

Design from Repair Society: Narratives of inventiveness from the geographic periphery

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ABSTRACT

The series of two posters presents the fieldwork within the team project of PhD and Master students of the Arctic Design School on studying locally appropriate transport vehicles for remote roadless areas with severe climate conditions. This project is a designerly exploration into the phenomenon of “vernacular design,” also known as – since Soviet times – the movement of DIY enthusiasts of garage-making and tinkering.

By investigating the local and vernacular design tradition we discuss what designers can learn, how they can creatively and ethically utilize local knowledge, and how to integrate this knowledge into the art/design educational practice.

Author Keywords

DIY; Local knowledge; User inventiveness; Transport design; Design fieldwork.

INTRODUCTION

The project explores the inventive potential of the Russian northern periphery – the rural areas, distant from administrative centers, large industries and infrastructures, where people pursue a literally de-modernized way of living. In such settings, we searched for local inventions – particularly transport vehicles

– that people made for themselves. We looked for practical solutions to problems of daily mobility that involved minimum effort and material. The objects we found provided a new understanding of the “beauty and utility” formula, which appeared to be unique for each locality and personality of a maker.

Data and methods

The dataset of the main project combines historical data on the Soviet phenomenon of a so-called “repair society” [1] (drawn from archives and other public domains such as magazines and newspapers, with firsthand observations of contemporary realities of the Russian northern periphery. Fieldwork is the subject matter of this presentation: in the period 2018-2019, we conducted three expeditions to Arkhangelsk Oblast and Perm Krai. Equipped with theoretical insights from the geographical construction of technology approach (G-COT) [2], we deepen the concept of “proximal design” [3] that puts forward not only users’ ability to adjust, repair and redesign their technology, but the very ability to innovate and, eventually, to come up with enduring design principles without the participation of design professionals.

Case study 1. Cosmic conversion

Moseevo is a remote village in Arkhangelsk Oblast with limited transport accessibility with the “outer world.” The primary transport vehicle is a traditional wooden boat called *zyrianka*, which is spread all over the area within the basin of the Mezen River. But in this particular village, since the 1990s, these boats have been made of metal: a high-quality rust-proof

alloy. Such an unusual material came literally from the sky: the village is situated on the course of space rockets launched from Plesetsk Cosmodrome. When rockets accelerate, their exhausted stages fall to the ground. Then the villagers search for them, collect fallen fragments, and reuse in a new practical way by making boats. To deal with this material, they invented and locally produced specific bricolage tools.

The space vessels are longer than traditional wooden boats – up to 2-2.5 meters – and their lifting capacity is up to 2.5 tons. Also, the space boats bypassed mass-produced factory models made of duralumin alloys in terms of running characteristics and lifting capacity. It takes about two-three weeks to make such a boat; the duration of use without repair is practically unlimited (while a wooden boat lasts about two years).

Case study 2. Pozhva jeeps

Pozhva is a factory settlement that belongs to Pozhva Machine-building Factory in Perm Krai, at the European North of Russia. In the early 2000s, it became famous among ATV-makers and users because of its unique community-centered manufacture of lightweight ATVs on low-pressure tires, called *jeeps*. The first jeep was made more than 30 years ago, and, to date, there are about 200 vehicles in the village.

Among those machines, there are no two jeeps alike, although there is an easily recognizable Pozhva frame. The reliable and ergonomic design resulted from numerous experiments in the field. Local makers experimented with different schemes: from front skis and three-wheels to all-wheel drive and other modifications. They finally came to the “golden standard” of all-weather use, easy-to-handle and light machine that included four wheels, a motorcycle engine, an automobile chassis, a luggage box at the rear, and a cargo platform in front.

Today, the production of jeeps is still not associated with any commercial enterprise. The factory was shut down in 2014, but there is still a viable community of former factory workers that serves as a group of peers to make the making process easier. At the same time, almost nobody makes jeeps for profit. Also, there is no specialization at any stage of the making process: generally, everyone should be able to do everything.

CONCLUSION

The examples of low-tech creativity we observed provide new insights into the concepts of recycling and improvisation; they are about bricolage as well as

about moving the control and responsibility over the object and the situation to the user. Through in-depth fieldwork we got access to the unique database of innovative locally appropriate solutions to rural/non-urban mobility problems. Our further plan is to move the research on the periphery inventiveness to the next level that is synchronous shoulder-to-shoulder collaboration between designers and real makers/users.

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