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The issue of theorizing: Object-of-study and methodology

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1. Introduction

The twentieth century gave us prominent linguists with an enormous influence on our understanding of language and scientific research on it, such as Ferdinand de Saussure, Noam Chomsky, and William Labov. However, a more characteristic feature of linguistics, especially during the last decades of the century, was the appearance of manifold approaches to language. William Kretzschmar (2009: 6) speaks of a 'marketplace, in which ideas about language are promoted and accepted, bought and sold'. Some of these directions have a common research ideology gathering scholars under a large umbrella, such as functional and cognitive linguistics. Some are scientific schools with a shared theoretical foundation such as generative grammar (and the minimalist programme), constructive grammar, and relevance theory. Some call on researchers to share a certain methodological tool, such as conversational analysis, discourse analysis, or corpus linguistics. Some pay attention to various neglected sides of language, such as variation studies or pragmatics.

Linguistics has also faced a shift of its object. There have always been linguists with different interests and orientations, but if we look at mainstream research it is easy to see a certain transition in research objects. The development has gone from small units to larger ones, first from phonetics and phonology to morphology and then to syntax. During the last two or three decades, more and more attention has been paid to units larger than the sentence (or utterance), to texts and dialogues.

Research on oral discourse and its prototypical format, dialogue, has been the main area of expansion of linguistics during the last thirty years or so. We know much more about the rules governing the conduct of dialogue now than a generation ago. Despite this intensified interest in dialogical speech, one can still claim that linguistics suffers from a 'written language bias', as Per Linell puts it (Linell, 1998; 2013; see also Marková, 1983). Various features of dialogical speech have been described with a high degree of precision, but this has had very little influence on our common understanding of what language is. Grammar and other general descriptions of languages are, as a rule, still based on written texts or on our notion of what a language should be.

Despite (or because of?) intensified language studies, linguistics still lacks a shared understanding of the object of research (Kretzschmar, 2009: 6; Weigand, 2011: 544). There are numerous competing camps with their own approaches and theories, and their adherents seem hardly to understand each other. This can be seen as richness and as a sign of the vitality of the field, but on the other hand the methodological and theoretical pluralism has had negative consequences for linguistics, which has proceeded slowly as a research field. It also makes it more difficult for linguists to find a common voice when this is needed for advocating language studies as a most relevant area of research.

The poor visibility of oral discourse in our understanding of language and the insufficiency of research tools in this field is paradoxical, because according to the famous Russian language philosopher Mikhail Bakhtin, everyday conversation is a primary genre while novels, scientific texts, and other 'organized cultural communication' are secondary genres (Bakhtin, 1986). For the epithet *primary* one can see two explanations. In human history the primary genres have developed first; as a matter of fact, they were for millennia the only format of language that human communities had. From the contemporary point of view, one may argue that dialogue still represents the natural form of a language, while written genres are artificial constructions. Nevertheless, grammar books, which are commonly conceived as 'official' descriptions of languages, are generally based on the genres named by Bakhtin as secondary.

Another relevant point is that every child learns its first language at home from its parents. Then at school the child has a subject called 'the mother tongue' which is, in practical terms, a foreign (non-native) language for him or her (Zemskaja, 1987: 4). It takes years of intensive work to learn this language form, which differs substantially from the real mother tongue the child has learnt without deliberate instruction.

The aim of this chapter is to elaborate the mystery of the essence of a natural language: what is language, and what kinds of evidence can we apply in describing language(s)? The first question is philosophical or ideological, the second methodological. We will start by considering the dichotomous nature of language.

2. Dichotomy of language

Even for a layman it is easy to understand that language has two states, two forms of existence. On one side, it is something that is 'located' in our minds as a potential, an inventory and an ability. On the other side, it can be heard and seen as a product of human activity. Using the vocabulary of contemporary technology, one can speak of *offline zlanguage* and *online language* (Kibrik and Koshelev, 2015).

These two states of language are closely interlinked. A child creates offline language on the basis of his or her experience of online language. Then, in learning the standard form of the mother tongue, he or she acts in the opposite way by trying to apply a set of memorized rules to speech production. The offline language is useless without its online implementation, and the online language makes sense only in interaction between people who have mastered a similar enough offline language.

Despite the close relationship between offline and online forms of language, they differ from each other in many essential ways. Offline language can be regarded as mental, abstract, and more or less stable; by its nature it is a code. Online language can be regarded as physical, concrete, and different in each communicative situation; it is a message.

There have been several attempts to conceptualize the dichotomous character of language. Three of these have had the strongest influence on linguistic ideology. Wilhelm von Humboldt saw in language two sides, *ergon* (product, Werk) and *energeia* (activity, Tätigkeit) (Von Humboldt, 1936: LVII). Ferdinand de Saussure launched the concepts of *langue* and *parole* (De Saussure, 1995). Noam Chomsky made the distinction between (linguistic) *competence* and *performance* and articulated very clearly that linguistics is about studying competence (Chomsky, 1957). The discussion around these concepts still continues, but it is not necessary to go into its details here. Instead, it is important to point out that the idea of seeing dialogue as the crux of language started with von Humboldt but then disappeared for several decades (cf. Habermas, 1991, McLuskie, 2003). Now we are witnessing a rebirth of this kind of thinking.

3. The question of the norm

'Norm' is not a common term and concept in theoretical linguistics. Many researchers associate the word with the standardization (codification) of a language and place it beyond the scope of their interest, among the concerns of applied linguistics. However, as will be shown below, the whole existence of language is based on the idea of conventions and norms within a certain community. A speaker will not be understood if the phrases he or she produces are not in concord with the linguistic tradition of that community. Some deviations from the norm are possible, but they cannot totally break down the frames given by the norm.

What we usually mean by speaking of the norm of a language is the *official norm* which is presented to native speakers on a 'top-down' basis and concerns mainly the written form of language. It is connected to the notions of 'standard language', 'literary language', and 'codification of a language'. The idea for linguistic normalization is closely linked to the idea of a nation state, the establishment of which led to the need to rule and educate citizens by distributing information to them (Taylor, 1990; Gal and Irvine, 1995). Most languages of the world have no literary (standard) form; thus, they do not have an official norm. Nevertheless, they have a *collective norm* which is built 'democratically' by unconscious agreement among the people of the linguistic community. The notion of a collective norm is relevant even in those countries where people receive intensive instruction in the standard language at school, because native speakers' impressions of the correctness of linguistic units are not equal to the official norm (Mustajoki, 1988, 2013a). Linguists may be involved in the codification of a standard language and they may study the history of this process, but it is the collective norm, people's common understanding of language, which is a reasonable source for evidence in studies where the correctness of linguistic units is a focal criterion.

(Collective) linguistic norm is a general context-free notion. Its main components are grammatical, lexical, and phonetic norms. The ability to determine that *cows* and *sheep* are correct plural forms, but *sheeps* is not, is an important constituent of the grammatical competence of a native speaker of English. There is nothing but the collective norm to determine that we should say *How do people comment on this?* instead of saying *How people comment about it?* Every language has created its grammatical regularities and pronunciational traditions through a centuries-long complicated process.

However, as noted by Dell Hymes (1972), and then repeated and expanded by other researchers (see review in Bagarić and Djigunović, 2007), other competences are also needed in human interaction. Constituents of communicative competence have been labelled by various names: sociolinguistic, discourse, strategic, organizational, pragmatic, and other competences (cf. Allwood in this volume). All of these abilities of speakers (and recipients) deal with socio-pragmatic norms of the linguistic communication goes wrong. A child may break a sociolinguistic norm by saying *Why does that woman have such a big tummy*? In order to cover such features of well-formed conversation, we use the concept of *situational norm*. Here again the concept of a norm is not typical of linguistic discourse, but by using this term we emphasize the societal aspect of the phenomenon: it is the speech community that determines which kind of language usage is acceptable, appropriate, and fitting in various communication situations.

In order to launch a further element to our understanding of the essence of language, let us apply the term and concept *usus* put forward by Louis Hjelmslev (1942). It is based on what is common and frequent in speech. Talking about *usus*, we do not care about

acceptability or correctness; it is a statistical generalization of linguistic material produced by speakers and thus reflects the communication habits of people. So, *usus* is the statistical generalization of online language. Usus can be retrieved only by analysing linguistic material produced by speakers (see Bondi in this volume).

For understanding the way that language works, one more constituent is needed. We call it *pattern*. It helps us to create new linguistic units on the basis of the intuitive knowledge of language that we have acquired. When we heard the English word *vlog* for the first time, we could immediately build the plural form *vlogs* due to the analogy pattern we have in our minds. In a similar way, we use our pragmatic knowledge when we find ourselves in an unfamiliar communication situation. An inexperienced car buyer tries to cope with the situation by comparing it with the patterns (scripts, scenarios) he or she already knows about other purchase actions. Although pragmatic patterns differ substantially from those in grammar, the basic mechanism is the same: speakers creatively expand their linguistic capacities in order to be effective and successful in communication. These patterns are realized in communication situations, but they exist as a hidden potential and reservoir all the time.

The Table 1 highlights the basic features of the concepts presented above.

langue / competence	PATTERN COMMAND	language in offline mode	potential of language	context-free language	non-statistical approach
	COMMAND OF BASIC LINGUISTIC NORM (grammatical, lexical, phonetic)		realization of patterns and potential for the use		
	COMMAND OF SITUATIONAL NORM			language in context	
parole / performance	USUS	language in use (online mode)	realization of language		statistical approach
	LINGUISTIC MATERIAL				concretization

4. Linguistic methodology: general questions

A focal and distinctive feature of any kind of scientific research is the use of methods recognized and accepted by the research community. The methods employed count as evidence for the findings and arguments that researchers want to distribute to their colleagues. Natural sciences strive for exact methods, which are objective in the sense that every researcher who uses them gets the same results. An example of this is the double blind method used in drug research. This means that the nurse giving a drug and the patient taking it do not know whether it is a real drug or an empty one. In this way, it is possible to exclude subjective elements and concentrate on the real effect of chemical constituents of the drug. This kind of hard evidence can be seen as an ideal of proper scientific research.

However, even in medical research a strict demand for such methodology leads to situations where relevant treatments are ignored. It is impossible to use the double blind method when psychiatry or physical exercise are used as a treatment. In the humanities and

social sciences, the use of strict methods is even more problematic. In history studies, researchers use historical documents as evidence, but at the same time they have to perform source criticism that brings subjective elements into the picture. This means that researchers may arrive at different conclusions based on the same material. Among sociologists there are two camps as to the methodology of their field of science. Some swear by quantitative methods as the only acceptable way to conduct research, while others argue that the essence of societal phenomena may only be captured if qualitative methods are employed. Thus, methodological pluralism is quite a normal situation in the Social Sciences and Humanities.

In linguistics, the question of evidence-based methodology and an endeavour to imitate the natural sciences can lead to extreme statements, such as this one made by Noam Chomsky in an interview:

'Corpus linguistics doesn't mean anything. It's like saying <...> suppose physics and chemistry decide that instead of relying on experiments, what they're going to do is [to] take videotapes of things happening in the world and they'll collect huge videotapes of everything that's happening and from that maybe they'll come up with some generalizations or insights. Well, you know, sciences don't do this' (Andor, 2004: 97).

As a matter of fact, Chomsky is mistaken in two things (Kopotev and Mustajoki, 2008: 9-10). First, physicists also go outside their laboratories and measure, for example, aerosol particles in the air. Second, in physics researchers making experiments reach the same results regardless of who is conducting the experiment. When 'armchair' linguists make experiments based on their linguistic intuitions, they may end up with different conclusions.

Although one may argue that linguistics is somehow closer to the natural sciences than some other humanities fields, it still lacks a common agreement on the methodology dilemma. It is therefore worth stopping to consider why this question is so difficult to solve in linguistics. One reason for this is the circumstance described above: the research interests of linguists are divided between the apparatus which stands behind speech and communication (offline language) and the actual use of language (online language) (cf. chapters by Kempson and Weigand in this volume). If there is disagreement on the object of study, it is evident that it is hard to reach a consensus in methodological questions. This discrepancy becomes even less solvable due to the fundamental difference between these objects of study: one of them is by its nature mental (psychological), while the other is social. These two areas of research require very different approaches and methods.

5. Linguistic methodology: language-oriented research

Now we turn to the concrete question on linguistic research methodology by differentiating two approaches. First we consider this issue in the framework of what we call *language-oriented* research; then we launch an alternative approach, *communication-oriented* research, and examine methodology from that point of view.

Strictly speaking, the methodology of language-oriented research should be a rather simple issue. If you are interested in the correctness and acceptability of linguistic units, as many linguists still are, you should turn to the intuitions of native speakers. If you are interested in language use, you should observe, collect, and analyse linguistic material produced by people (full lines in the figure 1). However, in practice the situation is much more complicated because there are also indirect ways of obtaining evidence on these matters (dotted lines) (cf. Penke and Rosenbach, 2004: 487-488).

The objects and aims of research are expressed in the form of two questions. One of these reflects the idea of *langue*, while the other is connected with the concept of *usus*, which is a statistical generalization of *parole*.

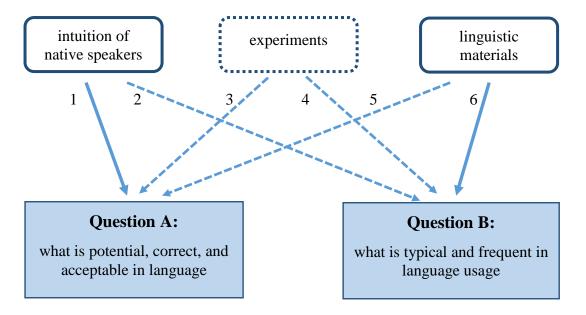


Figure 1. Source of information in linguistic research (the two states of language, 'langue' and 'parole')

A linguist aiming to describe what is potential, correct, or acceptable in language relies on the intuitions of native speakers (line 1). Correctness and/or acceptability may concern linguistic units of any level: pronunciation, semantics, morphological forms, syntactic structures, components of a dialogue, etc. The person taking a stand on this can be the linguist him- or herself, or a larger group of informants who are asked to take part in this kind of test. When the informant is the researcher him- or herself, the process of making assessments about linguistic units may take place intuitively without conscious reflection. When turning to informants, the questions should be well formulated. If a linguist is interested in the government of English nouns, he or she may ask: *Which of the following options do you regard as correct*. An alternative formulation is *Which of the following options do you regard as acceptable*. These questions are context-free, which means a basic linguistic norm approach. Similar questions may be linked to a certain genre, situation, or action game, e.g. *In your opinion, which of the following options is correct / the most appropriate* **a**) *in a written document of the department;* **b**) *in an oral presentation by the head of the department*.

disagreement over the strategy of the department disagreement on the strategy of the department disagreement about the strategy of the department

For a linguist interested in *usus* (language usage), the main source of information is naturally linguistic material (line 6). Electronic corpora are nowadays widely used in linguistic studies with various objectives (see Bondi in this volume). As a matter of fact, corpus methods appeared in linguistics much earlier than it was possible to employ electronic corpora (McEnery and Wilson, 2001: 2-4; Dash 2008).

Despite the rapid growth of linguistic corpora, the linguistic data that researchers have at their disposal covers only a tiny fraction of the whole existing language production. Oral discourse is particularly poorly represented.

'I don't think there can be any corpora, however large, that contain information about all of the areas of English lexicon and grammar that I want to explore. <...> (but) every corpus I have had the chance to examine, however small, has taught me facts I couldn't imagine finding out any other way' (Fillmore, 1992: 35)

After considering the primary sources in linguistic research, we now turn to secondary ones, described in Figure 2 by dotted lines. Line 5 denotes the case when linguistic material is used in answering Question A. This method is sometimes used, although *usus* does not directly reflect what is correct in language. Traditionally, researchers try to eliminate this discrepancy by using carefully selected linguistic sources, mostly written texts by well-known writers. Because the language of any writer also contains some incorrect linguistic units, researchers apply special 'filtering', eliminating linguistic units which are incorrect from the point of view of their intuitions.

Line 2 demonstrates the opposite case where tests based on intuition are used in exploring how people speak. Here informants are not asked to reveal their opinions about the correctness of linguistic units, but about their potential uses, e.g. *Which preposition would you prefer when using the following construction: disagreement* _____ the strategy of the department. Informants are capable of answering such questions, but it is quite another thing whether their answers reflect the real usage of these constructions in their authentic speech.

Lines 3 and 4 refer to the use of experiments in linguistic research. Referring to intuition is sometimes also regarded as an experiment. It is true that linguists may test hypotheses in this way. However, in most cases such processes take place automatically without strict design or arrangement. We understand by experiment specially organized conditions where informants conduct previously planned tasks and/or are subjected to neurophysiological measurements.

6. Communication-oriented research

Now we turn to a wholly different approach to language where attention is paid to the actions and processes that take place in concrete communication situations. The communicants bring into the situation their whole personalities with certain communicative capacities and goals of action. The environment where the communication takes place is an important factor as well. When having such a communication-oriented approach, a linguist is interested in quite different phenomena from those that the language-oriented approach focuses on.

For understanding the constituents of a communication situation, we have to take into account the motivational stances of interlocutors. Evidently, when taking part in a dialogue, they have some communicative aims, intentions, and needs. In order to cope with these communicative needs, they apply their (basic) linguistic competence, system competence, and situational (norm) competence. A good term for the ability to do this is *competence-in-performance*, launched by Edda Weigand (2003, 2004, 2010).

We examine the communication situation in Figure 2 from the point of view of the speaker. The recipient (listener) takes an active role in communication as well, but for reasons of simplicity we concentrate here on the role of the speaker. Any communication process consists of choices. The first choice of the speaker is to decide whether to take part

in communication or just to leave the situation. After deciding to participate in interaction, the next step is to find a linguistic (or other) way to do so. Our thoughts are usually rather sketchy ideas and it is not always obvious how to transfer them into words. In most cases, the speaker may choose between various expressions denoting the same state of affairs. Sometimes the options available reflect a scale of directness or politeness, cf. *Wash the car, Would you please wash the car, The car needs washing, The car is dirty.* In addition to deciding *what* to say, the speaker also needs to decide *how* to say it – with a nasty or friendly tone of voice, shouting or whispering, with determination or with caution.

As a rule, the speaker makes the choices about what and how to say automatically, unconsciously. However, we are not dealing with an engine, but with a complicated and complex human process. One could think that this is too demanding an object of research to be approached through scientific methods. It is, however, worth comparing this with cancer research. Scientists will never uncover all the secrets of the mechanisms causing cancer. Nevertheless, it is reasonable to try, step by step, to understand some of the factors influencing the process. The same concerns communication as an extremely complex object of research.

On a larger scale, the factors playing a greater or lesser role in the choice of utterances are: the speaker's linguistic capacity, his or her mental world, communicative needs, other possible needs, and the circumstances where communication takes place. Let us look briefly at these factors.

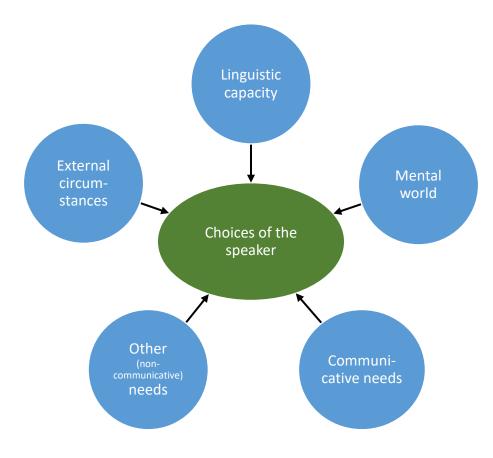


Figure 2. Main constituents influencing the course of communication

At a general level the linguistic capacity of communicants varies a great deal. There are substantial differences, among others, in the amount and content of vocabulary, in the ability to use various syntactic structures, and in the ability to implement different communication tactics. Much more variation is seen when we contemplate different communication situations. Some people excel at delivering talks, others are good at small talk and social interaction. We all have some subject areas (profession, interests, hobbies) where we feel comfortable and others where our ability to conduct normal communication falls almost to zero.

Basic linguistic competence (cf. Table 1) forms the foundation of our linguistic capacity. In all communication situations and action games, we have to master, at least to some extent, the main constituents of speech: knowledge of a certain amount of lexical units adjusted to the context, ability to build larger linguistic units by organizing lexical units in a line, ability to pronounce words and utterances, and an understanding of the rules of constructing texts and dialogues. From the communicative point of view, in most types of action games a full command of these competences is not needed. Extracts from people's normal everyday conversation and research on English as a lingua franca show that substantial deviations from the correct (normative) language do not harm the smooth course of conversation in any way; they sometimes even make it more effective.

Pattern knowledge and ability to use it in communication vitally expands our communicative opportunities. It adds to our capabilities a creative component, which enables us to produce and comprehend utterances that we have never heard or seen before. One may think that this is a capacity which is essential for writers or public speakers, but it is also a relevant part of everyday conversation.

Situational (norm) competence is a crucial element in successful communication. It includes appropriate genre and register design to be effective and understandable in conversation. To write a blog is quite a different task from writing a scientific article. The norms of conducting dialogue in everyday conversation at home differ very much from those in business negotiations or public political debate. These differences concern general features of building utterances (syntax), rules of turn-taking in dialogue, feedback mechanisms, and the need and possibility of using repairs and asking for clarification.

A salient constituent of situational competence is the speaker's ability to conduct *recipient design* by adapting their speech to the recipient (audience) present in the communication situation. The importance of recipient design in the course of communication has been shown by Sacks and Schegloff (1979) and subsequently by many others.

Linguistic capacity is one part of our *mental world* (Figure 2) (Mustajoki, 2012, 2013b). Our cultural backgrounds, like our linguistic capacity, are based on our personal histories – what we have seen, heard, and experienced until the moment of communication. This part of the mental world has been a popular topic in research on intercultural communication (e.g. Banks et al, 1991; Bürig and ten Thije, 2006), but it is an important factor in any kind of communication. This information is manifested in presuppositions, stereotypes, scripts, mental sets, scenes, schemas, and mental models. There are also some situational constituents of the mental world which affect speech production and comprehension: what the communicants have just experienced, what their mental and physiological states are (whether they are tired or fresh, calm or overheated) and what their attitudes are towards other communicants. Mental world is an essential background factor in communication because it affects the way the communicants outline the communication situation and the themes that are touched upon during the conversation.

When we take part in a conversation, we have some *communicative needs* including conscious or unconscious intentions, hidden agendas, and overt or covert aims. We may just want to say something about the surrounding world or about our feelings, or talk about

our future plans. We may aim to compliment, flatter, thank, hurt, insult, or humiliate the person(s) we are talking to. Or we simply want to make contact with another human being.

Besides primary communicative needs, the communicants may also have other aims in taking part in communication. When people do something in company, they often have an unconscious *need for self-presentation*: they want to be regarded as smart, intelligent, and humorous. This may lead to language use which, from the communicative point of view, is impractical. The speaker may succumb to trendy or sophisticated vocabulary although he or she knows that the recipient may not be familiar with it (cf. Mustajoki, 2015: 554-555).

One more factor that has a significant influence on people's behaviour in communication is the need *to avoid cognitive efforts*. This is difficult to recognize in the normal course of a conversation and may therefore seem a meaningless and irrelevant consideration. However, several experiments have shown that this factor dictates human activities in many ways (Bargh and Chartrand, 1999; Shintel and Keysar, 2009) The capacity of the brain to handle information unconsciously is huge, but for conscious operations it is very limited. This is why we spare our cognitive efforts whenever possible. In communication this means a diminished level of concentration on speaking and listening. In speaking it leads to careless choice of utterances and unclear pronunciation; in listening, it is even possible to switch off totally. This is an evident risk for misunderstanding and failures in communication

External circumstances sometimes make interaction onerous. A vacuum cleaner at home, music in a disco, or traffic noise in the street may be serious hindrances for understanding speech. The speaker could overcome these problems by speaking more loudly, but the volume needed for proper interaction is often so high that the speaker underestimates the voice level needed.

We have considered the main factors influencing the course of communication. Now it is time to look at the methods that are needed in studying them.

7. Linguistic methodology: communication-oriented research

In section 5, we considered methods that can be applied in language-oriented research when a linguist tackles the questions, what is potential, correct, and acceptable in language, on one hand, what is typical and frequent in language usage, on the other. If a researcher (you may call them a linguist or something else) tries to understand and describe communication by answering the questions what is the communicative capacity of the speaker and what happens in the interaction, a different methodological package is necessary. The main difference between these orientations is the general level of the study. A language-oriented researcher tries to identify features and constituents of a communication tool that is 'owned' by a certain community of speakers, while a communication-oriented researcher focuses on a situation of communication and aims to unravel the secrets of that complicated process. As discussed in section 6, this, as a rule, requires crossing the boundaries of traditional linguistics.

Let us first define the objects of research in a more concrete way. As we are interested in communication, it is evident that what happens in the interaction is a focal theme here (Question D in Figure 3). If one wants to find an approximate equivalent for this in the history of linguistics, the closest candidate is Humboldt's *energeia*. As demonstrated in Figure 2, there are many more influencing factors than in Humboldt's concept, but as a whole the idea is the same. A further object of research to be tackled is the communicative capacity which the speaker and other interlocutors bring into the situation, as described in Figure 2.

The two issues researchers try to study, the communicative capacity of the speaker and the course of interaction, have an analogous (but not totally equal) relationship, as between Questions A and B in Figure 1. Question C represents the potential which is available for fulfilling communicative tasks and Question D the realization of this potential.

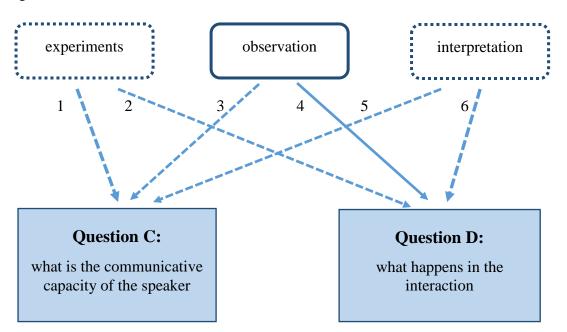


Figure 3. Source of information in communication-oriented research

We start by examining Question C. It is important to understand that the focus here is not on a certain language per se, but on the communicative capacity of an individual speaker. Consequently, every communication encounter is different in this respect: speakers have different vocabularies, different sets of favourite syntactic structures, and different knowledge of culture and environment. To be precise, one may even argue that in every particular instance the same speaker has a capacity which differs slightly from previous situations because the speaker's most recent experiences are at the forefront of their mind.

There are only indirect ways to study people's communicative capacities. One option is to turn to native speakers and ask them whether they know certain linguistic units or not. The results of this kind of study are based on speakers' subjective impressions about their linguistic capacity. It is clear that informants' opinions do not reflect reality on a full scale. Other options for studying linguistic capacity include tracing the reactions of the informants' brains to verbal stimuli by means of magnetoencephalography (MEG), eye tracking, or other technical devices.

Similar techniques could be utilized in studying other parts of our communicative capacity, e.g. to find out what people know about the world and how they see it – both factors influencing interaction. Our knowledge reservoir consists of thousands of facts, and each of us has a personal package of them: the capital of Nigeria, the latest hit of Lady Gaga, the name of a particular species of tree, and essential features of nature, the human body, or society. It has been shown that there is also cultural variation in seeing the world. According to dozens of studies, the Western type of thinking is more analytic and the East Asian type more holistic (see Nisbett et al., 2001 and literature there). These differences influence, among others, what people see in pictures: the holistic approach pays greater

attention to the background, while the analytic approach concentrates on active objects and their movements. This affects the way people understand each other when they meet.

Quite another method of tackling these questions would involve observation and recordings of authentic communication situations. It is obviously a 'mission impossible' to record all the linguistic production of a single speaker. It is an enormous task even to record a speaker's daily production, as has been done in the 'One speaker's day' project (Sherstinova, 2010). Such recordings of real speech reveal to us important features of human interaction, but they still cover only a small part of a person's communicative capacity. In applying such an approach, we are dealing with a potential which *can be realized* in communication but has not necessarily *been realized* yet. One can compare this with the situation in language-oriented research: corpora can never encompass the complete linguistic reservoir that people possess.

Question D, to understand and describe all the factors influencing the course of interaction, is a huge task for the whole research community. Within the framework of the action game theory, researchers approach the question as a unitary phenomenon which consists of various elements but makes up a single object of research.

A possible approach to Question D is to scrutinize causes of misunderstanding and failures of communication. i. e. situations where the recipient understands the message in a different way from what the speaker meant (Ryan and Barnard, 2009: 45). For researchers tackling this problem, it is not enough to describe authentic conversation extracts of this kind; they must also try to explain why communication failure takes place. In studying this question, one may apply explanations of various levels.

To illustrate such an interpretative approach, let us consider one of the basic characteristics of language, namely ambiguity. The first observation is that cases of syntactic ambiguity, as in the classic example Visiting relatives can be boring (Tyler and Marslen-Wilson, 1977), are in most cases resolved by two factors: 1) the mental worlds of the communicants give the same interpretation for the phrase; 2) in the context, there are certain deconflicters which help to eliminate wrong alternative interpretations (Kibrik, 2011). The same is true with regard to referential ambiguity, as in Tony Blair shook hands with George Bush in the White House. He wanted to discuss the situation in Iraq (Järvikivi et al., 2005). In studying such cases, we encounter the limits of experiments. In real communication situations, occurrences of this kind do exist but are usually harmless. From the point of view of successful interaction, other types of ambiguity are more important, e.g. those referring to something that is not mentioned in the context (Bring me the document tomorrow, It was really hot in there). Indirect speech, producing phrases which can be interpreted in various ways, is also a permanent risk for successful communication: is the phrase *The car is dirty* a statement or a request? In everyday interaction people often meet situations where the real intention of the speaker is open. What does the speaker want to say by telling us that Linda went with John to the football match if Linda hates football but fancies John?

Ambiguity as such is seldom an explanation of communication failure. Even when it seems to be the triggering factor, the real cause of misunderstanding is in fact improper recipient design, which leads us to move on to the second level of explanation, which is any more purely linguistic. By conducting proper recipient design, the speaker may avoid any kind of miscommunication (Mustajoki, 2012: 230).

The next level of explaining communication failures is to try to find out why recipient design fails. There are several possible reasons for this. First, people are often not aware of how they actually speak (Eplay, 2008; Keysar and Henly, 2002). Second, because of

egocentric thinking, people do not always realize that recipient design is needed (this is known as the common ground fallacy) (Keysar, 2007; Mustajoki, 2012). Third, the speaker may be in a state of strong emotion, tiredness, etc., which hinders a normal course of conversation. Fourth, the speaker may be thinking of something else rather than being fully present in the situation. And finally, speakers sometimes try to conduct recipient design but are not skilful enough to do so. Another important background factor is avoidance of cognitive efforts, a mechanism of that was described above.

8. Methodology-driven research vs. phenomenon-driven research

Finally, we try to take a broader look at the development of linguistics in recent years. Edda Weigand has claimed that linguistics moves from searching for 'the simple' towards challenging 'the complex' (Weigand, 2004: 3), or from 'reductionism' to 'holism' (Weigand, 2011). Approximately the same idea is introduced in Istvan Kecskes's 'sociocognitive approach' (Kecskes, 2010). As a matter of fact, what we see in linguistics is part of a larger development in the academic community.

There are two big lines which lead to a rethinking of knowledge production in research. One of them is connected to the need for an increased societal impact to be made by science. There are two major driving forces behind this. There is huge pressure from decision-makers who finance research to see a closer link between the work done by academia and economic growth. In this context multifarious concepts are used (see in details Hessels and van Lente, 2008): among others, 'Mode 2' research, 'Academic Capitalism' and 'Enterprise University'.

Another trend in science policy is a new approach to priority areas of research. For a long time, they were determined on the basis of disciplines such as nanotechnology, cancer research, or material sciences. According to the new doctrine, priorities are determined as grand challenges or wicked problems. Usually the list of these consists of such phenomena as climate change, energy supply, and the ageing of the population. The list compiled by the Academy of Finland (2011) also includes the themes of 'knowledge and know-how in the media society' and 'dialogue of cultures'. As a matter of fact, linguistics and communication studies should be one of the priority areas of research because contemporary societies and international trade and relations are totally based on the ability to understand each other. We, as linguists, should take part in solving this problem. This and other grand challenges cannot be met solely by the efforts of researchers in one discipline. Therefore, a multidisciplinary approach is often necessary.

The factors mentioned above concern general developments within science policy. However, the need to rethink research objects and methodology can also be seen as a consequence of the stage that the academic world has reached by intensive research. Research is more and more fragmented into small subfields. Knowledge has become deeper and more detailed, and the risk of losing a larger picture of complex phenomena has increased.

We will now consider how these trends influence the general ideology of research. In this connection, it useful to differentiate *theory- or method-driven* research on one side, and *phenomenon-driven* on the other. In a theory- or method-driven approach the starting point of the researcher is a certain theory or method which, in his or her opinion, is the best way to find out something important and new in the object of research. When working in such an environment, a researcher applies the chosen theory or method to more and more objects. Such a subfield has a strict vocabulary and commonly accepted rules in doing

research and reporting its results. The theory or method itself may be developed little by little, but its basic elements remain untouched. The working mechanism of the research community applying this approach seems very science-like. The results that are reached are exact and easily recognized by other researchers subscribing to this theory or method. For researchers of other schools and directions, it may be difficult to follow the chain of argumentation.

There are, of course, certain observations by researchers which have stimulated the development of the theory. However, after its creation the theory places strong limitations on the results that can be achieved. Important elements of the essence of the phenomenon may remain outside the interest of researchers. Usually, studies like these try to answer the question *what*; the *why*-question does not interest researchers, or is answered strictly in the framework of that particular theory.

An alternative approach is phenomenon-driven research. In its extreme version, a researcher tries to find out and describe the essence of a given phenomenon, but has no clear understanding of the method to be used. Naturally, a certain methodological toolkit is needed, but it is determined by the phenomenon rather than being selected beforehand. Because various methods are needed, they often (but not invariably) lead to a multidisciplinary approach. The essence of a phenomenon can hardly be clarified without why-questions. Because the methodological basis of research is diffuse, the results may seem somehow speculative or even unscientific.

The phenomenon-driven approach works also in traditional language-oriented linguistics. We may take the case selection in Russian negative clauses as an illustration of this. The choice between the genitive and the accusative cases seems to follow some principles, but these make up a complex bundle of factors, so that the case usage seems to be rather unpredictable and unsystematic. It is possible to discover some regularities by using corpus methods (Mustajoki and Heino, 1991), but they usually reveal only some correlations between the case and various factors (of which there are about fifty). An alternative possibility is to use experiments. They can be organized in such a way that it is possible to determine the influence of one single factor (Mustajoki, 1985). There are further options for approaching the same problem, e.g. by working with informants and using the reaction time method mentioned above.

As an example of methodology-driven research, let us consider conversational analysis. It examines real authentic dialogues. The space of research it strictly limited. The linguist applying this approach takes into account only the dialogue as such and avoids going beyond it. The main aim is to describe the course of dialogue by using the precise terminology developed in this linguistic school. The why-question may arise concerning the characteristics of the dialogue itself, but not concerning the background or history of the participants. There is definitely serious theoretical thinking behind conversational analysis, but as a whole, I would regard it as a methodology-driven approach to language.

Chomsky's generative grammar may be seen as an example of theory-driven research. The theory itself has developed, having as its latest modification minimalist theory. In its original form, generative grammar tries to describe the syntax of various languages from the point of view of an ideal native speaker. It aims to show dependency structures of sentences. The theory itself does not try to answer *why*-questions, but the research results can be applied to explaining e.g. the time the human brain needs for understanding and producing sentences of varying complexity. As mentioned above, a generativist is a typical armchair linguist who denies the necessity of paying attention to language use in real situations of communication.

Grice's theory on communication stands very far from the ideas of generative grammar because it deals with language use, more specifically with dialogical speech. At the same time, there are some similarities between the two approaches in that they both view language as an ideal construction. Chomsky states this explicitly by referring to an ideal native speaker; Grice speaks of well-structured dialogues. Indeed, Grice's maxims of conversation are hardly ever followed in real communicative situations (Sarangi and Slembrouck, 1992). In the case of Grice, intuition is used to describe correctly built dialogues rather than syntactically correct sentences. Nevertheless, the general approach is the same. Grice's theory is based on the norms of building dialogues in a linguistic community, rather than on real *usus*.

9. Conclusion

Dialogue is a very complex phenomenon and it is quite understandable that there are plenty of different approaches and methods in studying it. It is unrealistic and impractical to try to reach total consensus on this issue. Instead, it is important that researchers have an understanding of the diversity of the field. Knowledge of other possible approaches to the object fertilizes research and opens up novel, sometimes unexpected perspectives. It helps us to obtain a fuller picture of the phenomenon that we are interested in.

The Mixed Game Model developed by Edda Weigand over the last two decades is an attempt to demonstrate a more holistic approach to language than previous theories (Weigand in this volume). It abandons the idea of describing the very complex phenomenon of human communication by using methods that see language and its use as a strict entity with separate constituents. Instead, she proposes a probabilistic approach. There are various action forces which determine the sequence of speech acts in dialogic action games: representatives – acceptance, directives – consent, exploratives – responses, and declaratives – confirmation. Using these characteristics, it is possible to create a dialogic speech act taxonomy. This approach could be characterized as theory-based, phenomenon-driven research. Weigand puts it this way:

A holistic theory of a natural phenomenon needs to start from the complex object and to derive methodology from it without sacrificing the integrity of the object. (Weigand, 2011: 546)

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