Listening to music – with professional ears

A study of orchestral musicians' ways of listening

Inger Elise Reitan

Abstract

The training of listening skills in higher music education is a central part of the aural training discipline, often called aural analysis or structural hearing. Listening here refers to active, conscious attention paid to the music and its elements through the combination of perceptual and cognitive skills, and understanding. Theories about listening suggest various categories and types of listeners and of listening, mainly along the analytical-emotional spectrum. How do professional musicians react when actively listening to music? What is typical in their ways of listening? What are the links between listening and academic aural analysis? In this study, I interviewed eight professional musicians, seven orchestral musicians and one orchestral conductor, focusing on their ways of listening to music and how this might be related to their profession. As a starting point for the interview, an excerpt from an orchestral piece unknown to the participants was played, which evoked a great variety of reactions, both emotional and analytical. The most typical and dominant way of listening was critical listening, a professional way of listening, valuing the quality of the performance and the performers' ability. Academic aural training listening was also evident, but to a smaller degree. They also reported that the frequency of their deliberate music listening was strongly reduced, both in live concerts and listening without any purpose, and the importance of silence was strongly emphasized.

Keywords: expert listener, analytical-, emotional- and critical listening, valuing, aural training, aural analysis

1. Background

Listening to music is a normal human activity. It is also a very private activity in the sense that what is perceived and how people are affected, either emotionally or intellectually, are not observable to other people. In higher music education listening to music is involved in many disciplines, including instrumental and performing disciplines. But the development of *listening skills* is especially, and logically, important in aural training. This article deals with professional musicians' ways of listening. There is reason to believe that they, as *expert listeners*, possess a particular focus and skills that characterize their listening, as well as attitudes towards music listening in general, as a consequence of their education and professional musical practice. The main research question guiding this article is:

How do professional orchestral musicians listen to music?

I will discuss the findings of this question in relation to aural (ear) training in higher music education.

The concept of listening in this context refers to an active approach towards music, not everyday, passive listening situations where people are exposed to music in their surroundings. Professional instrumentalists must frequently listen to music, particularly their own playing, either alone or when rehearsing with an orchestra or ensemble. How has this practice affected them as listeners over the years? This study aims to provide insight into some typical tendencies of how musicians act and react to music.

Since listening to music is an abstract mental activity, the study of how people listen to music represents some methodological problems. Eric Clarke (2005:193) suggests several reasons for what he calls "a lack of open-ended and wide-ranging studies in how people listen", such as: the possible arbitrariness in choosing musical examples, differences in people's capacity to express in language what they hear, the inaccessibility of unconscious components of listening, the more or less artificial situations of people's usual listening habits, and also people's own assumptions about what they imagine they "should" be hearing. Despite the challenges of studying the listening experience, one previous study was conducted by Sloboda (1991), who examined the emotional responses of adult listeners to musical structures through the use of a questionnaire. He found that certain musical passages evoked physical reactions like shivers and tears. In my study, I will gain empirical data through the use of qualitative interviews with orchestral musicians and ask them about their experiences as professional listeners. I will return to this below in the methodology section.

For all the lack of studies of how people listen, there are many books written with the aim of *teaching* people how to listen, with titles like *What to Listen for in Music* (Copland 1957/1939), *Teaching Music Appreciation through Listening Skill Training* (Thomas 1972) and *Aural Awareness: Principles and Practice* (Pratt 2005). The pedagogical motivation for these books is the development of skills focusing on several aspects of the musical works, often with the involvement of music theory, or to develop music appreciation through knowledge and listening techniques. Eric F. Clarke (2005:5), in *Ways of Listening*, has another approach: "[...] to discuss listening to music as the continuous awareness of meaning, by considering musical materials in relation to perceptual capacities." He builds his theory upon James Gibson's ecological perceptual theory about the relationship between the perceiver and his or her environment, here connected to music listening, also called *affordance*: "affordances are the product both of objective properties and the capacities and needs of the organism that encounter them (Clarke 2005:37).

At the Norwegian Academy of Music (NAM), aural training focuses on the development of listening as a *skill*, as described in the curriculum (2012) of the bachelor degree program. One of the key aims of aural training is

[...] to strengthen the ability to active listening to music, and to develop skills to be able to perceive, memorize, structure and reproduce (by singing, playing, describing, or writing) both details and more general structures in music.¹

This kind of active listening is often called *aural analysis*, where the focus is on musical structures and the search for patterns, with a close relation to music theory and musical vocabulary and terminology. In the program for instrumental training, by contrast, listening is only mentioned as an additional activity to the regular individual lessons. The students are supposed to engage in "self-tuition comprising practicing, listening and literature studies". This rather vague formulation is not explicitly connected to listening skills in relation to the instrument.

The aim in my study is to link aural training to musical performance. McNeil (2000) executed a study of the link between aural skills and performing musicians, with regard to the British assessment testing system (ABRSM)². She found that teachers and pupils are unaware of the relationship between aural skills, as defined in the tests, and the skills used in performance. But when the interviewees became aware

¹ My translation

 $^{2\}quad Associated\ Board\ of\ The\ Royal\ Schools\ of\ Music.\ This\ kind\ of\ testing\ system\ is\ not\ used\ in\ higher\ music\ education\ in\ Norway.$

of a wider definition of aural skills than the skills included in the assessment tests, they found aural skills more relevant in connection with performance. Her study is an interesting contribution to the discussion about transference of subjects in higher music education.

This article is the first part of a three-part study covering the following issues:

- 1. Orchestral musicians' ways of listening
- 2. Orchestral musicians' use of "inner hearing" as a tool in their profession
- 3. Aural training in education and its relation to orchestral practice

This study has been approved by the Norwegian Social Science Data Services (NSD). I also want to thank the participants who offered me their time and expertise.

2. Theories, concepts and definitions

In this section, I will present some theories, concepts and definitions about listening, as well as relevant pedagogical and educational aspects connected to aural training.

2.1 Listening and listener

There are many theories or concepts connected to music listening, be it definitions of *types of listeners* or *ways of listening*. Huron (2001) presents twenty-one different listening styles and strategies in a conference paper, while others mainly suggest between two to four categories. Generally speaking, music psychologist Mursell stated in 1937 that:

It is a basic error to suppose that we ever have a response to all aspects of the music, or that it is always and for all persons substantially the same thing. On the contrary there are many types of listening (1971/1937:201).

He also stated that the focus will fluctuate depending on the listening situation, and that one way of listening is not more legitimate than another.

Listening is often categorised by the dichotomy between *analytical* and *emotional*. For example, the focus may be on the musical material and structures, as described in the NAM curriculum, or listening may have a more personal or emotional orientation.

It is also influenced by one's background, attitudes, experience, education, personality and mood.

Mursell, as many theorists after him, distinguishes between *hearing*, a passive attitude, and *listening*, an active attitude. He also suggests that listeners may be classified as *intellectual*, *emotional* or *motor types*, but concludes that instead of talking about types of listeners, he prefers to investigate different *types of listening*. He names four (1971/1939:218): 1) the *objective* attitude, with attention to the musical material, 2) the *intra-subjective* attitude, with an emotional or personal focus, 3) the *character* attitude, with attention to what the music expresses, and 4) the *associative* attitude, where the music evokes pictures or stories.

The composer Aaron Copland (1957/1939:18) suggests three planes of listening: the sensuous plane, which corresponds to a kind of listening for pleasure, without thinking or considering; the *expressive plane*, listening to what the music expresses; and the musical plane, listening to the musical material itself. He also claims that we may listen on all three planes at the same time and that this is an instinctive matter, without any mental effort. According to him, the ideal listener should be both inside and outside the music when listening. Copland, like Mursell, also speaks of the intelligent listener, who listens with an increased awareness to the musical material. Thus he also demonstrates that there might be a hierarchy in the way we listen, unlike Mursell. Sloboda (1985/1996:152) also uses the concept of intelligent listening, and distinguishes between cognitive and emotional listening (ibid.:2). The concepts intelligent, cognitive, analytical, or objective listening might symbolise more or less the same type of listening with a focus on the musical material. On the other hand, emotional, associative and expressive listening are more vague in the sense that they can mean either what the music expresses or what kind of emotions the music evokes in the listener. Both of these aspects involve personal, subjective reactions and experiences.

As mentioned above, there is an important distinction between passive, everyday listening, or hearing, and active listening. Lehmann et al. (2007:212) call everyday listening *holistic* listening, opposed to the more analytical *professional* listening: "Some persons in our society have trained particular listening skills to a level necessary to function professionally as performers, composers, conductors, music critics or sound engineers." Lehmann et al. also speak of the *expert listener* (ibid.:11), described as a person

[...] who can consciously follow the harmonic progression in a piece, identify the performer, or single out every instrument from a complex sound – and still feel the joy of listening. We believe that knowledge and understanding do not preclude amazement, surprise and admiration.

This description suggests that active professional listening thus presupposes knowledge, and that this knowledge also can evoke emotions.

The psychologist Wellek (1963:33) describes two dimensions in music: the *linear* and the *cyclic*. The linear dimension includes the horizontal or melodic lines in the music, while the cyclic dimension describes the harmonic or vertical aspects. These two dimensions are relevant for the two types of musicians in my study: the instrumental orchestral musicians reading and playing one horizontal staff, and the conductor reading and listening to scores and vertical harmonies.

In this article, I will mainly focus on *ways of listening*, but also involve some elements of *types of listeners*, as my empirical material is based on professional musicians as expert listeners. In this sense the professional musician is an active listener—conscious, reflective and attentive to music.

2.2 Knowledge and skill

In the NAM curriculum of aural training, one of the aims is to develop listening skills. I will present some theories of skill and knowledge relevant for listening. Swanwick (1994:15-19) presents various levels of knowledge and claims that it is multi-layered: from *factual knowledge* ('knowing that') to first-hand knowledge or *acquaintance knowledge*, which is characterized by being deeply personal and subjective, obtained from an accumulation of previous musical experience. The latter can be tacit, unanalyzed and unarticulated. The deepest level of knowing (knowing what's what) Swanwick calls *attitudinal knowledge*, a personal knowledge gained through experience that also contains an aspect of *value* or *valuing*.

In Norwegian pedagogical literature, Hanken & Johansen (1998:185) present a definition of knowledge connected to music, comprising *theoretical knowledge*, *practical skills and attitudes*, not unlike Swanwick's categories. Theoretical knowledge includes aspects such as knowledge of musical style, repertoire and music theory. Practical skills include the ability to play an instrument and aural skills in identifying musical elements while reading and listening to music. Attitudes are more connected to highly specialised expertise in judging and valuing music and musical performance.

As for *skill*, Dreyfus (1998) operates with five levels in the development of skills, from the *novice*, who requires a lot of theory and thinking to be able to perform a task, to the *advanced beginner*, the *competent performer*, the *proficient performer*, and the *expert*. About the two last categories, he says:

The *proficient performer* [...] sees what needs to be done, but *decides* how to do it. The *expert* not only sees what needs to be achieved: thanks to a

vast repertoire of situational discriminations he sees how to achieve his goal. [...] This allows the immediate intuitive situational response that is characteristic of expertise.

This means that the expert performer has developed skills to such a degree that it is integrated into his or her body. The professional musician fits into the expert category, in terms of playing and performing in an orchestra, and also in terms of professional listening.

2.3 Aural training

The academic discipline of aural training is a natural part of any music study program. There might be differences in the name of the subject – aural training, ear training or aural-skills – and the content may vary according to national or international traditions. The Danish scholar Frede Nielsen (1998:320) defines aural training as:

[...] an old discipline in music training. Its aim is the training of aural awareness, especially concerning musical structures – first and foremost those connected to melody, rhythm and harmony – perhaps also to musical form. According to the development of aural awareness the aim is to establish verbal categories, a fundamental musical language of musical terminology. This means that the aural training discipline becomes an integrated part of the musical craftsmanship.³

This definition is echoed in the NAM curriculum, which stresses the key words 'listening', 'musical structures' and 'verbal categories'.

2.4 Analysis and identification

Pratt (1990:8) writes, with reference to British music education, that "(...) once music is perceived, musicians need to be able to analyse and identify the elements within it". He means that conventional aural training is concerned with analysis and identification of pitches and duration, while other important parameters of the music are often neglected. It seems that Pratt uses *analyse* and *identify* as synonyms. Swanwick (1994:12) also has a rather open definition of analysis: "drawing attention to certain features of music is inevitably a form of analysis." Thus analysis is a way of separating

³ My translation

elements, for instance musical structures, and can be a part of aural analysis. In an analysis, you name the elements in various ways, be it in an everyday language or in professional musical terminology. In my own understanding, there is a difference in the meaning of the two concepts. 'Identification' in my own understanding is connected more to the surface of the music, as factual knowledge (e.g. "this is a dominant seventh chord, this is an oboe playing"), while analysis goes deeper and more systematically into the music to see connections among the elements, aiming at synthesis and meaning (Clarke 2005:5).

3. Method

This is a qualitative study based on interviews. The choice of method is due to reasons already mentioned: listening is an abstract and mental activity, but to some degree it is also a very personal matter. Thus the best approach in my opinion is to ask musicians to speak about their ways of listening and obtain empirical information through the interviews, based on grounded theory (Kvale 2008). I constructed an interview guide with some main themes (listening, inner hearing, aural training education) and used this as a basis for the three-part interview. In the analysis of the empirical material, I developed several categories that I found useful for the presentation of the findings and relevant for the final discussion.

The participants include eight musicians: seven musicians from three different professional symphony orchestras in Oslo, three women and four men. In addition, one male conductor was included. The orchestral musicians represent different instrumental groups and registers: two string players (viola and cello), two woodwind players (oboe and clarinet), and three brass players (trumpet, trombone and tuba). Except the conductor, the participants are all linear musicians, or 'single staff musicians', as they normally see, read and play one staff or musical line, though they are part of a complex auditory surrounding. The conductor has a broader focus, representing both the horizontal and vertical dimensions, reading complex orchestral scores while listening and balancing the whole orchestral machinery. As a consequence, he will also probably listen more consciously to the harmonic and cyclical aspects of the music than the linear musicians.

All of the musicians received higher music education, varying from 2-7 years, their average age at time was 41, their length of orchestral practice was from 8-32 years, and none of them had 'absolute pitch'. None of them were my former students, which may better guarantee a more neutral or objective relation to the researcher. In the

invitation, I made clear that I would not test their aural skills; instead I told them my interest lay in how they listen and in what catches their attention.

The individual interview session took place in my office at NAM, lasted between 45 and 60 minutes, and consisted of the three issues mentioned above (listening, inner hearing and aural training education). As a starting point, I played a three-minute excerpt from an orchestral work, a symphony movement by Erich Korngold.⁴ My intention was to play music I assumed was unknown to them. The composer is Austrian, but lived many years in America where he mainly worked as a film composer. The music is lively, colourful and very rhythmic.

The music was played twice with some discussion between and after the playing. The reason for the second exposure of the music was that I assumed during first playing their attention would mainly be drawn to the surface of the music, while a second playing would reveal more details or confirm the first impressions. The interviews were taped and transcribed. They were held in Norwegian, and I have translated certain quotations into English for this article.

4. Findings

The responses to the listening process, based on the actual music excerpt, represent a variety of ways of listening. I have organized the data into six categories. Below, I also include comments from the respondents concerning how they listen in general, not only to the actual piece of music.

4.1 Identification of the music

After playing the musical excerpt, the conversation was quite open with no direct questions concerning descriptions of the music. I told them that my first aim was to understand how they listened and what caught their attention while listening to a new piece of music. As the music was unfamiliar to them, every one had an immediate and spontaneous interest in identifying the music, either by composer, period or nationality. They suggested composers such as Shostakovich, Prokofiev, Stravinsky, Rosenberg and Britten. Some of them characterized the music as neoclassical. For some, this meant

⁴ http://norgesmh.naxosmusiclibrary.com/catalogue/item.asp?cid=PTC5186373 Erich Korngold (1897-1957): Symphony in F#, op. 40, from 4. movement: Finale, allegro gaio. Excerpt: ca. 3 minutes. München Philharmonic Orchestra. Conductor Rudolf Kempe (1910-1976).

that it sounded Russian, American or Nordic. There was also some reasoning about what it may not be, for instance Brahms or Stravinsky, as a method of elimination.

4.1.1 Reflections

This process of identification was obviously very important to them. Since none of them had played or conducted the music before, they felt a need to find out what it was. No one recognised the excerpt, which did not surprise me. But as they all are very experienced musicians with a wide knowledge of orchestral repertoire, their guesses were not random, but educated and qualified. One brass musician said that it sounded like Stravinsky, but because of the harmonies it had to be American music, without any further reasoning or explanation of what he meant by that. One woodwind player said: "I always try to find the composer first, and recognize his signature in the music." Although the composer was not identified, the suggestions were close to the right answer, as they all recognized the period; some of them also correctly guessed the nationality, namely American.

How is it possible to recognise musical style or a composer's signature? It is not possible to recognise signature based on factual knowledge alone. It is rather a result of knowledge learned through experience, or first-hand *acquaintance* knowledge (Swanwick 1994). Recognition of signature can also be considered *intuitive*, *tacit* and *unanalysed* knowledge.

4.2 Character

Along with the attempts to identify the music there were many descriptive characteristics of the music. This was part of the open format of the beginning of the interview, as they were not directly asked to characterize or describe the music.

Some characteristics were adjectives and descriptions in *everyday language* describing the mood or atmosphere of the music. The following words were used: exciting, lively, sparkling, fun to listen to, energetic, very catchy, humoristic, nice, warm, and a kind of 'easy-listening' music. Other descriptions were in *professional musical terminology*: programmatic music, symphonic dance or ballet music à la *A Midsummer Night's Dream*. A third way of characterizing the music was through *extra musical* or *visual descriptions*: it sounded like music from a cartoon, like film music, maybe from a Nordic film like *Olsen-banden*⁵. One of them said: "I get pretty visual associations. I imagine something like Cinderella ballet in a castle..." Another participant described

⁵ Originally a Danish comedy film by the same name.

it as "a dialogue between the instruments as different roles or characters in a theatre". Some even commented that they would like to play or conduct the piece.

4.2.1 Reflections

In sum, all of the characteristics were positive. All participants *valued* the music as good and enjoyable to listen to, and it evoked many colourful associations. There was certainly something in the music that gave them quite vivid pictures. Even if their way of expressing the character of the piece was different, they all shared common positive reactions. In terms of listening theory, they demonstrated both a *character attitude* and an *associative attitude*, (Mursell 1971/1937), or they listened on the *expressive plane* (Copland 1957/1939). This way of listening is more emotional than analytical, although some used music terminology in their characterization.

One musician mentioned that he always was searching for strong emotional reactions like 'shiverings' while listening to music. He also referred to 'peak experiences' (Lehmann et al. 2007:46) he had as a child that had a great impact on him. If he did not get such strong emotions, he would probably lose interest in the music he was listening to. A general impression from the musicians was that emotional listening was difficult because of their professional relation towards music.

4.3 Analytical and objective descriptions

As expected, the musicians described the musical material or elements in a more analytical or objective way, mainly through the use of musical terminology. The specific elements focused on were aspects of instrumentation and articulation, the different instruments in the orchestra, who played the themes, how the bass was played with pizzicato and had a special rhythmic function, how the flute gave colour to other instruments, and how there was some tempo variation.

4.3.1 Reflections

Due to the special listening situation I did not ask them or expect them to analyse the music. In any case, there were many comments on separate elements of the music, whether we call it analysis or identification. In this category there was an obvious difference between the instrumental musicians and the conductor. The conductor gave a very detailed description of the instrumentation and also of the technical aspects of the playing. He could quickly tell that there were attacks in the strings, whether the strings played in unison or in octaves, that there were parallel movements, that the

music was tonal, had playful harmonies and a clear linearity. According to him, the whole orchestra was "a traditional orchestra, not 2,2,2 with piccolo and e-flat clarinets, only four French horns, only 2 trumpets, no trombones yet, no special percussion, only xylophone". Obviously, the conductor had an overall perception of the whole orchestra, where he could identify and describe many details in the instrumentation as well as the global picture. He perceived the *cyclic dimension* of the music (Wellek 1963), a result of his professional experience as leader of large orchestras.

Only the conductor mentioned the harmonic aspect of the music. Some musicians also told that they never listened analytically to the harmonies in music, because harmony was a rather intuitive matter. One explicitly said that she had a very unconscious relation to harmony and chords, and associated that aspect of the music more with pictures and moods. The obvious explanation here is that the natural focus for musicians is on the *linear dimension* of the music (Wellek 1963), although they are part of a complex harmonic sound and intuitively find their place within the chords and harmonies when playing in an orchestra.

4.4 Attention to and awareness of one's own instrument

One of my questions in the interview was *if* and *how* their listening was influenced by their own instrument, both in the actual listening sequence and in general. Did they have a special focus on their own instrument in the orchestral sound? They all had comments on this question, particularly regarding whether or not their instrument was aurally or physically present in the piece. A general comment was that they were extra sensitive and attentive to their own instrument in any listening situation.

"I am drawn to the oboe; my ear is used to that", commented the oboist. The trombone player could not hear his instrument in this excerpt, "or maybe it was hidden in a chord?" But he said that he was always aware of the trombone in the music. Since he knew almost 'the whole orchestral repertoire' from his own playing, he also knew how it should be played and in listening this was always in focus. He speculated that this was very common for all musicians.

The tuba player was always focused on the lower range of the music. But he also mentioned that his listening had changed over time. Now, often sitting in the orchestra with many multi-bar rests, he had time to listen to the orchestra while he was not playing, so he tried to listen to the whole music, not just the bass line.

4.4.1 Reflections

In sum, attention to one's own instrument is highly present when listening to music, whether to well known or unknown pieces. This is a kind of selective listening and might be explained by the musicians' intimate aural, physical and emotional connection to the instrument obtained through years of practice and involvement. Thus personal knowledge (Swanwick 1994) is highly integrated in the musicians' professional expertise. They also express their attitudinal knowledge by *valuing* their fellow instrumentalists' playing, as expressed by the clarinetist. He told me that he always listened with a special focus on the clarinetist's sound or tone colour, which had changed and developed over the years: "Earlier, I could hear where the clarinetist came from. Now they sound more or less the same. [...] Some think that's fine [...], but I think it is fine when there are different schools and traditions. It has to do with the cultures." In the next section I will comment further on valuing.

4.5 Orchestral quality and performance

Participants also commented and evaluated the *quality* of the orchestra and of the performance, most often with particular attention paid to one's own instrument. Some of them also judged the quality of the recording of the excerpt. The judgments were both positive and negative.

Some of the positive aspects related to the sound quality of the instruments. Though the music was challenging to play, the instruments sounded good together and the performance was technically proficient, as was the timing or rhythmical precision. The musical details were also considered to be performed well, with clarity, energy and virtuosity. The recording was largely judged to be good, and, as one said if it was not, "it would have annoyed me". One claimed that it was even brilliantly played, with a great deal of humour.

Some musicians did not share this positivity: "I was irritated that it was so imprecise, the trumpets were too late, and there was bad intonation in the wood winds, terribly imprecise in the strings, not quite good intonation in some upper parts of the strings." The oboist commented on the poor sound quality of the oboe in this recording, specifying that it was too bright and sharp, and that he preferred another sound.

4.5.1 Reflections

Obviously there were differing opinions about the performance. Although the majority were positive, others judged it negatively. In this category of evaluation, *critical*

listening is dominant, as when they reported how they listen in general. One said that he always listened critically to his own instrument and reflected upon whether he would be able to perform better than his 'colleague'. Another listened very analytically to the orchestra, and especially to his own instrument, the trumpet. Critical listening was thus very much connected to their profession, as instrumentalists, orchestral musicians and conductor.

4.6 Analytical versus emotional listeners

The central issue in this study is orchestral musicians' listening practices. In asking how they would define themselves as listeners, I gave them two options: emotional or analytical? Three of them, two female string players and one male wind player, defined themselves as emotional listeners. One of the string players said that she had a very emotional approach to music and searched for expression, so her listening was not primarily founded in intellectual analysis. The other five musicians described themselves as analytical listeners. All of them described how their listening practice had changed since they were younger, when they enjoyed listening to music; now as professionals, listening for them is much more demanding and analytical. One brass musician mentioned that he often listened to music, not to enjoy the music, but to learn, either "ways of doing things or new repertoire". Another brass musician said almost the same thing, that his listening always had a purpose. As a consequence, the musicians seldom deliberately listened for pure enjoyment, and if they did they usually listened to music far from their own repertoire. Some of them listened to jazz, some listened to chamber music, e.g. to Haydn or Mozart. Some avoided music with their own instrument. The conductor called himself a 'technical' listener and had to be careful not to tell others how they should listen. In addition, he said that he always analysed the music, either by studying the score or listening deeply to the performance. Another reason for reduced frequency of listening was the need for silence. As one participant said: "I do not sit down to enjoy music. After four hours of orchestral rehearsal on a stage, my brain needs silence." Another musician even claimed that silence was just as important as music.

4.6.1 Reflections

This sequence raises the following question: what is analytical listening? My own pre-understanding of the dichotomies 'analytical' and 'emotional' was founded in my own pedagogical profession of aural training, where analysis is an integral part, for instance in analysing harmonies and chords. In aural analysis, the aim is to listen

actively, searching for patterns and musical elements and structures, and verbalizing them. In this study, 'aural analysis listening' was not the most typical category, even though some defined themselves as analytical and offered analytical comments. The interviews revealed another meaning of 'analytical', namely the meaning of *critical* listening or a critical attitude. To conclude: the professional musician as an expert listener is critically listening to the musical performance rather to the music itself.

Furthermore, the participants told me that critical listening also impeded the enjoyment of emotional listening to music in general. This fact shows a rather weak correspondence to Lehmann et al. (2007:212) in the assertion that the expert listener can identify and analyse many aspects of the music "and still feel the joy of listening." In my study, it seems that knowledge and understanding might be a negative factor in terms of the enjoyment of music listening. On the other hand, the musicians have developed a highly specialized way of listening, which is crucial to functioning professionally as performers. The main focus in this listening is to *evaluate* the performance. For many musicians, intonation and precision has the highest priority, but it may also include aspects like sound quality, interpretation, phrasing, and the technical standards of the musician. Said one musician: "Always, while listening to music, I am strongly involved in noticing things that are not okay, and this destroys the joy of listening."

4.7 Summary of the listening sequence

The point of departure for the interview about ways of listening was an excerpt from an orchestral work. The six chosen categories above give a varied picture of how the musicians reacted. In their listening, they demonstrate a high degree of skill and competence: to identify the style of the music, to characterize the musical expression, to recognize musical structures and to evaluate the performance. In addition, they have a special focus on their own instrument. All these listening categories are dependent upon learning and experience, and thus represent both factual knowledge and acquaintance knowledge (Swanwick 1994), due naturally to their long-term involvement in music. The dominating mode of listening was *critical listening*, with a high degree of *judgment* and *valuing*. They evaluate the musical performance; they have learned a way of listening throughout their professional life as highly skilled instrumentalists and orchestral musicians where there is a constant focus on quality and perfection. But professional critical listening has certainly influenced them negatively in terms of listening for pure pleasure; as professionals their listening normally has a purpose.

5. Discussion

Although the study shows that these musicians are indeed skilled listeners, the main aim was to learn *how* they listen and what they could tell me about their listening practice, not to test or measure their aural or listening skills. Because of the limited amount of participants in this qualitative study, the findings represent only tendencies and will be treated as such—not as absolute statements or facts. In this section, I will sum up and present the main findings, and discuss the relevance of the findings in relation to the discipline of aural training.

5.1 Main findings versus the research question

The interviews confirmed that listening, as musical knowledge (Swanwick 1994), is *multi-layered* and that the musicians perceive and listen to many aspects of the music at the same time: they recognise the style of the music, they observe musical elements and identify or analyse them, they react to what the music expresses or what kind of associations the music evokes, they judge and value the orchestral performance, and they pay special attention to their own instrument in the music, to the role it plays in the orchestra and to the quality of the performer. They are expert listeners.

The most striking finding concerned *critical* listening. What I expected to learn was how musicians listened to music 'as music', or on the sheer musical plane (Copland 1957/1939). I learnt that listening to the *performance* was dominating.

Lehmann et al. (2007:14) consider music listening and music making to be *learned behaviours* or skills, which means that there are individual differences among people with regard to these skills. My study confirms this theory, for instance when the conductor listens more to the cyclic dimensions than the orchestral musicians, who are more oriented towards the linear dimensions (Wellek 1963). Critical listening is obviously a learned behaviour, through education and experience.

Another important finding was that their profession had negatively influenced the practice of listening for pleasure, and that silence had become very important. There are several reasons for this. One is that daily exposure to music is hard. As one musician said: "I love music. But working in the opera, there is so much sound in the job that the ears simply must rest. I am exhausted in my body by all that sound." Analytical as well as critical listening also makes it difficult to relax while listening. The listening becomes so active: "You never switch off. That is the problem." Hearing such utterances is not surprising, as we often hear similar things from colleagues or know it from personal experience. As Mursell (1971/1937: 212) wrote: "there is a

constant danger for the trained musician that his listening will become so refined and highly sophisticated, so much dominated by the details of structure, that it loses vitality and significance."

5.2 Critical listening and valuing: the expert musician's way of listening

As mentioned, I had a pre-understanding of what analytical listening was, as structural listening. The interviews revealed that analytical listening was more like critical listening. I found that this type of listening is commonly associated with the specialized listening skills of music producers and sound engineers, directed mainly to the technical qualities of sound. Critical listening in my context has to do with a way of listening to the quality of the performer, of the performance, and of the interpretation. When the musicians in my study described their general listening attitudes, their speech was often dominated by a critical attitude, with a focus more on the performer and the performance than on the music. This might be a result of their constant search, as professional musicians, for the perfect sound, the perfect intonation, and the perfect precision.

Critical listening is thus connected to attitudinal knowledge, and involves value judgment, as described by Swanwick (1994:88): "It goes beyond sensory and expressive enjoyment or even pleasure in the fascination of music's structural twists and turns: it is an explicit celebration of 'quality'." This value judgment involves aesthetic judgments about good and bad performances and performers, good and bad interpretations, including listening to their own instrument and their own performance. This attitude is based on high-level skills and professionalism.

Within aural training, listening is normally directed towards analysis and objectivity. Professional musicians' listening is strongly connected to their instrumental practice, and in this study also to orchestral practice. A critical attitude is thus a positive attitude when it comes to evaluating qualitative performance, either their own or their colleagues'. But, as we have seen, this also has negative consequences, as it leads to the loss of enjoyment in music listening in general. As the conductor said, with a high degree of regret: "I cannot be an ordinary listener." It is tempting to respond: No, you are an expert listener!

⁶ Critical Listening vs. Analytical Listening: Two ways To Listen To Music Productions. Retrieved 08.05.2013 from: http://www.music-production-guide.com/critical-listening.html.

5.3 The link between aural training and musical performance

In this section, I will discuss the findings of the study in relation to aural training in higher music education and the possible relevance the study has to the education of professional musicians.

Academic listening is an analytical attitude towards musical material. This does not mean that critical listening is not academic or analytical. It has another focus. In the NAM curriculum, the concept of critical listening is not present, neither in aural training nor in the instrumental discipline. But in every instrumental lesson, in the rehearsal studio or in chamber music rehearsals, the critical ear is constantly activated. Also, in the aural training classroom, critical listening is important and active, for instance in sight singing and intonation, rhythmical exercises aiming at a high degree of precision, ensemble singing, etc. However, NAM does not use the term 'critical' listening.

Traditionally, the training of aural skills is evident in any study program aiming at educating musicians. Aural analysis is such a skill to be developed. In a study among first- and second-year students at NAM, 80-90 per cent responded that aural training was very important and useful (Reitan 2010:211). There were various explanations for this perceived importance and usefulness: from concrete and practical skills to more abstract skills, such as developing 'consciousness and understanding'. In McNeil's study (2000:210), she claims that the elements of *understanding* in an integral part of aural ability related to performance proficiency. She describes the performer's understanding and knowing to include "*musical production*, the process of creating music; *perception*, the ability to discriminate and monitor aural feedback; and *reflection*, critical thinking skills and the capacity for interpretation". Included in her definition of aural training, are also "self-reflection and criticism, stylistic awareness and demonstration of understanding".

Regarding the effect of aural training, more than 50 per cent of the students (Reitan 2006:108) answered that they developed *the ability as a listener* to a high or very high degree. Almost the same result was obtained for the development of the *ability to recognize musical structures* (ibid.). The skill to analyse harmonies and chords aurally is also an important element in aural training, both as an oral or written task. In a question about 26 various aural skills, the learning and understanding of harmony was seen as the most important skill to develop in aural training (ibid.:117). The majority of students who chose that option were linear musicians.

The main challenge is the transfer of skills from subjects like aural training to the instrumental and performing disciplines, as stated by McNeil (2000:359): "There is an argument for separating skills to develop them, but these skills are fully realised only when transferred back into context." At NAM there have been discussions about

the role of compulsory subjects in the programs, such as aural training. Changes have also been made to link aural training closer to the instrumental subjects, for instance in the way the classes are organized and also in the content of the subject. Currently (2013), the first year of study offers a general platform for students in all study programs. In the second year, the curriculum is directed towards the special requirements of various instrumental groups. The actual program describes the aim as transferring "knowledge gained in aural training to other aspects of the musical field, by listening and reading, and to manage various aural strategies to solve musical challenges." It also states that the content of the courses and activities should be relevant for the actual study program or instrumental group. In addition, students also use their instruments in aural training classes. In practice, students are grouped by their instruments—singers, strings, keyboard- and chord players, wind players etc.—in order to make aural training as relevant and useful as possible to the students in their future profession. There have also been recent attempts to encourage closer collaboration between the instrument teachers and aural training teachers. For example, a special chamber music program has been going on for several years, involving a team of instrumental teachers and teachers from music theory and aural training. Such projects depend on interest from all the disciplines to be successful.

5. 4 Final comments

What is the link to aural training in the findings? The musicians stated that they normally do not listen to music in the 'aural training way' by analysing structures and chords. But there is certainly a difference between 'aural training' learned in school and general 'aural skills'. For this reason, it is important to admit that the development of aural skills is a continuous process in the musical profession. A musician, conductor or orchestral instrumentalist will continue to develop and strengthen the skills needed to function as a professional musician. The aural training skills learned in an academic education are included throughout, from basic factual knowledge to the highest level of attitudinal knowledge and expertise. And finally, valuing is an important aspect of critical listening, which seems to have become the dominating way of listening to music.

"I assume that you as a musician listen differently, according to your starting point. You bring your priorities from your profession into the listening." (brass musician)

References

- Clarke, Eric F. (2005). Ways of Listening: An Ecological Approach to the Perception of Musical Meaning. Oxford: Oxford University Press.
- Copland, Aaron (1939/1957). *What to Listen for in Music.* New York: McGraw-Hill Book Company, Inc.
- Dreyfus, Hubert L. (1998). *Intelligence without Representation*. Retrieved from: http://www.class.uh.edu/cogsci/dreyfus.html
- Hanken, Ingrid & Johansen, Geir (1998). *Musikkundervisningens didaktikk*. Oslo: Cappelen Akademisk Forlag.
- Huron, David (2002). *Listening Styles and Listening Strategies*. Handout. Columbus, Ohio: Society for Music Theory 2002 Conference. Retrieved from: http://www.musiccog.ohio-state.edu/Huron/Talks/SMT.2002/handout.html. 08.05.2013.
- Kvale, Steinar (2008). *Det kvalitative forskningsintervju*. Oslo: Gyldendahl Akademisk.
- Lehmann, Andreas C., Sloboda, John A. & Robert Woody (2007). *Psychology for Musicians: Understanding and Acquiring the Skills*. Oxford: Oxford University Press.
- McNeil, Alison F. (2000). *Aural Skills and the Performing Musician: Function, Training and Assessment.* (Doctoral Thesis), University of Huddersfield. Retrieved from: http://eprints.hud.ac.uk/4749
- Mursell, James L. (1937, reprint 1971). *The Psychology of Music*. Westport, Connecticut: Greenwood Press.
- Nielsen, Frede V. (1998). *Almen Musikdidaktik*. København: Akademisk Forlag. NMH, Curriculum Portfolio 2012, Bachelor Programs. Retrieved from: http://nmh.studiehandbok.no/nmh/content/view/full/2456/language/nor-NO
- Pratt, George (2005). *Aural Awareness: Principles and Practice.* New York: Oxford University Press.
- Reitan, Inger Elise (2009). Students' attitudes to aural training in an academy of music. In: Nielsen, Frede V., Holgersen, Sven-Erik & Siw Graabræk Nielsen (eds.) *Nordic Research in Music Education. Yearbook Vol. 11 2009*. Oslo: NMH-publikasjoner 2009:8, 207-220.
- Reitan, Inger Elise (2006). *Gehørtrening i praksis. Hva sier fagplanen og hva opplever studentene?* Oslo: NMH-publikasjoner 2006:4.
- Sloboda, John (1985/1996). *The Musical Mind: The Cognitive Psychology of Music.* Oxford: Clarendon Press.

- Sloboda, John (1991). Music Structure and Emotional Response: Some Empirical Findings. In: *Society for Research in Psychology of Music and Music Education.* 1991,19, 110-120. Retrieved from: http://www.brainmusic.org/MBB91%20 Webpage/Sloboda_1991.pdf
- Swanwick, Keith (1994). *Musical Knowledge: Intuition, Analysis and Music Education*. London: Routledge.
- Thomas, Edrie (1972). *Teaching Music Appreciation through Listening Skill Training*. California: Parker Publisher & Co.
- Wellek, Albert (1963). *Musikpsychologie und Musikästetik*. Frankfurt am Main: Akademische Verlagssegesllschaft.