# **Original Paper**

# Definition and Truth in Social Science

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## Abstract

Language is important in social science theories. We employ a number of terms taken from ordinary speech, thus importing ambiguity and opaqueness. The remedy is to introduce explications, i.e., making stipulations about meaning. The risk involved is the analytic statement, i.e., treating sentences as true by definition or meaning.

## Keywords

Analytic/synthetic propositions, stipulative definition, "democracy", "polyarchy", Kant, Quine, Dahl, camouflaged tautology, Myrdal, value loaded concept

#### 1. Introduction

In philosophy today we notice a widespread scepticism about analytical propositions or sentences. There is a strong echo of Quine's rejection of analytical relations debated much in the philosophy of science. However, in the philosophy of the social sciences the distinction between the analytical and the synthetic is useful for criticism.

## 2. Value Loaded Words

As Gunnar Myrdal (1968) emphasized in his methodology for inquiry into political economy, key words i social theory is many times loaded with value. Take for instance "democracy" or "law" and "justice" or "institution". Be defining value loaded terms by means of a set of properties, on so to speak transfers the value to these properties.

Example: "justice". Kelsen (1957), professor of *Staatswissenschaft*, argued that "justice" had too many different meanings for there to be a unique concept. This value loaded word was simply arbitrary. Libertarians like Hayek (1978) and Nozick (1974) would equate "justice" with liberty whereas egalitarians like Barry (1995) and Dworkin (2002) would say that equality is the central meaning.

Carnap (1947) suggested that ambiguity could reduced by analysing various meanings and then recommending one set of properties by means of a stipulation. However, stipulative definitions may merely result in analytic truths or propositions that are true by virtue of the meanings of words.

### 3. The Analytic-Synthetic Distinction

In relation to a major social science theory, one needs to look more closely at the key propositions in order to test for falsifiability and empirical confirmation. Before one would test a theory by measurements and indicators, we ask which propositions are analytic and which are synthetic. This amounts to sound methodology as one does not want to test propositions that are analytic. Yet, several philosophers of science deny analytical propositions or sentences, arguing that truth by virtue of meaning is impossible.

Already Hume spoke of the analytic-synthetic distinction, but it was Kant who developed it into a complex classification of propositions: logical, analytical, a posteriori, a priori, transcendental, etc. The epistemological idea of the analytic-synthetic separation can be expressed in various ways.

The most cited today is Quinè's analysis (1953) of the sentence:

(S) All bachelors are unmarried men.

Using the correspondence notion of truth, one would not look for empirical evidence for (S). Instead one could claim that (S) is true analytically through:

- a) Definition
- b) Meaning
- c) Set theory
- d) Predicate logic.

Quine (1953) denied that (S) was analytically or a transcendent truth by rejecting all four interpretations. We will concentrate upon a) or i.e., that (S) is true by definition.

Language comprises definitions of words bur there is hardly a one-one relation between words and meanings. If a dictionary D states that two expressions—"bachelor" and "unmarried man" are synonymous, can one then make the substitution

(S1) All unmarried men are unmarried?

(S1) is a tautology, but is (S) then a transcendental truth? Dictionaries report facts about language usage which is often ambiguous and changing.

Quin es questioning of analytical sentences led to a wide debate about key concepts such as synonymity and meaning. It was continued in modal logic where analytic truth was equated with necessary truth.

### 4. Real Definitions

In some books on methodology (Cohen & Nagel, 1934) the idea of real definitions surface, i.e., a statement of the necessary and sufficient conditions for applying a term onto objects. This definition

would capture the essence of a phenomenon like democracy or capitalism. However, this is a too stringent demand on definitions. And the essence of objects is platonic concepts.

The epistemological situation in the social sciences is different as one relies much upon stipulative definitions. Since the theories are formulated in ordinary vocabulary—ambiguity and opaqueness—key terms need to be given an unambiguous meaning. Hence the use of stipulative definitions is important, but it also raises the problem of analyticity. Actually, analytic sentences take an important place in the social sciences. And the rejection of definitions, analytical propositions and especially stipulation seems.

The relevance of inquiries into the misuse of analytical sentences in the social sciences is clear when focusing upon, e.g., "democracy" and "polyarchy". Several real definitions have been launched.

#### 5. Democracy: Many Meanings

Philosopher A. Naess together with Stein Rokkan inquired into the many uses of "democracy" in a famous study from 1956. They found m meanings, often contrary ones. What to do to reduce ambiguity and semantic confusion? The standard approach is to rely upon stipulation and then proceed with empirical enquiries. But it generates lots of analytical propositions. Let us exemplify:

- (D1) democracy = participation
- (D2) democracy = couterveiling power
- (D3) democracy = socialism.

Given these stipulations one arrives at propositions such as:

(P1) The more of referenda the more democratic;

(P2) The more of countervailing powers the more democratic;

(P3) The less of capitalism the more of democracy.

By pairing stipulations with propositions—D1 to P1 etc.—we arrive at truths by definitions. But are they not factually false?

These propositions together with its stipulation are empty, as authorities saying nothing about the world. One may say that they are true by definition, although they have no factual content but just reformulate the corresponding definitions: P1-D1 etc.

Often theories in the social sciences have these stipulations about key terms with the following "analytical" propositions from stipulation, explicit or implicit. Revealing analytical sentences helps one determine the scope of a theory.

Given the much use of stipulations in the social sciences, one must handle the value loaded words with csre. Some terms like "democracy" is positively valued and when defined as above D1-D3 the positive value is transferred and results in a tautology:

(T1) Swiss cantons are highly democratic;

- (T2z) USA is the democracy par excellence;
- (T3) Soviet democracy was real democracy.

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These statements correspond to the different definitions D1-D3 and are non-falsifiable.

## 6. Polyarchy

Polyarchy is concept is found already with the *Ancients*. But Dahl mad it famous in his book (1971). So what is a polyarchy today?

"Polyarchy" means to Dahl a political regime where we have:

- a) Political accountability
- b) Legislation by representative bodies
- c) Free and fair elections
- d) Bill of rights
- e) Freedom of association
- f) Freedom of the press.

These conditions are necessary and sufficient for polyarchy but not for democracy, states Dahl. Here, do we have a real definition capturing the essence of polyarchy? Or is it just another meaning of "democracy"?

## 7. Democracy: Participation, Competition and Rule of Law

Time to return to Myrdal and his emphasis upon values in social theory (1958) to the extent that he questioned the practicality of objectivity (1968). To be more specific, Dahl stressed the positive value of the term "democracy" which could be transferred to a democratic country. However, Dahl adhered to the view that democracy does nor really exist anywhere.

Instead of pointing at a few democracies, Dahl looked upon democracy as an ideal nowhere realised. He thought about a definition like:

D4. Democracy = political equality, a regime "completely responsible to all its citizens".

This is not merely ideal but more seriously impractical. No system of institutions could deliver this, simply due to the zero sum conflicts in politics.

Dahl argues that polyarchy as above is the closest one can get to the ideal of democracy. Thus, his thesis that polyarchy is "democracy in development" is an analytical statement.

If the denomination of "democracy" targets the West European political systems, then the key connotation would compromise competition among party elites, participation of citizens and the rule of law.

## 8. Conclusion

Analytical propositions are said to be true by definition or meaning. Endorsing the correspondence concept of truth, analytical sentences are merely camouflaged tautology.

True by meaning is typical of analytical propositions. Yet, meaning is always subjective—see Weber's analysis of "Sinn" (meaning) in *Wissenschaftslehre* (1922). There is no objective meaning like Plato's concepts. In the social sciences terns mean how they are defined by dictionaries or individual scholars.

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