

## Juhani Topias Vesikkala – dissertation thesis review

The work entitled “THE NOISE-PITCH CONTINUUM IN TIMBRAL MUSIC” which was submitted as a theoretical part of the dissertation project is remarkable in many ways. One of the motivations that led to the creation of the thesis was the lack of theoretical reflection and related theoretical tools in the field of musical composition based on timbre. It is therefore not surprising that the focus of the work itself is primarily an exploration of such musical sounds that are denoted by the term *froise*, i.e. sounds that represent from the point of view of perception a kind of transition between sounds in which we simultaneously perceive both their pitch character as well as their noisy character. Although we can currently find a relatively large number of computer-based spectral analysis tools available the author decided to rely primarily on his ears: for the needs of grasping not only the mentioned sounds but theoretically any sound at all he comes up with a proposal of fifteen so-called *spectrotemporal descriptors* which are certain kinds of verbal descriptions of the respective musical sounds. All descriptors are based on a perspective determined by two poles: *pitch* on one side and *noise* on the other, thereby covering the entire pitch-noise continuum and especially the middle area, the area of *froise*. In practice, each individual descriptor generates one of five possible values (-2 and -1 being pitchedness criteria, 0 equals *froise*, +1 and +2 being noiseness criteria). By adding up all partial values we get a number that captures the timbral character of the given sound. In the thesis we find detailed instructions on how to deal with these numbers. We can also find many examples of how to process the mentioned results using different types of graphic representation, so-called *timbral canvases*, depicting different ways of handling timbre within a musical composition. These various ways, which are called *timbral trajectories*, are subsequently systematized and demonstrated on specific compositions.

From a formal point of view the work cannot be faulted at all. Although it significantly exceeds the required scope it is not a “talkative” work in the slightest. The graduate’s ability to formulate clearly and precisely without unnecessary accumulation of superfluous words is extraordinary (not to mention that English is not his native language). The amount of work he has put into studying and compiling the sources and literature relating to the subject (see the chapters preceding the description and use of his own theory) is simply breathtaking. The rigid, exact, thorough and scientific-like way of thinking to such an extent that the graduate displays in his work is for a music composer absolutely unique and admirable. I believe, along with the author, that his highly ambitious, theoretically comprehensive work can be both a relatively significant contribution to the field of music theory and at the same time a very inspiring reading for music composers, especially those who are interested in sound colour in general.

As an artistic part of the diploma project, the graduate presented three compositions for different instrumental settings which were created between 2018 and 2020. These are *Proxies for totems of belonging* for glissando-flute and PVC mat from 2018, *into these worldless houses* for sextet (fl./ bfl., cl./bcl., perc., pf., vl., vc.) from 2019–2020 and *Plainte* for 12 singers from 2020. All three compositions show their author as a highly competent composer who is well aware of what he is doing. As expected, the compositions work extensively with sound colour. A look at the scores reveals the author to be well acquainted with the “contemporary” repertoire, yet the sound result, as far as I am able to judge, I consider quite novel and original. From a formal/technical point of view, I also have nothing to criticize about the individual compositions.

With regard to my function as an opponent, however, I am aware that my task is not only to praise. Therefore, at the end of the review, I would like to make a rather short comment of a more general nature, which can be equally applied to both the

theoretical work and the presented musical compositions as well. However, I point out in advance that this is, as tends to be after all the custom within the artistic world, a purely personal opinion (which might be, on top of that, quite possibly based on my erroneous “reading” of the submitted works), and therefore will not have any influence on the highly positive assessment of both parts of the diploma project.

Both the theoretical work and the compositions (although in the latter case I can only guess because I do not know how precisely the graduate thinks about them and how they were composed), led me to the following thought. Thesis: the basis of an essential creative endeavour is usually a simple idea (although the result can be complex). This basis as something simple (which means: just before our brain starts the computational process) is at the same time something unquestionable. It is meaningless to ask why exactly that and not something else. If I were to push this thought even further: it is as if this basis, due to its simplicity, is something that stands before the possibility of questioning at all – or even better: the possibility of questioning stands precisely on this unquestionable basis. Specifically, in the case of the presented theoretical work, I perceive those fifteen descriptors mentioned above (see Appendix 1 for a detailed list) as this unquestionable basis. Although all descriptors are based on the simple idea of grasping the timbre quality of sound from the noise-pitch perspective, they form the unquestionable basis of the theory as a whole which in itself represents a rather complex construct. Why those fifteen descriptors? Why wasn't there a detailed description of each one of them in the entire work along with a justification for why it was chosen as one of the fifteen? Although we find a relatively thorough reference to already existing methods of verbal assessment of sound colour, i.e., using the language of the paper, *descriptors*, we do not find the line of reasoning that led to their final form. That is why I perceive those fifteen descriptors of the thesis as something given, something unquestionable.

If we were to transpose these thoughts into the realm of musical composition, I could make the following statement. I believe that the complexity which settles right at the foundation of a musical composition can even be harmful – it can be the cause of distortion or disruption of instinct, it can lead to uprooting and loss of creative taste. Isn't it the case that a unique composer often "hears differently" than others and to this different "hearing" has to find the way by his/her own, and therefore should not be prevented from doing so? The method of grasping musical sounds by means of the complex of those fifteen descriptors may well serve as a theoretical tool for already written music, it may be very beneficial for example for an aural training (in other words, I do not doubt to such an extent the possibility of its use for music theory), however, I fear that in most cases its application to the composition of a new musical piece will, by its very nature, tend to weaken and trample the uniqueness of the composer's voice. It may be a powerful compositional tool but I have a strong hunch that its full potential can be harnessed primarily – and perhaps merely – by its inventor.

The idea of complexity which is embedded at the basis of a composition (to put it prosaically: when everything is complex from the very beginning of the compositional process) leads me to one more reflection. I rarely consider the most interesting works to be those in which the author is the so-called "master of a situation", when he/she works from a distance and therefore is able to work with complexity from the very beginning. The author of the submitted works quite often operates with the term dramaturgy (though, to be fair, the theoretical thesis defines the term more broadly than I suggest here – see Wiese's definition, p. 151), that is, as I understand it, he often works "from the outside" of the work. Personally, I am much more attracted to the idea of a composition being created "from within", which means it necessarily needs to be based on something simple. Working from distance means, in a sense, using our brain. However, I prefer to think about brain as a "muscle" for creating new things rather than arranging already existing ones – that is why the

process should proceed from simple to complex and not vice versa. The well-known American director David Lynch can serve as an illustrative example. He speaks very plainly about his way of working: he says that at the beginning he falls in love with a simple idea and then he just follows it, without even knowing where it might lead him. Of course, this process can take place on different levels, from purely intuitive writing à la Feldman to constructivism à la Grisey, but in both cases, as I believe, there is always just a simple idea at the basis of their work.

However, as I stated above, the aforementioned reflections on complexity are of a purely personal nature (by the way, I thank Juhani for encouraging this thought activity in me – after all, what more could one wish from an encounter with other works?). I consider all individual parts of the diploma project that were submitted for defence to be exceptional, original and completely unique in our context. They go far beyond what is required for a doctoral degree. With great pleasure that I had the opportunity to deal with them, I strongly recommend them for defence and propose to award a PhD.

In Prague, 26.8.2022



doc. MgA. Luboš Mrkvička, PhD.