

Film-induced Tourism: A Crowdsourcing Approach

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Objectives | Film-induced tourism is an emerging topic in tourism studies. In this paper we address the problem of information gathering, which makes the creation of a structured collection of multimedia items, annotated with geographical information a resource consuming task. The proposed approach is based on crowdsourcing. The tasks of recognizing movie parts that are filmed outside the studios and of identifying the location where they have been filmed do not require skilled experts. Yet, general users need to be motivated for completing these tasks and we propose that an important driver is the reputation users may gain as experts in movies and landmarks. To this end we developed a web portal where users can insert new movies, vote previous insertions, annotate the movies with geographical information and vote the quality of annotations.

Methodology | Our first approach started in 2014 (Lavarone et al., 2015). The focus was on the creation of a database to represent the relationship between movie excerpts and locations. The project had a double goal: promoting film-induced tourism and raising interest towards audiovisual productions, their language and their relation with the landscape. Each scene relevant to a given Point of Interest was enriched with a standardized description including plot elements, artistic choices by the director, role of the location and content (e.g. actors, objects, sounds). Although the focus was on a small geographical area, Padua and its Province, this in-depth description showed to be a time-consuming task. One critical aspect was that scholars were required to provide all the information, from film analysis to location identification, although only part of this information required the competences of a trained users in film studies.

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Main Results and Contributions | A film-induced tourism offer is based on recollecting information about locations and representing it in a structured form, which pose a number of issues. First of all, the information about the exact location is missing or very general. Moreover, film-induced tourists can be interested in variety of audiovisual productions and it is a difficult task to keep track of TV series, commercials, music videos and so on. Finally, the interest towards locations can vary among countries and thus all national productions should be considered. A possible solution to these issues on data gathering can be based on crowdsourcing, which is a type of participative online activity where an institution proposes to a group of individuals of varying knowledge the voluntary undertaking of a task (Estellés-Arolas & González-Ladrón-de-Guevara, 2012). The task can range from describing an image to reorganizing the three-dimensional structure of a protein. The basic idea is that the "wisdom of the crowd" can emerge by introducing self-regulating mechanisms to compensate for non-collaborative behaviors and rewarding mechanisms to foster collaboration. Examples such as Wikipedia or OpenStreet Maps showed the efficiency of crowdsourcing, where a large number of non-experts can, under certain conditions, be as effective and precise as a small group of experts. (Savage, 2012; Surowiecki, 2005). The act of discovering where a movie has been filmed does not require particular skills, besides the knowledge of the related geographical area. In our initial experiments we noted that locations can be pinpointed because participants directly recognize their living environment or share the memory about where a movie was filmed. Our crowdsourcing approach is based on three simple tasks:

- discover audiovisual productions that are relevant for a geographical area (reward)
- annotate the precise location of the movie scenes on a digital map (data gathering)
- approve or refine the list of movies and their localization (self-regulation)

Limitations | General users may find unappealing to interact with a specialized system. Thus, we envisage an approach based on interacting with a simple and intuitive interface, which implements a reputation mechanism. The latter is likely to be part of a more complex process that is an investment in social capital. In this contest, "social capital is the actual or potential resources which are linked to a durable network of institutionalized relationships of mutual acquaintance or recognition" (Bourdieu, 1985). The quest for gaining a social capital requires a continuous search for consensus (Wellman & Wortley, 1990) and sharing with the group both what we know is becoming a pleasure without the expectation of reciprocity (Fabris, 2010). The analysis of these elements and their relation with the effectiveness of crowdsourcing is still in their initial phase.

Conclusions | From these premises we developed a portal where users can suggest audiovisual productions related to a given geographical area. Each action is public and shared with peers. Users are also challenged to identify the relevant audiovisual excerpts and geolocalize them using an intuitive web interface. The goal is to promote competition among users, thanks to a feedback mechanism that aims at improving the quality of contributions. The experiment is still ongoing. We plan to present our initial results to the conference if the paper will be accepted.

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References |

- Bourdieu, P. (1985). *The Forms of Capital*. In J.C. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education*. Greenwood, New York.
- Estellés-Arolas, E. & González-Ladrón-de-Guevara, F. (2012) Towards an Integrated Crowdsourcing Definition. *Journal of Information Science*, 38(2), 189-200.
- Fabris, G. (2010). *La società post-crescita: consumi e stili di vita*. Egea, Milano.
- Lavarone, G. et al. (2015). Modeling the Concept of Movie in a Software Architecture for Film-induced Tourism. *Proc. of IRCDL*, 116-125.
- Savage, N. (2012). Gaining Wisdom from Crowds. *Communications of the ACM*, 55(3), 13-15.
- Surowiecki, J. (2005). *The Wisdom of Crowds*. Anchor, New York.
- Wellman, B. & Wortley, S. (1990). Different Strokes from Different Folks: Community Ties and Social Support. *American Journal of Sociology*, 96(3), 558-588.