

On Choice, Belief, and Distribution: Axiomatic Studies in Behavioural Economics

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INTRODUCTION

I study individual behaviour, information processing, and resource allocation.

1. **Universalisation:** what would happen were everyone to behave like me?
(Alger & Weibull, 2013; Laffont, 1975; Kant, 1785; Roemer, 2019)
2. **Meritocracy:** allocation rule rewarding more meritorious individuals.
(Cappelen et al., 2020; Fleurbaey, 2008; Kagan, 2014; Sen, 2000)
3. **Belief-dependent tastes:** tastes over beliefs.
(Bénabou & Tirole, 2016; Brunnermeier & Parker, 2005; Golman et al., 2017)

1. A FOUNDATION FOR UNIVERSALISATION IN GAMES

An individual i in a game:

- chooses a mixed action α_i ;
- has a belief about opponent's actions p_i ;
- “universalises” his action to an opponent action with the function T .

A **universalisation preference** is

$$U_i(\alpha_i) = (1 - \kappa) \underbrace{\sum_{a_i, a_{-i}} \alpha_i(a_i) p_i(a_{-i}) u_i(a_i, a_{-i})}_{\text{Subjective Expected Utility}} + \kappa \underbrace{\sum_{a_i, a_{-i}} \alpha_i(a_i) T[\alpha_i](a_{-i}) u_i(a_i, a_{-i})}_{\text{Universalisation}}.$$

1. UNIVERSALISATION - DISCUSSION

I axiomatise universalisation preferences studying preferences over mixed actions.

Independence is only satisfied only between actions universalised “equivalently”.

Specifying the function T allows to study different types of universalisation.

I introduce **Equal sacrifice universalisation**.

2. MERITOCRACY AS AN END AND AS A MEANS

Individual i has preference over outcomes \succsim_i .

A preference \succsim_i is more “meritorious” than \succsim'_i if $\succsim_i M \succsim'_i$.

An outcome x is more “rewarding” than x' to individual i if $x R_i x'$.

A social choice function f maps preference profiles to outcomes.

The function f is **meritocratic** if more meritorious preferences are rewarded more.

CHAPTER 2. MERITOCRACY - DISCUSSION

A meritocratic social choice function represents *meritocracy as an end*.

When individuals are in a game their preferences dictate their actions.

One could then define meritocracy based on behaviour in a game.

The latter is *meritocracy as a means*.

I show that meritocracy as an end and as a means are equivalent.

I discuss **Pareto Meritocracy** and **Proportional Meritocracy**.

3. IDENTIFYING BELIEF-DEPENDENT PREFERENCES

An individual in a decision problem:

- has a prior belief p over uncertain states in \mathcal{S} ;
- observes a likelihood function ℓ_S putting weight only on states in $S \subseteq \mathcal{S}$;
- the bayesian update of p given ℓ_S is p_{ℓ_S} ;
- chooses an act f mapping states to outcomes.

A preference with **belief-dependent tastes** is

$$\mathcal{U}(f; \ell_S) = \underbrace{\sum_s p_{\ell_S}(s) u(f_s; \ell_S)}_{\text{Belief-dependent utility}} + \alpha_{\ell_S} \underbrace{\sum_s p_{\ell_S^*}(s) u(f_s; \ell_S^*)}_{\text{Utility with distorted likelihood}} .$$

CHAPTER 3. BELIEF-DEPENDENT TASTES - DISCUSSION

Belief-dependent tastes constitute a significant departure from Savage (1972).

I show how to identify belief-dependent tastes from choices of **contingent menus**.

A METHODOLOGICAL TAKEAWAY

Novel concepts require **conceptual** understanding.

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