

Polemical video annotation by Twitter

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Abstract. In this paper we present a method to enhance video metadata by using microposts generated through social interactions during live events. Our goal is to make visible the audience “polemical activity” (the exchange of arguments, counter-arguments and references) elicited by the talk, and use it as a tool to browse the video record. To achieve it, we design a new interface and service that makes a synthetic view of microposts interaction.

Keywords: micropost, annotation, video, social interactions, live, polemic

1 Introduction

During a public event, more and more social Web tools are used to post real-time information (e.g.: Twitter, Foursquare, Facebook). In most cases, users can follow the production of microposts during the event thanks to tagging systems - for instance, the hashtags on Twitter.

For live video streams broadcasts, various webservices already offer Web pages with an embedded video player and interfaces for reading and writing microposts. This design pattern is interesting because it contextualizes the production and consumption of microposts during the talk. Despite the undeniable contextualization offered by this kind of interfaces (video and tweets), their use is not accurate in all cases. Like asynchronous or distant users may encounter difficulties to link the purpose of the talk with existing microposts, and due to the heterogeneous nature of microposts, it is difficult to generate a synthetic overview from the polemical activity. After the event, the memory of the social interactions is lost (especially on Twitter), and it is hard to retrieve the video sequence in relation to a given micropost.

2 Polemic tweet device

In our experiment we tried to address these issues by making a device to qualify and quantify micropost interaction. Before the event we are sharing with the audience a flyer (Fig.1) which present a simple “polemical syntax” to express formally the polemical position adopted in a micropost during the talk. During the event we are recording videos stream and microposts containing the live event hashtag and propose a polemical twitter client (Fig.2). After the event

we produce a special interface to browse and represent the aggregation of microposts synchronised with the video recording (fig.3). This experiment was done on a 1 hour and 11 minutes Clay Shirky's talk the 31st January 2011. We have harvested 440 tweets with the "#rsln" hashtag including 97 tweets with the polemical syntax.



Fig. 1

Fig.1 The distributed flyer to announce the polemical syntax



Fig. 2

Fig. 2 Visual extract of the twitter client¹

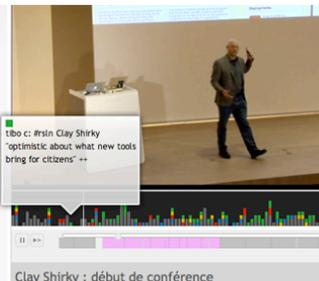


Fig. 3

Fig.3 Time stamped bar chart to synchronize tweets with the video timeline²

3 Benefits for social annotation practices

The polemic tweet device leverages the analysis and synthesis possibilities offered by classical linear tweeter interface. Timeline provides a graphical representation of tweets flow, revealing the reference content, immediately laying the emphasis on timecoded hot spot. Moreover it offers unprecedented access to the tweets for a *posteriori* analysis.

Last but not least, in addition to deepening the critical dimension of a discussion with the present or distant audience, the polemical tweeter annotation device allows engaging the user to take position through the polemical syntaxes and enable to avoid the determination of his position by post processing methods (like natural language algorithm or a Mechanical turk form).

Here are some additional benefits of the device for social annotations practices:

- It encourages public and audience to participate to the debate, to take position and to formalize arguments;
- It induces a new subjective social annotation level, in complement to the so-called objective indexation or quotation level in so far as it enables participants to become aware of their subjective approach to an issue;
- It offers new opportunities to study feedback loops on the microposts, particularly by identifying group emergences;

¹ <http://amateur.iri.centrepompidou.fr/live/client.php>

² <http://amateur.iri.centrepompidou.fr/live/rsln/polemicaltimeline.php>

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