

DESIGNING HYBRIDIZATION: ALTERNATIVE EDUCATION STRATEGIES FOR FOSTERING INNOVATION IN COMMUNICATION DESIGN FOR THE TERRITORY

Author:

MARCO QUAGGIOTTO, CLORINDA SISSI GALASSO

Affiliation:

POLITECNICO DI MILANO, DESIGN DEPARTMENT, ITALY

INTRODUCTION

Communication Design for the Territory

Within the broad context of design studies, Communication Design for the Territory stands as a hybrid discipline constantly interfacing with other fields of knowledge, that aims to generate communication systems capable of reading the stratifications of places. From an educational perspective, teaching activities are closely linked to research and can take on different levels of complexity: from the various forms of cartographic translation to the design of sophisticated transmedia digital systems.

Fundamental in this field of knowledge is the category of space, which has played a crucial role since the 1990s, taking shape in the studies of Edward W. Soja¹ who introduced the idea of *Spatial Turn*. With this concept the author underlines the renewed centrality of space in its real and imaginary dimensions. This turn affects geographical disciplines, but also extends to design practice: it adds a new dimension to communication design by introducing a focus on territory as a provider of information and communicative resources.² Communication Design for the Territory, starting from this paradigm, has adopted the theme of territory as its own specific dimension, combining the development of designed artifacts with traditional knowledge and technological innovation. Within this theoretical framework, is also relevant the principle of geolocalization involved in the creation of interfaces of the territory: any type of device that, through different systems of representation and mapping and experimenting with coherent communication formats, provides tools that can act as links to access the territory and its contents.³ The interface thus understood must be able to convey a deep understanding of the territory to express its nature as a multi-layered entity.

Therefore, recognition of spatial stratification appears essential and different levels of vertical investigation can be identified:

- Physical: the level of materiality, surface, and itineraries;
- Narrative: the level of storytelling and literary descriptions, including fictional stories;
- Representative: the level of information, data, and orientation;
- Mnestic: the level of mnemotopes⁴, traces of the past, and archives;
- Perceptual: the level of sensory experiences, and atmospheres.

The changes in the territory that are constantly taking place expand the extra-physical dimension and emphasize the hybrid realm in which the different layers coexist and confront each other. The cartographic paradigm is another essential reference when discussing Communication Design for the

Territory. For centuries maps have helped to reconstruct the past and geolocalize events: as an interpretation of reality, they are not only conventional visualizations of a geographical area, but they are able to convey the complexity of the elements that compose them. They are the final communicative artifact of a translation process in which different actors are involved: data, information, images, and texts that reveal their communicative nature.

Spatial turn, geolocalization and cartographic paradigm have made the study of territorial stratifications a living field of research that finds in Communication Design for the Territory a mature and prepared discipline. This leads to a different positioning of territorial communication projects, which are no longer only about the valorisation of physical emergencies, but about the polyphonic existence of the territorial levels.

Hybrid territories

With the arrival of the COVID-19 pandemic, the field of communication design for the territory has come to grips with a fundamentally transformed environment in terms of both limited access to physical space and the advent of new technologies for remote access⁵. The threats associated with the use of physical space, as well as the resulting constraints to its usage, have created extraordinary friction to the execution of many routine activities when compared to the execution of similar tasks in virtual space. While some changes in the interaction between digital and physical territories have persistently impacted the way individuals engage with one another, the interplay between “remoteness” and “presence” has become a fundamental element of how we understand space and our relationship with it. As a result of the COVID-19 epidemic, also the use of public space has been altered. The strategies enforced to limit the transmission of the virus have had considerable consequences on public space, where the imposition of severe limitations has harmed the social component of the local environment, eliminating the relational feature that characterized space in terms of interpersonal interactions to a large extent⁶. Many activities and relationships that are typically conducted in physical space have been supplemented by their digital equivalents: work activities, meetings, collaborative and creative activities, but also meetings among friends, grocery shopping, and commercial activities have found an analog in digital space that, albeit mediated through the use of software, has made it possible to maintain a number of relationships and achieve a range of objectives that were increasingly difficult to achieve in traditional space⁷. In some respects, the hazards associated with the use of physical space caused by the spread of the SARS-CoV-2 virus, as well as the resulting constraints to its use, have created unprecedented friction to the execution of many ordinary activities, which has surpassed the comparable friction to the execution of similar tasks in virtual space.

Communication formats for hybrid territories

While this pandemic-related configuration of physical space is hopefully temporary, and we will eventually return to using physical space without the limitations and hesitations imposed by the pandemic, some changes in the relationship between digital and physical territories have persistently altered the ways in which individuals interact with one another, establishing the dialogue between “remoteness” and “presence” as an integral part of the way we interact with one another. This is fueled not just by advances in the design of virtual environments and remote experiences, as well as a shift in public perception of their usage, but also by the seamless integration of real and virtual places that these same technologies have enabled.

In this context, there is evidence of an emerging difficulty in finding communication models suitable for conveying content that is articulated between the physical and digital reality levels. Formats inherited from the tradition of communication design, which has always been concerned with the translation of heterogeneous content into forms suitable for its dissemination, comprehension, and

interpretation by various types of audiences, often prove insufficient in a context in which fruition is not analog or digital, but simultaneously analog and digital.

METHOD

Hybridization as a creative tool

In this unique context, we propose a pedagogical strategy that focuses on the hybridization of communication artifacts with the aim of fostering design experimentation.

In biology, hybridization is the crossing of two organisms of different species resulting in an organism that is different from either parent. The offspring does not manifest the sum of the traits of the starting organisms, nor does it represent the average of the two parents. The mule, for instance, which represents one of the most common examples of biological hybrid among animals close to us, has characteristics of the horse, such as its speed and its height, and characteristics of the donkey related to its strength, its intelligence, and its character. In other cases, the descendant has features that are even more pronounced than in either parent, as in the case of the liger, whose size is larger than both the lion and the tiger. Extending the metaphor beyond the biological realm from which it originates it can be argued that hybridization refers to the creation of a new type through the combination, selection and crossing of known types by selecting characters from one and the other to give rise to a novel type. In cycling, *hybrid bicycles* are bicycles that mix the characteristics of more specialized bikes such as mountain bikes with those of touring and racing bikes so they typically have the straight handlebars and posture of mountain bikes, but have the wheels and gears for racing bikes or touring bikes. In the technological context hybrids are found everywhere: *hybrid cars* are cars that mix different types of engines and driving systems; *hybrid computers* are PCs that mix the features of laptops with those of tablets and allow the conversion of one to the other.

Artifacts hybridization in Communication Design

In communication design, we propose to talk about *hybrid artifacts* (or at least we want to use the metaphor of hybridization) as a key to analyzing communication artifacts that are innovative with respect to the starting context, i.e., communication artifacts that strategically mix existing types in terms of formats, structures, languages, tools, and media, but do so strategically, to achieve a specific goal.

The metaphor of hybridization, when controlled by the designer, allows to break out of traditional typologies, to experiment with hybridizations of formats, structures, and modes of expression, to identify novel communication strategies suited to the territory, to the target audiences, and to the content to be conveyed. As a creative tool, hybridization leads to the design of innovative systems by strategically combining the characteristics of different artifacts to achieve specific communication goals. Hybridization, in biology as well as in its metaphorical applications, enables the combination of different traits to produce original solutions. Evolutionarily, it amounts to a strategy of adaptation to change that allows species to combine existing characters to increase their fitness with regard to a changed environment. From a pedagogical standpoint, by experimenting with these creative strategies, students are led to critically reflect on existing communication artifacts' features and explore original designs that deliberately combine different media, contents, and communication languages in innovative ways. Through hybridization, the methods for territorial knowledge production appear more effective, effectively combining the skills and knowledge embodied in multiple subject areas.

RESULTS

Application context

The paper presents the experience developed in the teaching laboratories of the DCxT⁸ (Communication Design for the Territory) research group of the Design Department of Politecnico di Milano. The

teaching experience shows how hybridization strategies can increase effectiveness in learning about territorial specificities, in acquiring critical knowledge about communication systems, and in developing innovation strategies that allow to influence the evolution of traditional communication models. The Final Synthesis Design Studio of the Master's program in Communication Design was structured as an experimental laboratory from an educational point of view, with two major innovations compared to the traditional organization of design studios:

From a didactic point of view, the Studio was conceived as a "research laboratory", without a defined brief to be answered as in a client-customer interaction, but on the contrary, the activity of the groups is based on the development of a research hypothesis, where the students themselves must identify an original concept with the aim of innovating the state of the art in the context of communication design. In terms of artifacts, the workshop requires the development of experimental devices and projects. Students are not asked to implement a technical skill, but to propose new approaches and inventions that can be an innovation in the field of communication design.

In this specific framework, by invention we do not mean a magical process of divine inspiration, but an activity that requires the ability to look at things differently. An ability that often depends on experience, on reflecting on one's own projects or the projects of others, taking them apart and putting them back together to understand what the innovative process was. The goal is to present something that was not there before.

Teaching methodology

From a methodological point of view, several lectures were given during the Studio on the topic of hybridization, presenting the biological metaphor, its extension to other contexts, and the possibilities offered by this approach in the context of communication design. Following these theoretical presentations, some examples of hybridization in the context of communication artifacts were shown both from a historical perspective and with reference to emerging formats, such as the hybridization of books and maps in the creation of travel guides in the late 1800s and the proliferation of "longform storytelling," a digital format that mixes the characteristics of journalistic writing with the richness of audiovisual materials generally used for other types of channels. Finally, the traditional types of communication formats related to communication design for the territory were described. Classic and contemporary guidebooks, various forms of cartography, digital devices and apps, brochures, environmental communication, video documentaries, micro-signage, and other more or less conventional modes of communication were enumerated, and their characteristics and the possibilities of their reinterpretation were described.

Following these ex-cathedra interventions, the groups were asked to:

1. Identify a territorial content from which to design a novel storytelling format.
2. Gather extensive documentation related specifically to the selected territorial content in terms not only of information, data, but also documents, images and multimedia content that could be used in the context of storytelling.
3. Identify two established formats of territorial communication, selected according to the characteristics of suitability for communication of the collected content, on which to experiment with hybridization operations to verify their expressive potential.
4. Design hybrid communication artifacts that: strategically combine the characteristics of different artifacts; focus not on the idea of juxtaposition, but on the idea of combination; integrate media, content, languages and different modes of communication; work mixing the physical and the digital levels; use the idea of combination to achieve specific communicative goals; stimulate the reflection on the innovative components.

Outcomes

During the Final Synthesis Design Studio, students were divided into groups, and each autonomously chose a target area and developed a specific concept to be narrated through hybrid communicative artifacts. Very different territories were selected, each with its own content to be translated. Below is a selection of case studies in which hybridization was particularly evident as a driver of innovative outcomes.

Manifista

The first case study is related to a city in Italy called Lodi, and in particular to its most famous poetess Ada Negri who in her components narrates the territory and its specificities in an evocative way. To describe the figure of Ada Negri and her personal view on Lodi the group of students decided to hybridize two different communicative artifacts: the magazine and the poster generating the *manifista* (a portmanteau of the Italian words “manifesto” and “rivista”). From the typical structure of the magazine, they took the variety of languages and the thematic columns putting them together with the large format of the poster, its territorial positioning, and its public fruition. The result is a hybrid communicative artifact composed by a series of large format pages that combines different themes and contents: original illustrations directly realized by the students, historical insights about the Lodi territory, visual poetics, and orientation maps.



Figure 1. *Manifista* prototype, 2022.

The paper prototype of the *manifista* has been then positioned in the streets of Lodi to evaluate the general effect on place and people. Each page had several reading levels depending on the distance of the user: from a great distance the user is only able to see the illustrations and the big titles but looking at the posters more closely the user can carefully read the thematic insights.



Figure 2. *Manifesta* prototype on the territory, 2022.

Talking about the results of the project, the hybrid was able to enhance literary territorial memories and to reveal unexplored itineraries not only to tourists but also to people living in Lodi that do not know about their poetic history. The *manifesta* generates also a physical public involvement with the contents and turned out to be a model to be applied in the future to other cities. One of the main problems detected during the testing of the prototype, is the difficulty of discovering the *manifesta* without a digital map that signals the presences of the various pages in the city. In addition, unlike the magazine, the *manifesta* is a temporary and non-transportable experience, also subject to possible damage from atmospheric agents.

Temporale

The second case study is called *Temporale*, “Storm”, and is related to the bunkers and air-raid shelters used in Milan during the Second World War. It aims to communicate their invisible history hidden under the surface of the city and to valorize their territorial presence in the city. In this case the students worked not on literary memories but on traumatic testimonies related to the war. They decided to hybridize three different artifacts: an audio-documentary, realized with on-site research collecting oral testimonies and environmental sounds; a music album, in this case a vinyl with several different tracks; original video-art contents to produce evocative suggestions.

The result has been called *sound docu-album*, analogically accessible through the vinyl record or digitally in the online version. While listening to the vinyl, the user can enjoy the visual video-art contents that enriches the experience.



Figure 3. *Temporale vinyl prototype, 2022.*

The project focuses on the audio experience: listening to the oral testimonies of survivors, people who personally lived through the bombing, combined with a sound base and an experimental documentary narrative, creates an original immersive experience. The vinyl is also accompanied by additional editorial content that completes the narrative experience (maps and booklets).



Figure 4. *Temporale editorial content, 2022.*

As in the case of the *manifesta*, the hybridization helped to enhance invisible memories and little-known places like bunkers and to valorize their history. On the other hand, the collection of the archival documents and the oral testimonies have been very time consuming, and the places were often inaccessible.

CONCLUSION

In conclusion, hybridization appears as a valid strategy in the field of communication design for the territory. It is capable of increasing the effectiveness of learning about territorial specificities, providing students with critical knowledge about communication systems, and, in particular, encouraging the production of innovative artifacts that support the development of traditional communication models.

It should be noted, however, that students' feedbacks at the end of the course indicated that the concept of hybrid was difficult to understand and interpret, especially because it led to confusion between the idea of combination and juxtaposition. In some projects, hybridization was limited only to the esthetic level and to that of graphic languages. However, this initial obstacle did not affect the innovative contribution of hybridization, which was considered evident by almost all students.

During the course, students were also asked to write a scientific paper on their project to encourage critical analysis of their contributions, reinforce the role of the hybridization process, highlight innovations, and show the limits of their interventions. The structured format of the paper allowed to systematically highlight the main features of each hybridized artifact and then to show with greater awareness the value of the combination and its innovative contribution.

The general impression of the teaching staff was positive, and the experience will be proposed again with the aim of developing an analytical model for hybridization of communication artifacts to make this strategy clearer for students. It is also conceivable to apply this model in other contexts – outside academia – to retest its effectiveness.

NOTES

¹ Edward Soja, *Thirdspace, Journeys to Los Angeles and Other Real-And-Imagined Places*. (Malden, MA: Oxford Blackwell, 1996).

² Giovanni Baule and Marco Quaggiotto. "Communication of the Territory and Cartographic Interfaces. The Spatial Turn in Communication Design." In *Proceedings of the Cumulus Conference, Milano 2015. The Virtuous Circle Design Culture and Experimentation*, 1067–77. McGraw-Hill Education, 2015.

³ Ibidem.

⁴ Clorinda Galasso. "Mnemotopic Perspectives: Communication Design as Stabilizer for the Memory of Places." In *World Academy of Science, Engineering and Technology, Open Science Index 174, International Journal of Psychological and Behavioral Sciences* (2021), 15(6), 226 – 233. <https://publications.waset.org/10012111/pdf>

⁵ Jordi Honey-Rosés et al. "The Impact of COVID-19 on Public Space: An Early Review of the Emerging Questions–Design, Perceptions and Inequities." *Cities & Health*, 2020, 1–17.

⁶ Valera Saladino et al. "The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being." *Frontiers in Psychology* 11 (2020): 2550.

⁷ Erik Brynjolfsson et al. "COVID-19 and Remote Work: An Early Look at US Data." National Bureau of Economic Research, 2020.

⁸ Communication Design for the Territory research group of Politecnico di Milano, Design Department, <http://www.comunicazionedelterritorio.it>

BIBLIOGRAPHY

Baule, Giovanni, and Marco Quaggiotto. "Communication of the Territory and Cartographic Interfaces. The Spatial Turn in Communication Design." In *Proceedings of the Cumulus Conference, Milano 2015. The Virtuous Circle Design Culture and Experimentation*, 1067–77. McGraw-Hill Education, 2015.

Brynjolfsson, Erik, John J. Horton, Adam Ozimek, Daniel Rock, Garima Sharma, and Hong-Yi TuYe. "COVID-19 and Remote Work: An Early Look at US Data." National Bureau of Economic Research, 2020.

Galasso, Clorinda. "Mnemotopic Perspectives: Communication Design as Stabilizer for the Memory of Places." In *World Academy of Science, Engineering and Technology, Open Science Index 174, International Journal of Psychological and Behavioral Sciences* (2021), 15(6), 226–233.

Honey-Rosés, Jordi, Isabelle Anguelovski, Vincent K. Chireh, Carolyn Daher, Cecil Konijnendijk van den Bosch, Jill S. Litt, Vrushti Mawani, Michael K. McCall, Arturo Orellana, and Emilia Oscilowicz. "The Impact of COVID-19 on Public Space: An Early Review of the Emerging Questions–Design, Perceptions and Inequities." *Cities & Health*, 1–17, 2020.

Iacoli, Giulio, *La percezione narrativa dello spazio*. Roma: Carocci, 2008.

Quaggiotto, Marco, *Interfacce per l'accesso agli spazi della conoscenza*. Milano: FrancoAngeli, 2012.

Saladino, Valeria, Davide Algeri, and Vincenzo Auriemma. "The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being." *Frontiers in Psychology* 11, 2020: 2550.

Segal, Zef and Vannieuwenhuyze Bram. *Motion in Maps, Maps in Motion: Mapping Stories and Movement through Time*. Amsterdam: Amsterdam University Press, 2020.

Soja, Edward, *Thirdspace, Journeys to Los Angeles and Other Real-And-Imagined Places*. Malden, MA: Oxford Blackwell, 1996.

Stebbins, G. Ledyard. "The Role of Hybridization in Evolution." *Proceedings of the American Philosophical Society* 103, no. 2 (1959): 231–51.

Westphal, Bertrand, *La géocritique. Réel, fiction, espace*. Paris: Les Editions de Minuit, 2007.