Chapter 5
Abuse of the Social Media Brain: Implications for Media Producers and Educators

Fritz Kohle
University of Edinburgh, UK

Sony Jalarajan Raj
MacEwan University, Canada

ABSTRACT
Despite the criticism in the mainstream press regarding the use and abuse of digital and social media, its use has been increasingly encouraged and supported in schools and universities. This chapter examines the social media behaviour of tech-savvy undergraduate students at NHTV, University of Applied Sciences, Breda, The Netherlands, from the perspective of an independent documentary producer and educator, to determine whether any correlation between the amount of time spent online and the use of cognitive functions exists. Media producers require an audience capable of critical thought, and teachers educate future audiences to acquire the necessary cognitive skills. Hence, the chapter analyses how the viewer’s cognitive functions impaired by the use of social and digital media affects the reception of media products. This further leads to a more critical concern about the educators’ response to the challenges provided by social and digital media.

INTRODUCTION
In some recent research articles, Kohle and Cuevas (Kohle, 2012; Kohle & Cuevas, 2012; 2010) demonstrated that digital natives have and continue to adapt their viewing habits to social and digital media, challenging traditional content development, production and distribution methods. Social media marketing has become a buzz word—users, companies, charities and governments, all are exploring the use of social media. As happened during previous ‘information revolutions’, social media users and content creators are still in the process of developing the social media narrative. They are not only learning how to access social media networks (SNS), they are increasingly developing the capability to critically process online information, becoming social media liter-
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ate. For example, social media has become and remains instrumental in movements such as the Occupy movement and the Arab Spring. The digital and social media revolution has become a game-changer on a global scale and is the most recent in the evolution of previous ‘information explosions’, such as the invention of broadcasting and print technologies, the invention of the alphabet, and language itself.

Recently, the negative aspects of social media moved into the focus of the mainstream press. Surveillance of social and digital media was highlighted once more by Edward Snowden (Branigan, 2013). Agencies such as SS8 (2011) and Glimmerglass (2011) are well described regarding their data collection activities on behalf of government and private clients. Intelligence Support Systems for Lawful Interception (ISS, 2013) offer a platform for companies such as SS8 and Glimmerglass to present their latest social media tools in intelligence gathering. Conferences take place across the globe and services offered include, but are not limited to: cyber security and lawful interception of data, as well as submarine cable landing stations, offering access to submarine optical cables that support millions of voice calls and internet traffic. SS8 specializes in ‘accurate reconstruction of intercepted voice, text and internet activity’ and the ‘correlation of intelligence from Internet Protocol Data and Call Detail Records to full communications content’ (SS8, 2013). How this can be done without violating the 1st amendment of the US constitution is debatable, not to mention international and national law for the rest of the world.

The topic of social media surveillance abuse on its own requires further investigation, but this would go beyond the scope of this paper, which does not focuses on social media surveillance and security issues, but on the impact of social media on the development of cognitive skills of digital natives and place it into a historical as well as social theory context.

BACKGROUND

This paper is relevant to media producers who continue to work in their profession and who have an interest in teaching. Familiarity with Marshall McLuhan’s (1995) media theory and Briggs & Burke’s (2009) history of media is recommended. Macluhan argues that the “medium is the message”. It is the media system itself which transforms society. Evidence suggests that the use and abuse of social media also has a detrimental impact on the development of cognitive skills among digital natives and immigrants alike. (Spitzer, 2012) At the same time digital natives are challenged to acquire new skills to navigate social and digital media; skills needed to become literate in the use of a new media technology, which in itself is influencing user behavior and the way content is produced. Data suggests that not only behavior is affected; the brain itself also undergoes significant changes.

Social media is not only the latest ‘information explosion’ in a series of evolutionary steps, since the invention of language (Kohle, 2013); it differs considerably from previous information explosion events, such as print and broadcast technologies in speed of information dissemination. This was discussed by Mcluhan, though the speed with which this new technology evolves and the extent to which it encompasses previous media technologies is beyond the scope envisaged by Mcluhan. Social and digital media are a paradigm shift when compared to previous information explosions, such as the invention of writing and the alphabet.

History teaches us that the introduction of new technology also brings with it undesirable side effects. Social media is no exception to this: it not only challenges the way media productions are developed, produced and distributed – evidence suggests social media is also playing a role in the way audiences develop their cognitive skills. With regards to content for social and digital media, we take into account Mcluhan’s idea on how