

# Carnap's notion of analyticity and the two wings of analytic philosophy

Christian Damböck

Institute Vienna Circle

[christian.damboeck@univie.ac.at](mailto:christian.damboeck@univie.ac.at)

# Overview

1. Two meanings of „analytic“
2. Toward a mathematical theory of analyticity
3. The philosophical agenda of analyticity
4. The two wings of analytic philosophy

# 1. Two meanings of „analytic“

# Kant's notion of analyticity

- For Kant, a statement of the form “A is B” is analytically true, iff B is attributing a property to A that is already somewhat contained in the notion A
- Thus, for example,
  - (1) A bachelor is an unmarried man.

is an analytic truth, for Kant
- The language (the concepts) involved here are somewhat naturally *given*

# N-analytic philosophy

- The mainstream of post-WWII analytic philosophy (hereafter: **n-analytic philosophy**) shared Kant's attitude to take the language for granted
- Unlike Kant, however, n-analytic philosophers took the language to be *an empirical entity*
- Whether (1) is an analytic truth or not depends on the empirical status of our language

# Kripke: necessities a posteriori

- This empirical status of our language is particularly well described in Kripke's modal-logical approach. Take the example  
    (2) The morning star is the evening star.
- If (2) is true, then it is a necessary truth (true in every possible world)
- However, to investigate the truth of (2) is certainly an empirical task
- Thus, (2) becomes an a posteriori necessity (or, in our terminology, an analytic a posteriori truth)

# Synthetic falsities being analytic truths

- There is not only some syntheticity involved, in analytic statement – even synthetic statements often have an analytic core:
  - (3) All ravens are black.
- This is a (probably false) synthetic statement which carries a certain amount of analyticity because ravens are considered to be black *per definition*:
  - (4) Typical ravens are black.
- Here (3) is a synthetic falsity (remember white ravens) and (4) an analytic truth

# Quine's first dogma is a formative feature of n-analytic philosophy

- The degree of analyticity and syntheticity of a statement depends on the empirical status of the (natural) language in question
- Quine: the first dogma
- Davidson: “the task of a theory of meaning as I conceive it is not to change, to improve, or reform a language, but to describe and understand it.”
- Also: indeterminacy of translation (Quine, Davidson, Putnam, Wittgenstein)



# A-analytic philosophy considers artificial languages

- Carnap, however, was simply not interested in „natural language“ (n-analyticity)
- His enterprise was the investigation and construction of **artificial languages** (a-analyticity)
- Analyticity is a matter of convention and „meaning postulates“:

Our explication [...] will refer to semantical language-systems, not to natural languages. It shares this character with most of the explications of philosophically important concepts given in modern logic, e.g., Tarski's explication of truth. It seems to me that the problems of explicating concepts of this kind for natural languages are of an entirely different nature. ([Carnap, 1952, p. 66](#))

# *Construction* or *re-construction*?

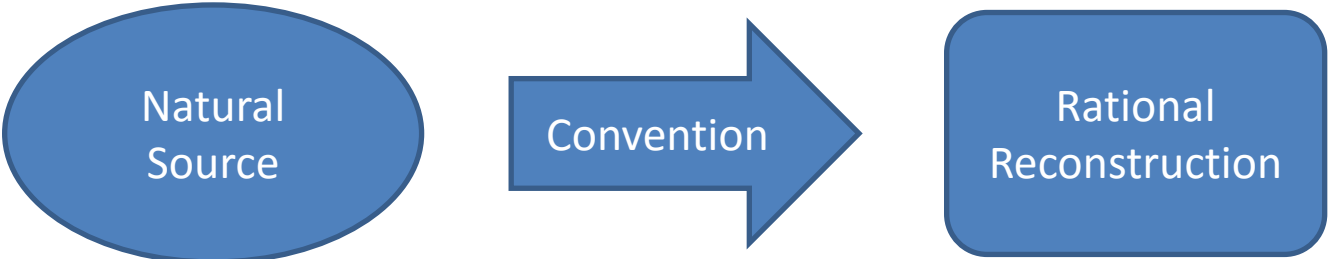
- For Carnap, it simply depends on our freely chosen meaning-postulates whether (1), (2) or (3) is an analytic truth or not.
- On the other hand, even for Carnap, there always must be a context on which our construction of meaning postulates is based
- Rational construction, for Carnap, always has to be rational *re-construction*

Quine (desperately): “[W]hy all this *creative* reconstruction, all this *make-believe*?”

# n-analytic philosophy



# a-analytic philosophy



≠

*Who is right?*

## 2. Toward a mathematical theory of analyticity

# A pure world, devoid of e-content

- For Carnap, analyticity is *not* a feature of a certain naturally given source (analyticity is no natural kind)
- In order to obtain analyticity we firstly have to construe a pure mathematical realm, being devoid of all kinds of empirical content
- Philosophical statement, then, should entirely belong to this pure analytic realm
- Two strategies: structuralism, logicism

# Mathematical structuralism

## (The algebraic strategy)

- *Aufbau*: Consider „arrow diagrams“ („Pfeilfiguren“) AD
- An analytic description of a certain matter of fact, by means of the structuralist option, is a description that can be boiled down to ADs (= PSDD)
- Foundationalism issue: A predicate  $P$  either is represented by no AD at all or by infinitely many ADs
- PSDD have to be „founded“ (Carnap, Lewis)
- We assume that this strategy works

# Logicism (The logical strategy)

- *Logical Syntax* etc.: let L be a formal language, i.e., a set of formulas being closed under logical consequence
- A sentence of L that follows from any premise is called *analytic*
- In order to increase or decrease the amount of analytic sentences we may add or remove „meaning postulates“
- Quine: no meaning postulates beyond the laws of „pure logic“
- Foundationalism issue: incompleteness (ignored)



# 3. The philosophical agenda of analyticity

# Is analyticity an end in itself?

- Quine: Yes! Because the aim of philosophy is to somewhat mirror reality in an analytic way (philosophy does not add anything)
- Carnap: No! Because the aim of philosophy is *to counteract reality* in an analytic way (philosophy adds a normative story)
- Quine purifies these normative stories away
- **Carnap's normative stories:** hermeneutic, aesthetical, ethical, political

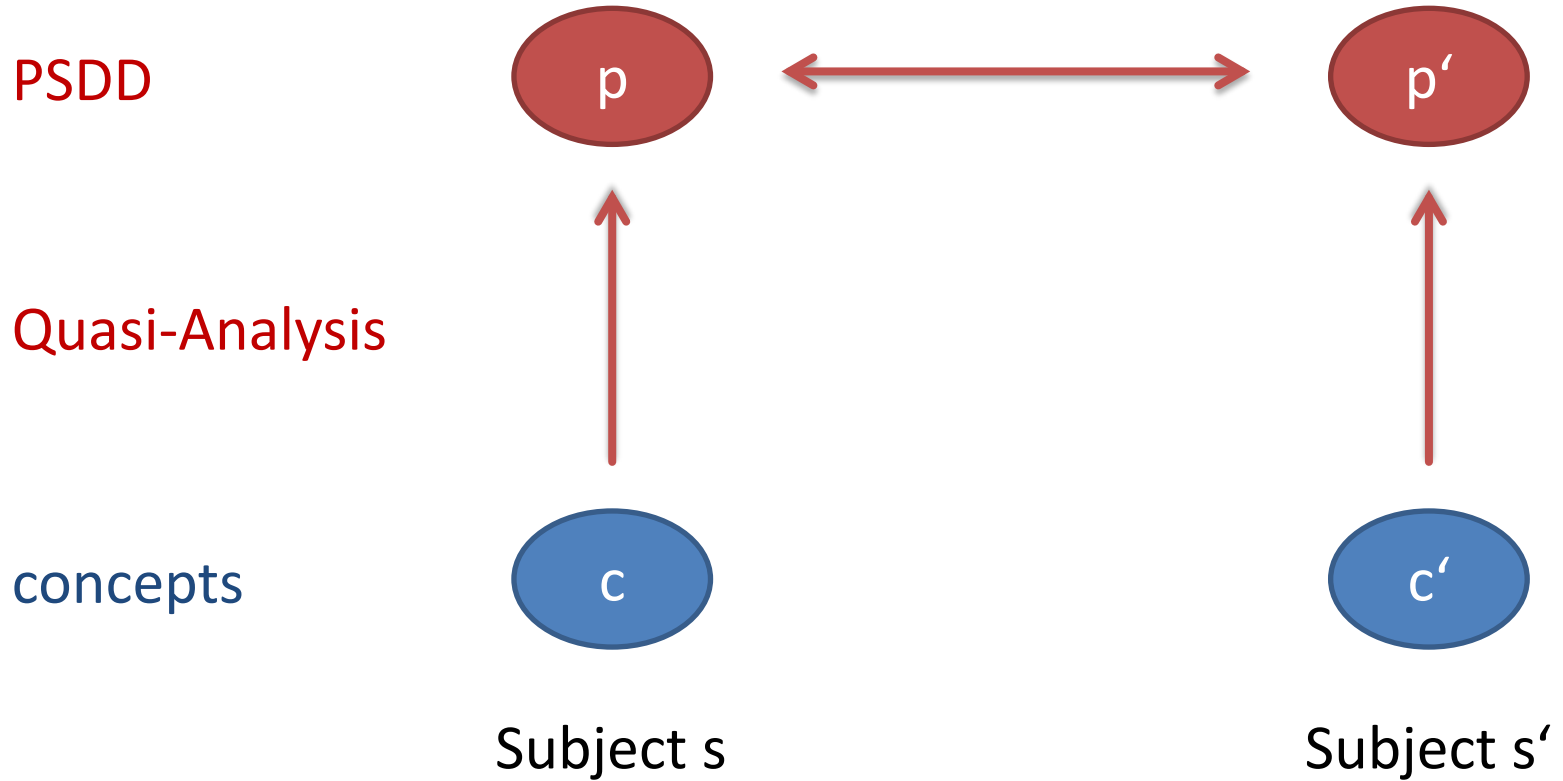
# Forthcoming book and papers

- *Deutscher Empirismus. Studien zur Philosophie im deutschen Sprachraum 1830-1930.*  
Habilitationsschrift, Universität Wien 2014, ch. 7
- “Beyond Pure Structure: Hermeneutic Objectivity in Carnap’s *Aufbau*.” (submitted)
- “Rationality, Values, and Intuition: The Capstone of Carnap's Philosophy.” (submitted)

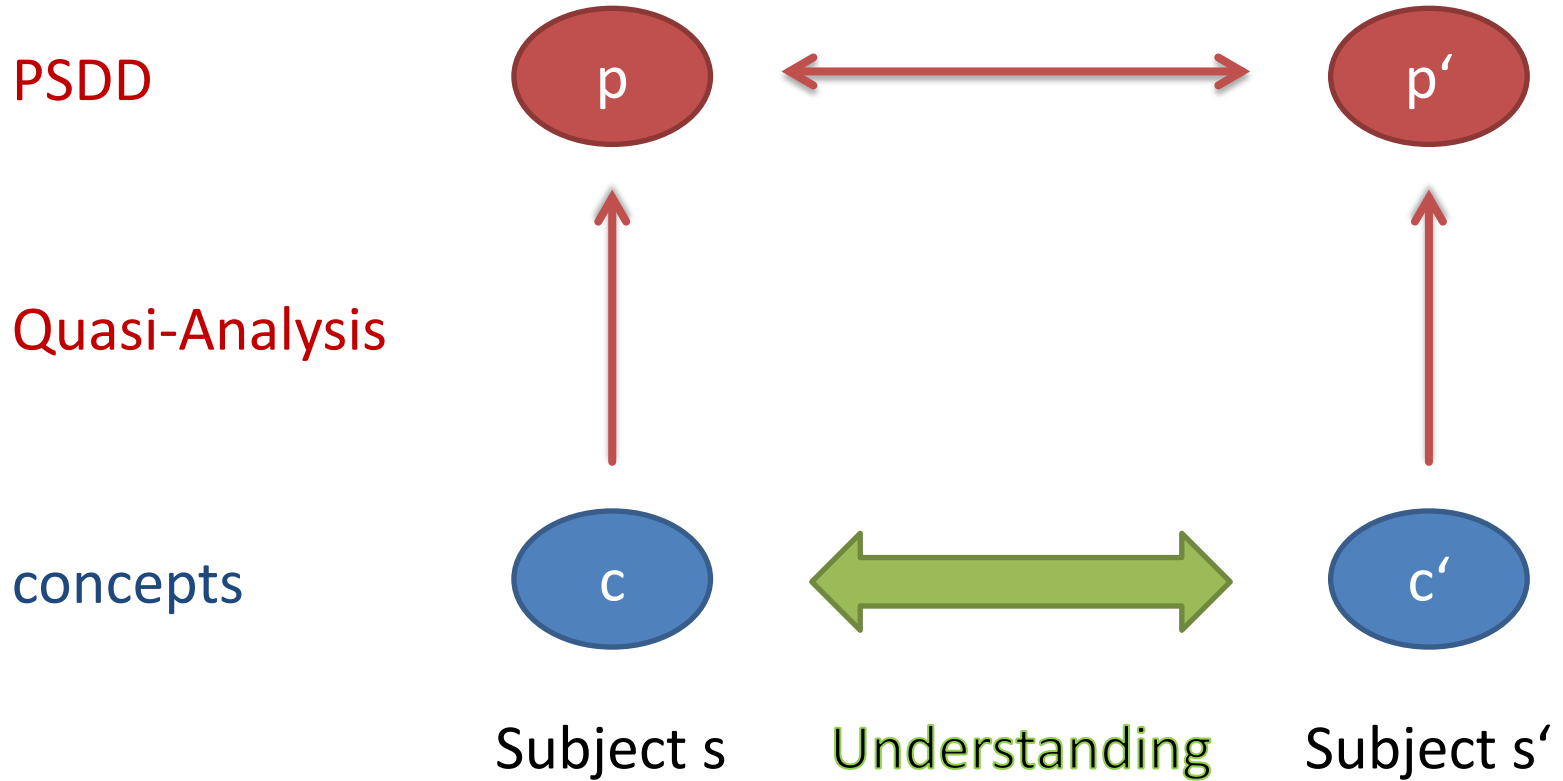
# 3.1 Hermeneutic aspects

- A crucial merit of analyticity is that analytic entities are *universally communicable*
- Analytic entities do not carry any subjective (intentional) burden
- Example: PSDD (purely structural definite descriptions) in the *Aufbau*
- Each concept becomes replaced with a PSDD

Intersubjective  
Coordination  
(§ 146)



Intersubjective  
Coordination  
(§ 146)



## 3.2 Aesthetical aspects

[It] is no accident that mathematics and later logic had a stronger attraction for me than linguistics. A first rather obvious explanation is the fact that the nature of my thinking is not historical, but rather systematic and structural. The internal harmony and symmetry of mathematics and later of symbolic logic had also a stronger emotional and aesthetic appeal for me than the natural languages with their innumerable disturbing irregularities. (AB, N1-N2)

- A question of taste?
- No! Carnap is referring to „New Objectivity“

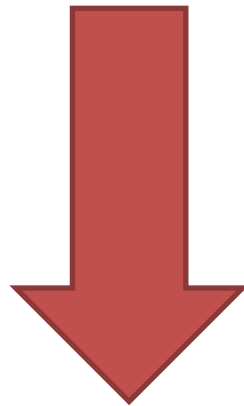
# The agenda of „New Objectivity“ (Franz Roh) and the *Aufbau*

- For Roh, a piece of art has to be based on “nature’s own expression” (Eigenausdruck der Natur)
- This does not mean to somewhat copy nature: “not a depiction [Abmalen] but rather a *rigorous erection, construction* of objects” is the aim of New Objectivity

One does not proceed, therefore, from the objects to the mind, but from the latter to the objects, whereby the greatest stress is put in keeping the mental structure [geistiges Gefüge] clean and clear. This second world of objects exactly resembles the first, the existent but remains to be a purified, referring one [gereinigte, bezogene]. (Nach-Expressionismus, p. 37)



The  
World



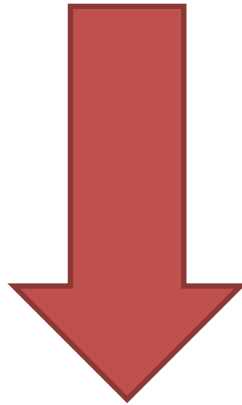
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Collage  
Photograph

The new objective  
standpoint of the  
artist construes

The  
World

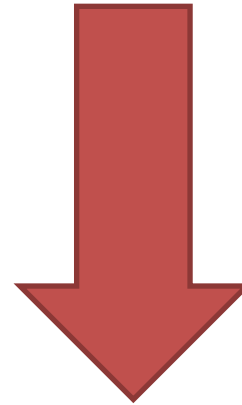
The  
World

The new objective  
standpoint of the  
artist construes



Painting  
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The new objective  
standpoint of the  
philosopher construes



PSDD

## 3.3 Ethical aspects

- Carnap's moral philosophy is recently re-investigated (cf. Carnap 2015, ed. Carus, etc.)
- In the last three decades of his life, Carnap developed a philosophical program that was based on three tasks: **inductive logic, philosophy of values, decision theory**
- The formal framework was the framework of decision theory as developed by de Finetti, Savage, and others
- However, Carnap proposed to use the latter framework in a strictly *normative* way:

Preference  
value

Action  $m$

Outcome of  
action  $m$  in  
possible world  $n$

Possible  
world  $n$

Empirical  
knowledge

$$\mathfrak{P}(A_m) = \sum_n V(O_{m,n}) c(W_n, e)$$

You may choose the  
very action  $A_m$  that  
obtains the highest  
preference value  $\mathfrak{P}$

Value function:  
reflects the values  
of a perfectly rational  
human being

Confirmation function:  
the objective degree  
of likeliness of  $W_n$   
against the back-  
ground of  $e$

# The robot as a role model

- Even perfectly rational human beings may adopt entirely incompatible value systems
- This is to say, Carnap's program will not allow us to avoid value disagreement once and for all
- But still, to become more rational is to become a better human being:

Thinking about the design of a robot will help us finding rules of rationality. Once found, these rules can be applied not only in the construction of a robot but also in advising human beings in their effort to make their decisions as rational as their limited abilities permit. ([Carnap, 1962, p. 309](#))

# 3.4 Political aspects

„Ich war immer davon überzeugt, daß die großen Probleme der Wirtschafts- und Weltorganisation im gegenwärtigen industriellen Zeitalter nicht etwa durch ‚das freie Spiel der Kräfte‘ gelöst werden können, sondern rationaler Planung bedürfen.“ (S. 130)

- **Rational planning** as highlighted by Carnap here is a social-democratic category
- My claim is that the whole task of **language planning** as highlighted by Carnap ultimately converges with the social-democratic category of **rational planning** (viz. the latter involves the former)

rational planning → language planning

(but not vice versa)

# The analytical worldview (Die analytische Weltanschauung)

The practical handling of philosophical problems and the discovery of their solutions does not have to be purely intellectual, but will always contain emotional elements and intuitive methods. The *justification*, however, has to take place before the forum of the understanding [vor dem Forum des Verstandes]; here we must not refer to our intuition or emotional needs. We too, have “emotional needs” [“Bedürfnisse des Gemüts”] in philosophy, but they are filled by clarity of concepts, precision of methods, responsible theses, achievement through cooperation in which each individual plays his part. ([Carnap, 1967, p. xvii](#))

# 4. The two wings of analytic philosophy



# Carnap on language planning

Only slowly did I recognize how large the divergence is between the views of the two wings of analytic philosophy in the question of natural versus constructed languages: the view which I shared with my friends in the Vienna Circle and later with many philosophers in the United States, and the view of those philosophers who are chiefly influenced by G. E. Moore and Wittgenstein. ([Schilpp, 1963, p. 68](#))

# Who is the enemy?

- Carnap distances himself here from the (basically British) tradition of so-called „ordinary language philosophy“ (cf. Strawson’s contribution to the Schilpp volume!)
- However, the rejection of language planning is by no means a unique selling point of OLP
- Thus, Carnap’s definitions of „first“ and „second“ wing have to be modified:
- First Wing: a-analytic philosophy
- Second Wing: n-analytic philosophy

# The first wing is the left wing

- There is another, more famous, distinction between two different “wings” of philosophy, namely, Neurath’s distinction between the “left wing” and the “right wing” of the Vienna Circle
- Left wing: Neurath, Carnap, Frank, Hahn
- Right wing: Wittgenstein, Schlick, Waismann, Feigl

- The first wing of analytic philosophy (= a-analytic philosophy) obviously *is* the left wing of the Vienna Circle (one may add Reichenbach here and a small number of other representatives of this movement in the US)
- The second wing of analytic philosophy (= n-analytic philosophy) converges with the right wing of the Vienna Circle
- However, the vast majority of analytic philosophy after 1945 certainly belongs to the “second wing” which almost entirely ruled out the “first wing”, during the six decades past (cf. Reisch)
- But:

*Who is right?*

- n-analytic philosophy: wants to get the analytic core of the world outside
- a-analytic philosophy: wants to get a lingua franca that allows us to talk analytical about the world outside
  
- a-analytic philosophy might either think that there is no such thing as the analytic core of the world outside or even take the project of n-analytic philosophy to be perfectly acceptable
- n-analytic philosophy might either take the project of a-analytic philosophy to be perfectly acceptable or even useless