Representation of climate and how technologies may influence climate change: case studies with subjects from France and French Guyana

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Introduction

We put forward the general hypothesis that human cognition, mediated by culture and technologies is currently very much concerned by global warming and recent environmental changes. Lamel and al. (2011) showed that depending on culture and risks exposure, people can show opposite positions concerning the possibilities of human beings to adapt to climate change.

Human cognition is both influenced by technologies and influences the role of technologies in dealing with earth-scale problems, such as environment and climate change.

Our question addresses the individuals'representation concerning the present and future role of technologies as regards to the perception of climatic risk.

Method

We will present a subset of data collected for a project financed by the French National Research Agency: ACOCLI (Cognitive Adaptation to Climate Change) examines how human cognition deals with climate change, according to the individual subject's characteristics (age, education level…) and to cultural and environmental contexts. To address these questions, a fieldwork was carried out in France and French Guyana.

By semi-directive interviews, expressions of subjective representation of climat's evolution and human adaptation were collected. The methodological hypothesis is that people associate various levels of conceptualization while answering the opened questions.

A qualitative analysis of the interviews focuses on how people relate climate to technologies.

Main Findings

Firstly, some people did not mention technologies at all. Secondly, among the ones who did, we identified three ways of expressing the interaction between climate change and technologies:

- the development of techno-sciences modifies the "natural" evolution of climate (for example, pollution is mentioned as a cause of climate deregulation)
- techno-sciences constitute one tool to manage climate change, and to help human adaptation (for example, technologies will be needed to cure new illnesses)
- in the communication field, new technologies are an intermediary between people and their perception of reality (for example, the media).

People consider the evolution of climate as an uncontrollable phenomenon, neither by the individual nor by the society. In parallel, the influence of technologies on nature (including people and climate) is expressed as a rather mysterious one. These matter of facts leads to a double uncertainty and thus, a great variety of interpretation concerning the future, some of them being very pessimistic, even cataclysmic. Young people (especially adolescents) and French Guyana inhabitants are especially looking on the dark side. However, metropolitan French adults are more confident in technologies to control climate's change consequences.

References

Lammel, A., Guillen, E., Dugas, E., Jamet, F. (to be published), Cultural and environmental changes: Cognitive adaptation to global warming, *Cross-Cultural Psychology*