

ON THE RELEVANCE OF POSSIBLE-WORLDS SEMANTICS FOR LITERARY  
THEORY

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1. *Outline*

If we start from a conventional conception of literature in a broad sense, then we can regard as "poetry" or "literary works" all those oral or written utterances which are so declared by the authors or so admitted by the recipients. A variety of outward forms is characteristic of these historic occurrences. Spells and magic tales, as well as the works of "concrete poetry" can be included here.

The following considerations, however, will refer only to a more restricted part of the varied and multi-functional poetry thus conceived. More precisely, to the literary works in connection with which the following questions are put: do they have any part in cognition, and if so, what may we come to know through them? It is enough to think of the culture of our continent, and we can see that the range of such works extends from Homer's epics to Beckett's dramas and further still. So it seems reasonable to ask that one of the central concerns of literary theory should be to answer these questions. In our opinion, every literary theory must be able to tell what the cognitive function is and what kind of knowledge may be attained through the analysis of literary works, or certain classes of these, forming the subject of literary research determined by the theory in question.

This set of questions has been present in European thinking for a long time. It already appears in mythological

forms of this thought in debated as to whether Hermes or Apollon should be the patron of poetry. In the relation between philosophy and poetry, Plato and Aristotle are the first to raise the questions with which we are concerned. But our purpose here is not to present a historical survey. We refer rather only to the essential methodological lessons drawn from such a survey: scientifically established results can only be achieved, if questions which seem particularly poetic are analysed in an overall theoretical framework. It will hardly be sufficient to define the relation between "poetry and reality" ("Dichtung und Wahrheit") by means of poetics only or of the conceptual system of aesthetics in some strict sense. Since the relationship in question can be seen as one special instance of the possible relationship between sign and significatum, it is expedient that we should take into consideration all those results attained in this field by linguistics, semiotics, logic and epistemology. Naturally, if the literary theoretician wants to exploit the results of the above mentioned disciplines, he is forced, then, to express his demands - in our case for a semantic theory satisfactory to literary theory - clearly and definitely. The profit, however, is not necessarily unilateral and unidirectional, since demands concerning the productivity of a semantic theory can at the same time mean a desirable challenge for scholars of the sciences mentioned above. A consistent and complete semantic theory, able to describe and explain from its own point of view, the mechanism of natural and artificial languages in all possible context of use, would no doubt come in useful to every scholar. In our opinion, this task cannot be solved by a considerable extension of the subject matter of any of the foregoing disciplines. Rather there is a need for interdisciplinary co-operation on the basis of common cognitive interest concerning semiotic systems. All the mentioned sciences examine the problem of how semiotic systems can deliver truths and how

they can orient the action of their users.

## 2. *The Frege paradigm*

From this last point of view, logic can be considered the fundamental discipline. Since logic, according to the founder of its modern, symbolical version, Gottlog Frege, is a science dealing with the most general laws of truth ("Wahrsein"). But if we study Frege's semantic theory from the viewpoint of literary theory, we must conclude that his thesis is not satisfactory for establishing the semantics of literary texts. While sketching our objections, we wish to illustrate with a concrete example: what demands does a literary theory raise for semantic theories? In the spirit of the foregoing, we shall show both the specific criteria on the basis of which literary theory may object to a semantic theory, and the advantages following the co-operation between the various branches of science. Undoubtedly, literary theory may become richer through the study and acquisition of versions of the logical semantics. In addition, a critical study with an eye to the demands of literary theory can lead to questions stimulating the improvement of the given theory of logical semantics.

The insufficiency of Frege's semantics demonstrable from the viewpoint of literary theory - in contrast with many other logical semantics - does not derive from the fact that the scholar of logic ignored these aspects of the question. Frege sees rather clearly that language has different usages. He differentiates the diverse usages by the language's ability, in the case of a given usage, to convey truth. According to this, there exists *serious* and *non-serious* speech, and the question of truth can only be raised in connection with the former. Only the statements of serious speech express *thoughts*, and thus only the thoughts can be true or false. In the case of non-serious speech we state

something only apparently, so such sentences express only *apparent thoughts*. But these are not included "in the concern of logic, as the physicist willing to examine storm, ignores the storm on stage." (Frege 1973 (1897): 44) As our example shows, in Frege's system the *serious* speech includes the utterances of science, while the *non-serious speech* includes the utterances of science, while the *non-serious speech* includes those of poetry.

As is well-known, in Frege's semantic theory both true and false are objects, and the objects as references ("Bedeutungen") are denoted by proper names. Expressions not taking this role, are merely quasi-proper names ("Scheineigennamen"). The quasi-proper names and the class of proper names still have a common feature: images are linked to the expressions belonging to them. Yet the images are always of a subjective nature because in every case they are someone's images, and because two people can never possess the same image. According to Frege, the duty of poetry is to produce precisely especially strong images. Beauty is the characteristic of images and the quasi-proper names precisely evoke particularly coloured images. Eventually, Frege's ideas on the difference of literature and science can be concluded as follows: science strives for the true, whereas poetry strives for the beautiful and only the beautiful. The true is objective and, as a consequence of this, is the common property of many people. The beautiful is subjective, thus it can be the content of only one mind. So it is impossible to imagine for Frege a discipline, the object of which is the literary work: "Every enjoyer of art has his own work of art, so between judgements referring to beauty there can be contradiction by no means" (Frege 1973 (1897): 47). If we were still to insist on the scientific study of poetry, we could then do it only in the domain of psychology.

The possible confusion of *serious* and *non-serious* speech reveals that the expressions - at least in some cases

- do not bear the sign of being proper names or just quasi-proper names. That speech is serious or non-serious must be decided separately. If we wish to work out a suitable procedure of decision within the scope of Frege's conceptual system, then we come up against the following insurmountable difficulty: Frege deduces the concepts of semantic theory from the definition of the *object*. The *reference* ("Bedeutung") is the object, *sense* ("Sinn") is the way the object is given to us. An expression denoting object is considered a *proper name*. For Frege, however, - as is well-known - not only those things are objects which can be recognized in the physical world with our organs of sense, but also the numbers - like number "7" -, geometrical forms - like the "triangle" and, moreover, truth-values themselves.

So the following question is inevitable: Why does "7" denote an object in mathematics, and why does "William Tell" not denote an object in Schiller's William Tell? Furthermore, why is the expression " $3 + 4 = 7$ " true, and why is the expression "Tell shot an apple from his son's head" not true? Nor can the latter expression be false for Frege, since it is from a literary work.

The logicians adhering to the conception of Frege will not find it strange, of course, that objects cannot be rendered into statements of literary works. So they can answer our questions thus: That there existed a William Tell, and whether he shot an apple from his son's head or not, must be determined by the same methods as the questions: did Alexander the Great ever exist and did he have a horse called Bucephalus? By no means do we proceed in the same way when deciding that the expression " $3 + 4 = 7$ " is true.

However, this answer cannot be satisfying for the school scholars of literary theory. Since, if we want to clarify the William Tell problem using the methods of the *historian*, then we are *historians* and not *literary theorists*.

Our reflection can also support an argument for literature being unable to constitute the subject of a special literary science differing from history. And if our researches result in the fact that William Tell does not really exist, or, in reference to Frege, we postulate it in advance, then evidently we do not have the opportunity of admitting or negating some characteristics of William Tell. If the science of literature with its own cognitive interest and method, cannot be studied, then we also must have a negative answer to the question as to whether literary texts as literature have any role in cognition. The inevitably negative answer, however, contradicts our intuition. There exists a literary science institutionally studied, and its history shows that its cognitive interest and methodology at least partly differs from those of the history. Already Aristotle tried to work out such a literary theory in which "poetry tells the universal while history the individual cases" (Cf. Poetics, Ch. 9).

### 3. *The problem of the reference of literary characters*<sup>2</sup>

We would like to demonstrate our observations concerning the reference of literary characters with the help of an analogy. The subject matter of the analogy - adhering to a former example of ours - is constituted by natural numbers.

In our opinion the natural numbers, concepts of second order also in Frege's system, express something general. The *general* in this context means that connections or systems of connections expressed by natural numbers may be valid not only on one subject but on a whole range of subjects. On the other hand, the truth of statements coming from operations with natural numbers depends on whether we keep the rules on the basis of which the operations are performable, and which secure that the reference of expressions does not change

without marking that change. If a "sentence" resulting from an operation with natural numbers, e.g.: " $3 + 4 = 7$ " is true - and it is true according to Frege because the expressions on both sides of an equation denote the same object -, then the connection expressed by the "sentence" is generally true. That is, it can be valid in different subject matters. We want to stress two elements of the foregoing considerations. On the one hand, the "existence" of natural numbers depends on whether they are the members of a well-formed system. On the other hand, the generality of natural numbers and the expressions resulting from operations with them depends on whether or not their validity range is confined to one subject matter. We can also note that the number theories constitute those systems of rules which determine the inner structures of various numerical systems and the operations that can be performed with their members. The task of the single branches of applied mathematics, then, is to elaborate the possible ways of reference of the different numerical systems to one another or to spheres beyond numerical systems. In other words, to determine the exploration of the less abstract images or models of the more abstract connections indicated above. So we must take into account that the systems of rules are of a formal nature and are always given by the theory, that is, they are human constructions.

In one respect, there is a similar situation with literary characters. Their existence also depends on the existence of a system. This system which, for instance, appears as the structure of events in a work describing events, is given neither in advance nor explicitly but must be discovered by the scholar of "applied literary theory", the analyst of the work in question. He must reveal that the composition of events follows that of a more abstract sequence of events. This more abstract sequence of events is one realization of possible formations according to a

system of rules, that is, a well-formed sequence of events. Let us call this abstract, well-formed sequence of events *action* from here on, or in other words *action-structure*. Consequently, we attribute existence conditionally to the characters of literary works describing a sequence of events only until we can explore or establish the systems of rules, according to which the action-model defining the composition of the sequence of events in the given literary work can be constructed. The more abstract equivalents of *characters* in the sequence of events in a work will be called *figures* in the action-structure. The attributes (=properties and relations) of figures are consequently prescribed by the system of rules. So the characters of the classes of literary works in question can be considered existent inasmuch as they correspond to a figure, and they are general because it is not necessary that one figure should have only one corresponding character. All those structured sets of states of affairs can be mapped onto the action containing the figures, and which can be generated with the help of the system of rules underlying the model. At the same time, if we cannot strengthen our previous hypothesis that sequences of events of a particular text-world imitate a well-formed action-model in their composition, while its characters imitate that of their attributes, then we are forced to regard the sequences of events as disordered and the characters as non-existent.

What emerges from these in relation to the cognitive role and subject of literary works? We think that if the science of literature wishes to attribute a role in cognition to the class of literary works taken here as an example, then it must elaborate or find those systems of rules which determine the action-model of the single works or a whole series of them. If the analyst's work has succeeded, he can then try to expand the composition of the sequence of events, and the range of validity pertaining to the

features and systems of relations of the characters' attributes: while he takes the role of the historian, the sociologist or the moral-philosopher, the analyst can judge where and when similar systems of rules operated in the world not necessarily available through texts, that is, in the *real world*. Besides, he can set requirements for the agents of the real world, for men of action, and he can set tasks and aims to be accomplished according to the explored system of rules.

This latter observation, however, indicates the limits of the analogy that is set up. No doubt, there is a similarity between the numbers and characters, the numerical systems and the action-structures from the analysed point of view, nevertheless we have to admit that the role of literary works played in cognition cannot be deduced solely with an analogy available in the subject of mathematics and literary science. The orderedness of text-worlds is not only of a syntactic-semantic nature, but of a pragmatic nature as well. In literary works the syntactic-semantic component always bears ethical values. Eventually that is the way literary works could and can become *action-orienting systems*. In this context can we speak of the cognitive role of literature, and can clarify more closely the question of what the knowledge, delivered by the given literary work, means.

#### 4. *Major concepts of "possible world" in logic*

The next task is to find a semantic theory suitable for our purposes: a theory with the help of which the semantic aspects of the foregoing considerations can be described systematically. In dealing with literary characters, we have already introduced some concepts the usefulness of which becomes apparent now. The expressions "real world", "possible range of reference", almost suggest that for the clarification of the above problems, it is advisable to rely on the

*possible-worlds semantics*. This semantics has been elaborated by various modal and philosophical logics in the course of time, but above all in the last two decades. Using the possible-worlds semantics in literary theory is a tempting experiment for the very reason because it would mean the revival of an old thought under new conditions, when the devices of logic and the literary theory have been refined considerably since the first explicit experiment. The old thought referred to is the theory of Bodmer and Breitinger who tried to apply the Leibnizian concept of possible worlds directly to literature<sup>3</sup>.

Studying the recent logical literature dealing with this question in mind, we find that the concept of possible world occurs in very different systems, and that these systems define its content rather loosely and diversely<sup>4</sup>. Essentially, however, two basic types of opinions can be isolated.

(1.a) According to one kind of thinking, possible worlds are that kind of abstract models of set theory which represent definite states. These theories are characterized mainly by the fact that, when giving the truth-conditions of propositions they fix formal and not material conditions<sup>5</sup>.

(1.b) The constructivistic concept<sup>6</sup> does not regard the possible worlds as given, but establishes them from the propositions in the light of certain conditions. That is, this kind of theory does not simply assume, but gradually builds up, that is, materially defines the possible worlds.

If asking what standpoints the theories represent concerning the relationship between the real world and possible worlds, then again the opinions form two major groups.

(2.a) Some logicians and philosophers think that possible worlds are autonomous entities, and can be reduced to nothing else. According to them, these worlds must be understood in the same way as our own world, that is, the differ-

ence between the possible worlds and the real world cannot be ascribed to type-difference. The only point is that the events happening in the real world are different from those taking place in the various possible worlds.

(2.b) Several philosophers, however, state that possible worlds are theoretical constructs, intellectual projections the basis of which is the actual world. So possible worlds, through some vehicles, can be deduced from the real world. The construction of possibilities, in accordance with this, can happen by means of transformations of different complexity. The transformations operate on the population of individuals, the descriptive make-ups and on the really operative laws of nature<sup>7</sup>.

##### 5. *The concept of possible world in literary theory*

In the first approach it seems that out of the different logical concepts (1.b) and (2.b) promise the most for literary theory. That is to say, those logical ideas which expound the content of the concept of possible world. When, in principle, we also believe that possible worlds are functions of the real world, we want to further stress, however, that this close dependence only occurs *in the course of construction*, or it is relevant only in that process, since if the establishment of the possible world is finished, we can blow up the bridge over which we crossed from the real world to the given possible world. Let us imagine, for example, that we want to look for all those possible worlds which can be constructed with respect to a given possible world. In this case we need not return to that real world from which the possible world in question was deduced. It is enough to regard the already-constructed possible world hypothetically as a real world from which further possible worlds can be derived<sup>9</sup>. The above procedure guarantees that concepts of possible worlds shown in

(1.a) and (2.a) can also be used in cases of *reconstruction* of possible worlds. The great necessity of this opportunity for the interpretation of literary works will be easier to see, if we define the concept of possible world in literary theory more closely.

First, however, we want to clear up the connections between the *text-worlds*, *possible worlds* and *the real world*.

The practice of interpretations of literary works discloses that the reconstruction of text-worlds of literary texts and the explanation of their structure is not possible on the basis of only one actual state of the real world. Even if it were possible, that explanation would be irrelevant from the specific cognitive point of view of literary science. This, in the first place, is related partly to the reference and truth problem already dealt with. Since no one can seriously doubt the fact that a lot of literary characters cannot by any means be referred directly to flesh-and-blood persons of the real world, or at least not in a relevant way. It is conceivable in principle that none of the states of affairs in a literary text-world has an equivalent in the real world, and therefore all the statements which express and denote the state of affairs of a text-world are false. Moreover we can postulate, as many have, that every statement, which occurs in a literary work, independent of the fact whether the state of affairs drawn by the statement has an equivalent in the real world or not, is necessarily false. We can represent that opinion, too - Frege's studies are good examples for this - that literary works do not contain statements in advance, so the question of truth-value cannot even be raised. No matter how we think of the sentences of the literary texts, we never regret acknowledging that the characters and the states of affairs described by these sentences, play or can play a constructive role in establishing a specifically autonomous world that will be defined more clearly in the following.

Discussing the analogy of numbers and literary characters, we have already referred to the fact that the characters of literary works, if they are to be considered existent, can be referred to the figures of a more abstract action-model. We noted though, that, on the one hand, the number of characters and figures is not necessarily the same, while on the other hand, that the action-model itself is an abstraction, so its extension is smaller than that of the concrete text-worlds. But the analyst of the work must give the reference of all characters, that is, the significatum of every sign in principle. Furthermore, he must decide on the truth-value of all states of affairs in the text-world. As a consequence of this, in spite of the obligatory correspondence-relations, there is no such action-model possible which forms the entire reference range of a given text-world. We also noted that all those structured sets of states of affairs can serve as a possible reference range for a text-world, the structure of which can be mapped to the action-model containing the figures and abstract events. The sets of states of affairs fulfilling the above conditions may be regarded as the *possible worlds of literary works*, and we suppose that characters in the text-worlds refer to the individuals of possible worlds. The true and false truth-values can be rendered to the sentences expressing and denoting the states of affairs also according to the connection between the single states of affairs of the text-world and the possible world. Though it can hardly be doubted after the above, we still stress the following: the possible worlds as the referential ranges of the text-worlds are not metaphysical entities. Possible worlds are essentially the referential ranges of the text-worlds structured, or to put it in another way, explicated with the help of the action-models. They are constructs in which the arbitrariness of the states of affairs and their connections composing the text-world ceases. We can say figuratively

that possible worlds are the 'images' of action-models constructed on the basis of the systems of rules, inasmuch as we approach the analysed class of literary texts from the recipient. The metaphoric expression relates to the fact that the abstract actions can be realized in very different 'surface structures'. It is said in this connection that the extension of the possible world of a text can be considerably greater than that of its text-world. This information-enrichment, not irrelevant from the aesthetic point of view, is related to the role of the action-model: the action-model as an abstract structure, and, consequently, a structure of more general force can 'open' several (similarly structured) referential ranges for the text-world in question, which the text-world as such can never achieve. It is time to draw the conclusion already evident by now: text-worlds, possible worlds and action-models are situated on different levels of abstraction, therefore the methods for approaching and reconstructing them are also different. The text-worlds are mainly available through text-linguistical operations, the action-models through logical-epistemological and the possible worlds through text-linguistical and logical-epistemological. Thus is the cognitive function and value of literary texts related to the hypothesis of possible worlds, on the one hand, while, on the other, it is related to the comparison of structures of the possible worlds and the real world, a question to be dealt with later in more detail.

As we have seen, the action-model plays a distinguished part in relation to the possible worlds. Among other things, it is so because the existence of literary works as possible worlds is attached to these models, and is determined by the models and by the rules generating those models, respectively. This fact definitely excludes the possibility of metaphysical interpretations of the possible-world concept used

here. When we stated that the literary characters refer partly to the figures of the action-models, partly to the individuals of a possible world, we then tried to give an explanation to the following facts. At least one part of the characters, determined by the model, possesses characteristics of general force, that is, shares the 'number'-nature of figures. At the same time, all characters in the works, also those being directly attached to figures, preserve their individual nature, accidental-contingent characteristic, and in this way they contribute to the creation of the 'specialness' of the possible worlds. They cannot lose their contingent features for the action-models wish and are able to explain the text-world as a possible world only in a certain respect and do not explore all possible structures in it.

The foregoing passages proved that the reference of figures, and generally the truth-value of the statements of a text is closely related to our interpretational and pragmatic standpoint. It is related to the way we read a text and to what kind of text we consider it to be from the beginning. We tried to argue in the above that we handle literary texts as vehicles of possible worlds. In our consideration, concepts like text-world, possible world, action-model, real world, etc. are linked in one consistent conceptual system.

In a given possible world, which can be mapped to a literary text, truths and demandable norms derived from the base action-model and system of rules, also valid in the real world, 'reveal themselves' in a specific way by methodically reforming the real world.

The literary characters as possible individuals, the extension of the reference-range of the text-world, and thus the growth of information-richness of the possible world, the possible world as the 'showing up' of action-models in the sphere of the 'specific', that is, the realization of

abstract structures through specific surface structures, and other similar connections demonstrate convincingly that the introduced conceptual system can connect and explain the *cognitive function* of literary works, the *knowledge* delivered by them and the *aesthetic quality* of that knowledge in a consistent and natural way.

Before finishing this phase of our discussion, we return briefly to the question, how the concept of 'possible world' in literary theory, drawn before, relates to the 'possible world' concepts in logic.

We have already referred to the following: to (re)construct the structure serving as the basis of a possible world, we must start from the supposition that the text-world to be analyzed is a possible world. That is, in the first approach, like the formal conceptions of (1.a) and (2.a), we postulate it as a possible world. To strengthen this hypothesis, we can try then to define those rules which materially determine and explain the possible world formally postulated in the sense of (1.b) and (2.b). The strong necessity of such a connection derives from the following consideration: the reader of literary texts cannot suppose that there is a world available, independent from the world of the read text, with the help of which he could determine the truth-value of the statements in the text, and through which he could explain the composition of the text-world with the 'mapping' operation. He can attempt, however, - and in so doing he does the job of a literary theorist - the systematic construction of a model which seems to be relevant from the point of view of the text-world's composition: its constructing rules prevail in the text-world, they make it true and understandable from the viewpoint in question, that is, to change it to a possible world.

The realization of our objective raises the following methodological problem: if we do not want to make in advance the laws and norms prevailing in the given state of real

world the system of rules in the model to be set up - for, in doing so, every possible world would be an image of a given state of real world - then we have to elaborate the procedure for disclosing the systems of rules underlying the various possible worlds.

6. *A theoretical example for the literary explanation of text-worlds operating with possible worlds*

First we would like to explain more precisely the principle of possible world in the sense of (1.a).

To understand a modal notion is to understand a certain relation. This is the 'alternativeness relation', which is defined on a given set of possible worlds. According to Hintikka, the alternatives to a world  $W$  may be thought of as those possible worlds which could be realised instead of  $W$ . In connection with this, a proposition  $p$  is *possibly* true in  $W$ , if and only if  $p$  is true in at least one alternative possible world of  $W$ . That  $p$  be *necessarily* true in  $W$  requires the condition that  $p$  should be true in every alternative possible world of  $W$ .

Let us take now the finite set of the propositions  $p, q, r, \dots, z$  the extension of which is the sequence of events of text-world  $W_t$ . In the following we consider this sequence of events as identical with  $W_t$ . In our assumption  $W_t$  is the distinguished possible world  $W^+$  of the real world  $W_r$ . 'Distinguished' in this context means that  $W^+$  is exactly that possible world from among the alternatives of  $W_r$  in which  $p, q, r, \dots, z$  are true. In Hintikka's semantic theory this ensures the possible truth of  $p, q, r, \dots, z$  in  $W_r$ . We must mention two more preconditions of the text-world interpretation:

- (i)  $p, q, r, \dots, z$  neither belong only nor in the first place to the worlds of characters of  $W_t$ ;

(ii)  $W_r$  is not directly relevant from the viewpoint of text-world interpretation.

The text-world  $W_t$ , which as opposed to the possible world  $W^+$ , can be characterised as the choice and construction of the sequence of events  $p, q, r \dots z$ , is not justified. At the same time  $W^+$ , unlike  $W_t$ , is not given in a way available simply by linguistic devices, and we can regard it as existent only if conditions ensuring the truth of  $p, q, r \dots z$  are given. The elaboration of a system  $M$  for fulfilling the truth-conditions of  $p, q, r \dots z$ , however, will not mean any more that we *postulate* the propositions *true*, but that we have *made* them *true* by means of  $M$ . The system  $M$  in question, identical with the action-model in this case, gives the material explanatory principle of  $W_t$  demanded by Rescher, and thus, in fact, the composition of  $W^+$ .

But we have not yet reached the end of our investigations. We can take a step further with the method of modal semantics, inasmuch as we now regard the possible world  $W^+$  as a hypothetically real world. So in the next phase we search for alternative possible worlds for  $W^+$ , and try to find at least one in which  $M(p, q, r \dots z)$  propositions of  $W^+$  are true. That is, now we do not seek the truth of the single propositions, but rather a possible world in which the structure of propositions determined by  $M$  is true. Suppose that we should find such a world  $W^{++}$ , and  $W^{++}$  coincides with a clearly limited fraction of  $W_t$ . Since the mapping refers to the structure in question,  $W^{++}$  fulfills the truth-conditions also, if the propositions  $p, q, r \dots z$  are replaced by other propositions or real sets of affairs. Our sole requirement is that the new propositions, or real sets of affairs should have a structure  $M'$ , either isomorphic or homomorphic with respect to  $M$ .

The problem that the structure  $M$  itself can be multi-dimensional in the case of literary narratives will not be

dealt with here. It is more important to observe that our method based on possible worlds comes full circle: in the example, starting from the real world  $W_r$  through the text-worlds  $W_t$  and the possible worlds  $W^+$  we reached the real world  $W_r$  again. More precisely: the range of  $W_r$  coinciding with the possible worlds  $W^{++}$  structured by  $M'$ . We stress, however, that our process, in spite of all appearances, is not tautologic, for there is a hierarchical difference between the start and the end of the route virtually made. From an epistemological point of view, the  $W_r$  chosen for the start, is evidently not the  $W_r$  of the end. We wanted to make the difference in the abstractional degree of levels clear with the introduction of the marking  $W^{++}$ . Out of the grades connecting the starting point  $W_r$  and the end  $W^{++}$ , the text-world  $W_t$  is realized on the level of *comprehension*, while the possible worlds  $W^+$  on that of *explanation*. From the viewpoint of cognition,  $W^+$  can be attributed the following value:  $W^+$  represents possible truths, inasmuch as in the real world  $W_r$   $W_t$  possessed an alternative  $W^{++}$  in the treated sense. But if in  $W_r$  or in  $W_t'$ , that is, in the real world and other text-worlds, respectively, there are more alternative worlds (e.g.:  $W^{+++}$ ,  $W^{++++}$  etc.) of  $W^+$ , then the general validity force of truths represented by  $W^+$  actually increases parallel to their cognitive value. With regard to the fact that the scientific research making this circle is of an empirical nature, there is no way to establish logically necessary truths.

In the end, we must make another mention in connection with the 'choice' of propositions structured by  $M$ . We cannot declare that the real world  $W_r$  always possesses such fractions that are characterized by  $M'$ -structures, that is, which qualify the possible world  $W^+$  as a possibly true world on the basis of the correspondance principle. There are, or at least can be imagined, such literary world whose

possible worlds do not have alternatives in the real world. The alternatives of the possible worlds of a certain work of art must be sought in many cases in the various modalities of  $W_r$ . Literary works try to influence and orient their readers, and with the help of their possible world  $W^+$  they 'show' what the real world  $W_r$  should look like, must have looked like, could have looked like, etc.. It is evident that the possible truths become relativized in such cases. It is a more extreme example when the possible world of a literary work can be reconstructed, but no alternatives can be found for the model either in the real world or among its modalities. Until it can no longer be decided whether or not it is the invention of new truths not yet seen, it is more suitable to act in accordance with the coherence principle of truth. If the statements in question can be deduced relying on the constructed model without contradiction, then we consider them valid statements. And valid statements in this system are true statements. Naturally as far as the action-model has no alternatives on the basis of the correspondence principle, we can speak of non-actualized possible truths.

#### *7. Concluding remarks*

If we assert the epistemological question raised in the beginning of the study, then we also must declare that the cognitive function of poetry must be registered among the essential functions that can be performed by literary works. But the acceptance of such a standpoint has far-reaching consequences for literary theory: we must require, for example, that such a semantic theory should form a part of literary theory with the help of which into the statements of literary texts truth-values can be rendered. In this connection, the first problem is that exactly that semantic school which elaborated the semantics operating with truth-

values, denies in advance the mapping of truth-values to the statements in literary texts. To be more precise, it does not even allow that the thoughts expressed by assertive sentences can be regarded as statements. Thus, in fact, it denies that literary works can have any part in cognition, that is - apart from psychological knowledge - we can learn nothing through them. The above negative answer is derived from the conception that exclusively the real world can be regarded as the referential range of literary text-worlds, and so the basis of truth-value mapping as well. In this study we have argued that the truth-value of statements of literary texts can be decided with the construction of different possible referential ranges. To form our conception into a theory, the possible-worlds semantics can offer a suitable basis and frame. We have reached this conviction but by starting to study the different modal logic systems or philosophical logic but on the basis of practical experiments in text-world interpretation. Thus the presented literary theory conception is independent of the semantic model that serves as the interpretent of the metatheory of text-world interpretation. Though we took the stand that the truth-value of statements in literary texts cannot be determined by *direct* reference to the real world, we by no means want to deny that the possibility of this procedure exists, and acknowledge that the realization of this possibility is necessary in certain methods of literary text analyses. Therefore, literary theory cannot ignore this circular of question. We stress, however, that resulting from the nature of literary work, the *indirect* connection between text-world and real world, the systematic establishment of which is a scientific task, is more important. This is the reason for the more detailed treatment of the possibilities of the indirect, systematic connection in this study. To enlighten the problems, we introduced the concept of text-world, possible world, real world and action-model. As a suggestion

for solving the question, we formed the following relationships between them: the text-world represented by linguistic devices can be declared a possible world with the help of an explanatory action-model constructed on the basis of a system of rules. The possible worlds as structured and so explained text-worlds can be compared through the action-model functioning as the basis to the range or ranges of the real world similarly structured, or to their different modalities as alternative possible worlds. For determining the alternatives the procedures used in modal logic can serve as models.

In finalizing, we are of the conviction that all questions dealt with must play a central role in every such semantic theory that lays claim to the description and explanation of literary texts. At the same time, we see clearly that we had to ignore several factors in this study without which the problems raised cannot be solved satisfactorily. We hope that our work, in this restricted sense, contributes to a research not yet finished.

#### Notes

<sup>+</sup> This study is the revised version of our earlier work entitled "*Mögliche Welten*" unter literaturtheoretischem Aspekt. The original one was lectured on the II. International Congress of Semiotics (Vienna) in 1979.

<sup>1</sup> Frege described his semantic theory in several studies, in a form modified several times.

<sup>2</sup> For the discussion of these question see *Poetics* 1979, Vol. 8, No. 1/2.

- 3 Cf. Breitinger 1966 (1740).
- 4 At our statements we relied mainly on the works of Link 1976 and Rescher 1975.
- 5 Cf. Rescher 1975: p. 4.
- 6 This concept is mainly represented by Rescher 1975.
- 7 Rescher 1975: p. 92 and 193.
- 8 Rescher 1975: p. 92.
- 9 Rescher 1975: p. 84.
- 10 Hintikka 1975: p. 160.