

they relate to the video content. Users predominately describe *what* appears in the video using generic tags. Although the tags also provide some coverage of the subject, the *who*, and the location, the *when* in the video fragments. While the persons occurring as the subject are described both in generic and specific tags, there are very few tags describing specific locations.

Together with The Netherlands Institute for Sound and Vision we are preparing a second pilot project with *Waisda?*. The results of this study show several limitations of the current metadata, that we aim to address in this pilot. One limitation is the low number of specific type of tags in the *who* and *where* facets. We are exploring how users can be motivated to provide such tags. We showed that by matching the tags to controlled vocabularies we can derive the type of the tags. We are exploring if this can be used within the game to detect what type of tags are entered, and for example provide more points when the user enters a location name. For this purpose the recall of the current algorithm to match tags and terms should be improved.

Another characteristic of the current *Waisda?* tags is that many are also found in the subtitles. In case these subtitles are also available for retrieval this can be considered a limitation of the tags, as it reduces the added value. Computing the overlap between the tags and the subtitles during the game can be used to detect such tags, and for example be used to motivate users to provide different tags.

An assumption of labeling games is that only the verified tags are associated to the content as metadata. Our study shows that this approach would exclude many potentially useful tags. A solution could be to include tags that can be matched with a term from a controlled vocabulary. Another solution could be to compare the syntactically different tags based on their semantic similarity. We are currently exploring the consequences of these methods.

Finally, in future work we will experiment with the usefulness of the tags in search tasks. From the current results we learned that tags describe what users directly see or hear in the video. They do not provide a topical description of a fragment. We expect that the current tags are, therefore, suited to find objects within a specific video, but are as of yet less useful to find specific fragments. In future work we will explore methods to also collect topical descriptions of video scenes, by extending the game and/or with post-processing of the tags after the game.

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