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Sustainable Mobility in the Dorlay Valley

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Abstract :

"Sustainable Mobility in the Dorlay Valley" is a project that originated from a request by a group of residents. Organized as an association, they explored how to encourage their community to develop mobility solutions adapted to their needs, attentive to different ages and social situations, and that take into account the structure of their territory : an isolated rural valley. This project was selected by the Cité du Design as an experimental program for design in rural areas, within the European Smoties project.

Two designers will work in proximity to the residents for a year, using only sustainable modes of transport (cycling, walking, public transport, and hitchhiking) to test the constraints faced by the community. Those months will be used to conceive graphic and design tools that will help the project initiators move forward. The experience will prove to be more complex and enriching than anticipated.

Keywords :

Mobility, co-design, designer's role, collaboration, public space

Sustainable Mobility in the Dorlay Valley

Located in central France, the project area is the Dorlay agricultural valley, where the textile industry flourished until the mid-20th century. Like every where in Europe, the industry suffered an economic crisis, and only a few companies are still on activity, possessing valuable technical know-hows, while the villages have become commuter towns. Stretching for about fifteen kilometers, the valley, nestled in low mountains, stand on the border between urban and rural worlds, both close to and far from the major cities of Lyon and Saint-Étienne. Even though distances are relatively short and habitants owncars, many residents—especially the elderly and young people—experience isolation as services and shops are difficult to access. Although many public transport options, such as trains and buses, exist on the Saint-Étienne/Lyon route, residents are forced, from the entrance of the valley at Grand-Croix, to find alternative solutions for getting around.

4,000 cars aday cross the valley, but no buses are available for workers or occasional business travelers. The same issue arises on weekends and holidays, when cultural and artisanal activities could better flourish and leverage sustainable tourism with a different approach to transport.

We arrive in a community already grappling with mobility that has launched a series of data-gathering initiatives and begun his reflection throughout research on data and statistics. They have assessed the needs of their residents through questionnaires ;they have analyzed road traffic figures by researching official

documents; and they have set goals: to engage more and more people in actively transforming mobility and to implement actions that will gradually enable a systemic shift in mobility within their region.

IMMERSION AND SURVEYING



Walking, biking, discovering the valley by all means and weather

We begin by exploring the area, hiking with them but also on our own, with the constraint of using only transports available to those without a personal car: on foot, by bicycle, by public transport, and by hitchhiking. A previously unknown valley unfolds beneath our feet. We feel the fatigue of the slopes, the time it takes to walk each kilometer, the power of the weather, the inconveniences of car traffic, the unpredictability of public transport and the beauty of the landscapes.

WORKSHOPS AND EXCHANGES

We continued our meetings with map drawing workshops, which gave us the opportunity to ask participants about their usual routes. We discovered that a path is not a static item, but rather that the choice of a road is influenced by many factors: the activities planned at the end, whether one is alone or in a group, age, time of day, season, weather, and more. The idea of creating a sensitive map where residents could describe and suggest different routes began to take shape. The designers' outside perspective, their questions, and their requests for explanations allowed participants to appreciate the richness of experience contained in seemingly insignificant actions, how everyday life holds surprises, and the value of sharing and making information available.



Working with different tools, from maps to diagrams, to build knowledge and awareness on how each participant can contribute to the project

Continuing the immersion and exchange phase, we conceive and test decision-making tools to facilitate a series of workshops that encourage discussion and allow for future foreseen. Together,

weclarify the participants' needs, strengths and desires for the project in itscurrent state and in the long term: to become visible and recognizable in order to expand their community and thus strengthen and multiply their actions.

During these sessions, the designers discover how their approach, as well as their external perspective on the project, can play a clarifying role in understanding intentions and highlighting broader connections that they can help to uncover.

A side effect of the designer's presence is that they reinforce the group's confidence in their abilities, highlighting the importance of what has already been accomplished: the organization of collective purchases during lockdown which are gradually transforming into a permanent CSA (Community Supported Agriculture) program; a car-sharing WhatsApp group; a phone number for volunteers for a volunteer taxi service used to accompany elderly people to medical appointments or shopping outside the valley.

The designers act as a sounding board, first internally, then externally.

HIGHLIGHTING THE NETWORKS

Throughout our research and encounters, we realized that various actors with specific roles are already structured in the valley or near regionoften acting separately with parallel road maps: numerous initiatives that contribute to building community already exist, ambitious projects that can connect the valley to

neighboring areas and open it up, all of which have mobility needs, particularly for cultural, professional, and heritage events.

Indeed, the issue of mobility—beyond affecting workers or young students traveling outside the valley, or populations such as the elderly, isolated individuals, or very young people who rely on cars for daily travel within the valley—regularly arises during public events that are expected to attract significant numbers of visitors, especially on weekends.

The visitors have no other option than to arrive by private car, which, in a temporary surge, clogs the narrow roads and the few available parking spaces.

MAKE THE MOST OF EXISTING RESOURCES

We have selected three events in the coming months where we can experiment tools that will allow the group to continue its research, to become visible and identifiable within its community, and to test solutions applied to real-world situations.

For TRESSE ALORS (a two-day event at the Maison des Tresses et Lacets museum-workshop, aimed at professionals and the general public, featuring conferences, an exhibition, and informal, festive gatherings), the group, recognizable by their t-shirts printed with the mobility logo, will install visible signage inviting visitors to share their travel habits, both within and outside the valley, using a questionnaire and a map.



Sign design on t-shirts and totem.

The 19th century machine who has braided the transport shoelaces

The conversation begins with a "mobilityshoelaces" offered to visitors : a utilitarian object crafted on the machines at the Maison des Tresses et Lacets.

Once deciphered, the laces reveal to be a data design tool:using varying amounts of colored thread, they illustrate the transportation habits of rural residents regarding their commutes to work or vacations.

**VENEZ DÉCOUVRIR
LE PATRIMOINE
INDUSTRIEL TEXTILE
DE LA VALLÉE
DU DORLAY
EN TRAIN, EN BUS,
À VÉLO OU À PIED...**



For the **RESIDENCY OUTING** of the Fine Arts and Design school at the « **Turbine créative** » (a laboratory dedicated to textile located in one of the villages in the valley) we imagine a map focusing on the spots where art creations are exhibited, indoors or outdoors, and the group encourages and accompanies walking tests proposing alternative paths to those arriving by bike from the train stations located 14km away (and 440m of elevation change)



Visitors using the plan to wander and get informations

For JOURNÉES DU PATRIMOINE (« Heritage Days », an annual national event where cultural sites are open to the public free of charge and offer activities to visitors), the group is partnering with Saint-Étienne Métropole to coordinate a test of electric bikes disposal at the train station.



Moving ans statics signals

In parallel, the designers propose a few items to pursue previous experiences : official t-shirts are being produced for group members, the sensitive map is being finalized, and temporary signage is being installed to facilitate guide dwalking tours throughout the industrial architectural heritage and to accompany cyclists from the train station.

This signage will remain in place for a month to allow for the testing of permanent heritage signage that the « Nouveaux Ateliers du Dorlay » plan to install in the coming years. A celebratory event is being organized in the Terrasse village main square to bring participants together, mark the end of the project, and plan future activities by questionnaire to encourage discussion about mobility and alternative travel experiences.



ikers and pedestrian visitors.



Exchanging and informing tools.

MATERIAL AND CONCEPTUAL TOOLS

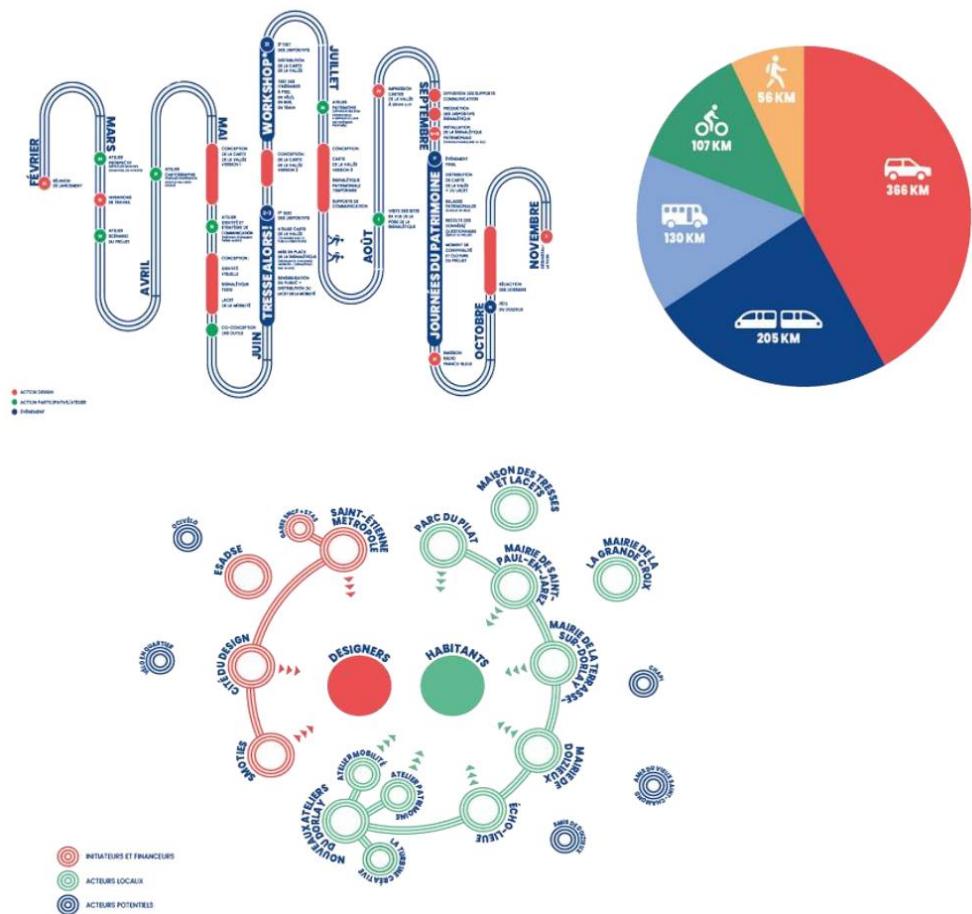
The map will gradually become the central element of the project, the common line of the experiment that links the events together : its common base has been modified each time to focus the view, zoom in on a part of the valley, and add supplementary information.

Each stage of the project, dedicated to a different event, allowed us to design adapted elements, to advance and refine our thinking, and to review and supplement the tools to adapt them for the next stage.

This gradual approach also allowed us to understand the limits of the local resources, the residents' needs for connection or, conversely, for freedom of action, and how subtle and gradual interventions, involving personal relationships, listening, and the sharing of skills and know-how, are more likely to take root than an externally injected intervention.

Action research and an adaptive project format proved to be the most suitable approaches for this specific design project, which involved a complex network and incorporated a pre-existing reality with which we gradually became familiar. From the outset, our aim was to be useful to the group and the local area, providing the means to continue their analysis and encouraging action.

The project's extended duration also allowed us to take the time to analyze our intervention with hindsight and to reflect on our role as designers, which we can explain and communicate through diagrams and graphs.



Diagramsshowing the overall actions, kilometers and the stakeholders network

Conclusion

The project proved to be, on the one hand, an exploration of the wide range of responses a designer can implement to meet a demand, as well as a showcase for another, less explicit and readily grasped role of the designer-researcher: that of becoming a revealer of needs, a link between the community and local authorities, and a highlighter of a perspective that encompasses a territory and sensibilities broader than those of the given framework.



An overall vision on all the actions initiated along with the project

PARTNERS: *Saint-Etienne Métropole, Cité du design (SMOTIES), ESADSE, Pilat Regional Natural Park, Saint-Paul-en-Jarez Town Hall, Doizieux Town Hall, La Terrasse-sur-Dorlay Town Hall, La*

Grande-Croix Town Hall, Radio France Bleu, ASSOCIATIONS: Nouveaux Ateliers du Dorlay (mobility and heritage workshops), Maison des tresses et des dentelles (House of Braids and Laces), informal residents' group, Creative Turbine (fablab), Écho-lieu (meeting place), production of equipment: Gran Lux (risograph printing), Pacoret (digital printing), Chronoflock (t-shirt printing).