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Linguistics as Semiotics. Saussure and Bühler Revisited.

Abstract

The article identifies some fundamental problems with Sausure's sign conception and with Bühler's Organon Model, and presents two new sign and communication models, one for the speaker, the Grammatical Triangle, and another for the hearer, the Semiotic Wheel. It is argued that the arbitrariness of language makes its arsenal of words *omnipotent* and capable of referring to anything. Exactly because of its arbitrariness language must have a code that can give a *semiotic direction* to the otherwise completely static sign. The speaker's model consists of an obligatory choice between three types of code corresponding to the three ways in which *states of affairs* exist: situations in a real or in an imagined world, the speaker's experience or non-experience of them or the hearer's experience or non-experience of them. The hearer uses his model as an *information seeker* in order to compensate for those pieces of content that were left out by the speaker's choice of semiotic orientation.

Keywords: language functions, icon, index, symbol, arbitrariness, indexicality, diagrammatic relations, function of grammar or code, speaker model, hearer model, types of languages or grammar, situation, experience, information, Saussure, Bühler, Jakobson, Peirce.

1. Introduction

It is more or less common to start a paper by introducing the problem and to conclude it by solving the problem. In our case there seems to be a couple of problems, but it is difficult to raise them as specific issues, because nobody has seen them as problems so far. This applies to Saussure's theory of the arbitrariness of human language from 1916, and to Bühler's theory of language functions and their corresponding sign types as they appear in his revised Organon Model in 1934. In the following sections I shall try to identify the problems and come up with my solutions.

2. Saussure revisited

2.1. Saussure's conception and its influence

All have taken it for granted that Saussure was right in saying that the linguistic sign is two-sided consisting of a sound-image and a concept, and that the relation between what is also known as the expression of the sign, i.e. the signifier (*signifiant*), and the content of it, i.e. the signified (*signifié*), is arbitrary and established by convention (Saussure 1916: 66ff). This has simply been the starting point for every general linguistic theory, since Saussure's *Cours de linguistique générale* saw the light almost three years after his death in 1913. In other words, language consists of words or lexemes which are symbols, not indexes or icons. Although Saussure devotes the second part (pp. 141-192) to grammar, the specific semiotic status of grammatical morphemes, so-called grammemes (e.g., *a*, *the*, and *–ed* in English), is not touched and the specific role of grammar in the semiosis process is not mentioned. We are told that lexemes are free, while grammemes are bound, but, nevertheless, he seems to have difficulty in accepting a clear distinction between lexicon and grammar (p. 186f). He stresses that the same content can be expressed by grammatical means as well as by lexical means, i.e. words, and holds the view that some languages are more lexical (e.g., Chinese), whereas others are more grammatical (e.g., German).

All other linguistic traditions or schools also regard words as symbols, and they also have nothing to say about the semiotic status of grammatical entities and their specific role in semiosis. This concerns the various varieties of old structuralism such as the Prager School (cf. Jakobson 1971), the Copenhagen School (cf. Hjelmslev 1943), the Russian tradition (cf. Serebrennikov 1973), the Tartu School (cf. Lucid 1977) and the American structuralist tradition from Bloomfield (1935) to Hockett (1958). It also concerns the different varieties of neostructuralism such as Transformational Grammar (Chomsky 1957) and its various offshoots in the sixties (e.g., Generative Semantics) and seventies (e.g., Space Grammar), Government and Binding and other formal grammars (cf. Chomsky 1981 and 1986), Functional Grammar (cf. Givón 1981, Dik 1989 and Hengeveldt 2004) and Cognitive Grammar (cf.

Langacker 1999, Lakoff 1987 and Talmy 2001). The difference between them is that the old structuralist tradition paid a lot of attention to the phonological and morphological levels of language, while the new structuralist tradition lost that interest, at least when we are speaking of synchronic studies, and instead concentrated their attention on syntax alone or its relations to semantics. The interest went from the simple sign to the complex sign without discussing the semiotic consequences of doing so.

2.2. Stating the problem

The consequence of taking the Saussurian sign conception for granted is predictable: nobody ever questioned it. Jakobson (1962, 1963 and 1965) critisized Saussure for considering language an arbitrary system, but all his examples of indexicality and iconicity are taken from grammar itself, whereby he never really cracked the problem – in doing so he actually avoided it: *For what reason are words arbitrary*? *What is the function of having an arsenal of pure symbols*? Nobody ever asked these crucial questions. This concerns Jakobson, too, despite the fact that he advocated a teleological approach to language and struggled all his life to develop a means-end model for language (cf. Jakobson 1963). Jakobson was attracted to Peirce and he did not miss an opportunity to mention Peirce – especially when he was critisizing Saussure (cf. above). But he never used Peirce in his own research. This is perhaps linked to Peirce's thrichotomic way of thinking (e.g., representamen – object – interpretant) which must have been difficult for Jakobson to accommodate to his own dichotomic way of thinking (e.g., expression – content), although there need not be any inconsistency in applying them in combination: dichotomies may apply to performing an analysis or a deconstruction of a mental building, while trichotomies may apply to performing a synthesis or a construction of a mental building.

2.3. Discussing the function of the arbitrariness of the linguistic sign

We shall keep to the sharp distinction between the lexicon of a language consisting of lexemes which constitute an open class or an additive system and

its grammar consisting of grammemes which constitute a closed class or a structured system. Let us start by looking at the lexicon as an abstract entity. In principle, it contains names for three different things: 1) names for objects in the form of nouns; 2) names for situations in the form of verbs; and 3) names for qualities in the form of adjectives. Without grammar no lexeme would be able to point out of itself – the common name *book* will create an image, but certainly not a specific picture of a particular book, and simultaneously an idea, but certainly not concrete thoughts about a certain book. The abstract capacity of *book* makes it possible to refer to any book in the past, present and future, be it in a real world or in an imagined world. I call it the *omnipotence* of the word. All lexemes have this capacity simply because they are symbols where there is an arbitrary relationship between expression and content, be it the image-based content or the idea-based content which is mediated by the expression unit (cf. just above).

The word *morning* applies to any morning in the past, present and the future – there are no limitations at all. In the same way, *Morning!* can be used as a greeting every morning and among all people in an English-speaking community. If we look at the corresponding non-verbal greetings such as kissing, embracing, hand shaking, knocking with one's head and waving with one's hand (all functioning as so-called emblems or intentional gestures, cf. Kendon 1995 and McNeill 1992), none of them would possess the same universal character or omnipotence as the verbal greeting, because – and this is crucial – they all inherently contain indexical and iconic elements.

When produced in a non-verbal greeting situation all the symbol-like gestures can be said to involve two types of contents (cf. Jensen 1999). First, they all involve "I hereby show you my respect" – this is shown by the gesture itself and its direction. Secondly, they all involve "We hereby reconfirm our mutual relationship" which is the effect of the addressee's reaction to the sender's message, i.e. the effect of a successful communication. The point is, however, that although I can say *Morning!* to my wife, to my dear friend, to my colleague, to a person I pass everyday in the subway and to a total stranger whom I see for the first time in the front of my office, I cannot use any of the

non-verbal greetings in all the above-mentioned situations. I cannot – or should I say: I will not – give a good-morning kiss to a person who is a complete stranger, or a good-morning knock with my head to my wife, or give a good-morning hand shake to the person I pass every day in the subway.

Each of the non-verbal greetings is limited in use, and they are so because as signs they are non-arbitrary: there is a diagrammatic, i.e. an iconic relationship between the signifier and the signified. The physical distance between the sender and the addressee reflects the intimeness or the depth of the mutual relationship between the sender and the addressee. This means that if their relationship is intimate or deep, they will, if possible, use a gesture with no distance; if their relationship is non-intimate or non-deep, they will use a gesture with some distance. The point is that because of that none of the gestures can fulfill the universal function of the verbal greeting. The fact that they involve iconic elements make them speak with a concrete voice, and the fact that they are indexical make them goal-directed and dynamic. In the case of gestures functioning as symbols it is not possible to separate the code from the actual signs used. The code is an inherent part of the signs themselves, because the signs are not only symbolic, but inherently indexical and iconic. And this is more or less true of all non-verbal communication systems.

## 2.4. Concluding and sharpening the problem

The arbitrariness of the linguistic sign is therefore a must for a communication tool that should be used globally. According to Martinet (1949) language consists of two articulations. The first articulation system is made up of morphemes or sememes, minimal signs, which together form words that can be combined into sentences. The second articulation system is made up of expression units, i.e. phonemes, that do not in themselves mean anything, but whose function is to distinguish one sign from any other sign. According to Martinet it is exactly the presence of the second articulation system that makes the linguistic sign arbitrary and, moreover, guarantees the economy of language. The point is, however, that an arbitrary sign, i.e. a symbol, is purely static in itself and therefore completely helpless in a communication situation

that is dynamic *per se*. A symbol needs a vehicle, i.e. a code, that can bring it to the proper place. I shall return to this important issue below.

3. Bühler revisited

3.1. Introducing Bühler's Organon Model

Just as it was the case with Saussure's conception, nobody has seen a problem with Bühler's Organon Model. It was published in 1934 in his famous book *Sprachtheorie. Die Darstellungsfunktion der Sprache*, but it was developed already in 1918 (cf. Bühler 1934: 28). In the Organon Model Bühler regards language as a means of communication which demands at least three components or participants that together form an equilateral triangle: speaker, hearer and objects and states of affairs ("Gegenstände und Sachverhalte"). Language establishes a function with each of the three obligatory communication participants: the expressive function is related to the speaker, the appeal function to the hearer, and the representative function to objects and states of affairs (see figure 1).
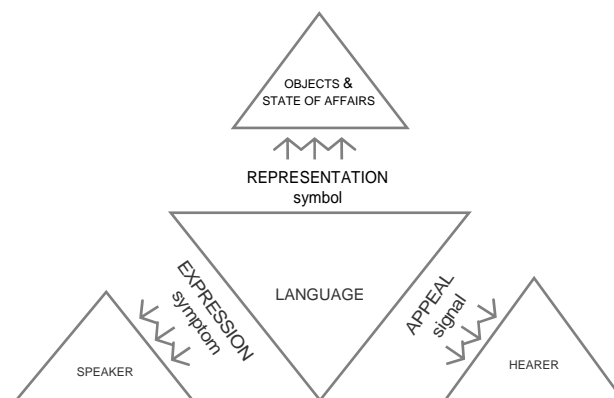
Fig. 1: Bühler's Organon Model

By introducing the Organon Model Bühler did not only influence all future reseach in linguistics, translation studies and communication studies, but also

laid the very foundation of pragmatics in general and speech act theory in particular (1934: pp. 30ff). Searle's distinction between expressives, commissives and declarations was unthinkable without the influence of his teacher Austin (1962), but it was also in direct continuation of Bühler's three distinctions, viz. language in relation to the speaker, its relation to the hearer, and its relation to reality (cf. Searle 1969). In that way it can be argued that the model has been an enormous inspiration and a guiding line for several generations of scholars, although, admittedly, not all may be aware of it.

3.2. Discussing Bühler's language functions

According to Bühler, the representative function is by far the most dominating function of language (p. 30), although each function is present in any utterance and therefore is part of the linguistic form, i.e. *langue*, and not its substance, i.e. *parole* (cf. Hjelmselv 1943): when a speaker utters *That horse is beautiful*, the utterance does not only represent a certain state of affairs or a certain situation, but it also expresses the speaker's emotions and at the same time serves as an appeal to the hearer to give a response. This is exactly what distinguishes Bühler's three language functions from Jakobson's six functions (cf. Jakobson 1960) and Halliday's seven (cf. Halliday (1975). Bühler's three functions are present in any utterance, whereas, for instance, Jakobson's poetic function may be present or may not be present (cf. Jakobson 1960). Bühler's functions are language functions, Jakobson's and Halliday's are speech functions.

Although all this sounds reasonable and convincing, a problem arises, when we read Bühler carefully. While his expressive function and appeal function only make sense when language is used in communication, his representative function (in German *Darstellungsfunktion*, jf the subtitle of his monograph) seems to be used in two very different ways corresponding to his two terms *objects* and *states of affairs* (1934: 30). Language represents objects, but it also represents states of affairs, i.e. situations. There is, however, a big difference between these two kinds of representations. When language represents objects, it need not do it in communication – quite on the contrary. This function is in principle purely static and therefore has a place outside

communication. It is reflected in dictionaries in the form of lexemes or words which make up the lexicon of a language. This is the static meaning of the terms "representation" and "Darstellung". When language represents states of affairs, i.e. situations in a real world or in an imagined world, we are not dealing with words, i.e. symbols, but with utterances or complex signs in Bühler's terminology (corresponding to supersigns in Eco's terminology (cf. Eco 1975). In short, we are dealing with language in use, with written or spoken discourse that is a dynamic phenomenon, and not a static one. This constitutes the dynamic meaning of the terms "representation" and "Darstellung". This duality is not found in the two other language functions, only in the representative function. And it is not a coincidence: Bühler explicitly states (1934: 30) that language is a two class system of representation means, one for words, i.e. the lexicon of a language, and another for sentence building, i.e. syntax (see also pp. 69-78 where he elaborates on the distinction between words and sentences). According to Bühler both systems perform a representative function, and it is exactly the double nature of the representative function that makes it the dominant function of language and distinguishes it from the other two functions. He says at the same place (1934: 30): "… in order to get it right at the place in the figure [from p. 25] where "Things [Dinge]" stands we now write the double designation "Objects and States of Affairs" [Gegenstände und Sachverhalte]". It looks as if Bühler was trapped by the German language which has one "dynamic" word, i.e. *Darstellung*, for two different functions, the one being static and the other being dynamic. The same linguistic trap is found in the English language, where the "static" word *representation* is used for both functions.

I conclude the discussion by saying that in order to make sense out of Bühler's Organon Model we must remove the word and its naming function from the model. This leaves us with the representative function used unambiguously and in line with the expressive function and the appeal function. All three functions are only present in communication and they are present due to the implementation of grammar. Words are symbols – they are static and cannot by themselves take part in communication. We saw it in connection with

Morning! where the intonation revealed that it was intended as a greeting and not as a name for a particular part of the day.

3.3. Discussing Bühler's sign types

Bühler's Organon Model (see fig. 1) also comprises within itself a semiotic elaboration of his language functions. According to him, any linguistic sign, i.e. a word, or any complex linguistic sign, i.e. an utterance, is "a *symbol* in virtue of its assignment to objects and states of affairs, a *symptom* (evidence, indication) due to its dependence upon the speaker whose innerness it expresses, and signal because of its appeal to the hearer whose external and internal behavour it governs just like other communicative signs" (1934: 28). In that way the three language functions become explicitly linked to three different sign types. Interestingly enough, nobody ever questioned the semiotic triad, presumably because each of the three sign types makes sense if one pairs them with their respective language function and ignores the duality of the representative function. The problem arises when we look at the triad itself, i.e. symbols, symptoms and signals. Symptoms and signals are clearly indexes. A symptom points backwards to the speaker and therefore we also go back in time, i.e. back to an earlier experience. A signal points to the hearer and therefore points forward in time. A symbol does not point, but names. There is no motion or direction involved, at all.

Again we suspect that the mismatch is due to Bühler's lack of distinction between words as static elements and utterances as dynamic elements. It makes sense to claim that words are symbols of objects. But it does not make sense to say that a specific utterance is a symbol of a certain state of affairs or a certain situation. If all utterances were complex symbols consisting of simple symbols, it follows that we had to distinguish between two sets of symbols, i.e. static and dynamic ones. It also follows that there would be an arbitrary relationship established by convention between every single sentence and every single situation. This would mean that all persons would have to learn all utterances by heart in order to understand what they symbolize and in order to produce them later on – just as they learnt all words by heart in

order to understand the meaning of them and later to be able to reproduce them in utterances. This totally contradicts common sense and completely undermines what is normally referred to as the productivity of language: due to its grammar language can give expression to any old and any new thought, and they can all be understood by the hearer, if he or she masters the language in question (see, for instance, Hockett 1963, Jakobson 1968 and Lyons 1977: 76).

In short, words are symbols, but sentences cannot be. They must function as a sort of an index, i.e. perform a pointing function which makes them dynamic and goal-directed at the same time. The consequence is that we have to remove *symbol* from Bühler's triad and instead look for a lacking index. We are looking for a concept for the sign of that part of reality that was stimulus to the speaker's experience, of which the sign is also symptom and to which the hearer returns when he has mentally processed the effect of the same sign understood as a signal. In other words: we are looking for a sign that points to the situation that is stimulus to the speaker's experience and at which the hearer arrives after having decoded the utterance. I shall call the lacking index *model*, and define it as the semiotic sign correlate to the representative function of language: an utterance is a model, because it points to a situation.

This means that we get the following indexical triad: model, symptom and signal. The triad corresponds to another triad, viz. situation, the speaker's experience of that situation, and information to the hearer. The order is not random: a piece of information to the hearer presupposes an experience by the speaker, and an experience presupposes a situation. Without a situation, no experience, and without experience, no information. In the same way, model, symptom and signal constitute a certain order within the realm of indexicality: to use Peirce's terminology, *model* is firstness, *symptom* is secondness, and *signal* is thirdness. In other words, within indexes *model* occupies the first order, *symptom* the second order and *signal* the third order. Indexes themselves belong to secondness, whereas icons belong to firstness and symbols to thirdness.

3.4. Concluding

If what has been stated so far is true, we can say that Bühler's Organon Model with the three language functions is a *decoding model* for the hearer. It explains why the hearer has to interpret any utterance in three different ways in order to draw all pieces of information out of an utterance. An utterance will always represent a certain situation, express the speaker's experience of it and appeal the hearer to find out the information status of the utterance alone as well as of its parts and through mental models get access to the specific situation referred to. In other words, the Organon Model is *the hearer's model*, where we are dealing with both-and, not with either-or: any utterance in any language will serve for the hearer as a model of a situation, as a symptom of the speaker's experience of the situation, and as a signal to find a matching experience and a matching situation to it. Since all people know it, they must know it not only in their capacity as hearers, but also in their capacity as speakers. Therefore the natural question arises: which sign and communication model functions as the point of departure for the speaker? Which model will guide the speaker, when he gets an intention and wants to verbalize his intention? We are talking about an encoding model, where we have to deal with the question "What is the function of grammar in communication?" or "For what reason does language need a code". Bühler did not ask questions of this type. We know that the main function of language is to serve as a communication tool between human beings and that it fits its main function and all subfunctions derived from it. But nobody addressed this question to the code or grammar itself. And nobody ever considered its function in a communication situation.

4. The speaker's model – introducing the Grammatical Triangle

The answer to the question "What is the function of grammar in communication?" is quite simple: due to the fact that all lexical units of a language have an arbitrary and completely conventional relation between the signifier and the signified, language must have a code, normally called a grammar when dealing with language, that can instruct the hearer how the content should be understood. The omnipotence of each single symbol, which

is ensured by its arbitrariness, would be empty without a grammar or a code, because grammar or the code is the tool or vehicle that carries the name to the rigth place. Exactly because of its arbitrariness language must have a code, i.e. a grammar, that can give a *semiotic direction* to the otherwise completely static sign or a *voice* to the otherwise completely mute sign. The fact that lexemes are symbols and thus arbitrary, yield them no semiotic direction at all. They are all static, and the *staticness* is their big advantage and at the same time their weakness. Their staticness makes them prepared for any kind of job, but at the same time they are totally dependent on a vehicle in order to get a specific job done. If there is any direction at all in a symbol, it is inner reference and not outer reference: a name will just refer to its own place in the linguistic system and at the same time create a combined percept-concept (object-interpretant) in the mind of a human being. Symbols in themselves do not refer, they just name. In order for a noun, or a verb, or an adjective to get access to a specific object, or a specific situation with specific participants, or a specific quality they must be supplied with a device that draws the hearer's attention to what the speaker intended – and this is exactly what grammar (or any other indexical device) does. Another way of putting it is to say that *morning be good* (or in any other order) gives only a vague impression of what really is at stake – it has a referential potential, nothing else. In order for the speaker and the hearer to get access to a specific real or imagined world one has to use grammemes for situation type, time world and ontological status of the world referred to.

Grammar in itself functions as a *prime index* that makes symbols dynamic by giving them a semiotic direction. Due to the fact that a direction always contains a target, grammar can also be said to provide the symbols with a specific frame of reference. But unlike decoding which is a search in all possible directions, encoding involves an obligatory choice between three possible targets of direction. Why? Because all communication requires three participants, viz. reality, speaker and hearer. One has to consider that, in fact, *state of affairs* has three modalities of existence: the situation as such, the situation as it is experienced or not experienced by the speaker and the situation as it is experienced or not experienced by the hearer (see also Durst-

Andersen 1992 for a cognitive explanation of this three-way ambiguity). This means that one may refer to the situation itself, to the speaker's experience of it or to the information intended for the hearer which is the linguistic result of the speaker's comparison of his own experience with the hearer's – if they match, it is old information, if they do not, it is new information. Language must make a choice in order not to complicate matters for the speaker in his encoding process and not to confuse the hearer in his decoding process. The encoding and decoding processes would be extremely difficult, if those parts that make up a grammar were completely disharmonic by pointing in all possible directions. We are thus dealing with an either-or relation in the case of encoding (see fig. 2).

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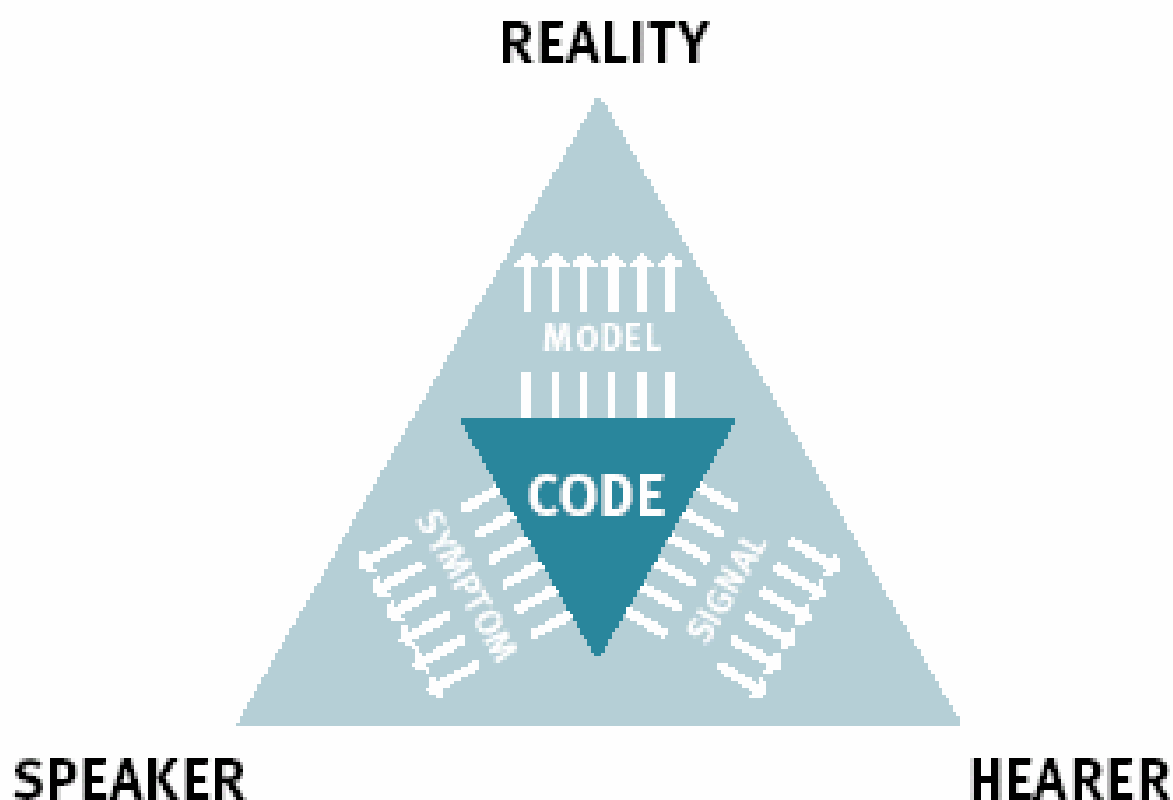
Fig. 2: The Speaker's Model – The Grammatical Triangle

The speaker knows the potential three-way ambiguity of any symbol and in order to be able to provide the hearer with an unambiguous tool that can instruct him how the string of words should be understood, he must choose between the three types of indexes, viz. model, symptom and signal (cf. Durst-Andersen 2005b). This means that all languages have a set of symbols, i.e. a lexicon, but must choose between three types of indexes, i.e. between three grammatical supertypes, the function of which is to be able to bring the symbols to their target by giving them a semiotic direction, i.e. by pointing to situations in reality, to the speaker or to the hearer. When the semiotic direction has been determined by the choice of grammatical orientation, the speaker has another choice to make, namely whether the target being pointed at is hit or not: (1) Is the object present or absent in the situation referred to? (2) Is the object part of the speaker's experiences or is it not? (3) Is the object part of the hearer's experiences or is it not? This choice is fundamentally based on iconicity: (1) Does the copy named by the noun have an original in the situation referred to?; (2) Does the original in the situation referred to have a copy in the speaker's store of experiences?; (3) Does the speaker's copy in his store of experiences have an equivalent in the hearer's store of experiences? The result will be a choice of a specific grammeme in the three languages in question (for further details, see below). All this explains why Jakobson found iconic relations within the grammatical systems of various languages (cf. Jakobson 1962, 1963 and 1965).

5. The three types of grammatical orientation

Since Chomsky's *Syntactic structures* appeared in 1957, linguists have believed in Universal Grammar and have tried to find linguistic expressions for what is considered to be universal content. One has ignored empirical facts about languages, namely that some languages, for instance, Russian and Danish, have nothing in common apart from having words and sentences, whereas others have a lot, but not all in common, for instance, English and Danish. The differences and similarities in content appear as differences or similarities in expression. But because language is considered to be arbitrary, nobody has

paid attention to differences in expression. Saussure has been read literally: if language as such is founded on the principle of arbitrariness, then any language may express a certain piece of content in any possible way, lexically or grammatically, by prefixes, infixes or by suffixes. This line of argument holds in the case of Martinet's secondary articulation system, but it does not hold in the case of his primary articulation system.

By arguing that the grammar of a certain language is a big index with iconic relations the expression units of a certain language get a new and important role. It is now possible to answer the question "Why do languages differ with respect to expression units?" in a natural and direct way – They differ because languages differ with respect to content. The only way in which languages can show differences in content is by having different structures of expression. They seem to fall into three types, which divide themselves into specific subtypes corresponding to specific systems of languages (for an earlier version of this theory, called *the theory of linguistic supertypes*, see Durst-Andersen 1992: 102-105; for the latest version, see Durst-Andersen 2005a and 2005b).

Some languages have a code that functions as a model of situations in reality. These languages have specific verbal and nominal categories that distinguish them from other types. They have the verbal category of aspect to distinguish events (a state caused by an activity) from processes (an activity intending to cause a state), the indicative and the subjunctive mood to distinguish real world from imagined world, and direct and oblique cases to distinguish referential and non-referential uses. Moreover, they have many sentences which lack a subject – following the implicit rule: if there is no figure in a picture, there can be no subject. In that way *It is raining* with a formal subject is just *Is raining* in that type of languages, i.e. a subjectless sentence, *It is cold* is just *Cold*, etc. Grammars of that type are called *reality-oriented grammars*, and they are found in languages such as Russian, Hindi and Chinese.

Other languages have a code that functions as a symptom of the speaker's experience of situations. These languages do also have aspect,

because both events and processes can be experienced, but besides that they have a well-developed modal system within the indicative mood. The function of the indicative submodal system is to tell the hearer whether the speaker saw or did not see the situation referred to, and if he or she saw it, which parts he or she actually saw: the activity, the state, or both the activity and the state of an event (a state caused by an activity). Grammars of that type are named *speaker-oriented grammars*, and they are found in languages such as Bulgarian, Turkish and Georgian (all languages spoken in the Balkan area are speaker-oriented with certain characteristic features, e.g., all of them lack an infinitive form: it has no place in the system, because it does not denote a situation that can be experienced by the human eye – the infinitive form denotes potentiality *per se* and is linked to an imagined world).

A different category or supertype of languages are those which have a code that functions as a signal to the hearer to make sense out of what often seems to be nonsense. Consider, for instance, the utterance *Bush and Blair stayed in Iraq and the violence got worse.* If it is translated literally into Russian, it cannot but mean that Bush and Blair actually were in Iraq (presumably because of the warm weather) and that the violence got worse totally independent of their being there. In English *Bush* and *Blair* are used as metonomies for the American and the English troops, respectively – what English-speaking people know, because the code acts as a signal to the hearer to find the situations behind the message. Such languages have a sharp distinction within the category of tense between the present perfect (e.g., *has said*) and the simple past (e.g., *said*) in order to distinguish new from old pieces of information and a sharp distinction between the definite article (e.g., *the director*) and the indefinite article (e.g., *a director*) in order to differentiate familiarity from non-familiarity – all being hearer-based notions. Moreover, they have so-called *it-* and *there*-sentences, because they treat sentences as logical propositions with an obligatory logical subject and a logical predicate. Grammars of that type are called *hearer-oriented*, and they are found in languages such as English, Danish and Swedish. The above-mentioned verbal and nominal categories are not found in Russian, Hindi and Chinese, and

indeed could *not* be found, because these languages do not speak with the hearer's voice, but with the voice of reality – that is why they automatically place Bush and Blair in a certain situation in Iraq (for more information, see Durst-Andersen 2005b).

If a language speaks with the voice of reality, it will have *situation* as its basic unit. The speaker will be a third person oriented speaker – from a grammatical point of view the speaker acts as a reporter, i.e. speaks with an objective voice. If a language speaks with the speaker's voice, it will have *experience* as its basic unit. The speaker will be a first person oriented speaker – from a grammatical point of view the speaker acts as a commentator, i.e. speaks with a subjective voice. If a language speaks with the hearer's voice, it will have *information* as its basic unit. The speaker will be a second person oriented speaker – from a grammatical point of view the speaker acts as an informer, i.e. speaks with an intersubjective voice.

All this should appear from the following table, where I also include what I call *identification mark*. Every so-called supertype has a determinant category, be it aspect, mood or tense, but it turns out that a determinant category tends to expand by conquering territory from other categories, thus taking over functions from other verbal categories. The result is that Russian has aspectual forms everywhere in the system, that Bulgarian is filled up with modal forms and that Danish has only tense forms (cf. Durst-Andersen 2005a). Note that Bhat 1999 contains convincing quantitative evidence for the expansion hypothesis – he based himself on the overwhelming amount of languages spoken in India.

	Reality-oriented	**Speaker-oriented**	**Hearer-oriented**
Representatives	Russian & Chinese	Bulgarian & Turkish	English & Danish
Basic Unit	Situation	Experience	Information
Speaker Orientation	Third person	First person	Second person
Speaker Function	Reporter	Commentator	Informer
Identification Mark	Aspect Prominence	Mood Prominence	Tense Prominence

It goes without saying that the effect of having different speaker voices is

paramount – not only when we are dealing with communication within the same speech community, but also when we are talking about so-called intercultural communication. I shall attempt to demonstrate the big differences on the basis of a single lexeme made goal-directed by means of three different types of grammars. Although I hesitate to use this example – one-word communication is abnormal – I have chosen to use it, anyway, for illustrative reasons.
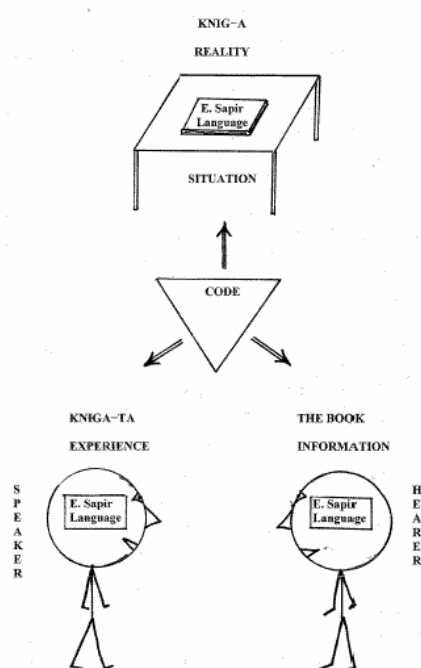
6. The three speaker voices in practise

Let us take the lexeme for "book" in three different languages and let us attach a grammeme to each lexical unit in order to make the linguistic symbol dynamic and goal-directed.

Knig-a ('book-nominative case' in Russian), *kniga-ta* ('book-article' in Bulgarian) and *the book* ('definite article-book' in English) all have exactly the same linguistic content, i.e. they all three evoke the same image (corresponding to Peirce's *immediate object*) and the same idea (corresponding to Peirce's *immediate idea*), i.e. all three lexical expression units mediate exactly the same two types of content. However, the Russian code, the Bulgarian code and the English code make them point to three different things (see fig. 3). Russian *kniga* points to a specific book situated at a certain place in a certain situation; Bulgarian *knigata* points to a specific book in the speaker's mind; and English *the book* points to a specific book in the hearer's mind.

If we substitute the Russian nominative case (i.e. *kniga*) for the genitive *knigi*, i.e. its semantic opposition, the specific book is automatically removed from a concrete place in a certain situation. If there is no local reference, you will have to use the genitive in Russian – you could never use the nominative or the accusative, i.e. so-called direct cases. Therefore "The book is not here" will be *Knigi* (Genitive) *net* (Negation) – the genitive noun will denote a specific book in the speaker's and in the hearer's memory, but the Russian noun is not triggered by that. It is triggered by the fact that the model that has no local reference at the moment of speech. The nominative is simply not possible, because it asserts local reference. If we substitute the so-called definite article in Bulgarian (i.e. *knigata*) for the zero-article, i.e. *kniga* – its

semantic opposition, the specific book is automatically removed from the speaker's mind and is no longer treated as being a part of his or her experiences, but is just a book in a situation in reality. If we substitute the definite particle in English (i.e. *the book*) for the indefinite article, i.e. *a book* – its semantic opposition, the specific book in the hearer's mind is removed and what is left is what is in the speaker's mind.

Figure 3: The effect of the three speaker voices

The effect of the Russian, Bulgarian and English grammemes should be obvious, but add to this that all other grammemes of these languages are in harmony, i.e. they speak with the same voice. In other words, the Russian case system is designed to be in harmony with the aspectual system that distinguishes two complex situations, viz. events (a state caused by an activity) and processes (an activity intending to cause a state); the Bulgarian article system fits the submodal distinction between situations experienced by the

speaker and situations *not* experienced by the speaker; and the English article system correlates with the temporal distinction between news-flashes and flash-backs, i.e. information that the hearer does not share with the speaker and information that he shares with him.

What we observe here is extremely important from a Peircean way of thinking (cf. Peirce 1932). Just as an experience of a certain book understood as a physical thing, not as its contents, requires its local existence, the memory of it requires an experience of it. This means that we can establish the following natural order outside a communication situation, i.e. a purely logical order: physical existence (firstness) > somebody's experience of it (secondness) > somebody's memory of the experience of it (thirdness). Having done this, we can establish the same elements within a communication situation with three obligatory participants: a *situation* where a certain object is present (firstness) > the speaker's *experience* of this object (secondness) > the speaker's memory of this object correlated with the hearer's memory which yields *information* (thirdness).

Note that because Peirce was an idealist – he considered *potentiality* to be firstness. I do not hesitate to say that *physical existence of a certain object* is firstness. What is actual is found in pictures being received by concrete human beings, as well as in thoughts evoked in human beings by receiving pictures. My *Pictures* and *thoughts* seem to correspond to Peirce's *dynamical objects* and *dynamical interpretants* (cf. Peirce 1953). What is potential is found in images, i.e. prototypicalized pictures, created by human beings, as well as in ideas, i.e. prototypicalized thougths, being evoked by human beings (corresponding to Peirce's *immediate object* and *immediate interpretant*, cf. Peirce 1953). They are potential, and because of that any lexeme, i.e. any linguistic symbol, will be linked to potentiality. A lexeme just names, i.e. it creates an image-idea pair, or (immediate) object and (immediate) interpretant in Peirce's terminology.

7. The hearer's model revised – introducing the Semiotic Wheel

When a Russian speaker utters an utterance with *kniga* (e.g., *Ivan* (nominative)

pročital (perfective) *knigu* (accusative) 'Ivan read/has read/had read a/the book'), the hearer has no difficulty in locating a specific "book" in a concrete situation, because the Russian grammar functions as a model of situations. But the Russian hearer will not know from hearing the utterance whether the "book" is experienced or not by the speaker, and he will not know whether the speaker is talking about the "book" he mentioned yesterday or another "book" that he is mentioning for the first time. In other words, the Russian language helps the hearer to find the real situation in reality, but leaves him on his own with respect to the speaker's experience and the hearer's information. Because of that it is my hypothesis that the Russian hearer will concentrate his attention on the lacking pieces of information in the utterance.

He knows that any utterance in any language involves a model of a situation in a real world or in an imagined world, a symptom of the speaker's experience of that situation and a signal to the hearer to find a match in his memeory and via mental models get access to the situation itself. This was, I think, what Bühler wanted to say by his Organon Model, but although we revised it by removing *objects* and *symbol*, we did not succeed in changing its purely static look at the expense of a dynamic one. In order to do so we have to transform the triangle into a wheel (see fig. 4).

The Semiotic Wheel is constructed in such a way that the hearer must take a full tour of the semiotic wheel irrespective of the place on which he or she lands. The Russian hearer lands on *Situations* after having decoded the explicit parts of the utterance and has to make the rest of the tour on his own, i.e. via *Experiences* and via *Informations* back to *Situations* where he started.
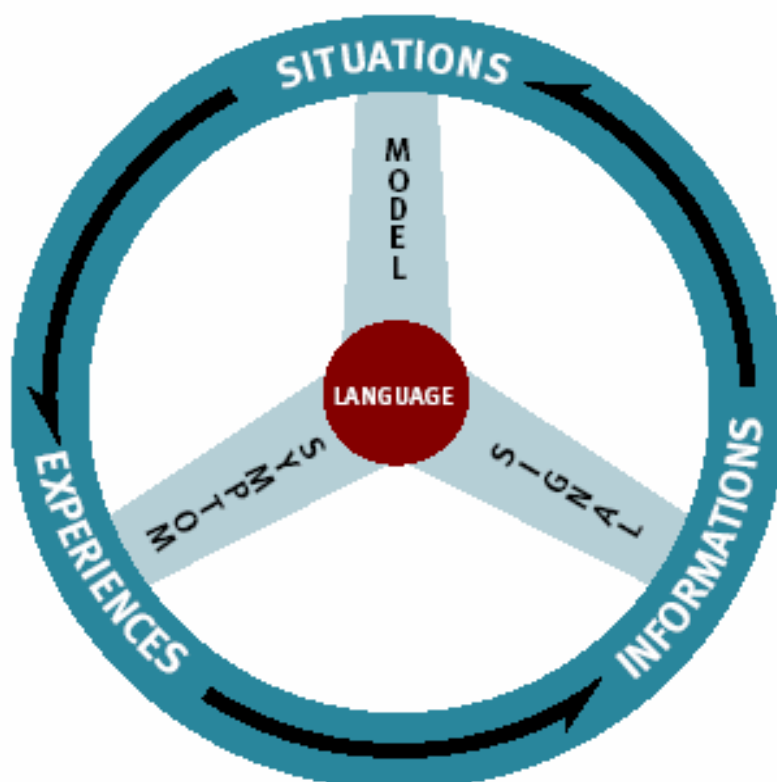
Fig. 4: The hearer's model – the Semiotic Wheel

When a Bulgarian hearer is confronted with *Stojan e pročel* (the perfect form of the perfective aspect) *knigata* (definite article) 'Stojan has read/must have read the book', he lands on *Experiences* after having decoded the explicit parts of the utterance and has to make the rest of the tour on his own, i.e. via *Informations* and via *Situations* back to *Experiences*, but now in a completely other position, because he has drawn all possible pieces of information out of the utterance in question. The Bulgarian grammar explicitly informed him about the speaker's experience of a certain situation, namely that Stojan knows the content of the book in question and therefore must have read it. In other words, the speaker informs the hearer that he commits himself to the truth of the entire propositional content, although he only experienced q, the state, and not p, the activity. But the hearer does not know the information status of the utterance and its parts as well as the specific roles carried out by the participants of the

situation referred to, for instance, which activity Stojan actually produced – did he read the book or did he listen to a tape of the book? Or was he told about the book by a friend? These things are totally left out by the Bulgarian grammar and it is therefore to the hearer to find out. The same applies to an English hearer when he is confronted with the utterance *John has read* (present perfect) *the book* (definite article). He lands on *Informations* and therefore has to localize the specific book in his mind before he can try to identify its local existence in reality. It is also to the hearer to find out whether the speaker actually saw or did not see John reading the book. This is so because unlike a Bulgarian utterance the English one does not explicate information of that type. Therefore the English hearer has to take the rest of the tour on his own, from *Informations* via *Situations* and via *Experiences* back to *Informations* in order to make the final interpretation of the utterance, where the different parts are put together.

Let us return to the utterance *Bush and Blair stayed in Iraq and the violence got worse*. Because English is a hearer-oriented language the speaker transformed his knowledge into information bites. The utterance in itself gives the hearer only a vague feeling of what is really at stake. Taken as a model of a situation it could only mean that Bush and Blair actually stayed in Iraq. Taken as a symptom of the speaker's experience it could only mean that the speaker actually saw Bush and Blair in Iraq. But taken as a signal to the hearer to find the situations behind the message it is multiambiguous, if – and this is crucial – it had not been the case that the hearer knows who Bush and Blair are and is fully aware of the situation in Iraq. This was anticipated by the speaker. By combining old information with new information the hearer concludes that the American and British troops in Iraq were ordered to remain there by their respective leaders, i.e. Bush and Blair, after some hesitation, and as a consequence of that decision the violence got worse. The last part of the interpretation may be wrong, because the utterance is completely open in that respect. Finally, the English hearer will probably conclude that the situations included in his interpretation were not witnessed by the speaker – had they been witnessed by him, the utterance would not have sounded *Bush and Blair stayed in Iraq and the violence got worse*, but *The American and British troops*

stayed in Iraq and the violence got worse.

The point is that grammar seems to help the hearer with one thing out of three possible ones – the two things that are left out by the grammar are, however, compensated for by the hearer himself. This may explain why, surprisingly enough, languages change all the time. A thousand years ago Old Russian was like Modern Danish, i.e. a hearer-oriented language with simple and compound tense forms and with an article distinction, and 700 years ago Old Danish was like Modern Russian, i.e. a reality-oriented language with aspect, mood and case (all categories are lost). By focusing on the parts that are ignored by the grammar of a language, the hearer constantly combine old expression units with new content units – tense forms carrying new and old information are combined with situations; aspectual forms expressing different kinds of situations are linked to the speaker's experiences or lack of experiences; and submodal forms giving witness to the speaker's experiences are associated with new and old information to the hearer. In that way everyday communication constantly creates innovations in a speech community. These innovations will eventually go together and form a supertype shift in the long run (cf. Durst-Andersen 2006).

8. Concluding and summing up

The article started by pointing to fundamental problems with Sausure's sign conception and with Bühler's Organon Model which remained unnoticed up till now. Saussure (1916) claimed that the relation between the signifier and the signified is arbitrary without even trying to ask the question "For what reason?", although the design feature distinguishes human languages from all other communication systems. My point was that its arbitrariness makes its arsenal of words omnipotent and capable of referring to anything – in opposition to non-verbal communication systems which are always restricted in use due to the indexical and iconic relationship between content and expression. Because of its arbitrariness language must possess a code, i.e. a grammar, that can give a semiotic direction to the otherwise completely static sign or lend a voice to the otherwise entirely mute sign. Without a grammeme the linguistic sign, the

lexeme, would be helpless, because it is totally static. Lexemes need a vehicle, i.e. a code or a grammar, that as a prime index can give a semiotic direction.

Bühler taught us about the representative, the expressive and the appeal functions of language, but neither he nor anyone else ever asked about the very function of the code itself in communication. In his attempt to explain the three language functions in semiotic terms Bühler failed to keep important levels apart from one another. It was argued on the basis of Peirce (1932) that symptoms and signals are both indexes, whereas symbols are not. Furthermore, it was argued that unlike the lexeme a sentence does not function as a symbol of a certain state of affairs, but as an index of a situation. I removed the wrongly placed *symbol* in Bühler's triad and replaced it by just another index, and we got the indexical triad: model (firstness), symptom (secondness) and signal (thirdness). This allowed us to conclude that the grammar of a language turns its embedded symbols, i.e. verbs and their subordinated nouns, into (1) models of situations in reality, (2) symptoms of the speaker's experiences or (3) signals to the hearer to find the situations behind the messages. In other words, because there are three obligatory participants in a communication situation, there are three possible targets of semiotic direction: (1) situations in reality, (2) the speaker's experiences of these situations, and (3) information to the hearer. Information was defined as the linguistic result of the speaker's comparison of his own memory of the experienced situations with that of the hearer – if there is a sign of equality between the speaker's and the hearer's memory, the result will be old information, if there is not, the result will be new information. Because Bühler's *states of affairs* have three modalities of existence in a communication situation, viz. situations as such, the speaker's experience of them and the hearer's experience of them, the speakers of a certain language must agree what they want to talk about. Therefore they must make an obligatory choice between them. This was demonstrated by the so-called Grammatical Triangle, i.e. the speaker's model. Hence, a grammar will be either *reality-oriented*, *speaker-oriented* or *hearer-oriented*. This means that many languages differ fundamentally from one another – not only with respect to grammatical inventory, but certainly also with respect to the way they function in oral and

written discourse.

Whereas the speaker's model requires an obligatory choice between the three modalities, the hearer's model necessarily involves all three. The hearer knows that any utterance in any language involves situations in a real or in an imagined world, the speaker's experience or non-experience of them as well as new or old pieces of information to himself. The hearer seems to use his model as an *information seeker* in order to compensate for those pieces of content that were left out by the speaker's choice of semiotic orientation. This was shown in the Semiotic Wheel – the revised version of Bühler's Organon Model made dynamical or, to put it differently, made apt for communication.

The main conclusions of this paper are straigth forward. First, the science of linguistics was never driven as a semiotic science. Its growth as a semiotic science was not facilitated, but hindered by Saussure's claim that the linguistic sign is arbitrary. People concluded that because the relation between content and expression of the sign is arbitrary, its way of expressing it is not significant at all. Secondly, communication science was never driven by focusing equally on the three participants of a communication situation. It was almost exclusively centered on the hearer, whereby the crucial choice of speaker voice was ignored. By including the speaker as well we made a serious attempt to reach the true level of the dialogue (cf. Bachtin 1994 [1929]).

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