

Report

DFG reference number and title:

KA 1545/2-1 – Funktionalbegriffe und Frames in der Substanzmetaphysik

Project head:

Prof. Dr. Christoph Kann

Staff:

Name	Position	Participation-hours/week	Period
Spoden,Celia	SHK	8,0	1.01.06-30.09.06
Sölch, Dennis	SHK	5,0	1.03.07-30.09.07
Sölch, Dennis	SHK	8,0	1.10.07-30.04.08
Christian, Alexander	SHK	10,0	1.09.07-31.07.08
Cohnitz,Daniel	wiss. Ang.	BAT IIa /part time	1.08.05-31.01.06
Kosubek,Tanja	wiss. Ang.	BAT IIa /part time	1.02.06-31.07.08

1 State of knowledge and goals

The project is concerned with the interrelations between different conceptions of traditional metaphysics of substance on the one hand and different uses of central notions (“substance”, “form”, “matter”) used in these conceptions on the other hand. Accordingly, the project intends to provide new historical and systematical insights into the conceptual formation, the basic concept types, and the linguistic resources of metaphysical theories. We are considering the relevant terms themselves and their precursors within the Aristotelian tradition. These have been analyzed with regards to the recent distinction between sortal and functional terms, their being embedded into frames and their formation into fixed terminologies as well as their role in theory and paradigm shifts. Furthermore, critical approaches to the concept of substance, which reduce substances to mere bundles of attributes, will be measured with the recent approach of frame-theory in cognitive science.

The main topic is “substance” as a pivotal metaphysical concept and term. This concept can be used alternatively as a sortal term (“x is a substance”) or a functional term (“the substance of x”) and can then be substituted by the notion of substrate (“the substrate of x”) or the notion of essence (“the essence of x”). “Substance” as a sortal term refers to something existing independently, “substance” as a functional term refers to something that underlies something else, specifically accidents or properties of things, or something that essentially constitutes a thing. The project aims to investigate to what extent the classical notion of substance, the metaphysical or ontological conceptions based on it, and the critics of metaphysi-

cal conceptions are obliged to use “substance” as a sortal or a functional term and how the development of metaphysics of substance, including principal types of criticism, can be analyzed with regard to the distinction between sortal and functional terms.

The project will continue to sort out the ambiguities inherent to the concept of “substance”, which has often been criticized for its polysemy, and will systematize these ambiguities by their specific causes. The relationship between different concepts of substance and between different historical substance ontologies can be determined by taking recourse to Aristotle’s multifunctional notion of “*ousia*”. To this end “*ousia*”, which displays ambiguous meanings in Aristotle’s *Categories* and *Metaphysics*, has to be analyzed as the precursor of later versions of the concept of substance and examined with respect to its influence on the history of philosophy. In the course of medieval and modern philosophical traditions the Aristotelian term “*ousia*” was superseded by various Latin translations – “*essentia*”, “*substantia*” and “*quidditas*” – and subsequently by modern terms. The development of these notions will be reconstructed historically and systematically, especially since they are partially competitive or incongruous and arise from different word formations.

Moreover, the questions as to how the notion of substance can be used as a technical term is directly linked to our objective, which proposes to investigate the relationship between language, semantics and philosophical ontology. The question of correlation between the substance-attribute-scheme in metaphysics and the subject-predicate-structure of language has been extensively analyzed in the course of 20th century and it is also the focus of current debates on the pros and cons of metaphysics and its central concept of substance. This discussion can be sharpened employing the linguistic distinction between sortal and functional concepts.

2 Results and their significance

Although the idea of a ‘traditional’ or Aristotelian concept of “substance” has often been discussed, an initial review of the most relevant historical versions of “substance” revealed considerable extensional and intensional discrepancies. Since standard usage does not exist, “the classical notion of substance” appears *prima facie* inappropriate. In order to attempt a more detailed analysis it would be necessary first to establish the predominant meanings of the concept of substance by classifying and systematizing them. Initial results within the scope of B3 have elicited three major modes of use of “substance”: 1. “Substance” as an expression for a primary ontological essence, i.e. the ultimate elements of the world that display no further determination, whereas this concept has been criticized due to its universality and its largely meaningless content. 2. “Substance” as an expression for a basic ontological unit, to which certain attributes can be attached (e.g. countable unity, independence, and persistence). Substances in this sense are the unified, unchangeable, persistent bearers of the variable and changing appearance of an underlying reality. 3. “Substance” as an expression for an object of everyday life in the meaning of Aristotle’s “*prote ousia*”, which also serves as the basis for our common-sense ontology. This third concept of substance shapes the Neo-Aristotelian conception of physical objects as the essential entities of the world. Another result advanced in B3 is that the notion of substance is often used in an inconsistent manner. A historical shift marks the change from the functional to the sortal use of “substance” that has been the subject

of considerable criticism in recent research. Yet another result of B3 has been an inquiry into the close affinities between Barsalou's concept of frames and modern bundle and trope theories.

3 Relation of work schedule to outcome

The work schedule included the following steps:

- (a) Basic survey of classical texts (especially Aristotle) for references to the notions of substance, form und matter and investigation of these with the perspective of distinguishing between sortal and functional concepts and addressing philological questions concerning the corresponding notions in various languages (Greek, Latin, modern languages).
- (b) Inquiry into medieval texts, especially commentaries on Aristotle, with regard to their analysis of the notion of substance and related terms.
- (c) Inquiry into central conceptions of the metaphysics of substance in modern philosophy with emphasis on their terminological resources.
- (d) Examination of research literature, i.e. of recent semantical, grammatical and syntactical approaches to the primary notions of the metaphysics of substance as well as conceptions of analytic ontology.
- (e) Framing a typology of the different versions of the notion of substance in order to sum up the different uses and eventual discrepancies between these usages and lexical instances of the terms mentioned.

(ad a) The original Greek and Latin texts (especially those of Aristotle, Seneca, Quintilian, Cicero, Boethius and Tertullian) had to be surveyed for occurrences of relevant terms and their specific contexts. As a result, we have had to distinguish between common, theological and philosophical as well as sortal and functional uses, to consider mutual dependencies and to extract their main philosophical uses.

(ad b) We examined the different uses and the distinction of "substance" in Aquinas' commentaries on Aristotle's *Physics*. Our research on Aristotelian commentaries and the Latin translations of his writings prompted questions concerning the equivalent synchronic handling of Aristotle in Old High German. Although the dominant language in philosophy at this time was Latin, the problem of the translation of philosophical technical terms like "ousia", "hypokeimenon" or "eidos" into Old High German was broached by Notker. As a consequence, the research agenda had to be broadened to include an investigation of Notker's translation of the *Aristoteles Latinus*.

(ad c) The relevant conceptions of the metaphysics of substance in modernity had to be analyzed in regard to the perspectives listed above. We assessed Descartes' use of the notion of substance and discovered that he uses "substance" as a sortal term in most – but not in all – instances. We evaluated Descartes' use of "substance" with applications in Leibniz and Spinoza and compared and contrasted these with critical passages in Locke and Hume.

(ad d) A significant part of the research literature concerning the history of translations of "ousia", "hypostasis", "substantia" and "essentia" has been compiled (cf. Kann 2008c). We examined recent semantic, grammatical and syntactical approaches to the main notions of the metaphysics of substance, including conceptions of analytical ontology.

(ad e) A list of explanation tasks for “ousia” as the *explanans* has been created and presented to the research group. This list, resulting from an examination of primary texts derived from traditional sources on substance metaphysics (Aristotle, Aquinas, Descartes, Leibniz, Spinoza) represents a historical and systematic typology outlining the different uses of the concept of substance and its antecedent terms. This list is currently being extended and will provide results about the development of and reciprocal relationships between different terms and concepts, especially with reference to historical, linguistic and terminological origins for the polysemy of the concept of substance.

4 Cooperation

4.1 within the research unit

Ch. Kann und T. Kosubek participated continuously in the weekly FFF-seminar.

Ch. Kann participated in the FFF-workshop "Verwissenschaftlichung medizinischer Beobachtung – Verbalisierung von Wissenschaft" (02 March 2007, Department of the History of Medicine, University of Düsseldorf) organized by B5.

Ch. Kann and T. Kosubek participated in the FFF-Conference “Concept Types and Frames in Language, Cognition, and Science”, 20-22 August 2007, University of Düsseldorf

4.2 with external partners

An invitation was extended to Dr. Dirk Fonfara (University of Cologne) as a specialist for the Aristotelian tradition of the metaphysics of substance. Fonfara spoke at the philosophical colloquium of the Department of Philosophy on 30 May 2007 on “Metaphysik als Erste Wissenschaft bei Aristoteles”.

An invitation was extended to Dr. Benjamin Schnieder (University of Hamburg) as a specialist on recent analytic ontology. Schnieder spoke at the philosophical colloquium of the Department of Philosophy on 28 November 2007 on “Existentielle Abhängigkeiten. Verteidigung einer klassischen Substanzdefinition”.

Invitations were extended to Prof. Johanna Seibt and Prof. Peter Simons to the FFF-Conference “Concept Types and Frames in Language, Cognition and Science”, 20 to 22 August 2007, University of Düsseldorf.

5 Publications and activities

An outstanding opponent to the Aristotelian paradigm of substance was A.N. Whitehead. His criticism of the concept of substance is embedded in the context of valuable reflections about the essence of technical terms and theories of their meaning. These reflections have been analyzed and related, among others, to Ryle’s and Strawson’s theses about generation and status of technical terms. This research will appear in print (Kann 2008a; cf. also the information about conceptualization and the distinction of concept types in Kann 2008b).

The uses of the concept of substance were systematically traced in Descartes' main works, which reveal an obvious dominance of "substance" as a sortal concept. In the same context an investigation of linguistic expressions (different types of pronouns) was undertaken, on the basis of which the Cartesian "I" investigates itself in its status as a thinking substance. The investigation will be published in 2009.

An extensive body of literature reflecting the history of translation and interpretation of the terms „ousia“, „hypostasis“, „substantia“, „essentia“ et al. has been researched and collected. Furthermore, some Greek texts (Aristotle, Proklos, Greek bible texts), a number of Latin texts (Seneca, Quintilian, Tertullian, Tacitus, Cicero, Boethius, et al.) and the central text in Old High German (Notker) have been investigated. An article containing a schematic survey of the interrelations of the concepts, the concept types and the translations is in preparation and will be published in 2008.

The concept of substance as 'object' and the development of frame theory – with regard to equivalents in philosophy and relevant debate on the substance concept in analytic ontology – have been outlined and are parts of a larger inquiry by T. Kosubek (for a survey cf. Kosubek 2008).

Daniel Cohnitz worked on Nelson Goodman's position concerning ontological relativism and the question as to whether ontological conceptions should be established in a realistic manner (i.e. based upon qualities) or in a nominalistic manner (i.e. based upon individuals or substances). Continuing the conceptions of Alfred N. Whitehead and his pupil Henry S. Leonard, Goodman demonstrates how a system can be constructed on the basis of qualities, while individuals or substances are treated as ontologically independent entities. Cohnitz/Rossberg 2006 have reconstructed the development of this conception within the recent history of philosophy and analyzed to what extent it influenced discussions in contemporary formal ontology.

Christoph Kann is working on a larger inquiry into the terminology of philosophy, which will integrate significant results of B3. The manuscript (250 pages are projected) includes chapters on "Terminologie und Normalsprache", "Terminologie und Begriffsfluktuation", "Etymologie und Wahrheitsanspruch", "Typisierungen und Dichotomien" and "Fachjargon und Popularisierung".

Tanja Kosubek participated in the workshop „Concepts – no language, no thought?“, 17 and 18 March 2007 at the University of Zürich.

Tanja Kosubek presented the project in a paper entitled "Die Substanz der Welt" at the "Tag der Forschung", held by the Heinrich-Heine-University on 05 November 2007.

Christoph Kann presented a paper on "Kreativität und Sprache. Whiteheads terminologische Reflexionen" at the 6th International Whitehead Conference: The Importance of Process-System and Adventure, held between 03 and 06 July 2006 at the University of Salzburg.

Publications related to the project

Cohnitz, D. & Rossberg, M. (2006). Nelson Goodman. Chesham.

Kann, Ch. (2008a). "Kreativität und Sprache. Whiteheads terminologische Reflexionen". In P. Seele, Philosophie des Neuen. Darmstadt (Wissenschaftliche Buchgesellschaft) (in press).

Kann, Ch. (2008b). Begriff, historisch-systematisch. In Neues Handbuch philosophischer Grundbegriffe. Freiburg/München (in press).

Kann, Ch. (2008c). Rezension zu: Dominik Lusser, *Individua Substantia*. Interpretation und Umdeutung des Aristotelischen ousia-Begriffs bei Thomas von Aquin und Johannes Duns Scotus, Frankfurt a.M. 2006. In *Das Mittelalter* 13/1 (in press).

Kosubek, T. (2008). Erkenntnistheorien in Philosophie und Kognitionspsychologie. Zum Wissen über Objekte bei Locke, Hume und Barsalou. In *Philosophie der Psychologie* (in press).

Current dissertation projects related to the project

Myung Hee Guderian: Typologien der Metaphysikkritik. (Including chapters of criticism on basic notions of metaphysics, especially the criticism by Hume and Carnap; to be finished in March 2008)

Annette Hahn: Die Verwissenschaftlichung traditioneller Termini bei Nikolaus Cusanus. (Including terminological shifts and innovations in Cusanus)

Tania Kosubek: Das aristotelische Substanzparadigma und Barsalou's Framekonzept. Eine kritische Verhältnisbestimmung. (Including historical reconstructions of the notion of substance and a comparison with the paradigm of concept types and frames).

Seminars and lectures related to the project

SoSe 2006:

Descartes: *Meditationes* (HS, Ch. Kann)

WiSe 2006/07:

Philosophische Terminologie (VL, Ch. Kann)

Metaphysikkritik (HS, Ch. Kann und M.H. Theuer)

SoSe 2007:

Ontologie und Metaphysik (VL)

Positionen der Substanzmetaphysik (HS, Ch. Kann und T. Kosubek); the seminar included a Master team-project on different notions of substance