## 専門分野・キーワード

## ●数理社会学

# いしだ あつし **石田 淳** 教授

## / 教育·研究内容

数理社会学を専攻しています。数理社会学とは、数学言語によって、社会現象の様態とメカニズムを記述する「モデル」を作り、それにより社会現象の 説明を目指す社会学の一分野です。

これまで、数理社会学的手法、そして同時に計量的手法を使いながら、雑多なテーマの研究に取り組んできました。これまで取り組んできたのは、コミュニケーション、社会階層意識、災害復興制度、社会的ジレンマ、言語権運動、不平等、分配的正義、ナショナル・アイデンティティ、幸福、人間開発指数、相対的剝奪、戦争と人口構造、軍拡競争モデル、ライフ・イベントによるヴァルネラビリティ、分居モデルなどなどです。

最近では、ベイズ統計モデリングの手法を応用して、理論的前提に立って経験的データを説明する研究にも取り組んでいます。たとえば、人々の階層帰属意識(どの階層に自分は属しているか)を、背後にランダムウォークプロセスを仮定する意識生成過程によって説明する研究(Ishida 2018b)などに取り組んでいます。

大学院ゼミについては、院生それぞれが自身の関心に基づき研究テーマを設定し、自主的に研究を進めていけるように支援したいと思います。

## / 代表的な著書・論文等

浜田宏・石田淳・清水裕士,2019、『社会科学のためのベイズ統計モデリング』朝倉書店.

石田淳,2017,『集合論による社会的カテゴリー論の展開―ブール代数と質的比較分析の応用』勁草書房.

石田淳,2015,『相対的剥奪の社会学―不平等と意識のパラドックス』東京大学出版会.

Ishida, Atsushi, 2023b, "A Fuzzy Set Extension of Schelling's Spatial Segregation Model," Journal of Computational Social Science, (2023).

Ishida, Atsushi, 2023a, "A Model of Income Evaluation: Income Comparison on Subjective Reference Income Distribution," Journal of Mathematical Sociology, 47(1): 75-96 (published online 01 Oct 2021).

Ishida, Atsushi, 2018b, "Life-Is-like-a-Random-Walk Model of Class Identification," Sociological Theory and Methods (理論と方法), 33(2): 261-76.

Ishida, Atsushi, 2018a, "A Bayesian Analysis of Income Distribution Image," SAGE Open, 8(2): 1-12.

石田淳、2016、「『日本人』の条件―インターネット調査データを用いた社会的カテゴリー分析」『社会学評論』67(2):182-200

Ishida, Atsushi, 2015, "An Initial Condition Game of Richardson's Arms Race Model," Sociological Theory and Methods (理論と方法),30(1): 37-50.

Ishida, Atsushi, Kenji Kosaka, and Hiroshi Hamada, 2014, "A Paradox of Economic Growth and Relative Deprivation," Journal of Mathematical Sociology, 38(4): 269-84.

#### <u>/ 研究紹介のホームページなど追加情報</u>

個人ウェブサイト(https://aishidajt9.github.io)に私の研究業績一覧と業績へのリンクを掲載しています。

Professor Atsushi Ishida

#### Areas of Expertise/Keywords

Mathematical Sociology

I am majoring in mathematical sociology, a branch of sociology that aims to explain social phenomena by creating "models" that describe the state and mechanisms of social phenomena using mathematical language.

I have been working on a variety of topics using mathematical sociological and quantitative methods, including communication, social stratification, disaster recovery systems, social dilemmas, language rights movements, inequality, distributive justice, national identity, well-being, human development indices, relative deprivation, war and population structure, arms race models, vulnerability generated by life events, and segregation model.

Recently, I have been working on research that explains empirical data with theoretical assumptions by applying a Bayesian statistical modeling method. For example, I am currently working on a study to explain people's class identification by assuming a random walk process (Ishida, 2018b).

As for graduate seminars, I would like to support graduate students in setting their own research themes based on their own interests and in proceeding with their research independently.

#### **Main Publications**

Ishida, Atsushi, 2023b, "A Fuzzy Set Extension of Schelling's Spatial Segregation Model," Journal of Computational Social Science, (2023).

Ishida, Atsushi, 2023a, "A Model of Income Evaluation: Income Comparison on Subjective Reference Income Distribution," Journal of Mathematical Sociology, 47(1): 75-96 (published online 01 Oct 2021).

Hamada, Hiroshi, Ishida, Atsushi, and Shimizu, Hiroshi, 2019, Bayesian statistical modeling for social sciences, Asakura Shoten. [In Japanese].

Ishida, Atsushi, 2018b, "Life-Is-Like-a-Random-Walk Model of Class Identification," *Sociological Theory and Methods*, 33(2): 261-276.

Ishida, Atsushi, 2018a, "A Bayesian Analysis of Income Distribution Image," *SAGE Open*, 8(2): 1-12.

Ishida, Atsushi, 2017. Set-Theoretic Social Category theory: An application of Boolean

algebra and qualitative comparative analysis, Keiso Shobo. [In Japanese].

Ishida, Atsushi, 2016, "The Condition of 'Japanese': A Social Category Analysis Using Internet Survey Data," *Sociological Review*, 67(2): 182-200. [In Japanese].

Ishida, Atsushi, 2015, A sociology of relative deprivation, Paradoxes of inequality and perception, University of Tokyo Press. [In Japanese].

Ishida, Atsushi, 2015, "An Initial Condition Game of Richardson's Arms Race Model," *Sociological Theory and Methods*, 30(1): 37-50.

Ishida, Atsushi, Kosaka, Kenji, and Hamada, Hiroshi, 2014, "A Paradox of Economic Growth and Relative Deprivation," *Journal of Mathematical Sociology*, 38(4): 269-284.

Additional information, including My Research Web Site. My Personal Website (https://aishidajt9.github.io) contains a list of my publications and links to them.