

Hempel on Idealization: Max Weber's Ideal Types

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June 10, 2016 · Belgrade
Language, Epistemology, and Metaphysics



analytické metódy v spoločensko-humanitných disciplínach
analytical methods in social sciences and humanities

APVV-0149-12 · WWW.AMESH.SK

AMESH (2013 – 2017)

Analytical Methods in Social Sciences and Humanities (SSH)

Hypothesis

“[...] Analytical methods thus fulfill similar methodological functions in SSH and in natural sciences, and also share the same formal and application properties [...]”

- **analytical methods:** non-empirical methods including defining, modelling, inference, classification...
- **SSH:** represented by economics, sociology, jurisprudence, philosophy, historical disciplines

Weber's ideal types

- Max Weber proposed **ideal types (ITs)** as an instrument **specific** to the SSH.
- Weber's views are thus a suitable object for investigation in our project.
 - What are ITs?
 - What does the “ideal-typical method” consist in?
 - Is it really specific to SSH?



Ideal types

- According to Weber, SSH use a specific kind of “**concepts**” which lack empirical correlates.
 - E.g., no particular case of real market exchange fully corresponds to the **economic exchange** dealt with in “abstract” economic theory.
- These concepts are **ITs**. They are constructed by means of a “**theoretical accentuation** of certain elements of reality”.
 - ITs are “utopias” which are **remote from reality** and which reality only more or less **approximates**.

Two roles for ITs

- **descriptive:** an IT “*is not a depiction of reality, but it seeks to provide [...] unambiguous means of expression*”
- **explanatory:** “In order to grasp the real causal interconnections, *we construct unreal ones*”

Ideal types

ITs and explanation

In terms of their explanatory role, ITs should (*somehow*):

- facilitate the discovery of (real) causes of social action for **explanation**
- help in providing a meaningful **interpretation** of social action – i.e., in making action “understandable” by showing that given certain conditions, such and such course of action on the part of a particular agent “was to be expected”

Interpretations of Weber's views

There are two basic positions:

- 1 **acceptance**: use of ITs is indeed commonplace in SSH *and* specific to them.
- 2 **rational reconstruction**: the “ideal-typical method” is some standard method (also used in natural science) in disguise.

Rational reconstructions and their problems

- Nowak (2000), Nowakowa (2007), and many others
 - ITs as **comparative concepts** used to classify phenomena
 - **no account of the explanatory function postulated by Weber**
- Hempel (1965)
 - ITs as explanatory **idealized (proto-)theories**
 - three problems: **terminology, idealization, behaviorism**

Outline

- ① Hempel's reconstruction: its merits and deficits
- ② A new reconstruction
 - IT as a product of abstraction and idealization
 - Heuristic use of IT in contrastive explanation

Hempel's reconstruction

“Typological Methods in the Natural and the Social Sciences”

- appears in *Aspects...* (1965); originally published in 1952
- an examination of the uses of **typological concepts** in (social) science:
 - **classificatory** types: simple classes
 - **extreme** types: based on quantitative scales
- separate sections dedicated to **ideal types** as a special case

Hempel's reconstruction

Re other interpretations

“ideal types [...] are **not** used for the kind of generalization characteristic of ordering types; rather, they are invoked as a specific device for the **explanation** of social and historical phenomena.”

Basic motivation

“[the] accounts which Weber and others have given of the nature of ideal types, are certainly suggestive, but they **lack clarity and rigor** and thus call for further logical analysis.”

General conclusion

“An ideal type [...] is meant to serve as an interpretative or explanatory schema [...] But then, in intent at least, ideal types represent not concepts properly speaking, but rather **theories** [...] they must have a character similar to that of the theory of ideal gases, for example.”

Hempel's reconstruction

- In other words: if ITs play an explanatory role in social science, they must be akin to **idealized theories** in natural science.
- Therefore, the use of ITs is **not** specific to SSH. Phew!
- However...

Three problems

- 1 **terminology**: ITs as theories are incompatible with Weber's use of the term
- 2 **idealization**: Hempel's view is far too restrictive
- 3 **behaviorism**: Hempel's position can hardly be squared with (most) contemporary social science

Terminological trouble

- Weber's examples: "capitalism", "Christianity", "the protestant ethic", "democractic citizen polis", "instrumentally-rational action", "affectual action", "institution", "bureaucracy", "city economy", "craft", "church", "sect", "purposive association"
- "[E]conomic theory reveals itself as a sum of 'ideal-typical' concepts"
- This suggests that ITs are **not** theories, but rather a sort of **objects**
 - that we refer to by "ideal-typical concepts"
 - that theories are **about**.

Inferior idealization?

- According to Hempel, proper idealizations satisfy the following conditions:
 - ① “The laws governing the behavior of the ideal physical systems are **deducible** from more comprehensive theoretical principles, which are well confirmed by empirical evidence.”
 - ② “The extreme conditions characterizing the ideal case can at least be **approximated** empirically, and whenever this is the case in a concrete instance, the ideal laws in question are empirically confirmed.”
- Such idealizations are **theoretical**, as opposed to merely **intuitive**.

Inferior idealization?

- Hempel: Unfortunately most idealizations in social science are of the **intuitive** kind:
 - ① general and independently confirmed theories, from which idealized theories/laws could be derived as mere special cases, are scant
 - ② agreement as to whether particular real situations constitute approximations of those postulated by idealized theories/laws is often lacking
- Hence, for Hempel, **idealized theories** (including ITs) of social science are – for the time being – **inferior** to those of natural science.
- In the long term, this should be rectified by
 - ① discovering those independently confirmed general theories (of human behavior)
 - ② a more precise specification of the range of empirical application of idealized theories

Inferior idealization?

“ideal types can serve their purpose only if they are introduced as interpreted theoretical systems, i.e., by

- (a) **specifying a list of characteristics** with which the theory is to deal,
- (b) **formulating a set of hypotheses** in terms of those characteristics,
- (c) giving those characteristics an **empirical interpretation**, which assigns to the theory a specific domain of application, and
- (d) as a long-range objective, **incorporating the theoretical system, as a special case**, into a more comprehensive theory.”

Inferior idealization?

- Hempel's **theoretical idealizations** are **Galilean**, i.e.: counterfactual assumptions made for **pragmatic** reasons which can be **approximated** in natural or experimental situations and in principle can be **eliminated**.
- However, more recent discussions suggest an important role for **non-Galilean** idealizations – including in natural science (Weisberg 2007, Hindriks 2008, Wayne 2011, Rohwer – Rice 2013).
- Non-Galilean idealizations are **non-eliminable** and/or are not undertaken with a view to such elimination. Their chief role is **heuristic**.

Weber on ITs as heuristic tools

“[An IT] is not a ‘hypothesis’, but it seeks to **guide the formulation of hypotheses**.” “[It is] a **tool** permitting the valid imputation, in a systematic manner, of a historical event to its real causes”

Behaviorist bias?

“If... relationships [postulated by ITs as theories] are to afford a sociologically significant explanation they must be, according to this view, not only ‘causally adequate’ but also meaningful, i.e., they must refer to aspects of human behavior which are intelligibly actuated by **valuation** or other **motivating factors** [such as **reasons**].”

Behaviorist bias?

“Weber’s limitation of the explanatory principles of sociology to ‘meaningful’ rules of intelligible behavior [...] is **untenable**: many, if not all, occurrences of interest to the social scientist require for their explanation reference to factors which are ‘devoid of subjective meaning,’ [...]”

Moreover,

“the more recent development of psychological and social theory indicates that it is possible to formulate explanatory principles for purposive action **in purely behavioristic**, nonintrospective terms.”

Behaviorist bias?

- However, the behaviorist program seems to have failed. The present consensus suggests that merely “behavioristic terms” will not do.

Hempel in *Philosophy of Natural Science* (1966)

“[...] in order to characterize the behavioral patterns, propensities, or capacities to which psychological terms refer, **we need not only a suitable behavioristic vocabulary**, but psychological terms as well. [...] the possibility of such a reduction **has not been established** [...]”

Weber in “Objectivity” (1904)

“Any conscious reflection on the most fundamental elements of meaningful human action is from the beginning **tied to the categories ‘ends’ and ‘means’.**”

A new reconstruction

Goals

- ① Account for the terminological discrepancy
 - ITs serve to explain, but they should not be viewed as theories
- ② Use insights from the discussion on non-Galilean idealization
 - ITs should be seen as a heuristic tool
- ③ Accept intentionality
 - explanations based on ITs should allow for means, ends, reasons...

A new reconstruction

The “ideal-typical method” consists of two procedures:

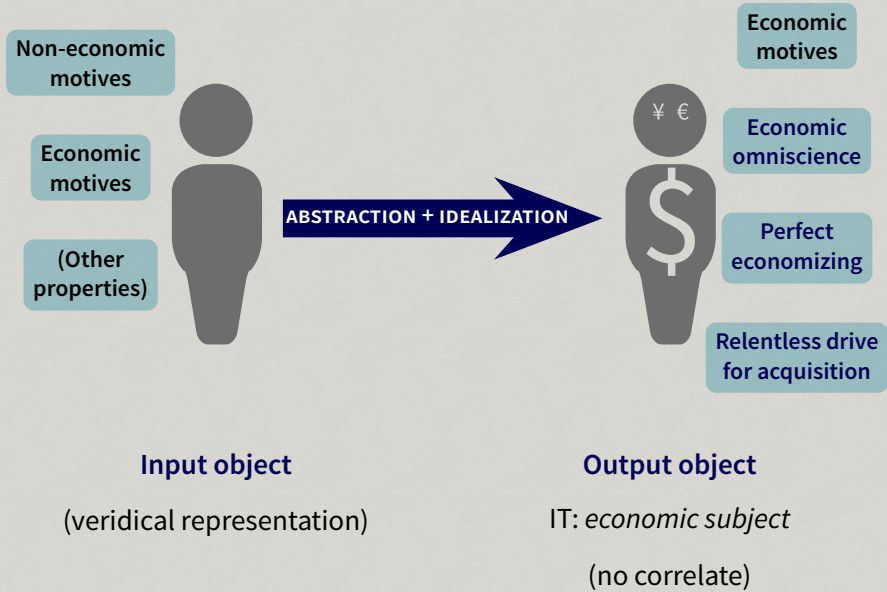
- 1 the **construction of an IT**
- 2 the **heuristic use of an IT**

The construction of ITs

An example

Economics constructs the *economic subject*:

“[...] (a) ***treats as absent, – ignores*** all such motives influencing the empirical Man which are not specifically *economic*, i.e. do not originate in the satisfaction of material needs; (b) ***pretends the existence of certain qualities that the empirical Man does not have*** or has only in an imperfect way [...] α) perfect *insight* into the current *situation* – ***economic omniscience***, β) exceptionless choice of the *means most suitable* to the given end – ***perfect ‘economizing’***, γ) full use of one’s own capacities in the services of acquiring goods – ***‘relentless drive for acquisition’***” (Weber, 1990, 30)



The construction of ITs

- Weber's "theoretical accentuation" involves:
 - ➊ **abstraction** (the "ignoring" of certain properties),
 - ➋ **idealization** (the "pretending of the existence" of certain properties).
- The construction of an IT can be represented in an existing model of both methods (Halas 2015, cf. Jones 2005).

The construction of ITs

The selection of properties depends on wider cognitive goals which motivate the construction of a given IT.

Weber's three criteria

- ① “value-relevance”
 - the properties are deemed **relevant** with regard to a wider context of value-judgments
- ② “causal adequacy”
 - the properties occur together in **nomological statements** which Weber views as probabilistic
- ③ “adequacy on the level of meaning”
 - the properties are **intentional** (refer to motives of action or dispositions to act) and are mutually **compatible** on the basis of preexisting **rules of experience** – rules governing our everyday understanding of meaningful action

The application of ITs

An example

“[...] a panic on the stock exchange can be most conveniently analysed by attempting to determine first what the course of action **would have been** if it had not been influenced by irrational affects; it is then possible to introduce the irrational components as accounting for the observed **deviations** from this hypothetical course. [...] Only in this way is it possible to assess the **causal** significance of **irrational factors** as **accounting for the deviations** from this type. The construction of a purely rational course of action [...] serves the sociologist as a type (**ideal type**) [...]. By comparison with this it is possible to understand the ways in which actual action is influenced by irrational factors of all sorts [...] in that they account for the deviation from the line of conduct which **would be expected** [if] the action were purely rational.”

Situation S



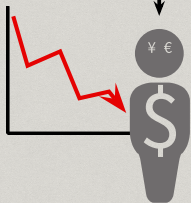
(real agent a)

Resulting action



K ("panic")

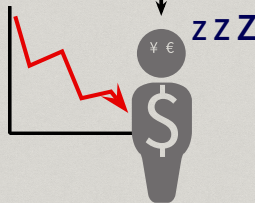
divergent
properties
of agents



(ideal-typical agent i)

are explained by

divergent
actions
of agents



K' (business as usual)

The application of ITs

The explanation proposed by Weber is **contrastive**:

“The event e occurred, rather than e' , because the conditions c obtained, rather than c' ” (cf. Lipton 1990)

To formulate one, we need:

- 1 knowledge of the real course of events:

“In a situation S , the real agent a took the action K .”

- 2 knowledge of the contrastive course of events:

“In a situation S , the *economic subject* i would have taken the action K' .”

The application of ITs

Studying IT: establishing a contrast

- We know what the real agent did in a given situation:

$$S(a) \rightarrow K(a)$$

- To establish a contrast, the *economic subject* must be “substituted into” the given situation:

$$S(i) \rightarrow ?$$

- How the contrast is established depends on preexisting knowledge. The method involved may be one of:
 - **thought experiment**,
 - deductive inference,
 - (other kinds of inference)

- A contrast is established:

$$S(i) \rightarrow K'(i)$$

The application of ITs

Contrastive explanation from an IT

- The explanation of the stock-exchange panic presupposes the identification of **properties** in which the *economic subject* **differs** from the real agent, and which could have **caused** the differences in the actions of the real agent and the *economic subject*.

Example

- The absence of a property A'_1 (present in the *economic subject*) and the presence of another property A_1 (absent in the *economic subject*) is confirmed in the real agent.
- One may infer that A_1 was the cause of the “divergence” between the real action and the ideal-typical one:
“In a situation S , the action K took place, and not K' , because the agent a had the property A_1 , and not A'_1 .”

Summing up...

- The **construction of ITs** consists in applying the standard methods of **abstraction** a **idealization**.
 - The only specific feature of ITs is that they relate to human action (motives for and dispositions towards action) and are constructed with regard to the cognitive goals of SSH.
- The heuristic **application of ITs** is a more complex procedure which involves the methods of:
 - **thought experiment/deductive inference**
 - **contrastive explanation**.
- In terms of the operations involved, the “ideal-typical method” is **not** a method exclusive to SSH.

Thank you!



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