

Review of

Performance and interpretation

By Guerino Mazzola and Stefan Goller

In this paper, the authors gave an overview of the key components in the musical theory and a view on an extension of the artistic performance concept to performance of more general databases other than music. If we believe in the idea that human understanding is virtually impossible outside sensorial representation for true, we may consider performance as a transformation of any abstract symbolic data into its sensorial representation in the ordinary human space-time.

In the introduction part, they mentioned some basic ideas.

1. There are some basic levels of music reality like mental, psychological, and physical which determine each other in an incessant communication stream while performing.

2. The ontology of music includes the axis of communication from poiesis (making) to the neutral work (score, audio, recording), and the aesthesis (the perception and understanding).

3. From the view point of music topography, music has its own symbolic reality. the score is a symbolic notation of thoughts instead of just prescriptions for performative execution. i.e. the sound colors are just means of representing composer's thoughts, which were not about sound

4. Guerino Mazzola said the best moments of performance are not those when you do not mainly control your actions, but when you are controlled by the music. It is the music which plays you, when it really lives; Leibniz stated that making music resembles telling a story whose development is unknown. One just participates in a deep reality of a spiritual extent which is far from controllable.

5. The intrinsic structure of performance and its precise theory automatically imply that mathematics plays a crucial role so it is impossible to remove the math concepts.

Then the author provides some rough ideas about performance, interpretation, and some other knowledge about performance analysis. They introduced a performance theory which performs a 1 to 1 mapping from the symbolic space to the physical space (a N-D real vector space called performance vector field). Performance field can only produce performances if the initial performance values are available.

They also provide the idea of hierarchies which says that not all music parameters play the same role in performance. We must also consider the performance fields of involved tone parameters as well as the physical constraints of realistic bodies when generating physical gesture. Such solution is still under development in as well as the genealogical tree of rehearsal.

The work of Joachim Stange-Elbe was also mentioned. He studied the possibility to generate interesting performance by using performance operators which are implemented in Rubato's performance RUBETTE. He found that the source-driven strategy is much more successful than the target-driven strategy.

The author gave 3 reasons why it's a difficult for the visual performance of music databases accompanied with a definition and a principle. The definition says Knowledge is ordered access to information while the principle says visual performance must be built on linear ordering since linear ordering relations among the database entries should be preserved in the visual presentation. The first problem of generating the recursive database visualization process is performance of high dimensions. Folding map is introduced as a solution for the multi-dimension to one-dimension problem.

I'm quite confused about the figures that the author provided. When I looked at fig.2, it looks like a figure of magnetic field to me. I'm not sure if I understand "the projection $(E, D) \rightarrow E$ is compatible with the field, and we have hierarchy "E,D dominate E" of spaces" and I'm quite interested about the reason why they use "Pinocchio puppet" to represent the visual performance. Since every character in each Pinocchio represents the corresponding character of an element of interest, I guess we can add as many different characters as possible in the same figure. So the problem is, we are not able to tell and trend and it's not easy to focus on a specific character for all the Pinocchio puppets in the same figure. He also mentioned that the dodecahedron in the background served as a cockpit on which all commands are executed. I wonder why they have to show the cockpit in the background I'm also confused about the about fig.4 and fig.5 is confusing and I can get no insight from the pictures and I'm wondering if people really use this kind of figure in real research..