Research Traineeships 2015

1. Title of the Project
The role of the contents of song lyrics within rituals

2. Coordinators
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3. Project Summary
Music is an important aspect in our daily lives. Depending on the context, it can have a wide range of functions. It may bring people together, mark identity, strengthen cultural or social bonds, but it may also have a personal, emotional impact on individual people. Moreover, in the context of rituals, music often plays an important role (Hoondert, 2007).

This proposal concentrates on music used in the context of cremations (Hoondert, 2014). In the Netherlands, cremations are typically secular and individualized (Tongeren, 2004). Often, music is played during the ritual, but type or genre of music used may vary greatly between rituals. For instance, one may hear classical music, religiously oriented music, but also popular music.

The exact role of music played during the cremation ritual is still not particularly well understood. The previous project (KNAW Academy Assistants Program 2014) concentrated on analyzing musical aspects of songs played during cremations. Based on playlists containing artist/composer and title information of songs played at the Tilburg Crematorium, musical aspects, such as tempo, key, mood, energy, etc. were collected from online databases. These have been compared against similar musical aspects of popular music lists, such as the *Top 40* and *Top 2000*. This analysis has shown that there are indeed differences between music played at cremations compared to "general" popular music, indicating that these songs have a distinct character, but the differences based on musical aspects only are not as pronounced as expected.

In this project, we would like continue our investigation of the actual role of the music during cremation rituals. In contrast to the previous project where musical properties were investigated, we will focus on the textual or semantic contents of songs, i.e., lyrics and their meaning, and relate these contents to potential functions, such as remembrance, personal or collective coping with grief, or consolation, that music may have within the cremation ritual.

To allow us to analyze the lyrics and relate its contents to the possible functions of music, several components are required. Firstly, an overview of the potential functions that music may have within the ritual of cremation is needed. This requires research on existing (or new) theories of functions of rituals and music performances (Lukken, 2005; Schechner, 2006). Secondly, we will need to (semi-)automatically collect lyrics of songs that are played at cremations. Finally, analysis tools that cluster or group lyrics according to aspects of their contents will need to be developed (Zaanen & Kanters, 2010). For instance, happy songs (which may indicate remembrance) or sad songs (which may help with coping) will need to be identified.

These difference components require a range of methodological approaches, from literature surveys (used to identify relevant theories of ritual and musical functions), ethnographic research in the crematorium, qualitative research manually identifying clusters of related songs with high

precision, computational and experimental research cleaning and analyzing the lyrics automatically (which allows for the analysis of large amounts of lyrics, but expected to have lower precision).

Even though it may seem that the required components can be developed in isolation, this is not the case. There are inherent interdependencies between the components, making this a highly interdisciplinary research project which can be placed in the context of e-Humanities. The ritual and musical functions identified in the first component will need to be described in such a way that lyrics that may be used prototypically for that function can be identified (either manually or automatically). Furthermore, the clustering of the lyrics will be evaluated by relating the resulting groups of lyrics against the functions of the music within the ritual setting. This evaluation requires close collaboration between researchers from both Cultural studies and Communication and Information sciences. Therefore, continuous collaboration between the researchers working on the different components is essential.

The interdisciplinary nature of the project means that both coordinators will need to collaborate closely. In the previous (KNAW Academy Assistants Program 2014) project, we have already seen that this interdisciplinary collaboration is very fruitful. In fact, the work of the KNAW students has resulted in two journal publications which are now almost ready for submission. Furthermore, three MSc students have graduated on related topics (musical analysis of songs from playlists), showing that the project has had a larger impact than only the experience of the funded students.

The research trainees that participate in this project essentially serve as the driving force behind the project. Even though both coordinators are very keen on further collaboration, the trainees speed up the collaboration greatly by performing practical research, which takes place on the intersection of the research areas of both coordinators. In practice, the research is supervised by both coordinators, which brings up differences in methodological approaches in the different fields. In particular, trainees will perform research based on methodologies coming from the Culture studies background (such as qualitative and ethnographic research) as well as a Communication and Information science background (including computational and experimental research).

4. Project timeline

Component 1: analysis of ritual and musical functions
This component requires a literature survey of existing theories of functions of music in a cultural and/or ritual setting. Additionally, this research may be extended using ethnographic methods to investigate in how far these theories are complete and relevant to the application area (interviews with funeral directors, ritual coaches; attending cremation rituals).

Component 2: collection and cleanup of lyrics
To allow for the analysis of the lyrics of the songs played during cremations, the lyrics need to be accessible in a practical format. Lyrics will need to be collected from the Internet and will require cleanup. Using computational techniques, the collection of lyrics can be performed (semi-)automatically.

Component 3: clustering of lyrics

To relate the semantics of the lyrics (collected in component 2), an analysis of the lyrics will need to be performed. This could be done manually, according to qualitative research methods, although automatic analysis of the text may allow for a larger lyrics collection to be analyzed. Computational techniques that identify relevant words in the lyrics (e.g., mood or emotion bearing words) or techniques that cluster lyrics based on their topic may be applied.

Component 4: analysis of contents of clusters

Component 3 results in one or more meaning representations of the lyrics. The actual relevance of this meaning with respect to the theories identified in component 1 will need to be investigated. This requires knowledge of the theories collected in component 1 as well as the means used to extract the semantics of the lyrics.

Summarizing, components 1 and 4 have a more cultural sciences focus, whereas components 2 and 3 are of a more computational nature. However, alternative approaches (more or less cultural or computational) are available for each component.

5. Research Trainee Profile

Given the interdisciplinary focus of the research, this topic may be interesting to students from a range of tracks, such as:

- Algemene cultuurwetenschappen
- ACW/KCW: Ritual in Society
- CIW: Human Aspects of Information Technology
- CIW: Data journalism
- CIW: Tekst en Communicatie
- CIW: Interculturele communicatie
- others

The level of the students (bachelor, master, or research master) is less important compared to the drive to learn more about the topic as well as the research techniques from the different disciplines. Given the interdisciplinary nature, it would have our preference to find a student who has a background in the field of Culture studies and a student with a background in Communication and information sciences (preferably with some computational affinity).

6. How to apply

Send a resume as well as a brief motivation letter to Martin Hoondert (M.J.M.Hoondert@uvt.nl) or Menno van Zaanen (mvzaanen@uvt.nl).

References

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