Digital Literature and Big Knowledge: The Case of Sociological Comics
Pedro Andrade

COMMUNICATION AND SOCIETY RESEARCH CENTRE, INSTITUTE OF SOCIAL SCIENCES, UNIVERSITY OF MINHO

ABSTRACT
In order to face the overwhelming process of Big Knowledge, it is possible to suggest experimental fictions that may help to understand and deal with our knowledge society and culture. The present paper suggests a mode of digital literature named "Sociological Comics", which analyses a political struggle through its story. Under a genre perspective, it fusions sociological knowledge with comics narrative to tell such story. This Sociological Comics example was selected from a corpus of fictional digital texts we included within an archive and Knowledge Base using Hybrimedia. Hybrimedia means the transformation via hybridization of originating media into innovative media. For instance, a post in a blog or a comment in a social network may be reported within a classical mass media e.g. a newspaper, or vice versa. This process actually changes the very nature of these information or knowledge messages.

KEYWORDS
experimental fiction; Big Knowledge; sociological comics; knowledge base; hybrimedia.

RESUMO
A fim de enfrentar o processo avassalador do Big Knowledge, ficções experimentais emergem para entender e lidar com a nossa sociedade e cultura do conhecimento. O presente artigo sugere um modo de literatura digital nomeado ‘Banda Desenhada Sociológica’, que analisa uma luta política através da sua estória. Sob uma perspetiva estilística e de género, funde o conhecimento sociológico com a banda desenhada para contar essa estória. Este exemplo de ‘Banda Desenhada Sociológica’ foi selecionado de um corpus de textos ficcionais digitais, residentes num arquivo e Base de Conhecimento usando Hibrimédia. Hibrimédia significa uma transformação mediática através da hibridização entre os média de origem e um novo meio. Por exemplo, um post num blogue ou um comentário numa rede social podem ser reportados por um meio de comunicação de massas clássico, como um jornal, ou vice-versa. Este processo muda frequentemente a própria natureza dessas mensagens de informação ou conhecimento.

PALAVRAS-CHAVE
ficção experimental; Big Knowledge, danda desenhada sociológica; base de conhecimento; hibrimédia.
I. INTRODUCTION: DIGITAL LITERATURE AND BIG KNOWLEDGE

The information society, for decades, has produced cyclopean amounts of data, a phenomenon known as Big Data. Such a process makes extremely difficult to analyze information in a timely manner for its application to economy, cultural industries, education and/or research. The recent network society only exacerbates this situation. One of the recommended solutions to solve such problem is the use of knowledge management systems, such as Knowledge Bases. These systems use various software for the search, curation and dissemination of knowledge. In other words, today Big Data becomes Big Knowledge, a strategy that overcomes some shortcomings of Big Data but simultaneously raises others.

Freebase project was one of the pioneering answers to solve such issues underlying the emergence of the knowledge society, through the implementation of a collaborative knowledge base in cyberspace, built by a knowledge community. The giant Google has acquired this platform and turned it into Knowledge Graph, a system that allows a more effective semantic research than the search operated through the traditional search engines, with respect to information and knowledge circulating in the Internet. At the individual level, several applications were designed to build personal knowledge bases. This software integrates subjective and individual information and knowledge, using knowledge aggregation technologies and methodologies such as mind mapping, concept mapping, cognitive mapping, and ontologies.

The author has produced several experimental fictions, through which he intends to suggest strategies and methods to understand our knowledge society, in order to minimize the overwhelming process of Big Knowledge. The present paper suggests a style of digital literature named Sociological Comics, that: (a) within a substantive or content level, produces a fiction on knowledge; (b) and, from a stylistic and genre perspective, uses a specific configuration of knowledge (the comics narrative) to tell a story. This Sociological Comics example was selected from a corpus of fictional digital texts we included within an archive and Knowledge Base using Hybrimedia.

Hybrimedia means the transformation of originating media into original (that is, innovative) media, through the hybridization of several precedent media. The above mentioned hybrid knowledge base gathers plural media and
sources, consulted in websites, blogs, wikis, and digital social networks, to represent and present Big Data and Big Knowledge phenomena, as a background theme of e-stories activated by e-readers. Hybrimedia was used in a former digital fiction named Geo Novel, where the narrative used GPS to locate the characters in the plot, at a specific real location and time within a map (Andrade, 2011b). It was also called GeoNeoLogical Novel, due to its innovative nature: ‘Geo’ as it uses space, ‘Neo’ because it occurred in an ever changing real/digital time, and ‘Logical’ as it incorporates a logical plot including the logos (meaning the reason and language) of several social actors and fictional characters. This work was first presented at the University of São Paulo in 2009, and selected to be shown at i-klectic Art Lab (London) within the 2nd exhibition Off the s/helf-the self and subjectivity in the artist’s book (29 May 2012).

II. SOCIOLOGICAL COMICS, A ‘KNOWLEDGE NOVEL’ GENRE

An illustration of a way to address the issues raised by Big Knowledge is a ‘knowledge novel.’ Knowledge novels not just tell a story through a plot as a common novel does, but also narrate some aspects of knowledge itself through a specific story. In other words, knowledge can be taken as a theme, but it may also constitute a way, a style, a method, and a genre of telling a story. One example is the emerging literary genre named ‘Sociological Comics’, written by this paper’s author (Andrade, 2015). In fact, such text tries to articulate, via a story: (a) on one hand, the knowledge implemented by institutions located at the contemporary communicative, democratic, and digital city, such as the academy; (b) on the other hand, the knowledge produced by urban digital citizens. And it does so through a particular way of presenting content or knowledge, i.e., a fictional comics book. Sociological Comics was first exhibited at a collective art exhibition the 8–9 December 2015, at Stockwell Studios, London.

As a literary genre, Sociological Comics includes narratives where social and knowledge questions are discussed through comics stories. However, such social questions are not just understood and used as an explicit theme to propel the plot. They are also embedded within the very way of representing and presenting real or imaginary worlds. For example, social problems may be not just narrated, but also analyzed through a sociological research using visual and verbal arguments within comics frames. In other words, the literary plot progression visible inside common comics, is augmented within a Sociological Comics, by a second and parallel plot progression inherent to a scientific or artistic research which delimitates a sociological plot.

Three main phases are involved in this procedure. Firstly, questions on the story are raised and hypotheses are formulated. Secondly, data within the story are collected through several sources: written or digitized texts, photos, social networks raw content, previous curated content, etc. Thirdly, this gathered content is analyzed and interpreted using a hybridization of scientific and literary
methods. Finally, hypotheses are tested and demonstrated along the Sociological Comics book.

To illustrate this process, Figure 1 depicts the cover of the first Sociological Comics book experiment, published in 2015 by Communication and Society Research Centre at University of Minho, and available at Amazon (Andrade, 2015).

![Figure 1. Cover.](image)

Gerard Genette calls ‘paratext’ those parts of a book that introduce other parts of this writing and reading device, working in some way as an aperitif or a visiting card: e.g., a book’s abstract, a table of contents or an index. We will focus here on some of this metadata that facilitate the consultation and understanding
of Sociological Comics. Returning to our example, Figure 1 shows the cover of the book, which includes a page of this book. Such a communicative argument reinforces the paratextual or metadata nature subjacent to the book’s cover.

Conversely, the book’s back cover (Figure 2) further adds to such paratextual emphasis. This is undertaken through the presentation both of the substantive and structural book’s perspective, as well as notes about its author. These notes include not just his biography, but also several personal or institutional contact data, in order to enhance communication between him and his readers.

Figure 2. Back Cover.
In the same direction, the table of contents (Figure 3) constitutes another metadata component that here adopts a visual design. The attention and motivation of the reader may be stimulated through this reading and writing strategy, where the visibility or the invisibility of the book contents is suggested, unveiled, revealed, induced, deduced, conducted, promoted or demoted.

Figure 3. Table of Contents.
III. DELIMITATING SOCIOLOGICAL COMICS

The story plot
This book tells a story based on sources that document a recently occurred social process: that is, events and accounts during struggles against European austerity measures, mainly directed against European southern countries (Giugni, 2015; Haive, 2014; Mendoza, 2014; Negra, 2014). This social story occurred in Portugal in 2013 and was led by several associations and social communities (Que se lixe a troika, 2014), within the context of a profound economic crisis period, and inside a Lusophone culture that was studied extensively by Moisés Martins (2015: 28). Such practices and counter-discourses were developed by common citizens, through 3 modes of communication articulated with one another, and mixed/hybridized in a new medium, above named hybrimedia:

• Co-presence communication (urban murals, graffiti, political demonstrations);
• Mass media communication (newspapers, television);
• Digital communication (social networks, such as Facebook).

Aims
The purpose is to analyze discourses and counter-discourses connected with local public opinion, which is partly engendered by social actors (citizens, tourists, etc.) inside the dialogic public sphere, like the city spaces and scapes, mass media and digital social networks (Andrade, 2011a). Such discursive phenomena often pertain to social discontinuities and political ruptures, that may be interpreted through their institutional and citizen accounting (Andrade et al, 2010). Differently but complementarily to social accounts produced by social actors, sociological accounts, and their respective plots, are interpretations made by a sociologist or by other social researcher, with scientific purposes, about such particular social accounts and the corresponding plots.

‘Sociological Comics’ book’s introduction develops such objectives, and establishes a genealogy with a precedent experimental writing called ‘written comics’ (in Portuguese named ‘Banda escrita’). Within the genealogy of political / cultural avant-gardes, Situationist movement applied comics to criticize the society of the spectacle. In the last decade of the 20th century, a ‘written comics’ experience was carried out, employing comics frames that included just text and no images (see Andrade 1997, and Figure 4, the image on the right, within the ‘Written Comics’ section).

Another illustration of a paratext is the Conceptual Abstract. Its meaning may be observed, using an intertextual tactic, by reading Figure 5, which presents the actual text of Sociological Comics when referring to its Conceptual Abstract. Therefore, this Sociological Comics genre not just tells a story, but also interprets it. In other words, the writer becomes his own conscience, initial reader and first critic.
1. INTRODUCTION:

Delimiting Counter-Austerity and Sociological Comics

SOCIOCOLOGICAL COMICS

This book was written in 2012 during the Euro crisis. The 2008 financial crisis, followed by the austerity measures implemented across Europe, led to a wave of protest movements that questioned the role of media and financial institutions. The book explores how everyday practices of going to work, buying groceries, and engaging in political protests are interconnected with the broader context of the crisis.

AIMS

Considering now a substantive perspective, this book aims to analyze disclosures and counter-discourses articulated with both global and local public opinion. These are partly channelized inside the digital public sphere, like the city itself, its media and digital social networks.

Figure 4. Introduction.
IV. QUESTIONS AND HYPOTHESES

To reach the above mentioned objectives, it is necessary to ask several questions that may be answered through the respective hypotheses and their testing in the empirical terrain.

First question: How do social movements use the three main modes of communication (co-presence, classic mass media, and digital media) to enhance citizens’ participation within counter-austerity? Correspondent hypothesis: after experimenting disenchantment in what regards political parties, citizens are trying to innovate, by inventing new strategies of political action. This is forged
with indignation and sometimes violence, articulated with ethics, and often using aesthetic means and methods, such as public art installations and performances.

Second question: Inversely, how can the nature of communication influence social movements to develop counter-austerity? Respective hypothesis: within contemporary societies, diverse media are not just being simply articulated among them, like in hypermedia, but they are also being mixed in novel ways. The above-mentioned hybridized media, named hybrimedia, are used extensively in counter-austerity processes.

Third question: How do digital social networks allow and enhance social cooperation and counter-austerity? Digital social networks (the pillars of the so-called Web 2.0) may have a central role in urban struggles, by gathering huge crowds within a common global front. And social semantic networks (also named Web 3.0, see Andrade, 2011a) transform political information into democratic knowledge on counter-austerity.

Fourth question: How are experimental literary genres contributing to the development of scientific media for cultural citizenship and counter-austerity? Sociological Comics is an experimental book genre that focuses on social dissemination of information and knowledge in ways that may enhance scientific and political literacies on counter-austerity, for instance, through open access, visual and digital languages, intermedia, transmedia, hybrimedia.

Figures 6, 7, 8, and 9 exemplify how these hypotheses are verified through the social and sociological stories depicted within them. Once more, our readers are invited to look at the ‘inter-text’ presented through the following comics frames, regarding the three main modes of communication above mentioned. Note the process of media hybridity testified in Figure 8, where the same content (a) is presented within a particular type of media such as digital media within social networks (the popular Angry Birds game); and (b) re-presented again inside a more classical medium such as newspapers, taking the new denomination ‘Angry People’ (the word ‘people’ is translated as ‘povo’ in Portuguese).
Figure 6. Co-presence communication.
Figure 7. Mass Media Communication.
Figure 8. Media Hybridity.
V. CONCLUSIONS

First conclusion: in the last decades, social movements are extensively using novel strategies for conducting political action, e.g. when forging counter-austerity. In fact, the right for indignation against austerity policies and politics is exteriorized nowadays in the public sphere through original strategies such as ‘tides’, beyond the classical political games and their respective authors and actors, such as parties and trade union.
"Tides" are protest processes including the participation of social agents belonging to multiple marginalized social classes, professions, retired people, unemployed youngsters, women, gays and lesbians, and other social fragmentations.

Second conclusion: communication processes may partly condition social processes, and social movements in particular, such as the ones claiming for counter-austerity through singular hybrid tactics and practices. In effect, hybrimedia is a new medium, originated from the hybridization of precedent media, such as co-presence media, classical mass media and digital media.

The social effects of one of these media can’t be understood without the contribution and fusion of the other media, as it is testified within counter-austerity social movements.

Third conclusion: social and political participation arenas within social networks, particularly those fighting for counter-austerity, can’t be reduced to digital social networks like Facebook, Twitter, You Tube, Instagram, etc. These constitute just the top of the iceberg.

Within contemporary societies, we witness public participation processes based on singular articulations among three major strategic pillars, corresponding to 3 central network types:

1. Pre-capitalist/preindustrial face-to-face networks, which feed processes of identity and difference, activated by several social agents at their localized/globalized everyday life.

2. Web 2.0 social networks (Facebook and the like) where raw information, some opinions and synthetic analysis, are shared.

3. Social semantic networks (Web 3.0), that is, internet sites where information is transformed into knowledge, through the definition, interpretation and explanation of social and political processes, like counter-austerity.

Fourth conclusion: experimental literature does enhance knowledge transfer and sharing, and develop diverse literacy modes. In fact:

1. Experimental fiction like sociological comics is publically disseminated through digital libraries and sold at digital booksellers at a low price; their PDFs, abstracts and text extracts are available in open access at university repositories and other knowledge bases.

2. Experimental literature may diffuse both social and sociological stories/accounts.

3. Experimental stories disseminate social and sociological ontologies, that is, instruments that organize and disseminate social practices and scientific concepts, for better understanding social relations and processes within our knowledge society, and to overcome the contemporary challenges of Big Knowledge.

Finally, three last paratextual and metadata dispositifs are underlined within this Sociological Comics example, mainly through a more visual display, which is one of the core characteristics of comics literature: a Bibliography, an Ontology and an Index (respectively, Figures 10, 11, and 12).
Again, please look at the inter-text provided within the frames in Figure 11, to understand in more depth the polysemic meanings of the concept ‘Ontology,’ nowadays profoundly deconstructed and reconstructed. One of its forms, a social/sociological ontology, may be defined as a collection of concepts’ meanings, articulated through logical relationships, which circumscribes the social semiotics of a certain area of knowledge (Social Sciences), intimately connected with a specific social and power arena.
Within Sociological Comics, an example of such ontology pertains to the actions and discourses developed in the public sphere where citizen participation occurs, and may include any type of media or their synthesis, e.g., the emerging hybrimedia.

To conclude, an index (Figure 12) constructed in a comics style, works as a paratext containing metadata, as if it depicted another story of the concepts.
REFERENCES

ANDRADE, Pedro (2015). Austerity History through Sociological Comics: A Guide to Social Media and Networks against Austeritocracy for Use by all Generations. North Charleston: Create Space.

——— (2011a). Sociologia Semântico-Lógica da Web 2.0/3.0 na sociedade da investigação: significados e discursos quotidianos em blogs, wikis, mundos/museus virtuais e redes sociais semântico-lógicas. Lisboa: Edições Caleidoscópio.

——— (2011b). Novela GeoNeológica nº 1: Um caso de Literatura Transmediática/1ª Novela da Web 3.0. Lisboa: Edições Caleidoscópio.

——— (1997). “Sociologia do Olhar: um novo olhar sobre a Sociologia?” Atalaias: 3: 197-201.

ANDRADE, Pedro, José Barros, Carlos Marques, and Malcolm Miles, eds. (2010) Arte pública e cidadania: novas leituras na cidade criativa. Lisboa: Edições Caleidoscópio.
GIUGNI, Marco, and Maria T. Grasso (2015). *Austerity and Protest: Popular Contention in Times of Economic Crisis*. London: Routledge.

HAIVE, Max, and Alex Khasnabish (2014). *The Radical Imagination: Social Movement Research in the Age of Austerity*. London: Zed Books.

MARTINS, Moisés de Lemos (2015). “Media digitais e lusofonia.” *Lusofonia e interculturalidade: promessa e travessia*. Ed. Moisés de Lemos Martins. Vila Nova de Famalicão: Humus. 27-56.

MENDOZA, Kerry-Anne (2014). *Austerity: The Demolition of the Welfare State and the Rise of the Zombie Economy*. Oxford: New internationalist.

NEGRA, Diane; and Yvonne Tasker, eds. (2014). *Gendering the Recession: Media and Culture in an Age of Austerity*. Durham, NC: Duke University Press.

“Que se lixe a troika”. 30 June 2017.

https://pt.wikipedia.org/wiki/Que_se_lixe_a_troika!_Queremos_as_nossas_vidas!

© 2018 Pedro Andrade.
Licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 International (CC BY-NC-ND 4.0).