## Attribute-Based Decisions in Subjective States

## YOSUKE HASHIDATE

Graduate School of Economics, The University of Tokyo

April 2016

## Abstract

We study preferences over menus to analyze attribute-based inferences, which produces a decision-making based on attributes of alternatives. Especially, we focus on the following two procedural aspects. First, in general, decision analysts cannot observe directly which attribute information is used by the decision maker. The subjectivity of attribute spaces is studied by contemplation strategies as measures over ex-post attribute-based utility functions. Next, there are various ways of aggregations of attribute-based evaluations, ranging from putting a weight on only a specific attribute to putting weights on all attribute equally. We analyze the way of aggregations of attribute information as an optimization problem. To capture the two procedural aspects, this paper axiomatizes an attribute-based decision model in which the subjective attribute space is identified, and the optimal way of aggregations of attribute information is characterized. In addition, we provide a measure of comparative attitude toward the aggregation of attributes.

Keywords: Attribute-Based Decisions; Bounded Rationality; Satisficing; Contemplation Costs; Subjective State Spaces; Preferences over Menus.

JEL Classification Numbers: D01, D03, D81.