<u>States of Affairs – Towards Their Methodologically Apt Conception As Cumulative Extensional Abstracta</u>
<u>(Summary)</u>

Within moderately holistic theoretical contexts, the *semantic* assignment of truth values to the type sentences of the object theory runs parallel to the *ontological* assignment of states of affairs to these sentences. In accordance with the model-theoretic definition of truth, states of affairs can be conceived as relatively abstract sentence extensions that are made up from constructively given individuals and relations of different orders and types and which take the form of irreducible *n*-tuples. – It is advocated that extensional states of affairs of this kind are methodologically, semantically, and ontologically preferable to their standard rivals in theoretical philosophy such as different kinds of intensions, propositions, and truth-making states of affairs. – In the following passages, some of the background reasoning and of the special arguments that will support this general thesis in the planned talk are outlined.

A minimally realist theory of constructive givenness is proposed, according to which simple objects cannot be intersubjectively given to us until some regimented, interpreted theory language with a characteristic apparatus of individuation has been elaborated and applied by the concerned academic community. The particular objects in the domain are indirectly structured by the specific proper usage and empirical application of the terms of the respective theory and can thus be intersubjectively characterized, named, and identified. –
If only constructively given objects are admitted, all presupposed identity relations within the domain of a theory language are definable in terms of weaker equivalence relations so that the language gets extensionalized. In a theory language which has been extended into a modal system, constructively given individuals are, despite the requirement of strict ontological indiscernibility, still empirically identifiable.

The semantic expression 'true in L' is conceived as a positively laden term, a value term: It serves for the marking of those sentences which establish, according to descriptive cues, some reference to subsisting (e.g. empirical) structures in the respective model of the language L. Accordingly, singular *states of affairs* are proposed as appropriate extensions of atomic sentences and are introduced as special ordered pairs which cannot be reduced to classes and satisfy the principle of compositionality of reference. – The suggested valuation of sentences by means of extensional states of affairs is especially adequate for the interpretation of weakly extensionalizable theory languages, which contain sentence operators that are not completely truth-functional such as some concept of metaphysical necessity. Within the framework of an extension-centered relational semantics for modal predicate logics which has been type-theoretically extended, the interpretation of composed sentences by means of general, encapsulated states of affairs is made possible by a recursive valuation procedure. In modal contexts of use, sets of ordered pairs of extensions (such as states of affairs) and relatively possible models, i.e. total extensions, need to be assigned to sentences as well as to predicates and other not purely referential, descriptive expressions. – Since the present approach is concerned with the ontological interpretation of mainly descriptive theories which have an intended empirical model, the employed relational semantics also needs to be modified in accordance with certain actualistic restrictions. Above all the validity of the Barcan formula and its converse is regarded as a methodological requirement for all modally extended theory languages. As a result, the basic (first order) total domain of these languages coincides with their basic actual domain so that possibilia are excluded from their ontology. – It is demonstrated that the method of sentence interpretation stays compatible with the Tarskian definition of truth in an interpreted language L. – The intended, actual model of the theory language is but one of many explored sectors of the independent external world, which needs to be postulated for pragmatic reasons such as the maintenance of the incentive to ply natural science. The advocated internalistic, theory-relative semantics and ontology fits in well with the weakly realistic, pluralistic epistemology. The states of affairs, though, do not vary in their main formal features from domain to domain in science; their basic formal structure is just differently realized in distinct theoretical contexts. – The description and observation of states of affairs is semantically theory-laden (it involves predicates the usage of which is determined by a collection of rules and theoretic assumptions of the explanatory theory in question) as well as measurementally theory-laden (it involves concepts and quantities coined by their use in observation theories).

In some versions of relational semantics, intensions are assigned to the sentences of L that are functions from possible worlds to truth values. The standard objection to such propositions is that they are not individuated finely enough, since the semantic contents of the constituent expressions of the sentence are not recoverable from the proposition expressed. This is particularly pressing in view of the slingshot argument, which is deployed to substantiate the claim that the values of sentences have to be truth values and cannot be propositions, facts or states of affairs. If purely referential terms are duly taken into consideration, however, the soundness of the slingshot argument can be justifiably contested so that it can be rejected.

The main rival theory of the account of propositions as sets of worlds is the neo-russellian theory of structured propositions. In contrast to propositions as sets, the semantic contents of the expressions in a sentence are constituents of the structured proposition. - This asset of having a more fine-grained account is shared by the present approach to extensional states of affairs, which, analogously, contain the extensions of the constituent expressions of the sentence. However, in contrast to the neo-russellian account, the present approach clarifies what holds the state of affairs together. What is more, neo-russellian propositions prove to be mixed entities with an absurd ontological structure. Their identity is undefinable and they contain prelinguistically structured

contents of predicates, which – qua denoting properties – apply in turn to prelinguistically individuated and ostensively given particulars.

It is shown that the advocated model- and type-theoretic account of extensional states of affairs entails the principle of supervenience of truth on being. However, it does not entail the truthmaker principle. At least, if the concept of making true is to involve the concept of necessitation, the truthmaker principle is not satisfied by extensional states of affairs. As regards the nature of the truthmakers, accounts strongly diverge, and the focus of the talk will be that variety of truthmaker theories which take states of affairs containing individuals as well as universals as the basic truthmakers. For instance the central problem of accounting for the way in which the constituents of states of affairs are bound together in them is rightly emphasized by some truthmaking theorists, though they are in disagreement on whether the relevant mode of composition needs to be mereological or not. According to the present approach, it is important that the problem of the (non-mereological) complexity for states of affairs is clearly differentiated from the one for mereological sums. The present approach obviously diverges from the prevailing strong ontological realism in truthmaking theory, which often is barely justified. What is more, the understanding of truth-bearers in the present approach is more lucid than in the prevailing truthmaking approaches. If e.g. the term 'proposition' is used to stand not for sentences but for what they express, truthmaking theories are liable to be committed to truth-bearers that fall prey to the arguments against structured propositions, irrespective of whether they are to be identified with Fregean thoughts or with neo-russellian objects, which are an amalgam of senses with individuals. – The present view of states of affairs is thus not a truthmaking theory. It is, however, a truth-conditional theory of sentence reference and states of affairs for whole theory languages.