Blog Content and Structure, Cognitive Style and Metacognition

Barbara Colombo, Department of Psychology, Catholic University of the Sacred Heart, Milano, Italy
Alessandro Antonietti, Department of Psychology, Catholic University of the Sacred Heart, Milano, Italy
Roberta Sala, Department of Psychology, Catholic University of the Sacred Heart, Milano, Italy
Simona C. S. Caravita, Department of Psychology, Catholic University of the Sacred Heart, Milano, Italy

ABSTRACT

Fifty blogs were analysed and classified according to both their content and formal structure. The SOLAT questionnaire, aimed at assessing the right (i.e., intuitive-holistic) vs. left (i.e., systematic-analytical) thinking style, was put online, and blog owners were asked to complete it in order to match their cognitive style to the "style" of their blog. Respondents were also asked some metacognitive questions in order to explore their awareness of the psychological processes that are activated by the blog that they had devised, both in their own and in other people's mind. Results showed that blog owners are able to use effective communication strategies by differentiating the formal structure of blogs according to the content, but they lack metacognitive awareness about the mental processes activated by the blog. No relation between the blog owner's cognitive style and blog style was found. Implications for the educational use of blogs are discussed.

Keywords: Blog, Cognitive Style, Media Psychology, Metacognition, Multimedia Learning

1. INTRODUCTION

Today, blogs are a widespread form of communication amongst young people and adults, who can be defined as blog users because they actually own a blog (in other words, they built a blog and manage it) or they are habitual blogs readers. Since a blog is a user-friendly computer-supported artefact that can be easily handled by almost everyone, it can be viewed as an ecological field for exploring spontaneous multimedia and hypertext information processing.

DOI: 10.4018/jthi.2013070101
In reason of the high level of personalisation in dealing with such an artefact, the way a blog is devised and managed may be linked to individual cognitive style, that is, the preferred and habitual manner to process information (Antonietti, 2003). Therefore, it is interesting to assess whether blog owners actually personalise the blog they built by arranging the structure of the blog not only according to its content but also in order to match the blog owner’s cognitive style. In addition, it is worth investigating individuals’ metacognitive awareness, that is, to what extent the blog owners are conscious of the mental processes which are activated in other people by the blogs they devised, and, in particular, of the possible match between the features of the blog and the bloggers’ individual characteristics.

This paper addresses the aforementioned questions. In this introduction the theoretical grounds of the empirical study reported here are highlighted. The basic features of a blog are summarised so to make clear the kind of personalisation it implies. It is a kind of personalisation that can be linked to the concept of “cognitive style”, which is hence presented. The possible relationships between blogs and cognitive styles are then discussed. Finally, the issue of metacognition is introduced by stressing the assumed role of metacognitive awareness in blog management.

1.1. Blogs and Personalised Cognitive Processing

A blog (a portmanteau of web log) is a website where entries are written in chronological order and displayed commonly in reverse chronological order. Many blogs provide commentaries or news on a particular subject; other blogs are personal online diaries. The opportunity for readers to leave comments is an important part of many blogs.

A typical blog combines texts and images (sometimes also sounds and music) and includes links to other blogs, Web pages and media related to its topic. Therefore, blog can be conceived as a multimedia artefact and also as a hypertext (Murray & Hourigan, 2008). Such peculiar characteristics make the building and everyday managing of a blog cognitively demanding. The characteristics mentioned above, indeed, “force” people to use specific cognitive strategies while constructing and administering their blogs, and this should promote reflection (Blood, 2000; Colombo & Sala, 2011; Wagner, 2003). For example, anyone who builds and manages a blog is asked to make decisions concerning the sections to be included, the number and typologies of the pictures, their layout, the writing style, and so on (Huffaker, 2005). However, such choices should depend not only on the blog’s content, but also on the cognitive preferences of the blog owners, and hence the blog structure, as well as any kind of artefact, should mirror the author’s cognitive style (Henri, 1992; Xie, Ke, & Sharma, 2010).

1.2. Cognitive Styles

A cognitive style can be defined as the preferred way of thinking (Sternberg, 1997). Such an inclination concerns the peculiar mode of information processing that is applied across different tasks and occurs in a variety of behaviours. Cognitive styles are transferable to different domains: people tend to use strategies that belong to their own preferred cognitive styles when facing different kinds of tasks. In short, cognitive styles concern the general tendency to follow thinking strategies of a certain type more frequently than others. They are not abilities, but rather a way of applying abilities.

The role of cognitive style has been mainly investigated in instructional contexts. Cook, Gelula, Dupras, and Schwartz (2007) argued that adapting instructions to students’ individual style enhances learning, especially in web-based environments. As far as learning from hypermedia is concerned, it has been shown that cognitive styles can be associated to specific browsing patterns (Calcaterra, Antonietti, & Underwood, 2005; Fiorina, Antonietti, Colombo, & Bartolomeo, 2007). Cognitive styles are also good predictors of self-efficacy in learning environments (West, Kahn, & Nauta, 2007).
Related Content

Parochial School Teachers Instructional Use of the Interactive Whiteboard
[www.irma-international.org/chapter/parochial-school-teachers-instructional-use-of-the-interactive-whiteboard/186213/](www.irma-international.org/chapter/parochial-school-teachers-instructional-use-of-the-interactive-whiteboard/186213/)

Voice Priority Queue Scheduling System Models for VoIP over WLANs
[www.irma-international.org/article/voice-priority-queue-scheduling-system/76320/](www.irma-international.org/article/voice-priority-queue-scheduling-system/76320/)

Web Credibility
[www.irma-international.org/chapter/web-credibility/13198/](www.irma-international.org/chapter/web-credibility/13198/)

The Politics of Establishing ICT Governance for Large-Scale Healthcare Information Infrastructures
[www.irma-international.org/article/the-politics-of-establishing-ict-governance-for-large-scale-healthcare-informationinfrastructures/186757/](www.irma-international.org/article/the-politics-of-establishing-ict-governance-for-large-scale-healthcare-informationinfrastructures/186757/)

A Participatory Design and Formal Study Investigation into Mobile Text Entry for Older Adults
[www.irma-international.org/article/a-participatory-design-and-formal-study-investigation-into-mobile-text-entry-for-older-adults/151590/](www.irma-international.org/article/a-participatory-design-and-formal-study-investigation-into-mobile-text-entry-for-older-adults/151590/)