**BOOK REVIEW**

# Handbook of Research on Interactive Information Quality in Expanding Social Network Communications

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Social networking sites (SNSs) not only allow users to share information such as uploaded videos or pictures, but also to communicate with each other about this content, to chat with other users and to post messages to small or large audiences. SNSs can also be beneficial tools for users to gain social capital (Lin, 2015). The network society is a social structure based on networks operated by information and communication technologies (ICT). ICT has rendered international boundaries irrelevant since many modern activities cut across international frontiers. We now live in a boundless world that is becoming a smaller place, due to the recent developments in ICT.

The basic unit of the network society has become the individual who is linked by networks. This results from simultaneous scale extension (nationalization and internationalization) and scale reduction (smaller living and working environments) (Scott & Carrington, 2011). Daily living and working environments are getting smaller and more heterogeneous. The scope of the

network society is both global and local, sometimes referred to as "glocal". The organization of its components (individuals, groups, organizations) is no longer tied to particular times and places. Aided by ICT, these coordinates of existence can be transcended to create virtual times and places and to simultaneously act, perceive and think in global and local terms (Scott, 2012).

Discussion surrounding social networks is widespread, including, but not limited to, applications such as Facebook, Twitter, Instagram, YouTube, Google+, Linkedin, Conference Blog, etc. Each of these different systems has both its positive and negative aspects. The monikers of these interactive systems, mostly belonging to the category of freeware, have in many cases entered into the daily vocabulary of millions of users, with the end goal to enhance effective communication. In our days, quality and convenience in communication is the main goal of software and hardware associated with ICT devices, especially since democratization of the production of online multimedia/hypermedia content is assumed for present and future generations.

The necessity for this book comes from the fact that currently a set of non-democratic elements deriving from the automatic information systems exists in social networks, which may increase the digital gap among the users. In this current book, authors intend to provide the first 360-degree observation of the phenomenon of social networks, intending to increase the quality of communication. This main goal is coupled with a

set of scientific, theoretical and practical services. In each of these aspects, the most relevant and avant-garde aspects of the new technologies aimed at the social networks are approached, such as the education and the human and sociological factors.

The book is organized in a logical way; there are 20 chapters and 2 appendices, giving a description of the trends of social networks from microscopic video game to macroscopic economic crisis perspective. The book covers five main topics. The first topic, which is presented from Chapters 1 to 2, introduces how to use phaneroscopy to classify these systems and explores the feasibility of carrying out semiotics analysis regarding these interactive systems as an intersection, not as a union, of dynamic and static means. Then, the first set of elements belonging to the interactive design categories, layout and content, which comprise the synechism in video game design, is described from the 1990s on. The possibility of establishing links with those elements of interactive design that do not change with the passing of time is positive for communicability.

The second topic, focusing on using creativity to solve current problems, is presented from Chapters 3 to 9. In Chapter 3, the author explains the computer not as a tool, or as bicycle-for-the-mind, but simply as self. Computer screens, like a mirror, can reflect users and the behavioral patterns they display in interaction. In Chapter 4, the authors describes how to assess users' abilities to integrate their interpretations; a pair of large touchscreens is very important

in using the computer. In chapter 5, the researchers have found a simple yet effective approach to build a view-dependent stereoscopic display and to evaluate its performance. This means a metric and a practical setup that can be adopted to evaluate a wide range of viewer-dependent displays.

In Chapter 6, the article explains why Kinect cannot track through the fog screen due to disturbances caused by fog, then introduces Microsoft Kinect-based 2D and 3D that can track for mid-air projection screens. In Chapter 7, the authors introduce a methodology for the transformation of behavioral cues into Social Signals (SSs) in human-computer interaction. This methodology consists of three main steps: behavioral cues acquisition, manual and algorithmic pre-selection of behavior cues, and classifier selection. In Chapter 8, Marek Wyleżoł compares a new method and original methods of virtual skull implant modeling from bioengineering research. He finds that more and more often these implants (also complete skeletal systems) will be performed with the use of generative technologies. In Chapter 9, Bojan Novak gives us a good view of how he moved from art to found the efficient Prefix Scan for the GPU-based implementation of random forest and suggestion for problem solving.

The third topic is education applications, which is covered from Chapter 10 to 15. In Chapter 10, titled "The Future of Supercomputers and High-Performance Computing", it is pointed out that different hardware architectures will assist computing and programming and offer some alternatives to traditional computational models. In Chapter 11, based on the concept of a Personal Reality (PR) system that can be used to visualize links between universals and particulars within digital worlds, a new philosophy of user interface design is described. In Chapter 12, social media to investigate students' level of familiarity, engagement, and frequency of use of social media technologies in Bahrain's higher education is described, along with tools to promote students' problem solving skills. In Chapter 13, ubiquitous learning (UL) supporting systems are introduced and characterized; these learning systems challenge computing software designers, and the state of the art of this recently initiated line of research on informatics and information systems is presented. In Chapter 14, the authors explain why data mining applications are able to assist the learning process for students and teachers in collaborative-learning environments. In Chapter 15, the authors share their experience of how they use software agents and virtual words to achieve effective collaborative learning. In Chapter 16, the authors present a VoIP voice conferencing test-bed they developed based on Adobe Flash Media server that allows users to point out new roads for future investigations.

The fourth topic in this book is about methods for prediction. In Chapter 17, the authors present an integrative method for the effectiveness evaluation of network attacks. The new method provides a solution to the problem of accuracy drop seen in prevailing grey evaluation methods when the cluster-

ing coefficients exhibit no significant difference. In Chapter 18, the authors discuss different perspectives around a framework architecture for delivering IP multimedia services, which allows voice and multimedia applications to communicate from multi-access scenarios, thus allowing the convergence of fixed and mobile networks. In Chapter 19, the authors present the role of electronic commerce in the global business/marketing environments, thus explaining the main strategy, the applications, and the barriers to e-commerce adoption, etc. This kind of information could then be used, as the authors claim, to find some "orientations" for global business. In Chapter 20, the authors describes a set of topics which have been interrelated for a long time but which have acquired a special attention in the context of computer science, computer graphics, computer animation, textile managing, and productive computing, and the human factors that prevent boosting online sales. In Appendix 1, the authors present some negative examples of the adverse use of the social networking and/or Internet. The examples are 100% true and stem from digital newspapers, entrepreneurial websites, personal messages, etc. Appendix 2, "A Set of Good Online Information", releases the results of an analysis applying communicability to the Social Web. It will open new horizons in the coming years. Along with this, the authors introduce technological aspects of interactive design. The examples, which go with the text, illustrate the correct explanation of the introduction.

## REFERENCES

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