People's Republic of Bolzano or how digital artifacts can be adversarial to misinformation

Matteo Moretti, Maurizio Teli & Antonella De Angeli

Published online: 06 Sep 2017.

Submit your article to this journal ⬀

View related articles ⬀

View Crossmark data ⬀

People's Republic of Bolzano or how digital artifacts can be adversarial to misinformation

Matteo Moretti[a*], Maurizio Teli[b], Antonella De Angeli[c]

[a] Free University of Bozen - Bolzano
[b] Madeira Interactive Technologies Institute
[c] Association University of Lincoln and University of Trento
*Corresponding author email: matmoretti@unibz.it

Abstract: Design scholars have been focusing more of their attention to public controversial "things", through the focus on "making public things" or on the "formation of publics" in relation to design projects. With this in mind, this paper describes a design case contrasting and challenging the main media narrative through the production of digital artifacts. The design intervention we describe, aimed at counteracting the racist stereotyping which targets the local Chinese community of Bolzano. The project People's Republic of Bolzano reshapes the identity of the local Chinese community through digital media, in order to restore more transparent and balanced information, allowing a broader audience to inform itself on such a complex and multifaceted issue. This small project is part of an emergent phenomenon to counterbalance misrepresentation, in this case over the issue of migration.

Keywords: Public Design, User Engagement, Visual Journalism

1. Introduction

Social network sites (SNS) and information websites create new forms of communication and spaces for debates, that mediate the perception of everyday life and affect the news and the political agenda of government and institutions (Douglas, Maruyama, Semaan, & Robertson, 2014).
This suggests that digital artifacts, as means of communication, can be created by a growing number of people, and the content and dissemination of these artifacts can contribute to debates in the public domain.

At the same time, it implies that a huge amount of unverified and unfounded news, or "clickbait" articles, mainly written to attract attention and encourage visitors to click (Chen, Conroy, & Rubin, 2015), are giving bias to the online debate (Solon, 2016). It should also be taken into account that functional illiteracy and innumeracy increasingly affect the Italian population in the perception of facts and news (Cafaro & Staples, 2009). Finally, that SNS expose users to highly personalized

information which is biased toward self-confirmation and which supports their "confirmation-bias" tendency (Nickerson, 1998) and the radicalization of their position on controversies.

Digital space becomes a space for highly biased political debates, in terms of inaccurate information provision confirming personal, radical, positions.

In light of this, design plays an important role. It engages with public controversies by the design of good artifacts and good dissemination that expose users to transparent information, make data available to publics, return a more accessible narrative on complex phenomena and contrast the inaccurate information generated by the factors above.

In this paper, we discuss a project that contrasts dominant and xenophobic narratives portrayed by the Alto Adige, the most widely read (in both print and online) local newspaper in [CityName], through an alternative web-based narrative built with a structured procedure and theoretical depth. The project started with an analysis of how the Alto Adige newspaper was depicting the Chinese migration in the area as an "invasion". To counter this narrative, interactive digital artifacts, including data visualizations and videos, have been constructed and disseminated. To describe our case we engage with recent literature that has focused on the role of design in public controversies, that has been substantiated in design as making things to intervene in public debates (Le Dantec, & DiSalvo, 2013) sometimes becoming adversarial and which contrast the dominant narratives and promote a vision of democracy as based on social conflicts (DiSalvo, 2012). In this perspective, design becomes "public design", and it aims to expose controversies and to participate in collective meaning making (Teli, Bordin, Blanco, Orabona, & De Angeli, 2015), through the re-presentation, re-designing, re-informing, re-aligning, re-reading of information. A similar approach has been adopted by SIDL (Spatial Information Design Lab) in the project "Million dollar Blocks", that helped reframe the public debate around community justice in cities across the United States[1].

To present our work, the paper is structured as follows: first, we direct the recent attention in design toward public controversies, showing how there is a lack of research on how the design of digital artifacts can be adversarial to media narratives; second, we describe the case of People's Republic of Bolzano, detailing its methods and outcomes; finally, we discuss how projects like this can strengthen the role of design in tackling societal and political issues, evaluating what we have learned from our experience in terms of design activities.

2. Design and public controversies

Since the industrial revolution, *the market* has been the main design paradigm, and alternatives received little attention. However, in 1972 Viktor Papanek re-framed the relationship between design and society, with his book "Design for the Real World" and it quickly gained worldwide popularity with its call for a new social agenda for designers (Margolin, & Margolin, 2002). A socially responsible design (Armstrong, Bailey, Julier, & Kimbell, 2015), that is driven by social causes rather than by the market (Lloyd, & Bohemia, 2016).

Another important contribution to frame the context in which the presented case study operates, is represented by the work and research of Otto Neurath, an Austrian philosopher of science, sociologist, and political economist. Through the work of an interdisciplinary team, he designed the

---

[1]   http://c4sr.columbia.edu/projects/million-dollar-blocks

*International System of Typographic Picture Education (*ISOTYPE) in 1933, a visual language to make information available to a wider part of the population, communicating social facts memorably to less educated groups, including schoolchildren and workers (Burke, 2009).

Some decades later, a new wave of social design emerged, where the object is "the social" – social structures, processes, and forms of action – rather than a social problem. In this perspective, common artifacts can be used to tackle "public controversial things" as the domain of intervention, as framed by Ehn (2008). The reference to controversial issues has been prominent in levering Science and Technology Studies, in particular the work of Bruno Latour, and the concept that scientific and technological "matters of fact" could indeed be conceived as "matters of concern", open and contested (Latour, 2004). How issues are questioned and made visible is therefore one of the domains in which contemporary design can act, even in an adversarial way, opening up "matters of fact" to people's concerns (DiSalvo, 2012).

Carl di Salvo, in his book "Adversarial Design"(2012), shows that the new wave of social design became participatory and public and allowed the emergence of new "matters of concern". This agonistic design aims to open a debate which makes participants aware of not only how they see artifacts they may agree with, but also the position of how others see artifacts. What emerges is the space for forms of politically engaged design that participate in the collective meaning-making about social controversies. The work done until now has focused on the process of design and on its underlying theoretical concepts but, with the notable exception of Di Salvo (2012), few words have been spent describing how a design project could intervene to challenge established discourses in a strong way, particularly online, where more than two Italian internet users in three is on social media and often is an active part of the highly misinformed online debates.

2.1 Controversies online in Italy

The number of the Internet users in Italy is rising (58.5%)("Internet World Stats", 2016), while regarding SNS, Facebook is the most popular: out of the 36.058.199 Italian Internet users, Facebook subscribers totalled 28.800.000 in May 2016 ("Leading countries", 2016). The impact of these platforms in and on our everyday life, has strongly increased in recent years. Public opinion today takes place in an increasingly wide, virtual and de-spatialized sphere (Grossi, 2004), often biased by unfounded or unverified information: the confirmation-bias and the personalization of SNS news feeds toward self-confirmation (Quattrociocchi & Vicini, 2016), increase intolerance of dissent and foster more ideological segregation of political and social issues (Glynn, Herbst, Lindeman, & O'Keefe, 2015).

Indeed, in the analysis made by P. Orrù (2015) on the alterity and racist discourse on Facebook, a number of racist discourse strategies were highlighted, with the consequence of a polarization of the users' positions between two extremes. Narratives based on the contrast on "us" vs. "them", for instance, shape a collective identity founded in the open conflict between groups. Italian vs. migrants or Italian vs. refugees are the most diffused strategy on SNS to gather consensus and clicks, fostering prejudices that became a potential trigger for xenophobic and racist discourse with a potential for consequent social impact.

In this paper, we describe a design case that adversarially challenges the main media narratives and the prejudices such narratives would deploy through the production of a digital artifact. Through the work of a trans-disciplinary team, the project introduced an alternative online narrative, providing more accurate information on the local Chinese community of Bolzano.

4. People's Republic of Bolzano

4.1 The depiction of the Chinese invasion

The design intervention was focused primarily on the analysis and secondly on the counteracting of the stereotyping of the local Chinese community of the South Tyrolean city of Bolzano, a bilingual Italian town close to the Austrian border, where citizens speak Italian and German, and where several communities of migrants coexist. Even with the small size of the city and the economic wealth of the whole region, global phenomena such as economic and migrant crises have affected national and local identities and the economic status quo. The rise of racist or xenophobic behavior by a part of the population could be seen as people's reaction to these phenomena (Castells, 2011). In this scenario, local media, especially the Alto Adige newspaper, was engaging in a negative depiction of the local Chinese community (Figure 1).

Bar cinesi verso quota 150 La Chinatown bolzanina è in via Claudia Augusta

di Alan Conti

13 marzo 2011

Figure 1. One of the Alto Adige online headlines that state the existence of a local Chinatown in Claudia Augusta street and the presence of 150 Chinese-run bars in the city.

In order to better understand the multifaceted phenomenon of the local Chinese community and allow it to become a public thing able to interest the wider population, an interdisciplinary team was formed containing the following: a journalist, a cultural anthropologist with a strong connection to the local community, a software engineer, a graphic designer and a web designer (the latter being the author of this paper). The team designed a digital artifact that made data and facts public, depicted an alternative narration and contrasted the Alto Adige strategy with an entertaining design and a good dissemination where: a series of video interviews that show how the local Chinese citizens differ from the stereotype (Figure 4), an interactive map that reveals where the Chinese businesses are located (Figure 2) and several data visualizations that clarify the number of Chinese people in Bolzano and the number of their businesses (Figure 3), were the key arguments of the intervention.

The analysis started with the collection of three years of headlines, (from 2011 to 2014). It is important to acknowledge the persuasive effect of the headlines on what information a reader focuses on —or ignores— when reading an article (Ecker, Lewandowsky, Chang, & Pillai, 2014). The analysis collected 222 titles referring to the Chinese community (where the keywords "Cines*", "Cina" or "Chinatown" occur).

We thematically analyzed these, to understand if recurring themes were present, and found 31 different concepts that were then clustered in six main categories:

Invasion (80 titles)
The most common theme related to the concept of a Chinese "invasion" affecting a large set of contexts from business to leisure. Titles such as "Shop Owners: Too many permits to Chinese shops" (commercial invasion) or "Bolzano, Italian children: more Chinese and less German at school'" (cultural invasion).

Crime (62 titles)
All the crime and law related news that involved or referred to Chinese. Half of the results collected in this cluster refer to *national* facts and not *local*. Headlines such as, "Napoli: the Chinese actor of "Gomorra" movie under arrest", or, "The Police 'Christmas Cleaning': Chinese eggs and fish whiteners being seized" contributed to emphasizing a relation between Chinese people and criminality, even if the headlines or the news refer to a different context.

Competition (41 titles)
This cluster of concepts refers to all kinds of competition between the Italian and Chinese communities, stressing a generalized "us" vs. "them" tension. "The hairdresser who challenges the Chinese salons: ' I open next door and beat them with quality'", or, "Only the Chinese ahead of Tania " where "Tania" is the name of the local Olympic champion that was beaten by an unnamed Chinese competitor.

Chinese stereotyping (22 titles)
This group contains general headlines that reinforce the stereotyping of the Chinese community, through titles such as "The picture from the Chinese New Year (Prato)" that refers to another Italian city with little relevance to Bolzano and its surroundings.

Social Cohesion (9 titles)
Refers to local titles related to a positive depiction of the local Chinese community with a relation to the local Italian one. "The Chinese-Italian of Bolzano tell them" or "100 at the Baccalaureate Discover the Chinese girl who arrived in Bolzano just 5 years ago" are titles that talk about the integration of the second generation of Italian Chinese.

South Tyrolean Identity (8 titles)
Even the delicate topic of the local identity has been included in the Alto Adige newspaper. Titles such as "Italian children: more Chinese and less German language courses at school", or, "Even the Dolores bar is run by the Chinese" open a debate about local traditions which appear to be under attack by the activities of the local Chinese community.

The analysis revealed the strategy operated by the Alto Adige through its titles on the Chinese topic: an oversimplification of the social phenomenon based on its depiction as a single dangerous "enemy" to beat, instead of a diverse community of people.

4.3 The statistical data

Given this scenario, the design intervention focused on using available data to cross check the validity of the Alto Adige headlines, and then contesting the simplification operated by the newspaper. The intervention restored accurate information on the local Chinese community of Bolzano and redesigned the Chinese "invasion" concept that was indeed oriented toward making the Alto Adige newspaper position controversial, by being adversarial to it, and, in such a way, exposing discriminatory narratives about the Chinese population.

Even if the data were open and accessible online on the Astat website (South Tyrolean Institute of Statistics), the *main local media outlets did not considered it*. Our intervention made these data available to a wider population and then facilitated their understanding, through the design of a series of visualizations. A large use of visual metaphors transformed abstract charts into entertaining animated data visualizations that communicate immediately the inconsistencies of the so-called "invasion" (Figure 3). Indeed, the number of Chinese citizens living in Bolzano in 2014 was 633 out of 105.713 residents, i.e. some 0,6% of the population. From a business point of view, the data from the local Chambers of Commerce revealed that the Chinese-run businesses are 126 out of 9543 in 2014, i.e. the 1,3%. The same dataset also revealed that even the Chinese bars and restaurants are not as many as stated in the Alto Adige article (Figure 1).

To dismantle the presence of a Chinatown within the urban territory, we gathered the Chinese-run businesses dataset from the local Chamber of Commerce. Following a formal request, they issued a permit to use and publish the data online. Out of 441 bars, 51 were owned by people of Chinese nationality, exactly 11.5% and out of 261 local restaurants, only 32 were Chinese, i.e. 11.8% of the total (Figure 3). Moreover, the dataset has been visualized on an interactive map that demonstrates that a "Chinatown" does not exist in Bolzano. Chinese businesses are spread all over the urban territory, instead of being in a single road or district (Figure 2). The project counteracted the cliché of the "Chinese Invasion" and of the supposed "Chinatown" by gathering data and making them available to a wider population through a design project that used them to return the complexity of the phenomenon, and let a different narrative emerge. Moreover, in order to support it, the project paired quantitative and qualitative data, in order to dismantle a series of misconceptions related to the local Chinese population of Bolzano and its integration in the local community. This revealed what data is unable to tell: personal stories.

Dove e quando 何时何地

Nella mappa interattiva si vede che non esiste un quartiere cinese, ma le attività, e quindi anche le abitazioni, di cui poco sappiamo, sono distribuite su tutta la città in maniera uniforme e parcellizzata.

Die interaktive Karte verdeutlicht, dass es kein chinesisches Viertel gibt, sondern dass die Geschäftsaktivitäten, und demzufolge auch die Wohnstätten, über die uns wenig bekannt ist, gleichmäßig und lose über die ganze Stadt verteilt sind.
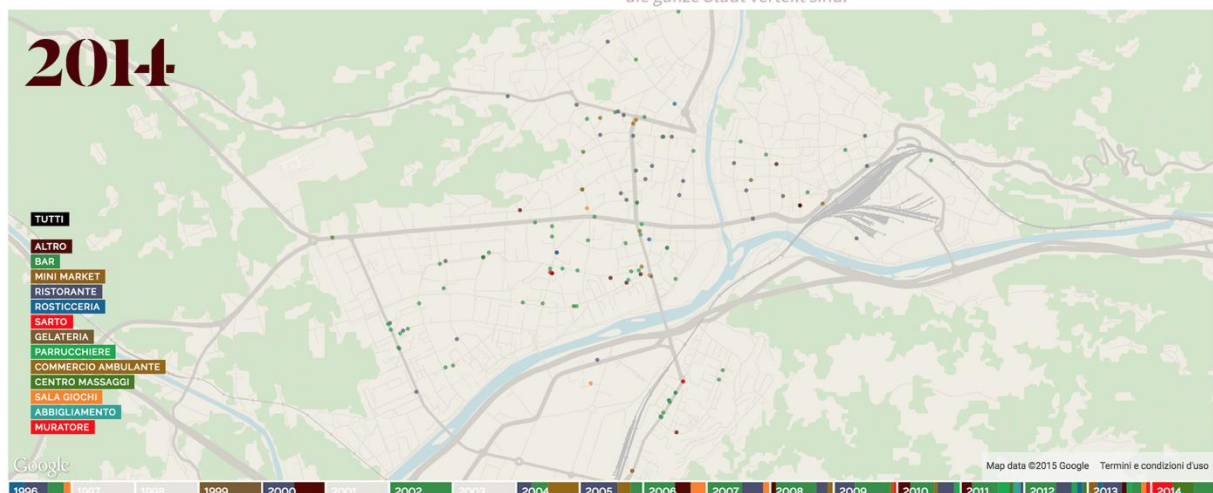
Figure 2. Interactive map that shows the position of the Chinese run businesses in Bolzano.

I ristoranti 餐馆

11,8%

Su 261 ristoranti locali, solo 32 sono cinesi, sono quindi l'11,8% del totale.

Anche sul fronte ristoranti, i dati rivelano una normale attività commerciale, ben diversa dall'invasione: su 261 ristoranti locali, solo 32 sono cinesi, l'11.5% quindi. Rispetto ad altre comunità ben più numerose i cinesi lavorano come imprenditori nell'ambito di attività al dettaglio, cioò implica che siano più visibili ad esempio di cittadini rumeni o albanesi che lavorano in cantieri o in aziende agricole.

Auch was die Restaurants angeht, weisen die Daten auf eine ganz gewöhnliche Geschäftstätigkeit hin, die mit einer Invasion nichts zu tun hat: auf 261 örtliche Restaurants entfallen lediglich 32 auf Chinesen, was einem Anteil von 11,5 % gleichkommt. Verglichen mit anderen Gemeinschaften, die zahlenmäßig viel stärker vertreten sind, finden wir Chinesen häufig in Sektoren des Einzelhandels vor, wodurch sie von der Öffentlichkeit stärker wahrgenommen werden als beispielsweise Rumänen oder Albaner, die auf dem Bau oder in landwirtschaftlichen Betrieben tätig sind.

Figure 3. Animated data visualisation that shows the percentage of Chinese run restaurants in Bolzano.

4.5 Video production: the personal stories

Two preparatory meetings with each interviewee were followed by an open interview of one hour, allowing us to have intimate contact with the Chinese community members. Through the work of the anthropologist, we were able to show what quantitative data is unable to show (Figure 4). From a narrative point of view, the team selected eight members from the Chinese community that would reflect its profile: one second-generation Italian Chinese, two middle-aged Chinese, some young students and two academic researchers. Through the story of their everyday life, each interview highlights some aspects of the Chinese culture and indirectly debunks some of the most diffused stereotypes around the Chinese tradition, listed below.

1. The Westernization of my parents
Yanghui Chen is a Chinese man that defines himself "more Italian than Chinese". He talks about his parents and their more western-oriented mindset, thanks to him.

2. Relations with the motherland
According to Hongling Yang, the Chinese who have not migrated to the west now live better than she does due the rapid Chinese economic growth and thus now have a higher standard of living. If she could travel back in time, she would not have migrated to Italy.

3. You don't live just for yourselves

Yiyi, a Chinese girl arrived in Italy when she was seven, explains how the Chinese use the "Guanxi" (a social network made by relatives and friends) to quickly raise huge amounts of money, without the need of a bank, to open business activities abroad.

4. The stereotypical view of the Chinese

Xiaofeng, a researcher in Computer Science at the Free University of [CityName], talks about when she was victim of a stereotype: she was mistaken for a janitor and not perceived as an academic.

5. Gender equality

After completing her university studies Yingjun Chen will return to China on the premise that a woman can now work and live autonomously without being pushed by her family to marry.

6. Making money is a priority

Mouzhi Ge was able to keep up with the competition among Chinese families. He tells how the Chinese meritocratic educational system pushes the students to their best performance, positively affecting the economic sphere.

7. The "bananas"

Romina was the only second-generation Italian Chinese that was interviewed. She reveals the drama of looking Chinese but being Italian: the "pure" Chinese call her "banana", due to the metaphor that they are yellow outside (Chinese) but white inside (Italian).

8. Chinese enterprises

His interview helped to explain why Chinese often live in their shops and have a different idea of social life, compared to the western model.

Figure 4. The eight interview to the member of the Chinese community of Bolzano.

4.4 The website

The narration, the data visualizations, the interactive maps and the interviews were structured in small "informative units" composed by a short informative text and a multimedia element. Each unit tells a facet of the story, following the principles that users can access the story in a linear (scrolling from top to bottom) or nonlinear way (skimming the content).

The general tone of the website is light and fresh, in order to attract a wider variety of reader and tell a complex phenomenon in an engaging way. Extensive use of images and visual metaphor played a strong role in user engagement, motivating the navigation but, furthermore, allowed the comprehension of the data visualization, making them as self-explanatory as possible (Figure 2).

5. How the project was reported by the press

On September 26 2014 the project was published online[2]. Since its publication, it has been widely acclaimed, being awarded with the international Prize Journalism Award in June 2015; from that point there was also international relevance. Thanks to a series of articles published internationally, the project was then brought to the attention of the local media: in fact, the project was apparently ignored by local media *until* the international media published it (Figure 4).
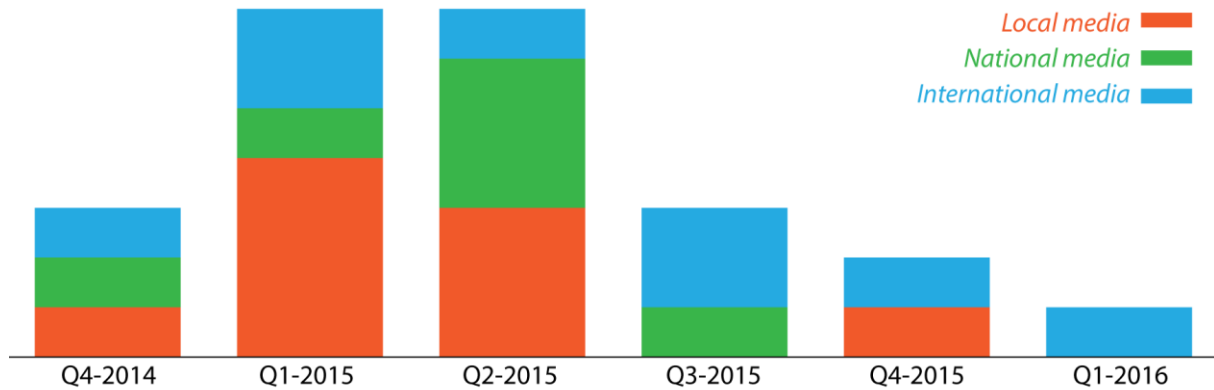

Figure 4. Online and Offline reporting of the project according to the media scale.

Indeed, four months later, probably encouraged by all the media coverage our project had, Alto Adige newspaper published our project on its online platform, on its SNS and, in print, on a spread, with an unexpected headline: "Macché invasione: i cinesi in città sono solo lo 0,6%" ("Which invasion: Chinese in the city are only 0.6%) and a secondary headline that mentions the design

intervention as source.

Figure 5. Alto Adige headline that reverse its narration and mention the design intervention.

Through data and facts to support more transparent information, embedded in an engaging designed online website and disseminated on local and global scale, the project generated international media coverage. It opened up a local debate on the Alto Adige SNS where followers discussed the presence and integration of the local Chinese community on the more transparent and informed basis which the project provided and led to the secondary, wider reflection on the way citizens inform themselves. Subsequently, the project has been disseminated in Italian and European design and journalistic events, festivals and conferences, being also awarded with the [Prize Design Award

2 http://www.peoplesrepublicofbolzano.com/

2015], widening the debate on the transparency of information, and on the way design could help in reducing misinformation, making data and facts public and accessible to a wider audience.

6. Discussion: design and social controversies

We have framed our contribution in terms of public design - that is a design process concerned with social controversies and interested in public engagement. In particular, we framed our design intervention as focusing on the part of the process in which something becomes publicly controversial as formalized by DiSalvo (2014). To do that, we engaged with local newspapers (one of which has a long history of "agenda-setting"), and through a design artifact we addressed media prejudices toward migrants, in particular the Chinese population in [CityName], generating controversy and sparking debate among the local community. The process we enacted suggests significant elements for public design projects that would like to challenge prejudices portrayed by the media, including newspapers, other broadcast media, or widespread social media campaigns. Indeed, we needed to find ways through which to make such a challenge to dominant narratives not only enjoyable to the potential audience of our project but also to reach such an audience.
This has been possible thanks to a design intervention that, firstly, made existing data accessible and understandable to a wider public, and secondly, created an engaging experience able to attract diverse citizens interested in the topic, aggregating them around the issue. Indeed, "matter of concern" refers not only to object of discussion, but also to object of interest and care (Mangano, & Mattozzi, 2009). Through a good visual design, our project attracted and affected a wider audience concerned about the social integration of minorities. It then generated a debate on the Alto Adige SNS, making information and data accessible to the public, as a base for and a tool of the discussion. Surprisingly the debate hosted on the Alto Adige SNS witnessed a majority of positive oriented responses different from previous discussions on the topic. Indeed, Alto Adige SNS followers' comments are usually negative with regards to the topic of the local Chinese Community or similar migrant-related topics.

If we look at the content of what we have produced, we can see the different roles of the quantitative and qualitative information we collected. The interdisciplinary collaboration produced videos, data visualizations, and the map, as well as the capability to design a dissemination campaign involving a website and SNS, following the Neurath approach. Indeed, we formed an inter-disciplinary team able to address the phenomenon from different points of view, returning the complexity of the social phenomenon in a more accessible way. Using the quantitative information, in conjunction with mapping, we have been able to challenge the main tenets of the narrative of Alto Adige newspaper, about the "invasion" and the presence of a "Chinatown". This project seems to be one of an emergent phenomenon that engages with public controversies and entails both the design of good artifacts and good dissemination.
In conclusion, the project was able to engage positive oriented users to participate in the digital debate and take a position that differs from the dominant narrative. This helped shape a new, more informed narrative.

References

Armstrong, L., Bailey, J., Julier, G., & Kimbell, L. (2014). Social design futures. Retrieved August, 7, 2015.

Burke, C. (2009). Isotype: Representing social facts pictorially. Information Design Journal, 17(3), 211-223.

Cafaro, P., & Staples III, W. (2009). The environmental argument for reducing immigration into the United States. Environmental Ethics, 31(1), 5-30.

Castells, M. (2011). The rise of the network society: The information age: Economy, society, and culture (Vol. 1). John Wiley & Sons.

Chen, Y., Conroy, N. J., & Rubin, V. L. (2015, November). Misleading Online Content: Recognizing Clickbait as False News. In Proceedings of the 2015 ACM on Workshop on Multimodal Deception Detection (pp. 15-19). ACM.

Cho, M., Schweickart, T., & Haase, A. (2014). Public engagement with nonprofit organizations on Facebook. Public Relations Review, 40(3), 565-567.

Clickbait. (2016). In OxfordDictionaries.com. Retrieved from https://en.oxforddictionaries.com/definition/clickbait

DiSalvo, C. (2012). Adversarial design. The MIT Press.

DiSalvo, C., Lukens, J., Lodato, T., Jenkins, T., & Kim, T. (2014, April). Making public things: how HCI design can express matters of concern. In Proceedings of the 32nd annual ACM conference on Human factors in computing systems (pp. 2397-2406). ACM.

Douglas, S., Maruyama, M., Semaan, B., & Robertson, S. P. (2014, June). Politics and young adults: the effects of Facebook on candidate evaluation. In Proceedings of the 15th Annual International Conference on Digital Government Research (pp. 196-204). ACM.

Ecker, U. K., Lewandowsky, S., Chang, E. P., & Pillai, R. (2014). The effects of subtle misinformation in news headlines. Journal of experimental psychology: applied, 20(4), 323.

Ehn, P. (2008, October). Participation in design things. In Proceedings of the tenth anniversary conference on participatory design 2008 (pp. 92-101). Indiana University.

Glynn, C. J., Herbst, S., Lindeman, M., & O'Keefe, G. J. (2015). Public opinion. Westview Press.

Grossi, G. (2004). L'opinione pubblica. Teoria del campo demoscopico. Laterza.

Internet World Stats, (2016). Retrieved from http://www.internetworldstats.com/europa.htm

Jenkins, H. (2012). Textual poachers: Television fans and participatory culture. Routledge.

Koskinen, Ilpo. "The Aesthetics of Action in New Social Design". "Proceedings of DRS 2016 International Conference: Future-Focused Thinking." Proceedings of DRS 1 (2016).

Latour, B. (2004). Why has critique run out of steam? From matters of fact to matters of concern. Critical inquiry, 30(2), 225-248.

Leading countries based on number of Facebook users as of May 2016 (2016). Retrieved from https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/

Le Dantec, C. A., & DiSalvo, C. (2013). Infrastructuring and the formation of publics in participatory design. Social Studies of Science, 43(2), 241-264.

Lloyd, P., & Bohemia, E. (2016). Proceedings of DRS 2016 International Conference: Future-Focused Thinking. Proceedings of DRS, 1.

Margolin, V., & Margolin, S. (2002). A "social model" of design: Issues of practice and research. Design issues, 18(4), 24-30.

Mangano, D., & Mattozzi, A. (2009). Il discorso del design. E/C Serie Speciale, 3(3), 4.

Mocanu, D., Rossi, L., Zhang, Q., Karsai, M., & Quattrociocchi, W. (2015). Collective attention in the age of (mis) information. Computers in Human Behavior, 51, 1198-1204.

Orrù P. (2015), "Burn them all": alterity and racist discourse on Facebook, in "Letterature Straniere & Quaderni del Dipartimento di Filologia, Letteratura, Linguistica dell'Università di Cagliari", 16, pp. 147-165.

Pagnoncelli, N., (2015) Dare i numeri. EDB.

Quattrociocchi, W., & Vicini, A. (2016). Misinformation.: Guida alla società dell'informazione e della credulità. FrancoAngeli.

Solon, O. (2016). Facebook's failure: did fake news and polarized politics get Trump elected? Retrieved from https://www.theguardian.com/technology/2016/nov/10/facebook-fake-news-election-conspiracy-theories

Teli, M., Bordin, S., Blanco, M. M., Orabona, G., & De Angeli, A. (2015). Public design of digital commons in urban places: a case study. International Journal of Human-Computer Studies, 81, 17-30.

Thurman, N. (2008). Forums for citizen journalists? Adoption of user generated content initiatives by online news media. New media & society, 10(1), 139-157.

About the Authors:

Matteo Moretti is a designer and researcher at the Free University of Bozen-Bolzano. His research interests focus on the visual journalism practices and methods in transdisciplinary and social contexts.

Maurizio Teli is a participatory designer and sociologist, now Assistant Professor at the Madeira Interactive Technologies Institute. His research interests focus on how participatory IT designers can politically intervene on social inequalities in the age of platform capitalism.

Antonella De Angeli is Professor of Human-Computer Interaction at the University of Lincoln and Associate Professor at the University of Trento. Her research investigates cognitive, social and cultural aspects of ICT with an emphasis on design for social innovation.