Petr Sgall

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in its multifarious

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Introduction

Petr Sgall (born May 27th, 1926 in České Budějovice, but spending most of his childhood in the small town Ústí nad Orlicí in eastern Bohemia and living since his university studies in Prague) is one of the most prominent Czech linguists belonging to the so-called "second generation" of the world-famous structural and functional Prague School of Linguistics. His first research interests focused on typology of languages, in which he was a pupil of Vladimír Skalička. His PhD thesis was on the development of inflection in Indo-European languages (published in Czech in 1958). He spent a year of postgraduate studies in Cracow, studying with J. Kuryłowicz. He habilitated as docent (associate professor) of general and Indoeuropean linguistics at Charles University in 1958 on the basis of his Cracow study of infinitive in Old Indian (Infinitive im Ṛgveda, published the same year). Since his beginnings, he was always deeply interested in the exceptional situation of Czech where alongside with the standard form of language there exists a form of Czech that is usually called ‚Common Czech‛ (as it is not restricted to some geographical area as dialects are) and that is used by most Czech speakers in everyday communication. In this he was influenced by the work of Bohuslav Havránek on functional stratification of Czech.

At the beginning of the 1960s, Sgall was one of the first European scholars who got acquainted with the emerging new linguistic paradigm, Chomskyan generative grammar. On the one hand, he immediately understood the importance of an explicit description of language, but at

the same time, he was aware that the generative approach as presented in the early days of transformational grammar, lacks a due regard to the functions of language (at this point we want to recall his perspicacious analysis of Prague School functionalism in his paper published in 1964 in the renewed series Prague Linguistic Circle Papers (pre-war TLCP), the Travaux linguistiques de Prague Vol. I in 1964. Based on the Praguian tenets, Sgall formulated and developed an original framework of generative description of language, the so-called Functional Generative Description (FGD). His papers in the early sixties and his book presenting FGD (Sgall 1967) were the foundation stones of an original school of theoretical and computational linguistics that has been alive and flourishing in Prague since then. Sgall's innovative approach builds on three main pillars: (i) dependency syntax, (ii) information structure as an integral part of the underlying linguistic structure, and (iii) due regard to the distinction between linguistic meaning and cognitive content.

Petr Sgall has proved also outstanding organizational skills. In 1959, he founded a small subdepartment of mathematical linguistics (called then ‚algebraic‘, to get distinguished from the traditional quantitative linguistics) and theory of machine translation at the Faculty of Arts of Charles University, followed by the foundation of a small group of computational linguistics also at the Faculty of Mathematics and Physics (in 1960) of the same University. In 1968, the two groups were integrated under his leadership into the Laboratory of Algebraic Linguistics, attached to the Faculty of Arts. This Laboratory, due to the political changes in the country caused by Russia-led invasion, had, unfortunately, a very short life-span. In 1972, Sgall faced a forced dismission from the University for political reasons, and the whole group was eventually doomed to be dissolved. Fortunately, thanks to a group of brave colleagues and friends at the Faculty of Mathematics and Physics, he and his collaborators were transfered to this Faculty, less closely watched (by guardians of ideology) than was the domain of the Humanities. Even there, however, the conditions were not at all easy for him – for several years, the Communist Party decision for the group to disappear was in power, the number of Sgall's collaborators was harshly reduced and many obstacles were laid in the way of research in computational linguistics as such. Sgall himself was deprived of possibilities to teach, supervise students, travel to the West,

attend conferences there, and only slowly and gradually he could resume some of his activities in the 1980s. Neverthless, not only the core of the research group continued working in contact with Western centers and their leading personalities (as evidenced above all by the contributions to his Festschrift edited by Jacob Mey and published by John Benjamins in 1986), but it was also possible to help three other immediately endangered colleagues to survive at the University.

The years after the political changes in our country in 1989 have brought him a due satisfaction after the previous years of suppression: a possibility of a 5-month stay as a research fellow at the Netherlands Institute of Advanced Studies in Wassenaar (a standing invitation he has had for many years but which he was not allowed to accept for political reasons), the membership in the prestigeous Academia Europaea, the International Research Prize of Alexander von Humboldt in 1992, a visiting professorship at the University in Vienna in 1993, the Prize of the Czech Minister of Education in the same year, a honorary doctorate at the Institut National des Langues et Civilisations Orientales in Paris in 1995 and at the Hamburg University in 1998 and an honorary membership in the Linguistic Society of America in 2002, not to speak about numbers of invitations for lectures and conferences in the whole world, from the U.S.A. to Malaysia and Japan. As a Professor Emeritus of Charles University since 1995, he is still actively involved in teaching and supervising PhD students, in participating at Czech and international research projects and in chairing the Scientific Board of the Vilém Mathesius Center he helped to found in 1992.

Petr Sgall was also among those who helped to revive the Prague Linguistic Circle already in 1988 and has a substantial share in reviving also the book series Travaux de Cercle linguistique de Prague (under a parallel title Prague Linguistic Circle Papers), the first volume of which appeared in 1995 (published in Amsterdam by John Benjamins Publ. Company) and the fifth volume is now in preparation.

With his research activities based on a true Praguian functional approach, he thus more than made up for his negative attitudes pub-lished in the beginning of the fifties, a revolutionary and rash approach to which he was inspired by his wartime experience (his father died in Auschwitz, as did eleven of his closest relatives, and Petr Sgall himself spent some

months in a labour camp) and ill-advised by some of his tutors. Let us remind in this connection e.g. his review of three American volumes devoted to the Prague School published in 1978 in the Prague Bulletin of Mathematical Linguistics (a University periodical founded by Sgall in 1964), at the time when the political situation in the country and his own personal position was very difficult.

The present volume is conceived of as a reflection of the broad scope of Petr Sgall's linguistic interests, and, at the same time, as a document how lively the Prague School tenets are if developed by such a creative personality. Also, the contributions included in the volume illustrate characteristic features of Petr Sgall as a researcher: the overwhelming variety of deeply rooted topics of interest, the ability to penetrate into the substance of arguments and giving a convincing counterargument, the consistence of opinions but, at the same time, openmindedness and openess to discussion and willingness to accept the opponent's viewpoint if he finds good reasons for it. There are not many researchers of his position who would be able to react so creatively to stimuli from the outside, to learn a lesson from them and to push his students to do the same ('read if you want to be read' is one of his favourite slogans).

Sgall's papers selected for this volume have been sorted in six parts covering both general theoretical questions of language typology, linguistic description, relationships of grammar, meaning and discourse as well as more specific topics of the sentence structure and semantics. It is a matter of course that we could not omit at least a small sample of contributions to his most beloved child, functional stratification of Czech and orthography. Below, we give a very brief outline of the main views as present in the papers; we refer to the individual papers by their serial numbers in brackets.

Part A (**General and Theoretical Issues**) provides a broader picture of Sgall's understanding of the tenets of Prague School Linguistics and their reflection in the present-day development of language theories, including a brief characterization of the Functional Generative Description, based on a perspicuous account of the topic-focus articulation and on dependency syntax (4). Sgall has always been aware of the usefulness of comparison of linguistic frameworks and approaches (3). His original formal approach called Functional Generative Description (FGD) was

presented in a comparative perspective in the context of M. A. K. Halliday's Systemic (Functional) Grammar (5). FGD was proposed as early as in the mid-sixties (9) and was conceived of as an alternative to Chomskian generative transformational grammar. It is based on the dependency approach to syntax (8; this paper, in spite of its title, presents a proposal how to generate underlying dependency structures and is not concerned only with topic-focus articulation) and on a firm conviction that what constitutes the syntax of the sentence is its underlying structure rather than its surface shape (7). As a founder of computational linguistics in Prague (and in the whole of former Czechoslovakia), he has always been very sensitive to put a right balance to the formal and empirical aspects of that interdisciplinary domain (6). In this connection it should be recalled that Petr Sgall used his unvoluntary shift from the Faculty of Arts to the Faculty of Mathematics and Physics in the years after the Russian invasion in a fruitful way: not only he has won the interest of several young computer scientists in computational and theoretical linguistics, thus helping to establish this field as one of the curriculum specialities at this Faculty, but also offered a „shelter" and research environment to those whose political background was not „reliable" enough to apply for admission at an ideologically oriented Faculty of Philosophy but whose skills enabled them to be admitted to a less „watched" Faculty of Mathematics and Physics. It is symptomatic for the atmosphere of that time and for Sgall's sharp eyes and good intuitions that most of these former students belong now to promising researchers and university teachers at both of the Faculties.

The other fundamental issue Sgall has been recently concentrating on is the relation of the core of language and its periphery (1, 2). These notions are also rooted in the Prague School tradition, but Sgall puts them into a broader and more complex perspective. He claims that since language is more stable in its core, regularities in language should be searched for first in this core; only then it is possible to penetrate into the subtleties and irregularities of the periphery. The relatively simple pattern of the core of language (in Sgall's view, not far from the transparent pattern of propositional calculus) makes it possible for children to learn the regularities of their mother tongue. The freedom of language offers space for the flexibility of the periphery.

Petr Sgall gives an impression of a most serious, matter-of-fact and sober person. To document that he understands good and intelligent humour and that he is creative also in this respect, we include in the present volume his „Mourphology" paper (10) as a kind of delicatesse.

Parts B and C focus on two fundamental pillars of Sgall's linguistic theory: underlying dependency syntax (Part B) and information structure (topic-focus articulation) as a basic aspect of the sentence (Part C).

Section B (**Syntax**) contains papers extending and examining the main issues of the Functional Generative Description (FGD), proposed by the author in the 1960s, (11), (12), (13). The papers chosen for this section present the author's argumentation for the importance of the difference between linguistic meaning and ontological content, which delimits the opposition of language as a system and the domain of cognition. P. Sgall demonstrates in (13) that this distinction, known since F. de Saussure and L. Hjelmslev (with linguistic meaning characterized as "form of content"), can be determined with the help of operational and testable criteria. On such a basis, the "deep cases" (case roles, i.e. the underlying, tectogrammatical syntactic relations) can be specified as belonging to the language patterning and differentiated from a conceptualization of the scenes more clearly than with many other approaches, including that of Ch. Fillmore. Strict synonymy is understood as a condition of tectogrammatical identity. Open questions (more or less directly connected with empirical studies of texts and corpora), remaining in the specification of the list of arguments (participants) and adjuncts, are discussed in (12), where also relations other than dependency are investigated. Sgall points out the possibility to linearize even rather complex more-dimensional graphs representing projective tectogrammatical structures (including coordination and apposition) into relatively simple strings of complex symbols with a single kind of parentheses. He claims that this type of structure comes close to elementary logic and thus documents that the core of language exhibits a pattern based on general human mental capacities, which might be useful in analyzing the acquisition of the mother tongue by children. The author's subtle sense for the development of linguistic research is reflected by his participation in conceiving and constructing the Prague Dependency Treebank, a syntactically annotated part

of the Czech National Corpus. P. Sgall describes the main issues of the procedure of the syntactic annotation based on FGD in (11). Examples of tectogrammatical tree structures are given here and an outlook for the future extension of the automatic part of the procedure is discussed.

One of the most innovative contributions of Petr Sgall to theoretical and formal linguistics is his claim that the **topic-focus articulation** (TFA, Part C, see also (4)) of the sentence is semantically relevant and constitutes the basic sentence structure essential for the semantic interpretation of the sentence. As discussed now in Hajičová and Sgall (in prep.) more explicitly than before, this dichotomy is considered to be more fundamental than the subject–predicate structure of traditional grammar and of the "mainstream" theories (be it analyzed in terms of constituents or of dependency syntax). Sgall refers back to Aristotelian original understanding of 'subject' as 'given by the circumstances' (τὸ ὑποκείμενον – translated in Gemoll's 1908 dictionary as *die gegebenen Verhältnisse* 'the given circumstances') and 'predicate' (τὸ κατηγορούμενον – *das Ausgesagte* 'the enounced') as what is 'predicated' about the 'subject', emphasizing the aboutness relation. It is in this sense that the content of an utterance (i.e. of a sentence occurrence) can be properly seen in the interactive perspective, as an operation on the hearer's memory state. It should be noticed that the first paper by Sgall on TFA and its inclusion into a generative description of language was published as early as in 1967 (17). The surface word order is conceived of in relation to TFA; the differences between the surface and underlying order of items of the sentence can be accounted for by a relatively small number of 'movement' rules. The study of issues related to the information structure of the sentence is paid a serious attention in the Prague School history, introduced there by the studies of Vilém Mathesius in the first half of last century and continued by Jan Firbas, whose approach is critically examined from the FGD viewpoint in (14). A study of these issues was given a more intensive attention by a wider linguistic community only later in the last two decades of 20th century and it is thanks to Sgall that the position of the Czech studies on the international scene has been duly specified (15) and, even more importantly, that the attention has been focussed on the basic semantic relevance of these issues (14).

(13)

Part D (**From sentence to discourse in semantics**) gives a perspective on Sgall's views on the delimitation of the language system (linguistic competence) against the domain of cognition and the process of communication. He analyzes issues going beyond the limits of the sentence – both in the 'dimensional' sense (extending the scope of attention to discourse) and in the sense of crossing the boundaries of the literal meaning towards the issues of reference, cognitive content and truth conditions. Well aware of the distinction between linguistic meaning and (extra-linguistic) content claimed by Praguian scholars following de Saussure, Sgall (19) analyses the notion of 'meaning' as present in linguistic and logical discussions and suggests to distinguish between several explicata of the concept: (a) meaning as linguistic patterning (literal meaning), (b) meaning (or sense) as literal meaning enriched by reference, which can be understood as a layer of interface between linguistic structure and the semantic(-pragmatic) interpretation of natural language, (c) meaning in the sense of structured meaning, i.e. with specifications more subtle than propositions (Lewis-type meaning), (d) meaning as intension, (e) meaning as extension, and (f) meaning as content, taking into account the context-dependence of the content of the utterance. In this paper, as well as in all other papers on the issues of meaning, especially when discussing the distinction between ambiguity and vagueness, a crucial emphasis is laid on the necessity to establish and apply operational criteria for making the relevant distinctions. Sgall's own proposal of a starting point for a description of the semantic system of a language is presented in (20) as a nine-tuple, taking into account the outer shape of the sentence described, the representation(s) of the meaning(s) of the sentence, the entities that can be referred to, the set of items activated (salient) at the given point of time of the discourse, the possible sense(s) of the utterance token with the given meaning, the class of possible worlds, the set of truth values, and Carnapian proposition (i.e. a partial function from Sense(Meaning(Sentence)) into the class of functions from the possible worlds into the truth values). The author tests the potential of the proposed framework on several examples, each illustrating some particular point present in the discusions of natural language semantics such as the relevance of topic-focus articulation (see (4) and Part C of the volume) for semantic interpretation, the importance of the different

kinds of contexts (attitudinal, quotational) for the operational criteria for synonymy, and the cases of presupposition failure and contradictions. Discourse patterning in its dynamic perspective based on the notion of the hierarchy of activation is discussed in detail in (18) and partly also already in (20).

The papers included in part E (**Typology of languages**) are closely connected with the author's linguistic beginnings. As a pupil of V. Skalička, the founder of the Prague School typology, Sgall develops the ideas of his teacher and supervisor in (22) and (23) (see also (1)), pointing out that each of the types of languages can be understood as based on one fundamental property, which concerns the way of expression of grammatical values: by free or affixed morphemes, by a word-final alternation (a single ending), or by word order. In (24), which is a part of Sgall's habilitation about the infinitives in the R̥gveda, the nominal and verbal characteristics of infinitive in agglutinative and inflectional languages are analyzed. While in languages of the former type the role of the "second verb" in a sentence is fulfilled first of all by verbal nouns, the latter type prefers an infinitive with a single ending (without preposition), and the analytical counterpart is a subordinate clause. In (23) the author discusses various meanings in which the terms "type" and "typology" are used in contemporary linguistics, distinguishing between polysemy of a term and different views of a single object of analysis. A type differs from a class in that it is based on a cluster of properties, on their "extreme combination". Working with one fundamental property for each type and with the probabilistic implication makes it superfluous to enumerate sets of properties defining the individual types. Agglutinative and inflectional languages are compared as for their "naturalness" (*Natürlichkeit*) in (21). Although inflection, based on a single ending with many irregularities, seems less natural than agglutination from the morphemic point of view, inflection conveys a more appropriate basis for natural syntax (with cases rendering mainly arguments or theta roles, the high degree of "free" word order expressing the topic-focus articulation, and analytical prepositions occurring in the forms of adverbials). Sgall, as always, is aware that some questions examined here are far from a finite solution (e.g. the boundaries between lexical units and syntagms or between word derivation and morphemics are still open for further discussion).

(15)

The papers included in Part F (**Speaking and writing**) reflect Sgall's permanent interest in sociolinguistic issues. The situation of Czech in everyday speech is characterized by the author as code switching rather than diglossia known e.g. from the Arabic world. Following the classical functional viewpoint of the Prague Linguistic Circle, Sgall suggests that linguists should describe the actual usage of Czech (especially of its morphemics, considered to be the main source of the differences between the varieties of Czech) in different layers of communication, rather than impose prescriptions. The position of Common Czech among the varieties differs nowadays from that of the so-called interdialects. Speakers of Czech are encouraged by the author to reduce the means with a bookish flavour in their communication, because their occurrence in other than bookish contexts is one of the reasons why the Standard norm and everyday spoken Czech are quite distant. The nature of the orthographical systems using graphemes is studied in (26), where the author provides a definition of such notions as alphabet, orthography and spelling, based first of all on the relation between phonemes and graphemes. Questions about appropriateness of orthographical systems are formulated on the basis of this explicit description. Sociolinguistic issues connected with an orthographical reform are touched upon by the author as well.

It is not only the broad scope of interests and deep insights that characterize Petr Sgall as an outstanding scientific personality. His deep knowledge and clear view of linguistic (and, in a broader sense, cultural) resources and background ranging from the historical beginnings up to the present-day modern trends is in a unique balance with the originality of his own proposals and solutions. He has never fallen into the trap of black-and-white descriptions of language phenomena: he has always been aware of the restrictions given by the complexity of the described object, i.e. language, and has found a reasonable way out by distinguishing between the notions of the centre (core) of the system and those of the system's periphery. Sgall's deep insights and capability to distinguish these two aspects is documented by his contributions throughout the present volume.

Editorial Note

Due to the richness and broad scope of Petr Sgall's publication activity, it was not at all easy to select only few of his papers for this volume. In our choice, we have followed a couple of guiding principles: we have included only papers where Sgall was the only author and exclude collective papers even if often he was their main author; for a more general acquaintance with the Functional Generative Descripiton, of which Sgall is the originator, and the work on Prague Dependency Treebank, in which he has played a crucial role when setting its background and general linguistic conception, we refer to Sgall et al. 1986; Hajičová, Partee and Sgall 1998; Hajič 1998; Hajič et al. 2000; 2001; Hajičová et al. 2002. As for the dates of publication, we have concentrated on recent papers published after 1990, and this is e.g. why we have included only a very small part of Sgall's important habilitation, i.e. its section about the typological nature of infinitive.

The papers in individual parts are ordered from more recent to earlier ones. Since several important contributions of Petr Sgall were intended to introduce the Praguian views and results to different linguistic circles (to those of Systemic Grammar, to the environment of functional linguistics, to that of pragmatics, and so on), the author had to repeat the basic assumptions and standpoints of FGD. In the present collection, we preserve such repetitions only in cases when they are very short or when this is necessary to make it possible for the reader to follow the development of his ideas. This criterion is most relevant for paper (1) from 2003 and papers from the earlier dates, which are valuable from the point of view of temporal priority. We do not shorten the papers if they discuss similar issues from different angles; this is e.g. the case with the passages on presupposition, allegation, synonymy. Thus, different aspects restricting the concept of (pure, strict) synonymy are discussed in (7), (13), (19) and (20). The concept gained in this way is rather narrow so that Petr Sgall more recently proposed to use the term quasi-synonymy in those cases in which two sentences or constructions, etc. differ in their truth conditions only with a specific lexical cast (as is the case e.g. in the presence of attitudinal adverbials such as *willingly* with passivization). Also the short mention of the classification of tectogrammatical units in (4) is necessary for the un-

derstanding of that paper, but more details on this classification can be found in (11). In a similar vein, the possibility of a linearization of tectogrammatical representations is mentioned in (4) and in other places, but a more detailed account is given in (11) and (18). If possible, we avoid the reduplication by shortening one of the papers; we mark such a deletion by ((…)), mostly with a reference to that of the included papers in which a more complete formulation of the given point can be found; as the case may be, the surrounding contexts are slightly adjusted. In some of such cases, also examples and footnotes have been left out, without changing the numbering of those which have remained in the text.

Apart from the small changes mentioned above, the texts are left as they were in their original form, only misprints and similar tiny omissions are being corrected.

The present collection could not have been compiled without the extremely valuable cooperation with the author himself. The Editors are also most grateful to Anna Kotěšovcová for her devoted and time-consuming technical work connected with the preparation of the electronic version of the papers, which in case of earlier contributions involved laborious and exacting scanning. The proof reading has been done very carefully by Zdeněk Kirschner.

Eva Hajičová and Jarmila Panevová
Prague, March 2005

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This list of references contains only papers and books referred to in the Introduction. Petr Sgall's bibliography before 1986 was compiled as a gift from his colleagues at the occasion of his 60th birthday and was made available as an internal report of the Faculty of Mathematics and Physics, Charles University; the bibliographical data from later periods were published at the occasions of his birthdays in the Prague Bulletin of Mathematical Linguistics (PBML) 55, 1991, 95–98; PBML 65–66, 1996, 113–122 (bibliography 1986–1996, with a short introduction "Petr Sgall Septuagenerian") and PBML 75, 2001, 87–91 (bibliography

1996–2000). A complete bibliography of Petr Sgall is attached at the end of this volume.

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