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EMERGENT MUSICAL FORMS:

AURAL EXPLORATIONS

Lasse Thoresen

With the assistance of Andreas Hedman

~~(e.g., listening to the patterns rather than identifying the cause of the sounds).~~

START =>

The discovery of and research into listening intentions are relatively new developments in music theory. The discovery was greatly aided by the invention of technological tools, such as the phonogram (any medium for the storing and play back of recorded sounds) and the loudspeaker. It was Pierre Schaeffer, the so-called 'father of musique concrète', who dealt in depth with this subject in his *Traité des objets musicaux*.

Schaeffer identified four basic listening intentions, here rendered in their original language (Figure 1.1).

IV. Comprendre	I. Écouter
III. Entendre	II. Oïr

Figure 1.1 The four basic listening intentions as proposed by Schaeffer

A literal translation of these French terms is not only hard, but also not the key to understanding them; even in French, they are in need of definitions beyond the everyday usage of the terms.² In order to avoid any confusion with regard to which listening intention is being referred to, we prefer to use the compound expressions presented below.

I. Écouter. *Indexical listening*: listeners are directing their attentions towards identifying the source of the sound they are hearing. The sound serves as an indexical sign that reveals its source. *Examples*: when hearing the sound of somebody striking a saucepan with a spoon, one notices that the stick used is not made of wood but of metal. Crossing the street, a 'vrooom' at one's side makes one aware of a car approaching at great speed. On the other side of a door, one recognises the voice of the person speaking inside. Listening to an orchestra, one identifies the characteristic timbre of an oboe.

² John Dack has translated Schaeffer's terms as follows: I. 'Listening', II. 'Perceiving', III. 'Hearing', IV. 'Comprehending'. See Dack and North 2009.

II. *Ouïr. Unfocused listening:* this is a passive and elementary form of listening, in which sounds reach the ear without being identified, understood or made the object of selective attention. Often, this is the background listening involved when one only registers the sound environment while focusing on another sound. *Examples:* while sitting in a restaurant conversing with somebody, one registers, hardly without noticing it, the sounds from the kitchen. The following exercise can induce a mental state in which unfocused listening prevails: close the eyes and listen to sounds all around. Decide not to identify causes (indexical listening); decide to hear all the sounds from all directions at once and without priority. Never keep on following one sound if another catches the attention. Hear music only as sound, speech only as sound.

III. *Entendre. Selective listening:* the listener selects and sticks to one particular strand of sound, often seeking to match it against a pre-existing notion or category. *Examples:* the guests of the restaurant are capable of following the conversation of somebody in a noisy room without becoming distracted by the other conversations or kitchen noise. Later, they select the rhythm of the music played on the saucepans, disregarding the tools with which they are produced. Moreover, an experienced listener will hear the pitches, chords and rhythms played by the classical guitar soloist and disregard the scratching sounds the player is making when moving his left hand up and down the strings. In order to learn a foreign language, it may be necessary to adjust one's habits of selective listening in order to distinguish sound nuances that are necessary for understanding it.

IV. *Comprendre. Comprehension-oriented listening:* here the emphasis is on the meaning of a discourse, through the sounds supporting it. The sound is treated as the signifier in a sign, or a key element in a code. The point is not to listen to the sounds themselves, but to the meaning they convey. *Examples:* in reference to our introductory anecdote again, the improvising cook drums a well-known dance rhythm, recognised by the guests. When listening to a foreign speaker speaking one's own language with a strange accent, the temptation is to focus on the sounds, but in order to comprehend the message one has to focus on *what* is being said, the latter listening intention being comprehension-oriented listening. When a children's orchestra is playing false unisons, the melody and the harmonies are recognisable nonetheless.

MUSIC THEORY BY EAR

The numbered squares in which the listening intentions are entered are ordered according to two coordinates: one is Abstract-Concrete; the other is Subjective-Objective (Figure 1.2).

Abstract	Concrete	
IV. Comprehension-oriented listening	I. Indexical listening	Objective
III. Selective listening	II. Unfocused listening	Subjective

Figure 1.2 Listening intentions

Indexical listening (I) is concrete in an objective way because it seeks the concrete, manifest source of the sound. Unfocused listening (II) is concrete and subjective because while it hears the raw sound in a concrete way, it is not concerned with the objective correlate of the sounds, only their subjective appearance. (III) and (IV) are called abstract since they direct the attention towards only parts of the sound (III) or towards non-manifest, symbolic meaning (IV). Selective listening (III) is abstract because we are literally extracting information out of a greater amount of events and subjective because it does not imply the establishment of an objective correlate beyond focus on the sound. Comprehension-oriented listening (IV) is objective and abstract; objective because again it goes beyond the sound to an external object, and abstract because it rests on the understanding of code and a selection of pertinent features of the sound.³

It is possible to add several more precise characteristics to the basic listening intentions presented; among the additions are the listening modes *ordinary/specialised* (Chion 1983: 29; Schaeffer 1966: 127). The *ordinary listening* jumps directly to the cause of the sound

³ 'Whether we're talking about subjective listening, or values and knowledge emerging collectively, the whole idea in 3 and 4 is to strip down, and consists in retaining from the object only qualities which will allow it to be related to others, or to be referred to meaningful systems. On the contrary, in 1 and 2, whether we're talking about every potential for perception in the sound-object, or every cause reference in the event, listening [*l'écoute*] turns towards a given in the real world, inexhaustible as such, even though specific' (Schaeffer 1966: 119). For the whole summary, see Chion (1983: 25-26).

(I) and to its meaning (IV), without questioning the validity or function of such an interpretation. The *specialised listening* goes in one particular direction, often determined by professional interest. For instance, ordinary listening hears music coming from the loud-speakers, whereas the sound engineer only listens to the level of the background noise of the recording (thus a specialised (I)).

1.2.2. The constitution of the sound-object through reductive listening

Yet another listening intention can be found in Pierre Schaeffer's theory, namely *reductive listening* (*l'écoute réduite*); it attains a very special position in his project. It may be thought of as a further extension of unfocused listening (II) and of selective listening (III). Reductive listening is essentially non-interpretive, but certainly focused. It is the listening intention by which the sound-object is constituted. It is characterised by *the intention to hear the sound simply as a sound*. This means putting between 'brackets' (i.e., marking as not for consideration, or not to be attended to) both the indexical associations of the sound (ideas about the sound source) and its traditional position in pre-existing musical languages (e.g., its position in a musical scale), and in addition refraining from any other interpretation of a symbolic or semantic nature. Michel Chion summarises Schaeffer's definition succinctly:⁴

Reduced [*reductive*] listening⁵ is the listening attitude which consists in listening to the sound *for its own sake*, as a *sound object*, by removing its real or supposed source and the meaning it may convey. More precisely, it reverses the twofold curiosity about causes and meaning (which treats sound as an intermediary allowing us to pursue other objects) and turns it back on to the sound itself. (Chion 1983: 33)

Applying this listening intention to a sound is what constitutes the sound-object:

⁴ Unless otherwise stated, all translations from Schaeffer and Chion from the French have been contributed by John Dack. See Dack and North 2009.

⁵ We have chosen to translate the Schaefferian term '*écoute réduite*' as '*reductive listening*' rather than '*reduced listening*' (as proposed, by John Dack: Dack and North 2009). The former seems more appropriate for describing a constitutive act on the part of listener and precludes associations in the direction of reduced hearing capacity.

MUSIC THEORY BY EAR

The name sound object refers to every sound phenomenon and event perceived as a whole, a coherent entity, and heard by means of *reduced [reductive] listening*, which targets it for itself, independently of its origin or its meaning.

The sound object is defined as the correlate of *reduced [reductive] listening*: it does not exist 'in Itself' but by means of a specific foundational intention. It is a sound unit perceived in its material, its particular texture, its own qualities and perceptual dimensions. On the other hand, it is a perception of a totality which remains identical through different hearings; an organised unit which can be compared to a 'gestalt' in the psychology of form. (Chion 1983: 34)

The study of the sound-object is greatly enhanced if, in addition to mastering this shift of intention that constitutes it, one isolates the object physically from its context, and repeats it over and over. Understandably, therefore, the use of electronic and digital recording equipment can facilitate the development of this listening intention. However, reductive listening has admittedly got something unnatural about it: musical sounds are almost always vehicles for something else when presented in their usual context, whereas when sounds are turned into sound-objects by a change of our listening intention, they are considered for their own sake. The reductive listening is a voluntary and somehow artificial act; its importance, however, lies in the fact that it enables us to elucidate a great number of phenomena that otherwise only would remain implicit, and for the most part unnoticed, in the musical experience.⁶

This intensive study of the sound as such—out of context—opens a new and sometimes confusing world for the observer: a simple sound, one that we used to consider simply as the pitch 'la', on closer scrutiny turns out to be a concrete object incredibly rich in inner articulations.⁷ The following example could serve as an illustration of this almost bewildering diversity that the sound-object may reveal.

A piano tone is played repeatedly in the upper register, struck *forte* and with pedal. With careful listening, a whole number of sonic phenomena begin to appear. There is of course a perception of the pitch, but this is only one among several aspects of the sound: for example, there is also a short sound in the moment of the attack that has no pitch at all (it is evidently caused by the wooden key hitting the frame of the instrument; however, this way

⁶ See Chion (1983: 33).

⁷ See Godøy (2006: 149–57).

of describing it would refer to the cause and possibly distract from the reductive listening intention). Moreover, there is a surging resonance that gives rise to a complex sound without any definite pitch; in addition, this sound aspect has a kind of fluctuation. The sound has a sharp attack and the pitch is present instantaneously and the latter fades away relatively quickly. The complex resonance enters after the attack, but lasts longer. The whole sound has the profile of a diminuendo. Now, hardly any of these qualities would have been noticed in a normal use of the sound in a traditional musical context. But the sound-object itself now turns out to be a whole with a number of more detailed, constituent parts.

We see that the context—the organisation of the sound into a pattern—may favour the selection of one dominant feature of the sound, such as the pitch, by means of consistent variations within this feature. However, when the sound is isolated from its usual context and studied with reductive listening, a number of other features inherent in the sound emerge. One can easily imagine that these are features that potentially could be exploited musically in the sense that other features might be varied in the musical context, and so be given precedence. It may even be that other cultures have selected such features of the sound and used them for their purposes. Thus, reductive listening brings us to a point zero of the musical experience; we are at a point of origin whence we could conceive of several alternative kinds of music.

To sum up, the sound-object is at the meeting point between a physical sound event and a listening intention (Schaeffer 1966: 271). The term should therefore not be taken to refer to the sound source, the physical signal (an energetic item such as variations in air pressure, oscillation of voltages in a circuit—all of which have no sound at all), its support as a registered entity (i.e., its support in terms of a recording tape, sample medium etc.), or its notation in a score. It is on the other hand not a state of mind or a phantasm; there is a physical, acoustic stimulus there to perceive (Chion 1983: 34; Schaeffer 1966: 95-97).

Mastering the intentionality of open reductive listening is a first step that leads to careful observation of the different attributes of the sound as such. Evidently, this has not been the priority of the traditional terminology of Western music theory. Pierre Schaeffer developed such a conceptual approach to sound; this will be a subject for discussion in Part IV below.