

# Methods for the study of mobile journalism - a case for physiological data awareness

Tiago Gama Rocha (tiago.gama.rocha@fe.up.pt),  
Paulo Frias (pfcosta@letras.up.pt),  
Pedro R. Almeida (palmeida@direito.up.pt),  
João Sousa Lopes (jsousalopes@lsi.upc.edu)  
& Sofia Leite (sleite@med.up.pt)

(University of Porto | Universitat Politècnica de Catalunya)

PORTUGAL | SPAIN

## Abstract:

Journalism is still trying to adapt to an always-on society, producing content by means of a new language, learning new skills and competences, learning how to interact with a new breed of users, and being more of a process and less of product. Meanwhile, the digital world has entered the age of data ubiquity. Every interaction that takes place in the evermore ubiquitous, social, mobile and real-time technologies can be recorded and analyzed. As a result, journalists now can access an unprecedented volume of data, allowing for almost moment-to-moment snapshots of how users are interacting with content (interest-graphs), each-other (social-graphs) and the world around them (context-graphs).

In this research work, we further explore this monitoring of interactions. We suggest that a new breed of human activity monitors has the potential to add another layer to the methods and techniques currently used. We are referring to wearable technologies (WT), which are easy-to-use body sensors that capture physiological data (PD). Some authors and professionals already plead for the field of journalism to turn its attention towards WT, addressing how it can become a tool for content creation (e.g. heads-up displays), a new interface (e.g. heads-up displays and smart-watches), and a tool for augmenting the storytelling faculty (e.g. virtual reality devices). We argue for the power of WT to track and analyze emotions, biometrics and behaviors, and we show how PD can be used in new media studies.

Furthermore, we provide evidence for using such psychophysiological methodologies outside laboratory constrains, which is another accomplishing result. Finally, this pilot study also points towards PD as a strong predictor of users' news consumption habits. We conclude by raising some questions for future discussion about adding PD to the volume of data already available:

What are the limitations and potential of such rich and intimate stream of data? What are likely to be the implications? How can we develop a critical assessment of these tools? If we can agree that data has already had influence on journalistic practices, what will happen when technology allows humans to track their intrapersonal dynamics and when recording habits becomes itself a habit?

For the most part, the access to this new type of data is being used in the fields of health and performance monitoring. These tools already let users track their physiological activity completely passively, which is comfortable, and appropriate software and visualization displays make data interpretation greatly facilitated. A growing segment of the population spends a remarkable amount of time capturing, monitoring and sharing their personal data. We believe the time to explore is now and that it is critical for researchers and professionals to fully tackle these conceptual and methodological issues, so as to fully understand the evolution of journalistic practices.

**Keywords:** Mobile-journalism, data, Wearable-Technology, physiology, experimental-study.