

# Constructing the Formula of Universal Law

Matthew Braham and Martin van Hees

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# Categorical Imperative 1: The Formula of Universal Law

## Definition (The Formula of Universal Law)

Act only in accordance with that maxim through which you can at the same time will that it become a universal law.

# CI1: The Formula of Universal Law

## Definition (Step 1: Contradiction in Conception Test)

Can your maxim be a universal law?

- Perfect duties
- The examples of the *Grundlegung*:
  - False promises
  - Suicide

# CI1: The Formula of Universal Law

## Definition (Step 2: Contradiction in Will Test)

Given that your maxim can be a universal law, can you rationally *will* it to be so?

- Imperfect duties
- The examples of the *Grundlegung*:
  - Procrastination
  - Never helping others in need

# Motivation

- Problems:
  - FUL does not generate definitive conclusions as to which actions have moral value and can be said to carry the force of obligation.
  - FUL does not yield the duties it is supposed to yield

# Motivation

Conclusions about Kant's formula:

- 'radically defective' and 'pretty worthless' (Wood).
- 'a sad history of attempts ... no one has been able to make it work' (Herman).
- 'it may give either unacceptable guidance or none at all' (O'Neill).
- When used on its own, it cannot provide 'even a loose and partial action guide' (Hill).

# Motivation

## Workarounds:

- 1 The problem is one of interpretation – FUL has a *logical*, *teleological*, and *practical* interpretation (Korsgaard).
- 2 The informational structure of FUL needs to be specified (Rawls).
- 3 FUL needs to be augmented with anthropological assumptions about ‘essential ends’ (Korsgaard, Herman).
- 4 FUL needs to be reformulated (Parfit).

# Motivation

- *A methodological observation:* None of these studies of FUL actually take up Kant's project on its own terms: to systematically examine its *formal* structure
- *Our project:* Propose a formal decision-theoretic framework for FUL and examine one part of it that is particularly contentious: the so-called 'Contradiction in Will Test' (CW-test)

# The Framework

- 1 Game frames: worlds, games, actions, outcomes
  - $W, N$  (cardinality  $n$ ), games  $G^w = (S_1 \dots, S_n, R^n, \pi)$ .
  - $\mathcal{D}^w \subseteq S_1 \times \dots \times S_n$
- 2 Maxims
  - A mapping  $m_i$  that assigns to each world  $w$  an outcome-intention  $A_i^w$  and an action-intention  $T_i^w$
- 3 Similarity of maxims
  - A reflexive and symmetric relation  $\sim$  over the set of all individual maxims. Uniqueness.
  - A strategy of  $i$  *instantiates* a maxim of  $i$  in  $w$  if the strategy is an element of  $i$ 's action-intention in that world. The combination of all strategies that instantiate a similar maxim  $m$  at  $w$  is  $\mathcal{M}^w = T_1^w \times \dots \times T_n^w$ , where for all  $i$ ,  $T_i^w$  is  $i$ 's action-intention in  $w$  according to the maxim similar to  $m$ .

# Rationality Requirements

## Rationality requirements

- Intrapersonal consistency 1: Consistency between a person's maxims
- Intrapersonal consistency 2: Consistency of a person's maxim (proper fit between intended action and intended outcomes)
- Interpersonal consistency: CC and CW

# The CC-Test

A maxim is conceptually inconsistent – fails the CC-test – if there is some world  $w$  such that not all of the individuals can act on the basis of that maxim in that world.

## Definition (Contradiction in Conception (CC-test))

A maxim  $m$  of agent  $i$  contains a contradiction in conception (fails the CC-test) if and only if:  $\mathcal{D}^w \cap \mathcal{M}^w = \emptyset$  for some world  $w$ .

# The CW-Test

A maxim violates CW if universal adoption entails that the agent will not realize her intended outcome in some world ('practical contradiction').

## Definition (Contradiction in the Will (CW-test))

A conceptually consistent maxim  $m$  of agent  $i$  contains a contradiction in the will (fails the CW-test) if and only if: for some  $w$ , and for all  $s_N \in \mathcal{D}^w \cap \mathcal{M}^w$ :  $\pi(s_N) \notin A_i^w$ .

# Results 1

## Definition (Complete Enforceability)

A maxim is completely enforceable if, and only if, for each state  $w$  the adoption of the action  $A^w$  ensures the realization of  $T^w$ .

## Proposition

*A maxim that is completely enforceable and conceptually consistent (i.e., passes the CC-test) never results in a contradiction in the will (i.e., always passes the CW-test). That is, any such maxim satisfies FUL.*

Examples:

- Sidgwick's strong man
- The stoic retreat

## Result 2

### Definition (Agent-Neutral Maxims)

A maxim  $m_i$  of  $i$  is an *agent-neutral* maxim if, and only if, for all  $j$  and any  $m_j$  such that  $m_i \sim m_j$ :  $A_i^w = A_j^w$  for all  $w$ .

### Definition (Pure Consequentialism)

A maxim  $m$  of  $i$  is a *pure consequentialist* maxim if, and only if, for all  $w$ ,  $T_i^w = \{s \in S_i^w \mid \pi(s) \cap A_i^w \neq \emptyset\}$ .

### Proposition

*Any maxim that is agent-neutral and purely consequentialist satisfies FUL.*

Example: Utilitarianism

## Results 3

Assume some solution concept  $\Gamma$  is given.

### Definition (Sophisticated Consequentialism)

Given  $\Gamma$ , a maxim  $m$  of  $i$  is a sophisticated consequentialist maxim if, and only if, for any  $w$ ,

- (i) There is an equilibrium:  $T_i^w$  is set of all of  $i$ 's eq actions at  $w$  and  $A_i^w$  is set of all eq outcomes at  $w$ ;
- (ii) There is no equilibrium:  $T_i^w$  is set of all of  $i$ 's actions at  $w$  and  $A_i^w$  is set of all outcomes at  $w$

### Proposition

*Any sophisticated consequentialist maxim satisfies FUL.*

Example: Ethical egoism

## Possible answers?

- Rendition of the CW-test is too weak
- The presumed counterexamples fail the CC-test
- Bite the bullet: accept that the CW-test doesn't do what it is supposed to do
- Chew on the bullet: “Comprehensive Kantianism”