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Understanding Social Media and Sound: music, meaning and membership, the case of SoundCloud

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INTRODUCTION

Social media technologies have meant that people's music consumption and production practices have rapidly changed and evolved. In this paper, we start to explore and present some of our initial findings in respect to this growing area of research by focusing upon the audio distribution platform SoundCloud. Technologies such as SoundCloud are enabling music producers and consumers a whole range of different ways in which they can engage, give/get feedback, promote, share, acquire, tag and make meaning of music. In this respect we are able to observe the role that such systems play in respect to: workflows and metadata production. The work also speaks about music consumption and production; as an individual and part of the crowd. We envisage that this paper will both provide a platform for future research and offer some insights into this world.

SOCIAL SOUND

The SoundCloud¹ platform offers both the consumers and producers music of music a range of mechanisms by which they can share and consume music. In this section we start to briefly unpack some of the reasoning and motivation behind sharing and consuming as practical activities. We use these as a point by which we can encourage the research community to think about the "implications for design" (Dourish 2006) that these findings bring forwards. Our research suggests that various communities of producers and consumers use SoundCloud. We were able to observe how people accessed and managed their audio libraries and the tools and techniques used to contribute in this space. We chose to focus on the growing Grime and Dubstep cultures and explore the utilization of SoundCloud in their work. Semantic tagging and the retrieval of music is a core research theme within this space, the use of such tags in music searches has been explored at length (Byrd & Crawford 2002; Begelman 2006; Bischoff 2008). While semantics offer a means by which to search and sort (Sandler 2007; Turnbull 2008a; Turnbull 2008b) tag uniformity presents problems. Tags such as #Grime and #GrimeUK, are used interchangeably, though no additional meaning is prescribed to either. Typically the community, and the individuals that make up that community control tagging conventions. The practice of tagging helps to define and refine conventions for tagging – it is an evolving emergent process. The community's playlists, shares and samples also offer a 'best practice' view of production in this context. Who has tagged, and the way this has been done is important to the community. One might say that how tags are used evidences one's expertise, belonging and standing within a given SoundCloud community. The tagging of '*free*

downloads' also presents issues. Many '*free downloads*' are intended to be reused, though lack a creative commons license or a policy of reuse. This presents a number of challenges in the ethical and legal domains (Darrow & Ferrera 2007; Peguera 2011). To compound the problem, the genre is historically notorious for sampling and reuse without proper attribution, although identifying these practices is technically possible (Rho, Han, Hwang, & Kim, 2008; Rynnänen, 2008). The challenge here is working with a culture grounded in subverting traditional licensing rules. Groups and practices have emerged in this space that exist beyond the 'usual' music consumption models. Private spaces for feedback, tips, tools and samples offer a contextualized view, defining access by linked project, or technical skill level for instance. People are able to create networks for expert feedback or link themselves to projects dynamically. The resulting 'production' workflows that emerge are dynamic and situated (Garfinkel 1984) offering a 'refixing'/'remixing' of tracks in a range of different fluid contexts. This can include editing, adding to a track or recomposing a piece of music. The possibility for a track to be remixed several times means that the ownership of a track becomes less evident with each iteration, often to a point beyond traceability. Services that could be designed and developed to work with SoundCloud may relate to provenancing 'mix' iterations, what DAWs², instruments and plugins were used on a track, and by whom. Instruments such as the Carolan guitar (Benford *et al.* 2015) have a digital, as well as a physical presence and this could be used to enhance and support future mixes that link to both consumption and production practices. It is clearly evident that social media is implicated within the music production/consumption workflow; integrating such technologies into music production software can offer new and exciting possibilities for composers and consumers alike.

CONCLUSION

This short introduction to the world of SoundCloud offers insights into the world of audio-based social media. In presenting this work we realize that we have only 'scratched the surface' of what is yet to be understood in this emerging field of research. We hope that this introduction will open up new research and design avenues for researchers working within a variety of research fields, from audio technologists, to HCI/CSCW researchers and social scientists.

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¹ SoundCloud – www.soundcloud.com

² DAW – Digital Audio Workstation

REFERENCES

- Begelman, G., 2006. Automated Tag Clustering: Improving search and exploration in the tag space. *World Wide Web Conference Series*.
- Benford S., Hazzard A., Chamberlain A., Xu L., 2015. Carolan: Augmenting a Guitar with its Digital Footprint. *International Conference on New Interfaces for Musical Expression (NIME 2015)*, Louisiana, USA.
- Bischoff, K., 2008. Can all tags be used for search? *International Conference on Information and Knowledge Management*.
- Byrd, D. & Crawford, T., 2002. Problems of music information retrieval in the real world. *Information Processing & Management*, 38(2), pp.249–272.
- Darrow, J.J. & Ferrera, G.R., 2007. Social Networking Web Sites and the DMCA : A Safe-Harbor from Copyright Infringement Liability or the Perfect Storm? *Northwestern Journal of Technology and Intellectual Property*, 6.
- Dourish, P., 2006. Implications for design. *Proceedings of the SIGCHI conference on Human Factors in computing systems - CHI '06*, p.541.
- Garfinkel, H. (1984) Studies in Ethnomethodology, Polity Press, Cambridge
- Peguera, M., 2011. Secondary liability for copyright infringement in the web 2.0 environment: Some reflections on Viacom v. Youtube. *Journal of International Commercial Law and Technology*, 6, pp.18–27.
- Rho, S. et al., 2008. MUSEMBLE: A novel music retrieval system with automatic voice query transcription and reformulation. *Journal of Systems and Software*, 81(7), pp.1065–1080.
- Ryynänen, M., 2008. Automatic Transcription of Melody, Bass Line, and Chords in Polyphonic Music. *Computer Music Journal*.
- Sandler, M., 2007. A SEMANTIC SPACE FOR MUSIC DERIVED FROM SOCIAL TAGS. *International Symposium/Conference on Music Information Retrieval*.
- Turnbull, D., 2008a. Five Approaches to Collecting Tags for Music. *International Symposium/Conference on Music Information Retrieval*.
- Turnbull, D., 2008b. Semantic Annotation and Retrieval of Music and Sound Effects. *IEEE Transactions on Audio, Speech & Language Processing*.