The Pitch Aspect

When shaping the body of time in music, we have to think about what material we want to distribute over time. Time as such has no sensual quality: You don’t see, smell, hear, touch it. We need to think about what is being dealt with in time.

This tutorial unit deals with this theme. And it, in fact, will answer it in such a way that we understand *why music deals with sound* and not with, say, odors or visuals.

8.1 What Is Your Open Question?

To begin with, we want to look at all possible ways to shape the body of time. We do not want to shape it in an abstract reality of pure thoughts, but in a sensual way. We are concerned with art and human expression for other humans and therefore are focusing on the five human senses\(^1\): touch, smell, taste, hearing, and sight. Note that we have other senses, such as kinesthetic sense, senses for temperature, pain, balance, and acceleration. But let us focus on the most prominent ones.

**Exercise 13** Describe the five classical human senses and their qualities. What can you express with these senses? How precise is this expression? How can you perceive them? How can you produce them? How about their communication to other humans?

Your discussion evokes the open question of this tutorial unit: *Why are we using sound in music, and how do we deal with sound?*

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\(^1\) These senses are classical. They were classified by Aristotle but also recognized in other cultures, such as the “five material faculties” in Buddhism or as the “five horses drawing the chariot of the body” in the Katha Upanishad of Hinduism.
It is, of course, not the question of defining music as the art of sound (in time), but the question of why this sense of hearing, and not any other, has such a prominent position in human artistic expression.

8.2 Let Us Describe the Context!

We are now looking at the musical sense of hearing in the wider context of all five senses. The context is the multisensorial human reality of perception and utterance. Following your discussion of the qualities of our five senses, we can write down the following rough list of properties.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Precision</th>
<th>Complexity</th>
<th>Production</th>
<th>Perception</th>
<th>Speed</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>touch</td>
<td>low</td>
<td>low</td>
<td>high</td>
<td>high</td>
<td>fast</td>
<td>low</td>
</tr>
<tr>
<td>smell</td>
<td>low</td>
<td>average</td>
<td>high</td>
<td>high</td>
<td>slow</td>
<td>average</td>
</tr>
<tr>
<td>taste</td>
<td>low</td>
<td>average</td>
<td>low</td>
<td>high</td>
<td>slow</td>
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<td>sight</td>
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</tbody>
</table>

In this sensual context, hearing is the most skilled. More precisely, it is the only one where we can make fast and fine-grained sensorial output (sounds) and perceive it with no extra efforts. We have a voice and are also sensitive to sound for reasons of biological survival! We can communicate by sounds. The sense of sight is a passive one, since we can see but we cannot make what we see, whereas the sense of hearing can both receive and produce sounds.

**Exercise 14** Try to invent and use different instruments to make sounds. Try the same for visuals, touch, taste, and smell.

8.3 Find the Critical Concept!

Within the context of the sense of hearing, we want to find a critical concept. This would be a concept that is central to our sense of hearing and ‘sounding.’ Let us first listen to different sounds from instrumental and environmental recordings.

**Exercise 15** Describe the different concepts coming to your mind when talking about sound.

You have exhibited a number of such concepts: Loudness, the sound’s character (bright, dark, cold, hard, etc.), the development of the sound’s presence (envelope, play a piano sound backward to hear the envelope!), the spatial position and distribution of the sound, its male or female voice, etc.