BOOK REVIEWS

Assembling Policy. Transantiago, Human Device, and the Dream of a World-Class Society

Sebastian Ureta. MIT press, 2015.

by Ivana Suboticki

Assembling Policy. Transantiago, Human Devices, and the Dream of a World-Class Society is a new monography published by MIT Press as part of their Infrastructures Series and a welcomed contribution to Science and Technology Studies (STS). Written by Sebastian Ureta, the book takes us on a journey through the assemblage of Transantiago – a large-scale infrastructure project aimed at transforming the whole transport system in Santiago, Chile. In addition to re-inventing the transport system, this agenda was aimed at creating a world-class society – a new kind of humans that were satisfied, fare-paying, self-governing, and participating consumers. But things did not go according to plan. At the outset, we learn that Transantiago is one of the biggest public controversy in Chile in recent history and a failed attempt at modernizing the public transport system of Santiago. Throughout the remaining of the book, the author shows how different ways of integrating and enacting people in the transport assemblage contributed to its controversial materialization. In the end, he argues how public participation in planning is not enough, rather, we need to be more reflexive of the different ways people are included in policy-making.

Embarking on this ambitious endeavor, Ureta's analysis draws on two key concepts – *assemblages* and *human devices*. The first is familiar to most STS scholars. Using a constructivist approach, Ureta argues for the analysis of policies as assemblages. Following Deleuze and Guatari (1988), assemblages are made up of heterogeneous elements that are constantly changing. One of the novel contributions to the analysis of these processes is the author's emphasis on recognizing their inherent double movement. Assembling always goes hand in hand with de-assembling, or to use Ureta's terminology, territorialization has to be viewed in light of deterritorialization. This approach makes us ask the question: What is left behind and excluded when something new is assembled? The second concept, and perhaps the most innovative aspect of the book, are human devices. The author describes human devices as a conceptual heuristic, allowing for a broader and more flexible analysis of the different ways humans and their agencies are accounted for and enacted in assemblages. He defines human devices as "highly heterogeneous sociotechnical devices that perform existing and/or projected humans for technoscience" (p.6).

With the main body of the book divided into six chapters, Ureta deconstructs Transantiago by looking at the genealogy of the policy assemblage. The author describes how human devices are constructed and performed from the initial Transantiago plan in 2000, to its launch in 2007, and the first years of its functioning. Based on the double movement of assembling in mind, Ureta delineates

four central assemblage configuration: crisis, infrastructuration, disruption and normalization. Although they should not be understood as linear stages of Transantiago's development, they do seem to follow a chronological (perhaps overlapping) order. Clearly based on extensive fieldwork, these chapters present us with rich empirical material and engaging depictions of the sociotechnical assemblage.

In this thorough analysis, Ureta convincingly stresses the relevance of human devices in infrastructure planning. We can see how human devices have been instrumental to the socio-technical assemblage of Transantiago and its enactment in practice. Ureta's recognition of human devices as both artifacts and practices, allows us to put a focus on people in assemblages, see the multiple ways humans are brought into technoscientific practices and what effects these might have. In the crisis configuration when Transantiago first emerged, human devices were produced to deterritorialize the old transport system dependent on miceros (private bus owners) and give way for new political leadership to reclaim control. Here, the author delimits two key devices. The citizen consumer, dissatisfied and angry about the current service provision, and the active and participating citizen, envisioned as a fare-paying user, who is prepared to change and optimize their mobility habits, while also being a direct participant in planning process. Both devices materialized through different mechanisms e.g. quantification of population and mobility patterns, new designs for the system, financial schemes etc.

In the infrastructuration configuration when the preparation of the Transantiago took place, Ureta shows how the active and participating citizen was excluded, and new human devices were introduced in the form of design and business model. In this configuration, people were rendered as captive of the new transport systems, informed rational actors, and time and fare optimizing users. Scenario and forecast models employed where human devices that excluded alternative visions of users. Ureta hereby shows how humans are brought into plans through different mechanisms, without being directly/physically part of them. The effects of these devices are evident in the following two configurations, depicting the aftermath of Transantiago's launch in 2007.

People's dissatisfaction with the new public transport system and the following disruption and normalization configuration, show how different human devices came into conflict. Ureta's heuristic concept allows for different kinds of human devices to emerge in these processes. First, the user challenging the new system

through unexpected devices. The comfort seeking and fare-evading user confronting the devised models, while the suffering user overtook the media story from the previously promoted world-class user. And secondly, human devices aimed at normalizing the disruption. Contained protests organized by citizens in order to succumb some aspects of the new system, new control systems developed in order to sanction fare evasion, different adaptions to the system were developed in order to account for people acting in strange ways, and opinion polls were used to show improvements in citizen satisfaction.

As an overarching theme of the book, Ureta argues that assemblages have power and create new orders and disorders. He explains how Transantiago was a technocratic top-down governmental planning scheme aimed at performing a particular script (human device) that had severe effects on peoples' lives. Still, the author argues that democratization of planning processes and acknowledgement of lay people knowledge is an insufficient answer for improving complex policy assemblages. According to Ureta, we need to recognize the broader area of ways people are included in policy-making. If we recognize policies as assemblages with different ontological politics aimed at enacting order, Ureta argues, we can better account for the different ways people are included and enacted in policy-making. In turn, this can lead to more inclusive and reflexive policy-making practices, in this case, infrastructure planning.

In this way, Ureta tries to bring questions of politics and power into STS and assemblage thinking, often criticized for lack thereof. Perhaps a more explicit explanation of the interplay between assemblage theory, different agencies, and Foucault's notion of governmentality and power could have been fruitful. In a contradictory fashion, less attention could have been put on extensive references and quotations relating to other concepts and

approaches in STS made throughout the book. Although this to some degree grounds the book within the STS field, at times it is also distracts the overall flow and clouds the position and voice of the author. This is however only a remark to an overall well-structured and enjoyable book that could also be of interest to a wide range of scholars interested in urban and transport development and social change.

I want to end this review with a reflection on the authors concluding remarks. In addition to the mentioned recognition of double movement (understanding of what is left behind) and the accompanied ordering of humans, Ureta gives some concrete suggestion on how to improve planning through different devices: heterogeneous testing, continual porosity, and different modes of coordinating complex planning practices. By following these steps, Ureta stresses that a new responsibility can emerge. A responsibility that accounts for both how humans are included in planning as well as how they are produced through planning. This is very interesting remark in a time when public participation is promoted as the cornerstone (and solution) of good governance and policy-making. Ureta stresses the need to go beyond the normative turn and the democratization of technical decision-making, and to reflect on both the way humans are directly included, as well as the way they are produced in policy assemblages. In my opinion, this is a very tall order and perhaps the best way to take on this recommendation is to recognize the potential of STSers (or STS sensitive actors) in policy-making. Here, we can see how particular STS competencies might contribute to better assemble policy.

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