Viennese Ballet: Connecting Music-Image-Dance

In the middle of the eighteenth-century theatre and dance in particular played an important role within the cultural life of the Habsburgian court. State’s chancellor Graf Anton Kaunitz intended to demonstrate the improved relations and the new alliance with France by introducing elements from French culture within the arts, leading to a unique amount of sources relating to the Viennese ballet performances: a chronological theatre repertoire compiled by dancer and choreographer Philipp Gumpenhuber includes information on performers and performances; journal critiques contain descriptions of performances; a look from the inside of the theatre give diaries of court intimates; a collection of 180 musical sources is preserved by the Schwarzenberg archive in Český Krumlov. Furthermore, 35 pictures of scenes from the ballets provide information on the cast and on the intended scenario and, above all, on movement style, gesture and acting.

A combined digital exploration of these materials allows a novel and innovative access to these sources. Text, music, images and stage action are captured in encoding standards as TEI and MEI and can be linked with the aid of Edirom-technology. Additionally, aspects of moving dancers in the scenery may be recorded and encoded based on the MovEngine software. By employing approaches from movement notation systems (Eshkol Wachman Movement Notation and Kinetography Laban) this experimental software already allows to represent movement data in a structural and flexible manner. As a long term goal, capabilities of MovEngine should be extended and its data formats should be further developed to propose an encoding standard for movement and dance analogous to TEI or MEI. However, there are profound differences between a typical movement notation score – with lots of implicit assumptions on movement execution based on physical and stylistic constraints – and the data used by MovEngine – with a more explicit description of all movement details. A newly designed tagging system should be able to unify both types of information – movement notation for a human reader and geometric description to drive a 3D-animation – in one data file, while preserving the link between both.

By using these innovative technical approaches, a new kind of cooperation between dance and music research will be opened up allowing for a digital documentation of and approach to historic dance and choreographies. Despite the comparatively limited amount of information on historic dance movement, the transfer of dance poses presented in images into 3D-data will enable an analysis of movement potential and style. Exploring and identifying unique patterns of gesturing may lead to a refined view on eighteenth-century movement aesthetics.

Further information on dance will result from an analysis of the musical sources: Annotations within the music tell about the realisation as “solo” or “concerto”, dances for soloists or the company. The sources mention also passages for particular performers; knowledge on their personal styles therefore offer additional indications. Musical parameters like tempo, rhythm, instrumentation or texture can also be taken in consideration for the combination with movement.

References on standardised dances like menuette, contre-danse or chaconne concern music and movement. Considerations on the combination of music and dance can be found in theoretical texts on dance, in writings on acting and from comparable cases of notated dance e.g. in Feuillet notation.
A careful combination of the knowledge on music and dance of the era should open up the possibility to construct animated movement sequences reflecting a synthesis of all known sources. The planned project connecting music and text sources through coding standards like TEI and MEI, the Edirom technology and three-dimensional movement data will lead to a new approach to combine music and dance in historic research. As an ultimate goal, this research should result in a digital tool that enables users to create connections between music, imagery, movement and stage action, independently.

**Bibliography**


