

The Analytic-Synthetic Distinction and the Social Sciences

Jan-Erik Lane

Geneva University, Geneva, Switzerland

The analytical-synthetic distinction keeps being of great interest. But why? Analytical sentences are *camouflaged tautologies*. They are not falsifiable, neither in this Kant's world or in any of Leibniz' possible worlds.

Keywords: analytic propositions, Quine, stipulative definition, "democracy", "polyarchy"

Introduction

Analytical proposition, I argue, is a tool for scientific critique. Thus, its value is negative, namely revealing that sentences may just be true by definition lacking any correspondence to reality. In the social sciences analyticity offers a powerful tool to separate out definitions from truth. There is only implication and factual statements. Analytical statements are not falsifiable (Popper, 2002).

In philosophy today we notice a widespread scepticism about analytical propositions or sentences. There is a strong echo of Quines 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.

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.

Denying Analyticity

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, etc. The epistemological idea can be expressed in various ways. The most cited 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 true or a Kant's transcendent truth by rejecting all four interpretations. We will concentrate upon a) or i.e. that (S) is true by definition.

Jan-Erik Lane, Professor emeritus, University of Geneva, Geneva, Switzerland.

Language comprises definitions of words but 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*, one can 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 (Putnam 1975). It was continued in modal logic where analytic truth was equated with necessary truth—see Kripke.

Analytical Sentences in the Social Sciences

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 with the multitude of definitions, analytical propositions, and especially stipulation seem non-appropriate.

We will argue for the relevance of inquiries into analytical sentences in the social sciences by focusing upon "democracy" and "polyarchy".

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 several meanings, often contrary ones. What should be done 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 = rule of law
- (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 assertions 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 care. Some terms like "democracy" are 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;
- (T2) USA is the democracy par excellence;

(T3) Soviet democracy was real democracy.

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

Polyarchy

The link between stipulations and analytical sentences in the social sciences appears in the discussion about R. Dahl's concept of polyarchy. This concept is found already with the *Ancients*. But Dahl (1970) made it famous in his book. So what is a polyarchy today?

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

1. Constitutionalism

2. Legislation by representative bodies

- 3. Free and fair elections
- 4. Bill of rights

5. Freedom of association

6. Freedom of the press

These conditions are necessary and sufficient for polyarchy but not for democracy, states Dahl.

First, polyarchy is not the same as democracy according to D1, D2, and D3. Second, Dahl claims that "democracy" refers to an *ideal* where the state is ruled by everyone equally. Thus, polyarchy is just democracy in development—Dahl's *key thesis*.

Here we have a conclusion that is an analytical statement summary of a few definitions or stipulations. In reality, the *Dahl thesis* is empty since democracy as real political equality can never be realised.

Real Definition of Democracy

Dahl invented the term "polyarchy" because the word "democracy" was too value loaded. Schumpeter had no reservations about listing the necessary and sufficient properties of existing democratic regimes. We quote from Capitalism, Socialism and Democracy (1942):

"Democracy is a political method, Thatcher is to say, a certain type of instutional arrangemang for arriving at political legislative and administrative decision and henne incapable of being an end in itself."

This does not amount to a stipulative definition but is a characterization of living democracies when Schumpeter was around. Such an approach is sometimes said to aim at a real definition. And it does not result in any analyticity. "Democracy as the competition among political elites" is just the famous Schumpeter conclusion.

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" in *Wissenschaftslehre*. There is no objective meaning like Plato's concepts. In the social sciences, terns mean how they are defined by dictionaries or individual scholars.

References

Dahl, R. (1956). A preface to democratic theory. New Haven: Yale University Press.

Dahl, R. (1970). Polyarchy. New Haven: Yale University Press.

Dahl, R. (1998). On Democracy. New Haven: Yale university Press.

Kant, I. (2006). Critique of pure reason. London: Penguin.

Kripke, S. (1980). Naming and necessity. Princeton: Princeton University Press.

Leibniz, G. W. (2022). Theodice. Guttenber: Gutenberg Library.

Naess, A. (1956). Democracy, ideology and objectivity. Oslo: Oslo University Press.

Popper, K. (2002). Conjectures and refutations. London: Routledge.

Quine, W. (1953). Two dogmas of empiricism. In Quine from a logical point of view. Cambridge: Harvard University Press.

Putnam, H. (1975). The Analytic and the Synthetic. Philosophical Papers, Vol. 2. Cambridge: Harvard University Press.