

# Travel Behavior Analysis

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## Pragmatic social science regarding transportation, city, nation-state, and the environment

Although social science is today divided into economics, sociology and social psychology, it has originally been a pragmatic intellectual activity derived from a process in which human beings consider how to cope with a variety of social problems in the modern period. In the last 200 years though social science has become more isolated from the real issues in society. As a result, there are unfortunately a large number of today's problems regarding transportation and the city left with no actual methodology. Therefore this laboratory focuses on "pragmatic social science", that is, we deal with real issues relevant to transportation systems, urban and rural areas as well as whole nations. Our research is based on the axiomatic truth that these issues are all critically based on the existence of "society" and "humanity".

### Social dilemma studies and social psychology

Social issues such as environmental problems, destruction of the scenery and disorder in urban areas are mostly caused by egoistic tendencies of individuals. For instance, as a consequence of each having a desire to drive car, there are a large amount of CO2 emissions and heavy traffic congestion. This is generally called "social dilemma with conflict between public and private interests". This research group takes psychological approaches to reveal the socio psychological mechanisms of these issues. In addition, we make an extensive effort to study countermeasures against these real issues relevant to transportation, landscape, disaster prevention and environment, and to make suggestions to adopt in the real society. In more detail, we conduct in-house experiments, field tests, administration supports and so on.

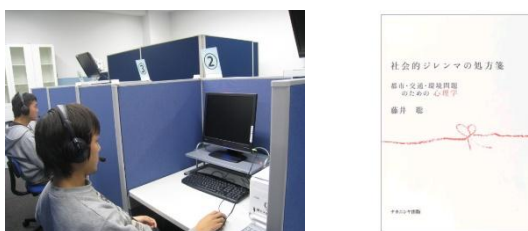


Fig. 1 : A test on responses to a social dilemma (left)

### Pragmatic social science supporting the vitality of cities and nation

Civil engineering, urban and national planning aims to improve the facilities of urban or rural areas. For that purpose, "vitality" is a key: For example, community development (Machizukuri in Japanese) can be carried out by enthusiastic residents. Without such active residents, many cities would be devastated. We consider what action is required to increase "the vitality", which is the core

source of all the improvement, taking transportation, disaster prevention and landscape of individual cities. Then, we make suggestions for those issues. We search for social policies to increase vitality applying psychology, sociology, folklore, politics and social philosophy with keywords such as: local attachment, regional charisma, altruistic behavior, dialectics and narratives.



Fig. 2 : A field study on the background of traditional and historical landscapes (left)

### National policy theory based on social science tools

In every region or city, any economic, social or cultural activity are determined by an overall national policy for national land, economy, industry, finance and trade. From that macro perspective, this research group aims to make our country wealthier and more resilient. This process will enable all the people to obtain peace and wellbeing in their daily lives. It involves national theory; economic, industrial, financial and trade policy theories, as well as comprehensive social science (macroeconomics, sociology, political economy, social psychology, etc.). In particular, the study of journalism is also part of our research since it proves to have a large impact on our economy and politics.