INDIVIDUAL CHANGES IN THE BICYCLE COMMUNITY WORKSHOPS,

A TYPOLOGY FROM A NEW AGENT OF SOCIALIZATION.

ABSTRACT

Social change is at the center of solutions to the problems of the environment. Yet social change is sometimes elusively described. Through empirical inquiries guided by socialization theories, the present article aims to identify different types of individual changes.

These individual changes are observed and discussed in French bicycle community workshops. These places aim to replace cars with bicycles. Everyone is offered the opportunity to learn how to repair his own bicycle. Without a motor, the bicycle is moved by the force of its user and is easier to repair than a car. The goal of the bicycle community workshops is to allow individuals to gain more control over the tools they use daily.

In these workshops, individuals start or continue to transform their lives and not only their travel habits. In the words of Berger and Luckmann, these places constitute laboratories of transformation. That is why I conducted 40 qualitative interviews and one-month as a participant observer in two bicycle community workshops.

The result is a precise description both of social change on an individual scale and of a new agent of socialization. Bicycle community workshops may be seeds for a more sustainable future.

KEYWORDS

Social change; Individual change; Demotorization; Sustainability

The state of the Earth calls for changes in the ways individuals live. Mobility is one of the activities contributing the most to the emission of CO₂. Consequently, changes in travel habits are of interest, especially if they involve an overall renewal of individual practices. That is why I studied the new agent of socialization dedicated to the bicycle - a sustainable way to travel. In France, cycling is flourishing because of many factors. One of them is the emergence of bicycle community workshops. A few dozen in the 90s, there are more than 200 bicycle today (Gioria, 2016). They encourage cycling by teaching adults bicycle mechanics and reconstructing bicycles. Often, they are also experimental spaces for alternative behaviors and organization. Some of the workshops influence the adoption of innovations on a city scale. These workshops are a great field for observing how social changes take place both on an individual and a broader collective basis. I conducted an inquiry in two bicycle workshops to identify individual transformations and to propose a typology of individual change. Changes are the result of the interaction between individual biographies, the collective life of the workshop, material devices and argumentation for differing alternatives. This inquiry will hopefully contribute to the identification of social changes we need for sustainability.

I. A new agent of socialization dedicated to the bicycle

As part of the Maker movement, bicycle community workshops rectify the lack of control by individuals of industrial objects and open up the field for diverse identities.

Bicycle community workshops organize spaces where tools, bicycle parts, and reconstructed bicycles are stored. They welcome members coming to fix their bicycles. Sales of rebuilt bicycles ensure regular income, in addition to public subsidies. Bicycle community workshops centralize services for bicycle users, ranging from learning how to plan a trip to creating "weird" bicycles (e.g. tall bikes).

Bike community workshop activities are local (Batterbury, Vandermeersch, 2016, p. 191). Members are often daily bicycle users. Personal attachment to bicycles grow from regular participation in workshops (Abord de Chatillon, 2019). In many cases, members of bike community workshop are members of several community organizations (see Ferrand, 2016, p. 31). The replacement of cars with bicycles is the mainspring of the network. 17% of the members of one bicycle community workshop declare that they have stopped using their car or have renounced the intention to buy one (Gioria, 2016, p. 21).

In France bicycle community workshops are local and are connected through a national network, named L'Heureux Cyclage¹. The network was created as an emancipation project, finding its sources in anarchism, feminism, the LGBT and free software movements.

Autonomy is a keyword for understanding the bicycle community workshops. In these places autonomy is firstly defined as the capacity for an individual to ride his bicycle and to fix minor breakdowns. Secondly, autonomy refers to the replacement of cars with bicycles. A bicycle is easier to fix than a car. It necessitates only the energy of the user and not oil or electricity. Thirdly, for many bicycle community workshops, a bike is a symbol of the struggle against heteronomy. Consequently the ideal member of a bicycle community workshop is supposed to travel by his own body power, having gained control over his environment and its tools and fighting against discriminations of all sorts.

Starting from these common principles, bicycle community workshops differ in their focus: mechanics, social reinstatement, sustainability and/or political experimentation.

II. Methodology

II.1. Two sites of the inquiry

I conducted the inquiry in one bicycle community workshop centered on political experimentation and in another centered on mechanics.

The first bicycle community workshop is named "Un P'tit vélo dans la tête". It is the oldest workshop still existing in France (25 years). Volunteers run an association numbering more than 1000 members. They organize critical masses and other counter-cultural demonstrations. The key value of the association is the equality of all participants. They were among the first promoters of a pioneer bike sharing service in the city of Grenoble.

The second bicycle community workshop is named 'Pignon sur rue''3. This two-year-old workshop is also used by more than 1000 members. Two employees were in charge at the time of my inquiry.

¹ The name ''L'Heureux Cyclage" is a word play. It means both happy cycling and recycling (https://www.heureux-cyclage.org/?lang=fr).

² http://www.ptitvelo.net

³ http://envilleavelo.fr

The workshop aims to include as many users as possible, adopting a strategy of political neutrality. The association influences local transport policies.

II.2. Qualitative methods

In the two bicycle community workshops, I interviewed a total of 40 individuals, either employees, ex-employees, volunteers, and both new and ex-members (19 in the first bike community workshop, 21 in the second one). The interviews lasted from 15min to 3hours, depending on the nature of the involvement of the individual in the workshop.

The interviews began with practical questions. They moved to biographical and personal aspects. The interviews focused on the meanings of bike use, bike mechanics, and also the identity of the individuals in facing daily life challenges and turning points.

In addition to the interviews, I participated in the lives of the two bike community workshops, two weeks in each. I learned how to fix minor breakdowns, rebuild bikes. I also conversed and celebrated with the other participants.

III. A disruptive space of socialization

The bicycle workshop space is designed to ease access to the objects and knowledge necessary to the use of the bicycle.

Five interviewees compared the bicycle community workshop to Ali Baba's cave. Entering a bicycle community workshop, one is impressed by an array of bikes, tools and numerous items for repairing them.

The space of the workshops is analyzable using the notion of affordance elaborated by the environmental psychologist James J. Gibson. This notion breaks with the behaviorist approach, the view of the individual as foremost deliberative and the thesis of the dichotomy between the individual and his environment. Using the notion of affordance means that the action is born from the individual's perception of the located entity, wherein the qualities as perceived determine the action taken (Gibson, 1979, p. 127-129). This interrelation is made possible if the individual explores the environment and gains knowledge for identifying the useful properties to his/her action. In this process, the more elaborated affordances are those furnished by other individuals (ibid., p. 135).

The bicycle workshops are full of affordances. Yet the affordances through the objects of the workshop may be inadequate for some bike users, particularly novices. Breakdowns are collectively treated thanks to the advice and the help of the other participants in the workshop. Together human and non-human affordances compose the pedagogical space of the workshops.

There exists a discrepancy between the space of the workshop and urban space in general. At least for the bystanders, urban space is a type of space in which the objects are mostly perceived by travelers as *black boxes*, that is their content is considered indifferent for the action (Latour, 1993, p. 22) and travel in particular. The passerby has no competency nor right to manipulate these black boxes. Without a prior experience of mechanics, participating in a bicycle community workshop enhances learning, that is first learning to perceive workshop tools as affordances, then to distinguish the affordances and actively manipulate them. Gradually the members of the workshops incorporate and perceive directly the potential interactions with objects.

This space of socialization - a specific taskscape (Ingold, 2011, p. 195) - is created so that every bicyclist may ride with the knowledge of the necessary affordances, even at times of breakdown.

IV. Individual changes and the bicycle community workshop

So far I have described the bicycle community workshops and the properties of the two sites of my inquiry. Now I will describe the kind of changes that happen to individuals in the process of connecting with a bicycle community workshop. An individual change results from interactions between aspirations and human and non-human affordances within the workshop. Obviously bicycle community workshops are not the sole drivers of social change. Yet they are places where social change is particularly promoted and made possible.

In the following description, we consider the aim of gaining new skills in mechanics only in the context of broader aspirations (29 of 40 interviewees). We selected individuals who are seeking and experiencing broader transformations. Individuals' trajectories are divided between three main categories: extension, polarization, and conversion. Trajectories are defined depending on their patterns and not on the effects of the bicycle community workshop on individual life.

IV.1. The extension process

The extension process describes how an individual integrates a new practice in his way of life. The specific result of such process is to create a unified way of life by the repeated addition of new practices, without a primary project.

The extension process particularly exists when an individual lives in a diverse context in terms of possible activities, but a context oriented by a narrow set of values. In that kind of context⁴, the new practice possesses a family resemblance to already habitual practices of the individual (eg. recovering food/rebuilding bikes).

After having been a school assistant, Salome (Individual 26 - see Annexes) moved to Grenoble to go to the university to enter a gender studies program. Her boyfriend was already involved in the bike community workshop "Un P'tit vélo dans la tête". He invited her to visit the workshop where she discovered mechanics. She was not even a daily bicycle user.

She enjoyed the place and started to ride her bicycle to the University. For her, riding a bike was a safe mode at night and a tool for becoming familiar with the city. She discovered the bicycle universe and the potential of the affordances in the bicycle community workshop.

Becoming more and more involved, she became a volunteer for the non-cisgender session of the workshop. She also contributed to the installation of a small library and she sold a leftist newspaper in workshop.

From a more general point of view, she declares that her desire to understand how things work already comes from her childhood. There is a continuation of her primary socialization in her discovery of the bicycle community workshop. In the workshop, she has found a hospitable place to put together many counter-cultural practices previously fragmented.

The process of extension sometimes consists of the unification of already existing practices in a bicycle community workshop. In other cases the extension may happen by the addi-

⁴ The largest space in Europe inhabited by squatters is the neighborhood of Christiania (Copenhagen). With a population of 11,000 there exists a socio-economic diversity inside Christiania. Yet the inhabitants share a rejection of certain values - capitalism, hierarchy, etc. -. Such values and life models influencing the practices of individuals unite them, even if not absolutely identical for all (Hellström, 2006, p. 47, cited by Fremeaux, Jordan, 2012, p. 346).

tion of the activity of bicycle mechanics to an existing coherent alternative way of life. In each case, the workshop is identified with counter-cultural and leftist practices.

The notion of extension is useful in contemplating the interweaving of individual practices. For each practice, the individual needs to acquire skills in a specific context. On the other hand, the variety of practices make bring into being an overlapping between them that already exists. An extension process evolves step by step as the individual encounters new affordances, particularly in the rich environment of a bicycle community workshop. In the analysis of the interviews we identified 9 cases of extension.

IV.2. The polarization process

The polarization process is gradual, born of a slow- or fast-growing taste for one specific practice. This specific practice orients the whole way of life of the individual, which is easily visible in the setting of his daily rhythm. Most of the time, one polarization process coexist with another. However, in other cases, one practice will exert a monopoly over the individual. The practice becomes the habitual energy source of the individual (see James, 2003). Past practices are reoriented, conferring a new coherence to the way of life.

Alejandro was an occasional cyclist before becoming a member of a mechanics-centered bicycle community workshop. Only a few months after entering the community, he became a bicycle activist. In the near future he will start a Ph.D. thesis about cycling.

A breakdown of his partner's bicycle was the cause of his first visit to the bicycle workshop « Pignon sur rue ». He started to learn how to repair a bicycle. He was already committed to the protection of nature and a member of many associations. Upon becoming more involved in the workshop he transferred his skills and became an active figure in the network of bicycle associations around the globe.

The bicycle exerts a growing centripetal force in his life because of his constant interest in political action on a local scale. In this way he became a daily bicycle user.

The polarization process was recognized eleven times during the analysis of the interviews. The polarization process is strong enough to blur boundaries between leisure time and work because skills are often transferable (eg. in the case of a mechanic or an engineer). The similarities of the practices of the individual during work time and beyond maintain a continuity in the individual's way of life (see Flichy, 2017, p. 91). In the interviews, the polarization process is less politicized than the process of extension. The process can start in a bicycle community workshop or elsewhere — in a factory or a garage. The process of polarization may complicate what significant others expect of them.

IV.3. The conversion process

Classic sociologists apply the notion of conversion to deep changes. Conversion arises from a disrupting experience provoking a personal crisis, that is, difficulties in making sense of one's own life. Joining with others, perhaps a new group, is helpful in making sense of the disrup-

tive experience (Berger, Luckmann, 1966). The meaning of the individual's identity is redefined conjointly with others, i.e. a laboratory of transformation in the words of the duo of sociologists.

Matt' (Individual 20) was an automotive engineer belonging to the French upperclass. The hierarchical organization he encountered working in a factory bothered him. But it was the sight of traffic jams near the factory that shook him. He asked himself if his work was absurd. Wanting to escape his situation, he prepared a backpacking trip to Asia and left his job. He aimed to live a more simple life. Arriving in Nepal, he met impressive bicycle travelers and made the decision to return to France by bicycle. In Istanbul, he dwelt with bicycle activists who were also anarchists. After a short stay in France, he traveled to London and visited a bicycle community workshop. A few weeks later he decided to learn bicycle mechanics. After finishing the program in France he found a position in the bicycle community workshop in Grenoble. In the workshop he met a group of new friends and had a love affair. He continued to lead a simple life. Thanks to a supportive group offering the necessary affordances he found his ideal life. In this way, he broke with his upbringing and milieu, that is his primary socialization.

In the 9 reported cases of conversion process, conflicts and negative experiences at work are significant catalysts for exploring new practices. A formative trip (see Rigal, 2019)⁵ or flight are the two reported responses to the negative situations. These periods of fragility and openness are favorable for professional retraining. They lead to a new social status and often to a rupture with the former social background. The identity of the individual experiencing a process of conversion is then turned upside down. In this process, bicycle mechanics is an opportunity to gain a new work environment. Furthermore, the community of the bicycle workshop constitutes a supportive context for the exploration of alternative practices.

IV.4. Summary of the different types of individual changes

Based on the study of bicycle community workshops, we can distinguish three different processes in relation to the primary socialization.

- 1. The extension process is a transformation limited to the adoption of a new practice which is merely a continuation of previous patterns, and as such does not imply a rupture with primary socialization.
- 2. The polarization process is the result of a powerful investment in a specific practice. The practice is significant enough to reorient the daily organization of the individual and his life trajectory. The individual's identity is redefined by his attraction to one practice, both for himself and for others. We notice a modification of primary identity. However, there is no rupture with primary socialization.
- 3. The conversion is the individual transformation *per se*, because the entire life of the individual is transformed through the process in opposition to the primary socialization.

⁵ "Whether it's to undertake a pilgrimage, go on a round-the-world trip, or discover new ways of life and practices, many people embark on journeys that will forever change their lives. Formative journeys have been true initiation experiences throughout history, combining a break with everyday life and self-realization, and connecting mobility to the core transformations within each and every one of us." (Rigal, 2019).

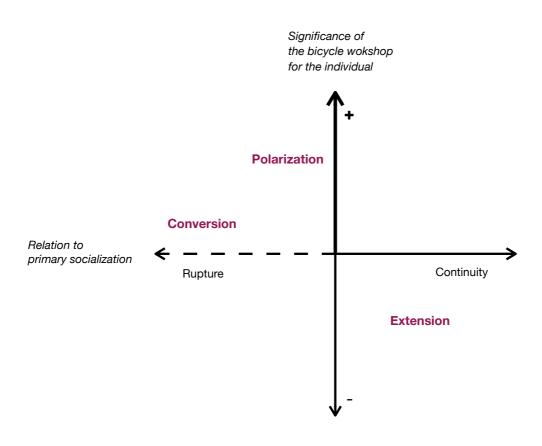


Figure 1. Comparison of the three processes of individual change.

At an individual scale, practicing bike mechanics in a bicycle community workshop is often part of broader transformations. They are not necessarily the result of turning points but of lasting processes that take place at various rates.

V. Conclusion

The French network of bicycle community workshops takes autonomy as its motto. In the workshops autonomy is made real by the teaching and the activity of doing repairs oneself, in a non hierarchical and non standardized manner. The bicycle community workshops do not only challenge enforced and inherited identities. They reduce the dependency of individuals on complicated industrial tools and offer affordances for individuals' daily lives.

Through discussions with participants in bicycle community workshops, I was astonished by two features. Firstly, the workshops are well thought out teaching spaces, offering a large variety of tools and affordances. Secondly, individual changes take place in these spaces. Some individuals may discover bicycle mechanics and gradually change their whole way of life. Others were already fond of mechanics. They find a new place to continue to practice their passion. People interested in politics can discover bicycle uses thanks to an appeal for bike activism, etc. A bicycle

community workshop is a place for experimenting with new possibilities and sometimes alternative social realities.

On a local scale bicycle community workshops challenge transportation and environment policies. Close to the Maker movement, bicycle community workshops are sites of exploration of alternative solutions for industrialization: another model of industrialization based on autonomy and tools efficiently perceived, repaired and used by individuals. These tools are not motorized. In this way, bicycle community workshops are examples of sustainable spaces and seeds for the future of the Earth.

Appendices

Appendices					
Individual's number	Gender	Age	Family situation	Main activity	Role in the work- shop
1	M	35	In a relationship	Student	Volunteer
2	F	28	Single	Hotel employee	Member
3	М	73	In a relationship X children	Retiree	Volunteer
4	F	45	In a relationship	Visiting teacher	Volunteer
5	M	24	Single	Civic service	Civic service
6	М	37	Single	Unemployed person	Member
7	M	26	In a relationship	Robotician	Member
8	M	23	In a relationship	NGO Founder	Member
9	F	29	In a relationship	Physiotherapist	Member
10	M	34	Single	Unemployed person	Volunteer
11	М	26	In a relationship	Unemployed person	Volunteer
12	М	70+	In a relationship 2 children	Retiree	Volunteer
13	F	40	Single	Graphic designer	Member
14	М	40+	In a relationship 2 children	Bike mechanic	Founder and employee
15	М	51	Single 1 child	Bike traveller	Employee
16	F	23	Single	Musician	Volunteer
17	М	30	In a relationship	Unemployed person	Volunteer
18	М	28	In a relationship	Unemployed person	Member
19	М	32	In a relationship 1 child	Botanist	Member
20	М	40	In a relationship	Employed bike activist	Ex-employee Vol- unteer
21	М	40	Single	Unemployed person	Ex-employee Vol- unteer
22	М	24	In a relationship	Unemployed person	Volunteer
23	М	19	Single	Unemployed person	Volunteer
24	М	70	Divorced 1 child	Retiree	Volunteer

Individual's number	Gender	Age	Family situation	Main activity	Role in the work- shop
25	М	72	Divorced 1 child	Retiree	Member
26	F	25	In a relationship	Student	Volunteer
27	M	40	In a relationship	Railwayman	Ex-Volunteer Member
28	М	50	In a relationship 2 children	Employed bike activist	Founder Volunteer
29	М	50+	Divorced ?	Unemployed person	Member
30	F	25	Single	Phd student	Member
31	F	67	In a relationship	Retireee	Member
32	M	50	In a relationship X children	Employee (logistics)	Member
33	M	40	?	Cook	Member
34	M	34	In a relationship avec children (au Mali)	Asylum-seeker	Member
35	М	64	Divorced 2 children	Retiree	Member
36	M	40	In a relationship 2 children	Cleaner	Member
37	M	51	In a relationship 2 children	Employee (logis- tics)	Member
38	M	46	In a relationship	Unemployed person	Member
39	M	30	In a relationship	Unemployed person	Member
40	М	28	In a relationship	Artist	Member

Table 1. List of the interviewees

References

Abord de Chatillon Margot, « "We care for each other" - Pratiques mécaniques et relation cyclistevélo », Rencontres de l'APERAU, 2019.

Batterbury Simon, Vandermeersch Inès, « Bicycle justice: community bicycle », pp. 189-202, in Golub Aaron, Hoffmann Melody (eds.), *Bicycle justice and urban transformation: biking for all?*, Routledge, London, 2016, 270p.

Berger Peter, Luckmann Thomas, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor Books, New York, 240p.

Ferrand, Bruno, Les ateliers d'autoréparation de vélos sur la métropole de Lyon, Mémoire de master VetAgro Sup, Marcy-l'Étoile, 2016, 126p.

Flichy Patrice, *Les nouvelles frontières du travail à l'ère du numérique*, Seuil, Paris, 2017, 419p. Gibson James J., *The Ecological Approach to Visual Perception*, Houghton Mifflin Company, Boston, 1979, 332 p.

Gioria Christian, « Etude d'évaluation sur les services vélos - Synthèse technique », 2016, 23p., consulté le 25 novembre 2019, https://www.actu-environnement.com/media/pdf/dossiers/808-ademe-services-velo.pdf

Goffman Erving, Asylums: Essays on the social situation of mental patients and other inmates, Aldine Transaction, 1968, 400p.

Hellström Maria, Steal this place, The aesthetics of tactical formlessness and « The Free Town of Christiania », Doctoral Thesis Swedish University of Agricultural Sciences, 2006.

Ingold Tim, *The Perception of the Environment, Essays in Livehood, Dwelling and Skill*, Routledge, London, 2011, 463 p.

James William, *The Varieties of Religious Exprience: A Study in Human Nature*, Routledge, London, 2003, 375p.

Lave Jean, Wenger Etienne, *Situated Learning, Legitimate peripheral participation*, Cambridge University Press, Cambridge, 2016, 138p.

Musso Pierre, La Religion industrielle, Monastère, manufacture, usine, Une généalogie de l'entreprise, Fayard, Paris, 2017, 792p.

Rigal Alexandre, « Voyage de formation », *Forum Vies Mobiles*, 2019, consulté le 2 octobre 201), http://fr.forumviesmobiles.org/reperes/voyage-formation-12954.