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TRANSMEDIA EDUCATIVA: CUERPOS, MEDIACIONES Y APRENDIZAJES
EDUCATIONAL TRANSMEDIA: BODIES, MEDIATIONS, AND LEARNING
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ES | EN | PDF

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Abstract

The migration to a virtual mode of the Basic Design Studio of the School of Architecture, Design, and Urbanism of the National University of the Littoral, in Santa Fe, Argentina, motivated by the mandatory COVID-19 pandemic quarantine, established a collective challenge in which new means and relationships were tested among educational actors, re-signifying learning and teaching practices. In this article, we propose a critical glance at the processes developed at the Studio during the first quarter of 2020, which promoted multiple forms of expression and communication, typical of our hybrid culture. The interface-space of the didactic dispositive has articulated the links between the various dimensions of an augmented context, enabling the transit of subjects, representations, and discourses for the unfolding of a transmedia narrative strategy. A convergent grammar provided integration of different languages and platforms that carried out

several content contributions and offered alternative experiences. A multitude of words, actions, and productions actualized the presence of a mediated, polyphonic, and dialogical body that was configured in an ambiance of trust and affectivity. Such development favored multidirectional exchanges and the active participation of students and professors in the collaborative construction of knowledge. We reflect on the discoveries, limits, and prospects of an academic experience as rich as unexpected.

Keywords: Didactic dispositive, Educational strategy, Mediatization, Corporality, Virtuality

1 Introduction

This article proposes a reflection on the migration to the virtual mode of the Basic Design Studio (BDS) during the COVID-19 pandemic. The BDS is a transversal curricular space to enter the three careers of the School of Architecture, Design, and Urbanism¹ of the National University of the Littoral (UNL), located in Santa Fe, Argentina. To contextualize the experience, it is crucial to highlight the regional scale of FADU-UNL and its large area of influence, added to the unrestricted admission to public universities in Argentina. This condition requires the School to face an expressive influx of students, particularly in the first year of study of the three careers: Architecture and Urbanism, Visual Communication Design, and Industrial Design.

In response to the quarantine contingency, the institution proposes a strategic plan with the availability of digital platforms to generate virtual, university-administered learning environments and training courses for the educational community. In this frame of reference, we propose to visualize the multiple changes in the configuration of the didactic proposal of the BDS, which had to take on the collective challenge of transforming itself, activating new media, and other relationships between the educational actors, which resignified learning and teaching practices.

The impossibility of the physical encounter brought forward the emergency —and the opportunity— to design a teaching proposal that incorporates technologies as a means to create strategies for “educational innovation” (Litwin, 2009). This design approach lays on the intersections between Technological Didactics (Litwin, 2005) and Project Didactics, which the authors and the teaching team have been investigating in various research projects. The reconfiguration of the proposal had to achieve a “genuine” inclusion of digital technologies (Maggio, 2012), which give them an educational sense, understanding them as a way of acting and communicating concerning teaching and the purposes that give meaning to the act of teaching. Added to these complexities is the particular scenario of the initial moments of higher academic life since, in the Basic Design Studio, the need to create an approach to the world of the project is raised, embodying the dimensions of the project experience, the procedural and the “poietical” (Bossaro, 2008).

The sense of teaching, in the family of the design disciplines, finds its meaning in the very action of designing, in the “praxis” of design (Schön, 1992), referring to a reflective conversation with the specific problematic situation. With design thinking being the main object of knowledge, taking into account the design process and meta-process, the opportunity arose to give the integration of ICT, a substantial place in the development of collective and distributed knowledge (Salomon, et al., 1992), amplifying and diversifying the experience developed in the face-to-face modality. To achieve this, when reconfiguring the studio proposal, it was essential to work with hypotheses and statements open to contingency and indeterminacy, where the role of the teacher as an activator of learning situations, is constructed and deconstructed during the course of the educational process itself.

Immersed in navigating virtuality, we generate scaffoldings to guide the paths in the web and the places to slow down, a kind of cartography that provides criteria for the construction of a critical gaze. We incorporate strategies linked to the inverted class and learning model to guide the students, which frame of reference is the concept of zone of proximal development of Vygotsky's sociocultural - constructivist theory, where the pedagogical proposal of our studio is based.

The basic idea of inverting the traditional class structure is to move the 'delivery' of the material out of the formal class and make use of it to engage in collaborative activities. The aim is to integrate new technologies in the teaching of content by actively using audio-visual materials, combining videos, conference summaries, animations or tutorials ... What is inverted are the moments and roles of traditional teaching. (Rigo, et al., 2019, p. 45, our translation)

The BDS virtual classroom² allows access to the contents, practices, and educational materials of the entire proposal. Although planning is structured in three thematic units, we created a learning space that makes flexible the chronological organization of the curriculum. The conceptual cores and the practices through which they are recovered in each thematic unit can be recognized and visualized from the first day of classes. Students have prior contact with the contents at the time of the synchronous meeting, so they use this time to share what is produced, as well as problems, questions, answers and, fundamentally, strengthening peer learning to promote active learning, where shared praxis animates processes.

2 Mediating and mediated bodies

Virtual environments offer a varied collection of instruments that enable a diversity of visualization strategies, understood as different access doors to knowledge (Gardner, 2010). In line with this idea, the BDS develops its teaching practices from a heterological approach, attending to multiple ways of thinking that promote heuristic openness (Breyer, 2007), that is, the search for solutions to problems, diversifying the paths of the creative processes. The didactic transposition (Chevallard, 1998) was redefined by incorporating knowledge related to transmedia pedagogical narratives, recognizing other learning spaces and other forms of communication between students and professors, through bodies mediated by technologies. The dialogic dimension, typical of the dynamics from the design workshops, was challenged by the presence of modified bodies, renewed by their technological treatment, that interacted in mediated spaces. As Sola Morales (2013) states, one of the key questions when it comes to expressing the importance of the body at a theoretical and empirical level is its mediating condition.

In addition to being a mediator in the didactic link, the body in its dimensions of thinking, doing, and feeling, in its intra and interpersonal relationships, and in the experiences lived with our students (Maturana, 2000), is a key issue for the construction of a disciplinary look, from the multiple subjectivities that are recovered in the workshop practices which start from the referential world of the learning subject. The body as a medium between the subjects and the world, between the individual and the collective, and between the different temporalities (the present and the absent), expanded the frontiers of the physical, and established links and appropriations through multiple screens, as shown in figure 1, reconceptualizing the presence as a symbolic dimension. Building an educational community in a physical-virtual context implies to recognize the presence of the other, which makes sense in the commitment to responsible participation, whatever the degree and technology of mediatization (San Martín, 2006-2008).

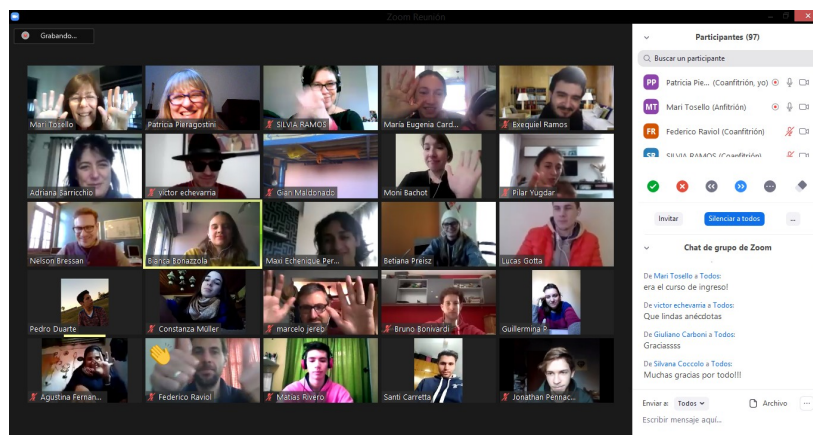


Fig. 1: BDS class on the Zoom platform. Source: Authors, 2020

3 Sociotechnical mediations

The announced fusion between the physical, biological, and digital systems, sustained by mobile connectivity to networks, would promote the simultaneous inhabitation of various interconnected dimensions. These dimensions would make up a complex and uncertain ecosystem that is also constantly evolving. This hybrid culture (impure, polluted, chaotic) requires interfaces capable of articulating the links between its heterogeneous and interdependent elements. It is undeniable that the new worldview, which includes emerging technologies, has an impact on all scales of design and art, modifying and expanding the production strategies of the human habitat; the methods of representation; the possibilities of experimentation; as well as the teaching of design and artistic disciplines, promoting the hybridization of languages and media, and enabling the approach to heuristic processes from a multidisciplinary, transversal and integrating approach.

In our disciplines, understanding their fields of study from a sociotechnical approach (Pinch, Bijker, [2008] 1987), social, technological, and contextual factors, condition each other in constant dynamic interaction, establishing different degrees of linkage and different evaluations and interpretations that create multiple

forms of expression. Inquiries are raised from a transdisciplinary approach that integrates the three careers of FADU-UNL, recognizing and colonizing relationships and borders, links and distances, to achieve a synergy between disciplines and, from there, promote experimentation and / or resignification of spaces / artifacts / communications.

It is interesting to apply the concept of interfaces in the context of teaching and learning, through theories and methods that address multiple representations of design processes, conceived as interfaces to shape communication, objects, or architecture, be these virtual or material. We use various platforms and communication formats in the experience. Classes and evaluative sessions in real time were carried out by Zoom, using an institutional version that provides multiple integrated rooms, which allows all professors and students to work together (approximately 120 people), and, at the same time, distributed by groups (approximately 20 people per group).

All the contents and didactic materials were available on the Moodle platform, in which, Padlet boards, theoretical videos and video explanations of the practical works, were also embedded. All the videos were previously uploaded to the YouTube channel³. We also took advantage of the Moodle Forums to share the addresses of all the students' blogs, queries and contributions, which allowed us to socialize knowledge.

The blogs were academic binnacles where students presented their weekly production, through texts, images and videos. The weblogs enabled continuous monitoring and evaluation, as well as the visualization of progress by all the professors and students in sessions that were held at the beginning of each class (2 times a week), in which individual or group developments were shared. These instances of presentation were rich in opportunities to drive the most lethargic learning processes and, at the same time, for the self-evaluation of the students.

Regarding the YouTube channels, the BDS channel provided fluid access to the theoretical classes (combining the synchronic and the asynchronous), strengthening the techno-pedagogical and communicational dimension of the proposal. On the other hand, the FADU channel⁴, a true educational repository, allowed asynchronous access to all the conferences organized by different professors and by the FADU management group, constituting a great contribution in terms of the diversification of voices and views around the design disciplines.

4 Learning Unit Design

The Learning Unit is structured in three moments, enabling a progressive approach to the world of the project: Phase A: the world from the student's referential universe; Phase B: the world as an analytical entity; and Phase C: the world as a project. Each phase is crossed by theories and stories from various fields and scales of inhabiting, as multiple gateways to the posed issues. Exercises that articulate the different scopes of approach to the object of study are carried out, promoting reflection on the value of collaborative work and diverse intelligences, as well as on the task of the designer as an empowering subject of innovative and creative proposals, in relation to a new epistemological, ethical, aesthetic, and technical paradigm that integrates the potentialities of the digital medium.

4.1 Phase A: The world from the referential universe

The first phase focuses on the student's referential universe. It is defined as the "enclosing stage" to the studio proposal and to university life. The proposed activities are designed to stimulate relationships between images, imaginary and imagination.

Rational and sensitive cognitive schemes are gradually made explicit from the relationship among stories about inhabiting, that come from art and culture and act as poetic activators. At the same time, especially elaborated semantic fields guide the production of ideas and images. They also exercise relational dynamics that are recovered and transferred to the world of the project in stages as follows.

4.1.1 Activities

"I like my city" raises different questions that put the subject in relation to the place he or she inhabits, his or her imaginary world, and the levels of identification with the context. Students carry out the transposition of a semantic field into an image, and share their productions on a Padlet, as shown in figure 2.

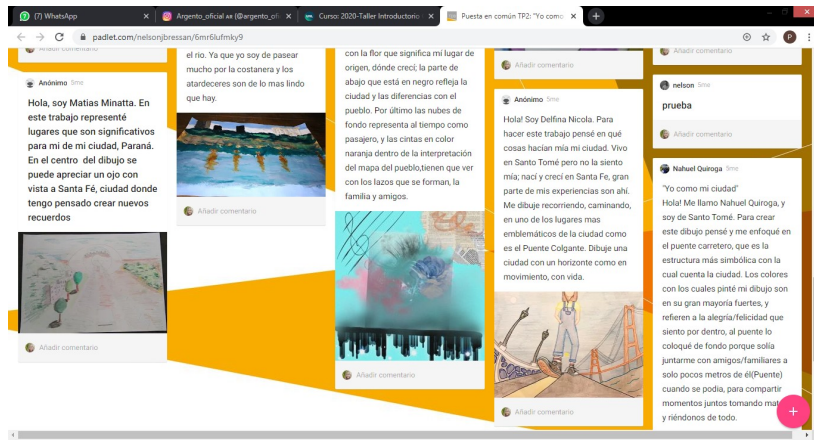


Fig. 2: Padlet I alike my city. Source: Authors, 2020.

"Tales about inhabiting" proposes the relationship of texts from other expressive fields, such as literary and film, and their possible transpositions into spatial narratives. Concepts of classes by Zoom, recorded and available on the YouTube channel; lecture notes accessible on the Moodle platform; and basic bibliography, are recovered in real time. As in the previous activity, the productions are shared in a Padlet as shown in figure 3.

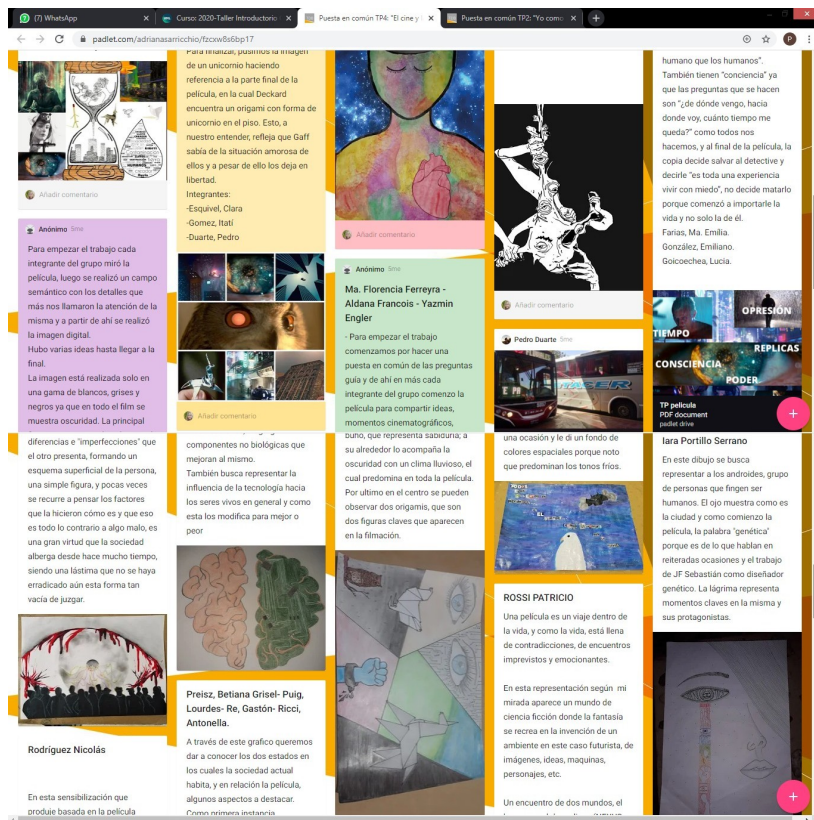


Fig. 3: Padlet Stories about inhabiting. Source: Authors, 2020

4.2 Phase B: The world as an analytical entity

Understanding that the city and the spaces of social appropriation are the cultural configurations that integrate all design scales, the progressive approach to the design domain begins from an urban analysis. It is proposed to investigate inhabiting from the perspective of subjects immersed in their daily lives, in their concrete conditions of existence. In this phase, the exercise of basic analog and digital representation skills also begins. Figure 4 shows some of the panels that are delivered in digital image format, on the Moodle platform and in the student's blogs.



Fig. 4: The world as an analytical entity. Source: Authors, 2020.

From significant tours, we usually carried out a comparative analysis of 3 sectors of the city, through inquiries of interest that highlight the social space as the central place of inhabiting and expressive mediations for habitat production. A conceptual-operational matrix relates the inquiries of interest with different levels of approach. Due to the mandatory social isolation measures, and the fact that some students did not reside in Santa Fe, we were unable to make the urban journeys through the different sectors of the city. For this reason, we decided to narrow the analysis to a single sector on which we had a virtual reality teaching material, designed and developed within the framework of the thesis "Augmented Didactic Dispositives" (Appendino, Carboni, 2020, our translation), linked to our research projects. The "Paseo Boulevard" VR tour, shown in Figure 5, was complemented with Google Maps and other graphic resources available online.

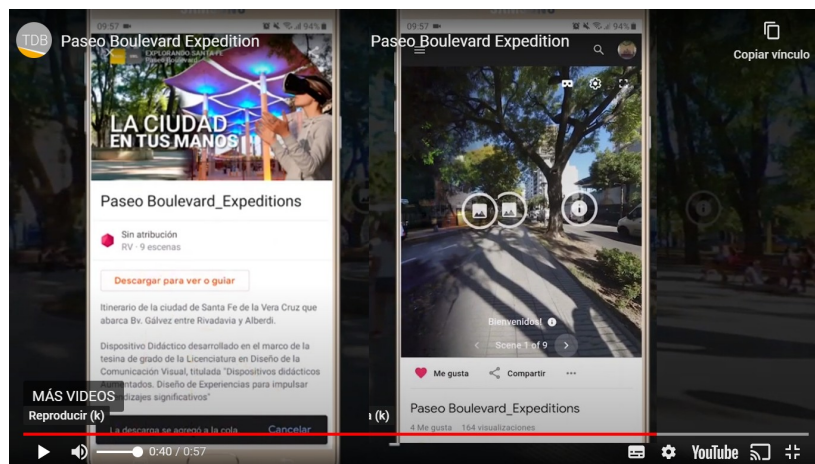


Fig. 5: "Paseo Boulevard" Virtual Tour. Source: María José Appendino and Lucía Carboni. Available at: <https://poly.google.com/view/a3JEXd-mZ4d>.

4.3 Phase C: The world as a project

This last phase presents an approach to the world of the project. Starting from transversal notions to the 3 careers, we introduce ourselves in the practice of design, experiencing the different moments of its process, and exercising the appropriate representation languages and resources, to generate proposals and communicate them. The operations involve three aspects present in all project tasks:

The Object to be designed, the actual material entity, the artifact, which conforms to a more or less precise set of guidelines or requirements, stated in narrative form. The Project, the processual becoming that extends from the very enunciation of the problem and the emergence of the first images, verbalizations or gestures, to the final material result. The Subject who designs, that is, the modality of behavior involved [...] (Bossero et al., 2008, p. 20, our translation)

"Form and syntax: transformations in the scopes of inhabiting" consists of the design of a spatial syntax that articulates different scenes, organized by space-time sequences of beginning-traveling-ending. The route system is defined from the relationship between objects, which are designed using the plane as the primary element for generating the shape, to which actions are applied (transformation, mutation, grouping, etc.), to configure complex objects that can act in its different variants, as an urban, haptic and/or communication artifact.

Each of the shapes that are generated in the process of transforming the plane can be used to compose the scenes, while the complex final object operates as a threshold, an event along the way, or at the end of the journey. The panels in figure 6 demonstrate the approach to the design process based on the appropriation of space. These images are published during the activities' development, in the forums of the Moodle platform and in the blogs of each student, allowing constant monitoring by the professors, and the visualization by the students, of all the proposals. Although the projects are individual, the virtual evaluative sessions reveal features of creative processes that are configured from collective actions and knowledge, also triggering an accompaniment effect, which rescues the value of the presence and commitment of the group.



Fig. 6: Design process determined by the appropriation of space. Source: Authors, 2020.

Finally, one of the objects is selected, corresponding to any stage of the series, whose scale is altered according to the level of appropriation. Figure 7 shows how the photomontages of the object contextualize several variants. They approach it as an artifact belonging to different scales of design: urban-architectural, industrial, and visual communication.



Fig. 7: Various appropriation scales. Source: Authors, 2020.

As anticipated, all the activities of the Learning Unit were carried out in the Virtual Workshop modality, through different hypermedia interfaces linked to methodological processes and didactic sequences. These interfaces provide forms of mediatization that enable the integration of technological developments into

educational projects. In the case of disciplines linked to design at all its scales, the various dimensions of projectuality are sustained in different representation languages (Temporetti, 2008), which have a possible correlation in the multiple formats proposed by the educational transmedia narrative.

5 Educational Transmedia

Transmedia storytelling (TS) is a narrative format that transcends linearity to create an ecosystem of stories that tend to branch out and overflow the medium in which they were conceived. With the new millennium just beginning, Jenkins (2003) already argued that we were in an era of media convergence that made the flow of content through multiple channels inevitable. Then, to further clarify the concept, he stated that the most significant stories tend to flow through multiple media platforms (Jenkins, 2008). TS is a communicative strategy of a transversal nature that is deployed through different media, that make different contributions to the narrative world.

... the story expands, new characters or situations appear that go beyond the borders of the fictional universe. This textual dispersion, which finds its common thread in the narrative - although it would be more appropriate to speak of a network of characters and situations that make up a world - is one of the most important sources of complexity in contemporary mass culture. (Scolari, 2013, p. 22, our translation)

Another characteristic feature is the active participation of users. Thus, those who were previously consumers become content producers or "prosumers" who, through the appropriation of the story, collaborate in the construction of meaning. In his project "Transmedia Literacy", Scolari (2015) argues that today's young people do not limit themselves to passively consume the media, but rather intervene, reinterpret, modify and intermix their contents to re-disseminate them through various platforms. As in any TS, educational transmedia generates a network between actors, events, media, languages and sociotechnical contexts that construct the story, outlining a convergent and expansive map at the same time, in which interpersonal links are re-signified.

In the absence of an audience and the presence of essential factors such as expansion, convergence and collective authorship, the BDS 2020 transmedia proposal stimulated a diversity of teaching and learning processes. It also established a fluid communication between professors and students, causing multidirectional exchanges that encouraged participation in the collaborative construction of knowledge, and tended to dissolve the distances and hierarchies between them, as seen in figure 8.

That is what the word 'emancipation' means: the blurring of the border between those who act and those who watch, between those who know and those who don't, those are stories of borders to be crossed and of role distributions to be erased [...] (Rancière, 2010, p. 25, our translation)

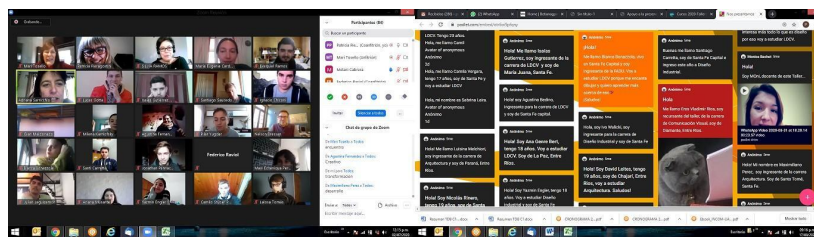


Fig. 8: Disestablishing distances and hierarchies. Source: Authors, 2020.

According to Castro Antonio (2016), educational transmedia uses two strategies (both taken from marketing) to motivate students: negative capacity, which entails the construction of an atmosphere of intrigue that activates students' curiosity and enthusiasm; and the use of migratory clues, signs that mark the way to the content published on other platforms. In the BDS, the migratory clues were multiple, for example: Moodle notices and forums, WhatsApp messages, YouTube classes and tutorials, etc. The topics and practices were energized by the digital medium: editing images, zooming in, revisiting the recorded classes, or virtually exploring the urban space through virtual reality applications. In this way, the capacities that each resource presents in mediated educational processes were discovered and integrated.

During the experience, we observed how the procedures and stories became divergent, but needed each other and converged in new productions (Temporetti, 2008). The simultaneity and dynamism of the environment provided the possibility of activating reflective design processes, which generated knowledge that was made visible through virtual binnacles such as those in figure 9.

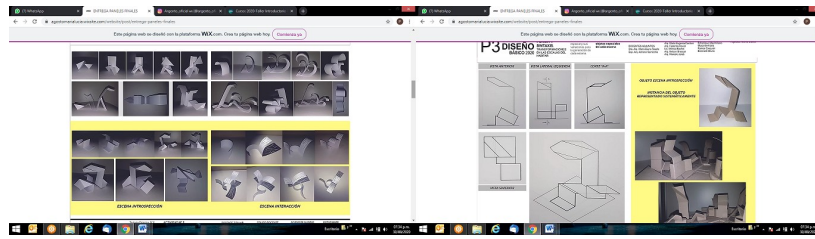


Fig. 9: Virtual binnacles. Source: María Lúcia Agosto, 2020. Available at: <https://agostomarialucia.wixsite.com/website>.

Fleming (2013, p. 2) defines the processes of “transmedia learning” as “[...] the application of narrative techniques combined with the use of multiple platforms, to create an immersive learning panorama that enables multiple-varied points of entry and exit to learn and teach”. With a convergent grammar, the educational transmedia storytelling integrated diverse platforms and languages that, based on their potential, made different contributions of meaning and offered alternative experiences. Words, productions, and participations updated the presence of a mediated, polyphonic and dialogical body that was constituted in a climate of trust, based on the intertwining of cognitive and affective factors, as a necessary condition to achieve meaningful learning.

Active social participation is considered to be key in experiences mediated by technological instruments, since the appropriation of a technology is the result of processes of resignification carried out by different social groups, who constitute the artifacts (Bijker, 1995; Thomas and Buch, 2008), starting from the meanings that are attributed to them in the process of inhabiting them.

6 Teaching dispositive

The environment of global culture determines the coexistence of virtual-material hybridizations, in which the material is approached from the artificial, the abstract and the geometric, or from the natural, organic and genetic. Likewise, the sense of belonging is diluted, due to dispositives composed of subjects, interfaces, artifacts and other actors that make up a multidimensional environment, in which the tangible physical becomes a dimension subject to montage and the superposition of other sensory perceptions. A dispositive is a network of heterogeneous elements whose strategic function responds to an emergency. The link between the elements results from the intersection of lines of knowledge, power and subjectivity. The processes are dynamic, they reverberate and resonate with each other, demanding readjustments and changes of position (Foucault, cited in Agamben, 2007). It is a complex bundle of relationships that depends on conditions of enunciation and visibility that are defined in the historicity of the event (García Fanlo, 2011).

The dispositives that enable the contact between physical and virtual spaces propose different representations of the world from the combination of media, spaces and languages, as well as the opening to multiple paths that unleash multidirectional links between subjects and knowledge. These links stimulate critical thinking and collaborative construction (San Martín, 2008; Carbone, 2010), encouraging new ways of reading, writing and designing.

Given that this hybrid space-time demands “thresholds” that enable migration between the physical and the virtual, interface-spaces were created as territories of mediation or transition that articulated the links of the didactic dispositive and facilitated the transit of various types of signs, promoting dialogue in collective processes of production and recognition of discourses and representations (Tosello, 2016). As an ecosystem, the dispositive manifested itself in the collective, active and interactive nature of the network. It's a spatial model of intersubjective, multidimensional and multidirectional communication and production, where everything comes into contact and is combined through a polyphony of voices that are part of an extensive conversation, in which each fragment is crossed by the nearby stories and images, encouraging the deployment of a transmedia educational strategy.

7 Final thoughts

The experience has confirmed that it is possible to devise and implement didactic dispositives that enable the multiplicity of the emergent, beyond the degree of mediatization. In this sense, it is essential to consider that the notion of dispositive goes beyond the technique to include the subjective dimension of its operation, that is, the appropriations that the subjects put into action (Traversa, 2001), and that they are the result of resignification processes of dialogical and plural character. Perhaps, the greatest achievement was to create a sense of community, which was unfolded through the dispositive, which managed the inseparable links that constitute this hybrid context and enhanced the experiences of the subjects in the process of inclusively inhabiting the n-dimensions that conform it, offering more learning opportunities, valuing cooperation, and encouraging participation and self-management.

These virtualized collective learning processes demanded the establishment and maintenance of active personal links between educational actors, and a great commitment from everyone. In reticular didactic strategies, all the actors are constituted as solidary co-authors forming an educational community in a network that, in our case, was sustained in affectivity to mitigate uncertainty and shared responsibility.

The educational experience of the first semester of 2020 put our flexibility, adaptability and resistance to the test (a lot of time in front of screens that consumed our energy and caused saturation). In addition to the technical limitations and the lack of access to the necessary resources and services by some educational actors, it was evident that ICT requires competent users in handling new languages and supports. Such capacities are the ones that enable or not the capability to participate in different spaces of sociability and information, as well as the development of cultural competencies and interpersonal skills or soft skills (Jenkins, 2008) must be promoted and exercised in educational spaces.

Within the framework of planning an educational transmedia strategy oriented to teaching and learning processes in design workshops, the possible applications of each medium should be observed, especially with regard to identity, media convergence, navigation strategies, predominance of iconic language, the variety of representation modes and the used audiovisual resources (as observed in figure 10), in addition to the value given to play and experimentation (Rainaud, 2018).

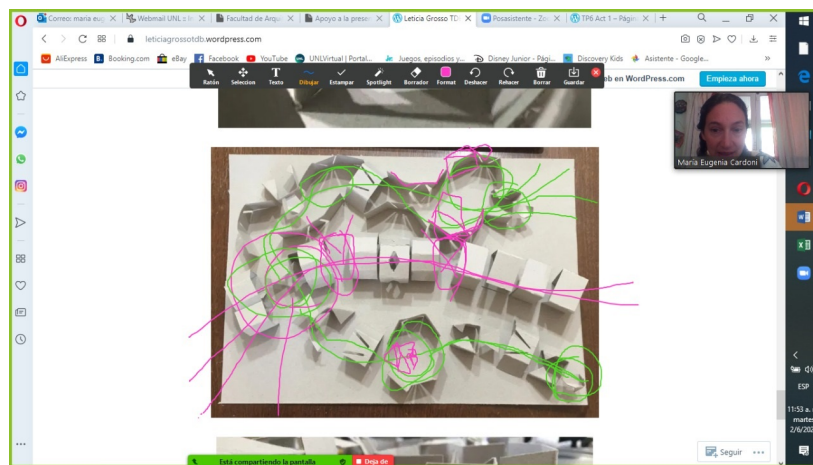


Fig. 10: Representation modes and audiovisual resources. Source: Authors, 2020.

Finally, it should be noted that the current challenge is to rethink the exercises and activities proposed in the BDS in light of this experience and its impact on the operational dispositive. We ask ourselves, what status do we give to the statements pre-established by the chair for the approach of the contents? How can we consider alternative paths? How to take advantage of these other temporalities that virtuality facilitates, such as updating procedures in the design process and meta-process?

Amplified through transmedia storytelling, this interrelationships network should open up new perceptions about the complexity of the world. If the task of the designer is to build worlds within the world –worlds of meaning– and our attribution as design workshop professors is to bring together ways to exercise design thinking and to train creativity and the ability to imagine, the question is how to diversify these forms of enunciation? In this task, we are now revisiting our practices so that they have a greater openness to instances of co-creation, with less coded variables in the statements. They take better advantage of the potentialities of inverted learning, by stimulating the students' protagonism in building their journey through knowledge.

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1 FADU for its Spanish acronym. Website available at: <https://www.fadu.unl.edu.ar/>.

2 Available at: <https://servicios.unl.edu.ar/aulavirtual/fadu/course/view.php?id=24>.

3 Available at: https://www.youtube.com/channel/UCY2Rv8ty5agC1_WZeUgryZw.

4 Available at: <https://www.youtube.com/channel/UC0aiDjXjvJ2erKRQbxDImBw>.