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AN ETHNOGRAPHIC EXPLORATION OF STUDIO PRODUCTION PRACTICE

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ABSTRACT

Tools for music production range from full scale digital production workstations to context-driven plugins. There are a number of inherent challenges to address in supporting users at different stages of work and at different levels of technical skill, utilizing both legacy and novel tools. We present findings from ethnographic encounters of music production at work and discuss some of the challenges of designing and developing systems for different types of users. We explore the issues of collaboration, shared ownership and a growing need for tools to support automation and intelligent music making as a practice. The work explores the use of technology in a real world, working studio environment.

1.   THE STUDIO

The work here describes a series of ethnographic engagements in a music production studio in London. The studio contains a variety of tools including mixing equipment, recording/monitoring tools and a range of other hardware. The production studio comprises of four separate rooms: A room with a workstation, a recording booth, a space for storage and a space for merchandise production. The studio is a shared space between three producers. The work discusses: An amateur hobbyist producer. A pro-amateur (pro-am) who works part time as a DJ and producer and finally a professional producer. Figure 1 shows the studio in use by the pro-am.
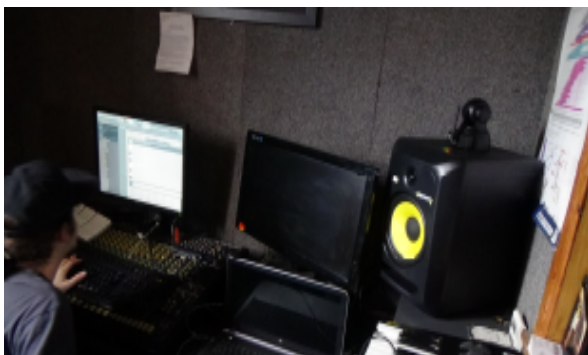

Figure 1: Shared workspace showing a pro-amateur producer at work.

1.1. Organization

In the context of Figure 1 we present the pro-am at work. Figure 1 shows keyboards overlayed across an unused mixing desk in order to support a digital way of working. The presentation and orientation of tools and technology in this space depends on context and expectations about how the tools should behave. So as not to disturb the working practices of the professional in this context, the pro-am has overlaid tools in place. His laptop offers mobility and freedom, as much of his work happens while traveling. He describes the importance of "mobility" and "freedom to work wherever, whenever" as key factors in the organization of his work. However, the portability of the laptops presents issues in connecting additional devices and the need for additional tools and space is evidenced by his use of the studio.

2.   CONFIGURATION

Digital tools are key components of practice. This is not to say that there is not a place for physical hardware within this space [1] but that the tools and technology must be designed and presented in a way which supports user behavior in a hybrid way [2]. The pro-am uses a laptop for portability and many of the tools within the studio do not afford this mobility. There is a need here to connect and disconnect efficiently, supporting association without a loss of functionality. One example of this is where a VST keyboard is used in a mobile context, and a MIDI keyboard used in the studio. Moving between these configurations requires fluidity in order not to disturb the creative practice of the individual. Interfaces and microphones cannot be connected without configuration and mapping processes taking place. While the mixing desk offers a multitude of opportunities for configuration, the constraints it provides in terms of cabling offer little utility and setup for experimentation becomes time consuming. As the number of devices connected increases, it then becomes challenging to manage. The mappings in a DAW are similar to that of a physical mixing desk and with it come the same inherent problem of complexity and configuration. Intelligent music production tools could optimize the process by supporting fluid connectivity through automated mapping and visualization.

3. COMPLEXITY

Multiple working patterns often exist in a single space. In this context, the distributed nature of work means that the studio is used for a specific purpose by each individual and that the creative process is time critical for each case. The amateur and pro-amateur use this space to augment and extend their existing setup whereas for the professional, this is his core workspace. Though tools in place afford these opportunities, there is an inherent need to quickly connect, configure, reconfigure and disconnect, to support the distributed working patterns of the pro-am and amateur. Automatic mapping of configuration in this space would improve efficiency. Connecting a MIDI keyboard for instance could automate the configuration of MIDI tracks in the linked DAW. The need for customization and personalization in different configurations presents a problem for designers and developers of digital audio workstations. It is no longer reasonable to expect a user to have a conceptual knowledge of traditional recording practices or understanding of music theory. With the emergence of tools and technology to support recording, mixing and mastering, we must consider the workflow of a digital audio workstation. Traditional metaphors may no longer have a place as working patterns and habits evolve over time. The variable knowledge of individuals in our case not only affects the orientation of users, but also has a negative impact on collaborative practice.

4. COLLABORATION

Complexity becomes difficult to manage where people work with separate components of the system. In this context the amateur is often responsible for writing lyrics and the pro-am is responsible for appropriating tools to support this practice. Techniques such as looping offer utility however the need for a constant feedback loop presents challenges. Technology could for instance, offer to facilitate discussion through shared semantic terms and suggestions. Making a track more "muddy" for instance, has a particular set of processes associated with it. Usage of tools that enable collaborating artists to communicate and work together would prove beneficial. Attaching ownership to tasks, sharing progress and visualizing metadata present as genuine issues that could optimize workflow. While content management and version control systems offer these types of opportunities, the DAWs in use do not. An example of a user taking ownership of a process in this space is sitting down at the workstation iteratively taking turns to edit small sections of the mix. This process could be supported by enabling users the opportunity to pull apart and snap together sections of the mix, tagging data in a shared knowledge repository. This information must also be visualized in a way which makes it clear to all parties involved the current state and the roles and relationships of individuals to converge on a shared set of goals. Contextually-relevant descriptions of metadata could better facilitate collaborative convergence on shared goals.

5. CONCLUSION

Modern systems are built on legacy contexts of usage. Rather than aiming to propose new ways of working that embed the technology in a usable way the tools have been built around previous understanding of working practice, based on technology that may no longer have relevance or support dynamic user contexts. This work evidences a requirement for contextual support in the design and development of digital audio workstations. User studies offer value here by helping us understand the working practices of musicians in this space [3] and offering insights as to the implications for design, driven by user-context [4,5]. As part of this work, we have identified challenges unique to collaborative music making in a shared space [6]. This is not to say that these challenges are localized and we recognize the need for tools to support both physical and digital contexts. There is an ever growing need to support collaborative music making and the need to share contextual metadata across a distributed workspace.

6. ACKNOWLEDGEMENTS

7. REFERENCES

[1] A. Crabtree and T. Rodden, "Hybrid ecologies: Understanding cooperative interaction in emerging physical-digital environments," *Personal and Ubiquitous Computing*, vol. 12, no. 7, pp. 481–493, 2008.

[2] J. Arrasvuori and J. Holm, "Designing interactive music mixing applications for mobile devices," *2nd International Conference on Digital Interactive Media in Entertainment and Arts,* pp. 20–27, 2007.

[3] A. Chamberlain, S. McGrath, and S. Benford, "Understanding social media and sound: Music, meaning and membership, the case of SoundCloud," *DMRN+10,* 2015.

[4] S. McGrath, A. Chamberlain and S. Benford, "Making music together: An exploration of amateur and pro-am grime music production," *Audio Mostly,* 2016.

[5] S. McGrath, A. Chamberlain and S. Benford, "The Grime Scene: Social media, music, creation and consumption," *Audio Mostly,* 2016.

[6] S. Benford et al., "Supporting traditional music-making: designing for situated discretion." *ACM Conference on Computer Supported Cooperative Work*, pp. 127-136, 2012.