Original Citation:



Università degli Studi di Padova

Padua Research Archive - Institutional Repository

Teaching Cartography with Comics: Some Examples from BeccoGiallo's Graphic Novel Series

Availability: This version is available at: 11577/3170071 since: 2015-12-17T21:35:49Z
Publisher:
Published version: DOI: 10.4458/5196-07
Terms of use: Open Access
This article is made available under terms and conditions applicable to Open Access Guidelines, as described at http://www.unipd.it/download/file/fid/55401 (Italian only)

Journal of Research and Didactics in Geography (J-READING), 1, 4, June, 2015, pp. 69-78

DOI: 10.4458/5196-07



Teaching Cartography with Comics: Some Examples from BeccoGiallo's Graphic Novel Series

Giada Peterle^a

^a Dipartimento di Scienze Storiche, Geografiche e dell'Antichità, University of Padua, Padua, Italy Email: giada.peterle@gmail.com

Received: March 2015 – Accepted: April 2015

Abstract

This article suggests the use of comics, particularly of graphic novels, as valuable instructional tools for teaching cartography. Of particular interest is the idea that comics can be used to develop students' geographical competencies, their ability to think actively about cartographical issues, and their capacity to interact with "maps as mappings" (Dodge, Kitchin and Perkins, 2009). The theoretical references used to conduct the deep interdisciplinary proposal and analysis include: the growing field of literary cartography, recent post-representational theories in cartography, and the emerging field of "comic book geography" (Dittmer, 2014). The article reads comics as maps and analyzes their map-like features to demonstrate that both maps and comics ask the reader-user to be actively engaged to decipher, orient, and practice them. Proposing to read "maps as comics", "maps of comics", "maps and mappings in comics", and "comics as maps and mappings", the article suggests the possible practical employment of comics in cartography classes. Furthermore, this study uses examples from BeccoGiallo's comic series to demonstrate that graphic novels may help students become more aware map readers and users, by being involved in an active spatial practice. Finally, this article focuses on the unexplored educational potential of graphic novels by exploring the improvement of students' understanding of post-representational cartographical approaches through comic use.

Keywords: Literary Cartography, Post-Representational Cartography, Graphic Novel, Comic Book Geography, Mapping, Teaching Cartography

1. Introduction

This article's main aim is to suggest the use of comic books, particularly of graphic novels, for teaching new understanding of cartography. By highlighting the intrinsic spatial essence of the grammar of comics, this article compares comic books and maps as a useful teaching tool. Fundamental theoretical references for the

proposal of teaching cartography through and with comic books will be reflections on the educational potential of comics (VV.AA., 2005, p. 1), the gradual convergence of cartographic and literary theory within the interdisciplinary field of literary cartography (Papotti, 2012; Rossetto, 2014; Ryan, 2003), and finally the recent advancement of post-representational cartographic theories (Caquard, 2015; Dodge, Kitchin and Perkins, 2009).

2. Teaching with comics and graphic novels

It is evident that the benefits of the employment of comic books are not a new aspect for educationists, as a 1944 issue of the Journal of Educational Sociology was devoted to The Comics as an Educational Medium. As argued almost 70 years ago, it was a natural development that a popular and widespread medium such as comics would be utilized in the direction of instruction (Sones, 1944, p. 234). Nevertheless, despite often being included in literature, history, and sociology classes, comics remain little recognized as instructional tools (Kleeman, 2006, p. 145), particularly in teaching geography. Nonetheless, in recent years, there has been an increasing number of works indicating the educational value of comic books, and the growing academic interest in this field reflects a recent renaissance of the use of comics in classrooms (VV.AA., 2005, p. 2).

The volume *Teaching the Graphic Novel*, edited by Stephen E. Tabachnick in 2009, well illustrates and explores the theoretical, social, aesthetic, and pedagogical issues that the graphic novel has posed for literature teachers (Tabachnick, 2009, p. 2).

It suggests some compelling reasons for adopting comics in teaching other disciplines as well. Indeed, as Charles Hatfield indicates in his chapter Defining Comics in the Classroom; or, The Pros and Cons of Unfixability, the intrinsic "interdisciplinary" or even "antidisciplinary" essence of comics nudges us "out of accustomed habits of thought and into productive grey areas where various disciplines overlap and inform one another" (Hatfield, 2009, p. 23). This is tremendously helpful in bringing students closer to the capacity of going beyond disciplinary limitations and boundaries (Mandaville and Avila, 2009, p. 249), thereby creating connections among different disciplines. Moreover, "graphic novels fit students' sensibilities at a deep cognitive level" (Tabachnick, 2009, p. 4) by connecting the language they adopt in with what they use outside the classroom, thereby engaging "today's visually oriented students" (Mandaville and Avila, 2009, p. 246) with a combination of visual and textual communication. Therefore, comic books perfectly embrace the contemporary

"cognitive shift" toward a hybrid form of visualand-textual-reading encouraged by the everyday languages of the Internet, Power Point, and cell phone screens (Tabachnick, 2009, p. 4).

Being motivational and instructional materials that can add relevance, diversification, and enjoyment to teaching as well as to learning (Kleeman, 2006, p. 146), comics – particularly graphic novels – are taken as required readings into courses teaching urban studies, memory, autobiography, cultural and postcolonial studies, and even geopolitical geography. Despite the illustrated compelling pedagogical reasons for studying with comics, they have never been considered as educational tools that could also be employed for teaching cartography thus far.

3. Teaching post-representational cartography with(in) comics

In her 1949 article An Experiment in the Use of Comics as Instructional Material, Katharine H. Hutchinson referred to the possibilities comics could offer, among others, to geography teachers. However, Hutchinson simply alluded to the geographical elements emerging from comic books in the form of direct references or by implication in the characters and setting of the stories (Hutchinson, 1949, p. 240). Being apparently the most simple and immediate, this approach continues to prevail for the employment of comics in geography classes. However, this approach merely looks for explicitly mentioned geographical references, without aiming to deeply analyze the geographies that emerge from the peculiar spatial structure of the comic book itself¹. In his article, Not Just for Fun: Using Cartoons to Investigate Geographical Issues written in 2006. Grant Kleeman moves forward in the consideration of the possible contribution of comics to the learning and teaching of geographical themes. As Kleeman states, "the communicative power of cartoons lies in their ability to present often-complex issues, events

Copyright[®] Nuova Cultura

¹ For more information on the peculiar geographies emerging from different contents and forms of literature, and generally in fiction, see the analysis developed by Marc Brosseau in his seminal article "The City in Textual Form: Manhattan Transfer's New York", 1995, pp. 89-114.

and social trends in a simplified and accessible form" (Kleeman, 2006, p. 145) that helps students in approaching geographical subjects.

From an academic perspective, in recent years, "comic book geography" is growing as a new, independent cultural geographical area of research. First indicated in Jason Dittmer's 2010 seminal article Comic Book Visualities: A Methodological Manifesto onGeography, Montage and Narration, comic book geography has definitely been confirmed as an independent field of study with the publication of the volume entitled Comic Book Geographies in 2014, which was edited by Dittmer himself. This contribution, together with Juliet J. Fall's studies on geopolitical issues in comics (Fall, 2006), were able to highlight the value of using comics in cultural geographical studies, thereby drawing attention to the unforeseen geographers' possibilities comics offer them for understanding the contemporary experience of space (Dittmer, 2010, p. 223).

Aiming to proceed a step further in this promising field, I suggest here that the "spatial grammar of the comics page" (Dittmer, 2010, p. 235) can open not only geography, but even cartography up to new understandings. In my view, a cartographic appreciation of comics may disclose unforeseen strategies and innovative methodologies for teaching cartography. This aim responds to the need for renewal and change in the field of map-related pedagogy that Patrick Wiegand calls for in his 2006 volume entitled Learning and Teaching with Maps. Indeed, as affirms, despite Wiegand the incredible popularity maps have come to enjoy in previous decades, map education was not able to respond to the fast mutation of cartographic thinking (Wiegand, 2006, pp. 1-2). More specifically, the aim here is to demonstrate how the particular structure of comics, relying on a deep engagement of the reader, could help students in developing their own mapping and reading-amap skills. As Wiegand reports, if "problem solving, making inferences and decision making (especially with interactive mapping tools) is under-researched" (Wiegand, 2006, p. 2), in educational cartography, comic books appear to be a useful pedagogical tool for the development of map and geo-information science pedagogy.

In fact, comics appear to intrinsically mirror and structurally embrace recent advancements toward a post-representational approach to cartography². This new perspective understands maps not as merely static, fixed, and detached representations, but as dynamic, contingent, and embodied practices. While maps are always "inbecoming" entities, which come into being only when someone engages with them (Del Casino and Hanna, 2006; Dodge, Kitchin and Perkins, 2009), comic books are graphic objects that have to be read to truly gain their realization. Following Dittmer (2010, p. 223), who indicates that the visualities of comic books are profoundly spatial in both representational and non-representational aspects, one could see the possible connection between comic books and post-representational cartography³. Comic books reveal their "map-like" nature in manifold ways: through the alternation of both visual and antioptical elements within/between panels (Dittmer, 2010, p. 228); through the intrinsically spatial organization of the page; through the spatial choices the author has to make "in the distribution of spaces and occupation of places" (Groensteen, 2007, p. 21) while composing the story. Furthermore, not only being able to represent but also perform and enact (Round, 2014, pp. 130-139), comics display a truly postrepresentational essence that emerges through the performative nature of their reading practice.

The gutters between panels present the reader a story that is full of holes, which are gaps in the meaning he/she has to fill up to find his/her "pathway to follow" (Groensteen, 2007, pp. 7-10). By alternating reticence and representation, linearity and discontinuity, comics like maps offer the reader a space for being involved in the construction of spatial meanings. The reading experience becomes an actual mapping- and

² For a review of the state of the art of non- and post-representational studies see Cadman, 2009; for a particular focus on post-representational cartography see Caquard, 2015.

³ A great example of hybridization between comics and cartographical theory is the chapter by John Krygier and Denis Wood "Ce n'est pas le monde (This is not the world)" in Dodge, Kitchin and Perkins, 2009.

orientation-practice⁴. According to Marie-Laure Ryan, a reader is always required to do the mapping of the salient features of the fictional world (Ryan, 2003, p. 335). This process is heightened in comics. Indeed, passing through the spatial structure of the comic book is like attempting to construct a mobile map for the reader that recomposes all the fragments in a coherent constellation. As Charles Hatfield asserts, if there is no "right" way to read the comic page (Hatfield 2005, p. 65), I would suggest that this "plurivectorial narration" (Groensteen, 2007, p. 108), which permits multidirectional movements of the reader's eyes through the page, represents the main postrepresentational feature of comics. From an educational perspective, making the experience of reading a "plurivectorial narration" could also encourage students to create their spatial strategies and tactical choices, thereby helping them in developing their own cartographical skills.

Not only a "motivational tool" that catches students' attention, comic books could be employed in geography and cartography classes to help students in becoming more active "critical thinkers" as well as "viewers" (Kleeman, 2006, p. 146; Versacci, 2001, pp. 64-65). Referring to Versacci's article's title, How Comic Books Can Change the Way our Students See Literature, in the last paragraph of this article, I attempt to further demonstrate "how comic books can change the way our students not only see cartography but even engage with maps." By mentioning a few examples from BeccoGiallo Editions, I suggest how comic books could be usefully employed in teaching cartography.

4. "The *comic* book and the map": examples from BeccoGiallo's editorial series

Recently, the connections between cartography and fictive literary narrations have engaged literary critics as well as map theorists, thereby providing new resonance to the interdisciplinary field of "literary cartography." The hybridization between the book and the map is at the base of the theoretical and methodological exchange that I suggest for considering the relationship between comics (as fictional narratives) and maps. Furthermore, I will take into account the 2014 article entitled *Theorizing Maps with Literature*, in which Tania Rossetto highlights the unforeseen insights offered by fictive works of literature to map theory from a post-representational cartographic perspective.

In order to suggest some of the still unexplored ways in which comics could be employed in maps-related pedagogy, I begin first from the theoretical frame proposed by Davide Papotti in his Il libro e la mappa. Prospettive di incontro tra cartografia e letteratura (The Book and the Map: Perspectives for an Encounter between Cartography and Literature) appeared in the volume Piani sul mondo. Le mappe nell'immaginazione letteraria (Plans on the World: Maps in the Literary Imagination) edited by Giulio Iacoli and Marina Guglielmi (2013). Second, I select a few representative graphic novel examples from BeccoGiallo's Editions. In fact, with their specific attention to "reality comics" and journalism", "graphic BeccoGiallo's publications appear particularly suitable for the purpose of teaching concrete geographical through comic books' creative representation and engagement with maps and cartography.

Beginning with Papotti's (2012) suggestion, I further analyze "the comic book and the map," thereby shifting the attention from the relationship between literature and cartography to that between comics and cartography. The analysis is developed through the following four sections: "maps as comics," "maps of comics," "maps and mappings in comics," and "comics as maps and mappings."

First, I suggest that it is possible to read "maps as comics" by inviting students to reflect on the process of reduction, simplification, and symbolization of the reality that maps undertake (Mori, 1990, p. 5), by comparing it with the ways in which comics use visual elements to

⁴ For the interpretation of the encounter between the reader and the book as a "geographical event" see Hones, 2008.

condense, concentrate, and symbolize the story they tell.

Second, I propose to realize "maps of comics", referring in particular to the renowned method elaborated by Franco Moretti for producing a "cartography of literature" (Moretti, 1997). Therefore, a "cartography of comics" could elaborate a cartographical projection of the geographical spaces and places mentioned within comic narration. On the one hand, this could help students in researching, selecting, and then visualizing the geographical information contained in the graphic novel by developing their personal cartography of the narration. On the other hand, this could also open up new possibilities for the critical analysis and comprehension of the comic book itself. Figure taken from Destinazione Freetown (Destination Freetown) (2012) by Raul Pantaleo and Marta Gerardi, demonstrates how the insertion of a map representing the protagonist's journey back home from Italy to Sierra Leone helps readers in locating, summarizing, and assimilating the geographical data inserted throughout the comic book. This graphic novel is the first of a trilogy published with BeccoGiallo by Pantaleo, Gerardi and, from the second volume on, Luca Molinari, which I consider particularly useful for the proposal of teaching geography and cartography with comics. Indeed, being part of the architecture studio Tamassociati, the three authors show not only a deep attention to motifs related to geography, urbanism, and the "resistance of places" to abusive urban speculation, but also a great capacity for playing with maps and plane or three-dimensional representations of spaces (Figure 1).

Indeed, the second volume of the trilogy, Architetture resistenti. Per una bellezza civile e democratica (Resistant Architectures. For a Civil and Democratic Beauty) (2013) is helpful in introducing the third section, which proposes to look for "maps and mappings in comics." Like in literary texts, the appearance of "cartography in comics" could be "literal" or "textual" (Papotti, 2012, p. 84). In the first case, the cartographic element is literally inserted

within the comic book. In the second one, the cartographic element is implicitly mentioned and evoked throughout the narration. Inspired by post-representational approaches to maps. teachers could search not only for the reproduction of maps (cartographic images) within the comic's narration, but also for the representation of mappings, that is of the disparate practical involvements the characters have with maps. From this perspective, Figures 2 and 3, selected from Zeina Abirached's Il gioco delle rondini (The Game of the Swallows) (2009), represent the intimate cartography of the protagonist's collapsing city map during a warnight in Beirut; Figure 4, from Architetture resistenti, exemplifies the potentiality of comics to shift from the depiction of a map to that of an active engagement with it. If employed as instructional tools. Abirached's mental maps could help in teaching how cartographies can be (re)interpreted, manipulated, and reshaped through personal perceptions and projections of space. Furthermore, Pantaleo's, Gerardi's, and Molinari's pages will illustrate how cartography not only depicts but also invites the reader to perform the map by (visually) visiting the places located on it (Figures 2, 3, and 4).

The fourth cartographic educational use of comics that I would like to suggest is based on the "map-like" features of comics; I propose to understand "comics as maps and mappings" in a post-representational sense. Like works of literature, "comics as maps" transmit an informative content and respond to a "call for orientation" (Papotti, 2012, pp. 77-78). As mappings, through their peculiar spatial and even "cartographical" grammar, comics create cartographies, emergent thereby offering students an actual cartographical experience that resembles actual cartographic engagement. On the one hand, the comic book reader performs a mapping practice by reading the maps represented in the plot; on the other hand, he/she is forced to find an orientation in the space of the comic book itself, and collecting visual metaphors and symbols which, as coordinates, direct his/her reading strategies.



Figure 1. Pantaleo R. and Gerardi M., Destinazione Freetown (Destination Freetown). Source: BeccoGiallo, 2012.

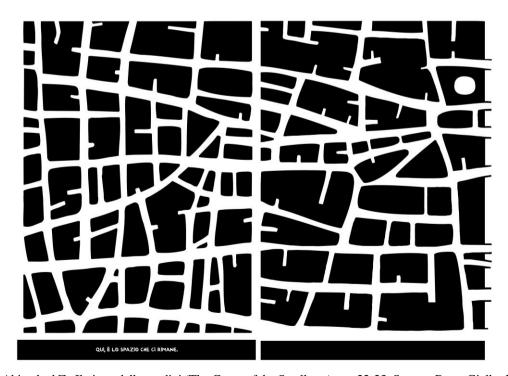


Figure 2. Abirached Z., Il gioco delle rondini (The Game of the Swallows), pp. 22-23. Source: BeccoGiallo, 2009.

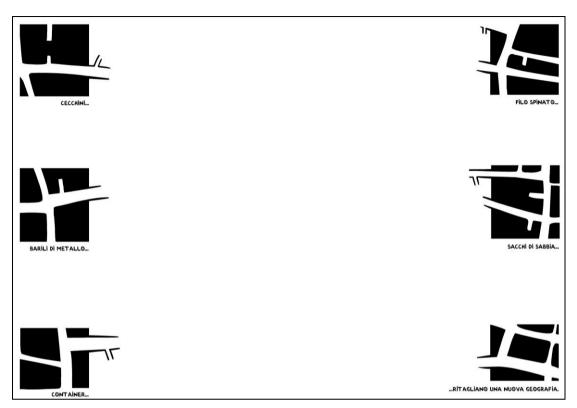


Figure 3. Abirached Z., Il gioco delle rondini (The Game of the Swallows), pp. 26-27. Source: BeccoGiallo, 2009.

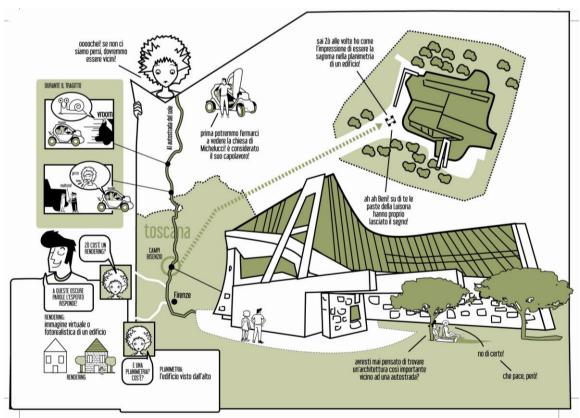


Figure 4. Pantaleo R., Gerardi M. and Molinari L., Architetture resistenti. Per una bellezza civile e democratica (Resistant Architectures. For a Civil and Democratic Beauty). Source: BeccoGiallo, 2013.

It is not only the "internal maps" (Ryan, 2003, p. 339), already inserted by the authors, but also the spatial architecture of the comic book itself that require a cognitive involvement (Ryan, 2003, p. 335) from the reader in creating his/her own reading map. This may help students in developing their mapping and orientation skills. The last example, in Figure 5, is picked from Terre perse. Viaggio nell'Italia del dissesto e della speranza (Lost Lands: Voyage into Italy's Collapse and Hope, the third volume of the trilogy by Pantaleo, Gerardi, and Molinari). It could be used in the classroom as an example of the different, personal, mobile, and contingent ways in which readers themselves could engage with maps. In fact, by being superimposed on a human scale map and portrayed while literally walking on and through it, the protagonists invite the reader him/herself to be engaged in the cartographic experience within the comic book (Figure 5).

5. Conclusions

This article considered the growing educational and instructional employment of comics and proposed their use in the teaching of cartography.

The article began by enumerating the merit of comics in enabling students to be more engaged and making even difficult subjects easier to understand. It also goes a step forward by analyzing "comics as maps," since both require an active engagement of the reader-user to be deciphered, oriented, and practiced. Through comics, students can become more aware map-readers and users by being forced to transcend the binaries representation and practice, authoring and reading (Rossetto 2014, p. 520). Most of all, they can be encouraged to go beyond the (only apparently) inert materials that lie on the page and on the map. Further, this article focused on the benefits derived from the use of comics and graphic novels as a means of improving students' understanding of post-representational cartographical approaches. Of particular value is the extent to which comics can be used not only to develop students' geographical competencies (Kleeman, 2006, p. 151) but also their ability to think actively about cartographical issues and maps.

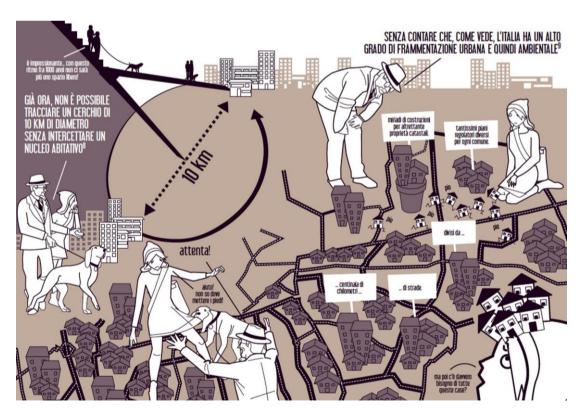


Figure 5. Pantaleo R., Gerardi M. and Molinari L., Terre perse. Viaggio nell'Italia del dissesto e della speranza (Lost Lands: Voyage into Italy's Collapse and Hope). Source: BeccoGiallo, 2015.

Acknowledgements

I am grateful to the BeccoGiallo Publishing House, and especially to Guido Ostanel and Claudio Calia for providing me with their relevant and informed suggestions for individuating the case studies of this article.

References

- 1. Abirached Z., *Il gioco delle rondini*, Padua, BeccoGiallo, 2009.
- 2. Brosseau M., "The City in Textual Form: Manhattan Transfer's New York", *Cultural Geographies*, 2, 1995, pp. 89-114.
- 3. Cadman L., "Non-Representational Theory/ Non-Representational Geographies" in Kitchin R. and Thrift N. (Eds.), *International Encyclopedia of Human Geography*, vol. 7, London, Elsevier, 2009, pp. 456-463.
- 4. Caquard S., "Cartography III. A Post-representational Perspective on Cognitive Cartography", *Progress in Human Geography*, 39, 2, 2015, pp. 225-235.
- 5. Del Casino V.J. and Hanna S.P., "Beyond the 'Binaries': A Methodological Intervention for Interrogating Maps as Representational Practices", *ACME: An International E-Journal for Critical Geographies*, 4, 1, 2006, pp. 34-56.
- 6. Dittmer J., "Comic Book Visualities: A Methodological Manifesto on Geography, Montage and Narration", *Transactions of the Institute of British Geographers*, 35, 2, 2010, pp. 222-236.
- 7. Dittmer J. (Ed.), *Comic Book Geographies*, Mainz, Franz Steiner Verlag, 2014.
- 8. Dodge M., Kitchin R. and Perkins C. (Eds.), *Rethinking Maps: New Frontiers of Cartographic Theory*, London, Routledge, 2009.
- Fall J.J., "Embodied Geographies, Naturalised Boundaries and Uncritical Geopolitics in La Frontière Invisible", Environment and Planning D: Society and Space, 24, 2006, pp. 653-669.
- 10. Groensteen T., *The System of Comics*, Jackson, University Press of Mississippi, 2007.

11. Hatfield C., *Alternative Comics: an Emerging Literature*, Jackson, University Press of Mississippi, 2005.

- 12. Hatfield C., "Defining Comics in the Classroom; or, The Pros and Cons of Unfixability", in Tabachnick S.E. (Ed.), *Teaching the Graphic Novel*, New York, Modern Language Association, 2009, pp. 19-27.
- 13. Hones S., "Text as it Happens: Literary Geography", *Geography Compass*, 2, 5, 2008, p. 1301-1317.
- 14. Hutchinson K.H., "An Experiment in the Use of Comics as Instructional Material", *Journal of Educational Sociology*, 23, 4, 1949, pp. 236-245.
- 15. Iacoli G. and Guglielmi M. (Eds.), *Piani sul mondo. Le mappe nell'immaginazione lette-raria*, Macerata, Quodlibet, 2012.
- 16. Kleeman G., "Not Just for Fun: Using Cartoons to Investigate Geographical Issues", *New Zealand Geographer*, 62, 2006, pp. 144-151.
- 17. Krygier J. and Wood D., "Ce n'est pas le monde (This is not the world)", in Dodge M., Kitchin R. and Perkins C. (Eds.), Rethinking maps: New Frontiers of Cartographic Theory, London, Routledge, 2009, pp. 189-219.
- 18. La Porta F., *Uno sguardo sulla città. Gli scrittori italiani contemporanei e i loro luoghi*, Rome, Donzelli, 2010.
- 19. Mandaville A. and Avila J.P., "It's a word! It's a Picture! It's Comics! Interdisciplinary Approaches to Teaching Comics", in Tabachnick S.E. (Ed.), *Teaching the Graphic Novel*, New York, Modern Language Association, 2009, pp. 245-253.
- 20. Moretti F., *Atlante del romanzo europeo:* 1800-1900, Turin, Einaudi, 1997.
- 21. Mori A., *Le carte geografiche. Costruzione, interpretazione e applicazioni pratiche*, Libreria Goliardica, Pisa, 1990.
- 22. Pantaleo R. and Gerardi M., *Destinazione Freetown*, Padua, BeccoGiallo, 2012.
- 23. Pantaleo R., Gerardi M. and Molinari L., *Architetture resistenti. Per una bellezza civile e democratica*, Padua, BeccoGiallo, 2013.

24. Pantaleo R., Gerardi M. and Molinari L., *Terre perse. Viaggio nell'Italia del dissesto e della speranza*, Padua, BeccoGiallo, 2015.

- 25. Papotti D., "Il libro e la mappa. Prospettive di incontro tra cartografia e letteratura", in Iacoli G. and Guglielmi M. (Eds.), *Piani sul mondo. Le mappe nell'immaginazione letteraria*, Macerata, Quodlibet, 2012, pp. 71-88.
- 26. Rossetto T., "Theorizing Maps with Literature", *Progress in Human Geography*, 38, 4, 2014, pp. 513-530.
- 27. Round J., "We Share our Mother's Health: Temporality and the Gothic in Comic Book Landscapes", in Dittmer (Ed.), *Comic Book Geographies*, Mainz, Franz Steiner Verlag, 2014, pp.127-140.
- 28. Ryan M.L., "Narrative Cartography: Toward a visual narratology", in Kindt T. and Müller H.H. (Eds.), What is Narratology? Questions and Answers Regarding the Status of

- *a Theory*, Berlin, Walter De Geuyer and Co., 2003, pp. 333-364.
- 29. Sones W.W.D., "The Comics and Instructional Method", *Journal of Educational Sociology*, 18, 4, 1944, pp. 232-240.
- 30. Tabachnick S.E. (Ed.), *Teaching the Graphic Novel*, New York, Modern Language Association, 2009.
- 31. Versacci R., "How Comic Books can Change the way our Students See Literature: One Teacher's Perspective", *The English Journal*, 91, 2, 2001, pp. 61-67.
- 32. VV.AA., "Using comics and graphic novels in the classroom (The council chronicle)", NCTE National Council of Teachers of English. A Professional Association on Educators in English Studies, Literacy, and Language Arts, 2005, http://www.ncte.org/magazine/archives/12203.
- 33. Wiegand P., *Learning and Teaching with Maps*, Abingdon, Routledge, 2006.