Subject anonymisation in video reporting: is animation an option?

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ABSTRACT

This short-paper contribution questions the potential of a simple automated video-to-animation rotoscoping technique to provide subject anonymity and confidentiality to conform to ethical regulations whilst maintaining sufficient portraiture data to convey research outcome. This can be especially useful for presenting to young researchers whose limited experiences can restrict their ability to draw association between a treatment and subject profile when solely presented textually and/or verbally. The goal of the paper is to provoke discussions on the subject. It is speculated that given a satisfactory result researchers will more easily be able to illustrate in-session action, responses to treatment, and other outcomes.

1. INTRODUCTION

Participant pseudonyms, characteristics (such as gender or occupation), and location of a research study are often changed to comply with ethical requirements. Thus, identities are concealed and the confidentiality of the data provided by participants is maintained (Crow and Wiles, 2008).

Observing facial data and non-verbal body language are significant for assessing human subjects in e.g. rehabilitation research sessions. Video recordings are commonly used to archive such sessions for subsequent analysis. Especially in qualitative research, findings can be illustrated to other researchers in the field of study by sharing an extracted single image or a video clip. However, ethical considerations need to be addressed in order to share outside of the research team.

A single image can quickly be treated to hide identity, but to similarly treat a video is an enduring process due to the numbers of frames involved. Another challenge is that the editing can delete important data such that the findings are not supported as well as if the original material was used.

This extended abstract posits how the technique of Rotoscoping can address these challenges. The technique is similar to creating a drawn image from tracing over a source image (see Baimbridge, 2001). The technique can be used to turn a movie into an animation and a version has been used in Hollywood movies e.g. ‘Waking Life’ (Linklater, 2001) and ‘A Scanner Darkly’ (Linklater, 2006).

Figure 1. Left: Source image from movie – Middle: Airbrush preset – Right: Outlines only present (DancingGirlMov) by Studio Artist [synthetik.com].
Problematic is that in some of the generated material the identity of the source is not obscured, thus possibly being unacceptable for ethics. However, as Rotoscoping is available as a software program plugin where parameters can be adjusted to incrementally obscure an identity, a balance between the adjustments made to reduce identity whilst maintaining available data for a satisfactory analysis needs to be case-specifically explored. Figure 1 and 2 illustrates the technique via simple pre-sets.

Experiences inform how healthcare professionals, therapists and carers witness a presentation and visualise association to one of their patients. Young researchers have limited experiences to be able to draw such associations. Thus, video presentations can have high impact value on the next generation researchers. Similarly, with the introduction and adaptation of novel devices in healthcare research it is suggested that experienced researchers have a preference to view intervention videos to learn new methods and witness applied practice so as to envisage direct associations to their patients.

An additional query is if this goal is achieved then would the technique be accepted by the research community, both those who establish ethical guidelines and the researchers that would need to edit their source videos.

A discussion questions an analogy of courtroom artists whose remit is to illustrate sensitive legal situations where cameras and in-court sketching are not permitted (e.g. figure 3). Single image depictions are of a similar nature as the Rotoscoping technique is capable of generating, however, in court cases it is plausible to assume that the public and media know the person(s) involved in the image. However, courtroom illustrations (or courtroom art) have been criticized as depicting fiction not fact (e.g. see Solnik, 2009). The Rotoscoping automated technique more accurately depicts fact as the source is directly responsible for the computer-generated animation.
2. CONCLUSION

This contribution is a work-in-progress that posits the question of whether animating research video can be considered as an option to address ethical considerations of subject anonymity in sensitive research reporting. However, if considered, it is likely a subject’s identity can be speculated via certain animation techniques that uses source video if the subject is known to the audience, e.g. the rotoscoping technique as used in the movie industry such as ‘Waking Life’ (Linklater, 2001) and ‘A Scanner Darkly’ (Linklater, 2006). Is such a technique suitable for research reporting when text and words are not enough to determine idiosyncratic condition if so what level of depersonalisation of portraiture will make it a feasible option. The case is argued that “text and words are not enough”.

3. REFERENCES


G Crow and R Wiles (2008), Managing anonymity and confidentiality in social research: the case of visual data in Community research. ‘ESRC’ The National Centre for Research Methods.

