and* attitudes.

To recapitulate, if the present state of affairs is characterized by a negatively valued attribute, the holder of the belief is also likely to desire that a different object or state of affairs obtain. This other desired object or state of affairs is believed to possess an attribute that is *ideologically* opposite to the attribute assigned to the present state of affairs. An action believed by the agent to bring about this change in the state of affairs is thereby rationally motivated and sanctioned (given that conventional norms do not say otherwise). What this all shows is, first, that a web of beliefs and attitudes cannot be interpreted severed from values and desires, and second, that language is ideological in that it determines which actions we have at our disposal. The repertoire of possible beliefs, and by extension actions, is, as Davidson says, only 'as fine as our language provides'.¹³⁰

¹²⁸ See M. Fishbein. "An Investigation of the Relationships Between Beliefs About an Object and the Attitude Toward that Object", in *Human Relations*, vol. 16 1963.

¹²⁹ Attitudes should therefore not be confused with so-called desirability judgments, which are beliefs that certain states of affairs are desirable and which thus rationalize desires. See O.H. Green. *The Emotions: A Philosophical Theory*, p.69ff. Kluwer Academic Publishers, Dordrecht, Boston, London 1992.

¹³⁰ D. Davidson. "Philosophy as Psychology", in *Essays on Actions and Events*. Clarendon Press, Oxford 1980.

Chapter eleven

Emotion and the motivation of action

Language is ideological in that it requires compassionate subjection to a web of beliefs and attitudes, and in that it determines which actions we have at our disposal. In addition, we can see how these aspects are culturally constrained by paying attention to, as Davidson says, 'the ineluctable normative element in interpretation', that is, the element governing not only 'the norms of deduction, induction, reasoning about how to act, [but] even how to *feel* given the other attitudes and beliefs'.¹³¹ Put differently, we can now see how emotions function ideologically.

Reasons rationally motivate action, and therefore facilitate everyday explanation and prediction of action: 'without [a] divergence between the state of affairs believed to obtain and the state of affairs desired to obtain, there would be no rational motivation to action'.¹³² As Harvey Green has pointed out, when a desire and a belief are directed towards the same object, motivating a goal-directed action, this compound of belief and desire is identical to an emotion, or more precisely, a *negative* emotion.¹³³ When, on the contrary, belief renders a desire fulfilled, we experience a positive emotion and no action is motivated. In other words, when we fear, hope, suspect, or are happy, these attitudes can be seen as compounds of a belief and desire directed towards an identical object. Perhaps one can even say that interpretation as such is motivated by the negative emotion, or feeling of lack that one may sense when not knowing what the other knows. But is this really the kind of feeling we experience when we say we have an emotional experience of music?

Analysing emotions in terms of desire and belief renders emotions rational (and emotions rationalize actions). Emotions, because of the propositional attitudes they contain, are intentional; they are directed towards something, as when we are *afraid of the dog*, *disappointed by the performance*, *in love with the woman in the bar*, etc. Because of this "aboutness," emotions become open to rational criticism and may even disappear when our beliefs about the intended object change, for instance when we learn that the dog is harmless, are convinced that the performance was accurate, or get to know the woman in the bar a little closer. We can hereby distinguish emotions from moods, the latter of which are not open to rational criticism in the same way (an example of a mood state would be depression, which is usually described as lacking an obvious object).

¹³¹ D. Davidson. "A New Basis for Decision Theory". Italics added.

¹³² O.H. Green. *Op cit*, p.122.

¹³³ See *Ibid.* p.122.

But this object-directedness also makes emotions amenable to cultural manipulation. As Errol Bedford puts it, 'Emotion concepts ... are not purely psychological: they presuppose concepts of social relationships and institutions, and concepts belonging to systems of judgement, moral, aesthetic, and legal. In using emotion words we are able, therefore, to relate behaviour to the complex background in which it is enacted, and so to make human action intelligible'.¹³⁴ The emotions are intimately tied to cultural institutions, and the rights and duties that go along with them. To differentiate between, for instance, envy and jealousy, embarrassment and shame, or annoyance and indignation, one must learn which objects are conventionally related. To feel ashamed involves a responsibility on the emotive agent. One feels ashamed if one has done something one ought not to have done, whereas in the case of embarrassment, the fault may have been somebody else's. Crying from sorrow is but one more example of culturally regulated behavior (which may also say something about how girls and boys are socialized to behave and feel differently). With regard to the role played by desires and beliefs (about objects and events), this can be understood as a way of culturally determining our emotional responses to the world (we do not cry from remorse).

This not only means that there are culture-specific emotions, emotions that exist in one culture and not in another, but also that emotions may come and go over time in a culture, as is the case with the medieval emotion *accidie*.¹³⁵ Conversely, there are cases where emotions may seem similar between cultures with regard to their objects, but where the evaluations of having the emotion differs, for instance *metagu* among the Ifaluk in Micronesia,¹³⁶ and the Japanese feeling of *amae*.¹³⁷ While the Ifaluk *metagu* is a word that approximately describes fear, Japanese *amae* describes a feeling of subordination and dependence. The interesting point to note here is that while both these emotions would have a negative ring in European cultures, they are almost unequivocally positive in their home contexts. Not only the feelings, but the actions people perform in accordance with these emotions are positively sanctioned in Micronesia and Japan, while they are judged more or less negative in Europe.

So we can see that to facilitate communication and enhance communal ends, culture minimizes the discrepancy between the conceptual schemes of its members. One way of doing this is by providing norms for interpreting and reacting to the various kinds of situations that might occur in daily life. This involves both the determining of an object worthy of desire, and a normal (*i.e.* ideologically sanctioned) response pattern to the situation in which the object occurs.

¹³⁴ E. Bedford. "Emotions and Statements about Them", in *The Social Construction of Emotions*. Ed. R. Harré. Basil Blackwell, Oxford 1986. In addition to the articles in this volume, see also those in *Emotion and Social Change. Toward a New Psychohistory*. Ed. C.Z. Stearns and P.N. Stearns. Holmes and Meier, New York and London 1988; and *The Politics of Emotion*. Ed. C. Lutz and L. Abu-Lughod. Cambridge University Press, Cambridge 1990.

¹³⁵ R. Harré and R. Findlay-Jones. "Emotion Talk Across Time", in *The Social Construction of Emotions*.

¹³⁶ C. Lutz. "The Domain of Emotion Words on Ifaluk", *Ibid.*

¹³⁷ H. Morsbach and W.J. Tyler. "A Japanese Emotion", *Amae*", *Ibid.*

In thus being socially and culturally constructed, emotions have to be learned and it has been suggested that we become 'familiar with the vocabulary of emotion by association with *paradigm scenarios*, drawn first from our daily life as small children, later reinforced by the stories and fairy tales to which we are exposed, and, later still, supplemented and refined by literature and art.'¹³⁸ We may even say that culture supplies its members with a set of more or less preestablished behavioral roles, whereof the "grief role," has its conventional scenario, just as the "jealousy role" and the "revenge role," *etc.*, has theirs.¹³⁹

But to what extent does music partake in this ideological construction of emotion (and its sanctioning of certain kinds of action at the cost of others)? Are there any paradigm scenarios teaching us about the emotions to be heard in music? Are there any emotions at all in music? And if so, to what extent is language necessary?

Chapter twelve

Music as a language of emotions

In an interesting study by Anthony Newcomb he defines 'plot archetypes' in music as 'the complex series of actions and agencies (action-forces) toward which we [are] quite firmly directed by purely musical attributes and successions.'¹⁴⁰ Although he only identifies one such plot archetype – the strife towards 'renewed harmony to heal the wounds inflicted by mankind's alienation from nature', a progress from "'Arcadia forward to Elysium'"¹⁴¹ – which he regards as pertinent to both Schumann's Second and Mahler's Ninth Symphonies (as well as Beethoven's Fifth and Ninth), he emphasizes that the identification of such an archetype in music is not an extramusical matter, not 'something external to the musical happenings themselves', but rather something that appears from the 'interaction of formal paradigm, thematic character and recurrence, and plot archetype'.¹⁴²

The archetypal plot inherent in Mahler's Ninth, described by Newcomb as that 'of growth through to young adulthood – and of the inevitable hardening and toughening that comes with this process, the inevitable loss of gentle innocence and openness to love and the learning of self

¹³⁸ R. de Sousa. "The Rationality of Emotions", in *Dialogue*, vol. 19(1) 1979.

¹³⁹ See T.R. Sarbin. "Emotion and Act: Roles and Rhetoric", in *The Social Construction of Emotions*.

¹⁴⁰ A. Newcomb. "Action and Agency in Mahler's Ninth Symphony, Second Movement", in *Music and Meaning*. Ed. J. Robinson. Cornell University Press, Ithaca and London 1997.

¹⁴¹ M. Solomon. "Beethoven's Ninth Symphony: A Search for Order", in *19th-Century Music*, vol. 10(1) 1986.

Quoted in A. Newcomb. "Narrative Archetypes and Mahler's Ninth Symphony" in *Music and text: critical inquiries*. Solomon in his turn quotes Schiller.

¹⁴² A. Newcomb. *op cit*.

protective strategies that come with its storms and crises'¹⁴³—is thus a more complex matter of musical narration than that which we envisioned in chapter two, where a formal paradigm (the sonata form) articulated the thematic characters (the musical figures). Here, the plot archetype may even go against formal conventions: 'In fact, thematic character, evolution, and interaction outweigh architectural and tonal balance as carriers of formal shape, and hence of ideal meaning, in much music of the later nineteenth century.'¹⁴⁴

This, according to Newcomb, is one of the reasons that, for instance, a work such as Schumann's Second has been repudiated during the twentieth century as ill conceived. However, it was not so received during Schumann's lifetime, largely because

The conception of music as composed novel, as a psychologically true course of ideas, was and is an important avenue to the understanding of much nineteenth-century music: Beethoven's Fifth Symphony, for example, was so understood by at least some of its listeners from the outset.¹⁴⁵

The fact that Newcomb does not describe any other plot archetype than the above (though, as we have seen, Adorno ascribed a fundamental humanistic thematics to Beethoven's symphonies), and does not analyse its ideological significance should not be seen as a problem for the present view—that music may be ideological through its displaying paradigm scenarios or archetypal plots of emotional unfolding. A perhaps more serious obstacle is Newcomb's comment, that

it is important to realize that in music as in the other arts (verbal, filmic, literary, painterly) *aspects of agency are not continuously displayed, nor are aspects of narration*. Both are only intermittently operative. Even the most "expressive" music (to use a favorite nineteenth-century term for what I take to be music having clear elements of narration and agency) at times simply swirls or dreams or chugs along in its decorative function.¹⁴⁶

What this suggests is that ideological power through emotional expression would be a rather marginal affair in music, perhaps relevant only to parts of some of the romantic music of the nineteenth century (geographically limited to Europe and the United States). Though this may indeed be the case if we consider the elaborate plots that Newcomb speaks of, there is still a great deal of latitude for emotional characteristics in music on a more constrained basis. For instance, one may bring to mind Rosen's observation, when comparing Baroque and classical music, that

¹⁴³ *Ibid.* Compare this with the Kaluli metaphor mentioned earlier: in the rainforest environment, only persons who have overcome the softness of childhood and hardened can survive, just as melodies will only be heard if they are hard enough to *lift up over sound*.

¹⁴⁴ A. Newcomb. "Once More 'Between Absolute and Program Music': Schumann's Second Symphony", in *19th-Century Music*, vol. 7(3) 1984.

¹⁴⁵ A. Newcomb. *Ibid.*

¹⁴⁶ A. Newcomb. "Action and Agency in Mahler's Ninth Symphony, Second Movement".

the former 'acts as a dramatic image, not as a scenario'.¹⁴⁷ In other words, music may be expressive of emotions without being a 'syntactic art of dramatic movement'.¹⁴⁸ On the other hand, as Newcomb points out, the basis for narrative interpretation of music, the identification of a persistent theme, need not lie in the latter's tonal form, but may as well be located in its figurative character(s).

Peter Kivy has pointed out three ways by which music may be expressive of emotions.¹⁴⁹ First, music may be expressive by resembling passionate speech, that is, the music resembles the way we sound when under the influence of a certain emotion. Kivy refers to the first line of Monteverdi's *Arianna's Lament*, where Arianna declaims her apathy in a slowly falling melody line: *La-^{scia}-te-mi mo-ri-re!*¹⁵⁰

The second way for music to express passions is in virtue of more extensive passages to resemble expressive bodily behavior. Not only is slow rhythmic movement more expressive of sadness, so is fast more expressive of happiness. We tend to move slowly when we are sad, faster when happy; we tend to move abruptly when anxious, more foreseeable and regular when feeling secure and self-confident. This resemblance also holds for movement in tonal space:

The "rise" in pitch, like the raising of a physical body against gravity, requires at least in a great many of the most familiar cases increased energy. And the rise of pitch, both in natural organisms and machines betokens a rise in energy level. The faster the wings beat, the shriller the sound; likewise, the more energy expended, the higher the engines whine. The rise and fall, the ebb and flow of the musical line is by no means simply a function of its position on the printed or written page, to be seen and not heard. The languid fall of the oboe in the first Brandenburg is not simply a fall in virtue of starting at the top of the page and ending closer to the bottom. To claim that is to overlook the intimate relation of pitch to energy, and energy to motion.¹⁵¹

The third way, finally, by which music is expressive of emotions is by cultural convention. First, there is always the possibility for music to resemble speech or bodily behavior that in its turn is expressive by convention.¹⁵² More interesting, though, is the observation that music's

¹⁴⁷ C. Rosen. *Op cit*, p.70.

¹⁴⁸ *ibid*, p.49.

¹⁴⁹ According to Kivy, music does not express any passions at all; at most it is expressive of them. By this Kivy means that only living creatures have feelings and passions and therefore are the only ones who are capable of expressing them. Music can be expressive of passions only in the sense that a willow can be seen as weeping: it looks sad to us, and music may sound sad, or happy, or whatever, to us in very much the same way. Of, course, a composer or a musician may express his or her emotions through music, but this need not be noticed by any listener. What music expresses (what it is expressive of) is there irrespective of the state of the listener: What is expressed by music is in it "objectively" – that is, we can hear it without anybody having to feel it emotionally. However, when I use the term expression I mean the metaphorical exemplification of an emotional term. See N. Goodman. *Op cit*, p.85ff; M.C. Beardsley. "Understanding Music", in *On Criticizing Music. Philosophical Perspectives*. Ed. K. Price. The Johns Hopkins University Press, Baltimore and London 1981.

¹⁵⁰ P. Kivy. *Sound Sentiment: An Essay on the Musical Emotions*, p.20. Temple University Press, Philadelphia 1989.

¹⁵¹ *Ibid*. p.55.

¹⁵² See *Ibid*. p.85.

expressiveness may be found in different parameters. Kivy's example contrasts Western with Eastern conventions; Western music is said to focus more on vertical, harmonic, aspects while eastern music gives priority to horizontal, melodic aspects.¹⁵³ Here one may also assume that some cultures put more emphasis on rhythm, and others on timbre, *etc.* An example of harmonic expressivity can also exemplify how conventions may have an origin in natural likeness: why, Kivy asks, is the major triad expressive of happiness, and the minor of sadness? How can static chords come to express anything whatsoever? This is explained with reference to the musical history of the diminished triad. In classical and Baroque music the diminished triad had a conventional syntactic function that prescribed resolution to a more stable chord. In the music of Bach, for example, the diminished triad is often inserted beneath a resting point of the melodic line, but since the chord, by convention, has to be resolved, there is no feeling of secure rest, but of distracted restlessness. Similarly, the minor third demanded resolution by convention; it was dissonant, and thereby upset whatever joy or calm the melodic contour would imply.¹⁵⁴

However, according to Kivy, music can only be expressive of what he calls 'the garden-variety emotions, such as anger, joy, grief and the like'.¹⁵⁵ The garden-variety emotions are contrasted with so-called "'platonic attitudes,'" such as pride or respect'. While the latter are emotions that require a clear-cut object towards which they are directed, the former do not. We cannot be proud without knowing what we are proud of, whereas we can be happy or sad without knowing the reason why. As Kivy says, 'the garden-variety emotions do, as the Platonic attitudes do not, have *standard* behavioral responses'; 'the Platonic attitudes are "intellectual" emotions ... so there are no standard bodily manifestations of them'.¹⁵⁶ This distinction between garden-variety emotions and Platonic attitudes coincides with a more common distinction between basic and subordinate levels of emotion categories (the distinction between basic and subordinate will be explained below).¹⁵⁷ Although there is some dispute about the notion of biologically and behaviorally basic emotions,¹⁵⁸ their possible existence does not rule out that music may be expressive of more subordinate emotional categories (or Platonic attitudes).

As we saw, Newcomb does interpret music on a more specific level than Kivy would admit. Indeed, Newcomb criticizes Kivy for focusing on music segments that are too brief; the complex emotional content of music is only revealed when the whole of a composition is taken into account.

¹⁵³ See *Ibid.* p.90.

¹⁵⁴ See *Ibid.* pp.80ff.

¹⁵⁵ P. Kivy. *Music Alone. Philosophical Reflections on the Purely Musical Experience*, p.175. Cornell University Press, Ithaca and London 1990;

¹⁵⁶ *Ibid.*, p.177.

¹⁵⁷ See e.g. J.A Russell. "Culture and the Categorization of Emotions", in *Psychological Bulletin*, vol. 110(3) 1991; T.D. Kemper. "How Many Emotions Are There? Wedding the Social and the Autonomic Components", in *American Journal of Sociology*, vol. 93(2) 1987.

¹⁵⁸ See e.g. A. Ortony and T.J. Turner. "What's Basic About Basic Emotions", in *Psychological Review*, vol. 97(3) 1990.

Moreover it is fairly obvious that such plot archetypes as Newcomb describes requires a rather developed verbal discourse. But, as we shall see below, when they become part of a *structural metaphor*, even Kivy's emotions are language-dependent.

Chapter thirteen

Music and metaphor

Metaphors have the capacity to alter our conceptual schemes, alter the structure of our webs of beliefs and attitudes. Metaphors enable us to understand the foreign in terms of the familiar and as such they are to a large extent constitutive of knowledge.¹⁵⁹ Perhaps most obvious in talk about music are *spatial metaphors* that describe melodic movement in tonal space, a movement which enables melodies to go up and down, as Kivy shows. Such metaphors are also what enable Jazz musicians in New York City to speak of *getting out there*,¹⁶⁰ as well as for the Kpelle of West Africa to say they *enter the inside of the performance*.¹⁶¹

A second kind of metaphor are *emotional metaphors*. Both Kivy and Newcomb discuss emotional metaphors. But it is also a case of emotional metaphor when Tagg speaks of the *Kojak* theme's *restless* character (as we saw, both Tagg and McClary referred to an unexplicated *affective* code). A third kind of metaphor are the so-called *ontological metaphors*. In chapter three I referred to Adorno's critique of the musical work as autonomous objective structure. Implicit in this notion is the idea that a musical work is a particular entity with an objective existence over time, that is, it has an ontological existence tending to that of a physical body.

These kinds of metaphors are often systematically related by *structural metaphors*, which have the capacity of projecting the relationship of an entire categorized domain of experience onto another uncategorized domain. In Newcomb's plot archetypes, emotional metaphors are organized (along with other kinds of metaphor) as structural metaphors.

Structural metaphors are applied when, for instance, the Kaluli speak of their music as a characteristic *lifting up over sound*, which is only possible for a song that has become *hard*. This view is directly related to their everyday environment in the forest, where sounds constantly shift figure and ground—an environment where only people that have overcome the softness of childhood and become hardened can survive.¹⁶²

¹⁵⁹ Cf. N. Goodman. *Op cit*; W.V.O. Quine. "Postscript on Metaphor", in *Critical Inquiry*, vol. 5 1978; D. Davidson. "What Metaphors Mean", in *Inquiries into Truth and Understanding*.

¹⁶⁰ See D.G. Such. "'Out There': A Metaphor of Transcendence among New York City Jazz Musicians", in *New York Folklore*, vol. 7 1981. Cited in J. Porter and A.J. Racy. "Introduction." In J. Porter and A.J. Racy. *Op cit*.

¹⁶¹ See R. M. Stone. *Op cit*.

¹⁶² See S. Feld. *Op cit*; "Sound Structure as Social Structure", in *Ethnomusicology*, vol. 1984; "Sound as Symbolic System: The Kaluli Drum", in *Explorations in Ethnomusicology: Essays in Honor of David P. McAllester*. Ed. C.J. Frisbie. Information Coordinators, Detroit 1986.

As another example, one can mention the Tiv, who conceive of composition as a *quick subtraction after slow addition*. The phrase (which is a translation of a single Tiv term) reflects a zero-sum view of life and may also characterize the catching of fish, figurative speech, withdrawals from the bank, the digging of a well, and miscarriage.¹⁶³

Whether music is a *lifting up over sound* or a *quick subtraction after slow addition*, as in the Kaluli and Tiv examples, the music functions as a sign *exemplifying* the ideological notions of discourse—*lifting up over sound* or *quick subtraction after slow addition*, or whatever—and the particular types of actions these notions implicitly sanction. Music will promote these actions by being heard as exemplifying the action-motivating notions of the discourses that the sounding music *affectively articulates* on the more or less basic level (the exemplifying action-motivating notions of the discourses are the “superordinate categories” activated whenever basic level musical sound are heard, as will be further explained in chapter eighteen).

To see how structural metaphors work, George Lakoff and Mark Johnson gives the example “Argument is war.” That the expression “Argument is war” is a metaphor is obvious, since war is something other than argument; but the point is that the metaphor to a large extent structures our way of conceiving what it is like to be involved in an argument with someone. This is seen by comparing the war metaphor with a number of related expressions related to it, such as “Your claims are indefensible,” “He attacked every weak point in my argument,” “If you use that strategy he’ll wipe you out,” *etc.* By this metaphor, arguing means to be involved in a verbal battle where one wins or loses and where the main actions are attack, defense and counterattack (perhaps Lerdahl or Jackendoff, whose grammar is said to ‘militate’ against certain other views, would make a good example).¹⁶⁴

But although the concept of war structures that of argument, it does so only partially. For instance, you do not normally want to kill or mutilate your antagonist, and neither is a winner of an argument entitled to war indemnity. The metaphor thus dictates what actions we normally perform (and do not perform). To illustrate, imagine what would happen if the metaphor was substituted for the more peaceful alternative “Argument is a building,” entailing expressions such as “The theory will *stand* or *fall* on the *strength* of that argument,” “Is that the *foundation* of your theory?” “The argument is *shaky*.”¹⁶⁵ In this case, to argue, like constructing a house, would admit of collaboration, and could even allow arguments, like houses, to stand side by side.

Now, whether music is a *lifting up over sound* or a *quick subtraction after slow addition*, as in the Kaluli and Tiv examples, the ideological impact not only concerns how to interpret and evaluate the notion of music, as

¹⁶³ See C. Keil. *Tiv Song*, ch.2.

¹⁶⁴ F. Lerdahl and R. Jackendoff. *Op cit*, p.261;333.

¹⁶⁵ G. Lakoff and M. Johnson. *Op cit*. p.46. The University of Chicago Press, Chicago and London 1980.

argument is evaluated in the example above with regard to our attitudes to war, but more importantly, it (music) will function as a sign exemplifying the ideological notions themselves—*lifting up over sound* or *quick subtraction after slow addition*, or whatever—and the particular types of actions these notions implicitly sanction. Music will promote these actions by being heard as exemplifying the action-motivating notions of the discourses that the music affectively articulates. In the next chapter we shall see how structural metaphor was operative in an important transitional phase in the history of Western music.

Chapter fourteen

Two structural metaphors: music as oration and as organic structure

The example that I would like to consider in a little more detail is found in the history of Western classical music and concerns the change in general conception from the classical music of the enlightenment, to the organic works of Romanticism, a change which involved a successive transition from the notion of music as a type of activity to that of music as a type of object. Furthermore, this is a transition from an activity the purpose of which was ‘to arouse in the listener idealized emotional states—sadness, hate, love, joy, anger, doubt and so on’,¹⁶⁶ to an object resulting, insofar as emotions are considered at all, from the ineffable inner life of the passionate composer. Actually, what we have here is an example of two structural metaphors and the substitution of the one for the other.

As pointed out by Mark Evan Bonds, Carl Dahlhaus, and others, during the eighteenth century unity and order among musical sounds were established by the composer mainly through molding his material according to the rules of rhetoric. Music was seen, at this time, as a wordless oration (albeit in the service of the sung word), and the task of the composer was to persuade the listener. Through a rhetorically ordered presentation of various passions, the successful composition enabled the expression of a certain sentimental character that was to be accepted by, or affect, the audience. Music was a means to an end and the form of the composition had to be graspable by the listener, since it was the listener’s (positive) verdict that was the outcome sought.¹⁶⁷

To this end, Johann Mattheson elaborated a complete rhetorical inventory of figures, by which he claimed to show how particular

¹⁶⁶ G.J. Buelow. “Rhetoric and Music”, in *The New Grove Dictionary of Music and Musicians*. Ed. S. Sadie. Macmillan Publishers. London 1980.

¹⁶⁷ See M.E. Bonds. *Wordless Rhetoric. Musical Form and the Metaphor of Oration*. Harvard University Press, Cambridge (Mass.) 1991.

emotions such as joy, sadness, love, hope, pride, humility, anger and fury are physiologically aroused by music: 'Since, for example, joy is an *expansion* of our vital spirits, it follows sensibly and naturally that this affect is best expressed by large and expanded intervals.' And in the same vein: 'Hope is an *elevation* of the spirit; despair, on the other hand is a *casting down* of the same. These are subjects that can well be represented by sound especially when other circumstances (tempo in particular) contribute their share. In such a manner one can form a concrete picture of all the emotions and try to compose accordingly.'¹⁶⁸

During the following century, this view of music changed successively, allowing ultimately for a conception of music as an organism existing in its own right. From being rejected as more or less nonsensical or superficial (unless serving such ends as exhibiting the virtuosity of the musician, or accompanying dance), instrumental compositions now became elevated to "absolute music."¹⁶⁹ Whereas the composer of the eighteenth century was regarded more or less as a craftsman and the outcome of his toil a crafting of preexisting material, he was hailed by the Romantics as a divinely inspired genius, whose organic offsprings aspired to a higher status than the transience of their mortal forerunners. And while the form of a pre-Romantic composition was largely determined by genre, the harmonic plan being a way of ordering a preconceived thought, during the course of the nineteenth century this underlying thought came to be equated with the formal outline of the work itself. Whereas content was earlier determined mainly by a text (and the thoughts or passions it conveyed), content subsequently found itself incarnated in the individual form of the composition. The general hereby becomes particular; the event is turned into an object—in a movement which curiously replaces the expression of individual passions with that of an ineffable feeling¹⁷⁰—and eventually the identity of the work is to be found in the achronic harmonical structure, rather than as before, in the temporal unfolding and exposition of an "extramusical" idea (ultimately enabling the jettisoning of emotional content in music altogether).¹⁷¹

In this shift from the Enlightenment conception of music as a rhetorical oration, to the Romantic view of music as an organic structure, we witness a shift in the view of music as being chiefly a temporal event, or activity, to an objective view: works of music are aesthetic objects. They are things rather than activities; they are autonomous objects. To say that music is either an oration or an organic structure is to speak metaphorically, since in a sense music is neither. By applying either the term rhetoric or organic structure on a sound event, one transposes a whole domain of

¹⁶⁸ Quoted from H. Lenneberg. "Johann Mattheson on Affect and Rhetoric. A Translation of Selected Portions of *Der vollkommene Capellmeister* (1739)", in *Journal of Music Theory*, vol. 2(1) 1958.

¹⁶⁹ See C. Dahlhaus. *The Idea of Absolute Music*. Trans. R. Lustig. The University of Chicago Press, Chicago 1989.

¹⁷⁰ Cf. E.T.A. Hoffman. "Review of Beethoven's Fifth Symphony", in *E.T.A. Hoffman's Musical Writings: Kreisleriana: The Poet and the Composer: Music Criticism*. Ed. D. Charlton. Cambridge University Press, Cambridge 1989.

¹⁷¹ Cf. E. Hanslick. *Om det sköna i musiken*. Trans. B. Collinder. Almqvist & Wiksell, Uppsala 1955.

relationships onto it. And insofar as the metaphor proves successful, a sound event is only regarded as an acceptable instance of music if it complies with the metaphor. In the first case, the relationships transposed are those of rhetoric, and accordingly, an acceptable piece of music has to display a correct rhetorical plan, thus the exposition, development and recapitulation of a pre-Romantic sonata correspond to the *exordium*, *narratio* and *confirmatio* of rhetoric.¹⁷² In the second case, the organic work of Romanticism, the dispositional parts of a sonata are seen as the surface of an organism whose elements are all structurally related to a tonic centre.¹⁷³

What we also see is that the structural metaphor “A work of music is an organic structure” is a specific variant of the ontological metaphor “music is a physical body.” Perhaps it is even closer to the truth to say that the metaphor of music as organic structure *is* the ontological metaphor responsible for the reification of music in much of Western thought since the beginning of the nineteenth century. However, the case is much more ambiguous with the structural metaphor stating that “a piece of music is an oration.” Taking the view of Mattheson, he explicitly refers to Descartes’ explanation of the human body as a mechanism separate from the soul, according to which passions are seen as an activity of the soul which, in contrast to rational thought, is caused by outer, physical, circumstances. Thus, rather than music being expressive of emotions, there would be a direct causal relation between the sounds heard and the passions felt – to speak of emotional metaphor in this case would therefore be an anachronism.

On the other hand, Jean Dubos, Charles Batteaux and Rousseau all regarded music as a means of arousing passions through “imitation,” by which we should understand metaphorical exemplification. In addition, though without the connection to rhetoric, Charles Avison characterized a musical experience not as a result of any physiological effect on the listener, but as his or her sympathetic reaction to the passions expressed by the music.¹⁷⁴ Although there are no explicit references in Avison’s work, one is tempted to think of the notion of sympathy as it appears in Hume, described as first effecting our cognitive powers: we first observe that someone has, or is in a certain emotive state, whereupon this knowledge is ‘converted’ into the passion itself – observation and

¹⁷² Cf. Mattheson’s six parts of a ‘well-developed composition’, cited in I. Bent and W. Drabkin. *Op cit.* p.8: Rhetoric became a model for composition already during the 16th century, ‘loosening its medieval bond with the mathematical disciplines of the quadrivium and becoming an expressive language’, as witness, for instance, the development of the *ricercar* as an introductory *exordium* ‘searching for the listener’s goodwill, attentiveness and receptiveness’: W. Kirkendale. “Ciceronians versus Aristotelians on the Ricercar as Exordium from Bembo to Bach”, in *Journal of the American Musicological Society*, vol. 32(1) 1989.

¹⁷³ Cf. R.A. Solie. “The Living Work: Organicism and Musical Analysis”, in *19th-Century Music*, vol. 4 1980.

¹⁷⁴ C. Avison. “An Essay on Musical Expression, part I. Sect.1”, in *Musical Aesthetics: A Historical Reader*, vol 1. Ed. by E.A. Lippman. Pendragon Press, New York 1986. Cf. also W. Jones. “Essay on the Arts, Commonly Called Imitative”, in *The Works of Sir William Jones*, vol. IV. London 1807.

recognition of expressive properties thus causing emotion to take hold in ourselves, affecting us as the other is affected.¹⁷⁵

I bring these issues to the fore in order to indicate that the ideological impact of music in general, and of the discourses implicit in these metaphors in particular, may vary depending on who the beholder of the music is and what discourses the music is exemplificational of by way of these metaphors. For instance, the two structural metaphors mentioned did not appear in such explicit form as here when they occurred; rather they were intertwined and the one only successively replaced the other. In addition, there were other parallel, partly related views; witness Newcomb's reference to what might be regarded as a metaphor stating that "music is a narrative," as well as formalistic descriptions of music in terms of organisms *growing out of* a single thematic kernel.

So although both metaphors could probably be argued to support the Enlightenment autonomy theme pointed out by Adorno, one should not forget that the idea of rationality itself (on which the whole idea of an autonomous subject more or less builds) varied among listeners. As Amelie Rorty has emphasized in discussing the changing relation between rationality and the passions (ultimately admitting a constructive role for imagination) from Descartes to Hume:

Reason was once the primary ruling power of the soul. But when the mind has become a field of forces, the place of knowledge in that field becomes problematic. Is reason one of the forces in the field, or is it outside the field altogether, a map indicating but not dictating resolutions? ...When reason is assigned only the functions of discovering regularities among matters of fact and analysing the relations among ideas, it is the imagination that becomes the active faculty. Besides its traditional functions of recombining perceptual elements, it [imagination] becomes capable of introducing novel ideas and impressions: it becomes a productive or spontaneous faculty and not merely a reproductive one.¹⁷⁶

Chapter fifteen

Formal structure – is language really necessary?

Reification, by way of emotional or structural metaphor, requires language. But isn't it a bit trivial to say that language is a necessary condition for the description of music *in terms of* oration or organism? And wouldn't it still be possible to imagine a complex composition without invoking any words or verbal metaphors whatsoever? Surely there is no logical contradiction in claiming that a

¹⁷⁵See D. Hume. *A Treatise on Human Nature*, book II, part I, sect.XI. Longmans, Green, and Co, London 1874. Hume regarded passion and sympathy as necessary for morality.

¹⁷⁶ A.O. Rorty. "From Passions to Emotions and Sentiments", in *Philosophy*, vol. 57 1982.

musical genius could be able to compose a sonata movement without ever having been exposed to the discourse of any musical tradition, from the beginnings of mankind to present. Let me give an example that indicates why the musical genius, in a crucial sense, could *not* do this.

In an illuminating article, John Baily summarizes findings of musical anthropologists from von Hornbostel to Blacking.¹⁷⁷ The focus of the studies mentioned is on pieces of music of various African styles played on flute, xylophone and mbira.¹⁷⁸ Although the cultures wherein these pieces of music originated possessed neither written historical nor notational sources, the pieces studied showed a great sonorous complexity and variation, which gave the scholars a hard time analysing the assumed musical structures. Moreover, none of the natives were able to offer any clues to the assumed structural relationships. Not until they paid attention to the way these pieces were *played*, were the analysts able to discern any reasonably graspable patterns. The patterns even turned out to be comparably simple, *vis-à-vis* the way the music sounded (a quality notably exploited by Steve Reich).¹⁷⁹

What this example tells us, in other words, is that it is possible to create structurally complex music without the structural metaphors of a musical discourse—Baily's example makes this perfectly clear. Thus it would be possible to come up with a sonata movement-like piece of music without ever having been exposed to the terminology of any musical tradition, at least in principle (although a physiologist studying performance and motor action may have some objections here); but—and this is the crucial point—it would not be heard as such: in an important aesthetic sense it would not be a classical sonata movement at all, since nobody would be able to conceive of any structurally related subjects and countersubjects, nobody would be able to hear any modulations between hierarchically related tonal areas, *etc.* So, what the example really tells us is that in order to compose structurally complex music, where structural complexity is consciously planned by the composer (for instance in terms of rhetorical oration or organic structure), and not just the consequence of a certain playing technique—and where such structural complexity is heard as an aesthetically significant aspect of the music, we need language.

What seems to be the principal obstacle speaking against the natural understanding of structural complexity in music, as it turns out, has to do with the categorizing underlying structural metaphors—the judgment that *the relationships* within two groups of different objects are identical. Such a judgment is, to put it schematically, the matching of AA to BB, AB to CD or (AA to BB) to (CC to DD). Though human beings do not spontaneously master this kind of categorizing until they have passed the age of five (not

¹⁷⁷ J. Baily. "Music, Structure and Human Movement", in *Musical Structure and Cognition*. Ed. P. Howell *et al.* Academic Press, London 1985.

¹⁷⁸ On the ideological implications of terms such as "African music" and "African rhythm", see K. Agawu. "The Invention of 'African Rhythm'", in *Journal of the American Musicological Society*, vol48(3) 1995.

¹⁷⁹ See S. Reich. *Writings About Music*. The Press of The Nova Scotia College of Arts and Design, Halifax 1974.

even when corrected), they overcome the problem as soon as they learn that AA to BB is an instance of "same." It is the learning and understanding of the words same/different that enables the child to form the concept of a complex relation.

Whereas the concept of a sameness relation is available prior to speech, it only pertains to perceptually similar phenomena. When a word is acquired for the sameness relation, it may be metaphorically transferred to non-perceptible analogical relationships that are thereby made conceivable as also being same. This conclusion is drawn by David Premack, who has been able to show that even apes are capable of making such analogous transfers—as soon as they learn the meaning of *the words* same and different. Although there is data suggesting that this kind of abstract categorizing may occur naturally among gregarious species as a means of establishing social relations in large groups,¹⁸⁰ there are still no indications that any primate (including humans) extend this capacity beyond social relations without language. It is language that provides the catalyzing factor. Thus Premack concludes that 'this transition [to relational concept formation] is not maturational in the human child; it occurs only as the product of pedagogy, after the child has attended school. A transition that could have been brought about by biological evolution has been achieved instead by cultural evolution.'¹⁸¹

This is an important point to bear in mind as well when considering the body-minded thematics of Lakoff and Johnson's work, for instance in their description of *orientational metaphors*. One can be in a high spirit or feel depressed, with the physical correlate that sadness and low moods often go together with drooping body postures, while positive emotional states go along with erect posture. Similarly, one can have control over somebody and be at the height of one's power, or one can be socially inferior and be at the bottom of society. Here the correlate is rather that physical strength enables a person to knock somebody to the floor.¹⁸² The point of discussing such orientational metaphors is that they indicate that our conceptual schemes are not solely structured by cultural or neurophysiological determinants, but that we live in a common physical environment; they are a result of our 'constant physical activity in the world',¹⁸³ which is what lends itself to communication in the most basic cases.

Structure is generated within our bodily experiences and projected onto more abstract phenomena. This might seem to imply that the structure of music originates within our bodily experiences and that perceiving music as a complex structured object is a natural process that does not require language (it has been shown, for instance, how the notions of modulation

¹⁸⁰ Cf. D.L. Cheney and R.M. Seyfarth. "Précis of *How Monkeys See the World*", in *Behavioural and Brain Sciences*, vol. 15 1992. The study is about vervet monkeys.

¹⁸¹ D. Premack. "Minds With and Without Language", in *Thought Without Language* Ed. L. Weiskrantz. Clarendon Press, Oxford 1988.

¹⁸² Cf. G. Lakoff and M. Johnson. *Op cit.* pp.14ff.

¹⁸³ *Ibid.* p.56.

and cadence in the work of Hugo Riemann derive from such bodily 'image schemata').¹⁸⁴ The problem with such a conclusion is that the second part of the clause does not necessarily follow from the first (neither do Lakoff and Johnson make any such inference). Although I do not deny 'that there are irreducibly metaphorical projections and structures of meaning with a nonpropositional dimension',¹⁸⁵ and although our understanding of musical structure may ultimately have its source in our bodily experiences it does not rule out that metaphorical transfers such as those we are considering here are necessarily prompted by language.

Chapter sixteen

Cultural innovation as radical change

As Alan Merriam once said, 'it is very doubtful that any people have nothing whatsoever to say about their musical style'.¹⁸⁶ Since the time of Merriam's statement, several studies have shown that explicit musical terminologies are by no means marginal, even in such "primitive" cultures as the 'Are 'are of the Solomon Islands,¹⁸⁷ the Kaluli of the Papua New Guinea highlands,¹⁸⁸ the Kpelle of West Africa,¹⁸⁹ the Mapuche of Argentina,¹⁹⁰ the Flathead Indians,¹⁹¹ as well as many non-academic European, North American, and North African sub-cultures.¹⁹²

Nevertheless, there seems to be a general reluctance towards regarding language as a precondition for the music under study.¹⁹³ Why should music—the purest of art forms—depend on language? Before suggesting an answer, let us address the doubt: if all cultures have terms for various aspects of their music, one may indeed ask why this is so. If it were not to serve some necessary purpose, why are there no cultures without discourse about music? Considering the magic that have so often

¹⁸⁴ J. Saslaw. "Forces, Containers, and Paths: The Role of Body-Derived Image Schemas in the Conceptualization of Music", in *Journal of Music Theory*, vol. 40(2) 1996; Cf. also U. Kronman and J. Sundberg. "Is the Musical Ritard an Allusion to Physical Motion", in *Action and Perception in Rhythm and Music*. Ed. A. Gabrielsson. Royal Swedish Academy of Music, Stockholm 1987; A. Friberg and J. Sundberg. "Comparing Runner's Decelerations and Final Ritards", in *Proceedings from the Third Triennial ESCOM Conference*. Uppsala 1997.

¹⁸⁵ G. Lakoff and M. Johnson. *Op cit.* p.19.

¹⁸⁶ A.P. Merriam. *The Anthropology of Music*, p.117. Northwestern University Press, 1964.

¹⁸⁷ See H. Zemp. "Aspects of 'Are 'are Musical Theory", in *Ethnomusicology*, vol. 23(1) 1979.

¹⁸⁸ See S. Feld. "'Flow Like a Waterfall': The Metaphors of Kaluli Musical Theory", in *Yearbook for Traditional Music*, 1981.

¹⁸⁹ See R. M. Stone. "Toward a Kpelle Conceptualization of Music Performance", in *Journal of American Folklore*, vol. 94(372) 1981.

¹⁹⁰ See C.E. Robertson-DeCarbo. "Tayil as Category and Communication among the Argentine Mapuche: A Methodological Suggestion", in *Yearbook of the International Folk Music Council*, vol. 8 1976.

¹⁹¹ See W.K. Powers. "Review Essay of A.P. Merriam, *Ethnomusicology of the Flathead Indians*", in *Ethnomusicology*, vol. 14 1970.

¹⁹² See the articles and references in *Issues in the Conceptualization of Music. Selected Reports in Ethnomusicology*, vol. 7. Ed. J. Porter and A.J. Racy. University of California, Los Angeles 1988.

¹⁹³ Cf. S. Feld. "Communication, Music, and Speech about Music", in *Yearbook for Traditional Music*, 1984.

surrounded music in rituals, one could at least expect that some culture had developed a taboo against discourse about music, but none seems to have (and even if a religion such as Islam condemns music—at least in certain forms—discourse about it is permitted, not least since discourse enables the formulation of persuasive reasons for banning it).

Perhaps the only scholar ready to admit the necessity of language was John Blacking, when discussing the problem of musical change. Musical change, assimilation and acculturation have been studied by different ethnomusicologists focusing on its causes,¹⁹⁴ effects,¹⁹⁵ or criteria.¹⁹⁶ What seems to have distanced Blacking from other writers and directed his interest towards language was (at least in the case of musical change) his premise that ‘Since the world of nature is constantly evolving, always changing, consciousness of change and the notions of change and non-change are cultural phenomena’. Thus ‘The evolution of culture itself has been possible because human beings have conceptualized space, time, and notions of change and continuity, and they have been able to produce artefacts and institutions that transcend time and place and the immediate needs of communities.’ The important consequence Blacking infers from this is that musical change—*radical* change, that is, in contrast to mere variation—‘is the result of conscious human decisions’, in other words, change is an intentional act and as such it presupposes verbally formulatable beliefs: music presupposes ‘essentially *verbal* ideas’.¹⁹⁷

But whereas Blacking restricts himself to the notion of radical change as the intentional action that requires language, I claim that the crucial moment, the birth of music as a *human* cultural artefact, occurs when certain manners of sound production and sounding behavior become the subject of verbal discourse. That is, when certain sounding phenomena are denoted and referred to by language in specific ways.

It would indeed be a truism to say that language is a necessary condition for talk about music. But this is not my point. It is rather the case that language is necessary for there to be any music to talk about in the first place—it is *talk about music* that is necessary. That language is a necessary condition for music in no way implies that music itself is a language, or that musical experiences amount to verbal interpretations of sounds. Neither does it imply that musical creativity, the creative impulse of musicians and composers, is necessarily language-bound; we do not make music to fill in any blanks that our musical vocabularies leave open. But, to quote Blacking again, ‘individual Einsteins are of no significance

¹⁹⁴ See G. Kubik. “Stability and Change in African Musical Traditions”, in *The World of Music*, vol. 28(1) 1986.

¹⁹⁵ See K.-O. Edström. “The Jojk—A Clear Case of Organic and Non Organic Acculturation”, in *Trends and Perspectives in Musicology*. The Royal Swedish Academy of Music, Stockholm 1985.

¹⁹⁶ See K. Wachsmann. “Criteria for Acculturation”, in *International Musicological Society. Report of the Eighth Congress, New York 1961*. Ed J. LaRue. Bärenreiter, Basel 1961. Attempts at more complex models for musical acculturation have been proposed by M. J. Kartomi. “The Processes and Results of Musical Culture Contact: A discussion of Terminology and Concepts”, in *Ethnomusicology*, vol. 25(2) 1981; M. McClean. “Towards a Typology of Musical Change: Missionaries and Adjustive Response in Oceania”, in *The World of Music*, vol. 28(1) 1986; for an overview, see also B. Nettl. *Op cit*, p.177.

¹⁹⁷ J. Blacking. “Identifying Processes of Musical Change”, in *The World of Music*, vol. 28(1) 1986.

unless their thoughts and actions can be shared by other members of society.¹⁹⁸ The difficulties facing composers and musicians as diverse as Mozart and Charlie Parker – once deemed incomprehensible, now classics within their genres – may serve as examples of this fact.¹⁹⁹

What I am talking about is music as a cultural phenomenon, and one important role language plays in human culture is obviously to create a frame of reference for new and foreign sounds to relate to. To use a geological metaphor, the new needs historical *sediment* to take root. The discourse about music of one age makes sense of its musical changes and hands them down to the next age more or less as naturally given. The new then has to be conceived in verbal terms to make sense, or, as may also be the case, in order to be refuted as nonsense. No single individual needs to be familiar with this discourse in its entirety, however; it exists as a cultural heritage and saves the aspiring musician (or composer, or listener) from having to live through all the phases of our musical history as it has developed through the ages. For the lay listener it may even suffice just to have a term that can be consistently used to denote a certain musical phenomenon to enable a way for the listener to relate to it, and impose or extract regularities and characteristics from it, thereby leading to a gradual appreciation of the music in question.²⁰⁰

We can compare with one of our ahistorical non-human cousins, the gibbon ape. The gibbon has developed a 'ritualized acoustic fight' as a territorial defence.²⁰¹ The male ape sings and barks in order to mark his presence, and if the intruder does not disappear the male will soon be supported by the female, which starts an intricate duet with her partner. This duet follows a certain pattern developed by the couple itself, which, if not correctly performed, will be interrupted and started anew.²⁰² This context-bound and style-preserving behavior is backed up by songs which are heavily stereotyped and 'consistent throughout the entire range of the species, even [among] those whose distribution is interrupted by intrusions of another species'.²⁰³ However, although we could perhaps ascribe to these duetting apes some sort of style awareness, they still show no sign of musical change. While the male is capable of individual variations and embellishments, he remains faithful to his 'prescribed score',²⁰⁴

A case of change can be found in the song of the humpback whale. The humpback sings songs that may be up to thirty minutes long, possibly

¹⁹⁸ J. Blacking. *Op cit.*

¹⁹⁹ See O. Stockfelt. *Musik som Lyssnandets Konst. En analys av W.A. Mozarts symfoni no40, g moll K.550.* Skrifter från Musikvetenskapliga institutionen, Göteborg 1988.

²⁰⁰ E.g. A. Durant. *Conditions of Music.* Macmillan, London 1984.

²⁰¹ M. Orgeldinger. "Protective Territorial Behavior in Captive Siamangs (*Hylobates syndactulus*)", in *Zoo Biology*, vol. 16 1997.

²⁰² See E.H. Haimhoff. "Video Analysis of Siamang (*Hylobates Syndactulus*) Songs", in *Behaviour*, vol. 76 1981.

²⁰³ J.T. Marshall and E.R. Marshall. "Gibbons and their Territorial Songs", in *Science*, vol. 16 1976.

²⁰⁴ *Ibid.*

signifying the physical condition of the male, his ability to keep breath,²⁰⁵ and which may be analysed into different themes made up of various phrases.²⁰⁶ Still, the whale fares only slightly better than the ape. Although the humpback repeats the song that is currently typical of its population, 'the song of each population changes extensively and irreversibly, with each singer keeping abreast of the current version of the song at all times'.²⁰⁷ The songs of a population change gradually and may after five years be as different from each other as the songs of populations in another ocean. In other words, the whale cannot be renowned for any radical innovation (and neither can it choose to perform the version it sang, say, last year); it is rather an instance of what Blacking would call variation, and variation does not require conscious awareness of either function or sounding phenomenon.

It can be concluded, given that there does not exist some other sufficiently musical species as yet unheard of, that no wordless animals are capable of radical change, that is, conscious intentional change.

Chapter seventeen

Music as ontic commitment

Some listeners are "Platonists" with regard to music (some explicitly, others not). That is, they claim musical phenomena such as Western classical works, the sounds we hear at a concert or from a recording, are token instances of universal types with an objective existence over time. Put differently, they claim ontological metaphors at best capture the way we come to know about the ontological status of musical works; however their objective existence is literal.

Composing a musical work, Jerrold Levinson claims, is 'a God-like activity in which the artist brings into being what did not exist beforehand much as a demiurge forms a world out of inchoate matter'.²⁰⁸ A more orthodox Platonist would not credit composers with the capacity to create anything at all, however. According to Nicholas Wolterstorff, 'A composer does not bring that which is his work into existence ... musical works exist everlasting'.²⁰⁹ Common to both is that they regard musical works to exist

²⁰⁵ K. Chu and P. Harcourt. "Behavioral Correlations with Abberant Patterns in Humpback Whale Songs", in *Behavioral Ecology and Sociobiology*, vol. 19 1986.

²⁰⁶ R.S. Payne and S. McVay. "Songs of Humpback Whales", in *Science*, vol. 173 (3997) 1971.

²⁰⁷ L.N. Guinee and K.B. Payne. "Rhyme-like Repetitions in Songs of Humpback Whales", in *Ethology*, vol. 79 1989.

²⁰⁸ Dahlhaus traces the idea of music as an '*opus absolutum*, a work in itself, freed from its sounding realization in any present moment', to Listenius in 1537. C. Dahlhaus. *Esthetics of Music*, p.11. Contrast this with the medieval view of Thomas Aquinas or Bonaventura who, according to Carl Dahlhaus, 'would have thought it blasphemy to apply to human works the term "creation"'. Quoted from L. Goehr. *Op cit*, p.46. Clarendon Press, Oxford 1992; C. Dahlhaus. *Esthetics of Music*, p.2. (However, one should be careful not to ascribe a 19th century idealist work concept to Listenius.)

²⁰⁹ Quoted from L. Goehr. *Ibid*.

objectively “over and above their performances and score-copies”,²¹⁰ as token instances of universally existing types or kinds.

What I want to highlight here is not the different varieties of musical “Platonism,” but the distinction between similarity and identity, that is, whether two temporally distinct appearances are categorized as instances of the same recurring particular or if they are just two of a kind. Consider vision. Infants expect a steadily moving object to reappear after it passes behind a screen; but if the time lapse between two appearances exceeds a certain amount of time, the distinction same and similar seems to lose significance. It becomes not only impossible but meaningless for an observer to say whether the object is categorized by the child as identical or just of the same kind.²¹¹ Only as language enters onto the scene will it be possible to make the distinction and infer an *ontic commitment* on the part of the speaker.²¹² However, several steps need to be overcome before this can be done. For instance, as Quine says, an infant’s preverbal greeting does not commit the baby to anything more than ‘Hello! more Mama’.²¹³ Likewise, when verbal labels are acquired, “Mama” and “Papa” are initially on a par with “water” or “red”. Only successively, along with a fuller acquisition of language, is Mama referred to as an individual, as an individuate object. A first step towards this *reification* (objectification) is when the child masters predication, when “the apple is red” and when “Mama is nice,” *etc.* However, the great ontological leap occurs, Quine suggests, when relative terms are applied to singular terms, such when a trivial expression like “smaller than that speck” comes to indicate an unobservable, entity, the existence of which we cannot judge from observation.²¹⁴

Still, Quine does not hesitate to claim that the human being is a ‘body-minded’ animal, conceiving of its world by applying terms and expressions about concrete observable objects when encountering or reasoning about more abstract entities:²¹⁵

Genetically what we have beforehand is just a play of grammatical analogies that mask differences in learning patterns. Centrally situated there is what we retrospectively classify as talk of bodies. Here is where the apparatus of objective reference gets its first development. Bodies are the prime reality, the objects *par excellence*. Ontology, when it comes, is a generalization of somatology. Steps in this direction [occur] in the development of ordinary language, in the emergence of such general terms as “color” and “shape” by grammatical analogy to the general terms for bodies. In forging this grammatical analogy we make our first

²¹⁰ *Ibid.* p.14.

²¹¹ See. W.V. Quine. *Pursuit of Truth*, p.24f.

²¹² Cf. W.V.O. Quine. *Word and Object*. p.238.

²¹³ W.V. Quine. “Speaking of Objects”, in *Ontological Relativity and Other Essays*. Columbia University Press, New York and London 1969.

²¹⁴ Cf. W.V.O. Quine. *Word and Object*. pp108ff.

²¹⁵ W.V.O. Quine. *The Roots of Reference*. p.54. Open Court, La Salle (Ill.) 1974.

faltering allusion to incorporeal things. Grammar is thereby simplified, while ontology is multiplied.²¹⁶

Likewise, Lakoff and Johnson explain ontological metaphors by saying that ‘we conceptualize the nonphysical *in terms of* the physical – that is, we conceptualize the less clearly delineated in terms of the more clearly delineated’:²¹⁷ ‘Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we can identify our experiences as entities or substances, we can refer to them, categorize them, group them, and quantify them – and, by this means, reason about them.’²¹⁸

A physical object, according to Quine, ‘is the material content of any portion of space-time, however small, large, irregular, or discontinuous’ – a scientifically aimed definition which for him equals that of an event.²¹⁹ To say that ontology is an analogical or metaphorical extension of somatology is thus to say that a way of speaking about certain portions of space-time (bodies) has been extended to certain other portions of space-time (music). It is the employment of grammatical analogies and ontological metaphors by this “body-minded” talk that enables the reification of musical entities with an objective existence over time. Speaking of objects spills over to our speaking of substances, states, events, and other more fuzzy-edged stuff as if they were entities that come in clearly distinguished package. Think of such things as inflation, political parties, national borders, or, for that matter, beliefs, desires, meanings, and their likes. But we can also say that ontological metaphors are what we apply when we reify our musical objects.

To see what this means, take the first four notes of Beethoven’s Fifth. That we hear it as a repeatable phrase (on a par with “Hello! More Mama”) can be explained by saying that it constitutes a unified perceptual basic-level *gestalt* available to any listener. But to hear the four notes as a recurrence of the previous *particular* phrase or motif, or a token instance of a universally existing type, we need language. We need language to be able not only to say, but also to think, that it is the same identical musical object that recurs. Insofar as we say that music consists of objects with an objective identity over time, an ontic commitment has been made. That is, we have committed ourselves to what we take there to be – a Beethoven’s Fifth – and for there to be such an objectively existing entity as “the” Beethoven’s Fifth we need language. However, not all listeners are Platonists.

²¹⁶ *Ibid.* p.88.

²¹⁷ G. Lakoff and M. Johnson. *Metaphors We Live By*, p.59.

²¹⁸ *Ibid.*, p.25.

²¹⁹ W.V. Quine. “Events and Reification”, in *Actions and Events. Perspectives on the Philosophy of Donald Davidson*. Ed. E. LePore and B.P. McLaughlin. Basil Blackwell Ltd, Oxford 1985.

Chapter eighteen

Music as superordinate category

Remember John Cleese at the Ministry of Silly Walks. Why is Cleese's routine so funny? One important reason, I believe, is that we do not conceive of our own walking in objective terms. We do not read in our morning papers that Pierre Boulez has created a new walk entitled *Pied selon pied* (though we wouldn't be surprised if we found an old walk manuscript signed Cage). We do not call up our best friend to suggest that we go out and do the latest walk together ("Have you tried out Babbitt's *The Chafe of Philomel*?" "Why? It's loathsome!"), although we might well do so in the future—just as we hum the latest chartbuster from MTV or whistle along with Carmen's *Habanera*. In other words, Cleese's silly walk ministry ridiculously suggests that there be different "walks" to govern.

For music this suggests that in the future we might conceive of our music in terms different from today, as we did in earlier historical times. For the ancient Greeks, as for many non-Western cultures, as well as for Western musical culture up to about 1800, the main importance lies in the conformity of a performance to a preestablished genre, the latter being an action category (rather than an object category). For instance, the ancient Greek term *mousiké* could be used to denote any activity inspired by the muses. Although there did exist prescribed "compositions" already during antiquity, some of which, such as the *Delphic Hymns*, were even notated,²²⁰ this does not mean that they were conceived as objects;²²¹ at any rate they were the exception and one might even say that whereas since the nineteenth century works of Western music has come to *instantiate* objectively existing kinds or types, before that time they *exemplified* particular genres.²²² The extent to which many indigenous cultures have any nouns whatsoever, in their musical terminologies, is to a great extent due to the influence of Christian missionaries who were successful in spreading a very particular view of music.²²³

Still, whether we conceive of music as an object category or an action category this requires language. What enables us to conceive of music as an *abstract type* (or sort, or kind) of object or activity in the ways just described is our capacity for superordinate categorization. To categorize is to group different phenomena together in categories, which are often sorted into hierarchical systems, or taxonomies. A system of categories of

²²⁰ See I. Henderson. "Ancient Greek Music", in *New Oxford History of Music*, vol. 1. Ed. E. Wellesz. Oxford University Press, London 1957.

²²¹ See L. Goehr. *The Imaginary Museum of Musical Works. An Essay in the Philosophy of Music*. Clarendon Press, Oxford 1992.

²²² See C. Dahlhaus. *Esthetics of Music*, p.15. Trans. by W. Austin. Cambridge University Press, Cambridge 1982; *Analysis and Value Judgment*, pp13;22. Trans. S. Levarie. Pendragon Press, New York 1983; *Nineteenth-Century Music*, p.28.

²²³ C. Keil. Personal communication, March 12, 1998.

things one keeps in one's house may thus include furniture at the topmost level, subsuming sofas and chairs, the latter of which, for instance, may subsume wheelchairs and Naugahyde chairs. Turning to music, music itself may be the topmost category, subsuming genre categories such as classical and rock, subcategories of like symphonies and concertos (or, in the case of rock, power-ballads and twelve-bar blues), subsuming in their turn particular pieces or works, which in their turn subsume actual performances of the music.²²⁴

Whether we deal with furniture or music, research has shown that there seems to be a *basic level* at which categorization occurs more readily than at other levels. This basic level is not, as one might perhaps suspect, to be found at the lowest level of a categorical hierarchy, nor at the top, but somewhere around the middle. The reason this middle level is the most easily acquired—it is the level at which categorization can first be observed in children—is that the phenomena categorized have similarly perceived overall shapes. It is the level at which we use similar motor activity in our interaction with the categorized phenomena, the level at which mental images are most easily evoked, and the level at which we find the highest amount of intracategorical similarity and intercategory dissimilarity. At lower levels we have to perceive more detailed attributes to distinguish the categories, while at higher levels the categories become increasingly abstract.²²⁵ It is the higher and more abstract levels that interest us here.

Characteristic of such high levels is that it is no longer possible to group phenomena on the basis of similarly perceived overall shape, it is not possible to invoke single mental images that do justice to all instantiations of the category, and there is no single action pattern that would enable interaction with all the category members. Instead, what enables the acquisition of a high level *superordinate* category, whether of furniture or of music, is language. Let me contrast with a high level category that does not require language. Such a category is the collection. An orchestra is a collection of musicians, with the latter being a part of the former. In contrast to the objects of collection categories, for instance, which are *parts* of the collection, the objects identified by a superordinate category *are of that kind*. A guitar *is* an instrument, it is not a part of an instrument. While the objects of a collection and the collection are clearly distinguished, a superordinate kind and its objects overlap.²²⁶ This blurring of perceptual

²²⁴ Cf. G. Lakoff. *Women, Fire and Dangerous Things. What Categories Reveal about the Mind*, p.31ff. The University of Chicago Press, Chicago and London 1987.

²²⁵ See E. Rosch and C.B. Mervis. "Categorization of Natural Objects", in *Annual Review of Psychology*, vol. 32 1981; C.B. Mervis and M.A. Crisafi. "Order of Acquisition of Subordinate-, Basic-, and Superordinate-Level Categories", in *Child Development*, vol. 53 1982; D. Starkey. "The Origins of Concept Formation: Object Sorting and Object Preference in Early Infancy", in *Child Development*, vol. 52 1981.

²²⁶ Cf. E.M. Markman. "How Children Constrain the Possible Meanings of Words", in *Concepts and Conceptual Development: Ecological and Intellectual Factors in Categorization*. Ed. U. Neisser. Cambridge University Press, Cambridge 1989.

boundaries is the reason why superordinate concepts presuppose language.²²⁷

My claim now is that the general term *music* (and its cognates in different human languages, whether they function as nouns or verbs) enables superordinate categorization, in that the verbal label provides the stepping stone for an extension of the musical category. Thus superordinate categories turn out to be necessary not only for music conceived as activity,²²⁸ but also for music conceived as object. To conceive of phenomenally diverse musical objects or activities as belonging to one and the same category requires language.

But is there not a problem lurking here somewhere? Consider Charles Keil's observation while studying Tiv song in Nigeria:

The problem with our [terminological] biases hit me rather forcefully when it became clear that a word corresponding to our term "music" could not be found in one African language after another—Tiv, Yoruba, Igbo, Efik, Birom, Hausa, assorted Jarawa dialects, Idoma, Eggon, and a dozen other languages from the Nigeria-Cameroons area do not yield a word for "music" gracefully. It is easy to talk about song and dance, singers and drummers, blowing a flute, beating a bell, but the general terms "music" and "musician" require long and awkward circumlocutions that still fall short, usually for lack of abstraction, for example, "the voices of the tools of the dance," a way of bringing together instruments blown and beaten which when supplemented by "plus singing" almost add up to "music." So what seems to us a very basic, useful, and rather concrete term is apparently a useless abstraction from a Tiv, Yoruba, perhaps even a pan-African or non-Western point of view.²²⁹

What this may seem to imply is that there are cultures in which one cannot find any superordinate category labels such as our term "music." And if there are no superordinate category labels in a musical culture, it could at worst mean that conceiving music as either object or activity is not that central to music as a human cultural artefact. It could even mean that many musical cultures of the world were incapable of conceiving anything aurally or functionally different from their own as music ("music" here taken to stand for their own concept of their own musical activity). I referred already in the opening chapter to Bruno Nettl's wide use of the term, according to which any sounding phenomenon that anyone would call music would qualify as such, with the additional requirement that it be conceived by its audience as either an activity or an object. Nevertheless, the consequence of my thesis is that the absence of superordinate category labels in a musical culture would imply that this

²²⁷ M.S. Horton and E.M. Markman. "Developmental Differences in the Acquisition of Basic and Superordinate Categories", in *Child Development*, vol. 51 1980; B. Benelli. "On the Linguistic Origin of Superordinate Categorization", in *Human Development*, vol. 31 1988.

²²⁸ All actions are events, but all events are not actions. An event consists of phenomena that are conceived as temporally interconnected in different ways. Although language heavily facilitates the identification of complex novel events and activities, language does not seem to be a prerequisite for event categorization (Cf. Á. Cabrera and D. Billman. "Language-Driven Concept Learning: Deciphering *Jabberwocky*", in *Journal of Experimental Psychology: Learning, Memory and Cognition*, vol. 22(2) 1996.).

²²⁹ C. Keil. *Tiv Song*, p.27. The University of Chicago Press, Chicago 1979.

culture simply does not have music any more than birds, whales or apes could be said to have it. We can conceive of their sounding activities and objects *as* music, but they cannot (and of course, they cannot conceive of our music *as* music either).

This is a consequence I would not hesitate to accept, were it plausible. However, the fact that Keil actually mentions two superordinate category labels in the above quote, namely “song” and “dance,” lessens its likelihood. What is more, I have already mentioned the ancient *Mousiké*, and the East African *Ngoma* as other examples of a superordinate category. That Western category labels are not easily translated into non-Western ones is therefore no argument against my thesis.

What counts as a basic, superordinate, or subordinate level category is not absolute and static, but flexible and modifiable – though within limits and with respect to interest. Hence, it has been observed that basic level categories may differ between adults and their children because of the significance assigned to the various perceived attributes,²³⁰ as well as they may differ between cultures.²³¹

Compare this with Quine’s pointing out that what counts as an observation sentence in one speech community need not do so in another: ‘when scientists marshal and check their own data or one another’s, they press no farther than is needed to assure agreement among witnesses conversant with the subject; for they are reasonable men. “The mixture is at 180°C” and “Hydrogen sulfide is escaping” are observational enough for any of them, and more recondite reports are observational enough for some’.²³² What is immediately observable from the vantage point of a chemist assumes a prior learning of theory and is highly theoretical for the lay person.

By the same token, basic categories of music may also vary; for instance, the untrained listener spontaneously taps his or her foot to an intermediate metric level of music (the strong beats), whereas the skilled musician has no problem in attending to and coordinating both higher and lower levels.²³³ What counts as basic to a trained listener may be extended upwards to include such abstract and general categories as twelve-bar blues or lied form. Likewise, the basic level may be extended downwards to include subordinate categories such as specific intervals and distinctions between different instrumental timbres.²³⁴ Moreover, the extension of the basic level need not be confined to the musical expert;

²³⁰ See C. Mervis. “Early Lexical Development”, in *Origins of Cognitive Skills*. Ed. by C. Sophian. Lawrence Erlbaum Associates, Hillsdale 1984.

²³¹ J.W.D. Dougherty. “Salience and Relativity in Classification”, in *Language, Culture and Cognition: Anthropological Perspectives*. Macmillan, New York 1981.

²³² W. Quine. *Pursuit of Truth*, p.6.

²³³ See C. Drake *et al.* “Tapping in Time with Musical and Mechanical Sequences”, in *Proceedings from the Third Triennial ESCOM Conference*. Uppsala University, Uppsala 1997.

²³⁴ According to Mark DeBellis, trained listeners are capable of applying much more detailed and fine-grained concepts to what they hear than do untrained listeners. Though the latter may have a conceptual grasp of whole melodies, or parts thereof, they cannot apply this capacity to any more detailed level. See M. DeBellis. *Music and Conceptualization*. Cambridge University Press, Cambridge 1995.

many differences in musical style are attributable to differences among subordinate categories of sound. An uninitiated is quite unlikely to distinguish, say, hard core from death metal, Classicism from Romanticism, Ottoman from Arabic-Andalusian music, *etc.* whereas for the untrained but initiated listener the differences are immediately obvious. In such cases difference has come to override similarity as the salient feature.

But are we not at odds here with Davidson's claim that we have no reason to believe that there are objects in the world observable only to the members of certain language communities.²³⁵ Fortunately not—as long as we do not make any epistemological claims by our “dualism of scheme and content.” And since the present account does not tamper with the determinants of truth, as the different basic levels are not principally unavailable to anybody (though they might practically be so), we can remain safe in Davidson's boat. Making the distinction between content and scheme, or perception and cognition, requires interpretation, and not *vice versa*. Music, as a human cultural artefact, presupposes certain beliefs; it is a theoretical construct, a way of talking (a nominal rather than a natural kind), and *as such* it is not equivalent between cultures. But, all else equal, the sound events that make up music are available to all listeners.

Chapter nineteen

What is human about music (and why is language necessary for music as a human cultural artefact)?

Any general conception of music as activity such as when one says “Let's play music!”²³⁶ or even as expressed by more particular phrases like “Let's boogie!,” “Let's rock!,” or (with a little imagination) “Let's symphony!,” requires language. That is, it would not be possible to conceive of music in such ways without language. Even such an apparently bracketed insight as David Sudnow's ‘there is no melody, there is only melodying’,²³⁷ requires language. It is the superordinate character of these categories that would not be available without language.

This has further significance for music as a human cultural artefact than just the fact that we happen to be the only creatures who have voluntarily developed verbal language. This significance resides in the circumstance that superordinate category labels work by abstracting away musical sounds and the activities necessary for their production from worldly

²³⁵ Cf. C. Hardin and M.H. Banaji. “The Influence of Language on Thought”, in *Social Cognition*, vol. 11(3) 1993.

²³⁶ Swedish enables a more apposite expression with the verb “*musicera*”, however, the neologism “*musicing*” has been suggested by D.J. Elliot. *Music Matters. A New Philosophy of Music Education*, *passim*. Oxford University Press, New York and Oxford 1995.

²³⁷ Quoted from P.J. Martin. *Op cit*, p.205.

circumstances such as social function and context. It enables the separation of the two parameters. And this, for instance, is what enables Blacking's radical change, insofar as radical change consists in the assimilation of one of the two parameters (sound or function) from a foreign music into a previously established repertoire. It enables on the one hand the recognition that a foreign music which sounds totally unfamiliar to one's own may fulfill the same socio-cultural function, and on the other, that a foreign music regarded as similar to one's own may nevertheless be understood as fulfilling a completely different function in its original context (Premack's "same" functions just the same).

The superordinate category enables a decontextualization and re-contextualization of the experienced sounds and their requisite activities.²³⁸ Listening, one might say, becomes *creative*, in that it allows for the imagination of extended functioning.²³⁹ It thus becomes possible to subsume the foreign into one's own cultural framework on the sole basis of metaphorical imagination. It becomes possible to appreciate music which would otherwise—without language—not even appear to us as such. Music, *Mousiké* and *Ngoma* are all examples of superordinate categories enabling human beings to decontextualize and defunctionalize the musical sounds heard, thereby facilitating musical change, assimilation and acculturation in a way that is not available to any non-human species.

More specifically, what the superordinate category does is that it allows the cultivated listener to ascend from the depths of the subordinate categories having become basic. In the previous chapter I said that to the initiated listener, subordinate differences override basic-level similarities as the salient features. In such cases, superordinate categories allow the listener to temporally disregard the specific traits of the subordinate level so that various musics can be heard on an equal basic level. Language fulfills this role by providing the listener with general and abstract terms for different styles or types of musical expression. Superordinate categories are the necessary conditions that opens the door, and guarantee that it stays open, for discourses about music. Thus it allows the listener both to be manipulated by and manipulate foreign music (in the previous chapters I have described ways by which discourse enter the experience of musical sounds through the verbal door, as it were).

In addition, we may assume that language, with its superordinate categories, is what allows stylistic pluralism within a culture, where style should be understood as referring to functionally similar but perceptually different musics. All the same, we must keep in mind that the basic, universal level is not the level at which we will find the culture-specific traits of the world's musics.

²³⁸ Cf. K. Wachsmann. *Op cit*; K. Nelson. "Where Do Taxonomic Categories Come From?", in *Human Development*, vol. 31 1988.

²³⁹ Cf. I. Anhalt. "Text, Context, Music", in *Canadian University Music Review*, vol. 9(2) 1989. Anhalt locates the 'superordinate contexts' primarily in texts set to music, such as librettos or poems.

But, one may finally want to ask, does not a parroting bird also decontextualize and defunctionalize the sound it mimics? There are species of nightingales that have enormous repertoires, consisting of a thousand song types, or so. These song types are not innate, but learned. The repertoire is arranged into a cycle that the bird works through over a span of several days, or even weeks. Moreover, it may omit songs in the cycle and move from one song to another that is further on in the program.²⁴⁰ In addition to this, it has also been argued that even a lowly animal like the pigeon is capable identifying superordinate kinds, since it can be trained to respond with similar behavior to such different objects as flowers, cars and chairs.²⁴¹

What speaks against the mockingbirds, parrots and pigeons (and whales and gibbon apes) is the fact that a superordinate category subsumes objects towards which we behave and act in *different* ways, whereas the pigeons in this case categorize by means of similar behavior. And for the parroting bird, there is nothing that indicates that it would be able to interpret a foreign sound as functionally similar to its own vocalizing, not to mention the converse, that is, interpreting a foreign sound that it cannot mimic as functionally similar to its own behavior. Finally, the bird lacks an own inventiveness; it does no more than parrot, and what counts is a large and varied repertoire.

What no animal seem to understand is, first, that the perceptually similar may fulfill different functions; only humans may do this. Humans can conjecture that what sounds similar to their own music may in fact differ in its socio-cultural contextual use. Secondly, by the same token, only humans may come to understand that a different culture than their own (or even a different species) can have a different way of performing a sociocultural function similar to their own. So without language it seems impossible to understand the sociocultural significance of a behavior without first internalizing it into one's own repertoire. We may assume then, that these two ways of metaphorical functioning of musical terms, by way of superordinate categorization, are prerequisites for any kind of cultural pluralism. *Verbal language is thus necessary for acknowledging and understanding other cultures as cultures.*

The same cognitive mechanism is of course at work during less momentous occasions than times of radical change, such as when we hear the sounds of our everyday environment as music. In other words, outside any verbal logosphere neither a composer like Olivier Messiaen nor the Kaluli would be able to hear bird song as music – and neither would the Congo Basongye be able to say it is not.²⁴² However, it does not imply that radical innovation must be present and praised everywhere (as it is in the Western modernist tradition). As Blacking admits, 'traditions do not

²⁴⁰ B. Merker. Personal communication.

²⁴¹ E.A. Wasserman *et al.* "Non-Similarity-Based Conceptualization in Pigeons via Secondary or Mediated Generalization", in *Psychological Science*, vol. 3(6) 1992.

²⁴² Cf. A.P. Merriam. *op cit*, p.64.

change nearly as much as we would like to imagine'.²⁴³ And when they do, the requisite imagination may proceed subtly and subconsciously,²⁴⁴ appearing more often than not in the guise of divine inspiration – though the releasing psychological mechanism depends for its existence on internalized verbal labels that identify superordinate kinds.

What has been said so far about superordinate categorization and music of course also goes for the aspiring child. The human child shouts, babbles and hums, in imitation or by chance (it also uses words by chance to see what their effect is); but it is because the child does this in a verbally rich context that it will eventually conceive of some of its expressive behavior as music (we shall take time to speak a great deal more about children's early experiences of music in part two). The existence of such a context is also the reason why we can speak of the wordless teaching of the gamelan to children in Bali, as reported by Colin McPhee, as the teaching of music,²⁴⁵ and the same of course goes for the mute teaching instructions by the famous conductor Jorma Panula to the students at the Sibelius Academy.²⁴⁶

To sum up: for a sound event to qualify as music in the sense discussed here – as a human cultural artefact – we need language. It is true that we could experience a stream of sounds without knowing that it was a musical object or activity, and even be affected by it (cows are said to milk better to Mozart); it is equally true that some of us are more musical than others, capable of imagining complex musical sequences to an extent that is beyond the reach for the lay listener;²⁴⁷ but, as Quine says, 'what there is is a question of fact ... Saying or implying what there is, however, is a matter of language'.²⁴⁸

²⁴³ See J. Blacking. *Op cit.* See also "Some Problems of Theory and Method in the Study of Musical Change", in *Yearbook of the International Folk Music Council*, vol. 9 1977.

²⁴⁴ See C. Keil. *Tiv Song*, ch.4.

²⁴⁵ See C. McPhee. "Children and Music in Bali", in *Djawa*, vol. 18 1938. Referred to in Merriam, *Op cit.* p.152f.

²⁴⁶ See L. von Bonsdorff. "Jorma Panula på workshop i New York", in *Hufvudstadsbladet*, Feb 26, 1998.

²⁴⁷ Cf. H. Gardner. "Musical Intelligence", in *Frames of Mind. The Theory of Multiple Intelligences*. Basic Books 1983. It has also been suggested that some extraordinarily gifted people cannot avoid hearing music in their heads, just as some schizophrenics constantly hear voices, see B. Milkowski. *Jaco. The Extraordinary and Tragic Life of Jaco Pastorius, "The World's Greatest Bass Player"*, p.184. Miller Freeman Books, San Francisco 1995.

²⁴⁸ W.V. Quine. *Pursuit of Truth*, p.27.

Chapter twenty

An ethological parenthesis

If permitted, I would like to insert here a little parenthesis (once more from the world of ethology). As result of a series of experiments with the pygmy chimpanzee Kanzi, it has been inferred that linguistic communication is not an exclusively human competence.²⁴⁹ While earlier experiments in the field of animal communication concentrated mainly on training the subjects in pointing to specific symbols as an act of “naming” different objects on request when shown to them, Kanzi has “spontaneously” acquired a vocabulary of more than one thousand symbols which he uses voluntarily. The first indication of Kanzi comprehending human language occurred when the word “light” was uttered in an everyday context (no *fiat* exclaimed), whereupon Kanzi rushed over to the light switch and flipped it on. Subsequently Kanzi learned to identify the word on a keyboard with printed symbols connected to a speech synthesizer. For a long time Kanzi would produce only one word at a time, but during his fifth year strings of words combined into sentence-like structures began to appear. At the time of writing, Kanzi is capable of making voluntary assertions, requests as well as asking questions.

A conclusion drawn from these findings is that Kanzi understands what he “says,” that is, he is not merely assenting or dissenting to conditioned responses, but has also internalized the logical relations between sentences that identify their meaning. Linguistic competence seems therefore not to presuppose any purpose-specific faculty in the brain, as is still widely held, since there appears to be no evolutionary reason why a chimpanzee should run around with such idle capacity. The difficulties faced by Kanzi—apart from his brain being only a third of the size of his human counterpart—is mainly due to his inferior vocal mechanism. When producing signs with a symbol keyboard (an artificial device), the time spent finding the right symbols to combine into appropriate utterances seriously diminishes Kanzi’s communicative abilities. In spite of this shortcoming I would like to put forth the following question (and leave it for the reader to dwell on): if a pygmy chimpanzee is capable of communicating and understanding English, would it thereby be able to hear sounds as music?

²⁴⁹ E.S. Savage-Rumbaugh. “Language Acquisition in a Nonhuman Species: Implications for the Innateness Debate,” in *Developmental Psychobiology*, vol. 23(7) 1990.

Part II

Chapter twenty-one

Cognitive sedimentation – the making-basic of sub- and superordinate categories

Human beings, as well as animals make sounds. Why? A common answer is that humans and animals produce sounds in order to communicate, to express feelings and thoughts. To these ends man has developed music and language, two means of communication that are partly interwoven, partly distinct. But whereas it is often claimed that man is the only creature that has developed a natural language and a capacity to communicate through speech, music and musicality are sometimes ascribed (by man) to animals as well. Not only do birds sing; so do gibbon apes, and even the humpback whale is sometimes claimed to sing to its friends across the vast distances of the oceans. To stress the similarities between these modes of animal expression and their human counterparts it has been shown that the singing of birds, apes, and whales each share common characteristics. It is possible to observe certain isomorphic traits in the acoustic signals emitted by these creatures. Slow down a recording of a certain bird song, or speed up the song of the humpback whale, and the result will be remarkably similar not only to the song of, say, the gibbon ape, but also to certain forms of human cattle calls such as the *kulning* of Scandinavian herdswomen (which shows similarities with herding songs from the European Alps, the Pyrenées, the Caucasus, etc.).²⁵⁰

But is it music? Is the singing or the sounds made by birds, apes, whales and even shepherds *music*? In part one I argued that language is a necessary condition for the experiencing of sounds as music. In this part I shall focus on aspects of music that do not require language, but which

²⁵⁰ J. Ekstedt and N.L. Wallin. *Den musikaliska hjärnan*. Discussion at the Royal Swedish Academy of Science, fall 1993.

nevertheless add to music's ideological force. However, there is an issue that should be dealt with before we leave the language-bound experiencing of music. This is the obvious fact that it is rather rare that our listening experiences are accompanied by immediate verbal descriptions. The musical experience is wordless. It may not even have any clear boundaries, it may come upon us almost unnoticed and then slowly fade away (as we shall see in the next chapter, it will be fully reasonable to regard the idea of "having an experience" as a result of reification, that it is a theoretical fiction). How can language condition (musical) experiences in which words are absent?

In a discussion of Wittgenstein's views on aesthetic understanding, Simo Säätelää places the focus on those *reactions* to music that might be taken as indications that a person has a certain aesthetic experience. 'What', Säätelää asks (along with Wittgenstein), 'is involved in the ability to hear the irony in the Fugato in the first movement of Beethoven's Ninth Symphony? Of course this presupposes certain basic natural reactions such as reacting to rhythm ..., etc., but also a host of "culturally dependent" or conventional things that can be called knowledge of music and that enables us to hear the work in the correct categories. Still, appreciating the irony is a primitive reaction. It is not based on calculation or interpretation, it is rather something that one hears or doesn't hear *directly*'.²⁵¹

Similarly, Lars Hertzberg argues that a musical reaction is like reacting to a joke, which in many cases requires 'a fairly advanced "cultural competence", matters taught and shared, but if your laughter is genuine you do not simply laugh because you *know* the joke is supposed to be funny'.²⁵² So our reactions, indicative of our experiences, may be "primitive" in that no conscious thinking is going on; but all the same, these reactions and experiences may presuppose previous interpretation and verbal description.

In addition, what Wittgenstein and his followers point out is the unproblematic ease by which we immediately hear that a sounding phenomenon is a particular jazz standard, a progression around the circle of fifths, or a piano solo—that is, the ease by which we recognize and identify phenomena that presumably do not naturally belong on the basic level of categories. To repeat: it is a "primitive" reaction, not based on calculation or interpretation, but rather something that one hears (or does not hear) directly. And the phenomenon occurs at almost any level of simplicity or complexity. In other words it is a question of being capable of conceptual listening, although one does not apply it to the particular listening situation—one listens non-conceptually—and still one is capable,

²⁵¹ S. Säätelää. *Aesthetics as Grammar. Wittgenstein and Post-Analytic Philosophy of Art*, p.188. Uppsala University, Department of Aesthetics 1998. Säätelää cites the Beethoven example from Wittgenstein's *Culture and Value*.

²⁵² Quoted in Säätelää, *Ibid.*, p.193. See also L. Hertzberg. "Wittgenstein on the Nature of Aesthetic Remarks", in *Nordisk Estetisk Tidskrift*, vol. 8 1992.

if asked, of recalling and identifying what was heard according to conceptual categories.

In the field of psychoacoustics, a comparable phenomenon has been referred to as *holistic pattern recognition*. Holistic pattern recognition means that the listener recognizes the global quality of a musical pattern without thereby necessarily being able to decompose and identify the constituent notes of the pattern. The capacity for recognition in such cases can be explained with an analogy to chemical compounds: 'The auditory compounds of psychoacoustics and the molecular compounds of chemistry both consist of elements that are combined to form structures with emergent non-colligative or global properties (that is, characteristics which do not represent the sum of properties of the constituent elements)'.²⁵³ So while a melodic line with a certain arrangement of tones has a particular perceptual quality which does not equal the sum of its parts, a different arrangement of the same constituent tones will display a different perceptual characteristic. And while the listener may not initially be capable of analysing the melodic compound into its constituent notes (just as we may not be able to discern the constituents of a chemical compound), once the notes and their particular arrangement in the melodic line has been learned, a two-stage process is made available for future identification: '*First, the compound is recognized, then a remembered analytical description may be given in terms of component elements and their internal relation.*'²⁵⁴

It should be pointed out, though, that holistic pattern recognition concerns rapid melodic phrases, each constituent note being approximately between 200 and 500 milliseconds. Even so, in more moderately paced melodies listeners often pay attention only to the global properties of melodic *contours* (the pattern of ups and downs of pitch). Not only is 'the extraction of contour ... a preliminary and indispensable step to the precise encoding of intervals',²⁵⁵ it is also 'important to melody recognition under certain circumstances—especially when tonal context is weak (as with atonal melodies) or confusing (as with tonal imitations)', and it 'seems useful as an indexical advice to access melodies in long-term storage'. In spite of the fact that 'recognition of such melodies seems critically dependent upon scale-step information',²⁵⁶ at least 'some indication of where that contour should be hung on a tonal scale' seems necessary.²⁵⁷

²⁵³ R.M. Warren. "Perception of Acoustic Sequences: Global Integration versus Temporal Resolution", in *Thinking in Sound. The Cognitive Psychology of Human Audition*. Ed. S. McAdams and E. Bigand. Clarendon Press, Oxford 1993.

²⁵⁴ *Ibid.* Italics added.

²⁵⁵ I. Peretz. "Auditory Agnosia: A Functional Analysis", in *Thinking In Sound. The Cognitive Psychology of Human Audition*.

²⁵⁶ W.J. Dowling. "Melodic Information Processing and Its Development", in *The Psychology of Music*. Ed. D. Deutsch. Academic Press, New York 1982.

²⁵⁷ W.J. Dowling and D.L. Harwood. *Music Cognition*, p.128. Academic Press, Inc., Orlando 1986.

But even if ‘changing the rhythmic pattern of a tune while retaining the melodic contour will make the tune all but unrecognizable’,²⁵⁸ it seems reasonable to distinguish between holistic perception of melodic contours and a more detailed perception of the particular intervals of a melodic sequence. While I will regard perception of melodic contour as a form of basic level categorization, perception and identification of specific intervals requires subordinate categorization. The way these two modes of perception function together is, we may further hypothesize, that previous perception-based knowledge about interval structure may be accessed when (immediately or in retrospect) one wants to identify a holistically perceived pattern or melodic contour. In other words, the particular “compound quality,” as it were, of a melodic contour may be stored in memory and unconsciously associated with a specific interval pattern, and although the latter need not be perceived in the listening moment, the perception of the melodic contour is marked with an associative link to the specific interval pattern (which may thereby be inferred).

Would the case be similar with an abstract structure such as the large-scale tonal plan of an extensive piece of music? As we saw in chapter eighteen, to conceive of music as an organic structure requires language. What one perceives then, when listening to a sonata movement, for instance, is not the large-scale formal relations, which are atemporal. What one perceives is the temporal unfolding of the constituent elements of such a structure, whereas the atemporal structure itself is imaginatively inferred.

This phenomenon – the possibility of cognitive judgment on the basis of non-conceptual listening, of which the primary reactions discussed by Säätelää may be an expression – can, in analogy with what I have earlier termed historical sedimentation, be called cognitive sedimentation: discourse makes sense of a novelty in terms of its structural properties and hands it down to the next encounter as a more or less inherent part of the listener’s musical competence. The structural properties may not be attended to in the listening situation but can be retrospectively inferred on the basis of the characteristic melodic contour of the music. While historical sedimentation is a cultural phenomenon, cognitive sedimentation applies to the individual mind of the listener. And while the identification of melodic contours requires basic level categorization, the identification of pitch and harmony requires subordinate categorization. Similarly, identification of specific harmonic relationships as instantiations of certain form-types requires superordinate categorization.

As mentioned at the outset of this chapter, the purpose of part two is to argue for the ideological force of music on the basis of those aspects of music that do not require language. In addition to this aim I will sketch a

²⁵⁸ W.J. Dowling. “Tonal Structure and Children’s Early Learning of Music”, in *Generative Processes of Music: The Psychology of Performance, Improvisation and Composition*, p.116**. Ed. J.A. Sloboda. Clarendon Press, Oxford 1988. Reference to Dowling and Harwood. *Music Cognition*.

theory about *how music can sound the way we say that we think it does*. First steps have already been taken by explaining how our musical experiences can depend on language without us being aware of it, without any verbalizing (overt or covert) going on in the listening situation. After considering how such a theory could be formulated without violating the epistemological premises adopted in part one, I start out with a discussion of two influential theories about our capacities for experiencing music—that of Lerdahl and Jackendoff, and that of Leonard Meyer. These two theories do not acknowledge the role of language in the categorization of music, but I shall point to certain problems with them that concern aspects of musical experiences not requiring language.

Chapter twenty-two

Functional explanation and analysis – epistemological benchmarks

Ontologically, I regard musical experiences as being on a par with beliefs, desires, emotions and the like. Musical experiences are states that we can ascribe to others on the basis of their observed behavior, verbal or nonverbal. We also form beliefs about these experiences as well as about the musical events that we take to cause them. To explain how our verbally formulated beliefs about the nature of musical experiences and events partake in shaping these experiences and events, we have to engage in *functional* theorizing.

What does it mean for an explanation to be functional? And what are the benefits of a functional theory of music? To start with, we are not interested in the possible functions of music as such, or the function of descriptions of sounds in terms of music. That would perhaps place music as a functional component in a specific culture or society, or more generally, in mankind. Being more or less evolutionary in spirit, such a theory would say what the “teleofunctional” purpose of music is,²⁵⁹ for instance, to provide the human being with a sense of time,²⁶⁰ or to serve as a transitional object in various situations from infancy to adulthood.²⁶¹ Though I will engage in such teleofunctional theorizing when explaining the ideological impact of the nonverbal aspects of our musical experiences (when explaining the teleological purpose of our capacity of basic level categorization as such), what I would like to do here is rather to explain

²⁵⁹ Cf. R. Millikan. “Explanation in Biopsychology”, in *Mental Causation*. Ed. J. Heil and A. Mele. Clarendon Press, Oxford 1993.

²⁶⁰ M. Minsky. “Music, Mind, and Meaning”, in *Music, Mind, and Brain*. Ed. M. Clynes. Plenum Press, New York and London 1982.

²⁶¹ G. Adamo. “First Notes on a Psychoanalytic Approach to the Functions of Music”, in *For Gerhard Kubik. Festschrift on the Occasion of his 60th Birthday*. Ed. A. Schmidhofer and D. Schüller. Peter Lang, Frankfurt am Main 1994.

the capacity of the human music listener to verbally describe his or her musical experiences.

This can be done by viewing this capacity as a hierarchical system of functions, such that the ordered fulfillment of these functions yields a performance specified by the capacity. Put differently, the method proceeds by explaining the fulfillment of a complex task with reference to the fulfillment of a number of less sophisticated tasks, which in turn may be analysed into even less sophisticated tasks, and so on.²⁶² By functional is thus meant that the musical experiences reported by a listener are the output of a cognitive system, the listener's mind, whereas the musical surface, which consists of sound events of various frequencies and durations (such as pitches and chords), is the input to this system.

To illustrate, one can say that we are all functional analysts in our teleological, everyday interpretations of the intentions of other people. We see our neighbour observing a certain phenomenon, which we take as input, whereupon a certain expression is uttered, taken as output. Interpreting an expression as being about a commonly observed phenomenon amounts to a functional level analysis of sorts, and as curious "folk-psychologists," which we all are from time to time, we set out to "analyse" an underlying process that enables the speaker to say something about the observed phenomenon. An explicit intentional explanation ascribes a system of beliefs, desires and attitudes to the speaker, which gives rational criteria for the explanation and prediction of behavior. This is tantamount to inferring a capacity to communicate on the part of the speaker, a capacity itself analysable as a functional system (a web of belief), of which the interpreted sentence is a functional unit.²⁶³ A theory of meaning and mind, like Davidson's, may thus be characterized as functionalist in that it starts from the level of everyday intentional explanation and its common vocabulary, which it supplies with a more explicit and law-like subsystem than that which is employed by ordinary speakers and interpreters.

Now consider a much simpler example: a keyboard with its capacity to emit sounds. This capacity can be explained by decomposing it into the specific functions of the key mechanism. A key, we are told by the *Oxford Dictionary*, is any one of the set of levers that are pressed by the fingers, causing a small hammer to strike a metal string to produce a specific note. This short description of the piano key as an information processing system contains in itself a little hierarchy of functions. First, it is claimed that the function of the key is to produce the sound of a note when depressed. The depression of the key is the input to the system, while the production of a sounding note is the system's output. This capacity is then decomposed, specifying that the key functions as a lever mechanism, which when pressed by the finger causes a hammer to strike a string,

²⁶² See R. Cummins. "Functional Analysis", in *The Journal of Philosophy*, vol. 72(20), 1975.

²⁶³ Cf. R.G. Millikan. "Thoughts Without Laws; Cognitive Science With Content", in *The Philosophical Review*, vol. 95(1) 1986.

thereby producing the sounding note. The point of this second description is that it analyses the main function into one or more simpler and less complicated functions—in this case a hammer attached to a lever mechanism—and to specify the temporal order and the causal interactions between these subfunctions. How is the sound producing system realized in real matter? The *Oxford Dictionary* gives us no clue other than that the strings should be made of metal; it says nothing about the ebony and ivory of the keys, *etc.*

An important aspect of the functionalist standpoint is exemplified here by the lack of material specification of the key as system. If the *Oxford Dictionary's* explanation had not mentioned anything about the metal string (leaving it unspecified, as a “sound-producing device”, for example), the description could have served as well for a *Fender Rhodes* electric piano. Had it been silent about the hammers attached to the lever mechanism, this could even have served as an explanation (less specific of course, but that is beside the point) for all keyboard instruments, from the hydraulic organ of antiquity to the digital synthesizer. This is so because material specification is undetermined by functional description. The two functional levels of the keyboard description do not prescribe any particular kind of material at the expense of any other for its instantiation.

The same ontological consequence befalls our desires and beliefs. In everyday circumstances we do not need to speculate about the material substance of a speaker's beliefs and attitudes to understand their meaning. Think of the symphony orchestra. Different orchestras with different members may still play the same standard programs. In the same way a mind may be composed of any sort of substantial “members” as long as they are capable of “playing” similar “programs” of mental states, that is, beliefs and desires. And just as the same orchestra may vary in members on different performances of the same program, our minds need not be in exactly the same physical state when a certain mental state recurs on a different occasion.²⁶⁴ Daniel Dennett has formulated this point of view by saying that the role of the concept of belief ‘is like the role of the concept of a center of gravity, and the calculations that yield the predictions are more like the calculations one performs with a parallelogram of forces than like the calculations one performs with a blueprint of internal levers and cogs. Folk psychology is thus *instrumentalistic* in a way the most ardent realist should permit: people really do have beliefs and desires ..., just the way they really have centers of gravity and the earth has an equator.’²⁶⁵

It is not the material purport that determines whether something counts as a center of gravity, an equator or a keyboard key. And the same holds for mental entities such as beliefs and desires, as well as for the musical experiences that we verbally report. This peculiarity of functional

²⁶⁴ A similar analogy, between the identity of a person and the identity of a club, is given in D. Parfit. *Reasons and Persons*, p.213. Clarendon Press, Oxford 1986.

²⁶⁵ D.C. Dennett. “Three Kinds of Intentional Psychology”, in *The Intentional Stance*. The MIT Press, Cambridge (Mass.) 1989.

descriptions echoes Aristotle's discussion of the mind (or soul), but whereas Aristotle was no functionalist in our sense, it is noteworthy that functionalism—understood here as the treating of minds as information processing systems whose material substance is undetermined—by refusing to take a stance on any issues pertaining to substance, enables us to treat the difference between mind and a mechanical device such as the keyboard as one of degree, rather than a difference of kind. A functional description may be of the mind as well as of neural structure.²⁶⁶ However, substance is material, not ideal or dualistic.²⁶⁷

The other advantage of this functionalist approach is that it may solve an age-old problem regarding the format of the tasks our minds are set to solve. From early empiricism to psychoanalysis and cognitive science, theorists have been prone to speak about *representation*. The mind is said to represent the surrounding world. The outcome of mental processing, when successful, is a representation of the way the world is at the moment of experiencing it (I am not considering memory here). A more advanced version has it that computations are performed on representations resulting in thought processes. In this case the representations (of states of affairs) are the well-determined equivalents of the objects of beliefs, desires and their emotional compounds. But, may one ask, to whom or what is this representation presented? Who or what cares about the representational outcome of our nervous systems? The answer might be you and me, or, if we add some further sophistication to the reply, our respective souls or minds.

Unfortunately, referring to an external soul or mind (or any part thereof) that observes our worldly representations runs into the familiar troubles of Cartesian dualism. Likewise, speaking of representation in a materialist context leads to an infinite regress, since the observation—by a material mind—of a neural representation has to be accounted for. And so one has to explain what it is for the mind to represent the neural representation of the world, who or what this second representation is presented to, and so on, *ad infinitum*.

That it is intuitively attractive to think of our brains as representing the world is indicated by the fact that the term is so widely used. The attractiveness of the idea may also reside in the neurophysiological data available. When converted into neural signals, the auditory stimulus is analysed early on into different aspects—frequency and amplitude—by the cochlea of the inner ear. This analysis is carried further by the cochlear nucleus and the olivary complex as spectral analysis and spatial localization. Finally the signals are synthesized and brought together in various regions of the cortex. Specific areas of the cortex have accordingly been identified as central for speech understanding (Wernicke's area), and

²⁶⁶ See W.G. Lycan. "Form, Function and Feel", in *The Journal of Philosophy*, vol. 78, 1981.

²⁶⁷ Of course, material instantiation may affect the speed of information processing. See P.S. Churchland and T.J. Sejnowski. "Perspectives on Cognitive Neuroscience", in *Science*, vol. 242 1988.

for the production of grammatically correct speech (Broca's area).²⁶⁸ Notwithstanding that the matter seems more complicated when considering perception of music (e.g. musically-trained listeners seem to use the left hemisphere to a much higher extent when dealing with music than do untrained listeners, who mainly use the right hemisphere), and for the reasons mentioned above, the converging of neural pathways at the cortex calls for an explanation that does not rely on such a notion of representation as just described.²⁶⁹ Although sound may function as a sign (of well-being or frustration, say), there are no mental representations signifying sound; we have no signs in mind. Rather it would be reasonable to say that the outer world is meaningfully *presented* to the organism.²⁷⁰ And it is meaningfully presented only when different sensory modalities and behavioral output have been coordinated.

If this is the case (as Dennett, among others, has argued),²⁷¹ a meaningful presentation is the result of the sum total of the entire processing of a sensory input, from its analysis in the inner ear, via its synthesis at various cortical regions, to its connections with other similarly processed inputs and outputs. There is thus no single place in the brain where it all comes together, no single place where conscious awareness of a perceived meaningful world springs forth; rather, conscious awareness of a perceived meaningful world is the resulting experience of instantiating (as most of us do) a more or less coordinated sensorimotor system.

The way a functional analysis deals with this was described above: by analysing beliefs and other mental states into smaller sub-components that interact logically, we need not take the mind to represent anything to anyone. Not only are the contents of our mental states underdetermined by behavioral data; material substance is undetermined by functional description. And we can safely develop hypotheses about musical experiences as functional states without having to care about the functional states of biology or neurophysiology; we need only consider the verbally described entities and states of our music theories (or "folk musicologies," if you will).²⁷²

²⁶⁸ S. Handel. *Listening. An Introduction to the Perception of Auditory Events*, ch 12. The MIT Press, Cambridge (Mass.) 1989.

²⁶⁹ The wide cerebral distribution of musical functions is indicated by research on various forms of amusia. Cf. M.I. Botez and M. Aube. "Amusia: Clinical and Computerized Scanning (CT) Correlations", in *Neurology*, vol. 30 1980.

²⁷⁰ Cf. M.C. Beardsley. *Aesthetics*, p.43ff.

²⁷¹ See e.g. D.C. Dennett. *Consciousness Explained*. Penguin Books, London 1991.

²⁷² Cf. P.M. Churchland. "Is *Thinker* a Natural Kind?", in *Dialogue*, vol. 21(2) 1982.

Chapter twenty-three

A generative theory of music

Let us once more consider Lerdahl and Jackendoff's *General Theory of Tonal Music* (the *GTTM*). A basic premise of this theory is that 'a piece of music is a mentally constructed entity'.²⁷³ When we listen to music we assign to the sounds heard qualities they do not always exhibit in an acoustic analysis. The phenomenon may be compared with our tendency to hear the equally strong ticks of a clock as a periodicity of stronger and weaker beats, or ticks and tocks. In music, similarly imposed qualities or characteristics may be aspects of grouping, meter, the hierarchical assignment of structural importance to the inferred groups, as well as changes in tension and relaxation that this structure gives rise to. In other words, it is not obvious that the acoustic sounds always possess phrase boundaries or strong and weak beats corresponding to the way we experience them; and by extension, to hear a dominant as a tension demanding resolution requires the listener to add something to his or her listening.

The theory thus assumes that we add mental structure to a "musical surface," and the hierarchical form of these structures are accounted for by an explicit grammar: 'Overall, the system can be thought of as taking a given musical surface as input and producing the structure that the listener hears as output.'²⁷⁴ In other words, the *GTTM* is a functionalist theory:²⁷⁵ It is 'a theory of the formal combinatorial interactions of the ... functional components' of a musical mind.²⁷⁶ It should therefore provide a possible framework for the explanation of how language interacts with the categorization of music, as well as of how nonverbally-mediated categorization can also be ideological. Although the theory does not deal with these issues, we shall take a look at some of its details to see why it cannot help us with the second issue, how nonverbally-mediated categorization can be ideological.

The theory deals with four kinds of structure—those of grouping, meter, relative structural importance (time-span reduction) and the hierarchical levels of tension and relaxation (prolongational reduction)—each of which has its own explicit grammar for application. We shall take a closer look at the results of two of them. The first cognitive structure added to the musical sound is *grouping structure*, which formalizes 'a hierarchical segmentation of the piece into motives, phrases and sections'.²⁷⁷ The other, final structure results in a *prolongational reduction*, where the feeling of tension and relaxation experienced when one listens

²⁷³ F. Lerdahl. and R. Jackendoff. *Op cit*, p.2.

²⁷⁴ *Ibid*, p.11.

²⁷⁵ See R. Jackendoff. *Consciousness and the Computational Mind*, p.15ff. The MIT Press, Cambridge (Mass.) 1987.

²⁷⁶ *Ibid*, p.33.

²⁷⁷ F. Lerdahl. and R. Jackendoff. *Op cit*, p.8f.

to a particular piece of music, is 'defined with respect to particular events',²⁷⁸ ranging from the piece as a whole down to groups, segments and rhythmical accents. Applied to J.S. Bach's C-Major Prelude from the first book of *Das wohltemperierte klavier* we can say that the analysis accounts for the experience of the Prelude as a prolongation of one single affective fluctuation, one fundamental split between tension and relaxation (somewhat in the manner of a Schenkerian *ursatz*). These cognitive structures are imposed on a more primitive *surface structure* which consists of 'discrete pitch events [such as] notes and chords'.²⁷⁹

The acoustic properties of the C-major Prelude, the authors complain, yield 'an unusual paucity of evidence for the grouping [...] analysis'.²⁸⁰ Despite this lack of dynamical and textural contrast, it is possible to divide the piece into four measure periods at least from the dominant seventh in measure 24 till the end (the authors do not refer to any particular performance or acoustic analysis, but to the score, which in itself reveals several clues about how the music is likely to be heard). However, this approach exposes a symmetrical "shortcoming" of the piece as the remaining twenty-three bars are not equally divisible by four. During the nineteenth century, this "deficiency" was sometimes adjusted by simply inserting an extra measure in an unorthodox chordal passage (between measures 22 and 23), but in Lerdahl and Jackendoff's analysis the groups are permitted to overlap (that is, instead of adding an extra measure, one of the original chords is heard as if belonging simultaneously to two adjacent groups). It has been suggested by others that this overlap occurs at measure 4 but due to the harmonic parallelisms traced in measures 5 to 6 and 7 to 8 the authors argue that the groupings incorporate these features, postponing the overlap until measure 8. The analysis then continues by subsuming these four-measure groups under more extensive groupings until the ultimate 35-measure group of the complete piece is reached.

This was the grouping analysis. The other formal structure of interest here concerns the progression of the chords and the resulting feeling of tension and relaxation that the music conveys. This second structure follows that of the groupings (as well as those of metrical structure and time-span reduction, although I do not describe them here). The music increases in tension at a global level up to measure 20, enforced by measures 4, 11, and 19 respectively. Each of these global tensings subsumes local movements of relaxation, for instance, the progression D-minor seven, G-major, and C-major in measures 2 through 4—a local progression towards repose which on a global level functions as part of a tensing movement. From measure 20 onwards the process is reversed: globally, measures 20, 24, and (to a lesser extent) 26 relax the accumulated tension, while at the local level there are shorter processes of increasing

²⁷⁸ *Ibid.* p.179.

²⁷⁹ R. Jackendoff. *Op cit*, p.218.

²⁸⁰ F. Lerdahl. and R. Jackendoff. *Op cit*, p.260.

tension. Thus Lerdahl and Jackendoff conclude that the unusually even distribution of tensioning and relaxation-points, together with the unarticulated musical surface, 'gives the piece the character of a single overarching phrase.'²⁸¹

What can we learn from this analysis? With regard to the criticism of the theory in chapter four, we should be aware that the full analysis of a piece like Bach's C-major Prelude, following the rules of the *GTTM*, based on a notion of an 'experienced' or 'perfect' listener, 'is meant as an idealization'.²⁸² Moreover, the analysis represents an 'endpoint' and not a real-time auditory experience.²⁸³ It is thus highly doubtful that anyone would ever be capable of perceiving the piece in such detail as the analysis predicts. This is not to say that the particular rules for grouping, meter, time-span and prolongational reduction, as formulated by the theory, are wrong; they may very well describe cognitive capacities that we all have and can develop.²⁸⁴ Of course, an important question is to what extent these cognitive capacities apply without the intervention of verbal language, as opposed to the extent that 'one learns these cognitive tasks by "just picking them up" from experience with sufficient environmental stimulation'.²⁸⁵

But perhaps the most obvious aspect of the analysis that we should be aware of is that the phrase level of the piece has been reduced away. There is no melody anymore. The 'surface events' are treated here as arpeggiations, each event being no more than 'a single chord spread out over a time-span'.²⁸⁶ While there are most certainly other details in the analysis that could be discussed, I believe that this aspect may run counter to some basic musical intuitions that many of us have. This becomes clear if we pay attention to how the four hierarchical dimensions of the theory interrelate. Whereas meter and grouping mutually influence each other, their structural analysis are presupposed by the time span reduction, whereas the hierarchical layers of tension and relaxation presuppose time-span reduction. Thus, grouping does not demand any prior hierarchical structure. Instead it is said to build on *Gestalt* laws. Two *Gestalt* laws are mentioned in the *GTTM*. Sound events that are close in time tend to be grouped together and separated from events that are more distant. This is referred to as *the law of proximity*. In addition, there is a *law of similarity*, which dictates that events of similar rhythmic, timbral or pitch character are grouped together. Of these two laws, proximity overrides similarity.

What I find hard to accept in Lerdahl and Jackendoff's theory is that the feeling of tension and relaxation in the music presupposes that a set of highly elaborated cognitive structures has already been assigned to the

²⁸¹ *Ibid.* p.264.

²⁸² *Ibid.* p.3.

²⁸³ *Ibid.* p.4.

²⁸⁴ Cf. M.L. Serafine. *Op cit.*

²⁸⁵ F. Lerdahl. and R. Jackendoff. *Op cit.* p.249. Context does not rule out reading this passage as implying "sufficient non-verbal stimulation".

²⁸⁶ *Ibid.* p.153.

musical surface. Although I do not question that a hierarchically-layered experience of tension and relaxation in music presupposes what Lerdahl and Jackendoff say it does, I do not accept the impression one may get that there is no feeling of tension and relaxation in hearing music prior to such a cognitive involvement. What I am going to argue for below is, instead, that a feeling of tension and relaxation is basic to our musical experiences. It is there already at the first intuitive segmentation of groups and phrases in the music – indeed, *it is what makes such gestalt grouping possible in the first place.*

Thus I shall hypothesize that surface-level phrasing is perceptually more basic than any high level archetype, or *ursatz*, of which the surface level may be regarded as a prolongation. Analogous to the distinction between basic, subordinate and superordinate kinds, I propose that we regard an intermediate phrase level as basic. This means that there is a perceptually basic level of both grouping and tension/relaxation corresponding to the phrase level in the score. Although the organizing principles for this basic level can be assumed to be innate, we shall see that the perceptual capacity that the listener develops with regard to it is largely determined by social interaction.

Chapter twenty-four

Affect – the embodied morphology of feeling

One theory capable of accounting for the feeling of tension and relaxation at the basic phrase level of music is Meyer's theory of emotion and meaning in music, which refers to this phenomenological sensation as affect. According to Meyer's famous "law of affect", affect occurs when (and only when) the expectations of a listener are not fulfilled by the music heard. Meyer describes his law in the following terms: if a 'sound succession fails to follow its customary course, or if it involves obscurity or ambiguity, then it can be assumed that the listener's tendencies [to predict the course of the music] would be inhibited or otherwise upset and that the tensions arising in this process would be experienced as affect, provided that they were not rationalized as conscious intellectual experience.'²⁸⁷

Meyer's notion of unfulfilled expectation can be described as spanning over a continuum where the opposite endpoints are, respectively, *surprise* and *suspense*. In Meyer's view, 'every inhibition or delay creates uncertainty or suspense',²⁸⁸ whereas, on the contrary, surprise 'is most intense where ... continuity is expected'.²⁸⁹ While suspense is the outcome

²⁸⁷ L.B. Meyer. *Emotion and Meaning in Music*, p.32. The University of Chicago Press, Chicago 1956.

²⁸⁸ *Ibid*, p.27.

²⁸⁹ *Ibid*, p.29.

when expectations are general, surprise requires more specific expectations. As examples of suspense, Meyer mentions the opening of Beethoven's Ninth and the opening measures of the "March to the Gallows", from Berlioz' *Symphonie Fantastique*. In these examples, the repetitive character of the music requires change from a stylistic point of view, so that any listener acquainted with the style should expect some kind of cadential break. We can thus say that suspense is when we know *that* an event will occur, but not *when* it will occur. We may or may not know what will come, only that something will. Surprise, on the contrary, is when our expectations are unfulfilled, when the *when* and the *what* that were expected did not occur, in favor something totally different.

In other words, whether a deviation or unfulfillment will cause suspense or surprise depends on a difference in the specificity of the listener's expectations. This specificity of expectations actualizes the role of cultural conventions, of musical *style*. Meyer makes a distinction between "cultural" and "'natural" modes of perceptual ordering'.²⁹⁰ Whereas the latter are determined by Gestalt laws (of "good continuation" and "pregnanz"), the former refers to particular ways of categorizing within a specific culture, which predicts that expectations and deviations according to culture-specific patterns will go more or less unnoticed by a non-cultivated listener. Although Meyer's primary concern is style-bound expectation, the "natural" modes of perceptual ordering that he derives from Gestalt theory are of particular interest here. Since we are concerned here with the temporal unfolding of a melodic shape, rather than the grouping and distinction between such shapes, we should notice that Meyer's "natural" modes of perceptual ordering differs from that of Lerdahl and Jackendoff's *GTTM*. As formulated by one of Meyer's followers, Eugene Narmour, the gestalt law of *good continuation* states that 'small intervals imply a continuation of registral direction and a continuation of intervallic similarity'. Similarly, according to the law of *pregnanz*, 'large intervals imply a change in registral direction ... and a differentiated change in intervallic motion from large to small',²⁹¹ a phenomenon Meyer calls "gap-fill melody".

Considering gap-fill melodies, the larger the gap is, the stronger the tendency is to prefer a reversal, a contrary motion to fill the gap. Meyer shows how this principle also holds for more extensive melodic processes, and argues that the gap-fill principle (along with what he calls 'changing note' principle), is a more important determinant for our perception of music, than melodic contours or even form.²⁹² However, in contrast to Meyer, I will argue that the affective impact of melodic contours are developmentally prior to that of melodic processes. Drawing on empirical

²⁹⁰ L.B. Meyer. "The Perception and Cognition of Complex Music", in *Music, the Arts, and the Ideas*. University of California Press, Berkeley 1973.

²⁹¹ E. Narmour. "The Top-Down and Bottom-Up Systems of Musical Implication: Building on Meyer's Theory of Emotional Syntax", in *Music Perception*, vol. 9(1) 1991.

²⁹² B.S. Rosner and L.B. Meyer. "The Perceptual Roles of Melodic Process, Contour and Form", in *Music Perception*, vol. 4(1) 1986.

research, I want to emphasize that affects are passionate states, that they have hedonic value (they are either pleasant or unpleasant), which also means that they have motivational force (they provoke desires). To see the full significance of this claim, we have to consider Meyer's theory in a little more detail.

As stated by his famous "Law of affect," Meyer sees affect as the second step in a causal chain that leads to musical experiences. The first step is a cognitive appraisal, or categorization, of an encountered stimulus. This appraisal, this judgment whether the stimulus accords with expectations or not, may (or may not) lead to an affect. Only thereafter, as a possible third step, affect causes an "experience" which may be either affective or intellectual. The way a piece of music will be experienced, as affective or intellectual experience, 'depends upon the disposition and training of the listener'.²⁹³ For Meyer, this means that 'affects per se' are neither pleasant nor unpleasant; they are hedonically neutral. Affects are undifferentiated.²⁹⁴ Only affective *experience* is differentiated, because it involves awareness and cognition of a stimulus situation. So 'while affects and emotions are in themselves undifferentiated, affective experience is differentiated because it involves awareness and cognition of a stimulus situation which itself is necessarily differentiated'.²⁹⁵ Thus 'Love and fear are not different affects, they are different affective experiences'.²⁹⁶

Whereas "affective experience," as Meyer uses the expression, comes close to "emotion," in my use of the term, the case for "affect" (per se) is more problematic. As hedonically undifferentiated, Meyer's affect resembles the notion of "activation" in psychobiology (which we shall consider in chapter twenty-seven). But activation is an objective notion to the extent that it refers to observed bodily behavior or neural activation, whereas affect as I see it is always judged hedonically.²⁹⁷ The reason I bring this up is not to fuss about theoretical detail, but to bring to the fore and question the sharp line between awareness and cognition on the one hand, and affect on the other, that Meyer's (very influential) theory implies. The consequence of Meyer's affect being undifferentiated is namely that *it cannot partake actively in categorization*. Categorization, for Meyer, is cognitively prior to affect. Affect has no impact on the design of categories; rather the contrary. Affect, Meyer says, is experienced as differentiated *only* because affective experience (I repeat) 'involves awareness and cognition of a stimulus situation which itself is necessarily differentiated'.²⁹⁸ Stated even more clearly, 'Conceptualization precedes

²⁹³ L.B. Meyer. *Emotion and Meaning in Music*, p.40.

²⁹⁴ *Ibid*, p.17.

²⁹⁵ *Ibid*, p.19.

²⁹⁶ *Ibid*.

²⁹⁷ Meyer's affect comes closer to the notion of arousal that one finds in a theory such as Stanley Schachter's, than that of Berlyne's. Cf. R.Reisenzein. "The Schachter Theory of Emotion: Two Decades Later", in *Psychological Bulletin*, vol. 94(2) 1983. On Berlyne, see chapter twenty-eight.

²⁹⁸ L.B. Meyer. *Emotion and Meaning in Music*, p.19.

and qualifies affective experience'.²⁹⁹ Thus, in so far as differentiation does not hinge on affect, categorization must be a purely cognitive and rational process in Meyer's theory. And since affect is hedonically neutral, hedonic judgment—the judgment whether something is pleasant or unpleasant (whether one feels tensed or relaxed)—would also be a completely rational affair, leading only thereafter to an affective experience. This, one must admit, is a rather strange consequence of a theory that claims to despise 'the traditional dichotomy between reason and emotion and the parent polarity between mind and body'.³⁰⁰

We have reason to doubt Meyer's claim that the affective experiences of music are determined solely by 'the nature of the stimulus situation'.³⁰¹ Whereas Meyer admits that "'musical mood gestures" may be similar to behavioral mood gestures',³⁰² and that 'the listener may become aware of how the music "feels" in relation to his own designative emotional experiences and the observed emotional behavior of others', he nevertheless maintains that music 'pictures, describes, or symbolizes none of the actions, persons, passions, and concepts ordinarily associated with human experience'.³⁰³ Although 'the character of the deviations embodied in a particular work play a part in conditioning our opinion of what, in general terms, its designative content is', music nevertheless 'is an art which is essentially without external referents ... a more or less closed system'.³⁰⁴ Meyer, in short, considers himself to be an 'absolute expressionist', believing that 'emotional meanings arise in response to music and that these exist without reference to the extramusical world of concepts, actions, and human emotional states'.³⁰⁵ And since there is 'no causal nexus between successive connotations or moods' to be found in music, we have to beware of 'the powerful temptation towards extramusical diversion' that any kind of referentialist position might imply.³⁰⁶

Although Meyer acknowledges the presence of moods, emotions and gestures when we listen to music, he is unwilling to see them as part of our *musical* experiences. Moods, emotions, gestures, *etc.* are extramusical diversions that, one would guess, distract the analyst from attending to the *real* music.

Of course, the basic-level affective contours of music that I propose would be devoid of emotive content outside any human context; they would be no more than the 'the logical expression[s]' of 'the morphology of feeling', as Susanne Langer put it.³⁰⁷ They would be no more than some

²⁹⁹ L.B. Meyer. *Explaining Music*. p.6.

³⁰⁰ L.B. Meyer. *Emotion and Meaning in Music*, p.39.

³⁰¹ *Ibid.* p.19.

³⁰² *Ibid.* p.268.

³⁰³ *Ibid.* p.20.

³⁰⁴ *Ibid.* p.89.

³⁰⁵ *Ibid.* p.3.

³⁰⁶ *Ibid.* p.372;

³⁰⁷ S.K. Langer. *Philosophy in a New Key*, pp.176;193. The New American Library of World Literature, Inc., New York 1948. Italics omitted.

sensory stimuli for us to cognitively respond to.³⁰⁸ But listening in a human context is taken for granted here, and I shall accordingly sketch the outlines of a more nuanced picture of our passions and their place within our musical experiences.

I will do this by claiming that affect is hedonic by nature, and as a consequence (and more importantly) that *affect fulfills a differentiating function in categorization*. First, I assume that the breaking of Gestalt laws causes affect. More specifically, it causes hedonically-appraised activation. Second, the directing of attention towards the arousing stimulus and the experience of tension and relaxation that follows, *provokes categorization* due to the hedonical valence of the affect. Third, categorization enables prediction of reward and gratification, which leads to a hedonic reevaluation of the stimulus. Categorization is thereby fed forward, admitting style-specific patterns of prediction and expectation. Thus, on my view, cognition is not a wholly rational but a fundamentally passionate affair.

Thereafter I will look at how music may induce moods and emotions in the listener, primarily by considering the role of *gestures* – auditory as well as visual and tactile – in human interaction. I hereby hope to show that music would never exist outside any “interhuman” situation, and that in spite of Meyer’s claims music actually *does* articulate our feelings in a very basic sense. Music indeed builds, and the capacity to experience music builds, on the extramusical, or rather *protomusical*, gestures and affective contours of the actions, passions and concepts ordinarily associated with human experience, but to which Meyer assigns no musical relevance. Without thereby saying that our musical experiences necessarily involve emotional *interpretation*, this line of argument will enable us to acknowledge an aspect of music that is always ideological without presupposing language.

Chapter twenty-five

Toward a functionalist theory of basic level categorization

A comprehensive functionalist theory of music takes basic-level categories as its input and describe how sub- and superordinate categories relate to it. In addition it would describe principles whereby a verbally determined categorization of sound relates to these levels and how this may influence our listening experiences without our being aware of the fact. A possible error with the *GTTM* is that it starts from what may turn out to be a *subordinate* level of categorization, which in turn would mean that the theory will not adequately distinguish

³⁰⁸ See L.-O. Åhlberg. “Susanne Langer on Representation and Emotion in Music”, in *British Journal of Aesthetics*, vol. 34(1) 1994.

between the innate and the learned on the one hand, and between that which can be learned with and without the mediation of language on the other. What I shall present now is a functionalist account of the basic level of our musical experiences.

Of course, sounds “in themselves” cannot be said to obey any principles of categorization. Although we describe the sounds we hear as melodies, spoken words, birds singing and cars passing by, *etc*, acoustics tells us that reaching our tympanic membranes is a smear of superimposed airwaves, rather than finely distinguished sound objects or Gestalts. The first step towards separating incoming stimuli into categories is accomplished by our innate capacity to analyse the harmonic spectrum of sound waves. Many bodies emit harmonic sounds. When they are set in motion the bodies produce airwaves whose frequencies are ordered multiples of a particular fundamental tone. This makes it possible for the listener’s auditory system to analyse the frequency spectrum and hear which parts of it stem from the same source and which parts do not.³⁰⁹

Nevertheless, since spectral analysis is nothing that listeners can engage in consciously, a functionalist theory aiming to explain the musical experiences of a listener need not account for it and may take its outcome for granted as that which, or part of which, basic level categories are built upon. Suffice it to say here that most of the suggestions in the literature aiming to relate content to neurology are also rather speculative, referring either to patterns of neural firings or various kinds of brain waves, which can be assumed to underlie our experiences of melodic contours (although neurons have only two states of activity – they either fire or they do not – the nervous system is capable of transcending this digital constraint by also accounting for the rate and pattern of firings).³¹⁰

What is not answered by either psychoacoustics or a theory such as the *GTTM*, is *why* we tend to pay attention to certain constellations of sounds and soundwaves. How can we learn that certain sound objects or gestalts are significant? To support the claim that music is always ideological, an account is needed of what brings about our basic level categorization of sounds. This will be a teleofunctional explanation giving the purpose(s) of the capacity of basic-level categorization as such. Such an account cannot, however, draw its strength from within the functional framework hitherto suggested. Whereas the input and output of the functional system envisioned are couched in folk-musicological or music-theoretical terms, the motivating force behind our perceptual and cognitive capacities is unlikely to be. The notion of basic-level melodic contours will instead have to be based on findings from various empirical fields such as psychobiology, experimental and developmental psychology.

³⁰⁹ A.S. Bregman. “Auditory Scene Analysis: Hearing in Complex Environments”, in *Thinking in Sound. The Cognitive Psychology of Human Audition*.

³¹⁰ See E.R. Kandel and J.H. Schwartz. *Principles of Neural Science*, pp.23;162. Elsevier/North Holland, New York 1981.

Moreover, in attempting to answer the question above (how we can learn that certain sound objects or gestalts are significant), I will draw on a particular principle, which we have already encountered in the notion of a narrative lack motivating action through the instigation of desire (and the way it has been articulated in the philosophies of emotion and action). This principle can be traced in various guises, if not to Plato's distinction between pleasure and pain as the 'first perceptions' of children,³¹¹ at least to Spinoza's *conatus*,³¹² via Schopenhauer's *will*, to Freud's *constancy principle*³¹³ – subsequently influencing music theorists such as Schenker, Ernst Kurth and Paul Hindemith.³¹⁴ We can call this the principle of *desire*.

Schopenhauer, to take the most familiar exponent of the theme, claimed that music is the unmediated expression of the fundamental source of being. This source, this propelling force in the universe, this motivating *will* that music expresses, recurs in the eternal cycle of nature, reaching its highest form in man's striving for need gratification. Existence, in Schopenhauer's view, is a constant oscillation between need and gratification, while man's experienced existence is but a *representation*, a mental conception, of the will, for which our verbal expressions function as terminal points of reference. Words such as happiness, sorrow, love, hopefulness, hate (with their corresponding reasons and motives) are the tools by which we try to grasp this underlying power of existence. However, music differs from both language and the representative arts in that it neither depicts nor denotes reality, but that it analogously to reality, is a direct expression of the will.³¹⁵

Although we may not be able to say that the will is any universal force, to say that it is the motivating force behind the development of the human mind is more plausible³¹⁶ – which is not to say that we must treat it as an epistemological first principle. We can see what this means by looking at Freud's constancy principle and the way it articulates the distinction between *pleasure* and *pain*.

According to the constancy principle, pleasure is proportional to the proximity of the state of the organism to psychophysical stability, while pain is proportional to the deviation from stability. From this principle Freud derives another two: the pleasure principle and the reality principle,

³¹¹ Plato. "Laws, Book II" in *Musical Aesthetics: A Historical Reader*, vol 1. Ed. E.A. Lippman. Pendragon Press, New York 1986.

³¹² According to Spinoza, 'the effort (*conatus*) by which each thing endeavours to persevere in its own being is nothing but the actual essence of the thing itself'. Quoted from J.I. Friedman. "An Overview of Spinoza's *Ethics*", in *Synthese*, vol. 37 1978.

³¹³ Freud attributes the constancy principle to Fechner, See S. Freud. "Beyond the Pleasure Principle" in *The Standard Edition*, vol. 18. The Hogarth Press, London 1958.

³¹⁴ See D.M. Hsu. "Ernst Kurth and his Concept of Music as Motion", in *Journal of Music Theory*, vol. 10 1966; K. B. Blomdahl. "Hindemiths kompositionslära", in *Musikvärlden*, vol. 9 1945.

³¹⁵ A. Schopenhauer. *The World as Will and Representation.*, §§52-58. Trans. E.F.J. Payne. Dover Publ, New York 1969.

³¹⁶ There does seem to be connections both to the "feedback policies" that our genes have bestowed our bodies with, as well as to the shifts between different attractors of so called self-organizing systems. See R. Dawkins. "Selfish Genes and Selfish Memes", in *The Mind's I. Fantasies and Reflections on Self and Soul*. Ed. D.R. Hofstadter and D.C. Dennett. Penguin Books, Harmondsworth 1982; F.J. Varela, et al. *The Embodied Mind. Cognitive Science and Human Experience*, ch.5. The MIT Press, Cambridge (Mass.) 1991.

the latter evolving out of the former. By way of various drives they are both in the service of protecting the organism from inner and outer disturbances, of maximizing pleasure and minimizing pain, although they do so in eminently distinct ways. The pleasure principle insists that the organism immediately act to regain satisfaction when painfully upset. This principle rules the unconscious, the *id*, which cannot bear pain at any cost, cannot accept anything but instant gratification. In contrast, the reality principle takes note of worldly circumstances, natural and cultural, and adapts the organism to their conditions before acting. The reality principle governs consciousness, *ego*, which avoids pain by trying to predict the future. Prediction presupposes memory and categorization, which the ego utilizes in order to achieve future gratification. Following the reality principle, the ego endures temporary pain for a less direct but more secure and predictable pleasure.³¹⁷

Sometimes conflicts arise, when the goals of ego and id, following the reality and the pleasure principle respectively, contradict each other. Although this is of major interest for Freudian psychoanalysis, it is not the issue here. What interests us instead is what it means for a reality principle to develop out of a pleasure principle. The basic assumption that I read off from this is that our cognitive capacities, of which experiencing the basic level categories of music is one, is a result of us having developed a reality principle from a more basic pleasure principle.

The questions to be asked are: How can an organism such as the human being, in its psychic development, come to distinguish between inner and outer stimuli? How can it learn to distinguish between various inner (interoceptive and proprioceptive) and various outer (exteroceptive) stimuli and respond to them in an accurate way? And are we right in describing this distinguishing capacity in terms of basic level categories?

Rather than being interested in the capacities of the pleasure and reality principles to motivate action *per se*, we shall see how such a motivating force could also bring about a development of our perceptual capacities — that by which we can learn that certain sound objects or gestalts are significant. To provide answers to these questions, I will regard experienced sound events as temporally unfolding fluctuations between (functional) pleasure and pain states, some of which become categorized on a basic level as musically unfolding fluctuations between (phenomenological) tension and relaxation.³¹⁸

³¹⁷ See S. Freud. "Formulations on the Two Principles of Mental Functioning", in *The Standard Edition* vol. 12. This account of Freud's tenets is enough to serve the present purpose, although it should be pointed out that he continuously elaborated the model, see "The Ego and the Id" and "The Economic Problem of Masochism", both in *The Standard Edition* vol. 19.

³¹⁸ On the applicability of the terms tension and relaxation, see F.V. Nielsen. "Musical 'Tension' and Related Concepts", in *The Semiotic Web*, 1986.

Chapter twenty-six

In the beginning was the voice – the mother’s voice

Already at four and a half to six months of age, babies seem to prefer certain phrasing in music. In one study, Mozart minuets were played with pauses inserted that either did or did not correspond to the phrase indications of the score. The infants in the test faced the loudspeaker out of which came the versions with pauses between phrases significantly longer, than they faced the loudspeaker out of which came versions that had pauses inserted in the middle of the phrases.³¹⁹ When did the children acquire this desire for stylistically correct phrasing of music? Are we innately “hard wired” to prefer correct Mozartean phrasing to stylistically deviant versions? Maybe some would not hesitate to say yes. After all, babies react to sound already in utero.

Not only do external sounds reach into the uterus;³²⁰ it has also been shown that from the third trimester on, the fetus reacts to external sounds with increased body movement and an observable change of heart rate.³²¹ In tests where music was played to twin fetuses by placing a pair of headphones on the mother’s abdomen the two fetuses showed different individual reactions, which suggests that they respond to the music with individual “preferences.” When the headphones were placed on the mother’s head there was no fetal reaction at all.³²² In a different test (with a single fetus), where music was played to the mother through headphones, the fetus did react with increased body movement, though increased heart rate could not be observed. The duration of body movement was significantly longer when the mother was exposed to music that matched her stylistic preferences, indicating the possibility that the ‘maternal emotional response to music was the first step in a chain of events which finally caused the fetus to be more active’.³²³

Studying the human being after birth reveals that already within the first three days of life, a newborn baby can distinguish its mother’s voice from other female voices. Not only does it recognize 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

³¹⁹ C.K. Krumhansl and P.W. Juszyk. “Infants’ Perception of Phrase Structure In Music”, in *Psychological Science*, vol. 1(1) 1990.

³²⁰ See S.C. Woodward and F. Guidozzi. “Intrauterine Rhythm and Blues?”, in *British Journal of Obstetrics and Gynaecology*, vol. 99 1992.

³²¹ See J.C. Grimwade, *et al.* “Human Fetal Heart Rate Change and Movement in Response to Sound and Vibration”, in *American Journal of Obstetrics and Gynecology*, vol. 109(1) 1971.

³²² See C. Olds. “Fetal Response to Music”, in *Midwives Chronicle and Nursing Notes*, vol. 98 1985.

³²³ See E.Z. Zimmer, *et al.* “Maternal Exposure to Music and Fetal Activity”, in *European Journal of Obstetrics and Gynecology and Reproductive Biology*, vol. 13(4) 1982.

mothers.³²⁴ 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).³²⁵ It has been suggested that the capacity to recognize the mother's voice among other female voices serves 'to prime the newborn to respond preferentially to its mother and ... provide important feedback to the mother who is looking for signs of recognition'.³²⁶ That the newborn recognizes its mother's voice is probably because without a mother to feed it, the child would not survive. But what about the music?

Part of the answer to the questions why and how the infant comes to prefer its mother's voice and certain phrasing of music has been offered by Sandra Trehub. With reference both to the attention-invoking dispositions of different types of speech contours (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, as we know, are easily encoded and remembered; they have similarly perceived overall shapes and show high intracategorical similarity and intercategory dissimilarity. Trehub suggests that prototypicality of basic-level 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. In addition, 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 by the newborn. 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.'³²⁷

³²⁴ See A.J. DeCasper and W.P. Fifer. "Of Human Bonding: Newborns Prefer their Mother's Voices", in *Science*, vol. 208/1980.

³²⁵ M. Papousek, et al. "The Meanings of Melodies in Motherese in Tone and Stress Languages", in *Infant Behavior and Development*, vol. 14 1991.

³²⁶ P.G. Hepper, et al. "Newborn and Fetal Reponse to Maternal Voice", in *Journal of Reproductive and Infant Psychology*, vol. 11 1993.

³²⁷ S.E. Trehub and L.J. Trainor. "Rules for Listening in Infancy", in *The Development of Attention: Research and Theory*. Ed. J.T. Enns. Elsevier Publishers B.V., North Holland 1990; See also S.E. Trehub and A.M. Unyk. "Music Prototypes in Developmental Perspective", in *Psychomusicology*, vol. 10 1991.

We can conclude that it seems as if the human being is capable of basic-level categorization of sounds already in utero. Additional indicies of this are studies showing that fetuses habituate to repeated stimulation, which means that some kind of categorization is going on.³²⁸ Moreover, if the capacity to recognize the mother's voice is a matter of prenatal learning in the uterus where only lower partials of the sound spectrum are available, 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').³²⁹ As tests show, neither frequency nor amplitude in isolation is recognized by the child, leaving as the only available parameter of significance the characteristic prosody of the mother's voice, its melodic contour (as we shall see in chapter thirty-two, the properties of this contour to which the child responds are amodal, that is, they enable comparison with other nonauditory sensations).³³⁰

What Trehub does not answer is why the specific contours of the mother's voice should be recognized at all. What may the mediating "chain of events" consist in that enabled differentiated fetal reactions to music—music that the fetus could not even hear—depending on the mother's preferences? In the next two chapters I shall articulate this question in a little more detail and point towards a possible answer.

Chapter twenty-seven

Dissipative structures and the musical brain

S chopenhauer's will, Freud's constancy principle, and the notion of slack and desire in narratology may all be regarded as *feedback mechanisms*. They feed the system back to the initial state of stability. There are also other, more complex mechanisms that maximize discrepancy, mechanisms that feed the system *forward* until a new different level of stability is obtained. Organisms which display this kind of positive feedback, or feedforward mechanism have been studied in terms of so-called *dissipative structures*.³³¹ In contrast to an *equilibrium structure*, such as crystal, which remains constant as long as there is no exchange of energy or matter with the environment, the dissipative

³²⁸ See E. Shalev, *et al.* "Fetal Habituation to Repeated Sound Stimulation", in *Israel Journal of Medical Sciences*, vol. 25(2) 1989.

³²⁹ See J.-P. Lecanuet. "Prenatal Auditory Experience", in *Musical Beginnings*. Ed. I. Deliège and J. Sloboda. Oxford University Press, Oxford 1996; Cf. also M.J. Spence and A.J. DeCasper. "Prenatal Experience with Low-Frequency Maternal-Voice Sounds Influences Neonatal Perception of Maternal Voice Samples", in *Infant Behaviour and Development*, vol. 10 1987; Cf. also A.H. Gregory. "Timbre and Auditory Streaming", in *Music Perception*, vol. 12(2) 1994.

³³⁰ See A. Fernald and P. Kuhl. "Acoustic Determinants of Infants Preference for Motherese Speech", in *Infant Behaviour and Development*, vol. 10 1987. See also J. Mehler. "Infant Recognition of Mother's Voice", in *Perception*, vol. 7/1978.

³³¹ See. I. Prigogine. and I. Stengers. *Order out of Chaos*. Bantam Books, New York 1984.

structure is highly dependent on communication with the outside world. Unless the dynamic dissipative structure is to approach equilibrium and turn static, it needs a constant flow of “information,” that is, a dissipation of energy or matter. The structure is open to the environment, it is in a constant state of non-equilibrium, and thereby adaptive to outer changes. But once environmental conditions become overwhelming, it will turn into a chaos out of which a new order, a new stable structure at a different distance from equilibrium, may emerge.

By reference to this notion of dissipative structure, Nils Wallin explains the reactions and responses of our brain to the regular and irregular patterns of musical stimuli. Musical experiences, Wallin proposes, are the result of neural fluctuations in our auditory systems between chaos and stable states at various distances from equilibrium. A stable state is when auditory input is categorized so as to coordinate with purposeful output (or purposeful absence thereof). For instance, the undulating melody of a lullaby or the meditative flute of a Dervish ritual may cause a biorhythmical pattern of neural firings that approaches equilibrium, but which is constantly upset by moderate fluctuations forming a regular structure.³³² On the other extreme we find chaos and trance, outlets of irregular energy flows, caused by excited playing and dancing, driving the dissipative patterns to a structural breakdown.

It should be pointed out, though, that for trance to be induced, the process must start with easily recognizable regular patterns which successively get more random and aleatoric, until trance is reached (think of Ravel’s *Bolero*).³³³ If, on the contrary, the musical process is unforeseeable already at the outset, if it starts with sonorities that cannot be categorized, as is often the case with modern music, an untrained listener will lose attention right away, leaving the trance option to a listener capable of a more analytic approach—that is to say, a listener capable of hearing categorical regularities where others hear only chaos or tiring noise.³³⁴

Finally there are also dissipative structures far from equilibrium, structures emanating from greater fluctuations than those of lullabies and the like. Recalling Trehub’s notion of good patterns, of which the falling contour of the lullaby was one, we may say that such a good pattern is a dissipative structure close to equilibrium, while a dissipative structure far from equilibrium is a categorized pattern that is far more complex than a simple good pattern. Any category that extends the limits of the simplest children’s song would be a dissipative structure more or less far from equilibrium. However, far-from-equilibrium-structures require learning and attentive listening. Any piece by Schoenberg or Webern would provide a good example of music available only to the trained listener; the

³³² Cf. N.L. Wallin. *Biomusicology. Neurophysiological, Neuropsychological and Evolutionary Perspectives on the Origins and Purposes of Music*, pp. 275;330ff. Pendragon Press, Stuyvesant (N.Y.) 1991.

³³³ Cf. *Ibid.* pp. 285;289;323.

³³⁴ Cf. *Ibid.* pp. 290; 326.

accidental listener not accustomed to this music is quite likely to display an indifferent, if not outright bored, reaction to it (I am thinking here of an ordinary concert situation, and not a movie situation, such as watching *The Shining*, in which the unpredictable structures of modern music are used as scary effects).³³⁵

Wallin refers to research with EEG and PET scanning, which enables the observation of neural energy flows, or *biorhythms*, in the brain. Such rhythms, or waves, vary according to sensory input and are related to different vigilant states of the subject.³³⁶ Fluctuations in energy flows, which appear in connection with auditory stimulation, function as an internal clock, measuring incoming sensation, synchronizing it with postural reflexes and behavioral readiness, thereby alerting us to the sources of various stimuli. Variations in biorhythmical patterns thus function as modifiers of alertness in response to environmental demands, such as the immediate attention to a sudden, irregular or loud sound, while they allow a secure drowsing off to a calm, undulating sound or movement.

Attentive states may be activated by ritual music or rock concerts, leading to excitation or even trance, while the effects of a lullaby or meditative flute playing may respectively induce sleep or religious ecstasy.³³⁷ Wallin speaks of these different activation levels in terms of an *arousal continuum* (activation and arousal are synonymous terms). The lower part of the continuum is said to serve a homeostatic, recreational purpose, while the upper part tends towards catharsis, an outlet for irregular energy flows. Between these two extreme poles of homeostatic ecstasy and cathartic trance, one finds moderately irregular rhythms, corresponding to relaxed wakefulness, caused by more or less predictable everyday experiences, as well as sophisticated listening to fairly complex music.³³⁸

The transformation of sensory information into biorhythmical energy flows, which triggers attention, is accomplished by the brain's *reticular system*. However, it is not a question of fixed response patterns of the brain being rigidly coupled to the identification of external stimuli. In addition to the quantitative biorhythmical analysis of sound, there is a qualitative analysis done by the *limbic system*, resulting not in states of attention but in positive and negative feelings that supposedly underlie our emotions. Considering the emotive coloring performed by the limbic system, states of alert vigilance caused by sudden, unforeseen sounds may be correlated with emotions such as fear or anger. If it follows from a concert or a ritual, the experience may instead be feelings of confidence or excitement. The intermediate states of relaxed wakefulness quite naturally seem to go

³³⁵ Cf. P.Tagg, *Op cit*, p.59, n.226.

³³⁶ See Wallin, *Op cit*. p.231ff.

³³⁷ Cf. *Ibid.* p.319f. Note that according to the terminology favored by Wallin, trance is the state of excitement and arousal while ecstasy denotes its opposite. The latter is therefore being associated with neither sex, drugs, nor intense music.

³³⁸ See *Ibid.* p.289.

together with moderately exciting feelings, such as happiness, grief and joy, while sleeping to a lullaby goes together with comfort and calm.

Wallin's nomenclature of dissipative structures can be seen as a way of functionally systematizing findings from brain scanning research. Although the musical examples go beyond a basic level of categorization, it is likely that the structural principles also apply to the basic level. In addition, the kind of research Wallin refers to can be further systematized.

Chapter twenty-eight

Aversion, reward and the inverted U-curve

As Wallin suggests, our experienced feeling states function as 'a kind of filter that structures the perception and memorization: for the most part, those stimuli which are sufficiently loaded by motivation-emotion are heeded; they become stored according to their grade of association-importance.'³³⁹ In other words, the effects of the limbic system extend beyond the mere temporary classification of our sensory experiences. But how do these mechanisms – the trigger of attention and the emotive evaluator – interact?

One suggestion that seems to account for both feedback and feed-forward has been offered by Daniel Berlyne, who suggests a two-part function of the reticular system.³⁴⁰ Berlyne speaks of a primary and a secondary *reward system* in addition to an *aversion system*.³⁴¹ Primary reward and aversion are both related to the observable activation of EEG waves in the reticular formation. Humans and animals tend to prefer moderate activation and tend to learn and repeat behavior that leads to a moderate increase in it. Moderate activation is rewarded; it is experienced as pleasurable. However, when activation reaches a certain level, the stimulus causes an aversive (displeasurable) reaction leading to a withdrawal by the subject, who also tends to learn to avoid such arousing stimuli.

Berlyne describes reticular activity in terms similar to Wallin's arousal continuum:

A human being or higher animal can be regarded as possessing, at a particular moment, a particular "level of arousal" or "activation." His position along this dimension can be regarded roughly as a measure of how wide awake, alert, or excited he is. As long as he is enjoying normal health, his lowest levels of activation will be reached while he is asleep, and, during his waking hours activation will undergo fluctuations within the middle range. It will be fairly low

³³⁹ *Ibid.* p.302.

³⁴⁰ Cf. A. Routtenberg. "The Two-Arousal Hypothesis: Reticular Formation and Limbic System", in *Psychological Review*, vol. 75(1) 1968.

³⁴¹ See D.E. Berlyne. *Aesthetics and Psychobiology*, p.75ff. Appleton-Century-Crofts, New York 1971.

while he is relaxed and resting, but it will rise when he is alerted, or in an emotional state, or under the influence of some drive like hunger. His activation will approach the upper extreme only in extraordinary circumstances, such as those of violent frenzy, passion, or fury.³⁴²

In contrast to the primary reward and the aversion systems, which are related to the reticular formation, the secondary reward system is related to the limbic system. Its purpose is mainly to inhibit the aversion system at high levels of activation, and thereby drive us beyond previous limits of action. Berlyne mentions that 'Reports of human beings that have undergone brain surgery confirm that electrical stimulation of some limbic regions makes formerly intractable pain more tolerable and temporarily abolishes severe depression.' A similar effect is triggered naturally, when food 'presented to a hungry animal' or fear 'alleviated through the appearance of a reassuring stimulus ... [leads to] a lowering of arousal and an alleviation of unpleasantness.'³⁴³ What happens in these trajectories is that hunger or fear (either reported by the subject or inferred from observation of the subject), appears together with an observable *increase* in activation of EEG waves. This level of activation is experienced negatively by the subject, until a reassuring stimulus (such as food within reach) is presented and the secondary reward system triggers.

Another example is that of a hungry baby who needs to be calmed down and soothed *before* it can be fed and its hunger reduced. We can explain this in terms of hunger causing a painful and aversive level of activation which cannot be decreased by the exteroceptive stimulus of food within reach, since the child does not recognize it, but only by the received properties of the touch, sound and smell of the soothing mother. Only through subsequent repetition will the child learn to associate the sight and smell of food with need gratification, enabling this new experience, as mediated by the secondary reward system's capacity to endure activation, to subsequently decrease activation by itself. The amount of activation admitted by the primary reward system, then, depends on the amount of learning and the ability to purposefully categorize stimuli, and this learning, in turn, requires of the secondary reward system that it deactivates the negative reaction of the aversion system.

Berlyne illustrates the reward and aversion systems with what he calls *the inverted U-curve*. The inverted U-curve indicates how increase of activation will be experienced positively up to a certain point—the top of the inverted U—whereafter pleasure decreases. At every particular moment there is a point that marks the maximum level of tolerated activation. If this point is transgressed, activation will be experienced as decreasingly pleasurable, until too high an activation will have exceeded the critical limit leading to an experience of increasing pain. This is so

³⁴² *Ibid.* p.64.

³⁴³ *Ibid.* p.85.

because the rewarding pleasure system has a lower threshold and ceiling level than the aversive pain system. At low levels of activation pleasure is therefore experienced, but at higher levels of activation the pain system is also activated, leading to the successive change in hedonic tone from less pleasure to more pain (as described by the inverted U-curve). Hedonic tone is thus the sum of the outputs from the two systems.

The amount of activation that can be positively experienced may vary over time. As mentioned, we may adapt to several increases of activation through learning, that is, through the categorization of, and familiarization with, new phenomena. Not only may we adapt to loud sounds and endure hunger if we know that food will soon be supplied; we may also learn to appreciate music that seems confusing at first listening. What happens in such cases, Berlyne suggests (individual limits for adaptation to all these variables being taken into account), is that the secondary reward system inhibits the aversion system, which enables the primary reward system to act at higher levels of activation (that is, increasing its ceiling level). Nevertheless, factors such as circadian rhythms affect the primary reward system, causing us to get tired at relatively regular intervals, thereby decreasing our tolerance for external stimuli.

Given a certain level of homeostasis, a certain base level of the inverted U-curve (that which physiologists sometimes refer to as *tonic* level), several factors may determine the amount of activation. Berlyne points to three factors of the stimulus that affect our sensory systems that are of importance for aesthetic research. What he calls *psychophysical* variables include brightness of light, loudness of sounds, *etc.* In other words, 'more intense stimuli are more arousing.' Secondly, Berlyne mentions *ecological* variables, associated with 'biologically noxious or beneficial conditions'. 'Lastly, and most significant for aesthetics,' according to Berlyne, 'arousal can be raised by such properties of stimulus patterns as novelty, surprisingness, complexity, ambiguity, and puzzlingness.' These variables are called *collative*, adverting to 'the fact that, in order to decide how novel, surprising, complex, and so on, a pattern is, one must compare or collate information from two or more sources.'³⁴⁴ In other words, collative variables assume the expectancies or implications of preexisting categories to deviate from.

Three things should be pointed out here. First, Berlyne's inverted U-curve is a hypothesis about subjective preference for a stimulus. However, I do not invoke it for the purpose of answering questions such as how much exposure it will take for a particular song on radio or TV to reach its peak of attraction on an audience.³⁴⁵ I envision the inverted U-curve, not as a nomological principle, but rather as a possible illustration of how a sounding stimulus is perceived and hedonically judged in *real time* while

³⁴⁴ *Ibid.* p.69.

³⁴⁵ Cf. A.C. North and D.J. Hargreaves. "Experimental Aesthetics and Everyday Music Listening", in *The Social Psychology of Music*. Ed. D.J. Hargreaves and A.C. North. Oxford University Press, Oxford 1997.

listening—or perhaps better, how the music *feels*. Second, we do not need to delve into the biological subtleties of hedonic tone (understood as the combined output of the aversion and reward systems); what interests us here is simply whether a stimulus is experienced as more or less pleasurable or painful. So when I speak of hedonic tone, I will make no assumptions about its composite cerebral sources. The third thing to be pointed out is that Berlyne does not say much about the secondary reward system, the system that should account for learning and categorizational capacities, the feed-forward system that would cause the inverted U-curve to change shape. In the next chapter I will refer to research that may explain the basic principles for the triggering of this secondary reward system-

Chapter twenty-nine

Pleasure, pain and reality

Auditory categorization—categorization of sound—occurs already in utero. According to the principle of desire, there would have to be a motivating force behind this early capacity. Can we point to such a force? Following Freud, René Spitz has given some support to the premise that ‘perception of the surround is predicated upon tension generated by an ungratified drive’.³⁴⁶ In Spitz’ view, the capacity of categorization in early life is the result of associating an external stimulus with an internal positive or negative state: To ‘enable the infant to perceive an external stimulus ... two factors must be present *jointly* and combine. The first is an external stimulus, the stimulus which the infant has come to associate with impending need gratification; the second stimulus is ... the infant’s hunger condition, his need for food.’³⁴⁷ Put briefly, Spitz’ view seems to be that the child is always put in a position in which it can see the mother whenever it is being fed; the child comes to associate visual features of the mother’s face with the pleasure of need gratification. Since ‘the human appears in the visual field of the infant every time one of his needs is gratified ... the human face becomes associated with relief from displeasure as well as the experience of pleasure’.³⁴⁸

Turning to the infant’s perception of the mother’s voice, the assumption we can make is that there is an affective variation already in utero. Following Spitz line of explanation, categorizing the mother’s voice in utero should take place because it is associated with well-being, in contrast to displeasure. After birth the voice is associated with feeding and nursing, since the mother is always present when she feeds and nurses,

³⁴⁶ R. Spitz. *The First Year of Life*, p.50. International Universities Press, Inc. New York 1965.

³⁴⁷ R. Spitz. *Op cit*, p.48.

³⁴⁸ *Ibid.* p.51.

but what about before birth? If prenatal life were constant well-being (as one would perhaps like to believe), there would be no need for the fetus to attend to any external phenomena, since it would not make any difference in terms of need gratification. What, then, could a normal source of in-utero negativity consist in? One possible explanation could be that the prenatal experience of the unpredictable pattern of present and absent speech sounds in an otherwise continuous environment creates a feeling of lack and a desire for presence, which the absence of the mother's voice would by itself function as a first proto-perceptual differentiation.³⁴⁹ A different answer would pay attention to a fundamental characteristic of the interaction between the mother and the fetus, mediated by heart rate, respiration, and bodily movement, namely its relative 'constancy and rhythmicity'.³⁵⁰ Assuming that temporary ruptures breaking this rhythmical constancy causes temporal mismatches in the mother-fetus dyad, we may have a source of intrauterine negativity where biorhythmical mismatches would be inherently negative to the fetus.

What these alternatives do not give is an explanation of why an unpredictable pattern of present and absent speech sounds would be negative to the fetus, or why biorhythmical mismatches between mother and fetus would be so. Why would the fetus have to react to these changes at all? Perhaps a simple answer would refer to the transmission by the mother, through the production of hormones, variations in temperature, and supply of oxygen and nourishment via the placenta, 'elements not only of her own biological state, but also of her own mental and emotional world'.³⁵¹ Thus, the fetus would associate certain kinds of speech phrasing with the pleasure or displeasure mediated by the mother's hormones, *etc.* Later on, after birth, infants would become able to distinguish musical phrases, as in the case with the Mozart sonata, because they attend to the melodic contour of the music, which show similarities with the prosodic shape of their mother's voice, the latter of which children have learned to recognize already in utero. Insofar as speech patterns would display prototypical features, or good patterns, as Trehub suggests, so would the melodic patterns of music.

Spitz' account also suggests another feature of the categorization process when he speaks of *two* factors that must be present jointly. These factors are the visual stimulus provided by the appearance of the mother's face and the simultaneously gratified hunger condition. There is thus simultaneously an exteroceptive and an interoceptive experience (face and hunger). Both of these are experienced according to their affective contours. Insofar as these contours may be different, have different

³⁴⁹ See S. Maiello. "The Sound-Object: a Hypothesis about Prenatal Auditory Experience and Memory", in *Journal of Child Psychotherapy*, vol. 21(1) 1995.

³⁵⁰ Cf. M. Mancía. "On the Beginning of Mental Life in the Foetus", in *International Journal of Psycho-Analysis*, vol. 62 1981. Cf. also B.R.H. Van den Bergh. "The Influence of Maternal Emotions during Pregnancy", in *Pre- and Peri-Natal Psychology Journal* vol. 5(2) 1990; K.J.S. Anand and P.R. Hickey. "Pain and its Effects in the Human Neonate and Fetus", in *New England Journal of Medicine*, vol. 317 1991.

³⁵¹ M. Mancía. *Op cit.*

shapes, we must also assume that they have different hedonic qualities. This fact, if it is a fact, may then account for how one intrinsically negative experience, the visual stimulation caused by the appearance of the mother's face, by being associated with the pleasurable feeling of decreasing hunger, is categorized as pleasurable. The positive hedonic valence of the interoceptive experience has thus *overridden* the negative valence of the exteroceptive, and the painful has become pleasurable. This, then, may be the very first way by which the secondary reward system is triggered in the development of our perceptual and categorizational capacities.

Once a visual or auditory object has been categorized, this feed-forward process may be further enhanced in that a repeated encounter with the now-familiar object leads to an overall pleasurable experience, in which associations with other pleasurable objects and self-images, because they too are pleasurable and add to the total hedonistic state, trigger the secondary reward system, so as to enable the pleasurable experiencing of new and previously unfamiliar stimuli.³⁵²

The way associations between different categorized objects in themselves become a source of pleasure has been suggested by Colin Martindale.³⁵³ Simplifying Martindale's theory somewhat, one can say that pleasure is relative of the degree to which a stimulus may be categorized by the perceiver. Assuming that the capacity to identify a category member corresponds to a "cognitive unit," or a "concept," in the mind of the perceiver, we can specify this by saying that pleasure (or, as Martindale prefers to say, "aesthetic pleasure"), is a function of the activation of this concept: 'Perception or recognition has to do with exactly which cognitive units are activated, whereas aesthetic pleasure has to do with the net amount of activation of these units.'³⁵⁴

Martindale has been able to show that prototypical stimuli are judged pleasurable, not according to the inverted U-curve, but according to monotonic curve, which means that 'the more prototypical a stimulus, the greater the preference for it'.³⁵⁵ Moreover, at the same categorical levels (basic, sub- or superordinate), activation is inhibitory, while activation is strengthened between levels. This means that not only may a certain basic-level melodic phrase trigger association with the whole melody and the superordinate style or genre to which it belongs, as well as to the subordinate harmonies and genre-specific scales on which it may build, but also that these associations are pleasurable. On the contrary, any intervention of closely related basic-level phrases will be negatively

³⁵² See N. Doidge. "Appetitive Pleasure States: A Biopsychanalytic Model of the Pleasure Treshold, Mental Representation, and Defense", in *Pleasure Beyond the Pleasure Principle*. ed. R.A. Glick and S. Bone. Yale University Press, New Haven and London 1990.

³⁵³ C. Martindale. "The Pleasures of Thought: A Theory of Cognitive Hedonics", in *Journal of Mind and Behavior*, vol. 5(1) 1984.

³⁵⁴ C. Martindale and K. Moore. "Priming, Prototypicality, and Preference", in *Journal of Experimental Psychology: Human Perception and Performance*, vol. 14(4) 1988.

³⁵⁵ C. Martindale and K. Moore. "Relationship of Musical Preference to Collative, Ecological, and Psychophysical variables", in *Music Perception*, vol. 6(4) 1989.

experienced. Since an activated superordinate category may activate several basic-level categories which are mutually inhibitory, the prediction of the hedonic outcome of a certain perceived stimulus is a rather complex affair: 'Preference is theoretically a function not only of the activation of cognitive units directly coding a stimulus and its meaning but also of activation of all units associated in an excitatory fashion with these units.'³⁵⁶

We must remember that hedonic judgment based on categorical prototypicality and taxonomic relatedness refers to elementary states that are quite unlikely to occur in "pure" form in real life. Rather, what happens in our daily listening to music is that disinterested pleasure adds to an overall hedonic state also determined by activation caused by the psychophysical, ecological and collative variables described by Berlyne, as well as by personal and cultural desires and preferences. Hearing a melodic phrase, belonging to a basic-level category, in a proper musical context, is therefore also likely to trigger expectations as to its continuation, the fulfillment of which probably overrides the displeasure that may arise from a subsequent phrase, the potential pleasure of which would be inhibited by the first phrase, as predicted by Martindale's theory.

Nevertheless, I believe that this points to the possible explanation of two important issues. First, Martindale's findings may add to the explanation of how categorization occurs in its initial stages. Whereas the association between a sound stimulus (the mother's voice) and a pleasurable experience (feeding) is probably a result of conditioning, the categorization of the sound stimulus and the increasing ability to distinguish finer and finer inflections of it, as well as their significance, may depend on the pleasure induced by categorical relations. The associative links between categorical levels may account for how the secondary reward system may raise the ceiling level of the primary reward system, insofar as an otherwise unpleasing stimulus is experienced as pleasurable when judged in accordance with some categorical system.

In addition, we may have an explanation here of how previous knowledge about interval structure can be accessed when in retrospect one wants to identify a holistically perceived pattern or melodic contour (see chapter twenty-one). Martindale's theory may offer an explanation of how the particular compound quality of a melodic contour stored in memory may be unconsciously associated with a specific interval pattern, although the latter need not be perceived in the listening moment. Since the perception of the melodic contour is marked with an associative link to the specific interval pattern, the latter may thereby be inferred after the encounter.

³⁵⁶ *Ibid.*

Chapter thirty

Attention

Berlyne has pointed out three kinds of variables that determine activation. We can compare these variables with some determinants of attention pointed out by Trehub. First, corresponding to Berlyne's psychophysical variable, the high register of female voices is more attention-invoking than the lower register of male voices, possibly explaining why rising pitch contours elicit more attention than falling, bell-shaped or continuous contours: high frequency is more intense than low (and so is higher amplitude). In addition, large changes in pitch are more attention-invoking than small changes.³⁵⁷ As a possible instance of an ecological variable, the mother's voice gets more attention than voices of unknown females. (we can also assume that adults and adolescents alike pay more attention to the music of their respective sub-cultures.) Finally Trehub offers an example of a collative variable with her hypothesis that the child attends to the highly personal deviations from good patterning that the mother's speech constitutes. In other words, the child compares the mother's voice with its innate preference for good forms and registers the mother's personal deviations from it.

As an example from the world of music shows, the variables may act in concert. It was suggested that dynamics (changes in amplitude) is a psychophysical variable. In music it has been observed that this variable also acts together with collative variables in the maintenance of attention. With a stimulus to which the listener has habituated, or formed expectations, an increase in dynamics is much more efficient in capturing attention than is a corresponding decrease in dynamics. In other words, listeners are much better in recognizing crescendos than diminuendos, just as they are better in recognizing voice entries than exits. This suggests that in order to maintain attention throughout a piece, one means of doing this in an economical way is to gradually increase amplitude for some time and thereafter rapidly drop it, gradually increase and rapidly decrease, and so forth. The increase in amplitude will sustain attention effectively, whereas the rapid decrease will have relatively fewer consequences. Research done on polyphonic Baroque music and piano music from the classic and Romantic periods shows that composers consequently use these variables in their compositions. In Baroque polyphony, the main means is successive voice entries, while dynamic shifts occur blockwise, or in "terrace" fashion. In classic and Romantic music, the means are shifted: gradual increase in amplitude, with subsequent drops, whereas successive

³⁵⁷ See *Ibid.* p.69.

voice entries instead give way to melody-and-accompaniment configurations.³⁵⁸

It should be noted that Berlyne does not stress the importance of attention to the extent that I have done here. Though he speaks of arousal and activation as a potential for alerting the organism, his main focus is on the variables that determine activation and how activation is hedonically evaluated following the inverted U-curve. However, Wallin speaks explicitly about vigilance and attention as the primary function of the reticular system, but one problem seems to be how activation and attention relate. Does attention follow activation proportionally or is the former affected by the hedonic evaluation of the latter, following the inverted U-curve? Whereas some suggest that attention follows activation in accordance with the inverted U-curve,³⁵⁹ others have pointed to the possibility that 'the things that elicit the most attention are slightly more complex than the things we find most pleasing',³⁶⁰ thus hinting at a possible mechanism for feed-forward.

Moreover, it seems reasonable to distinguish between two kinds of attention, which may be called *attention* and *attunement*. On the one hand we may be consciously aware of certain aspects of a stimulus as a result of some discrepancy from our more or less conscious predictions and expectations. When such discrepancies or deviations occur, we may assume that our attention is directed towards the activation-causing events. On the other hand, to be able to notice (consciously or unconsciously) the discrepant details of a musical passage, one must already be attending to (consciously or unconsciously) the musical flow. What determines this second kind of attention, this attunement? The question is intimately related to how we come to direct our attention away from the basic-level towards the sub- and superordinate levels. Put differently, how do we come to pay attention to details of pitch or large scale form in music?

Suggesting an answer to this second question obviously signals a departure from the immediate concerns of a theory about the basic level categories of music, and as such the next chapter is the final step in this endeavor, after which we shall turn back to the original issue of music's ideological impact.

³⁵⁸ See D. Huron. "The Ramp Archetype and the Maintenance of Passive Auditory Attention", in *Music Perception*, vol. 10(1) 1992.

³⁵⁹ See R.B. McCall and P.E. McGhee. "The Discrepancy Hypothesis of Attention and Affect in Infants", in *The Structuring of Experience*. Ed. I.C. Uzgiris and F. Weizmann. Plenum Press, New York 1977.

³⁶⁰ J.B. Davies. *The Psychology of Music*, p.98. Hutchinson and Co, London 1978.

Chapter thirty-one

Attuning to music

As suggested by Mari Riess Jones, a melody, in its succession of changes in frequency, amplitude, timbre and so forth, 'can direct attending along paths of implied motion to certain expected frequencies and times'.³⁶¹ Attention is thus 'cast from some reference event at one point in time towards a target event scheduled for a later time.'³⁶² Attention, as Jones stresses, is a temporal affair. It is as much about what is to occur as *when* it is to occur. Thus a musical event 'that occurs "too early" or "too late" violates one's expectancy just as much as does the timely occurrences of the "wrong" event'.³⁶³ The temporal aspects of music are found both in its small and large-scale rhythmical as well as metrical properties. But temporality is also an inherent aspect of pitch, since frequency is vibrations in time.

From these temporal properties of music, the listener is able to abstract invariants accounting for both octave equivalency of pitches and intervals (the fact that we hear, for instance, Cs or semitones as equivalent, irrespectively of register), and metrical and time-span hierarchies. I shall not go into any technical detail here, but basically the idea is that the invariant abstracted by the listener is a time ratio. The abstraction encoded in the listener's mind is an equation that yields different values for the expected event depending on the context that generates the expectation. Considering temporal hierarchies, these are more easily abstracted (and hence expected) the simpler the time ratios are. For example, experiments show that it is easier for a listener to predict the end point of a melody if it is in duple or triple meter, than if it is in some complex or irregular meter. But, as Jones points out, this 'generative approach parsimoniously relies only on a time-ratio invariant and so does not entail storage of either a time hierarchy or time levels'.³⁶⁴

Though Jones does not use the terms subordinate, superordinate, and basic levels of categorization, the way she explains attention shows that it may be directed along any of the levels. While subordinate levels include local details of pitch and rhythm, superordinate levels include global melodic properties and large-scale temporal patterns such as periods and sections. The basic level includes intermediate time spans such as melodic phrases. Assuming that the basic level is the level which most easily catches the listener's attention—it is the lowest level at which

³⁶¹ M.R. Jones and W. Yee. "Attending to Auditory Events: the Role of Temporal Organization", in *Thinking in Sound. The Cognitive Psychology of Human Audition*.

³⁶² M. R. Jones. "Only Time Can Tell: On the Topology of Mental Space and Time", in *Critical Inquiry*, vol. 7(3) 1981.

³⁶³ M. R. Jones. "Music as a Stimulus for Psychological Motion: Part 1. Some Determinants of Expectancies", in *Psychomusicology*, vol. 1(2) 1981.

³⁶⁴ M.R. Jones. "Learning and the Development of Expectancies: An Interactionist Approach", in *Psychomusicology*, vol. 9(2) 1990.

approximations of good patterns occur, as well as the lowest level at which metrical regularities can be detected—deviations from expected events at this level may have different consequences. For instance, unexpected accents may direct attention away from the basic level, to superordinate levels of time, where such accents may mark larger time spans, and hence generate expectations of a superordinate nature, such as endings of periods and sections. However, superordinate expectancies require coherent time hierarchies. If the music does not allow such hierarchies, attention is more likely to be drawn towards more local details of the subordinate level. As Jones puts it, ‘future-oriented attending that permits expectancies about event endings is more likely with [temporally] coherent events, whereas analytic attending that encourages focusing over lower time levels is more likely with less coherent events’.³⁶⁵

Deviations from basic-level expectancies thus make possible attentional shifts to other levels. On the local, subordinate level, attention is likely to be maintained if deviations from expected pitch are relatively small. In such cases, the experienced motionlike character of the melodic line is unaffected and the deviating pitch is integrated into the expectancy scheme of the listener. Is the pitch deviation large, the motionlike character of the melody line is broken and attention directed towards higher levels. ‘Essentially’, Jones says, ‘large contrasts force attending over different, and usually larger, abstraction cycles’; it ‘encourages attending over larger time spans to relationships *among* rather than *within* accent-defined groups’.³⁶⁶ This differentiation of levels also entails that a large contrast, a strong deviation from expectation, need not necessarily cause a revised low-level expectation, but may instead lead to a new expectancy on a higher level.

Jones’ theory has many important consequences. For instance, as the previous paragraph indicates, disconfirmed expectations may remain intact in spite of musical evidence (and thus continue to cause similar affective response in the listener after repeated exposure). While it thereby provides a support for one of the central tenets of a theory such as Meyer’s, it presents a serious challenge to Lerdahl and Jackendoff’s. According to Jones, ‘an elementary aspect of musical communication involves establishing a perspective’, which ‘involves the time structure of an event, and it may be possible for listeners to achieve different temporal perspectives by relying on different attending modes ... Implied in this analysis is the idea that attending is flexible, meaning that a listener can attend alternately over relatively short and relatively long time spans to track different sorts of relations in an unfolding composition’. Thus, she

³⁶⁵ M.R. Jones and M. Boltz. “Dynamic Attending and Responses to Time”, in *Psychological Review*, vol. 96(3) 1989.

³⁶⁶ M.R. Jones. “Learning and the Development of Expectancies: An Interactionist Approach”.

continues, 'theories that posits a single psychological representation of a musical piece are incorrect'.³⁶⁷

But how is attention caught in the first place? Is it simply a question of psychophysical variables such as high register or relative loudness that captures the listener's attention? Although such variables may account for the "jump start" of perceptual development in infancy, as well as for attentional shifts, they do not fully account for real time attending once perceptual development has started. Jones' suggestion is that attention to temporal sequences is primarily governed by certain biological attending rhythms. In order to attend to the temporal unfolding levels of a musical event, the listener has to synchronize his or her attending rhythms with those of the music. Just as Wallin's listener has to catch on and follow the musical course from the start in order to reach a state of trance, Jones claims that the listener has to catch on to one of the temporal levels of music in order to generate any expectancies about its future course. As she puts it, the listener's 'attending rhythms become phase-locked to corresponding time spans marked within the event'.³⁶⁸ This phase-locking between the listener's internal rhythms and the various rhythmical layers of a piece of music, 'is termed *attunement*' and 'involves a synchronous interplay between an attender and an event in which the former comes to partially share the event's rhythmic pattern'. In other words, 'the biological basis for responses to event time takes the form of attunement rhythms that selectively entrain, that shift over nested [hierarchical] levels, and eventually are shaped by the event itself. ... In effect, the structure of a temporally coherent event can function as a natural time keeper for the attender. Instead of a clock-timed world, the attender responds to a dynamic event-timed world in which time judgments depend on an event's characteristic timing and on how its structure confirms or disconfirms some expected course'.³⁶⁹

³⁶⁷ M.R. Jones. "Attending to Musical Events", in *Cognitive Bases of Musical Communication*. Ed. M.R. Jones and S. Holleran. American Psychological Association, Washington 1992.

³⁶⁸ M.R. Jones and M. Boltz. *Op cit.*

³⁶⁹ *Ibid.*

Chapter thirty-two

Self, other and affect attunement

The notion of attunement has been developed in a rather different direction by Daniel Stern, within a theory of the child's developing ability to discriminate between itself and the outer world.³⁷⁰ More particularly, Stern formulates a theory that outlines the child's development of a *sense of self*. Although our interest may not seem primarily to be the human being's development of a sense of self, but the simultaneous development of a sense of what is excluded by the self, that is, the sense of an *other*, or an outer world (of which music in particular is part because of its gestural richness), following the steps, or stages, that Stern proposes in this development may further articulate the developmental trajectory for our capacity to perceive sound and music—a trajectory that simultaneously shows music's intimate relation to human interaction. Though the main reason for invoking Stern's ideas is that they show the fundamentally social character of music, a quality of music which inevitably makes it ideological, the stages of self-development may also be suggestive as an outline for a future functionalist theory of musical experiences (which could possibly be formalized along the lines suggested by Eero Tarasti's musical semiotics).³⁷¹ In other words, we can take the notion of an affective contour for granted here, as that which constitutes the input to the functional system we are considering—the musical mind.

According to Stern, the qualities of sensation to which the newborn child attends, such as its mother's voice, constitute the earliest temporally organized islands of coherence and coordination in an otherwise non-differentiated chaos. These experiences 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. This is the first level at which the contour characteristics of various sound events will be noticed as such. Whereas in utero, the mother's voice had no particular social significance, now the events over which the child has no authority are to a large extent actions directed towards the child itself in ministrations and play, resulting in recognizable 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*,³⁷² the regulation of the infant's affective state by another's ministrations lead the child on to a second

³⁷⁰ D.N. Stern. *The Interpersonal World of the Infant. A View From Psychoanalysis and Developmental Psychology* p.47ff. Basic Books, Inc., Publishers, New York 1985.

³⁷¹ See E. Tarasti. *A Theory of Musical Semiotics*, p.47ff. Indiana University Press, Bloomington and Indianapolis 1994. Tarasti draws on ideas from literary theory, cf. A.J. Greimas and J. Fontanille. *The Semiotics of Passions. From States of Affairs to States of Feelings*. University of Minnesota Press, Minneapolis and London 1993.

³⁷² See *ibid.* p.69ff.

level, to a sense of *self with other* (or perhaps better, a self with various others).³⁷³

The latter 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."³⁷⁴

The contour is affectively regulated by the father's activity, and thereby constantly varied. However, as the child comes to expect the "Gotcha!" it assigns a generality to the affective experience, and an affective category is formed. Thus, 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.'³⁷⁵

This togetherness feeling is further enhanced by what Stern calls 'affect attunement'.³⁷⁶ In affect attunement the more or less unconscious communicative behavior depends on the similarities between the infant's behavior and the mother's. The basic idea was foreseen already in Spitz' discussion of the newborn's non-differentiated perception, limited to the distinction of pure differences, which Spitz described as 'primarily visceral',³⁷⁷ enabling response to abstract qualities of stimulus changes such as 'rhythm, tempo, duration'.³⁷⁸ This apprehension of various abstract quality changes Stern calls *amodal* perception. 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 (sometimes Stern speaks of affective contours in terms of 'vitality affects').³⁷⁹ That is, both activities are proprioceptively

³⁷³ See *Ibid.* p.100ff.

³⁷⁴ D.N. Stern. *The Motherhood Constellation. A Unified View of Parent-Infant Psychotherapy*, p.85. Basic Books, 1995.

³⁷⁵ D.N. Stern. *The Interpersonal World of the Infant*. p.106.

³⁷⁶ *Ibid.* p.138.

³⁷⁷ R. Spitz. *Op cit*, p.44.

³⁷⁸ *Ibid.* p.135. This apprehension of various abstract quality changes, rather than of sensory specific qualities, distinguishes amodal perception from synaesthesia, the latter of which being when stimulation of one sensory mode evokes experiences in another. Moreover, affective qualities should, because of their amodal character, not be confused with qualia.

³⁷⁹ D. Stern. *Op cit*, pp.53ff;156ff.

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

First, a girl of nine months '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.' Second, a boy of the same age '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.' And third, 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.'³⁸⁰

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 indicate anything about a 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.³⁸¹

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, intensity and shape; we will experience it directly as "forceful" – that is, in terms of a vitality affect.'³⁸²

We should pay attention 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

³⁸⁰ *Ibid.* p.140.

³⁸¹ *Ibid.* p.149ff.

³⁸² *Ibid.* p.158.

experiencing of affective contours—'perceived in another's overt behavior becom[ing] a virtual vitality affect when experienced in the self'³⁸³—now points further from the level of self versus other to the level of a *subjective self*.³⁸⁴ 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 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: '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.'³⁸⁵

With their function as protonarrative envelopes, affective contours experienced as linked together proffer their service as an underlying scaffold (or as an hierarchically overarching group, if you will) for the narrative distribution of perceived and successively denominated objects and events. One may perhaps assume reciprocity between the protonarrative envelope and the developing language. Subsequently language and narrative itself provides 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*.³⁸⁶

The verbal self is the final level in Stern's model of self-development. However, Stern says, the role of language for the verbal self 'is not primarily another means for individuation, nor is it primarily another means for creating togetherness.' 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.'³⁸⁷

³⁸³ *Ibid.* p.158.

³⁸⁴ *Ibid.* p.138.

³⁸⁵ *Ibid.* p.91.

³⁸⁶ *Ibid.* p.162.

³⁸⁷ *Ibid.* p.173f.

Chapter thirty-three

Affect attunement and the expressiveness of contours

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, as described by his notion of a sense of a verbal self. Language, to use one of 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*.'³⁸⁸

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 its ideological implications—and here we are: 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 of course the one I argued in favor of earlier, namely that language is a necessary condition for music. Music, as a human cultural phenomenon, is an analogue to our verbal selves. 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. 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.

The second point that I am trying to render plausible concerns three aspects of experiencing music that assumedly do not require language. The first concerns the experience of distinct phrases in music. That we experience short phrases as cohesive Gestalts was explained earlier with reference to the child's preference for its mother's voice. The affective substrate of these phrases, amodally perceived, enables the inference of an affective core underlying the other's behavior as well, leading to an intuitive understanding of other people's affective states. Stern likens this to art in general, which "translates" into feeling. It is the affective contour of a musical phrase—together with the linguistic competence of a verbal self—that subsequently makes it sensible for us to denote it in terms of being "masculine" or "feminine," of being "happy" or "sad," or of being expressive of any other kind of emotion.

In contrast, consider a whole piece of music, or at least an extensive part or period of it, experienced as a continuous whole, rather than as a number of disconnected phrases placed one after another. We can easily

³⁸⁸ D.C. Dennett. *Op cit*, p.418. For a naval illustration of a "sense of emergent self," see p.427.

imagine how protonarrative envelopes, of various durations, 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 is 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 section thereof). This corresponds fairly well to Lerdahl and Jackendoff’s analysis of Bach’s C-major Prelude, where tension and relaxation are said to occur in a hierarchy of structural levels, the topmost of which embraces the entire piece (though as I have pointed out, the *GTTM* lacks an account of the affective nature of short phrases). The experiencing of hierarchical structure in music would then depend on the social interaction between mother and infant, as Stern describes.

What makes this overarching protonarrative envelope come into existence is the suspension of events that the listener has come to expect as a result of learning. What enables the temporal extensions and desired outcomes are the various types of motivic similarities that support thematic consistency, some of which are directly available to the ear, others needing the mediation of verbal discourse.

A third aspect of affect attunement with relevance for art is the personal character of the 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 thus be ascribed to particular agents on the basis of the personal style-code of its performance. Thus 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.’³⁸⁹

The relation to music and the arts is obvious here: ‘In spontaneous behavior, the counterpart to artistic style is the domain of vitality affects.’³⁹⁰ In addition to, or analogously to, this stylistic variation of conventionalized “sign behavior”, conventionally expressive phrases of music may also be emotively altered (somewhat in the way that traits of personal character relate to emotion). Phrases that are judged to be expressive of the “basic” emotions – happiness, anger, fear and sadness –

³⁸⁹ D. Stern. *The Interpersonal world of the Infant*, p.159.

³⁹⁰ *Ibid.*

by convention 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'.³⁹¹ In brief, happiness is 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.

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.* 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. Third, the affective contours have a personal character that enables the infant to not only recognize its mother's voice, but also recognize personal styles of composition and of playing³⁹²—as well as of emotive coloring.

Chapter thirty-four

Moods, music and activation

In reply to Meyer we can now say that what makes music a passionate affair is its affective substrate, the hedonically-judged changes of various amodal properties. Of course, amodal perception should be distinguished from the notion of melodic contour. Whereas the perception of melodic contour can be understood as the perception of amodal qualities such as shape (the pattern of ups and downs) and timing (the pattern of sounds and silences), perception of melodic contour *as melodic* presupposes that one can differentiate between various sensory sources in a meaningful way (which the newborn assumedly cannot). But what about the other passions such as emotions and moods? In this and the following chapter I shall briefly discuss the role of mood and emotion in music, showing in the first case how there is always an interplay between mood and music in musical listening, whereas in the second case we shall

³⁹¹ P.N. Juslin. "Emotional Communication in Music Performance: A Functionalist Perspective and Some Data", in *Music Perception*, vol. 14(4) 1997. The musical examples were performed on electric guitar.

³⁹² Cf. M. Imberty. "Can One Seriously Speak about Narrativity in Music?" in *Proceedings from the Third Triennial ESCOM Conference*. Uppsala University, Uppsala 1997.

see that emotions need not at all be present in the musical experience. Let us start with moods.

As pointed out by Berlyne, the ranges of the reward and aversion systems may be altered. Circadian rhythms cause us to get tired at relatively regular intervals, thereby decreasing our tolerance for external stimuli. But there are other factors that also affect our tolerance for external stimulation. It has been observed that reflexive behavior such as the startle response, is 'reliably potentiated during perception and imagery of unpleasant events and reduced during pleasant events'. For instance, we usually react more strongly to sudden and unexpected sounds if we watch a scary movie than if we watch a cartoon for children. But not only does 'anticipatory anxiety reliably potentiate the startle reflex'; it is also possible to observe a 'continuity from reflex reactions to complex, elaborated emotional expressions', all potentiated by the 'aversive-defense system'.³⁹³

What is going on here is that the cognitive appraisal of an external stimulus causes a change of *mood* in the observer (displaying pleasurable or painful events to subjects is a common clinical method for the induction of various moods).³⁹⁴ Negative moods decrease our tolerance for external stimuli, as does a shrinking of the range of the primary reward system. What this should mean is that the relation between the primary reward system and the aversion system is related to mood, and consequently that the mood of a listener should affect the listening experience. Moods 'cause global changes in our propensities to occupy certain other states, and to respond in certain ways to certain stimuli.'³⁹⁵ From a folk-psychological point of view, moods (as well as more long-lasting personality traits) are functional states that affect a person's response to various input, and are attributed to persons by interpreters in order to account for deviations from the more normal functional models of folk psychology (models that, for instance, given certain beliefs and desires, assign certain emotions to persons). Whereas moods are often referred to when accounting for deviations from a person's normal behavior, character traits account for the differences between persons.

But how should we understand music's relation to moods? To begin with, the activating capacity of the music is considered to be an important causal factor—slow music reduces heart rate, fast music accelerates it.³⁹⁶ In addition, the tolerance level for activating stimuli may vary. Activation caused by a musical stimulus may be hedonically evaluated differently at different times. Accordingly, we often choose to listen to music that harmonizes with our general level of activation. For instance, experiments

³⁹³ P. Lang, *et al.* "A Motivational Analysis of Emotion: Reflex-Cortex Connections", in *Psychological Science*, vol. 3(1) 1992.

³⁹⁴ See M. Martin. *Op cit.*

³⁹⁵ P.E. Griffiths. "Folk, Functional and Neurochemical Aspects of Mood", in *Philosophical Psychology*, vol. 2(1) 1989.

³⁹⁶ See M.F. Pignatiello, *et al.* "A Psychophysiological Comparison of the Velten and Musical Mood Induction Techniques", in *Journal of Music Therapy*, vol. 26(3) 1989;

show that listeners in stable states of low activation prefer comparatively slow and calm music, whereas listeners in stable states of high activation prefer faster tempi (the preferences for tempo follows the inverted U-curve). But if the level of activation is temporarily affected by stimuli other than the music attended to, that is, during brief periods of activation change, we generally prefer music that counters the tendency of the non-attended-to stimuli, so as to 'restore and preserve one's equilibrium level of activation'.³⁹⁷ Another set of experiments that tested listeners' preferences for relative complexity in music gave results in line with the previous finding: temporarily aroused subjects (as a result of an insult, causing the listeners to get angry, or exposure to a previous loud noise) preferred less complex music than did non-aroused subjects.³⁹⁸

But it is not only the case that music is perceived differently depending on the listener's mood state and level of arousal; music is perhaps more famous for its capacity to alter our moods and feelings. For instance, there is evidence that 'for people in good moods, music which they like will not make them feel better, but music which they do not like will make them feel worse'; conversely, 'people in bad moods will not feel worse if they hear music they do not like, but may feel better if they hear music they enjoy'.³⁹⁹ But irrespective of the prior level of activation and taste of the listener, the capacity of music to induce mood seems only to be predictable for rather general properties, such as being elated or depressed.⁴⁰⁰ When it comes to inducing specific moods and emotions, music seems an unpredictable force. Why so?

It is widely acknowledged that mood states affect memory and thought. According to one researcher, 'the time taken to retrieve pleasant memories in response to a prompt (relative to the time taken to retrieve unpleasant memories) is significantly longer when subjects are depressed than when they are happy'. Conversely, individuals are more susceptible to the mood content conveyed by various stimuli such as films, news, etc. 'if the contents focus on one of their current concerns'. Yet a further sign of the relation between mood and cognition is 'The vicious circle hypothesis', according to which 'negative cognitions lead to depression, which leads to changes in accessibility within memory, resulting in negative cognitions, and so on, in a cyclic progression'.⁴⁰¹ What seems to happen here is that the secondary reward system is put out of the running, making any activation increase intolerable with the consequence that no new information can be processed, leading ultimately to apathy.

³⁹⁷ M.B. Holbrook and P. Anand. "Effects of Tempo and Situational Arousal on the Listener's Perceptual and Affective Responses to Music", in *Psychology of Music*, vol. 18 1990.

³⁹⁸ V.J. Konecni. "Social Interaction and Musical Preference", in *The Psychology of Music*. Ed. D. Deutsch. Academic Press, New York 1982.

³⁹⁹ B.L. Wheeler. "Relationship of Personal Characteristics to Mood and Enjoyment After Hearing Live and Recorded Music and to Musical Taste", in *Psychology of Music*, vol. 13 1985.

⁴⁰⁰ See M.F. Pignatiello, et al. "Musical Mood Induction: An Alternative to the Velten Technique", in *Journal of Abnormal Psychology*, vol. 95(3) 1986.

⁴⁰¹ M. Martin. *Op cit*.

We should therefore understand mood as involving both beliefs and desires, but whereas emotions are determined by a single belief and desire, a mood seems to involve whole clusters thereof (*cf.* chapter eleven). Accordingly, moods differ from emotions in their lack of focus. For Dahlhaus, 'the word "mood" suggests a complex of feelings in which a listener is submerged, turned in on his own condition'.⁴⁰² And Martindale suggests that cognitive units may be activated to a degree insufficient for bringing them to attention, with the consequence that stimuli that do not match the prevailing "theme" of these units will be negatively experienced: 'When one has a lot of concerns in the back of one's mind the pleasure of just about any stimulus does in fact seem to be decreased.'⁴⁰³

The direct influence of music thus seems to concern the ranges of the reward and aversion systems, which govern our tolerance thresholds for activating stimuli. Concerning specific moods and emotions in the listener, music seems only to have an indirect capacity to induce them. For instance, lowering the range of the primary reward system should be considered as a disposition to get into certain kinds of moods. What kinds of moods a particular person is disposed to get into would vary with that person's web of belief. The particular mood induced in the listener by a piece of music consequently depends to a large extent on the listener's cognitive history up to the time of listening.

But isn't this what Meyer has been saying all along? Affects are hedonically undifferentiated and any affective experience depends on the listener's propensity to focus on his or her own moods (whereas a rational listener instead focuses on syntactical aspects).⁴⁰⁴ To a certain point this is correct, but from this point to infer that music essentially lacks "external referents" (a rather imprecise term in Meyer's theory), that it is a closed system, is to ignore the role of the listener in favor of an idea about the affectively purged state of certain types of musical experiences. If we take Meyer's rejection of the dichotomy between reason and emotion, between mind and body, seriously, we can begin by saying that a listener (indeed any human being) is always in some mood or other, whether deviating from everyday – normal, neutral – states of mind or not. Mood is not just some external coloring of our states of mind; it is what it is to be in any state of mind. Even the "disinterested" state of the scientific analyst is a type of mood.⁴⁰⁵ Music thus either alters the mood prior to listening or it harmonizes with it.

Yet, the effects of music can seriously alter people's moods and affective states – for instance, according to one report, statistical data point

⁴⁰² C. Dahlhaus. *Esthetics of Music*, p.17.

⁴⁰³ C. Martindale. "The Pleasures of Thought: A Theory of Cognitive Hedonics".

⁴⁰⁴ See also L.B. Meyer. *Emotion and Meaning in Music*, p.139: 'Although not related to the Gestalt principles of pattern perception, our sense of closure is in part a product of the general configuration of relaxation and quiescence. Melodically speaking, relaxation is associated with the decline in tension which is effected when pitches are lower – when a progression descends at its close.'

⁴⁰⁵ Cf. C. Guignon. "Moods in Heidegger's *Being and Time*", in *What is Emotion?* Ed. C. Calhoun and R.C. Solomon. Oxford University Press, New York 1984.

to 'a significant correlation between the amount of air time devoted to country music on the American radio and the suicide rate'.⁴⁰⁶ And still we need not go to such extremes to find that listeners often claim that music has a strong emotional impact upon them.⁴⁰⁷ How does this go together with the claim that music at most is capable of creating a 'background atmosphere', rather than the specifying contents of particular moods? What does it take to have fully emotive experiences of music, if the claim is true that music at most 'yield[s] moods that are very nonspecific in the absence of guided imagery'?⁴⁰⁸

Chapter thirty-five

Emotions in imagination

Despite the main tenets of twentieth-century music theory, there are still those who claim to experience as their own those moods or feelings that others say are merely expressed by the music heard. If the music expresses sadness, this listener feels sad, and if the music expresses hope or joy, the listener becomes hopeful or happy. It is not the purpose here to pass any normative judgment on this type of reaction (Hanslick's famous diagnosis was pathology); it is enough to note the existence to justify an attempt at an explanation.

Let us start with a less controversial case, when one is emotively affected by a movie or television program, although one knows it is only fiction. The following scenario is described by Kendall Walton:

Charles is watching a horror movie about a terrible green slime. He cringes in his seat as the slime oozes slowly but relentlessly over the earth destroying everything in its path. Soon a greasy head emerges from the undulating mass, and two beady eyes roll around, finally fixing on the camera. The slime, picking up speed, oozes on a new course straight towards the viewers. Charles emits a shriek and clutches desperately at his chair. Afterwards, still shaken, Charles confesses that he was "terrified" of the slime.⁴⁰⁹

According to Walton, when we say we are frightened by a fictional being or situation, we are only make-believedly so, that is, we *imagine* that our feeling is one of fear (or whatever emotion). Obviously it is not an instance of real fear, since we do not flee or turn off the TV: 'Charles knows perfectly well that the slime is not real and that he is in no danger',

⁴⁰⁶ W.R. Crozier. "Music and Social Influence", in *The Social Psychology of Music*. Ed. D.J. Hargreaves and A.C. North. Oxford University Press, Oxford 1997. The author refers to a report by S. Stack and J. Grundlach. "The Effect of Country Music on Suicide", in *Social Forces*, vol. 71 1992.

⁴⁰⁷ See A. Gabrielsson and S. Lindström. "Can Strong Experiences of Music Have Therapeutic Implications?", in *Music and the Mind Machine*. Ed. R. Steinberg. Springer-Verlag, Berlin, 1995.

⁴⁰⁸ J. D. Mayer, et al. "Mood Inductions for Four Specific Moods: A Procedure Employing Guided Imagery Vignettes with Music", in *Journal of Mental Imagery*, vol. 19(1and2) 1995.

⁴⁰⁹ K.L. Walton. "Fearing Fictions", in *The Journal of Philosophy*, vol. 75(1) 1978.

and this is 'good reason to deny that what he feels is fear'. Rather, 'Charles imagines himself to be afraid of the slime' and this feeling 'is triggered more or less automatically by his awareness of his quasi-fear sensations',⁴¹⁰ or, as I would say, fear-like affects. It is only make-believable, then, that these experienced fear-like affects are feelings of fear.

The story (like any game of make-believe, such as when a father chases his child pretending to be a monster) functions as a prop that generates a fictional world with corresponding fictional truths (such as "the father is a monster" and "the child is afraid"). Now, Walton extends this to hold also for music. We may imagine our affective experiences of musical sounds to be complete emotional experiences. In Walton's words, 'music sometimes gets us to imagine feeling or experiencing exuberance or tension ourselves—or relaxation or determination or confidence or anguish or wistfulness'.⁴¹¹ But there is an important difference between the two cases. A movie or a novel determines what Walton calls a 'work world', that is, it determines certain fictional characters that we are to imagine and their actions. In addition to this work world there is the 'game world' which the viewer or reader adds him- or herself. Whereas the story's work world only includes a slimy monster, the wider game world allows that we, as viewers or readers, imagine that the slime is heading towards us and that we are therefore frightened.

The difference between a story and a piece of music is that the latter does not provide a work world. When we experience emotions while listening to music, we are under the spell of no work world, but only of our own personal game worlds of make-believe: 'The music itself is not a prop, as a painting or novel is. What the music does is supply us with experiences when we listen to it, and we use these experiences as props. It is the auditory experiences, not the music itself, that generate fictional truths'.⁴¹²

It should be pointed out that I have construed Walton's explanation here according to my own theoretical demands as referring to an experienced affect: it is the affect caused by the musical sounds that we come to imagine as a particular emotion. This reading has some support in the previous quote, in Walton's mentioning of Charles' "quasi-fear sensations",⁴¹³ and in some of his later work.⁴¹⁴ An explanation slightly different from Walton's of how we may come to experience emotions through music is provided by Jerrold Levinson. According to Levinson, rather than being affected directly by the physiological impact of sounds, 'It is generally in virtue of the *recognition* of emotions expressed in music,

⁴¹⁰ *Ibid.*

⁴¹¹ See K.L. Walton. "Listening with Imagination: Is Music Representational?", in *Journal of Aesthetics and Art Criticism*, vol. 52(1) 1994.

⁴¹² *Ibid.*

⁴¹³ *Ibid.* However, sometimes Walton seems not to consider this option, saying that why we come to imagine our experiences of musical sounds as emotional experiences remains 'a good question'.

⁴¹⁴ See K.L. Walton. "Projectivism, Empathy, and Musical Tension", paper presented at the conference *Meaning and Interpretation*. Stockholm, September 1998.

or of emotion-laden gestures embodied in musical movement, that an emotional reaction occurs'.⁴¹⁵ Levinson's account is also different in that it assumes an ascription of the recognized emotions to the music itself, or as he says 'perhaps better, with the person whom we imagine owns the emotions or emotional gestures we hear in the music'. Still, the role of imagination has a similar role as in Walton's account, and so 'we end up feeling as, in imagination, the music does'.

What is interesting is that both Walton and Levinson attribute this imaginative competence to our capacity for empathy. According to Levinson, 'One must be willing to identify with music, to put oneself in its shoes. One must allow oneself to be moved in a receptive manner by the emotion one hears, as opposed to merely noting or even marvelling at it. ... If I don't perceive what emotions are in the music by attending to it intently, I have nothing to properly identify with and empathize with'.⁴¹⁶

And Walton: 'My experience, phenomenologically, does have some affinity with that of one who watches another person's facial expression and responds empathetically. But I may not have much of a sense of empathizing with someone at all. No doubt this is partly because I do not imagine perceiving anyone, when I listen, and because music is so fuzzy about the individuation of particulars. ... It is as though the music provides the smile without the cat—a smile for the listener to wear'.⁴¹⁷

Recall now the distinction made earlier, between empathy and sympathy. Empathy, we stipulated, was the imagining of the beliefs and attitudes one would have were one in another's shoes (and the subsequent ascription of these beliefs to the other), whereas sympathy was the imagining of an idiosyncratic set of beliefs and attitudes, distinct from those oneself would hold, that the other might have. To the extent that we really imagine ourselves experiencing emotions—that is, states with propositional content—when listening to music, it seems as if we employ our compassionate capacities somewhat similarly.

Take Levinson's case. We first recognize the music we hear as more or less conventional expressions of music. This is empathizing insofar as we imagine the emotions (beliefs and desires) we would have ourselves if we expressed ourselves the way music does, and insofar as we ascribe these emotions to the music or some person "behind" it. A case of sympathy, on the contrary, would be when we encounter music whose expressive character we cannot attribute to any conventional code: 'The feelings expressed in Beethoven's late quartets often seem unfamiliar, as if the composer were able to explore entirely new emotional domains'.⁴¹⁸ In such a case we have to imagine a foreign set of beliefs and attitudes for the expressive qualities of the music to make sense.

⁴¹⁵ J. Levinson. "Music and Negative Emotions", in *Pacific Philosophical Quarterly*, vol 63 1982.

⁴¹⁶ *Ibid.*

⁴¹⁷ K.L. Walton. "Listening with Imagination: Is Music Representational?"

⁴¹⁸ S. Speck. "'Arousal Theory' Reconsidered", in *British Journal of Aesthetics*, vol. 28(1) 1988.

However, both sympathy and empathy ascribe these emotions to the other, to the musician, the composer or to the musical sounds. When, on the contrary, we imagine ourselves experiencing the emotions expressed by music, we imagine ourselves actually being in the other's situation, with either our own set of beliefs and attitudes, or some idiosyncratically other set. This I take to be a fundamental difference between what we may call musical interpretation and musical role-taking (note that interpretation of the expressive characteristics of music can, for obvious reasons, never be radical)—though, quite clearly, the two, both being instances of imagination, are closely related.

But what about Walton's case? At least the way I have construed it, it may seem only to have a weak affinity with interpretation, since the basis of the imagined emotional experience is not primarily the interpreted emotive expressions, but the affect that the listener in fact experiences him- or herself.⁴¹⁹ (In the slime case, however, I wonder whether it is not rather the case that we imagine ourselves being in the other's shoes, make-believedly feeling the fear that we would actually experience in such a situation; why we do not actually run away is because we imagine doing what the person we identify with in the movie does.) But could it not be that Walton's account—the imagining of our affective experiences caused by sound as being caused by emotions—points to a basic capacity that allows both empathy and sympathy in the first place?

Insofar as the observed facial expression mentioned by Walton causes an affective experience in the listener—and the lesson learnt from Stern's research in developmental psychology indicates that it does—empathy and sympathy may both hinge on the affective, amodal perception of the interpreter/listener. This attuned-to affect would then be interpreted in emotive terms because of our propensity to animate the world around us. According to R.T. Allen, 'we first take the world to be animate and expressive and then learn to de-personify and de-animate parts of it'.⁴²⁰ As culture develops and socialization enters in, expressive conventions (the basis of Levinson's empathic reactions) simplify interpretation.

What my reference to Stern adds to this discussion is an argument in favor of the claim that to hear music as gestural is not a matter of sheer fantasy. Imaginative as it is, this similarity is not completely arbitrary but draws upon the common amodal denominators that gesture and behavior share with musical phrases and patterns, and which provide the fundamental means for early interhuman communication. The affective similarities are thus *not* a result of verbally mediated metaphors, although verbal ostension may aid one in becoming aware of the similarities.

⁴¹⁹ Cf. S. Speck. *Ibid*; J. Robinson. "The Expression and Arousal of Emotion in Music", in *The Journal of Aesthetics and Art Criticism*, vol. 52(1) 1994.

⁴²⁰ R.T. Allen. "The Arousal and Expression of Emotion by Music", in *British Journal of Aesthetics*, vol. 30(1) 1990. The fact that Allen refers to Piaget should not interfere with the points I have made on the basis of Stern, though these two psychologists may be incompatible on other issues.

Fred Everett Maus has discussed the possibility that the ascription of agency to music, the hearing of music as if it stemmed from the composer's own "voice," is a matter of *prosopopoeia*, the metaphorical figure attributing a voice or face to an inanimate phenomenon. He speaks of musical experience as 'a matter of continuous temptation' to engage in 'the interpretative move from musical gesture to the unity of a persona',⁴²¹ a temptation we can now begin to explain with reference to the affective as well as to musical attunement. In response to Dennett, we can also say that the urge to posit a unified agent seems to arise prior to language and that language is simply what offers us the possibility to define this agent as a center of *narrative* gravity. And consequently, when it comes to music, this final narrative move *is* verbally mediated.

As a property of human behavior, affective properties and contours underlie our ability to interpret this behavior as intentional action, and as we have seen, emotions together with beliefs, desires, moods and character traits are aids to this interpretation (affect is prior to emotion). Whether a musical phrase is experienced as a purely affective contour or as a conventional sign of an emotion, the listener is invited, or tempted as Maus would say, to unify the succession of musical sounds in a narrative interpretation.⁴²²

Yet a final condition, whose fulfillment I believe is necessary for us to enter into an imaginative mode at all—whether role-taking or interpretation—is, at least in the case of music serving entertaining purposes (and I include Western classical music here), that we feel somehow attracted to it. Levinson speaks of marvelling at the music one hears, and an inveterate non-emotivist such as Peter Kivy, who claims never to feel what the music expresses, similarly speaks about being deeply moved by the music: 'it is not that I am deeply moved by music in virtue of its arousing in me the garden-variety emotions it possesses [e.g. joy, anger, melancholy, yearning and the like]. It is rather that I am deeply moved by the beauty of the music; and I can give this emotion no other name than that'.⁴²³

I think we can assist in the name-giving of this particular feeling and call it, following Green, an 'experiential emotion'.⁴²⁴ An experiential emotion could be a positive emotion that we experience when hearing music, or hearing it performed in ways that fulfill our desires and preferences. A negative experiential emotion, such as what we experience when we hear music that does not accord to our preferences, will hardly attract any attention to detail and hardly lead to any subsequent passionate reactions (however hearing a poor rendition of a piece of music that we favor might perhaps lead us to pity it). The importance of

⁴²¹ F. E. Maus. "Agency in Instrumental Music and Song", in *College Music Symposium*, vol. 29 1989.

⁴²² F. E. Maus. "Music as Drama", in *Music Theory Spectrum*, vol. 10 1988.

⁴²³ P. Kivy. "Auditor's Emotions: Contention, Concession and Compromise", in *Journal of Aesthetics and Art Criticism*, vol. 51(1) 1993.

⁴²⁴ O.H. Green. *Op cit*, p.138.

this experiential emotion is that it establishes an interpretive *contract* between the musical utterer and the listener, a mutual commitment to charity,⁴²⁵ somewhat like in the case of pre-classical oration mentioned earlier, where the affects had to be accepted by the audience as plausibly composed and arranged.

To the extent that such a contract is necessary for non-conventional (radical) interpretation, and to the extent that it amounts to a positive experiential emotion, we also see that the painful states averted by the pleasure principle must be overridden by the forwardfeed of a reality principle for narrative interpretation of music to occur.

Chapter thirty-six

Affect attunement, music and identity

The source of several aspects of music can be traced back to the human being's shaping of a sense of self in relation to other human beings. The crucial function is that of affect attunement, which can be regarded as a basis both for metaphor and empathy. First, motivated by the common amodal core, the attuning activity is seen by Stern as a metaphor for the attuned activity. Spelled out in words, the metaphor would read something like "The mother's activity *is* the child's activity." Of course, no such cognitive judgment is made by either the mother or the child, since the experience is one of affect. For the child, its own activity is experienced proprioceptively, while the mother's activity is experienced exteroceptively. For the mother the opposite holds, that is, the mother experiences her own activity proprioceptively, and her child's exteroceptively. And the two activities, we assume, both have the "same" feel.

While the metaphorical impact of affect attunement renders one's own and an other's activity similar in focusing on the doings rather than on the agents, there is also a sympathetic aspect of affect attunement which tells the mother and the infant that they have both received the world in a similar fashion, and which is thus, by focusing on the agents rather than on their activities, an important requisite for the social ability to communicate with others about a commonly perceived world. The metaphorical and the sympathetic aspects of affect attunement thus turn out to be two sides of the same compassionate coin (and as such they may be regarded as a precondition for any principle of charity, as discussed in chapter eight).

Most importantly, affect attunement in the early mother-infant dyad can be regarded as a sort of proto-music. Through the amodal perception of shape and timing, the child experiences the world in a way that is

⁴²⁵ Cf. A. J. Greimas. "Knowing and Believing: A Single Cognitive Universe", in *On Meaning. Selected Writings in Semiotic Theory*. Trans. P.J. Perron and F.H. Collins. Frances Pinter (Publishers), London 1987.

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*.⁴²⁶ Of course, attunement is present in any temporal experience of the outer world, as Jones has shown, and at an early age there is no hard-blown 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*.⁴²⁷ Thus, by being based on an expressive substrate of sound towards which we can affect attune, one which is artistically manipulatable, music always becomes ideological.

We have seen how the development of a sense of a self involves aspects that are protomusical. The senses of self, as well as the particular identities that we take on as our own verbal self grows, are always articulated against an *other*. As our social networks widen, so do our identities, which extend to include larger groups, communities and cultural traditions, with which one identifies in distinction to other groups, communities and cultural traditions.⁴²⁸ By turning to some examples, we can get a better idea of how music contributes to this shaping of various social identities and the normative systems that go with them—in other words, how the nonverbal, affective aspects of music comes to serve ideology.

To begin with, research shows that music plays an important role in the cultivation of the private selves for many adolescents in modern society. For instance, it has been said that whereas children 'have a fairly secure sense of who they are, based on parental and societal ascription', when they enter adolescence 'this naive, stable happiness appears to come apart; for some, the bottom falls out'. As a result of 'the elevated stressfulness' of their lives, teenagers begin to seek 'a *renegotiation* of their relationship with parents that gives them more independence and personal jurisdiction', and they 'partially shed the secure and unquestioned sense of self acquired from their families and begin to look for a more personally determined, authentic sense of identity'. In this process, increased solitary listening to music functions as an important 'context for self-exploration'

⁴²⁶ Cf. L. Wittgenstein. *Philosophical Investigations*, §.241. Trans. G.E.M. Anscombe. Basil Blackwell, Oxford 1958.

⁴²⁷ Cf. C. Guignon. *Op cit.*

⁴²⁸ Cf. E. Ruud. "Music and Identity", in *Nordic Journal of Music Therapy*, vol. 6(1) 1997.

and 'emotional discharge', by allowing the listener 'to feel a range of internal states and try on alternative identities, both desired and feared'.⁴²⁹

Although this primarily concerns the private focusing on the youth's respective selves, it is simultaneously a process where 'the private and public are woven together': 'The teenager who deeply identifies with Guns-n-Roses gains the solidarity of being soul mates with millions of other youth. Identification with M.C. Hammer connects you to a different group of peers.'⁴³⁰ In other words, music may come to support group cohesion, to serve as a social glue. Music may come to function as the cement in a social 'ritual', creating 'attachment to, and respect for, a group and to foster detachment and distance from other groups', thus creating a 'social solidarity among those who participate'.⁴³¹

The phenomenon is not restricted to any one type of social group or culture but spans from youth subcultures to ruling upper classes. It may assume various degrees of involvement among those concerned, and it may take a multitude of expressions. As has been pointed out, 'Attendance at the Friday afternoon concerts of the Boston Symphony Orchestra ... has long been regarded as an obligation of the Boston Social Elite'.⁴³² (And as we have noted in an earlier chapter, it seems to be the exception rather than the rule for many listeners to experience the large-scale formal structures that academic analysis assigns to classical music as its exclusive aesthetic quality, thereby leaving room for a more subtle, affective impact.) Likewise, most 'subcultures possess their own distinct norms and values in matters of clothing, hair styles, attitudes, and modes of behavior, they demand allegiance and identification as the price of entry'.⁴³³ Just as there exist more or less specific emotional "roles" to take on in various culture-specific situations (see chapter eleven), there exist more or less specific ways of responding to music, as well as characteristic personality types to build one's own upon.⁴³⁴ Thus, 'the adoption of artistic interests, tastes, standards, and activities associated with a social class helps establish an individual's membership in that class';⁴³⁵ it provides the individual with a certain amount of cultural capital.⁴³⁶

Still, there is no simple one-to-one relationship between the musical 'taste cultures' and social classes of a society; 'the more complex a society

⁴²⁹ R. Larson. "Secrets in the Bedroom: Adolescents' Private Use of Media", in *Journal of Youth and Adolescence*, vol. 24(5) 1995. The research findings are based on European and European-American adolescents.

⁴³⁰ *Ibid.*

⁴³¹ P. DiMaggio and M. Useem. "Social Class and Arts Consumption: The Origins and Consequences of Class Differences in Exposure to the Arts in America", in *Theory and Society*, vol. 5(2) 1978. (Italics omitted)

⁴³² *Ibid.*

⁴³³ K. Roe. "Swedish Youth and Music. Listening Patterns and Motivations", in *Communication Research*, vol. 12(3) 1985.

⁴³⁴ See M. Muelder Eaton. "The Social Construction of Aesthetic Response", in *British Journal of Aesthetics*, vol. 35(2) 1995; "Aesthetics: The Mother of Ethics?", in *The Journal of Aesthetics and Art Criticism*, vol. 55(4) 1997. Muelder Eaton quotes R.M. Hare (from *Freedom and Reason*) speaking of 'ideals of what a man shall be': 'It is as if a man were regarding his own life and character as a work of art, and asking how it should best be completed'.

⁴³⁵ P. DiMaggio and M. Useem. *Op cit.*

⁴³⁶ Cf. P. Bourdieu. "La production de la croyance. Contribution à une économie des biens symboliques", in *Actes de la recherche en sciences sociales*, vol. 3(13) 1977.

becomes, the more likely it is that all these patternings and musical connections to the culture will exist simultaneously, whereas in less socially mobile societies the simpler model of traditional taste cultures matching up with social class is more likely to be the norm'.⁴³⁷ But as this quote also indicates, I take the social significance of music discussed here to extend beyond the Western world: 'As expressions of relationships between individuals in community', Blacking has pointed out, 'performance of even the most elementary polyrhythmic structures in Venda music were political acts, in which people could receive and feel personal power through a shared, culturally prescribed action'.⁴³⁸

I think it was Blacking who once said that the function of music is to enable the listener to be "alone in company." Still others have spoken about the 'communalization of the consumer who sits alone with a radio or a gramophone, in a sounding, real, experienced fellowship with the chorus in the background',⁴³⁹ in what can be described as an 'intersection of singularities'.⁴⁴⁰ The common denominator, I suggest, whether music is experienced in solitude or in company, is the underlying affective core of all music, which is potentially available to every listener. The listener affect attunes to a musical style, a cultural convention, the *content* of which is determined by discourse. Such discourse may in certain sub-cultures significantly add to the listener's social status, to his or her cultural capital. For devoted listeners of some groups, this 'involves developing a knowledge of selected musical traditions, their history, and their associated performers. With this background, an individual can knowledgeably discuss such details as styles, trends, record companies, and the biographies of artists, and even nuances such as associated record producers and session musicians'.⁴⁴¹

In a similar vein, it has been pointed out that even the punk movement rested for much of its intelligibility on verbal discourse. As Simon Frith has shown, 'its meaning for its subsequent fans was derived not just from the music itself, but also from the various punk images and analyses battling it out in the media'.⁴⁴² 'Music papers, indeed, are important even for those people who don't buy them—their readers act as the opinion leaders, the rock interpreters, the ideological gatekeepers for everyone else'.⁴⁴³ Nevertheless, in addition experiencing music within a discursive context, the listener also knows, or at least has good reason to intuit, that

⁴³⁷ G.H. Lewis. "Patterns of Meaning and Choice: Taste Cultures in Popular Music", in *Popular Music and Communication*. Ed. J. Lull. Sage Publications, Inc., Newbury Park 1987.

⁴³⁸ J. Blacking. "The Context of Venda Possession Music: Reflections on the Effectiveness of Symbols", in *Yearbook for Traditional Music*, 1985.

⁴³⁹ G. Sönstewold and K. Blaukopf. "Musik der 'einsamme Masse' Ein Beitrag zur Analyse von Schlagerplatten". Quoted in D. Axelsen. *Listening to Recorded Music. Habits and Motivation among High-School Students*, p.92. Acta Universitatis Gothenburgensis, Göteborg 1997.

⁴⁴⁰ S. Hosokawa. "The Walkman Effect", in *Popular Music*, vol. 4 1984.

⁴⁴¹ R. Shuker. *Understanding Popular Music*, p.248. Routledge, London and New York 1994.

⁴⁴² S. Frith. *The Sociology of Rock*, p.208. Constable, London 1978. These "analyses," though hardly formal, were of course verbal.

⁴⁴³ S. Frith. *Sound Effects. Youth, Leisure, and the Politics of Rock'n'Roll*, p.165. Pantheon Books, New York 1981.

others have attuned to the same content, that others also have invested in an affective relationship with the music heard.

So whether the 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 (this world view) against and with the listener's personal moods and preferences. Recall McClary's analysis of Madonna's video, for instance. The average listener is quite unlikely to know what a "deceptive cadence" is. Instead, the listener reacts affectively to the more or less familiar sound of this cadence and relates the sound to the lyrics and the visual appearance of Madonna on the video and the record cover, all of which gain their particular ideological significance from the discourses that surround Madonna's music.

But rather than music being 'a main avenue of expression for group values and identity',⁴⁴⁴ Frith argues that it 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*'. 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'.⁴⁴⁵ With a slight change of emphasis we can add to Frith's claim by saying that in hearing, as we all do, music affectively articulating our feelings, our bonds to the music, its style and style adherents are intimated and strengthened. Music attended to, for better or for worse (and whether you like it or not), creates a meaningful backdrop for one's personal self and its mood. Music, when it functions socially, thus acts as a mediator of social relations. The listener becomes a "friend" (or "enemy") with the music, and by extension, (potentially) with others.

Some may sense now that I am arguing against myself, especially against the claim that music requires superordinate categorization. Doesn't the present argument claim that music draws on a capacity to attune to contours that are more or less basic level? This is true—musical experiences do build on this capacity; but the musics of the world's cultures involve more than this. First, the particularity of basic categories may be extended, as can their generality. For a specialist, the particularity of basic categories may be extended towards the subordinate, whereas many contemporary listeners tend to stretch their basic categories towards the superordinate, so that a pluralistic multitude of styles and genres may be subsumed under the category of music. Nevertheless, it is not difficult to find examples that an average Western listener would hesitate to call music (total serialism, throat singing, and death metal are plausible candidates, I guess). And as pointed out by Peter Martin, discussing the

⁴⁴⁴ K. Roe. *Op cit.*

⁴⁴⁵ S. Frith. "Music and Identity", in *Questions of Cultural Identity*. Ed. S. Hall and P. du Gay. Sage Publications, London 1996.

self-imposed exclusivity of Western classical music, many “quality” newspapers ... often (insofar as they deal with them at all) distinguish between such genres as “rock,” “country,” “folk,” “jazz,” *etc.*—and “music”⁴⁴⁶.

Another possible objection can be formulated on the observation that for many listeners, young or old, music functions as a context rather than as the focus for attention. Lacking ‘the socialized competences that must potentially be employed and displayed if a person is to warrantably claim *bona fide* membership in [say] “the community of blues enthusiasts”⁴⁴⁷ or of any other such clear-cut group, many adolescents ‘pass through groups, change identities and play their leisure roles for fun’.⁴⁴⁸ For instance, as Sheryl Garratt comments on her days as a fan of The Bay City Rollers, ‘many became involved not because they particularly liked the music, but because they didn’t want to miss out’:

We were a gang of girls having fun together, able to identify each other by tartan scarves and badges. Women are in the minority on demonstrations, in union meetings, or in the crowd at football matches: at the concerts, many were experiencing mass power for the first and last time. Looking back now, I hardly remember the gigs themselves, the songs, or even what the Rollers looked like. What I *do* remember are the bus rides, running home from school together to get to someone’s house in time to watch *Shang-a-lang* on TV, dancing in lines at the school disco, and sitting in each others’ bedrooms discussing our fantasies and compiling our scrapbooks. Our real obsession was with ourselves; in the end, the actual men behind the posters had very little to do with it all.⁴⁴⁹

What was talked about among the Rollers fans (at least among the friends of Garratt) was ‘how to look and what to buy’. The world view of these girls was largely provided by the media, who had very little, if anything, to say about musical traditions, history, about the performers (the Rollers ‘didn’t even play on their early records’), about styles, trends, record companies, or artist biographies, not to mention nuances such as associated record producers or session musicians. As Garratt puts it, the media ‘are not interested in music: how or what the artists play—lyrics aside—is usually irrelevant; even the inevitable color posters rarely show the band actually performing. What girls are sold is *a catchy hook*, and an image and lyrics they can identify with. Fantasy fodder.’⁴⁵⁰

The musical experience in this case boils down to no more—and no less—than a catchy hook (one particularly attractive and attention-

⁴⁴⁶ P.J. Martin. *Op cit*, p.179. The same tendency is evident in the ethnopornography that singles out pure “world music” from its assumedly unwordly deviations, cf. U. Volgsten. “Bön för lyra”, in *Lira*, vol. 5 1998.

⁴⁴⁷ D.J. Hatch and D.R. Watson. “Hearing the Blues: An Essay in the Sociology of Music”, in *Acta Sociologica*, vol. 17(2) 1974.

⁴⁴⁸ S. Frith. *The Sociology of Rock*, p.53. Constable, London 1978.

⁴⁴⁹ S. Garratt. “Teenage Dreams”, in *On Record. Rock, Pop, and the Written Word*. Ed. S. Frith and A. Goodwin. Routledge, London 1990.

⁴⁵⁰ *Ibid.* (Italics added)

invoking affective contour)⁴⁵¹ and sitting in each other's bedrooms discussing fantasies and compiling scrapbooks. The real obsession of these listeners is with themselves, not the men behind the posters, nor the details of, or history behind, the musical product. The example may seem puerile, although the ideological function of music does not differ in principle (only in detail) from that of the Venda rites or the the Friday afternoon concerts of the Boston Symphony Orchestra.

Still, I am not saying that everybody would somehow dance around humming *We are the world!* for themselves when they listen to music. What I have tried to say, along with the "language theme" developed in part one, 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',⁴⁵² so also in other, more or less limited, musical domains.

Chapter thirty-seven

Discursive content and censorship

Discourses may of course differ geographically and cultures which might appear similar on the basis of their music, may in fact have a rather different understanding of what they hear. M.C. Hammer may thus be, and is likely to be, a slightly different experience for a listener in Scandinavia than it is for one in Harlem. And Beethoven, most certainly, was experienced differently in nineteenth-century Vienna than by today's scholars. As an interesting example of culture-dependent differences in our experiences of one and the same piece of music, Charles Hamm has shown how Lionel Richie, with his 1983 hit *All Night Long (All Night)*, 'deliberately created a generic piece, constructing it in such a way as to make it accessible to audiences of various cultural backgrounds, while at the same time packing it with details allowing it to be culture-specific at different moments of reception'. Richie, Hamm says, 'even utilizes the notion that more specific meaning will come only at reception, conditioned by factors of history, society, and ethnic origin'.⁴⁵³

The particular 'moment of reception' of this piece assumes 'two young black women in November of 1984 in a black township in the Republic of

⁴⁵¹ Cf. G. Burns. "A Typology of "Hooks" in Popular Music", in *Popular Music*, vol. 6(1) 1987. In addition to the amodal qualities of rhythm, tempo, contour and dynamics functioning as hooks, Burns discusses harmony, instrumentation and lyrics, as well as details of recording technique such as editing and sound production.

⁴⁵² A. Fernald. "The Perceptual and Affective Saliency of Mother's Speech to infants", in *The Origins and Growth of Communication*. Ed. L. Feagans, et al. Ablex Publishing Corporation, Norwood (N.J.) 1984.

⁴⁵³ C. Hamm. "Privileging the Moment of Reception: Music and Radio in South Africa", in *Music and text: critical inquiries*. Ed. S.P. Scher. Cambridge University Press, Cambridge 1992.

South Africa', and the conclusion drawn is that not only can the 'reception of a song ... result in a perception quite different from that intended by the composer, it can also empower a piece with meaning quite different from that apparently implied by its text and musical style, and thus alter the impact of media-disseminated music intended by "power"'.⁴⁵⁴

Hamm first discusses various aspects of the production of the piece. It was recorded and produced by Motown records, which started out in the 1960s aiming at an urban black working-class audience in the upper midwest of the US, but which by the time of releasing this song had expanded its target group to the international market. The lyrics can be seen as a continuation of a tradition in black American popular music where music and dance function as symbols for sexual activity. In addition, the lyrics contain phrases and expressions in Spanish, Caribbean dialects and even Swahili, conveying connotations of partying and enjoyment. Musically, the harmonies and rhythms stem from an Afro-Caribbean tradition, but although an instrumental passage near the end may invoke the steel pans from Trinidad, the general reggae-feel of the song had by this time become a rather general musical property (used by groups like the Police and the Talking Heads, as well as by artists as diverse as Bob Dylan, Stevie Wonder and even Zappa). 'We can understand *All Night Long (All Night)*, then', Hamm says, 'as a deliberately generalized product, a generic pop song of the early 1980s'.⁴⁵⁵

It is this generality and apparent innocence of the song that enabled it to appear on Radio Zulu in South Africa, a government-controlled radio station in the service of the "Separate Development" policy, which aimed at further racial and ethnic segregation of the country. Nevertheless, as Hamm argues, the song might very well have conveyed a subversive content to its black audience. First, the musical history and traditions of this audience (to which the two women belong) differ from that of its American counterpart, which means that the dancing and singing referred to in the lyrics are likely to have invoked less of a sexual imagery and more of a literal encouragement to communal celebration and traditional dancing in the street. And although many of the lyrics' specific African words are from Swahili ("jambo," "jambali"), a language not spoken in South Africa, Hamm points out that whatever the word "'Tom bo" means literally, it would have been perceived immediately by blacks at this moment in South African history as "Tambo": a reference to Oliver Tambo, the head of the outlawed African National Congress, in exile in Zambia'.⁴⁵⁶

What enabled this message, this implied reference to 'the wrath, aspirations and hopelessness of [black] people who feel downtrodden',⁴⁵⁷ to get through to the audience was, on the one hand, the general Afro-

⁴⁵⁴ *Ibid.* Hamm does not refer to any actual interviews with the women mentioned.

⁴⁵⁵ *Ibid.*

⁴⁵⁶ *Ibid.*

⁴⁵⁷ R. Wallis and K. Malm, quoted from C. Hamm. *Ibid.*

Caribbean musical language, with its references to reggae and steel-pan music, and on the other, the musical structure of the chorus and coda of the song (an alteration between tonic and supertonic), which it shares with South African music played on, for instance, the traditional musical bow. Insofar, then, as this song was heard by this audience as 'a communal celebration of an exiled political leader',⁴⁵⁸ this specific discursive-bound content depended for its efficacy on the affective impact of the musical sounds, which in its turn depended for its availability on the familiarity with the particular musical style.

This relativism of discursive content is of course available not only subversively to the "downtrodden" but also to the repressors and illicit leaders. The crucial ideological question is who in the end gets to determine the final version of the discourse. The world history of music is full of examples both of how verbal discourses have served to promote mediocre propaganda music and condemn that of inconvenient and oppositional groups and cultures. As Julian Petley argues, considering banning and censorship, 'there is little doubt that the most thorough-going and systematic attacks on music this century have been in the Soviet Union between 1932 and 1953, and in the Third Reich'.⁴⁵⁹

Although there is no room here for a full account of the communist and Nazi handling of music during these periods, it may be illuminating to recount some of the verbally formulated reasons for the condemnation of what was mostly "classical" music and composers. In the USSR the attack was directed against 'formalism', which included music by such well-established composers as Prokofiev, Shostakovich and Khachaturian. Formalism was defined by the party's Central Committee and the Union of Soviet Composers as a 'cult of atonality, dissonance and disharmony', as 'confused, neuro-pathological combinations that transform music into cacaphony, into a chaotic conglomeration of sounds'. In its promotion of so called social realism, the Union stated that 'The main attention of the Soviet composer must be directed towards the victorious progressive principles of reality, towards all that is heroic, bright and beautiful', which is what 'distinguishes the spiritual world of Soviet man' from 'the folk-negating modernistic directions that are typical of the decay of contemporary bourgeois art'.⁴⁶⁰

In the Third Reich the attack was targeted against the same modernism, personified by composers such as Schoenberg and Kurt Weill, as well as the conductors Bruno Walter and Otto Klemperer. However, modernism and formalism was now dispatched (in the words of Hans Ziegler, organizer of the exhibition *Entartete Musik*) as 'Bolshevism ... and ... arrogant Jewish impudence'.⁴⁶¹ Likewise, Herbert Gerigk claimed in his *Lexicon der Juden in der Musik* that 'The twelve-tone system in music is

⁴⁵⁸ C. Hamm. *Ibid.*

⁴⁵⁹ J. Petley. "Smashed Hits", in *Index on Censorship*, vol. 6 1998.

⁴⁶⁰ Quoted from J. Petley. *Ibid.*

⁴⁶¹ Quoted from J. Petley. *Ibid.*

equivalent to Jewish levelling down of all matters of life' and that 'This represents the complete destruction of the natural order of notes in the tonal principle of our classical music',⁴⁶² and one of the Third Reich's chief ideologues, Alfred Rosenberg, declared that 'the atonal movement in music is against the blood and the soul of the German people'.⁴⁶³

Whereas Petley claims that the Soviet banning of modernist composers (and their works) 'undoubtedly contributed to their premature deaths',⁴⁶⁴ we know that composers such as Viktor Ullman, Pavel Haas and Gideon Klein all died in the Nazis' gas chambers.⁴⁶⁵ But the point remains the same: to hail the music by Schumann or Wagner as superior while condemning that of Mendelsohn or Mahler as degenerate requires language—and without any affective substrate to attune to, music would be hopelessly inefficient in conveying any verbal discourse at all.

Nevertheless we should be aware that, as Roger Wallis and George Klimis bring to our attention,

Music censorship did not end with the fall of communism and the decline of totalitarian regimes around the world. On the contrary, it is alive and well—some would say flourishing—in the “free” world. What has changed is the driving force behind it: greed as opposed to fear; economic rather than political considerations.⁴⁶⁶

One thing that Wallis and Klimis point to is the fact that commercial musical TV stations are constrained to play music that will not offend their sponsors. Likewise, record stores often refuse to sell certain products if these can be seen to hurt their sales or “credibility capital.” For instance, the Wal-Mart retail chain in the US refused to stock an album with Sheryl Crow, which contained the lyrics “Watch our children kill each other with a gun they bought at Wal-Mart stores”; however, they continue to sell guns. Perhaps the biggest force behind this kind of censorship in the US is the endorsement by the the Recording Industry Association of America (RIAA), as a result of right-wing religious pressure, of a system of album-cover advisory labels warning parents for “explicit lyrics” (see also chapter forty-eight). As Jim D'Entremont points out, 'Wal-Mart, the largest music retailer in the USA, has responded to pressure campaigns by banning albums with advisory labels from its stores, and successfully insisting that producers and musicians provide the 2300 Wal-Mart outlets with censored versions of their product'.⁴⁶⁷

Likewise, in the UK, the HMV has compiled an Obscene Product list of recordings that will not be stocked by their outlets. But perhaps the most frequent censoring has been undertaken by the BBC, 'nervous after years

⁴⁶² Quoted from J. Petley. *Ibid.*

⁴⁶³ Quoted from J. Petley. *Ibid.*

⁴⁶⁴ J. petley. *Ibid.*

⁴⁶⁵ See M. Ludwig. “Tales of Terezín”, in *Index on Censorship*, vol 6 1988.

⁴⁶⁶ R. Wallis and G. Klimis. “Key to the Highway. Record Company Mergers and Intense Commercial Pressures are Making Life Difficult for Existing Stars and Wannabies Alike”, in *Index on Censorship*, vol 6 1988.

⁴⁶⁷ J. D'Entremont. “The Devil's Disciples. Christian Right Versus Rock”, in *Index on Censorship*, vol 6 1988.

of political attacks from a hostile government that perceived the organisation as the embodiment of the liberal establishment it detested'.⁴⁶⁸ As Petley remarks on BBC's policy, 'Various chapters of the Irish "Troubles" have involved the temporary disappearance of a range of "politically sensitive" material; "unpatriotic" lyrics became casualties of the Falklands/Malvinas and Gulf wars; songs on the Queen, Margaret Thatcher and Ronald Reagan have equally been victims of desire not to offend'.⁴⁶⁹

This list of examples is already getting too long, and still it could be enlarged with further examples only from the Western world. For instance, French radio ... whereas the conservative mayor of Stockholm, backed up by a group of national socialists, tried to stop concerts with Alice Cooper at the end of the eighties. Still, although these last examples concern the lyrics and not the formal structure of the music, it is the impact of the affective substrate of music that makes it such an efficient manipulator in the hands of whatever ideology it is set to serve.

⁴⁶⁸ M. Cloonan. "Massive Attack. The Gulf War", in *Index on Censorship*, vol 6 1988.

⁴⁶⁹ J. Petley. *Op cit.* During the Gulf war, the BBC compiled a list of songs to be treated with "caution", including such offensive material as The Bangles' *Walk like an Egyptian*, Kate Bush's *Army Dreamers* and Abba's *Waterloo*, see previous footnote.

Part III

Chapter thirty-eight

Music as an internal world theater: from types of listener to modes of listening

Music is an 'internal world theater', says Adorno.⁴⁷⁰ And its comment on society takes the shape of a riddle, the message of which is the task of a critical analyst to interpret.⁴⁷¹ Indeed, it is only by becoming an analyst that the listener may come in contact with the ideological content of music. And what is more, as Adorno frankly states, this is the only acceptable way of listening to music. Critical analysis 'is not an external factor added to aesthetic experience'; instead, the description of music in ideological terms 'is inherent in that experience.'⁴⁷² To illustrate what is specific to this mode of listening, Adorno offers the reader a sort of personal survey, ranging from the "expert," via the "good listener" and the "culture consumer," to the more base varieties of "emotional," "resentment" and "entertainment listeners" – a survey enabling the listener to check, as it were, that he or she belongs to the proper category.⁴⁷³

In less normative descriptions,⁴⁷⁴ there is common reference to at least two types of listener, the first of which is concerned with the emotive aspects of music, whereas the second shares the analytical competence of Adorno's expert, though lacking interest for music's ideological significance. Rather than keeping up with Adorno's Marxist ambitions, I

⁴⁷⁰ T.W. Adorno. "Mediation", in *Introduction to the Sociology of Music*.

⁴⁷¹ See T.W. Adorno. *Philosophy of Modern Music*, 130.

⁴⁷² T.W. Adorno. *Aesthetic Theory*, p.475. Routledge and Keegan Paul, London 1986.

⁴⁷³ See T.W. Adorno. "Types of Musical Conduct", in *Introduction to the Sociology of Music*.

⁴⁷⁴ By among others Behne, Welds, Wellek, Francès, Valentine and Ortmann. For an overview, see I. Dahl. *Personligt musiklyssnande eller musiklyssnande personlighet. Något om musikupplevelsen och människan bakom*, pp.22f;76ff. FoU-rapport 1992:1, Arvika 1992.

will regard these types of listener as *modes of listening*,⁴⁷⁵ evident to the observer through distinct types of discursive formulations. I thus take there to be *emotive* and *analytical* modes of listening.⁴⁷⁶ For reasons that will become clear shortly, I add to these the *trivial* and the *critical* modes (corresponding roughly to Adorno's "culture consumer" and "expert listener", respectively). On my account, any listener may combine any modes of listening (my list is not exhaustive), depending on situation and personal mood. The listener may also change between modes and combinations as the music unfolds in time.

Common to the four modes of listening – the emotive, the analytic, the trivial and the critical modes (as well as any other possible listening mode) – are the affective cores, the "passions" as it were, underlying the respective experiences. Although the particular contours of these affective substrates may differ slightly between modes because of variations in attention, they all serve as foundations for the metaphorical, imaginative and fictional constructs, the more or less grammatical structures and narrative frameworks imposed on them. Filtered through these modes – of listening and of verbal formulation – are the musical experiences of the *virtual listener* who shall be our point of reference as we now turn to the "serious" music of Frank Zappa.

In the chapters that follow I will variously describe and analyse different aspects of Zappa's "serious" output, ranging from more trivial anecdotes to critical reflexion, and from emotional to more analytic aspects of some of his compositions. These verbal descriptions and analyses may all serve – in whole or partially – as content fixations of a listener's musical experiences. Since this is not a survey of what any "real" listener has actually experienced, I will refer the content fixations to a "virtual listener". Although these discourses, these virtual content fixations, are all authored and edited by myself I do not refer to them as "my listening experiences," simply because they are not. Whereas some (perhaps most of them) have affected my own listening, many stem from other sources. I have for instance not hesitated to quote other writers at length. Of course, verbal content fixation is a way of sharing experiences. By this token it should be obvious that I do not commit myself to any intentional fallacy when referring extensively and sometimes rather

⁴⁷⁵ Cf. O. Stockfelt. *Musik som Lyssnandets Konst. En analys av W.A. Mozarts symfoni no40, g moll K.550*. Skrifter från Musikvetenskapliga institutionen, Göteborg 1988. See also references in note 73.

⁴⁷⁶ I will not make any explicit distinction between what is sometimes called *emotivism* (exemplified most notably by Walton and Levinson) and *cognitivism* (exemplified more or less by both Kivy and Newcomb), both of which are variants of what can be called empathic listening. Whereas emotivists are concerned exclusively with the feelings that may be experienced through an act of identification with the music in a strongly compassionate way, cognitivists are not; cognitivists regard the emotions as properties of the music itself but may differ in the amount of animation with which they make sense of what they hear. While the one takes a rather analytic stance to the music, regarding it as a symbol system expressive of emotions, the other tends to hear the music as true emotional expressions. Cf. C. Radford. "Emotions and Music: A Reply to the Cognitivists", in *Journal of Aesthetics and Art Criticism*, vol. 47(1) 1989; "Muddy Waters", in *Journal of Aesthetics and Art Criticism*, vol. 49 1991. For an explicit distinction between different types of emotional listening, see F. Delalande. "The Construction of Musical Form by the Listener in Debussy's *La Terrasse des Audiences du Clair de Lune*" in *Der Hörer als Interpret. Schriften zur Musikpsychologie und Musikästhetik*, 7. Ed. by H. de la Motte-Haber and R. Kopiez. Peter Lang 1995.

uncritically to Zappa's own accounts of his life and music;⁴⁷⁷ the composer's report may very well serve to fix the content of some listeners' experiences without any claim to "essential" status (what the music is "really about"). Let me therefore start with an anecdotal report from the early days of Zappa's "serious" career.

Chapter thirty-nine

Introducing the Serious Zappa

P*etrouschka!*—The utterance is expressed with a voice of someone who seems to think he is announcing a classic of the genre. Not that Stravinsky's ballet is a complete stranger on the repertoire of Western art music; what might have seemed a little odd at the time (the fall of 1967) is that the music announced is from a rock concert at *Konserthuset* in Stockholm, during the first European tour of The Mothers of Invention, under the lead of Frank Zappa. The Mothers of Invention is Frank Zappa's rock group and the excerpt from *Petroushka* is played, not by a full string section, a grand piano, cornets, French horns, bassoons, clarinets, English horns, oboes, flutes and piccolos, but by an electric guitar, electric bass, electric piano and a drum kit—not exactly a classical rendering of Petroushka's *Russian Dance*. Neither is *Petroushka* a classic in the rock repertoire. Both *The Bristol Stomp* and *Baby Love*, which followed it in the programme, are tunes likely more familiar to the audience.

This way of combining different idioms occurred frequently in Zappa's music from the sixties. For instance, at the concert mentioned, the band also quoted from Tchaikovsky's *Pathétique*. Zappa's second album with The Mothers of Invention—*Absolutely Free*, recorded in 1966—provides further examples: in the song *I'm Losing Status at the High School*, e.g. a quotation from Petroushka's flute introduction is inserted as an intermezzo, and the same occurs in *The Duke of Prunes*. Here, in a section titled *Amnesia Vivace*, Zappa quotes the opening bassoon solo from *The Rite of Spring*, along with the horn melody of the *Ritual Action of the Ancestors* (from the same work), all nicely blended together with the berceuse from *The Firebird*. In a similar fashion *The Bringer of Jollity* from Gustav Holst's *The Planets* appears in *Invocation & Ritual Dance of the Young Pumpkin*. Zappa even mentions a short passage at the end of *Call any Vegetable*, where *God Bless America*, *The Star Spangled Banner*, and *America the Beautiful* are simultaneously being played, invoking the spirit of Charles Ives and his clashing marching bands (though I haven't been able to locate it). These kinds of (almost) literary quotations become less frequent on subsequent albums, although they do occur. For instance,

⁴⁷⁷ Cf. M. Beardsley. *Op cit.* chapters 1&10.

Tchaikovsky's *Pathétique* crops up once again in a piece where one would perhaps have expected Debussy's *Faun*, with the elegant title *Prelude to the Afternoon of a Sexually Aroused Gas Mask*, from the 1970 album *Weasels Ripped My Flesh*.

As is well known to most of his fans, Zappa's interest in art music stems back to his early teens. While looking for rhythm and blues singles in a record store (in contrast to most white kids at that time, Zappa mostly listened to black artists), he stumbled on an album with a 'mad scientist' on the cover. Zappa thought it great that a mad scientist had 'finally made a record', picked it up, and found to his surprise that it was a record he had read about a year ago in a magazine. The article was about an American record-store owner boasting over his merchandizing capacities: he could sell anything, even this album full of drums and things, called *Ionisation*. Since the music was described as '*dissonant and terrible; the worst music in the world*',⁴⁷⁸ Zappa (playing the drums in the school orchestra at that time) got interested. Now that he found it at the neighbourhood record store he emptied his pockets. After some bargaining he got the record (it had been used for demonstrations, with negative marketing consequences), and brought it home. The mad scientist was the French composer Edgard Varèse, and the description of Varèse's first appearance in the Zappa household is a charming little anecdote in the lingering history of musical Modernism:

My family had a genuine *Lo-fi* record player: a *Decca*. It was a little box about four inches deep, sitting on short metal legs (because the speaker was on the bottom), and it had one of those clunky tonearms that you had to put a quarter on top of to hold it down. It played all three speeds, but it had never been set to 33 $\frac{1}{3}$ before. The record player was in the corner of the living room where my mother did the ironing. When she bought it, they gave her a free record of "The Little Shoemaker," by some middle-aged white-guy singing group on Mercury. She used to listen to "The Little Shoemaker" while she was ironing, so that was the only place where I could listen to my new Varèse album. I turned the volume all the way up (in order to get the maximum amount of 'fi'), and carefully placed the *all-purpose osmium-tipped needle* on the lead-in spiral to "Ionisation." I have a nice Catholic mother who likes to watch Roller Derby. When she heard what came out of that little speaker on the bottom of the Decca, she looked at me like I was *out of my fucking mind*. It had sirens and snare drums and a lion's roar and all kinds of strange sounds on it. She forbade me to play it in the living room ever again. I told her that I thought it was really great, and I wanted to *listen to it all the way through*. She told me to take the record player into my bedroom. My mother never got to hear "The Little Shoemaker" again.⁴⁷⁹

The record was played over and over again and Zappa even marked his favorite parts on the record with a chalk, so that he could introduce his friends to his new musical acquaintance: 'I would force them to listen to

⁴⁷⁸ F. Zappa & P. Occhiogrosso. *The Real Frank Zappa Book*, p.31. Poseidon Press, New York 1989.

⁴⁷⁹ *Ibid.* p.32. In all quotes that follow, Zappa's various emphases, such as bolds and underlinings, have been changed (mostly) to italics.

Varèse—because I thought it was *the ultimate test of their intelligence*'.⁴⁸⁰ In spite of Varèse's cold reception in the Zappa household, the boy was allowed to make a long distance phone call to New York on his fifteenth birthday in order to speak to his new idol. (Varèse had moved from Europe to the United States in 1925). Unfortunately, Zappa recalls, on the first try Varèse was in Europe working with his *Poème électronique* for the World Fair in Brussels (a pioneering work of electronic music to be performed in a pavilion designed by Le Corbusier and Iannis Xenakis). When he finally got in touch with Varèse, the composer informed Zappa that he was working on a new piece to be called *Déserts*. As Zappa recalls, 'When you're fifteen and living in the Mojave Desert, and you find out that the World's Greatest composer (who also looks like a mad scientist) is working in a secret Greenwich Village laboratory on a *'song about your hometown'* (so to speak), you can get pretty *excited*'.⁴⁸¹ (N.B. according to historical sources, *Poème Electronique* was composed in 1958, and *Déserts* in 1954, while Zappa's fifteenth birthday was on December 25, 1955.)

This excitement before the music of Varèse—chronology set aside—followed Zappa, from the first compositions of his high school years throughout his entire career (he continued to believe that *Déserts* was actually about his old hometown Lancaster in the Mojave Desert), and he even turned part of Varèse's Composer's Guild manifesto into his own individualist slogan: 'The present day composer refuses to die'.⁴⁸²

Chapter forty

Orchestral favorites

To speak of The Mothers of Invention as a rock band is slightly misleading. This ensemble functioned rather as a style-transcending tool in Zappa's hands, playing almost anything from teenybop to avant-garde. Considering the pastiche album *Cruising with Ruben & the Jets* (1967), on which the band exclusively play songs idiomatic of the 1950's, Zappa describes it in almost academic terms: 'I conceived that album along the same lines as the compositions in Stravinsky's neoclassical period. If he could take the forms and clichés of the classical era and pervert *them*, why not do the same with the rules and regulations that applied to doo-wop in the fifties?'⁴⁸³

As the group expanded, including (in addition to the instrumentation mentioned above) another drummer, a percussion player, and multiple

⁴⁸⁰ *Ibid.* p.32f.

⁴⁸¹ *Ibid.* p.33.

⁴⁸² E. Varèse. "Manifesto of the International Composers' Guild, July 1921", in *The Frank Zappa Companion. Four Decades of Commentary*. Ed. by R. Kostelanetz. Schirmer Books, New York 1997. Varèse's original stated 'The present day composers refuse to die'.

⁴⁸³ F. Zappa & P. Occhiogrosso. *Op cit*, p.88.

reed players, it became possible to perform a totally different kind of music, as is evident in the set of miniatures *Igor's Boogie phase I&II* (from the 1969 album *Burnt Weeny Sandwich*). The first of these little woodwind scherzi reflects a distorted image of Schoenberg, or perhaps Webern, while phase two anticipates the car-horn overture to Ligeti's *The Great Macabre*. The best example of The Mothers of Invention as an avant-garde chamber orchestra is the double album *Uncle Meat* (1968), originally intended as a soundtrack for a surrealist film Zappa was working on. Here we have a number of small compositions (or "inventions," if you like) sometimes treated as themes for subsequent variations, among them *Uncle Meat* (with variations), *Dog Breath* (with variations), *A Pound for a Brown on the Bus* and *Solar Czakl*.

The size of Zappa's band was a question of economy, and when an opportunity to write for a larger orchestra arose he would take it. The first such occasion came with the request to write music for two low-budget films, *The World's Greatest Sinner*, about an ex-salesman who desperately tries to convince his environment that he is God, and a cowboy movie called *Run Home Slow*. Material from these scores was later performed under Zappa's direction by his "own" *Abnuceals Emuukha Electric Symphony Orchestra* (on the album *Lumpy Gravy*, from 1968, originally conceived as a commercial for Aloma Linda Gravy Quick),⁴⁸⁴ as well as by the *Los Angeles Philharmonic*, with Zubin Metha conducting. While the first performance was on his own initiative (he paid the costs for the purpose of recording), the second event, Zappa recounts, was the result of the *L.A. Philharmonic's* desire for a spectacle. The offer to perform the music (an offer the young Zappa could hardly refuse) was, however, coupled with a condition: there had to be a rock band on stage as well, playing together with the famous orchestra.

Although The Mothers of Invention were temporarily disbanded at that particular time (1970), it was of no great problem for Zappa to put a band together again, but whether it satisfied the symphony orchestra's demand for a rock band is another question. Nevertheless, this was, according to composer himself, the *Los Angeles Philharmonic's* most profitable concert of that season, all seats sold out. What is interesting to note here is how the smaller ensemble is capable of being used both as a contrast to the orchestra, as in Zappa's own movie *200 Motels* (released as a double album in 1971) where it was matched against London's *Royal Philharmonic Orchestra* and, but also how Zappa integrates the rock band in the overall orchestral sound. The latter can also be heard on the albums *L.S.O. volume I & II*, recorded in 1983, for which Zappa hired the *London Symphony Orchestra* (the 1971 session was conducted by Elgar Howarth, the 1983 session by Kent Nagano). In the pieces from the *L.S.O.* recording—especially *Mo 'N Herb's Vacation*, *Sad Jane*, *Pedro's Dowry*, *Bob in Dacron*,

⁴⁸⁴ See P.W. Salvo and B. Salvo. *Op cit*.

and *Envelopes* – one does not hear the clarinet player or the percussionist from Zappa’s rock band as any stylistic contrasts. Even the drum player, playing an ordinary drum kit (which is not, needless to say, a regular part of the symphony orchestra) fits in like an innovative extension of the orchestral timbre, rather than being just an external sonic embellishment.

That this phenomenon cannot simply reside in the fact that there are neither electric guitar nor electric bass scored for the *L.S.O.* sessions becomes clear when one compares it with the rock band-version of *Envelopes* (from the 1982 album *Ship Arriving too Late to Save a Drowning Witch*). This latter version sounds as idiomatically Zappaesque as the earlier orchestra version, although synthesizers, guitars, and bass are used. A similar conclusion can be drawn from the earlier piece *Music for a Low Budget Orchestra*: the version for steel stringed acoustic guitar (on the recording from the *Studio Tan* album of 1977), including both drum set, marimba, piano, violin, woodwinds, trumpets and trombones, sounds as idiomatically orchestrated as the more traditional instrumentation recorded by Jean-Luc Ponty with electric violin and string orchestra (on the album *King Kong* from 1970).

Another piece from the bulk of Zappa’s oeuvre that has survived the transmutation from one idiom to another is *The Be-bop Tango* (from *Roxy and Elsewhere*, a live recording from the 1974 rock tour). This piece, with a virtuoso trombone melody, has also been orchestrated for chamber orchestra, and the only significant limitation in this other rendering is (as is also the case with the *Music for Low Budget Orchestra*), the fact that it includes *ad lib.* solo sections which are usually better performed by musicians trained in a rock or jazz idiom. (With the exception of *Music for a Low Budget Orchestra*, *Be-bop Tango* and *Pedro’s Dowry*, *ad lib.* improvisation is rare in Zappa’s music for these kinds of ensembles.) Yet another piece that should be mentioned here, also recorded at a rock concert, is *The Black Page #1* (from the live album *Zappa in New York* 1977). *The Black Page #1* opens with an improvised drum solo (not included on the record) which turns into an elaborate, written-out (hence the “black page”) section for drum set, cowbells, and castanets. When this section is taken *da capo* the rhythmic pattern takes on a melodic shape with marimbas playing in unison with the percussion. In its disposition and conception, this piece is an excellent exposition of Zappa’s rhythmic and melodic imagination.

Chapter forty-one

Playing with “the real guys”

The prestigious summit of Zappa’s career, from a “serious” point of view, is probably his collaboration with the composer and conductor Pierre Boulez in 1984 (as Zappa ironically put it in his biography, Boulez was ‘serious as cancer’).⁴⁸⁵ It has been said that Boulez refused to perform any contemporary American music during his time as the principal conductor of the *New York Philharmonic*.⁴⁸⁶ This negative attitude even included the music of Boulez’ former friend John Cage, although he did conduct and record music by both Varèse and Stravinsky (both of which had become residents of the United States). When Zappa sent some scores to Boulez, wondering whether he would want to conduct them, Boulez replied that he did not have access to the full-size orchestra that the music required (this could have been as early as 1969, judging from Zappa’s comment in an interview, that he was ‘trying to get Pierre Boulez over to conduct ... a ballet [that] needs a one hundred-piece orchestra, and ... dancers to leap about all over the audience ... Also if possible, I want to get the musicians so well rehearsed that they can memorize the parts and get out into the audience while playing them. But that will need a lot of time and it may not happen’).⁴⁸⁷

Boulez did not turn Zappa down completely, however, commissioning a new chamber work to be played by his Ensemble InterContemporain. This piece, *The Perfect Stranger*, was later recorded on the album with the same name in 1984, together with two other chamber works. The first, *Dupree’s Paradise*, is a piece of music with a repetitive main theme that could bring to mind Olivier Messiaen’s *Turangalila Symphony* (cf. for instance the fifth movement), derived from a “low budget version” played by The Mothers of Invention on their European tour in 1973. The second, *Naval Aviation in Art*, which could be heard as a bizarre paraphrase of Ives’ *Unanswered Question*, is a dense little miniature without percussion, an instrumentally reduced version of the 1977 recording on the *Orchestral Favorites* album.

The remaining pieces on *The Perfect Stranger* album are remarkable in their own right. *Outside Now Again*, *Love Story*, *Jonestown*, and *The Girl with the Magnesium Dress* are short compositions, lasting from one to seven minutes, composed with, and performed by a Synclavier, a digital synthesizer that allowed Zappa to ‘create and record a type of music that is impossible (or too boring) for human beings to play’.⁴⁸⁸ Zappa refers here to the constant lack of rehearsal time when working with an orchestra—a lack of rehearsal time that frustrated his sense for precision

⁴⁸⁵ *Ibid.* Zappa credits the expression to Thomas Nordegg.

⁴⁸⁶ See J. Peyser. *Boulez – Composer, Conductor, Enigma*, pp.84ff; 241ff; Cassell, London 1976.

⁴⁸⁷ Quoted from R. Williams. “The Beefheart Zappa Talk-in”, in *Melody Maker*, Nov. 8 1969.

⁴⁸⁸ F. Zappa and P. Occhiogrosso. *Op cit*, p.172.

(his complaints on this matter includes the ‘underrehearsed’ Boulez session)—as well as to ‘the human element’ which caused the entire trumpet section of the *L.S.O.* to get drunk during a recording session.⁴⁸⁹ With his specially designed Synclavier Zappa could overcome both of these problems, the lack of rehearsal time and human elements, in one stroke, and during the second half of the 1980’s most of the music he composed and recorded was for this instrument. How this amazing computer instrument was utilized in a performance of Zappa’s music by the E.A.R. Unit Ensemble, led by the percussionist Art Jarvinen, is amusingly told by the composer himself:

Art Jarvinen ... asked me to write an arrangement of “While You Were Out,” a solo from the *Shut Up’n Play Yer Guitar* album, for his ensemble to play I created the arrangement on the Synclavier, and, using another of the machine’s features, printed out the parts. When he saw them, he realized that it was a difficult piece, and worried that his ensemble wouldn’t have enough time to rehearse it, as the concert was imminent. “You’re in luck,” I told him, “because you won’t even have to play it. All you have to do is learn to pretend to play it, and I’ll have the Synclavier take care of the rest. Just go out there and do what all the Big Rock Groups have done for years – lip sync it and make sure you look good on stage.” I made them a tape copy of the Synclavier performance and told him, “The way to pull this off is to have wires hanging out of your instruments leading into amplifiers and effects boxes on the floor. Any sound the audience hears that might be deemed ‘synthesized’ will be overlooked because there’s a wire coming out of your instrument.” Final result? The man who ran the concert series didn’t know the difference. The two classical reviewers from the major Los Angeles newspapers didn’t notice anything either. Nobody in the audience knew, except for David Ocker, my computer assistant, who had helped me prepare the materials. Nobody knew that the musicians *never played a note*.⁴⁹⁰ [A version, *While You Were Art II*, was recorded on *Jazz From Hell*, in 1986.]

Though Zappa seemed fed up with the practical problems connected with musicians and orchestras preferring beer to rehearsals, he did return to the orchestral world of ‘human elements’ a few years later (as he admitted, ‘the ear prefers variety, unless you happen to be one of those Mongoloids who thinks that the drum machine is the greatest device known to mankind’).⁴⁹¹ A more specific reason for this return to the ‘human element’ is the Ensemble Modern. When this chamber orchestra not only wanted to perform a complete Zappa program at the 1992 Frankfurt Festival, but also offered to spend two weeks on rehearsal at its own expense at Zappa’s studio in Los Angeles, Zappa found himself with yet another offer he could not refuse. The program, as recorded on *The Yellow Shark* album in 1993, contains music from all phases of his career (most of the pieces orchestrated by Zappa’s assistant Ali Askin): *Uncle Meat* and *Dog Breath*, were performed in updated versions, and in

⁴⁸⁹ *Ibid.* p.155f.

⁴⁹⁰ *Ibid.* p.175.

⁴⁹¹ *Ibid.* p.50.

particular *A Pound for a Brown on the Bus* together with the attached *Exercise #4* (basically the same material as the opening bars of *The Uncle Meat Variations*) got an interesting instrumental outfit in which the neoclassical, almost lyrical touch occasionally turned medieval. The only disappointing performance was *The Be-bop Tango*, which lacked much of the rhythmic drive in the earlier *Roxy* version.

New orchestrations were also applied to originally electronic compositions like *G-spot Tornado* (originally from the album *Jazz from Hell*) and *The Girl with the Magnesium Dress*. There were also new compositions for piano solo – *Ruth is Sleeping*, apparently a close cousin to *The Girl in the Magnesium Dress* – string quartet, wind quintet and other instrumental combinations. The most remarkable piece is perhaps the lyrical, even melancholic *Outrage at Valdez*, a slow ballad-like composition with a melody reminiscent of Zappa's guitar playing, a sound track to a documentary about the Exxon Valdez oil spill in Alaska. What is remarkable with *Outrage at Valdez* is its expressiveness of sadness and melancholy, in a way that is very rare for Zappa. Other pieces expressive of similar character are limited to *I Promise Not to Come in Your Mouth*, from *Zappa in New York*, and the song *Mom and Dad* from the 1967 album *We're only in it for the Money* (and perhaps a few more) – pieces purged of all qualities of the absurd, the ironic, or of musical satire.⁴⁹²

Outrageous or not, the music leads one to wonder whether the tough turned tender at the autumn of his life. In an interview, Rainer Römer and Andreas Mölich-Zebhauser, percussionist and manager of the Ensemble Modern, mention 'eine kleine friktion' which appeared between the orchestra and the composer. Römer and Mölich-Zebhauser comment upon Zappa's relaxed attitude to what would work and what would not. If some music seemed too difficult he would just tell the ensemble to 'skip it!' But, as Römer says, a big part of the job in dealing with contemporary music is to learn first 'the alphabet' of the particular work, to systematically work through a piece in detail. This was apparently an unfamiliar approach to Zappa, accustomed as he was to working with rock groups, and it took a while to convince him that it was an effective method. Whereas a rock group, according to Mölich-Zebhauser, captures the basic groove first and only thereafter deals with details, contemporary-music ensembles work the other way round: 'First precision in detail, then the groove – and I think that scared him'.⁴⁹³

⁴⁹² Taking titles into account one might of course come to a different conclusion.

⁴⁹³ Quoted from J. Scherwin. "Den gula hajen: Ett samarbete mellan Frank Zappa och Ensemble Modern", in *Musik*, vol. 5 1996.

Chapter forty-two

Is the music any good?

Many have found Zappa's compositions problematic, stemming as their formal characteristics often seem to do from Zappa's thorough acquaintance with popular music, rather than from the Modernist avant-garde to which they often allude. For instance, Jonathan Bernard (who is an authority on Varèse, having written a full length book on his music) reports his own troubles in listening to the Zappa pieces recorded by Boulez, to meaningfully evaluate them, to judge whether they were 'any "good" or not': 'On the surface, it [the music] seemed to demand that the listener tune in on the mental frequency marked "modern music" for best reception, and certainly some of the sounds, considered individually, were of a type quite familiar to those experienced in such a listening mode – but overall one came away with the impression that there was less to absorb that way than might have been expected.'⁴⁹⁴

Bernard shows how some of Zappa's compositional techniques are utilized for both the more popular material as well as for his serious stuff, coming to the conclusion that the techniques are better suited for the former; in other words, Zappa's ways of composing are more efficient in creating meaningful coherence in his popularly-oriented work than in his music for chamber and symphony orchestra. For instance, the *Petroushka* quote in the song *Status Back Baby* (from the album *Absolutely Free*) fulfills at least a twofold function in adding coherence. It provides a thematic comment to the contents of the lyric of the song, which depicts 'the inner turmoil' of a high school student. The *Petroushka* quote functions as an ironic comment from the composer that the boy is behaving like a puppet, without any control of his own. The quote also provides a textural contrast, as Stravinsky's theme is quite distinct from the rather corny rhythm of the rest of the song. By contrast, in a piece like *Mo 'N Herb's Vacation*, for symphony orchestra, there are no lyrics, no story to musically comment upon (as in the *Petroushka* case), and although Zappa was fond of supplying small programs to his orchestral works, there is no such program for *Mo 'N Herb's Vacation*. Had there been one, it is dubious whether it could have given a meaningful background to the episodic distribution of material in this twenty-seven minute piece.

In addition, though Bernard admits that *Mo 'n' Herb's Vacation* 'has, perhaps, more "Varèse moments" than any of Zappa's other large orchestral works', he complains that the figurative elements of the material are 'not that *qualitatively* distinct', as is for instance a *Petroushka* quote in a pop song. With reference to Varèse, Bernard also remarks on Zappa's homogenous textures, which 'make practically no use of silence

⁴⁹⁴ J.W. Bernard. "Listening to Zappa", in *Contemporary Music Review*, vol. 18(4) 1999.

as relief',⁴⁹⁵ as well as on Zappa's (in contrast to Varèse's) reliance on percussion to reinforce the beat, thereby creating a feeling of continuity. For instance, in many of the pieces performed by the LSO, continuity is accomplished through the use of a drum set, giving the music a much more forward-oriented quality than otherwise possible.

Another piece discussed by Bernard is *Dupree's Paradise*. Originally no more than a head in a solo-improvisation context, this material is elaborated and extended into an eight-minute piece for chamber orchestra, with a contrasting though thematically related middle section and a reprise. Bernard compares the large-scale form of this piece with Stravinsky's *Agon* (for which he notes 'Zappa's distinct and professed fondness') and its texture with the Neoclassicism of Aaron Copland (whose music Zappa described as 'a hoedown tune and ... a xylophone doubling the melody on top').⁴⁹⁶ All the same, in spite of its more graspable form, Bernard's final verdict is negative: The crossover of *Dupree's Paradise* from some kind of jazz fusion to an orchestral score 'ends up so monochromatic, in terms of dynamics, tempo, and overall pacing, that paradoxically it is very difficult to follow except from moment to moment. Without the long solos to open things up, the effect is curiously stifling. Partly this is a function of the specific twentieth-century musical style invoked in the head; the expectation of a certain kind of musical "argument" is created but not fulfilled'.⁴⁹⁷

Now, I am prepared to disagree with Bernard's verdict on this piece. Although I find, as does Bernard, *Mo 'N Herb's Vacation* a less successful piece as a whole (Zappa hardly ever employed silence as relief), I would give more credit to *Dupree's Paradise* than Bernard does (although the former composition belongs to a stylistically more interesting part of Zappa's oeuvre than the latter, it seems less balanced in the coupling of its three movements). Bernard recommends a comparison between Zappa's "popular" and his "serious" music so as to find clues for appreciating the latter in terms of the former. The conclusion he draws is that 'to the extent that the ["serious" orchestral] pieces come across to the listener it is because they can be heard through the models of Zappa's other pieces, to the extent that they do not come across it is because Zappa in writing for ["serious" orchestras] has, voluntarily or not, done without so many of the elements that make his other music vibrant and distinctive'.⁴⁹⁸

Considering the orchestra version of *Dupree's Paradise*, Bernard says that there is 'Something about the entire score between the head and its reprise—most of its length—that has the character of an improvisation.

⁴⁹⁵ *Ibid.*

⁴⁹⁶ J.W. Bernard. "The Musical World(s?) of Frank Zappa: Some Observations of his 'Crossover' Pieces", in *Expression in Pop Rock Music: A Collection of Critical and Analytical Essays*. Ed. W. Everett. Garland, New York 1999. Cf. also L. Jones. "Frank Zappa and the New Mothers of Invention. Civic Center Music Hall Oklahoma City", in *Down Beat*, June 7 1973. Who else, the reviewer asks 'could name a tune *Montana* and then come on with a quasi-Copland theme?'

⁴⁹⁷ J.W. Bernard. "Listening to Zappa".

⁴⁹⁸ *Ibid.*

There are even tradings-off between groups of instruments that could be taken to emulate the complementary riff trading that sometimes happens in more spontaneous settings'.⁴⁹⁹ To me it seems that Bernard is overstating the 'jazz inflections' of the piece somewhat. To speak of riff trading is a bit far-fetched. To say that the piece has the character of an improvisation might seem appropriate, although this characteristic does not owe much to the piece's history as a fusion number. The improvisatory character of the piece owes nothing to any obvious chord changes, no modal framework to expand, but rather to some peculiarly static and dense thematic variation that is not particularly jazz-flavored.

Moreover, the head was un-jazzy already in its original form, marked off against the solo improvisations in a manner quite different from, for instance, the otherwise similarly fusion-oriented *King Kong*. The head, the main theme of *Dupree's Paradise* was not common-language jazz-fusion, and would hardly have passed as a Weather Report, Brecker Brothers, or Return To Forever theme (as was mentioned, I first associated the theme to the repetitive qualities of a Messiaen, while Bernard likens it to Copland). What I want to suggest is that, to the extent that *Dupree's Paradise*, *Mo 'N Herb's Vacation* and many of Zappa's other orchestral scores 'are problematic as compositions',⁵⁰⁰ this holds for his jazz pieces and other music too.⁵⁰¹ Indeed, it seems as if it was the internal inconsistencies—the patently non-organic character—of Zappa's music that made it, to use Bernard's phrase, so vibrant and distinctive. It is in light of these inner tensions that one can make full sense of Bernard's claim that, 'in attempting to bridge the gap between pop and art, Zappa really belonged to neither world' (perhaps it could also explain the scarce and noncommittal comments on his orchestral works by professional critics).⁵⁰²

Making any claims about the quality of pieces such as *Mo 'N Herb's Vacation* or *Dupree's Paradise* should, I suggest, therefore be done relative primarily to Zappa's own catalogue; in spite of figurative similarities, qualitative comparisons with the music of Varèse or any other European Modernist would first have to come to grips with how to relate the fundamental differences of style (Bernard does not do this and I will not do so either). For instance, as Bernard says in his book on Varèse, 'the *objects* in a Varèse work, be they called themes, chord patterns, or—to use his own terminology—planes, masses, and volumes, have no importance in themselves; it is only their interaction over time that establishes the form of the composition.'⁵⁰³ In Zappa's music, on the contrary, the

⁴⁹⁹ J.W. Bernard. "The Musical World(s?) of Frank Zappa: Some Observations of his 'Crossover' Pieces".

⁵⁰⁰ J.W. Bernard. "Listening to Zappa".

⁵⁰¹ See H. Siders. "Meet The Grand Wazoo", in *Down Beat*, Nov.9 1972; O. Keepnews. "The Mothers", in *Down Beat*, May 24 1973.

⁵⁰² J.W. Bernard. "Listening to Zappa". For some noncommittal criticism, see A. Porter. "Courtesy Humanity, Headiness", in *Musical Events: a Chronicle, 1983-1986*. Summit Books, New York 1989; and M. Oliver. "Zappa. Chamber Works" [review of *Boulez Conducts Zappa*], in *Grammophone*, vol. 4 1985.

⁵⁰³ J.W. Bernard. *The Music of Edgard Varèse*, p.6. Yale University Press, New Haven and London 1987.

elements of form seem to a considerable degree determined by their figurative significance. When Bernard speaks of “Varèse moments” in Zappa’s music, we must understand this literally: The Varèseness (to speak metonymically about stylistic sources that reach well beyond Varèse) is not a trace to be effaced in the course of experiencing the whole of this music, no simple side effect of Zappa’s compositional technique lacking in importance itself, but a significant part of the compositions in question.

Chapter forty-three

Music as air sculpture – from pastiche to guitar derivate

As put by Christopher Smith when analysing the ‘Archetypal American Musical Icons’ of the 1988 Zappa album *Broadway The Hard Way*, ‘allusion-oriented composers from Ives to Mahler and Mozart to Zappa have depended on the expert replication and manipulation of definitive style characteristics’.⁵⁰⁴ And although the music discussed by Smith is for rock band, one should bear in mind that Zappa would not make any evaluative distinctions among his various material. In many cases, the distinction between the “popular” and the “serious” was put in question by placing the one next to the other. Zappa’s use of musical quotations has already been mentioned, but one could also point to instances where all material stems from his own pen. For instance, in a song like *Brown Shoes Don’t Make It*, the listener encounters boogie, cocktail jazz, swing, surf music and soul, along with atonality à la second Viennese school. Similarly, within larger works such as the music movie *200 Motels*, one can hear blues, rock, country as well as Varèse-like sonorities (the posthumously released triple-CD *Läther* is another example). Even when the Modernist fragments of *200 Motels* are brought together into the twenty-four minute piece *Bogus Pomp*, the program notes describe the music as ‘a parody of music clichés and mannerisms ... supported by cheesy fanfares, drooling sentimental passages and predictable “scary music”’.⁵⁰⁵

Zappa’s music can thus be described as a meta-music of sorts. It is often characterized by a sounding-*as* which constantly directs the attention to the diversity of its own constituent parts. For instance, Zappa’s orchestral pieces often sound as a kind of pastiche on twentieth-century modernism, recalling, as we have seen, music by composers such as Stravinsky, Webern and Varèse, in a bizarre blend of irony and humor. Recalling the distinctions between different levels of ideological significance in music

⁵⁰⁴ C. Smith. “‘Broadway the Hard Way:’ Techniques of Allusion in Music by Frank Zappa” in *College Music Symposium*, 1995.

⁵⁰⁵ F. Zappa. *The London Symphony Orchestra – Zappa, vol. I&II* [liner notes]. Rykodisc RCD 10540/41.

that were made in chapter two, we may specify this by saying that the pastiche elements in Zappa's music reside primarily in the level of figures. Only on rare occasions (one of which we shall look at shortly) does Zappa seem to parody formal characteristics. An important aspect adding to the rhythmical peculiarities of Zappa's melodic contours are their often humoristic timbral qualities:

What academicians regard as "humor" in music is usually stuff along the lines of "Till Eulenspiegel's Merry Pranks" (remember, in "music appreciation class," when they told you that the E-flat clarinet is going "ha-ha-ha!"). Take my word for it, folks—you can do *way better than that*. I've stated elsewhere that "Timbre rules" — rules *what* ? For one thing, it rules the "humor domain." The minute you hear a trumpet with a Harmon mute going "Fwa-da-fwa-da-fwa-da," you register "something" — a "humor something." (There aren't any technical names for these "things" because they don't give foundation grants to study this kind of stuff.) Likewise, a bass saxophone, playing in its lowest register, conveys a sort of "H.S." (Humor Something)—and how about our ol' buddy, *The Slide Trombone* — surely this graceful, expressive piece of machinery has its own little "H.S." radiator built into it. I've developed a "formula" for what these timbres *mean* (to me, at least), so that when I create an arrangement—if I have access to the right instrumental resources—I can put sounds together that tell *more than the story in the lyrics*, especially to American listeners, raised on these subliminal clichés, shaping their audio reality from the cradle to the elevator.⁵⁰⁶

Whereas this timbral and figurative treatment often involves a focus on stylistic or genre traits, Zappa at times also treats entire pieces as formal elements, or perhaps better, as figurative elements. I have mentioned the examples of *Brown Shoes Don't Make It*, *200 Motels* and *Läther*, wherein various genres are absurdly juxtaposed. On the contrary, pieces themselves constitute the material in works such as *The Yellow Shark*, in which the specific coupling of compositions and parts of compositions add to the overall character. Especially interesting to note here is Zappa's ability to treat parts of pieces as interchangeable. On *The Yellow Shark* album, for instance, short "suites" are built up from detached movements of string quartets and pieces for chamber orchestra, many composed previously for other occasions.

This pragmatic attitude towards precomposed material—rearranging and recontextualizing it—is brought to its extreme in Zappa's handling of his own guitar improvisations. The most well-known example being perhaps the solo from *Inca Roads*, recorded live on stage in Helsinki in 1974, then extracted from the rest of the song to appear on a studio recording half a year later.⁵⁰⁷ This way of using live recorded guitar solos was later extended to involve the choice of background accompaniment, developed into a technique which Zappa called *xenochrony*: 'You try to find something that's in the same key but the time signature could be

⁵⁰⁶ F. Zappa and P. Occhiogrosso. *Op cit*, p.171.

⁵⁰⁷ Cf. A. Björnberg. *Inca Roads – en analys av Frank Zappas musik*. Unpublished thesis, University of Göteborg 1980.

different. In “Packard Goose” the backing is in $4/4$ and the solo was played in $15/16$ in a totally different tempo. It was from the last show in Zurich during a song called “Easy Meat”. The solo in “Keep it Greasy” – the rhythm background I think is in $21/16$ and the guitar is in $11/4$. The beats come together about once a month.⁵⁰⁸

The most conspicuous result of Zappa’s guitar playing are the two albums *Shut up and Play Yer Guitar* and *Guitar*, consisting entirely of extracted guitar improvisations, presented in suite-, or collage-like form which gives them an almost surreal impression. These guitar solos are of course unlikely to appear outside their album contexts, which is not the case with Zappa’s transcriptions. Zappa had a lot of his improvisations transcribed and later orchestrated, some of them for different settings, resulting in what is perhaps some of the most remarkable musical compositions to have appeared during the last decades of the twentieth century. Not only are the compositional procedures original; in these pieces – *Sinister Footwear* (3rd mvt.), *Outside Now Again* (for Synclavier), *The Girl in the Magnesium Dress* – the work is treated as a superordinate category, on a par with the notion of material, which enables a continuing decontextualization and recontextualization of sound. In contrast to the early pieces, these works do not sound like anything else. They hardly even sound like guitar solos.

What we see here is, first, that Zappa’s way of treating his material is complex, focusing sometimes on a figurative level and sometimes on entire interchangeable pieces that may be juxtaposed in various ways (thus treating pieces as elementary figures). Secondly, the figurative aspects may involve familiar genre traits in a pastiche manner, which due to their timbral characteristics often sound parodic, or they may involve his own guitar playing, his own solos, which become treated as raw material for further elaboration in various ways (in the second case, the parodic is a less obvious quality). The ways by which this diverse material is put together was described by Zappa with reference to the mobiles of Alexander Calder, for whom he expressed a particular liking: ‘A large mass of *any material* will “balance” a smaller, denser mass of *any material*, according to the length of the gizmo it’s dangling on, and the “balance point” chosen to facilitate the danglement’.⁵⁰⁹ What Zappa added to this Calderian aesthetic, which in its metaphorical vagueness could also be likened to that of Varèse, is the element of humor: ‘If you can conceive of *any material* as a “weight” and any idea-over-time as a “balance,” you are ready for the next step: the “entertainment objects” that derive from those concepts’.⁵¹⁰

⁵⁰⁸ Quoted from B. Watson. *Frank Zappa. The Negative Dialectics of Poodle Play*, p.368. Quartet Books, London 1995.

⁵⁰⁹ F. Zappa and P. Occhiogrosso. *Op cit*, p.163.

⁵¹⁰ *Ibid.*

Chapter forty-four

Piano Introduction to Little House I used to Live in (album version)

My intention here is not to judge the relative merits of Zappa's various pieces. Instead I shall try to show how the aforementioned tensions—resulting from Zappa's idiosyncratic handling of form, content, work and genre—give significance to two particular pieces. These are chosen on the basis of the stylistic demarcations suggested by the previous discussions. Such stylistic characterization would suggest that we understand Zappa's works as tending towards either of two categories: the *pastiche* category of the early sounding-*as* works, or the guitar derivatives, the *transcriptions*, which do not play on the former's referential capacity in such an obvious way (pieces such as *The Be-Bop Tango* and *The Black Page* probably fall somewhere in the middle). Although there is no space to go through a sufficient amount of Zappa's output to allow an exhaustive stylistic analysis, I shall take a closer look at one piece from each proposed style category in order to diagnose the plausibility of this assumption. As a pastiche I have chosen the *Piano Introduction to Little House I used to Live in*, while as a guitar derivative I have chosen the third movement from *Sinister Footwear*.

Whether these two pieces of his are the most gratifying to study from these perspectives is a question I leave unanswered. I have chosen the piano piece partly because it is brief and easy to overlook (it is also the piece I deal with most thoroughly); the solo-derived piece for orchestra because it is the most extensive of its kind. When dealing with the music I shall also try to give voice to the four modes of listening modes mentioned at the outset (trivial, critical, emotive, analytical). What may sound conflicting from one listening perspective need not do so from another, and vice versa. However, the two pieces will not be subject to the same kinds of discursive or analytical treatment. I start with the *Piano Introduction*, first recorded on the album *Burnt Weeny Sandwich* from 1970, with Ian Underwood playing the piano (referred to from now on as the "album" version; I will also discuss the published "revised" version).

The album version of the *Piano Introduction*, which is seldom mentioned in the literature,⁵¹¹ is an intimate, almost impressionistic, piano miniature, serving as an introduction to a lengthy, jazz-flavoured improvisation set. Curiously, Ben Watson, who has perhaps written the lengthiest study ever devoted to a rock musician, only mentions it in terms of 'these beautiful chords',⁵¹² and Alain Dister, although naming an entire chapter in his book

⁵¹¹ The Zappa-literature (by 1999) consists mainly of rock biographies and articles/interviews in magazines and daily papers. In addition there is some scholarly work done, which as far as I know is restricted to the treatises by W. Ludwig and W. Reimers, an unpublished bachelors thesis by A. Björberg, as well as articles by A. Ashby, J. Bernard, S. Döhning, P. Kountz, C. Smith, and myself (there are doubtless more articles in various languages, although I have not been able to locate them).

⁵¹² B. Watson. *Op cit*, p.170.

on Zappa after the album title, confines himself to the mentioning of the 'zeitgenössische klassische Partituren für Ian Underwood am klavier'.⁵¹³ Wolfgang Ludwig, whose scholarly treatise promises to cover the 'musikalischen Schaffen von Frank Zappa', does not even mention it.⁵¹⁴ Obviously those authors who care to point out its existence find more interest in the surrounding jazz-rock experiments that put Zappa's work on an (undeservedly undercredited) equal footing with that of Miles Davis from the late sixties and early seventies.⁵¹⁵

In contrast to the previously mentioned head of *Dupree's Paradise*, the piece contains more composed material prefiguring the solo improvisations, as well as a composed interlude with a reference to the piece *Aybe Sea* from the same album, all ending in a live recorded organ solo by Zappa. Problematizing the status of the *Piano Introduction* and its context as original is the typical fact that the piece is a reworking of previous material. In a 1969 *Down Beat* issue, an unfinished score is supplied for a piece named *Little House*, featuring the first seventeen measures of the *Piano Introduction*. These are followed by twenty-three measures for an ensemble of seven woodwinds, two horns, tuba, four violins and piano (with no obvious relation to the ensemble interlude of the album version), and then forty-three more measures for solo piano, of which the *Piano Introduction* retains some twenty measures before ending with a reprise of the opening theme. According to the composer, 'The theme of the piece is the first three notes and the material derived from the superposition of augmented chords. The origins of that material are a piano exercise dated approximately 1962, and the rest of the piece consists of extrapolations of that material, influenced by environments of a number of Holiday Inns across the country'.⁵¹⁶

In other words, what to most listeners may seem to be the original context for the *Piano Introduction* is a complex web of cross-references. In its picturing of Ian Underwood, Zappa's keyboard player on the *Piano Introduction*, this intertextuality may even be seen to involve the very album cover—stylistically a reference to the cover design of *Uncle Meat*, *We're Only in it for the Money*, and potentially, as Nicholas Cook points out, the 'electronic extravaganza' of the back cover to Karlheinz Stockhausen's *Opus 1970*, from the same year.⁵¹⁷ Not only are album covers something

⁵¹³ A. Dister. *Frank Zappa*, p.77. Wilhelm Heyne, München 1980.

⁵¹⁴ W. Ludwig. *Untersuchungen zur musikalischen Schaffen von Frank Zappa*. Peter Lang, Frankfurt am Main 1992. On pp.120; 122 Ludwig refers to the ensemble part of the album version.

⁵¹⁵ See U. Volgsten. "Zema Zupra Zappa. Inventioner, kompositioner och flickan I magnesiumdräkten", in *Hjärnstorm*, vol. 49 1994. Davis had Gil Evans transcribe improvised solo-parts that were subsequently used as fixed heads, for instance that of *That's What Happened* (from the 1984 album *Decoy*), which was derived from the opening phrase of John Scofield's second solo on *Speak* (from *Star People*, 1983).

⁵¹⁶ Quoted from "Music Workshop: Frank Zappa's 'Little House'" (author not credited), in *Down Beat*, Oct. 30 1969.

⁵¹⁷ N. Cook. "The Domestic *Gesamtkunstwerk*, or Record Sleeves and Reception", in *Composition, Performance, Record Sleeves and Reception*, in *Composition, Performance, Reception. Studies in the Creative Process in Music*. Ed. W. Thomas. Ashgate, Aldershot 1998. 'And they decorated the back cover of *Opus 1970*, released in the same year, with an electronic extravaganza unmistakably reminiscent of contemporary rock albums such as the Mothers of Invention's *Burnt Weeny Sandwich* (which also dates from 1970).'

that most present-day listeners are familiar with (and although the CD format has turned it into a miniature art in comparison with the more impressive LP-sleeve, commercial advertising continues to bombard consumers with the visual impressions of album cover designs); as Cook has pointed out, 'record sleeves transcend their origins in packaging and become ... part of the discursive framework within which the music inside them is consumed'.⁵¹⁸

In the same way that 'The formal narratives of twentieth-century music analysis can be seen as serving [the purpose of] stabilizing the reception of music through the formation of an intersubjectively comprehensible terminology for describing it' (or, as I have put it, fixing the contents of our listening experiences), album covers become part of an 'iconographic vocabulary, a rudimentary discourse whereby the permutation and manipulation of images functions as a means of articulating critical ideas about music'. Cook analyses covers to recordings for music of Beethoven, Mozart, Stravinsky, Tchaikovsky and Stockhausen, and concludes that to fulfill this function, 'the image must possess qualities that are intelligible when transferred to the music', which 'implies that what matters about the image is not its objective properties – what it represents – so much as its generic qualities: in other words, the *way* it represents'.⁵¹⁹

The pictorial discourses that Cook is able to extract from the covers analysed mainly focus on the unattainability and remoteness of the depicted performers, as standing for the assumedly morally superior qualities of the music (Mozart and Beethoven), Russianness (Tchaikovsky), and 'the juxtaposition of materials of extraneous origins and natures' (Picasso illustrating Stravinsky's *Pulcinella*), etc. Two points should be made in addition to these observations. First, although pictures have the potential capacity to depict the unconventional *visual* properties of objects (*pace* Goodman), rather than the amodal contours that music is largely restricted to, they can be assumed to relate to the "discursive framework" by the same principles as music does, that is, through exemplifying, being denoted by, or otherwise relating to the predicates of these same discourses. Second, spelled out, the discourses may turn out to be much more extensive and ideologically committed than Cook's brief accounts may indicate.

An example of such an extensive account is Watson's eloquent description of the intertextual intricacies – or "conceptual continuity," as Zappa would say – of the cover to the *Burnt Weeny Sandwich* album. For a culture consumer, what Watson describes may be more or less the content that the music in question comes to affectively articulate – the impression of the album cover is likely to be an important first context to what is subsequently heard – and this may also to some extent justify Watson's

⁵¹⁸ *Ibid.*

⁵¹⁹ *Ibid.*

minimal comments about the musical structure (intertextuality in Zappa's lyrics being his main concern). Thus Watson on *Burnt Weeny Sandwich*:

The cover montage by Cal Schenkel perpetuates the organic-inorganic anxieties of *Uncle Meat* by nailing motor parts and cogwheels next to dummy hands (which have the same red-varnished nails as the hand which enters the frame just below the M of Mothers on *We're Only in It for the Money*). A nail and dripped red paint inevitably recall the crucified Christ, though here it is not wood the suffering subject is nailed to but a machine. On the reverse Ian Underwood bites a rubber tyre, exclaiming, "God! this *is* a tasty little sucker!", extending the blasphemy by recalling communion. Teeth bouncing back from their prey, art resistant to ingestion: teeth again a symbol for the uncommercial commodity, the undesirable desire. Within the gatefold, photographs are arranged ... as a complex series of thought bubbles, a visual equivalent to the hallucinatory way Zappa's mixing focuses on the thoughts of different participants ... In a frenzied blur of soprano playing, Bunk Gardner is thinking of Black, Estrada and Zappa listening to the playback; behind them is a picture of a white woman sucking a black woman's nipple, perhaps a psychoanalysis of a jazz saxophonist's thoughts while playing [*sic*]. However, Gardner's playing is merely being thought (or remembered) by Don Preston. Just as dreams-within-dreams do not become any less "real" or intense, the thoughts-within-thoughts of the graphics imply no hierarchies.⁵²⁰

Chapter forty-five

Piano Introduction to Little House I used to Live in (revised version)

Watson's lengthy account indicates a listening mode hovering between the trivial and the critical. Of course, other modes are possible as well. A listener more or less unfamiliar with Zappa's music, experiencing a recording of the revised version (not produced under Zappa's supervision), might very well experience a different dreamscape than that above, perhaps as follows (the point here is not that listeners commonly verbalize their experiences this way, but rather that some would not find the description entirely misplaced):

First a...feeling of floating, pleasantly drifting away, the gentle, caressing rhythm of untroubled daydreaming (first two measures); turning into a light but teasing tickle (upbeat to, and measure three); relax, the surrounding seems familiar – but then, all of a sudden, a feeling of losing something, disintegration – deceit (measure 9)

Now (with slight astonishment) a feeling as if entering a different, stranger landscape; a lingering sense of not getting anywhere, of treading on the same spot, of things that keep returning, and returning again... Ah, there it disappeared

⁵²⁰ B. Watson. *Op cit*, p.168f.

(m.14); *but only to be followed by – floating? drifting away? – no, no, nowhere, stop! stopping, ah...* (m.15ff)

...the pastoral rocking of a hammock; slight changes startle but are immediately calmed, the surface rippled only by fragmented reminiscences of what has been (reminiscences getting less and less) (mm.20-21,25); finally a secure drowsing off (m.32f); but isn't there a strange smell in the sofa? (m.33) Who is calling? A telephone (alarm bell)? (m.35) Try to ignore it...ignoring it – but it does smell!!!(mm.36-38) Better turn around and turn it off (m.39); floating backwards, strange landscape feels fine now (m.40f), floating again, pleasantly drifting away...unbound daydreaming...a teasing light tickle...wait!...relax...but – this all seems disturbingly familiar!...who is playing?...Cough...

What this tries to describe is an experience fixed, not in purely emotional terms, but as a more abstract affective imaginary. The cause of the experience – as it is presented within this imaginary – is described in terms of an unfolding dream, rather than as a musical object. The source of this imagined dreaming is still the affective contours of the music, which especially in the opening phrase resemble the irregular and a-rhythmic passage of images and thoughts as they often appear in dream states (rather than bodily movement and sound gestures).

Moreover, the listening experience is described in terms of a relaxed and untroubled mood, only slightly worried at times; though we could equally well imagine the piece experienced according to a much more anguished mood – just change the gentle and caressing to unreliability and insecurity and the pleasantness will turn unpleasant, the drifting away will become more threatening and neurotic. Such a change could depend on both the listener's mood prior to listening and the particular performance. For instance, the virtual experience given here was inspired by Jon Klibonoff's recording of the *Piano Introduction*,⁵²¹ played with a soft legato throughout the piece (not all that different from Underwood's performance of the album version).

A much more nervous performance is that by Anthony De Mare,⁵²² emphasizing rather than smoothing out contrasts and transitory parts, hurrying through the "stranger landscape" (skipping the prescribed arpeggiations of the chords), turning the "pastoral rocking" into an insistently grinding section (in comparison to the reflexive thoughtfulness it becomes in Klibonoff's hands). De Mare also renders the "disturbingly familiar" return of material at the end even more disturbing by playing it louder than the rest of the piece, ending it all with an almost irritated strike of the last chord.

Yet a third variant is Monica DeMatteis' interpretation,⁵²³ full of effort, as if every phrase demanded renewed motivation (playing the opening

⁵²¹ Meridian Arts Ensemble. *Anxiety of Influence*. Channel Crossings CD, CCS 9796.

⁵²² Radio broadcast, WDR 3, Apr. 25 1988.

⁵²³ D. Conti and M. De Matteis. *Plays Zappa, Lutoslawski, Lupone and Pärt*. Materiali Sonori CD, 10194. Other Zappa pieces played on this album are Uncle Meat, Oh No, Igor's Boogie, The Idiot Bastard Son, Music for Electric Violin and Low Budget Orchestra, Let's Make the Water Turn Black.

gap-fill phrase with a continuous crescendo, whereas Klibonoff and De Mare distinguish and emphasize the leap of the anacrusis by bringing down the dynamics before the crescendo of the rest of the phrase, the latter two resulting in a much stronger feeling of expectancy than the former). DeMatteis also slows down the more complicated rhythms resulting in what seems to be a rather undedicated performance, running the risk of losing the audience's attention altogether (a tendency countered only by the context of the preceding and subsequent arrangements for violin duet).

We could go on here and analyse in detail the different performances of Zappa's *Piano Introduction* with regard both to the attention-capturing use of dynamics (*cf.* chapter thirty) and emotively expressive use of dynamics, tempo and legato/staccato (*cf.* chapter thirty-three) (I have had access to two more recommendable performances, by Yvar Mikhashoff and Tomoko Mukaiyama,⁵²⁴ although commenting on them would not add to the brief points I have wished to make here). Instead of doing this, however, we shall contrast the emotive dreamworld described above with a more analytically-oriented content fixation of our virtual listener's experience. To the extent that some of the formal relationships of this analysis are hardly noticeable to the ear, they should be seen, much as the above, as invitations to imagine the sounds of the music in a certain verbally-structured way.

Listening analytically, Zappa's *Piano Introduction* might at first seem both balanced and unified; its parts could hardly be tossed around and redistributed at random without destroying the sense of coherence and movement. But is it an organic unity in the strong avant-garde sense that any event should follow by necessity from its predecessors? The overall form of the piece can be seen as three-part, a sort of ABA-form where the B-section starts at measure 18, after the double bars, and extends up to and including measure 38. Whereas the two A-sections could be described as manifesting unity in diversity, the B-section rather displays a diverting moment in a unified flux. If we start by considering what would constitute the first A section (mm 1-17), we can trace several thematic threads that unify its diverse material.

The piece starts off with a brief upwards gesture, finding immediate outlet in a series of whole-tone chords. Whereas the ascending anacrusis articulates a major seventh, the chromatically-descending line of chords that follows is a succession of superimposed augmented triads in $\frac{5}{8}$ meter. Viewing the augmented triads as formed from either of two whole tone scales separated by a semitone, the result is an alteration of two triads either harmonizing within the same whole-tone scale or clashing as they articulate portions of each of the two scales.

⁵²⁴T. Mukaiyama. Hello Pop Tart. BV Haas, CD 9801; Mikhasoff was recorded during the Ars Musica festival Belgium, Mar. 12 1991.

The image displays a page of musical notation for piano, spanning measures 1 to 18. The score is written in 5/8 time and consists of two staves: a treble clef staff and a bass clef staff. The music is characterized by complex rhythmic patterns, including augmented triads and syncopated rhythms. Dynamics range from *mf* (mezzo-forte) to *f* (forte). Performance markings include *Rubato*, *p* (piano), *mf*, *f*, *sost.* (sostenuto), *rit.* (ritardando), and *molto accel.* (molto accelerando). The piece concludes with a *Moderate (Ruhig Schreitend)* section starting at measure 18.

The fleeting $\frac{5}{8}$ rhythm eventually turns to a more regular pace as the augmented triads give way to a brief melodic line in $\frac{3}{4}$ (m 5ff), stated over a succession of chords, cadencing ambiguously in measure 9. In measure 10 the $\frac{5}{8}$ meter returns, but this time the melodic activity has moved down to the left hand register, placing the chords up top. Here the intervallic texture is once again different from the preceding measures, while the rhythm has become more complex and syncopated, giving something of a *hoquetus* character to the melody (these rhythmically twisted measures have a percussive character idiosyncratically brought to the fore in the 1978 band version of the piece by scoring them for drum solo). In contrast to the previous melody line, which I shall refer to as the *cantilena*, the main intervals above the *hoquetus* line beginning at measure 10 are notably major sevenths and their minor second inversions, forming an occasionally interrupted, descending line, articulated by a sextuplet, triplets, and eighth-note hemiolas.

The section ends with a chord formed by the familiar major sevenths, superimposed a fifth and a third apart. A major seventh anacrusis (F-E) leads into a transitional section in $\frac{3}{4}$ (mm 15-17), repeating the augmented triads of the opening measures. Although the rhythm is evened out into a regular succession of eighth notes, the alteration between the harmonizing and clashing augmented triads is retained. The *molto accelerando* is countered in the third measure by a fermated hemiola (ending with the

final chord in whole-tone harmony), which slows down the movement before the B-section begins.

We have thus identified a hierarchy of separate subparts of this A section. Whereas measures 1 to 9 make for one formal subdivision, with two balancing parts ending with a cadential chord, measures 10-17 form its equivalent, contrasting in thematic material and by separating its two parts with a cadential chord at measure 14 (the chords cadence rhythmically rather than harmonically). In sum, five measures of augmented triads in $5/8$; a brief melodic line in $3/4$ stated over a succession of chords of four measures; a five measure section in $5/8$ with a rhythmically twisted melody in the bass and atonal chords on top; and finally a recurrence of the augmented triads, although this time in an even eight note rhythm in $3/4$. What reason is there to regard these subsections as forming an integrated part, a “unified whole”? What are the unifying features among these diverting materials? And what reason is there to regard it as distinct from the B section that follows – and if there is such a reason, what are the links between A and B?

If we look at the very beginning of the piece, the upbeat contains a minor and a major third, articulating a major seventh between the lowest and the highest note. Although we have four notes here, this might be what Zappa spoke of as “the theme of the piece.” Whereas major thirds identify the augmented triads, minor thirds (and their inversions as major sixths) can be found in the *cantilena* section, though the latter is much more strongly colored by fourths and fifths. As we have already seen, the major seventh occurs frequently in the *hoquetus* section. And since the transitory measures (mm 15-17) consist of augmented thirds, we can say that all four subsections of the A-part are unified more or less by the intervallic content of the opening four notes of the anacrusis.

In addition to this we can see the motif of a descending major third at the very beginning of the *cantilena* (m 5) as a gestural mirroring of the ascending third in the opening anacrusis. Together with the descending minor second that follows it, it forms an intervallic recurrence of the last two upper notes of the sextuplet in measure 3 and the uppermost note of the first chord of measure 4. Also, the upwards gesture of *cantilena* (from m 6 on) retains a sense of the augmented thirds by its melodic articulation, the first five notes of which seem to hold in promise a complete whole-tone scale, contradicted only by the F#. Even rhythmically, the melody in measures 7 and 8 can be seen as an augmented crab-version of that of the opening measure, whereas the *hoquetus* section has a similar rhythmic grouping of its bass melody as the earlier augmented triads. A more abstract feature that helps smooth out the transition between the two subparts of this A section (from m 9 to m 10), is the pitch set formed by the four notes in the left-hand of measure 9, a 4-9(6) set, which also recurs in the left-hand melody line of measures 11 and 12.

We can hereby see several thematic “nodes” that connect the four sections of the proposed A-section. Moving on to the B-section, we see that it is almost entirely in $\frac{3}{4}$, articulated by a pulsating eighth-note rhythm, distinguished from the $\frac{3}{4}$ of the preceding section by a slight $\frac{6}{8}$ feel in its first four measures (however, none of the players mentioned brings this contrast to the fore). Although much more homogenous in sound, there are connections to the previous A-section to be found, for instance, superimposed fifths, seconds superimposed on sixths and augmented triads (even the 5-29 set formed by the first chord of m 35 can be seen as a recurrence of that in the right hand of m 9). Finally, the diatonic collections of measures 26-33 can be referred to those of the *cantilena* section.

The return of the A-section is not literal, and whereas measures 39-42 sound pretty much like a transitional passage (the sequential character of the rhythmical repetitions add to this sound), the recapturing of a $\frac{5}{8}$ meter and the contrast with the final measures seems to counterbalance this rather pointillistic texture against the *hoquetus* section. However, the pitch content of measure 39 seems drawn from the B-part, which opens with a chord the four topmost notes of which articulate a 4-14 set

(repeated in the second right-hand chord of the same measure). This set appeared already in measures 20 and 34. The three topmost notes of the second chord (m 39) forms a 3-11 set that recurs in the next measure (m 40) as the first vertical formation as well as in the three final notes in the left-hand (C, A, F). The last four notes in the left-hand of measure 39 (D, E^b, C, B^b) form a 4-11 set, which recurs three times in measure 40: as the first four notes in the right-hand; as the first four notes of the left-hand (D, B^b, C, A); and as the first two of the left-hand together with the a and c of the right-hand. Similarly, one can find several ways of relating the pitch content of measure 41 to the previous two.

What happens hereafter is that the first nine measures are reprised with some slight alterations. There are registral changes such that the first two measures of augmented thirds reappear an octave higher and the second two an octave lower, whereas the *cantilena* is moved up an octave all the way through. The augmented thirds are also sounded an extra time before the *cantilena*, and the sextuplet is changed into a quintuplet. The last chord rings out for an additional two measures, before the performer is instructed to “cough” and “move buttocks, causing stool to creak.”

On the basis of these findings it would hardly make sense to say that the piece is organically unified in a very strong sense. Although much of the material recurs throughout the various sections of the piece, I have not been able to identify any syntax that would generate any event from any of its predecessors. Indeed, I take it for unlikely that Zappa was even aware of some of the more abstract relations between pitch-sets. And although it has been suggested that ‘The quality of a sonority can be roughly summarized by listing all the intervals it contains’, and that ‘The difference in sound is clearly suggested by listing the interval-class content of the sonorities’,⁵²⁵ it still remains to be psychologically determined how the interval vector of a pitch set affects listeners’ distinctions between different sound events. The feeling one might have that the sections of the piece are not susceptible to redistribution would then have to rest on other qualities of the music. These qualities, not surprisingly, are of a more affective kind.

For instance, the opening anacrusis functions not only as a motivic kernel, but also as an attentive decoy, its gap creating the expectation of a filling in (as Meyer would say), which is provided by the chords of the first two measures. At the end of measure 2, another gap (articulating the familiar major seventh), also adds to the energy and direction of the movement, and a third propelling leap is embedded within the sextuplet (retaining only the major third in inversion). Moreover, the time signature of the passage is $\frac{5}{8}$, although there is no real sense of irregular meter. Instead the rhythm adds to the *rubato* indication at the outset of the score, creating a somewhat loose and fleeting feeling in the beginning, which accumulates tension and a sense of direction through the contrasting

⁵²⁵ J.N. Straus. *Introduction to Post-Tonal Theory*, p.9f. Prentice Hall, Englewood Cliffs 1990.

movement of the augmented triads in the left hand versus the right. While the upper triads descend chromatically downwards, the descending movement in the left hand is constantly interrupted by a slight upward gesture, creating (what Meyer would call) a changing-note pattern that never comes to rest. In addition, the last chordal superimposition (extending into m 5) is disharmonious from the point of view of the two whole-tone scales, which makes the descending third of measure 5, leading by descent of a minor second into measure 6, sound as a continuation and possible resolution of the movement of the previous material.

The case is similar with the *hoquetus* section. The gap-filling of the first major seventh leap is delayed and its descending line stretches over the entire section, via the D of the sextuplet, to the C[#] of the cadencing chord in measure 14. Another major seventh leap occurs in measure 5 (A^b-G), being chromatically filled in down to E^b. Likewise, the major seventh leap of measure 13 (G-F[#]), is countered by the descent to C in measure 14. As we see, neither of these melodic gaps is completely filled, adding to the feeling of unfulfillment and tension. This feeling is not entirely terminated by the cadencing chord in measure 14, largely because the gaps never get completely filled in, but also because the *hoquetus* will not formally balance both the whole-tone chords and the *cantilena*. This, and the dissonant character of the chord (m 14), calls for continuation, and although the augmented thirds of the transitory section (m 15-17) do not manage to completely resolve the tension created by its major seventh anacrusis (F-E), it at least ends in whole-tone “harmony” (albeit deceptive, since there is no “real” resolution of the one scale into the other).

The asymmetrical distribution of cadencing chords in the first (A) section is countered by the deletion of cadential breaks within the last section and the fact that the pointillistic passage functions more or less transitionally. However, we can see that the outer sections of the piece are inherently marked by a sense of unrest, manifested most poignantly by the unsatisfactory closure of the open ending. This tense feeling that the music displays depends to an important extent on the large-scale pattern of *local* affective properties, such as the gap-fill contours, which if redistributed would create an entirely different musical experience in the listener. This affective experience is further strengthened by the rhythmic and harmonic articulation of the material (some of which is only available to a listener with access to the score). And as mentioned above, whether an emotive listening mode invites an experience of the music as pleasantly dream-like or nervously tense depends on the more intricate phrasing and nuancing of the performer.

In addition to this I would like to add some analytic observations with regard to the fact that we have identified two subparts of the A-section, and that the overall form of the piece thus can be seen either as three- or five-part, as either ABA or ABCBA. First, the symmetry displayed herein is curiously reflected in the alteration of meter, $\frac{3}{4}$ and $\frac{5}{8}$. And whereas

the first $5/8$ section contains mainly augmented triads, the first $3/4$ section displays stacks of fifths or their inversions as fourths. Second, in the *hoquetus* section the pitch-content rather mirrors the entire large-scale formal plan, in its forming of an arch-like structure: in measure 10, the two right-hand chords, together with the note in the bass immediately below them, are both instances of pitch set 4-10; in measure 11, the pitch sets of the chord formations with E and B^b in the bass respectively are 4-19 and 4-22; this is reversed in *stretto* in measure 12, the first right-hand chord thus forming 4-22 and 4-19 with E and B^b in the bass, respectively, followed by a return of pitch set 4-10 as the result of the second right hand chord with the E^b of the left-hand triplet as bass note (by adding the subsequent notes in the bass, F and A, the 4-22 sets both form pc 5-35). Also, in measure 13, the right-hand chords together form the pitch set 5-4, while the left-hand melody forms the set 4-3. This nicely balances the 4-3 set formed by the two right-hand chords of measure 10, as well as the 5-4 set formed by the first five notes of the sextuplet together with the B^b of the second chord in the same measure.

Finally, as a matter of further (analytic) curiosity, to balance the “dangling” of this numerological material, the ninetuplet (the alarm bell)—relating, like yang within yin, with both the triplets and the sextuplets in the outer sections—appears at, or at least very close to, the golden section of the entire piece, thus elegantly constituting its peripethy.

Chapter forty-six

Shut up'n play yer guitar

I have mentioned that Zappa had many of his guitar improvisations transcribed and that he also orchestrated some of them for different settings. Pieces like *Outside Now Again*, *The Girl in the Magnesium Dress* and *While You Were Art* were all recorded in Synclavier versions, while *Sinister Footwear* is scored for a large symphony orchestra and electric instruments. Whereas *Outside Now Again* seems to be a rather straight forward, note-by-note rendering of the original guitar solo, the arrangement for *While You Were Art*, as it was conceived for the E.A.R. Unit Ensemble, is a simplified version of the transcribed solo, with the rhythm, ‘squared off to the nearest 32nd note, instead of having all the tuplets and weird stuff going on’. On the contrary, the melody was ‘hocketed ... so that the line was bounced from instrument to instrument’,⁵²⁶ thus creating a rather unguitarish impression.

Perhaps more remarkable is the procedure behind *The Girl with the Magnesium Dress*, from *The Perfect Stranger* album (also performed and

⁵²⁶F. Zappa, quoted in R. L. Doerschuk and J. Aikin. “Jazz from Hell”, in *Frank Zappa: A Definite Tribute*. Special issue from the publishers of *Guitar Player* and *Keyboard*, 1994.

recorded by the Ensemble Modern). The material basis of this piece is not derived from what we would ordinarily call an improvised guitar solo; the material origin of *the Magnesium Dress* is instead built on the informationless 'dust' registered by the computer. This dust is the result of all the secondary noise stemming from other sources than the pitched guitar tones, for instance the unintentional contact between the guitar pick, or the fingers, and the strings, when the hands are moved. As Zappa explained, 'if your finger moved [the dust] says what your finger did besides just playing the note'.⁵²⁷ The rhythmical pattern crystallizing from this dust has then been turned into music by assigning specific frequencies to the rhythmical pattern, that is, by giving ordinary pitch names to the rhythms achieved.

In this light the *Sinister Footwear* arrangement for orchestra (3rd mvmt.) is more similar to *Outside Now Again* than to *The Girl in the Magnesium Dress* or *While You Were Art*. *Sinister Footwear* is a rather literal restatement of the guitar solo, though in orchestral garb. Before turning to this piece it should be mentioned that Zappa used guitar-derived material in compositions on a smaller scale as well. For instance, the first phrase of the wordless male choir in *Strictly Genteel* (the closing number of the *200 Motels*) seems to owe its first four notes from the opening of the guitar solo of *Holiday in Berlin, Full Blown* (the main theme of which recurs as the *Semi-Fraudulent/Direct-From-Hollywood Overture* of *200 Motels*). The melody line of *Envelopes* also seems guitarish in style,⁵²⁸ whereas certain parts of *Bob in Dacron* apparently stem from the *Easy Meat* solo performed in Stockholm in 1982. In a Warner Brothers Circular Zappa describes how the "restatement" of the main theme of *Big Swifty* was derived from the guitar solo that precedes it on the recording (showing also how heavily edited some of his recorded music was),⁵²⁹ and in a *Guitar Player* interview, Zappa points out a few more instances:

The last movement of *Sad Jane*, kind of a marching thing, is actually a transcription of a guitar solo from the Shrine Auditorium, 1968, that Ian Underwood wrote out back then, and I came across one day in a pile of papers. I played it on the piano and liked the tune, and proceeded to orchestrate it. [Likewise] The opening phrase of the first movement of *Mo 'N Herb's Vacation*, the clarinet figure in the front, was from a guitar solo recorded at the Palladium, Christmas 1976, from a big band rendition of *Cruisin' For Burgers* [while the violin solo figure, the theme for the second movement of *Mo 'n Herb's Vacation*, was a lick that I used to play with [bassist] Patrick O'Hearn and [drummer] Terry

⁵²⁷ Quoted from D. Menn. "Frank Zappa! The Mother of all Interviews", in *Zappa!* Special issue from the publishers of *Guitar Player* and *Keyboard*, 1992.

⁵²⁸ See A. Ashby. "Frank Zappa and the Anti-Fetishist Orchestra", in *Musical Quarterly* 83(4) 1999.

⁵²⁹ F. Zappa. "The Complete History of last Weeks Mother's of Invention/Hot Rats/Grand Wazoo", in *Warner Brothers Circular*, October 1972: 'The restatement of the theme is actually derived from a guitar solo on the album which Sal Marquez took down on paper. After about an hour of wheeling the tape back and forth, Sal managed to transcribe this rhythmically deranged chorus (I don't have the ability to do this kind of musical dictation, but, since Marquez had a full-borne education at North Texas University, he had it covered). After he'd written it out, we proceeded to over-dub three trumpets on it, and, presto! An organized conclusion for "Big Swifty".'

Bozzio. I would use that during the solo in the *Sheik Yerbouti Tango* or *Little House I Used To Live In*—songs we played during that era. ... A lot of things start off on the guitar, but wind up being *orchestrational events* that could never be played on a guitar.⁵³⁰

Zappa's guitar playing deserves a study of its own and as such goes beyond the scope of this book. Although Zappa started out in his teens by playing the drums, he soon switched to electric guitar. Over the years he developed a style of playing which should be judged alongside those of guitarists such as Jimi Hendrix and Eddie Van Halen, if not in popularity and impact, at least in originality and inventiveness. Kent Nagano, conductor of the London Symphony Orchestra sessions, spoke of 'the rhythms of Frank's guitar playing never com[ing] to a full resting point. They phrase the way a phrase will, but they actually never come to sit on a big, fat, ripe cadence. Sometimes they don't fully ripen to a cadence until the end of a concert three hours later'.⁵³¹

Part of the reason for this characteristic of Zappa's guitar playing is his low esteem for chord changes, regarding chords as harmonic "climates" rather than functionally constrained departures from a tonic (sometimes bringing to mind the use of diatonic and octatonic collections in the work of Stravinsky):

I don't like chord changes. I like to have one tonal center that stays there, or possibly with a second chord that varies off the main tonal center, and then I play around that ... There's a little four-note vamp in *Treacherous Cretins'* (on *Shut Up 'N Play Yer Guitar*) that implies D minor and A chords. It creates a harmonic climate. I don't think of them as chord changes. Instead, I look at the whole as a harmonic attitude that sets up a mood, and I just play inside of that attitude.⁵³²

In line with the pastiche qualities mentioned, Zappa's harmonic climates all had rather definite connotations, such that 'if it's an augmented chord it's a mysterious climate; if it's a diminished chord it's a little tenser; if it's minor it's serious; if it's major it's happy; if it's major seventh you're falling in love; if it's augmented 11th it's bebop'.⁵³³ Whereas this conception of harmony is rather straightforward and uncontroversial, the extension of the same ideas to rhythm immediately complicates the picture: 'Just as in diatonic harmony, when upper partials are added to a chord, it becomes *tenser*, and more demanding of a resolution—the more the *rhythm* of a line *rubs against the implied basic time*, the more "statistical tension" is generated. The creation and destruction of harmonic and

⁵³⁰ F. Zappa. "Not the Moody Blues" (interviewer not credited), in *Guitar Player*, Nov. 1983. The brief orchestral statement that precedes the opening clarinet phrase is a rhythmically twisted and speeded-up quote from the song *Wet T-Shirt Nite*. As Mats Öberg has pointed out (personal communication) there are phrases throughout *Mo 'N Herb's Vacation* that probably stem from a guitar solo on *A Pound for a Brown on the Bus*, from a concert in Paris 1980.

⁵³¹ K. Nagano. "Premiering Zappa with the London Symphony Orchestra", in in *Zappa!* Special issue from the publishers of *Guitar Player* and *Keyboard*, 1992.

⁵³² Quoted in J. Rotondi. "My Guitar Wants to Kill Your Mama: Frank Zappa's Lethal Axe", in *Guitar Player*, Oct. 1995.

⁵³³ F. Zappa. "Interview", on *Frank Zappa Limited Edition Picture Disc*, baktabak CBAK-4012.

“statistical” tensions is essential to the maintenance of *compositional drama*.⁵³⁴

Zappa’s sense of xenochrony, developed in his editing techniques, was probably a result of wedding this idea of “statistical tension” between rhythmic figures and more or less complex meters to a sense of prosody and speech phrasing (which in turn could have been a trace of Zappa’s early blues influences). As he once put it,

any piece of time can be subdivided any old way you like. And that’s what happens when people talk, because people don’t talk in 4/4 or 3/4 or 2/4 – they talk all over the place. And if the rhythm of what you play follows along with the natural scan of human speech, it’s going to have a different feel to it ... If one guy is playing exactly the 4/4 of the bar and another guy is playing nine beats against that, you’re going to get another rhythm. That’s the difference tone, the mystery note.⁵³⁵

Thus, in contrast to many composers who have the piano as their main instrument, Zappa had the guitar (Berlioz is another who worked out his music on the guitar). Zappa’s own comment on the way this affected his music was laconic: ‘Well, I’m not a piano player, so obviously, because of the technical limitations of the guitar versus the piano—in terms of multiple notes and so on—the stuff that I write is determined by my interest in the guitar’.⁵³⁶ Considering some of the odder rhythms that could ensue from his instrument, such as twenty-five against twenty-four, one of Zappa’s band members recalls being told that ‘he [Zappa] had gotten interested in these cross-rhythms listening to jazz and he mentioned Gene Krupa drum solos and fills and said something like “it all just reduces to fives and sevens if you keep a steady beat going as he slows down”’.⁵³⁷ Also, equally important, Zappa reminds us of the possible significance of ‘mistakes...let’s face it, some of those notes got played by a finger landing on the wrong fret or because I was rushing the tempo, or trying to catch up with a band that was running amok...’.⁵³⁸

⁵³⁴ F. Zappa and P. Occhiogrossi, *Op cit*, p.181.

⁵³⁵ Quoted from J. Rotondi, *Op cit*.

⁵³⁶ Quoted from T. Schneckloth. “Frank Zappa. Garni Du Jour, Lizard King, Poetry and Slime”, in *Down Beat*, May 18 1978.

⁵³⁷ B. Lantz and J. Steinmetz. *The David Ocker Internet Interview*. www.primenet.com/~lantz/pages/ocker.html

⁵³⁸ F. Zappa. “A Few Words For Those Who Managed To Get This Far”, in *The Frank Zappa Guitar Book*. Munchkin Music, Los Angeles 1982.

Chapter forty-seven

Sinister Footwear

Just like the *Piano Introduction to Little House I Used to Live in*, *Sinister Footwear* turns out to have an intricate history of becoming. This process has been studied in detail by Arved Ashby,⁵³⁹ and so I shall only recount it briefly here. To begin with, *Sinister Footwear*, Zappa's most extensive orchestral score (matched only by *Mo 'n Herbs Vacation*), is in three movements and has never been officially released on any album, although a bootleg recording exists from its première performance. The second and third movements both exist as rock band versions and have been recorded as such (on *You Are What You Is*, from 1981, as *Theme From The 3rd Movement of Sinister Footwear*, and on *Them or Us*, from 1984, as *Sinister Footwear II*).

♩ = 84 "spacy" E lydian
E pedal

CR.x sfz
pp
sfz
p
sfz
ff

RI X st. o
f
3-2
sfz

fabk.
3
3
5
3
3
sfz
mp

M M

Theme From The 3rd Movement of Sinister Footwear, mm. 1-12, transcribed by Steve Vai.
Opposite page: Sinister Footwear, 3rd mvt, mm.1-5.

⁵³⁹ See Ashby. *Op cit.*

Whereas the third movement, which we shall mainly be considering here, is a solo transcription, the second movement builds on an instrumental section taken from the song *Wild Love* from *Sheik Yerbouti* of 1979, evolving into a lengthy semi-lyrical movement that would easily stand for itself. The first movement, in contrast, is far more parodic in its sometimes clumsy orchestration of rather simple-minded material as well as solo-derived portions, with their typically Zappaesque rhythmic twists in sections proposedly alternating between “jazz waltz feel” and “Latin feel” – all resulting in a sense of ironic cartoon soundtrack, having the tone set by the opening’s “scary music” rendition of the famous *Schicksals* motif (a descending fourth instead of a major third, producing a rather static atmosphere).

Whereas the solo-derived material of the first movement – introduced at measure 64 (marked in the score as *Illegal Aliens on a Lunch Break*) and continuing with slight alterations and some additions of new material till the end of the movement – stems from a piece called *C-instruments* which never reached public exposure,⁵⁴⁰ the guitar solo behind the third movement appeared in concert under the name *Persona non grata*, a solo introduction to the song *Dancin’ Fool* (*Persona non grata* was replaced after some three concerts by *Deathless Horsie*).⁵⁴¹ In the 1981 album version, the original solo was transferred from its concert context in shortened form to a new rhythm track, possibly taken from a solo from *Easy Meat*,⁵⁴² and with an added guitar, clarinet and mallet instruments doubling the melody. The transcription was made by Steve Vai, who transcribed some twenty-two solos later published as *The Frank Zappa Guitar Book* (Vai also played the added guitar part on the *You Are What You Is* band version of the third movement). As Ashby points out, Zappa is ‘remarkably faithful to his own guitar idiom’ when transforming the solo transcription to an orchestra score:

Except for a bit of re-barring, the notated solo is carried over exactly into the orchestration. Even though Zappa retains the metronome mark of Vai’s transcription and calls for up to ten instruments to double the leading line, he keeps the crazed tuplet divisions and original ornamentations as they are in Vai’s transcription. Many, if not all of his guitar-based events are also strictly realized: some of the original feedback is recreated, and occasionally an original squeak or scratch across a dead guitar string becomes orchestrated ... with almost phonographic precision ... : in guitar terms, the first two are squeaks caused by rubbing the right-hand on the neck of the instrument, the third a “harsh” attack and glissando that seem innately electric in sound and conception, but which he orchestrates with some ingenuity (the “choked” cymbal crash and entrance of the bass drum). Zappa expands the very first of these across two bars instead of one beat, but the muted and *sul tasto* indications come close to re-creating the squeak of the guitar original. Of course he often harmonizes the line of the notated solo,

⁵⁴⁰ Cf. B. Lantz and J. Steinmetz. *Op cit.*

⁵⁴¹ See *Ibid.*

⁵⁴² See B. Watson. *Op cit.*, p.391. Watson quotes Steve Vai from an interview by M. Brenna and R. Karlsen. “Stevie’s Spanking”, in *Society Pages*, vol. 12 1982.

most noticeably in a passage where the original consists of a scalar rise in straight quarter notes (mm.48-49 of both Vai's transcription and Zappa's orchestral score) and at one point where a chord in the trombones completely changes the harmonic implications of the original (mm.29-30). Occasional counter-figures are also added for additional rhythmic interest, and it is also incumbent on Zappa to use orchestral volume and timbres to shape the movement: the orchestra gets larger over the first 25 bars in a way that follows the original line's increasing intensity of rhythm and timbre.⁵⁴³

Like many of Zappa's orchestral works, *Sinister Footwear* came with a complete program and was also staged as a ballet. According to the score, the first movement describes the main protagonist, Jake, as he wakes up and adds the final strokes to a painting depicting 'the ugliest shoe you ever saw in your life'. Jake brings the picture through the morning traffic to the Sinister Footwear-factory where he is urging a group of illegal aliens to 'construct' it. This movement continues with scenes depicting Jake as he eats molded jello salad, his secretary grooming herself and the aliens stacking boxes on top of each other. The second movement displays a group of people 'wearing Jake's ugly shoes and masks of famous "beautiful people" posing in front of several fun-house mirrors'. As the "Beautiful people" appear to agree that they are truly beautiful', they 'experience great difficulty' in wearing their shoes, while 'other people pretend not to notice'. As expected, they 'gradually collapse', begin to remove their footwear and 'rub their feet'. A foot doctor examines their feet and says they 'might need an operation'. 'He warns them but they dance away from him', to the mirrors where they continue their poses. The foot doctor then 'produces a rolling bin full of masks of contemporary personages and distributes these to [the] dancers ... who affix masks and imitate the activity appropriate to the personage whose mask they are wearing', while indicating 'during the dance in some way how the personage's ugly shoes must affect his or her competence'.⁵⁴⁴

The third movement, finally, depicts 'A place where you can go when you got them on', a 'surreal night club with moving cut-out audience and moving cut-out entertainer on [a] small revolving stage', where the dancers 'in ugly shoes and evening clothes, conduct various social transactions'.⁵⁴⁵ The score does not indicate any further programmatic details and the movement ends after some hundred and two measures with the same scene as it began.

Now, what I would say is particularly significant about *Sinister Footwear* is the way it *addresses* the listener, quite irrespective of any program or pantomime. Whereas some have argued that the subversive potential of Zappa's music required a critical listener, capable of identifying the

⁵⁴³ A. Ashby, *Op cit.*

⁵⁴⁴ F. Zappa. *Sinister Footwear*. Barfko Swill, Hollywood 1981.

⁵⁴⁵ *Ibid.* The scenario seems similar to that of *Dupree's Paradise*, which according to the liner notes 'is about a bar on Avalon Boulevard in Watts at 6:00 AM on a Sunday in 1964, during the early morning jam session. For about seven minutes, the customers (winos, musicians, degenerates and policemen) do the things that set them apart from the rest of society' (this program is not reprinted in the score).

A PLACE YOU CAN GO WHEN YOU GOT THEM ON

The musical score is arranged in a standard orchestral format. It begins with a 3/4 time signature and a tempo marking of ♩ = 80-88. The score includes parts for woodwinds (Bass Clarinet, Bassoon, Contrabassoon), brass (Horn, Trombone, Tuba), percussion (Timpani, Chimes, MBA med. stks.), strings (Violins I, II, III, Viola, Cello, Double Bass), and a full drum set. The percussion part includes specific instructions for 'RIDE' and 'H-H'. The string parts include markings for 'con. forte/qui. lizato' and 'm.o.'. The score is marked with various dynamics such as *mf*, *f*, and *ff*, and includes performance directions like 'molto vibr.', 'espr. vibr.', and 'div.'. There are also some handwritten annotations like 'a4', 'a3', and 'a2'.

Scene is surreal night club with moving cut-out audience and moving cut-out entertainer on small revolving stage. All dancers, in ugly shoes and evening clothes, conduct various social transactions.

556 F. Zappa. *Sinister Footwear*. Barfko Swill, Hollywood 1981.

various quotations literally,⁵⁴⁶ the solo-derived parts of this piece, in particular the third movement, which does not belong to the category of pastiche, are capable of fulfilling its ideological function regardless of the

⁵⁴⁶ Cf. W. Reimers. *Sozialkritik in der Rockmusik Am Beispiel Frank Zappa*, p.27ff. Centaurus-Verlagsgesellschaft, Pfaffenweiler 1985. Reimers quotes Rainer Mueller-Delin saying that 'Zappas Musik war ein Sound für Individualisten und Individuelle Liebhaber. Die Mothers ... blieben für die Masse der Zuhörer eigentlich unerreichbar. Als zum Beispiel die Mothers Ende der 60er Jahre in einer Amsterdamer Konzert eine Passage aus Strawinsky's 'Petrouschka' in ihre Show einflochten, hatte kaum jemand das Zitat überhaupt erkannt, geschweige denn, seine Funktion in der Show begriffen' (p.34).

audience's mode of listening, and on the sole basis of the characteristic melodic contours. However, before we can appreciate the full significance of this (we will return to *Sinister Footwear* in chapter fifty-three), some further themes and problems have to be introduced.

Chapter forty-eight

Pornography to Practical Conservatism

As we have seen, Zappa's interest in so-called "serious music" was not just something he picked up as he got older, it was there right from the beginning: 'I hadn't even tried to write a rock'n'roll thing until I was 21 years old. All the rest of the music that I had been writing, from the time I was 14 until that time, had nothing to do with rock, jazz or anything else. I was writing strictly chamber or orchestra music'.⁵⁴⁷

But why this interest in modern art music? A European Modernist such as Varèse or Stravinsky is not exactly the first person to come to mind if one is to imagine sources of inspiration for a high-school kid in California during the sixties. As Bernard writes, 'Zappa had no teachers, no encouragement from his family, no peers who shared his outlook, no modern-music ensembles giving concerts nearby—no cultural support system, in short, to reinforce his feeling that what he wanted for himself was important and worth having'.⁵⁴⁸

Asking Zappa about the matter would give rather contradictory answers. On the one hand he could say that he composed such music just to prove to others that he was capable of it;⁵⁴⁹ and on the other he could say that he started off writing it because he 'liked the way it looked' on paper⁵⁵⁰—'you know how groovy harp notes look'.⁵⁵¹ (Then again, we already know his early fascination for the "mad scientist" look of Varèse on the album cover.) A more substantial explanation is suggested by Lars Mjøseth, according to whom it is not a matter of academic tradition:

Nobody could teach the young Zappa about the tradition of Modernism out there in the Mojave Desert. What caught his interest was the fact that this music [Varèse's] was unsaleable. The teenager was looking for r&b singles when he discovered it, and it was there only to supply strange sounds that could demonstrate the excellent sound reproduction of the new consumer electronics. The musical content in itself was far too remarkable to gain a foothold in the prosperous American consumer society. The interest in Modernism is the interest in something that provokes society, something that it will not buy.⁵⁵²

⁵⁴⁷ Quoted from J. Schaffer. "The Perspective of Frank Zappa", in *Down Beat*, Sept. 13 1973.

⁵⁴⁸ J.W. Bernard. "Listening to Zappa", in *Contemporary Music Review*, vol. 18(4) 1999.

⁵⁴⁹ See F. Zappa. "Frank Zappa Solo" (interviewer not credited), in *HiFi & Musik*, vol. 5 1982.

⁵⁵⁰ Quoted from D. Menn. *Op cit*, p.191.

⁵⁵¹ Source unknown.

⁵⁵² L. Mjøseth. "Teenybop och avant-gardism. Frank Zappa och the Mothers of Invention 1964-1969", in *Ord & Bild*, vol. 4 1988. Originally in Norwegian, translation by this author into English from the Swedish version.

It is symptomatic that Zappa rephrased Varèse's slogan about the present-day composers refusing to die into a statement in the singular. Regarding himself as a present-day composer who refuses to die, in a keynote address to the American Society of University Composers, he scorned the "we," the university composers with permanent tenure, manufacturing 'baffling, insipid packages of inconsequential *poot*' (in the same address he strikes at both the 'tone-deaf' critics and commercial record producers).⁵⁵³ This distancing attitude can be found throughout his career, whether articulated against the sixties' rock scene and political leftism, or the religious hypocrisy of the right as it tried to constrain the freedom of speech in music and the arts during the eighties.

The name of Zappa's first album, with the Mothers of Invention, was *Freak Out!* (it was one of the first double albums with a rock band, and was released in 1966). The "freak" of the title refers to the musical scene and the youth culture developing at that time in Los Angeles and was described on the album cover as follows:

On a personal level, *Freaking Out* is a process whereby an individual casts off outmoded and restricted standards of thinking, dress, and social etiquette in order to express *creatively* his relationship to his immediate environment and the social structure as a whole. Less perceptive individuals have referred to us who have chosen this way of thinking and *feeling* as "Freaks", hence the term: *Freaking Out*. On a collective level, when any number of "Freaks" come together and express themselves creatively through music or dance, for example, it is generally referred to as a *Freak Out*. The participants, already emancipated from our national slavery, dressed in their most inspired apparel, realize as a group whatever potential they possess for *free expression*. We would like to encourage everyone who *hears* this music to join us ... become a member of the *United Mutations ... Freak Out!*⁵⁵⁴

While there was Flower Power in San Francisco, the Freaks in L.A. were less peace-and-love oriented, more bizarre, and in comparison with the more active efforts by the Freaks to transcend the established forms of mind, Zappa (according to Mjøseth) viewed the Flower Power movement as an extension of the generally doped American way of life. The attitude is also reflected in Zappa's deprecation of the student riots in 1968. During a concert in West Berlin Zappa got the request from some student leaders to participate actively in the riots by inciting the audience to put the Allied Command Center on fire. Zappa refused and reviewed the happening thus:

I gave them a speech for about 15 minutes wherein I discussed the possibility that they were acting more like Americans than anything I've ever seen. And that pissed them off. They said: You are the Mothers of Reaction. And I told them they were fucked. And they understand English [...] It's just a crazed fantasy that these kids have that they are actually doing something new. They talk about a

⁵⁵³ F. Zappa & P. Occhiogrosso. *Op cit*, p.191.

⁵⁵⁴ The Mothers of Invention. *Freak Out!* (liner notes). MGM-Verve V6-5005-2.

revolution in a sort of carnival terms. They are still thinking about banners, gathering together in the street and yellin' things That's their idea of a revolution, and it 's so old fashioned.⁵⁵⁵

Zappa's solution to what he saw as the cultural misery of the West (or at least in the US) was to adapt to society and use the technological advantages it offers in a more subtle plan, where the consumer-citizen, saturated by enough "shit," will question his or her own situation, without any authoritative dictates from the revolutionary committee:

The only way you have of improving the world is by taking advantage of the technology which is fucking it up. In the United States, the problems are a combination of organized religion, television, poor education, military-industrial-complex and the government which I think is extremely corrupt on all levels and the easiest way to attack that is through the medium that caused it. [One has to get into] all the things that are causing the problem and straighten it out from the inside. It's very difficult to attack these things externally, there's virtually no hope of ripping it all down. I don' t even think it 's advisable.⁵⁵⁶

This subversive strategy successively turned into a political standpoint which Zappa named 'Practical Conservatism':

I believe that people have a right to decide their own destiny; *people own themselves*. I also believe that, in a democracy, government exists because (and only so long as) individual citizens give it a "temporary license to exist" –in exchange for a promise that it will *behave itself*. In a democracy, you own the government—it doesn't own you. Along with this comes a responsibility to ensure that individual actions, in the pursuit of a personal destiny, do not threaten the well-being of others while the "pursuit" is in progress.⁵⁵⁷

Congenial to the American Constitution, as it might seem in retrospect, Zappa's liberal, or libertarian bent did occasionally get him in trouble with the law. In 1962 or 1963 (Zappa is not wholly clear on the matter),⁵⁵⁸ having just received payment for the *Run Home Slow* soundtrack, Zappa had the opportunity to buy a small recording studio from a friend. The studio was situated in Cucamonga, a 'blotch on a map',⁵⁵⁹ at an intersection on Route 66. As Zappa tells us, the 'unspoken dress code for a Cucamongan male of that period, for all occasions was a white, short-sleeved sport shirt with a bow tie [...] T-shirts were considered avantgarde.'⁵⁶⁰ Accordingly, some of the citizens were offended by the liberal looks of Zappa and his customers, resulting in a request by a used-car salesman for a party tape with the sounds of assorted sex acts. Zappa produced the requested tape with the help from a girl he knew, making fake sounds on the tape, but when the used car salesman came back he turned out to be a police

⁵⁵⁵ Quoted in Mjøseth, *Op cit*.

⁵⁵⁶ Quoted from D. Walley. *No Commercial Potential*, p.69. E.P. Dutton, New York 1980.

⁵⁵⁷ F. Zappa & P. Occhiogrosso. *Op cit*, p.324f.

⁵⁵⁸ See *Ibid.* pp.43;55.

⁵⁵⁹ *Ibid.* p.42.

⁵⁶⁰ *Ibid.* p.55.

detective, arresting Zappa and charging him with 'conspiracy to commit pornography.'⁵⁶¹

A similar situation (caused by the suspicion of pornography) occurred in 1975, when Zappa brought legal action against the Royal Albert Hall in London, for having cancelled a concert to be performed by the Mothers of Invention together with the Royal Philharmonic Orchestra. The reason for the cancellation was the suspicion that Zappa's lyrics (as recorded on the *200 Motels* album) included references to sexual activities. But as the verdict made clear, Zappa's lyrics were not obscene. Unfortunately, however, it was not possible to sue the *Royal Albert Hall*.⁵⁶²

A more serious matter (this time also concerning pornography) went so far as the US Congress confronting Zappa in hearings (parts of this discussion is included in the piece *Porn Wars* from the album *Frank Zappa Meets the Mothers of Prevention*). This time—the year was 1985—the problem was, Zappa explains, caused by a Mrs. Tipper Gore (wife of Senator Albert Gore), who had discovered that the *Prince* album she had bought for her daughter included a reference to masturbation. This led Mrs. Gore to start an organization (including among others Mrs. Susan Baker, wife of Treasury Secretary James Baker), which accused the record industry of exposing the youth of America to 'sex, violence, and the glorification of drugs and alcohol'.⁵⁶³ This "moralist" group demanded that all records that could be deemed degenerate be marked with a scarlet sticker. This time Zappa won the battle: no legislation was passed. However, as we have noted earlier, the voluntary labelling by the record companies that followed has constrained the freedom of speech in the US.

Chapter forty-nine

Zappa the cynic

The incidents mentioned above are all reflected through Zappa's own subjective lenses, and as such they point to a kind of insidious demand for conformity, obedience and discipline (real or not) which Zappa insistently tried to illuminate and disarm. One may even guess that it was this 'You're-not-going-to-mess-with-me attitude' that attracted Zappa to the works of Varèse and Stravinsky.⁵⁶⁴ Perhaps it was also this particular attitude that he admired in Vaclav Havel, who hired Zappa as a cultural adviser for his new non-communist government in Czechoslovakia. (This collaboration did not last long; it was interrupted in 1992 by the new Vice President of the US, Albert Gore, and the new

⁵⁶¹ *Ibid.* p.57.

⁵⁶² See *Ibid.* p.137.

⁵⁶³ *Ibid.* p.262.

⁵⁶⁴ F. Zappa. *Speaking of Music*. Radio broadcast. KPPA, April 5, 1984.

Secretary of State, James Baker, who, so the rumour goes, made it clear to Havel that he could count on either Zappa's support *or* their government's; not both—perhaps they simply did not like Zappa's presidential ambitions).⁵⁶⁵

Whether Zappa's subversive strategy against hypocrisy and subjugating discipline was successful on a more far-reaching scale is an open question. In an interview with the National Swedish Radio on Zappa's 50th birthday, Zappa's reply to the accusation that he was just a weird guy that no one pays any attention to, was a succinct 'It's true!'⁵⁶⁶ Nevertheless, the conservative restrictions proposed by various moralist groups brings to mind a line from Michel Foucault's *Discipline and Punish*, in which Foucault traces the mechanisms for the internalization of norms by the *conscience* of the modern Western individual since the seventeenth century, in the birth of the prison, the hospital, and other meticulously organized, and thereby individuating, institutions of everyday life. As Foucault writes, 'It was a question both of making the slightest departures from correct behaviour subject to punishment, and of giving a punitive function to the apparently indifferent elements of the disciplinary apparatus: so that, if necessary, everything might serve to punish the slightest thing; each subject finds himself caught in a punishable, punishing universality'.⁵⁶⁷

One important thing that Foucault does is to point out the conventionality of a norm system that we have come to take for granted. What he shows is that the concept of an autonomous individual is a social construction that took shape in the West only after the Renaissance. (A crucial step towards assigning moral priority to such a social being, separate from the collective of family and village, seems to have arisen along with the increased awareness and importance of the Day of Judgment as late as the fourteenth century, since a weighing of good deeds against bad forced people to acknowledge their individual biographies.)⁵⁶⁸

That Zappa's practical conservatism is not at all original but a version of Enlightenment liberalism thus comes as no surprise. The idea invoked by Zappa of people "owning themselves" in a "state of nature," is as historically contingent as any other political view. But although the foremost of libertarian philosophers to date would not deny that this position has its problems,⁵⁶⁹ one may indeed wonder whether Zappa was aware of it. Did he become aware of it? At any rate, as Mjøseth has argued,

⁵⁶⁵ See D. Corn. "Frank Zappa – Trading Partner", in *The Nation*, March 19, 1990; J. Virdalm. "Frank Zappa på sin sista turné", in *Nyliberalen*, vol8 1993; V. Havel. "Revolutionary", in *The Frank Zappa Companion*.

⁵⁶⁶ Quoted from M. Gray. *Mother! The Frank Zappa Story*, p.238. Plexus, London 1993.

⁵⁶⁷ M. Foucault. *Discipline and Punish: The Birth of the Prison*, p.178. Trans. A. Sheridan. Penguin, Harmondsworth 1979. Though less profound than Foucault's analysis, Zappa's showed certain similarities. See e.g. F. Zappa & P. Occhiogrosso. *Op cit*, p.327f: '[in the U.S.] we needed regular, easy to defend, middle-class neighborhood criminals, with cash and equity. The lawyers of America set out to create a world where their services would be indispensable'.

⁵⁶⁸ See P. Ariès, *The Hour of Death*. Allen Lane, London 1981.

⁵⁶⁹ Cf. R. Nozick. *Anarchy, State, and Utopia*, p.9. Blackwell, Oxford 1974.

the utopian optimism that one could sense in Zappa's early freak period, as expressed in utterances like 'with an educated population, democracy works',⁵⁷⁰ successively turned into a more cynical pessimism:⁵⁷¹ 'You can wish for humanism but that doesn't make it happen ... You can sit down and write a prescription for a utopia but then what the hell? ... You can't legislate humanism. You can't make people be nice to each other. You can't even hardly trick them into it. ... You're naive if you hope'.⁵⁷²

In the following I will juxtapose some of Zappa's outspoken views on various topics and compare them with some of his orchestral work, to see how far it is possible to disentangle the various ideological strains of thought that he put forth. Is the abandonment of the freaked-out utopia (if it ever was abandoned) a sign of Zappa turning from a Modernist world view to a more postmodern stance? And considering his music, will the early picture of Zappa as avant-garde,⁵⁷³ be more accurately replaced by the picture of him as a dispassionate decoder of signs,⁵⁷⁴ or as a producer of volatile pleasure, a postmodern hedonist?⁵⁷⁵ Or was Zappa, with his outspoken weakness for symmetry and balance, simply a Classicist in search of universal musical values?⁵⁷⁶ As some of the references indicate, there is no chronological consistency to the changes of views he exposed: Zappa could simultaneously speak admiringly about the tax-funded festivals of Europe (his own *Yellow Shark* project was performed at the Frankfurt Festival),⁵⁷⁷ as he vented his spleen upon 'the lady with the frightening hair on the "special committee"' that wouldn't commission any of his works in his own country.⁵⁷⁸

⁵⁷⁰ Quoted from F. Kofsky. "Frank Zappa Interview", in *The Age of Rock. Sounds of the American Revolution*. Ed. J. Eisen. Random House, New York 1969.

⁵⁷¹ See L. Mjøseth. *Op cit*.

⁵⁷² Quoted from A. Kershaw. "Frank – Fearless and Still Fighting", in *The Guardian*, May 15, 1993.

⁵⁷³ S. Döhning. "Popmusik und Gegenkultur – Untersuchungen zu Frank Zappa", in *Avant-garde, Jazz, Pop. Tendenzen zwischen Tonalität und Atonalität*. Ed. R. Brinkmann. Schott's, Mainz 1978.

⁵⁷⁴ See M. Nyström. "Ögonblick som bränner till. Frank Zappas gula haj framförd med symfonisk musik", in *Dagens Nyheter*, Feb. 28 1996.

⁵⁷⁵ See E. Wallrup. "Ironisk Zappa stal showen för Varèse", in *Svenska Dagbladet*, Feb. 28 1996.

⁵⁷⁶ See P. Kountz. "Frank Zappa and the Enterprise of Serious Contemporary Music", in *Popular Music and Society*, vol. 4(1) 1975.

⁵⁷⁷ See D. Menn. *Op cit*.

⁵⁷⁸ F. Zappa & P. Occhiogrosso. *Op cit*, p.191.

Chapter fifty

Postmodernism, convention and irony

That Zappa assigned an important role to convention and context in the arts seems obvious in the following quote (there is a brief reference to John Cage here, whom Zappa had met in person when he was still at college, and whom he is said to have remembered mostly as ‘Cage gargling with carrot juice’):⁵⁷⁹

The most important thing in art is *The frame*. For Painting: literally; for other arts: figuratively – because, without this humble appliance, you can’t know where *The Art* stops and *The Real World* begins. You have to put a “box” around it because otherwise, *what is that shit on the wall?* If John Cage, for instance, says, “*I’m putting a contact microphone on my throat, and I’m going to drink carrot juice, and that’s my composition,*” then his gurgling qualifies as *his composition* because he put a frame around it and said so. “*Take it or leave it, I now will this to be music.*” After that it’s a matter of taste.⁵⁸⁰

But how convention-bound is taste in Zappa’s view? Is it a matter of individual relativism? Or should we understand “frame” as tantamount to musical norm? As Zappa continues, we may even find a tinge of utopian visionary here: ‘Without deviation (from the norm), “progress” is not possible’.⁵⁸¹ Progress from where? Progress towards what? Zappa does not go into any details about either musical taste or musical progress, but by juxtaposing these concepts in the same utterance he invites what might be taken to be an insoluble inconsistency in his thinking on music. On the one hand, Zappa could ask himself whether a ‘most interminable, grinding composition, even if it’s well conceived, should you be forced to consume it because somebody says it’s artistic, or should you consume it because you like it?’⁵⁸² In preferring the second alternative, we can interpret Zappa as regarding anyone’s taste as good as anyone else’s. On the other hand, Zappa could claim that ‘music is an art form that is too good for [this] kind of society... [an art form too] beautiful and too subtle to be appreciated on a large scale by the average American person’.⁵⁸³

Similarly, we can compare his ‘preposterously non-modern’⁵⁸⁴ somewhat-may attitude, as expressed in the liner notes of *The Perfect Stranger* album, that ‘All material contained herein is for entertainment purposes only, and should not be confused with any other form of artistic expression’,⁵⁸⁵ with the complaint about his audience which, as he himself puts it, is not capable of appreciating a music consisting of compositions

⁵⁷⁹ Quoted in M. Gray. *Op cit*, p.177.

⁵⁸⁰ F. Zappa & P. Occhiogrosso. *Op cit*, p.141.

⁵⁸¹ *Ibid*, p.141.

⁵⁸² Quoted from D. Menn. *Op cit*.

⁵⁸³ Quoted from L. Mjøseth. *Op cit*.

⁵⁸⁴ F. Z. Boulez Conducts Zappa. *The Perfect Stranger and Other Chamber Works Performed by the Ensemble InterContemporain and the Barking Pumpkin Digital Gratification Consort* [liner notes]. Zappa Records, CDZAP 49.

⁵⁸⁵ *Ibid*.

that 'are so carefully constructed that it breaks my heart when people don't dig into them and see all the levels that I put into them'.⁵⁸⁶

On the first hand, everybody is free to choose whatever he or she likes to listen to—'Anything, Any Time, Anywhere—For no Reason at All',⁵⁸⁷ as his slogan ran—but on the other hand, it is a sign of decay that people have the particular musical taste that they do have. On the one hand Zappa seems to express a typically postmodern pathos, and on the other a Modernist longing for a qualitative appreciation of his work (an appreciation that he thought could be achieved with proper education and exposure to a multitude of styles and genres).⁵⁸⁸

Since the notion of convention and style should be central for the appreciation of a music that so insistently played on a juxtaposition of styles, one could perhaps find in it a link necessary for the mediation of these inconsistencies. Discussing the problem of irony, Umberto Eco has tried to explain its postmodern appearance as a result of an epistemological insight that seems to be valid for Zappa too. Taking as examples John Cage and Marcel Duchamp, Eco claims we have learned the importance of situation and context in the creation of art: anything may pass as art in the well tempered spotlights of galleries and concert halls, but outside these institutional frames art loses its "power of speech;" it does not have anything to say to its audience anymore. In order for any work of art to become even ambiguous or polysemic, it must be interpreted, and interpretation is only possible in relation to a interpretative horizon. Thus, in the proper context, and against a proper horizon, works of art tend to become a kind of metalinguistic commentary on their own preconditions.

The theme is taken up by Robin Hartwell, who argues that Modernism in music refers to a sense of historical necessity, which it is assumed any great music must exhibit. Great music is a natural offspring of its time and must therefore differ from that of previous epochs. In the continuous historical process, the modern work of music is the avant-garde that shows the way (the only true way) into the inevitable future. Thus, the relation between a modern piece of music and its forbears is that the latter must be judged according to the standards of the former. This Modernist attitude can be contrasted with that which Hartwell calls Classicism—a belief in constant universal values, which implies that the present can only be judged in the light of a glorious past (Classicism accordingly judges the present as a decline). However, Hartwell points out, Modernism contains

⁵⁸⁶ Quoted from D. Walley. *Op cit*, p.80.

⁵⁸⁷ F. Zappa & P. Occhiogrosso. *Op cit*, p.163.

⁵⁸⁸ See *Ibid*, p.188; Cf. also p.340f: At the end of the 1980's Zappa developed far-reaching plans for a 'late-night adult program, sixty minutes, five nights per week', in order to offer the American nation 'raw, uncut news footage from daily satellite feed, point out the material other broadcasters have deleted, speculate on the possible motivations behind deletions, and refresh people's memories about recent events connected to each day's breaking stories'. The show was to be called Night School and was never realized (though similar projects have later been carried through in France—*Arrête sur images*—and Qatar—*Al Jezira*).

its own dissolution in its emphasis on the individual subject, the personal “language” of the composer:

Broadly, I am referring to a shift from the eighteenth century, where the grammar of harmony was common to most composers and originality lay in its usage, through Wagner, where the musical grammar itself was valued for its originality, to the twentieth century, where the basic materials of music – chords, tone-colours, *etc.* – are perceived as the intellectual property of the composers. (For example, one has the sensation that Messiaen has patented certain modes, chord formations and orchestral colours. To work with these materials is to run the danger of committing an act of plagiarism.)⁵⁸⁹

Eco and Hartwell reason along similar lines, but Eco more overtly emphasizes conceptual art as the ultimate consequence of Modernism’s pursuit of “truth,” a pursuit which in music takes the way over polytonality (*The Rite of Spring*) and noise (*Ionisation*) in order to reach its limit in the absolute silence of Cage’s 4’33’’. In retrospect we can regard this as a search for a truth lost, an expedition that also includes Cage; but no matter how hard we try, there is neither any absolute music nor absolute subject to be found: the treasure chest at the foot of the rainbow is semantically empty, and it is our inescapable task to fill it with meaning (and one of the concepts we have stuffed it with so far is the idea of the absolute). Thus, for Eco, the most significant sign of the postmodern is the *irony* inherent in the cynical intuition that any semantic expression intending to convey a truth about the world (its music, its subjects) is conventional.⁵⁹⁰

Both Eco’s and Hartwell’s descriptions of the postmodern poses irony as a specific attitude, a cynical approach to the predicaments of knowledge, rather than simply a rhetoric figure saying something while meaning something else (in a later chapter we shall pose this ironic attitude against its Modernist/romantic variant). Regarding Zappa’s music, it is telling how the constant decontextualization and recontextualization of material alter its ironic qualities. *Pedro’s Dowry* might serve as a case point. As it occurs on the *Läther* album, this Varèse-as-puppet-theater sounding piece definitely has an ironic touch to it, contrasting with what is mainly a rock-oriented soundscape. But what in particular does it take for a piece of music to display such ironic qualities?

To convey a sense of irony in the use of various stylistic figures, Jonathan Kramer suggests that there be ‘a natural language of the [piece] upon which the others are intruding’,⁵⁹¹ which in Zappa’s case can be taken as the “language” of popular music, against which modern art music is contrasted. This is clearly the case with *Pedro’s Dowry* as it

⁵⁸⁹ See R. Hartwell. “Postmodernism and Art Music”, in *The Last Post. Music After Modernism*. Ed. S. Miller. Manchester University Press, Manchester 1993.

⁵⁹⁰ See U. Eco. “Postmodernism, Irony, the Enjoyable”, in *Postscript to the Name of the Rose*. Trans. W. Weaver. Harcourt, Brace, Jovanovich, San Diego 1984.

⁵⁹¹ J. D. Kramer. “Beyond Unity: Towards an Understanding of Musical Postmodernism”, in *Concert Music, Rock, and Jazz since 1945: Essays and Analytical Studies*. Rochester 1995. For an overview of the debate about musical postmodernism, see J. Tillman. “Postmodernism och konstmusik”, in *Nutida Musik*, vol. 42(2) 1999.

appears on *Läther*, less clearly so when the piece appears on *Orchestral Favorites* – although the appearance of *Strictly Genteel* and *Duke of Prunes* recalls Zappa’s popular idiom – and even less than so on the *London Symphony Orchestra* album, where the popular traits are almost entirely absent. In the two latter cases the ironic qualities of *Pedro’s Dowry* seem to depend on rather different circumstances. Particularly on the *L.S.O.* album, the ironic qualities brought forth appears to draw on an exaggeration of certain stylistic traits within the piece itself – the cartoon-like puppet gestures, for instance (with a closing gesture recalling that of the scherzo in Ives’ string trio) – and their emphasis at the cost of others of the same idiom – its Varèseness.⁵⁹² When such exaggerations become less obvious, as for instance in *Mo ‘n’ Herb’s Vacation*, the music loses some of its humorist vigor and exposes itself to the risk of being dispatched as a stylistic failure.

Now, curiously, Kramer defines this use of irony as specifically modern, rather than postmodern; ‘the postmodernist does not feel the need to retreat behind a mask of ironic commentary’. It is a sign particularly of Modernism, Kramer says, that ‘the only viable way to incorporate the past into the present is with distortion’.⁵⁹³ Hartwell draws a similar conclusion in discussing Schoenberg’s incorporation of *Ach, du Lieber Augustin* in his second quartet, the melody of which soon dissolves into the atonal texture (a remnant of the sonata convention of finally grounding the secondary subject in the original tonic?). But whereas both authors acknowledge as particularly postmodern the tendency of not having to resolve the foreign into a familiar language, only Hartwell admits that this might still carry ironic potential. My view is that a piece like *Pedro’s Dowry*, as so many other Zappa pieces, shows that Zappa’s particular way of dealing with pastiche definitely has an ironic touch – and a humorous one at that.

Whether we choose to call this a postmodern way of pastiche is another question, of course, although I think it is significant that Zappa does not obviously revert to any one particular style as his “natural language.” What the case of *Pedro’s Dowry* indicates is rather that there cannot be any postmodern irony in the sense of a *total* rejection of any interpretative horizon (as Kramer seems to admit when quoting a video commentator rhetorically asking whether ‘the disappearance of a stable, universal context *is the context* for postmodern culture?’).⁵⁹⁴ The listener always creates a horizon of top-down stylistic expectations, as well as the preferential judgment of certain styles being more acceptable and desired, and only when this interpretative backcloth comes to include all the (previously) disparate traits on an equal ground, does irony evaporate.

⁵⁹² Cf. P.-E. Brolinson and H. Larsen. “Pastischen som stilanalytiskt problem. Exemplet Povel Ramel”, in *Nordisk musikforskarkongress, Oslo 24-27 juni 1992. Inlägg og referater*. Oslo University, Oslo 1993.

⁵⁹³ See J. D. Kramer. *Op cit.*

⁵⁹⁴ N. K. Hayles. *Chaos Bound: Orderly Disorder in Contemporary Literature and Science*. Quoted from J.D. Kramer. *Op cit.*

Chapter fifty-one

Little House as paradigm scenario

Considering irony, the case seems to be similar with the *Piano Introduction*. On the *Burnt Weeny Sandwich* album the piece stands out against what is basically a rock-group texture (although not exactly a “standard” rock-group texture), whereas on the recordings of the revised version, by Klibonoff, DeMatteis and Mukaiyama, the context is that of twentieth century art-music. To the extent that any irony expressed in this piece depends on the particular music that surrounds it, the latter recordings will prove rather empty. But as with *Pedro’s Dowry* on the *L.S.O* album, there is an irony springing forth as a result of its internal juxtaposition of figurative material—although perhaps in a more subtle way in the piano piece.

If we listen again to the revised version, it is hard not to hear in it the sound of modern music.⁵⁹⁵ The opening texture of the piano introduction sounds almost impressionistic with its chromatically descending line of augmented triads, a bit like a Debussy *prelude*, allowing the feeling of pleasant reverie that we encountered earlier. Its starting off with a brief upwards gesture, finding immediate outlet in a series of whole-tone chords could even be heard as a mirroring of the opening gesture of *Voiles*. Simultaneously, a more romantically oriented listener may perhaps trace similarities with the late Romantic use of augmented triads in Frans Liszt’s *Nuages Gris* or *Unstern*. But the texture is thicker here, more chromatic, and the difference in scale heritage diminishes the “pure” whole-tone feeling in comparison with a piece like *Voiles*, where the descending thirds of the opening measures all derive from one and the same whole-tone set. This dissonating touch, added by the clashing of the whole-tone materials, may also invoke Ivesian quartertone chords, whereas gesturally, the augmented triads would rather recall a Schoenberg (cf. for example the *fließender* passage of the right-hand in measures 34 to 38 of the first of the *Drei klavierstücke* op. 11). On a more abstract level the phrasing, which adds to the *rubato* indication at the outset of the score, may even recall the ‘melismatic rhythm’ (as Dahlhaus called it) of the bassoon at the beginning of Stravinsky’s *Rite* (rather than a Gene Krupa’s slowing down of tempo).⁵⁹⁶

Moving forward in the score, the rhythmically-twisted melody in the lower register of the second subpart of the A-section might recall Varèsian dissonances, which are abruptly terminated by some kind of Bartok-like

⁵⁹⁵ The following chapter is a revised and expanded version of U. Volgsten. “Den seriöse Zappa. Historik, estetik & *Piano Introduction to Little House I Used to Live in: en semiotisk etyd*”, in *Musikkittiede*, vol. 5(2) 1993.

⁵⁹⁶ C. Dahlhaus. “Aspects of Rhythm”, in *Schoenberg and the New Music*, p.47. Trans D. Puffett and A. Clayton. Cambridge University Press, Cambridge 1987.

sonority—like that exploited in *Minor Seconds, Major Sevenths*, from the *Mikrokosmos*. Also relating to Bartok, although on an entirely abstract plane, would be the pitch set formed by the four notes in the left-hand of measure 9, a 4-9(6) set, which also recurs in the left-hand melody line of measures 11 and 12 (smoothing out the transitional break between the two subparts of the A section). This is the germinal set that Leo Treitler identified in Bartok's *Fourth Quartet*, and which he dubbed the *z-group*,⁵⁹⁷ though obviously, it does not serve any generative function in Zappa's piece.

Although this last example is likely to go unnoticed by most listeners (as is the Webernesque tempo-indication, *Ruhig Schreitend*, of the B-section), the rest of the above should be enough indication that there are figurative qualities in the *Piano Introduction* available to most listeners with some acquaintance with early twentieth century music. Now, in what sense is there an ironic quality in these references (remember, we are not assuming the context of *Burnt Weeny Sandwich* here)? After all, there is also reference and allusion in neoclassical music, which is hardly ironic at all, since, as Hartwell pointed out, Classicist references are posed more or less as transcendental imperatives. The ironic qualities appear here, I suggest, when the figurative significance of the Modernist references are experienced *as* references, simultaneously as they retain their "pure," affective impact on a pre-reflective level. Let us therefore yield to the temptation of hearing the affective contours of the *Piano Piece* as evocative of anthropomorphic, gestural characteristics (and dispose of the impressionist dream world).

The major seventh leap of the opening phrase expresses vivid energy, which nevertheless seems to dissolve as it transforms into the chromatically descending line of the right-hand triads, phrasing off rhythmically with a trochee. This opening phrase with its modernist touch at once causes a positive experiential emotion, resulting in an interpretative contract being established (*cf.* chapter thirty-five), which leads us to hear the phrase as an optimistic effort immediately turning into a sigh, or a sign of resignation. However, more energy is summoned in the triplet upbeat and in the sextuplet, and although the new energy also seems to dissipate towards the end of the phrase, its slight *disengagement* from its relative point of repose in the mid register to the ascent of a fifth and augmented octave seems to express more of a humble request or interrogation. Then the *cantilena* line over the quasi-tonal chords, confidently, as if responding. The *hoquetus* line is a direct, almost irritated intervention: "no, not like that; the other way round!" (this part is also, by reference to the purely rhythmic, percussive rendering of this passage in live performance, evocative of Zappa pieces like *The Black Page* and *The Be-bop Tango*).

⁵⁹⁷ See L. Treitler. "Harmonic Procedure in the *Fourth Quartet* of Bela Bartok", in *Journal of Music Theory*, vol. 3 1959. The *z-group* should not be confused with Z-relations between sets: see A. Forte. *The Structure of Atonal Music*, p.21f. Yale University Press, New Haven and London 1973.

Whereas the description of the opening phrase is formulated quite straightforwardly in affective terms, more or less as a call and response, the *hoquetus* seems to imply something being contradicted—"the other way around." How shall we interpret this feeling? The way things have been done is hinted at by the quasi-tonal chords, which may be heard as instantiating an interrupted cadence. In spite of its iambic emphasis, the resulting cadence is a cluster, a failure generating rather than releasing tension. In contrast, there is an insistent, almost nagging feel to the *hoquetus* melody, which seems to succeed into a second cadential chord, although there is a sense of unrest that will not go away.

What we can say about this, so far, is that the narrative interpretation of the music shining forth builds upon the experiential interaction of both the affective qualities of the melodic contours and the referential figures, *i.e.* the exemplified predicates that relate the music to verbal discourse. With a narratological terminology we may accordingly speak of the melodic contours as *actors* enacting both an affective *actantial role* and a figurative *thematic role*.⁵⁹⁸

As we move on to the central B-section the music shifts character radically. Here I do not have in mind the change from the earlier $5/8$ to $3/4$; the passage leading over to the B-section is already in $3/4$. Instead it is the change of narrative character that makes itself felt here. Whereas the A-section narrates the musical story in a rather direct fashion, we arise here to a sort of reflective or self-reflective level. Whereas the earlier dispute was enacted in real time, fragments of it now reappear as if recalled through memory. We can therefore distinguish between a *diegetic* actor in the B section that is capable of commenting and reflecting on the *mimetic* actors in the A section. Whether we regard this *diegetic* action as a recounting by an external narrator or the recollection by a subject of its previous activities depends on how we relate the figurative (thematic) roles that we designate as whole-tone group, *cantilena* or *hoquetus*. Are they thematically related so as to display different facets of an identical subject-actor, or are they thematically distinct, promoting distinct actors? There is no clear-cut answer to the question, although for formal reasons I tend to hear the whole-tone group and the *cantilena* as two aspects of an individual, distinguished by the cadential mark from the *hoquetus* (of course, this is also a matter of whether the player chooses to emphasize or conceal the differences of the material).

But what kind of thought does the reflecting subject entertain? Not much, it seems. The $3/4$ rhythm is the pastoral rocking of a hammock, in which the daydreaming subject is slowly drowsing off as the casual reminiscences of whole-tone groups wane. Although temporally the longest, this section carries relatively meager narrative content. But it is interesting to note that the superimposed fifths and the seconds-on-sixths

⁵⁹⁸ See A.J. Greimas. "Actants, Actors and Figures", in *On Meaning. Selected Writings in Semiotic Theory*. Trans. P.J. Perron and F.H. Collins. Frances Pinter (Publishers), London 1987.

do not stick out from the pulsating background enough to attract attention as do the whole-tone references. Even less salient are the references of the diatonic collections of measures 26-33 to the quasi-tonal chords of the *cantilena*. These pulsating chords sound entirely as background, against which actantial and thematic drama can be enacted. Nevertheless the references are there, which may be interpreted as if they have sunken deep into the *diegetic* actor's cognitive sediment. Diatonicism would then seem to govern the conventional expectations of the *diegetic* actor, whereas the augmented thirds formulate a questioning of this diatonicism—a sceptic doubt which slowly fades. But as diatonicism eventually seems to have eradicated all reminiscences of anything *other*, the drop of a fifth in the bass (A to D) alluding to functional harmony, in measure 34 a smell of undefined dissonance is introduced and an alarm bell goes off (m.35). The insistence on pulsating eighth notes in $\frac{3}{4}$ cannot prevent the *hoquetus* actor from returning, although now in a pointillistic figurativization. And what happens?

Faithful to formal balance, the music ends with the call and response of the augmented thirds and the *cantilena*. It is as if the music ends with the same question and reply as it began. This question, I suggest, can be interpreted as a request for how to satisfactorily come to rest, how to attain closure, and the answer given by the *cantilena*-actor is: through tonal cadence. In light of Adorno's, Tagg's and McClary's work, we can thus interpret the music as a paradigm scenario reflecting a world view based on the rejection and dismissal of the unknown. The driving force behind this cultural property is the fundamental opposition between self and other, where the self is the secure and positive foundation from which it is possible to explore the unknown other, normative of a wide range of cultural activities from scientific pursuit to ethics and music (an exploration which more often than not has turned either into exploitation of the other, or into a damnation of it as immoral).⁵⁹⁹

For Zappa's piano introduction this would mean that the music articulates an opposition between a secure "foundation" (as the positive self) exemplified by the tonally cadencing *cantilena* and an insecure "raft" existence (as the negative other) exemplified by the atonal *hoquetus* actor. However, this dichotomy is questioned by the open ending, the *deceptive* cadence. To steal a phrase of Hans Keller's, we can interpret this as 'the composer's meaningful contradiction of his background',⁶⁰⁰ a suspension of his conventional expectations of tonal closure. But is it a suspension and contradiction which, as Tarasti has remarked in the case of Debussy's *Préludes*, discloses a twentieth-century incertitude, a bitter irony that precludes a triumphant and heroic ending in the manner of the grand

⁵⁹⁹ See E. Fox Keller. "From secrets of life to secrets of death" and "Language and ideology in evolutionary theory. Reading cultural norms into natural law", in *Three Cultures. Fifteen lectures on the confrontation of academic cultures*. Ed. E. Fox Keller, et. al. Universitaire Pers, Rotterdam 1989.

⁶⁰⁰ H. Keller. "Schoenberg's Return to Tonality", in *Journal of the Arnold Schoenberg Institute*, vol. 5(1) 1981. Note however that I speak of narrative interpretation here; not as Keller does, of psychoanalytic interpretation.

symphonic narratives?⁶⁰¹ Or is it the secret hint that an “optimistic” reversal of values is still possible, that the evaluation of the two opposed attributes of the dichotomy – foundation/tonality versus raft/atonality – are potentially interchanged (*cf.* chapter ten)? After all, the pointillistic counterpart of the *hoquetus* was never restated in the “tonic,” but disguised as a transitional passage. The music would thus become an aural expression of a more pragmatic irony, an irony conscious of Quine’s picturing of knowledge as ‘a boat which, if we are to rebuild it, we must rebuild plank by plank while staying afloat ...’⁶⁰²

Chapter fifty-two

The Sublime

Whether “progress” is the ultimate end of deviation or not, Zappa’s opinion that strict artistic norms are no more than a disguise for conservative moralism is shared by the philosopher Jean-François Lyotard. As Lyotard sees it, the significant characteristic of late twentieth century society is an almost unlimited access to information. However, the totality of this information is practically ungraspable by the receiving subject. We are confronted with an abundance of information, but the knowledge we are able to gain from it is vanishingly small in proportion. When nobody is thus capable of overviewing this mass-media torrent, when nobody is capable of summing it up in consistent terms, it is experienced as a cognitive and moral “slackening” that makes people shout for law and order.

What particularly concerns Lyotard is the demand that modern art give up its experimenting in order to return to the service of society’s preestablished needs. In the manner of nineteenth century realism in the visual arts, today’s art should strive to ‘preserve various consciousnesses from doubt: art must concentrate on anchoring the polysemic information in easily graspable meanings so that everything can remain as it once was’.⁶⁰³

But, Lyotard objects, a return to traditional languages and norms would be the same as giving in to a prostitution of the arts. We have to be aware that the foundation, the basis of what was earlier viewed as absolute truth, is constantly being ‘derealized’ by capitalism (‘anything goes’) or by ‘the party’ (‘terror’).⁶⁰⁴ Realism offers no remedy for this situation. Like a psychopharmacological drug it merely mutes the

⁶⁰¹ See E. Tarasti. “L’analyse sémiotique d’une prélude de Debussy: *La terrasse des audiences du clair de lune*”, in *Analyse Musicale*, vol. 67(3) 1989.

⁶⁰² W. V. O. Quine. *Two Dogmas of Empiricism*. Quine is paraphrasing Otto Neurath.

⁶⁰³ J.-F. Lyotard. *The Postmodern Condition: A Report on Knowledge*, p.71. Manchester University Press, Manchester 1984.

⁶⁰⁴ *Ibid*, p.74.

symptoms. Realism, as Lyotard uses the term, is namely that which 'intends to avoid the question of reality.' This realist art is nothing but 'pornography'.⁶⁰⁵ Lyotard's counterproposal to the realism polemics is *The Sublime*.

The sublime, the "opposite" of realism, is the feeling evoked by the unrepresentable, that which can be conceived of rationally, but not be experienced by the senses: 'We have the Idea of the world (the totality of what is), but we do not have the capacity to show an example of it. We have the Idea of the simple (that which cannot be broken down, decomposed), but we cannot illustrate it with a sensible object that would be a "case" of it. We can conceive the infinitely great, the infinitely powerful, but every presentation of an object destined to "make visible" this absolute greatness or power appears to us painfully inadequate'.⁶⁰⁶

In modern art, Lyotard claims, we are able to trace the sublime to a higher or lesser degree, but only as a negative representation, an absence or a loss: modern art 'allows the unrepresentable to be put forward only as the missing contents; but the form, because of its recognizable consistency, continues to offer to the reader or viewer matter for solace and pleasure.' The 'real sublime', however, is found in the postmodern art, an art which 'puts forward the unrepresentable in presentation itself'. The unrepresentable in postmodern art is, unless I have misinterpreted Lyotard, the paradoxical insight that "it is true that there are no absolute truths."⁶⁰⁷

Apart from his view of which artists are modern and which are postmodern, Lyotard's sublime thus seems compatible with Eco's notion of postmodern irony. Moreover, Lyotard has at times preferred to speak about this attitude as *humor* (saving the term irony for the Modernist longing for missing content).⁶⁰⁸

Lyotard traces the modern to Proust and de Chirico, while the postmodern is found in the work of Joyce and Duchamp; but he does not speak about music (though the realism that he speaks of seems equivalent to Hartwell's Classicism). The musically sublime was the prime subject of E.T.A. Hoffmann and the Romantic writers of the early nineteenth century. Influenced by Kant, music was claimed to be autonomous, and as such it could not be a mere means for sensory pleasure; on the contrary, the organic form of (what A. B. Marx later named) a sonata movement constituted, in Dahlhaus' words, 'a holistic entity, endlessly rich in relations and thereby directed toward something higher than the mere acoustic phenomenon'.⁶⁰⁹

The role assigned to unity and wholeness by the Romantics indeed seems to be the anathema of a postmodern sublime; for Lyotard it is rather that in which we *cannot* infer a unifying structure that the sublime appears

⁶⁰⁵ *Ibid*, p.75.

⁶⁰⁶ *Ibid*, p78.

⁶⁰⁷ Cf. J. Uusitalo. "The Recurring Postmodern: Notes on the Constitution of Musical Artworks", in *Essays on the Philosophy of Music*. Ed. V. Rantala, L. Rowell and E. Tarasti. Societas Philosophica Fennica, Helsinki 1988.

⁶⁰⁸ See C.D. Lang. *Irony/Humor. Critical Paradigms*, p.61ff. The Johns Hopkins University Press, Berkeley 1989.

⁶⁰⁹ C. Dahlhaus. *Nineteenth Century Music*, p.91. University of California Press, Berkeley 1989.

most effectively. It is therefore interesting that Ashby points out a relationship between Zappa's subversive orchestrational practices and that of the Schoenberg school, for whom, Ashby says, orchestration was seen as separate from 'the purely musical import of a composition', its formal structure:

Schoenberg's Society for Private Musical Performances turned economic strictures into musical benefits when it sponsored piano and concise chamber arrangements of orchestral tapestries by Mahler, Strauss, and Debussy. According to Berg's prospectus for the new organization, there were two didactic advantages to such reductions: the texture of orchestral works by worthy Late-Romantics could be laid bare, proving the contrapuntal and architectonic accomplishments that might have been obscured by purely orchestral skills, and the society could also wean audiences away from a fetishistic attachment to such textures.⁶¹⁰

But even though Zappa's orchestrational practice, in line with that of Schoenberg *et al.* may be seen as a rejection and subversion of traditional symphonic practices, it is questionable whether the third movement of *Sinister Footwear* lays bare its structure to any significant extent (irrespective of whether there is much of formal interest to discover in the first place). In this respect, the piece seems to display neither Romantic nor avant-garde traits of the modern. Of course, in the treatment of improvised guitar solos as material for further elaboration it would seem—in line with Hartwell's contention that musical grammars are the personal properties of their inventors, which in their focus on the composing subject ultimately lead to an implicit questioning of any universal "natural" languages for music—that Zappa with his transcriptional, orchestrational and xenochronic practices (his "anxiety of influence," as it were) has finally achieved a legitimate place in the circle of the Modernist avant-garde.⁶¹¹ However, such an understanding of Zappa's transcriptional practice as *original* in a Modernist sense is contradicted by the practice itself, which implies a multitude of different versions, positing the live performance of *Persona non grata* as its deferred source. (And parenthetically, in the liner notes to a recent issue of Varèse's complete works, Zappa is frankly dispelled as a 'pop-icon' in contrast to the 'most avant-garde classical composers' who were all influenced by Varèse.)⁶¹²

What Zappa's use of transcription and xenochrony suggests is rather a critique of the traditional notions of material, form and work. In Zappa's music, the work, or composition, cannot be identified with either a score, performance or a recording. Neither can it be identified with a transcendental Platonic form.⁶¹³ Instead it turns into a notion that

⁶¹⁰ A. Ashby, *Op cit.*

⁶¹¹ Cf. A. Krims. "Bloom, Poststructuralism(s), and Music Theory", in *Music Theory Online*, vol. 0(11) 1994.

⁶¹² A. Cornall. "Producer's Note", in *Varèse. The Complete Works*. Decca, 460 208-2. Of course, the mere fact of mentioning a 'pop icon' by name in this context indicates a problem in assigning the label to Zappa.

⁶¹³ Cf. L. Goehr. *Op cit.*

implicitly questions the individuality of the traditional concept or concepts to which it alludes, by provocatively shifting between these locations. Zappa was not unaware of this aspect, which for him seemed entirely natural: 'If I'm giving a performance with a band, the show itself is a composition involving sections which are smaller compositions ... I think every composer's got some idea of ideal proportions that suits personal taste. You take your raw material, your notes, your visual elements or whatever it's gonna be, and you strike up balances between loud and soft, fast and slow, many and few, thick and thin. It's like cooking, or building a mobile. The contrasts help define the structure, and at the same time they're part of the elements that are being structured'.⁶¹⁴

Similarly, in a comment on his early albums, Zappa claims 'It's all one album. All the material in the albums is organically related and if I had all the master tapes and I could take a razor blade and cut them apart and put it together again in a different order it would make one piece of music you can listen to. Then I could take that razor blade and cut it apart and reassemble it a different way, and it still would make sense. I could do this twenty ways'.⁶¹⁵ Although formulated in terms ordinarily associated with more classical or Modernist aesthetics, Zappa reveals what can be regarded as a postmodern attitude towards formal coherence and unity. If there is any coherence in Zappa's music, early or late, it quite obviously stems from another source than, say, the thematic development within a classical sonata. Whereas the latter can be seen as an organic structure in which the constituent parts are *not* admissible of such reorganization as mentioned in the quote above (lest the teleological linearity of the music be destroyed), Zappa's music often seems to display a more abstract, achronic coherence. The work, the musical entity displaying this unity is variously localized to the level of the performance or that of the album, which admits not only that what counts as a formal element in one context may may not do so in another, but also that what is assigned elementary status in one context may be elevated to work in another—material may become form and vice versa. In other words, there is a constant questioning of the frame in Zappa's music, a constant questioning of the work as a self-sufficient entity, as an *opus perfectum et absolutum*.⁶¹⁶

Finally, as we have seen, the theme, the point of balance, uniting the disparity of Zappa's music which readily suggests itself is the notion of musical *style*: however, style is a notion, a superordinate category, that brings together phenomena in a unity which is all but organic. Thus, although it may at times seem as if Zappa was stuck with "the great meta-narrative" of Modernism—that of organic unity⁶¹⁷—the way Zappa dealt with it was not as a means to irreproachable musical statements, but

⁶¹⁴ Quoted from M. Bloom. "Interview with the composer", in *Trouser Press*, vol. 47 1980.

⁶¹⁵ Quoted from J. Hopkins. "Frank Zappa", in *The Rolling Stone Interviews*, vol 1.

⁶¹⁶ Cf. R. Littlefield. "The Silence of the Frames", in *Music Theory Online*, vol. 2(1) 1996. On Listenius' notion of a *opus perfectum et absolutum*, see n. 212.

⁶¹⁷ Cf. J.D. Kramer. *Op cit*.

rather as a way of posing questions the answers of which seem inevitably (and ironically) to point in the direction of a postmodern, sublime humor.

Chapter fifty-three

Sinister Footwear and the birth of the subject

Just as we may regard Zappa's improvised material as a negation of the primacy of structure, we can see that what is especially intriguing here is that Zappa seldom settled for any original or final solution to his compositional endeavors, but continued to transcribe solos and rearrange material, resulting in a critique of the distinctions between genre, work, form and material—a peculiarity which can be understood as a questioning of the autonomy and individuality of his work. In relation to this, I would prefer to regard his compositional strategies as a putting into question of the Enlightenment notion of the absolute subject. To see why, let us once again consult Lyotard.

The conservative reactions against postmodern trends in society which Lyotard has described as either leading to capitalist or fascist oppression can also be understood as reactions against the dissolution of the autonomous subject. Lyotard's cure for this malaise consists in a complete letting go of the subject. Seeking inspiration in the Freudian subconscious, Lyotard advocates a free flow of *libidinal* energy (the energy generated through the pleasure principle), an unlimited access to sensory and bodily pleasure favoring ecstasy as the ultimate non-subjective state where all concerns of reality and future have been abandoned. Thus Lyotard can say, in what could be read as a paraphrase on Zappa, that 'Alienation [of the subject] can be evaluated positively, as a means of destroying capitalism from the inside', and that '[in] the age of the rising libido, being right is not important, laughing and dancing is what matters'.

In discussing these ideas of Lyotard's with respect to music, Wim Mertens has described how the counter-subjective tendency of Lyotard's libidinal approach is traceable in music, particularly in the repetitive minimalism of Steve Reich, La Monte Young, Terry Riley and Philip Glass. According to Mertens, 'repetition in repetitive music is technically identical to repetition in traditional music. The only difference is the context in which it is used. In traditional music, repetition is a device for creating recognisability, reproduction for the sake of the representing ego. In repetitive music, repetition does not refer to eros and to the ego, but to the libido and the death instinct'.⁶¹⁸

Mertens speaks about minimalism *referring* to the libido, and were we to take this literally, as implying that the music expresses the notion of

⁶¹⁸ Quoted from W. Mertens. *American Minimal Music. La Monte Young, Terry Riley, Steve Reich, Philip Glass*, p.120. Kahn and Averill, London 1983.

libido, the listener would have to interpret the music in order to understand it as such an expression. However, as Mertens also says, 'Repetitive music only appears to succeed when the listener consciously discards his dialectical way of listening'.⁶¹⁹ By thus focusing on the listener rather than the musical object, Mertens seems to mean that it would be perfectly possible to consume a classical symphony as pure libidinal energy, that it would be a matter of attitude, or perceptual mode of the listener/hearer (thus it is also a neglect of the process of composition, so important for Adorno's expert listener).⁶²⁰

Although Mertens does not fully acknowledge this split in his transmutation of Lyotard's ideas to music—he admits that it is unclear whether the libidinal dimension 'is consciously pursued and to what extent it may even be the main purpose of composing repetitive music', although it is 'certainly one of the main reasons for its popularity'⁶²¹—I nevertheless think it might shed light on Zappa's work if we distinguish between music figuratively signifying the death of the absolute subject, and music that, through its elementary constitution, tends to refute a subjective mode of listening altogether. Such a non-subjective mode of listening as the latter, giving free admission to libidinal forces, would be an opposite way of experiencing music as compared to the narrative interpretation we have considered earlier, and also to any other kind of terminologically fixed way of experiencing music.

To what extent does Zappa's music invite such a listening? Not only is this a question of the disposition of the listener; it should also be recalled that any music, the experience of which would not admit any verbal fixation, would not count as "a human cultural artefact," as this notion was stipulated in the introduction. But even if we accept as a libidinal experience one in which such fixation is minimal, one may nevertheless ask whether pieces like Reich's *Music for 18 Musicians*, or the first act of Glass' opera *Satyagraha*, with their obvious teleological syntaxes are optimal in (re-)presenting the "death" of the subject in music. Take *Music for 18 Musicians* as example: This piece opens with a pulsating succession of harmonies in a short overture-like section. These pulsating chords are then extended to approximately five minutes each, with metallophone cues signalling every upcoming harmonic change in advance. Using these chords as a sort of cantus firmus, Reich slowly builds up short melodies in a sort of germinal "development" process which he claims was influenced by the opening of Beethoven's Ninth. The result is an arch-like structure that can be heard as an extended parallel to Bach's C-major Prelude (which Reich has also referred to as a source of influence).

Though Reich's works, from *Music for 18 Musicians* on, could be characterized as postmodern on referential grounds, expressive as they are of a certain subtle irony in their choice and handling of material, they

⁶¹⁹ *Ibid.*, p.123.

⁶²⁰ *Ibid.*, p.124.

⁶²¹ *Ibid.*

lend themselves less to such a characterization if the libidinal, non-subjective is to be taken as a criterion for the postmodern.⁶²² Moreover, in comparison with the music of Reich and Glass, there are pieces by Zappa such as *The Girl in the Magnesium Dress* and *Ruth is Sleeping* that seem to lend themselves much more easily to a non-teleological, non-subjective experience—and this in spite of Zappa’s negative attitude towards minimalism.⁶²³ Perhaps one can even say that in their formally-structured fluctuations of sonic intensity, of tension and relaxation, Reich’s *Music for 18 Musicians*, or Glass’ *Satyagraha* (the first act)—and to some extent the third movement of *Sinister Footwear*—draw on the very processes that Stern has shown are active at the very *birth* of the subject, namely the *shaping of affective contours to attune to* (a material, or bodily subject, as we have seen, which does not presuppose an original spirit or *Weltgeist*).

In the end, Mertens warns that ‘one must consider the possibility that the current non-dialectical movement in music and philosophy could be searching for something quite different from the liberation it claims’, that it might be a means for late-capitalist society ‘to turn emancipatory movements into movements that accommodate the ruling powers’.⁶²⁴ Mertens quotes Herbert Marcuse, saying that ‘The breaking down of the ego-functions is intended to create and increase control and to strengthen the institutional monopolist powers’.⁶²⁵ However, rather than disposing of the subject, as Mertens would have it, it seems as if the third movement of *Sinister Footwear*, like many of Zappa’s other orchestral works, provokes a subjective interpretation (a fixation of the listening experience in subjective terms) by retaining, just as Adorno observed in Schoenberg’s music, *a sense of gesture*. What is more, this generation of the subjective tends to redirect focus in a peculiar and indirect way from the music back to the listener.

Having rejected the conclusions suggested by Mertens’ analysis, we may also see that instead of positing an absolute subject for the listener to identify with, and whose existence, threatened by an unknown other, the listener is invited to empathize with (as in more traditional modes of listening), *Sinister Footwear* exhibits a sort of sonic freak-parade, the otherness of which provokes the reconstitution of the listener as self-conscious subject. The otherness of this parade, I suggest, lies precisely in the odd rhythms of Zappa’s melodic contours, which are notoriously hard to follow for the average listener.

The redirection of focus from the otherness of these contours to the listener’s self is enforced by the change of chordal “climates” adding to a sense of tension/relaxation, which is not propelling in the same way as the drum and bass accompaniment of the rock-band version. Instead of inviting the listener to follow an authoritative musical subject-actor, the

⁶²² See U. Volgsten. *Den postmoderne Reich*. Unpublished paper, University of Stockholm 1989.

⁶²³ See F. Zappa & P. Occhiogrosso. *Op cit*, p.189.

⁶²⁴ W. Mertens. *Op cit*.

⁶²⁵ Quoted from W. Mertens. *Op cit*.

experience is one of the listener him- or herself being transported to ever new locales where the musical configurations are happening (this can be contrasted with the clearly figurativized and very modern subject of Mussorgsky's *Pictures at an Exhibition*, which the listener is invited to follow through its promenade). In contrast to the rock-band versions, the many shifts between the chordal climates of *Sinister Footwear*, which do not evolve into any progression and always return to some E-based mode (most often lydian; although the labelling of Zappa's chord formations according to conventional terms most certainly misses his idea of harmonic "densities," a notion which I regretfully have to leave unanalysed),⁶²⁶ do not create any clear sense of direction to the course of events. Instead these shifts serve to articulate the rhythmic groups, thus strengthening the role of orchestration and colour. Also, the additional "counter figures" not so much add to the rhythmical interest of the piece (as Ashby claims), as they in serving as extended upbeats seem to announce the upcoming changes of chordal climates—climates which, however, do not come to serve any narrative functions. What prevents the music from collapsing into a completely static moment-form is rather the successive increase of intensity that Ashby points out, its "protonarrative envelope," to use Stern's term.

Despite the familiar lydian mode of the melody and despite occasional "cheesy fanfares" and "drooling sentimental passages" (which, in contrast to the increasingly distorted *Schicksals* motif, do not owe to quotation or pastiche, as in many other works), there is no resolution of the contours into rhythmically familiar behavior; the otherness of the musical figures tend to remain intact, meaning that the language remains foreign (even if one may have attuned to the basic level contours, it is hard to engage in a more subordinate categorization of rhythmic detail), and also that it is up to the listener to accept the music as it appears in its bizarre movement. Insofar as one recognizes Zappa's idiosyncratic phraseology in the orchestral outfit of *Sinister Footwear*, it is partly because of its sometimes comic surface appearance (timbre rules, remember) which leaves questions of inner qualities (thematic relations, functionality, etc.) unanswered.

And it is here that we approach the crux of the biscuit: when no thematic roles can be assigned to the figurative actors of the music, they appear as increasingly foreign and incomprehensible, and thereby also objective (*being-for-themselves*), causing the music to reverse focus to the listener, a listener who is hereby subtly made aware of his or her "voyeuristic" position. With a little imagination we can liken this to the way an entry onto stage by The Mothers themselves might have appeared to the bewildered audience in the late 1960s:

⁶²⁶ This was pointed out to me in personal communication with Terry Bozzio; see also A. Aledort. "Zappa's Universe" (interview with Steve Vai and Mike Keneally), in *Guitar Player*, Feb. 1999.

Frank Zappa, composer, conductor, lead guitarist ... wearing a purple high-school cardigan, knit pants, and butterscotch-colored shoes with pointy, turned-up toes. His face is made of planes and angles ... The moustache and abrupt goatee form an upside-down anchor. He is like a wild, woodsy hermit, either very benign or very ferocious. The other six Mothers follow at their leisure. They make an incongruous group. Each seems a distinct, Technicolor character, as identifiable as Hollywood. Billy Mundi, the rotund, unjovial drummer, is a baker from the French revolution. Roy Estrada, caressing his electric bass, looks perplexed and determined, like a Polish anarchist. Don Preston sits within the circle of piano, organ and clavichord, well intentioned and vague, a Don Quixote before the windmill encounter. Bunk Gardner, absorbed in his collection of wind instruments, appears oblivious to everything except the anticipation of playing music. With his silver hair and trim beard he exudes the ruffled elegance of a riverboat gambler. Jim Black, the wry-eyed, bowlegged beater-of-the-gong, looks like a Mexican *bandido*. Ray Collins, credited with lungs and ingenuity in the program, is a high-browed Viking.⁶²⁷

With this quote (from a 1969 concert review) I want to say that the particular effect that a performance with The Mothers of Invention could have is refined in a different garb in some of Zappa's orchestral works, perhaps most conspicuously in the third movement of *Sinister Footwear*. This is a provocation of the listener to reconsider his or her relation to the other—the *ugliness*, as Zappa might have said—which needed no educated listener, no theoretical knowledge to establish an interpretative contract (since many of Zappa's orchestral timbres and harmonic climates, like the fancy costumes of The Mothers, were all-familiar), although it required some attention, and even patience, for the aesthetic payoffs to emerge.⁶²⁸ And this effect that the music had (and still continues to have) does not seem to be wholly unintentional, as the program notes indicate; it was, or at any rate it may be heard as a result of Zappa's own non-sentimental (and non-Kantian), pluralist ethics—whether ironic or deadly serious: 'As the planet gets more crowded, we must realize that "slack" is precious, schmucks are plentiful, impingements are impractical and werewolf etiquette for self-defense is a personal necessity. Techniques must be developed to enable each of us to escape the other guy's bullshit (just as he wishes to escape ours). Heaven would be a place where bullshit existed only on television. (*Hallelujah! We's halfway there!*)'⁶²⁹

⁶²⁷ D. Arbus. "In Person: The Mothers of Invention", in *The Age of Rock. Sounds of the American Cultural Revolution*.

⁶²⁸ The demanding character of Zappa's music, however, distances it from postmodern "double coding." Cf. C. Jencks. *What is Postmodernism?* P.14. Academy Editions, London 1986.

⁶²⁹ F. Zappa & P. Occhiogrosso. *Op cit*, p.234.

Chapter fifty-four

Does humor belong in music?

With regard to the sublime, as Lyotard describes it, *Sinister Footwear* appears as a postmodern statement. To use Kramer's words, the piece is postmodern in that it 'demotes textual unity from the status of a totalizing meta-narrative to one of many possible smaller narratives'.⁶³⁰ This rejection of unity as 'a ruling metaphor' not only involves form but also thematics.

But what about the *Piano Introduction*? With its ternary, open-ended form it seems to be a patently modern work of art, expressing its irony over the "missing content," the awareness that one cannot have tonal closure in atonal music. Apparently this is a Romantic (and thus modern) irony that acknowledges the artificiality of illusion by creating it for the sole purpose of destroying it. One may again bring to mind the fugato of Beethoven's Ninth, not to mention its Turkish ensemble (what shall become of it now, as the Ninth is turned into a community anthem?) and the intervention of the baritone soloist in the last movement, requesting more happy tunes. It is a romantic illusion of seamless wholes, of unified forms and large-scale structures, invoked and destroyed for the sole purpose of establishing the sovereignty of the autonomous composer-subject, whose 'artistic self-consciousness and reason not merely accompany but actually control poetic inspiration'.⁶³¹

It is an irony that can also be seen as a means to rid the act of composition from its initial enthusiasm and inspiration in favor of conscious thought. Whereas the romantics saw enthusiasm and inspiration as a heteronomous force of nature, conscious thought was a sign of autonomy. Irony is thus the rational expression of the autonomous subject, as opposed to the impulsive expression of emotion so characteristic of uncultivated nature. To quote Robert Schumann, perhaps the most ironic of Romantic composers, it is 'an art which lifts mankind above life, as above the sea; which, instead of engulfing and destroying us, mirrors us flying genii'.⁶³² Or, put differently: 'Through romantic irony the artist can strive to endure his critical position in a disrupted and finite world; through renunciation and revaluation he seeks a point of view outside himself and raises himself above the division that separates his individuality and the appearance of the world'.⁶³³

Whereas a piece like *Sinister Footwear* urges the listener to reflect on his or her subjectivity as a result of the encounter with an other, the *Piano*

⁶³⁰ J.D. Kramer. *Op cit.*

⁶³¹ H.J. Dill. "Romantic Irony in the Works of Robert Schumann", in *Musical Quarterly*, vol.73(2) 1989.

⁶³² Quoted from H.J. Dill. *Op cit.* This romantic irony can be found as early as the works of Haydn. See M.E. Bonds. "Haydn, Laurence Sterne, and the Origins of Musical Irony", in *Journal of the American Musicological Society*, vol.44(1) 1991.

⁶³³ R.M.Longyear. "Beethoven and Romantic Irony", in *The Creative World of Beethoven*. Ed. P.H. Lang. W.W. Norton and Company, Inc, New York 1970.

Introduction seems to treat the composing subject as self-made—at least as far as our narrative interpretation took us; however, there were a few crucial details at the end never accounted for, namely the instruction to cough and move buttocks so as to make the stool creak. These marginal details may seem to be but further instances of Romantic witticisms, but treating them as such would mean that we fail to pay attention to what they call into question. Whereas the failed closure of the open ending can be heard as a Romantic rejection of the artwork's organic nature (Kramer acknowledges that the notion of unity was weaker at the beginning of the nineteenth century as compared to the early twentieth), the cough and the moving of buttocks causing stool to creak is rather a comment upon this very irony.

What we have here is, I suggest, a postmodern irony of the *n*th degree that rejects any strong dichotomy between illusion and insight, between heteronomy and autonomy, nature and culture, *etc.* Although apparently modern in form, Zappa's *Piano Introduction* has a postmodern content (and in integrating these verbal comments into the piece as such, and not treating them as external embellishments, we see that the dichotomy between form and content also begins to waver). Moreover, in rejecting the dichotomy between closure and non-closure, between tension and relaxation, as it is conventionally codified, the *Piano Introduction* not only admits the otherness of the subject, it can also be heard as an ideological statement in favor of Zappa's endless guitar solos. Zappa's *Piano Introduction to Little House I Used to Live in* may thus be heard as a programmatic announcement for the orchestral pieces that were to come.

Chapter fifty-five

Project/object: the serious Zappa

The emotional and affective is eschewed by Romantic irony. As natural reactions they do not obey the rational principles of the autonomous subject. Zappa also showed a negative attitude on this issue:

If somebody decides that *he* is going to *write a song* then he is not making use of that material (time and those waves). He is *writing a song and spewing forth his inner feelings*, and I take a more objective view of art, and so consequently some people feel that that is not emotional, and other people who have a limited scope have a feeling that things that do not appeal to them on an emotional or glandular level are either not particularly suited to their taste, worthless, or don't exist at all, depending on how narrow their vision is.⁶³⁴

⁶³⁴ Quoted from P. Andersson and H.J. Hultberg. "Time and those Waves: Ett collage av texter och bilder om Frank Zappa", in *Embryo*, vol7/8 1979.

But here, instead of allowing for a Romantic interpretation—Zappa didn't care much about souls, subjective or otherwise; 'that's the Maharishi's department'⁶³⁵—he hints at what can be understood as a truly *metaphysical* vein in his work. This trait occurs for the first time in an untitled passage of *Lumpy Gravy*, cryptically stating that: 'Everything in the universe is made of one element which is a Note, a single Note. Atoms are really vibrations, you know, which are extensions of The Big Note. Everything is one note, everything, even the ponies. The Note, however, is the ultimate power. But, see, the pigs don't know that; the ponies don't know that...'⁶³⁶

Although this talk of pigs and ponies may seem to rule out any serious content of the utterance, Zappa claims this part as one of his personal favorites—'"Pigs and Ponies" really says what I wanted it to say'⁶³⁷ In the 1971 press release for *200 Motels* the subject is even elaborated into a little tract, by which we are asked to imagine the head of a pin:

On the head of this pin is an amazingly detailed illustration of some sort. It might be a little thought or a feeling or perhaps an obscure symbol... Now, imagine this pin is not a pin. It's a musical note with a corresponding physical action, like the secret raising of an eyebrow to add special emphasis. [This] *project/object* (maybe you like *event/organism* better) incorporates any available visual medium, consciousness of all participants (including audience), all perceptual deficiencies, God (as energy), The Big Note (as universal basic building material), and other things. We make a special art in an environment hostile to dreamers.⁶³⁸

With this talk of a Big Note emerges a picture of Zappa the Pythagorean cosmologist, where computer codes and rationalized thought take precedence over the bodily pleasure of aural stimulation. But although such a picture might seem far-fetched at first glance for anyone viewing Zappa as the cynical jester of serious music, it gains plausibility in the light of Zappa's withdrawal from the acoustic domains of music at the end of the 1980's. This is a withdrawal from the "human element" to the digital world of the Synclavier—to a world where everything is received as it is given, as pure "data." Just as Varèse gives up composition awaiting the development of the magnetic tape and the tape recorder, Zappa descends to his "secret laboratory" in order to become a "mad scientist," a Muffin man in the laboratory of the Utility Muffin Research Kitchen (as his studio was called).

And now we can see that the 'Anything, Any Time, Anywhere—for no Reason at All'⁶³⁹ takes on a rather different meaning than the previously suggested version of "anything goes" (although this latter connection simultaneously remains). In Zappa's view, 'time is an affliction'—all his music exists all the time, as one single Big Note (besides his family, he

⁶³⁵ T. Schneckloth. *Op cit.*

⁶³⁶ F. Zappa. *Lumpy Gravy*. Zappa Records CDZAP 14.

⁶³⁷ Quoted from J. Hopkins. *Op cit.*

⁶³⁸ F. Zappa. 1992 p.94f.

⁶³⁹ F. Zappa & P. Occhiogrosso. *Op cit*, p.163.

dedicated his autobiography to Steven Hawking). It contains still and on the same level his entire output and the individual material, his concerts as well as his printed scores and his commentary on society:

Rhythmically, if you're dividing the universe into twos and threes, which is basically what happens with all polyrhythmic subdivisions, you are to some degree missing the boat—the fractal boat. If you can think of rhythm as an extension of the fractal universe instead of even subdivisions of twos and threes grouped into elevens and thirteens or whatever, if you can think of microsecond relationships as being valid components of polyrhythms, then you're getting closer to the way I view things.⁶⁴⁰

Whether there are fractal relationships in Zappa's music is the task of a mathematician to confirm, although we have seen in the *Piano Introduction* how formal and numerical patterns recur at various levels of the score (if such relationships will be found, it will become possible to interpret Zappa's music as an expression of the fractal dimensions of the neural chaos that assumedly underlies our experiences of it).⁶⁴¹ Nevertheless, the rationalist/mysticist view manifested in the quote above is immediately challenged by a sudden surrender to "feeling." In commenting upon the proposal that Varèse, like Stravinsky, did not like emotion in music, Zappa could claim that it all 'depends on how you're going to use the word "emotion"':

I think that from a scientific standpoint the way that materials are put together you wouldn't think of it as an emotional procedure, but the materials have a very emotional impact when you hear them put together. And there are certain indications in the score that aren't just "play this loud, play this soft." There's one part in *Hyperprism* where the trombone player is instructed to say "ho ho ho" through his horn. That's not much of an emotion, but it's not exactly scientific either. And in either *Ameriques* or *Arcana* it has that little piccolo melody that's doubled with bells dancing along up on the top, and when he wrote that [his wife] told me that he would demonstrate it and whistle it and kind of dance around the room a little bit, and it was a cheerful thing—not all deadly serious in the sense that these are measured qualities being played against each other in order to yield this scientific result at the end of the piece. I mean, it's human music, and that's one of the reasons why I get such a good feeling from it—because it's not based on a mathematical formula ... he writes that stuff because it SOUNDS good.⁶⁴²

Here again we encounter a hedonist attitude: music as sensory pleasure, distancing Zappa from any metaphysical speculation—or is Zappa simply being ironic? Be that as it may, all these ideological inconsistencies are something that we shall have to live with (Zappa would not let himself be stuffed into any simple mold).⁶⁴³ Zappa was as serious about the humoristic dimensions of his work as he was ironic about his own

⁶⁴⁰ Quoted in D. Menn. *Op cit.*

⁶⁴¹ Cf. J.P. Crutchfield, *et al.* "Chaos", in *Scientific American*, vol.255(6) 1986; J.D. Kramer. *Op cit.*

⁶⁴² Quoted from J. Dilberto and K. Haas. "Frank Zappa on Edgar Varèse", in *Downbeat*, Nov. 1981.

⁶⁴³ F. Zappa & P. Occhiogrosso. *Op cit*, p.105f.

seriousness. As one journalist put it, 'You cannot take him seriously; you have to take him seriously: the dichotomy is the point'.⁶⁴⁴ In an age of "cynical reason," Zappa's thought is more like that of a cat among the poodles, the inconsistencies of which may serve to highlight the unfeasibility of any dogmatic and doctrinary views, including many of his own. As in Lyotard's work, 'we find not one philosophy but many talking to one another, held together without being unified';⁶⁴⁵ so also in Zappa's project/object (the *Weltgeist* connotations of the 'event/organism' incorporating 'any available medium' and the 'consciousness of all participants' is just one side of the prism). Although Zappa's writings and outspoken ideas hardly qualify as philosophical in any professional sense, his inconsistent thinking on various political and musical matters can be seen as being held together, without thereby being unified, by his music. According to Ashby, 'Zappa was a modernist cast in an Adornian mold [who] devised a compositional aesthetic that—to quote Adorno on Weill's settings of Brecht—"refuses positive solutions and contents itself with revealing the cracks in the social totality... without giving them the benefit (of the illusion) of aesthetic totality"'.⁶⁴⁶

Modernist, postmodernist, or Pythagorean mystic?⁶⁴⁷ What we can conclude is that just as Varèse started to compose again (after some twenty years), so did Zappa. And in his last project/object—*Civilization Phase III* (posthumously released in 1994)—Zappa continued what was begun with *Lumpy Gravy*, by picturing a surrealistic dystopia where the actors have taken refuge in a large grand piano, against the increasing number of fascist pigs and religious ponies. The outcome of the scenario is uncertain and ends, to the sounds of electronic music, with the following dialogue:

SPIDER: We can get our strength up by making some music.

JOHN: That's right. But the thing is, you know what?

SPIDER: What?

JOHN: We don't even understand our own music.

SPIDER: It doesn't, does it matter whether we understand it? At least it'll give us...strength

JOHN: I know but maybe we could get into it more if we understood it.

SPIDER: We'd get more strength from it if we understood it?

JOHN: Yeah.

SPIDER: No, I don't think so because—see I think, I think our strength comes from our uncertainty. If we understood it we'd be bored with it and then we couldn't gather any strength from it.

⁶⁴⁴ M. Oliver. "Bridging the gap. Is Zappa a serious composer?", in *The Independent*, April 22, 1988.

⁶⁴⁵ J. Rajchman. "Jean-François Lyotard's Underground Aesthetics", in *October*, vol.86 1998.

⁶⁴⁶ A. Ashby. *Op cit.*

⁶⁴⁷ Zappa's release of an album with trio-sonatas by his 18th-century namesake Francesco Zappa is less a sign of classicist values than it is a modernist anti-expression of the avant-garde potential of Zappa's own work. Cf. B. Watson. *Op cit*, p.433: 'Realized on the Synclavier in early-days chiming mode, this digital version of by-numbers baroque sounds like a musical chritmas card.' Postmodern irony, anyone?

JOHN: Like if we knew about our music one of us might talk and then that would be the end of that.⁶⁴⁸

⁶⁴⁸ F. Zappa. *Civilization, Phase III*. Zappa Records, CDZAP 56.