

Suzana Jurin Arijana Krišković

### Texts and Their Usage Through Text Linguistic and Cognitive Linguistic Analysis



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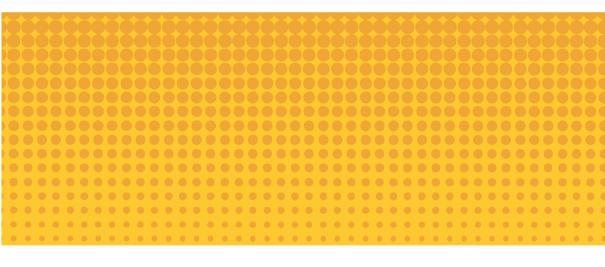
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# Texts and Their Usage Through Text Linguistic and Cognitive Linguistic Analysis



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### **Preface**

Is communication a necessity? Yes, it is, but how do we communicate through texts? Is text only one of possible modalities of communication? What makes text genres so special? What are the social purposes and functions that certain text genres serve? How is the text genre represented in our minds? Do metaphors and metonymies occur naturally in text genres and what is their function? These and similar questions are the topics which occupy our interest in this book.

Our aim is to bring to light specific communication situations, such as communication with text genres used in specific organizational settings in order to achieve particular corporate and institutional goals, gain corporate profit, and implement organizational ideology, based on the principles of text linguistic analysis. Another aim is to present texts in communication situations relevant to medical research in order to clarify the process and ways of mental representations of specific meanings based on the principles of the cognitive linguistic theory.

Firstly, the focus of our interest are text genres which belong to the commissive text type, of bilateral and unilateral subtypes. The authors have studied the role of commissives in general and specific communication, i.e. communication in corporations and institutions for many years. They have published, among others, two relevant papers concerned with the concepts and functions of commissives. The first article, entitled *The Role of Text Genres Offer and Authorisation/Approval in Management Communication* was published in Tourism and Hospitality Management, An International Journal of Multidisciplinary Research for South- Eastern Europe, Vol.17, Nr.2, 2011, Opatija, Wien, Thessaloniki, pp.175-304.

The second paper, An Analysis of Text Genres Belonging to Bilateral Commissive Text Type Used in Management of Multinational Corporations for Communication Purposes, was published in Interdisciplinary Description of Complex Systems, Scientific Journal, Vol.10, issue 2, 2012, Zagreb, pp. 193-204.

Additionally, the authors are concerned with the cognitive basis of production and reception of text genres belonging to the assertive text type, explicative subtype, specifically medical research articles. Among a significant number of published articles dealing with this topic, one relevant paper entitled *Metonymy as an Impersonalisation Device in Medical Research Articles in English and Croatian* was presented at The International Language Conference on The Importance of Learning Professional Foreign Languages for Communication between Cultures, Zagreb, 2015, and published in an e-form in the conference proceedings.

Further studies on the text linguistic analysis (on commissives and assertives) and cognitive linguistic analysis of text genres resulted in new knowledge and perceptions which we present in this edition.

### **Table of Contents**

In	troduction	11
1.	Communication	13
2.	Communication processes in corporations and institutions	15
	2.1. The role and significance of communication processes within corporations and institutions	15
	2.2. The organization as the sender and the recipient of information	17
3.	Text and text genres	19
	3.1. Text	19
	3.2. Standards of textuality	23
	3.3. Text genres	25
	3.3.1. Text function as a standard for the determination of text genre	26
	3.3.2. Different classifications of text genres	
	3.4. Text and text genres as a communication tool in management	
	3.4.1. Text in specialized communication	35
	3.4.1.1. Text genres as specialized communication tool in organizations	35
4.	Analyses of text genres	37
	4.1. Text genres in organizations	40
	4.2. Texts of the commissive text type used in multinational organisations	44
	4.2.1. Classification and analysis of commissives	44
	4.2.1.1. Bilateral commissives	46
	4.2.1.1.1 Text genre: application form	47
	4.2.1.1.2. Text genre: contract	51
	4.2.1.1.3. Text genre: notice of readiness	55
	4.2.1.1.4. Concluding remarks about text genres of the bilateral commissive text type	58

	4.2.1.2. Unilateral commissives or obligatives	59
	4.2.1.2.1. Text genre: offer	60
	4.2.1.2.2. Text genre: authorization/approval	65
	4.2.1.2.3. Concluding remarks about text genres of the unilateral commissive text type	68
5.	About cognitive linguistic analysis of texts and about cognitive linguistic analysis in texts	69
	5.1. Text analysis of text genre medical research article	71
6.	. Metonymy as an impersonalisation device	
	in medical research articles in English and Croatian	73
	6.1. Conceptual metonymy	73
	6.1.1. General classification of metonymy	75
	6.2. PART FOR PART metonymies in medical research articles	76
	6.2.1. The location domain	76
	6.2.1.1. STATE FOR INSTITUTION	76
	6.2.1.2. INSTITUTION FOR PEOPLE WORKING THERE	77
	6.2.1.3. PLACE FOR THE PROGRAM IMPLEMENTED THERE	79
	6.2.1.4. STATE FOR INHABITANTS	79
	6.2.1.5. PLACE FOR STATE	79
	6.2.2. The production domain	80
	6.2.2.1. RESEARCH FOR AUTHORS	80
	6. 3. Concluding remarks about metonymy as an impersonalisation device in medical research articles	83
7.	Predicative functions of metonymy in medical research articles	85
	7.1. Definitions of metonymy	85
	7.2. Metonymic functions	87
	7.3. Predicative metonymy in medical research articles	89
	7.3.1. PREDICATIVE ADJECTIVE FOR A VERBAL CONSTRUCTION	90
	7.3.2. TENTATIVE ADJECTIVE OR VERB FOR A VERBAL CONSTRUCTION	92

7.4.	Metonymy TENSE FOR A SPECIFIC ACTION	94
7.5.	ONE ACTION FOR ANOTHER ACTION	96
7.6.	Concluding remarks about predicative functions of metonymy in text genre medical research article	98
8. Pos	itive or negative test results and human perception of	disease.99
8.1.	The conceptual integration theory	100
8.2.	Mental spaces	100
8.3.	Conceptual integration	102
	8.3.1. Conceptual integration and metonymy	104
	8.3.2. Many-space model of conceptual integration vs. two-domain mappings	105
8.4.	Positive test vs. negative test	108
8.5.	Progressive disease vs. progressive treatment	114
8.6.	Aggressive disease vs. aggressive treatment	117
8.7.	Concluding remarks about positive or negative test results and human perception of disease	121
Summ	ary	125
Kratki	sadržaj	127
Refere	nces	129
Index .		147

### Introduction

Authors of this book have dedicated many years of research to text genres, their text linguistic and cognitive linguistic analysis. Some of their results are presented here.

The aim of this research is to present and analyze text genres of the commissive and assertive text type. This book presents a text linguistic and cognitive linguistic analysis of the text. Text genres are dealt with in this research as implementations of texts in a communication process. Their communicative function is the most important classification parameter.

The first and second chapter of the book deal with communication in general and with specific communication in corporations and institutions.

The third chapter deals with texts and text genres, and with the classification of text genres into text types. The authors also find it necessary to say something about texts in specialized communication and about the consequences of implementing certain text genres in the area of specialized communication.

The fourth chapter provides the methodology of analysis of text genres belonging to the commissive text type, and the theoretical background of classification of text genres into bilateral and unilateral text subtypes. The subtype of the bilateral commissive is presented through a text linguistic analysis of text genres including an application form, contract and notice of readiness. Analyzing the unilateral commissive subtype, a text linguistic analysis of text genres including an offer and authorisation/approval was conducted.

In the fifth chapter, the authors offer an insight into the cognitive linguistic analysis of texts. But, the text linguistic analysis of the text genre medical research article was conducted first, and this text genre was classified into the assertive text type, explicative subtype.

In the sixth chapter, metonymy in medical research articles is investigated from a cognitive linguistic perspective. The analysis includes medical research articles written in English and Croatian. The focus is on instances of metonymy in the location and production domains.

The seventh chapter is dedicated to predicative functions of metonymy in medical research articles. Predicative metonymies mostly represent relationships in events, and occur as an interaction of relations and participants. The role of metonymy is to highlight the aspect of an action which is salient in a predicate and thus allows a more precise understanding of an action, or a usage in accordance with scientific language conventions.

Conceptual integration or blending as a cognitive mechanism used in thought and language is discussed in chapter eight. The conceptual integration theory is a valued framework for explanations of human mental and linguistic functioning. In the text about positive or negative test results and human perception of disease, the theory of blending is presented and applied in the interpretation of adjective + noun constructions.

Text genres are crucial for gaining success in organizational communication, no matter if the organization provides the realization of corporate goals and ideology, or it provides contemporary results of medical research which will improve human life and develop new medical treatments.

This research gives information to all those who are interested and scientifically involved in text linguistic and cognitive linguistic investigations of text production and text reception. It can also provide a basis for further reflection and discussion about the significance of communication type and function for producing proper and understandable, actual situationally relevant texts in all spheres of the extralinguistic reality.

### 1. Communication

Communication is a process in which information is transmitted from one person to another, from one object to another, or from one organization to another, i.e. it includes the transmission of information from the sender to the recipient. Communication is a specific human behavior or way of interaction, i.e. interpersonal verbal and para-verbal behavior (Müller & Gelbrich, 2013).

In its narrow sense, communication is a process of interpersonal interaction dependent on the situation and context. In its broad sense, communication is a phenomenon of the transmission of information which is not restricted to transmission between humans, but it also refers to the transmission of information between living beings in general, as well as between a machine and a human. In its broadest sense, communication is defined as a special type of interaction between living beings, organs and biomolecules, or machines whichw process information. Communication requires efforts and work, not only the interchange of information (Hartung, 2000). Linguistic interaction such as communication is an act when one communication partner in an interaction, collective or social situation, uses linguistic utterances to influence other communication partners<sup>1</sup>, while Searle (Searle & Vanderveken, 1985:1) defines linguistic interaction as a possibility of realization of specific linguistic utterances, that are the smallest fundamental units of linguistic communication. Communication can be viewed from two aspects. Based on the cognitive communication model in which communication is understood as a dichotomy of mental and linguistic processes, communication is regarded as part of the whole cognitive process of language processing. Communication is also part of human cognition or individual possibility of human interaction with the environment or the extralinguistic reality. The second aspect or the information theory aspect regards communication as an interaction, interchange of information, and the transmission of information by means of linguistic signs. Communication is a process in which one communication partner in an interaction or collective situation tries to influence other communication partners by using verbal and non-verbal utterances.

Communication can be considered as a means used by the communicator-sender to achieve a goal related to the communicator-recipient, or, communication can be regarded as a means used by the communicator-sender to achieve a goal through the communicator-recipient. The communication process unfolds as follows: there is certain information which the sender wants to transmit or share with someone or something within or outside an organization<sup>2</sup>. The sender encodes the information in a certain system that is

<sup>1</sup> This formulation is based on the view that something should be achieved by communicative actions, i.e. to change the existing situation, namely, to change activities or states such as the way of thinking, knowledge or attitudes.

<sup>2</sup> An organization in this research can be understood as a group of communicators, or a certain social group, or an institution, corporation, or firm.

standardized, understandable or known to the recipient, and selects modes of transmission of the encoded information. The recipient tries to decode it into a cognitively understandable system, and in most cases provides feedback to the sender. In practice, communication can be reduced to a specific number of standardized communication situations (Fox. 2006:58), such as business meetings, reports, presentations of research results, seminars, product presentations, inquiries, offers, orders, etc. These communication situations occur in two basic communication modalities, i.e. as verbal and non-verbal communication. Verbal communication can occur in oral and written form, and both forms can use electronic media. In oral communication pronounced words are used to express intention. Written communication uses written media and occurs in the form of texts, tables, graphs, etc. The text appears in the form of text genres such as letters, telegrams, official notes, academic articles, minutes, reports, circulars, instructions, quidebooks, advertisements, posters, bulletins, corporate newsletters, etc. Written communication is more prevalent in organizations with a higher degree of hierarchical branching. Besides verbal, there is also non-verbal communication which, based on literature, represents a high percentage of the total content of the message<sup>3</sup>.

<sup>3</sup> Non-verbal communication is, as a rule, always present and makes up part of the verbal communication as well. It is manifested by body posture, facial expressions, clothes, physical appearance, makeup, wardrobe accessories, tone of voice, gestures, distance between communicators, etc. Non-verbal communication is especially important and powerful, although the speakers may not be aware of it.

### 2. Communication processes in corporations and institutions

Communication should be viewed as a basis for corporate and institutional functioning and the realization of set objectives. Each corporation or institution (hereinafter: organization) may be seen as a social system within itself, and as such needs communication to function (Buble, 2006:370). The larger the organization, the larger the number of its employees, and consequently, the number of communication types. It is precisely due to this volume of group or individual communication processes within an organization that communication needs to be organized to bring order and provide for the making of the right decisions in the right place at the right time. This order is achieved through corporate or institutional communication system networks. As mentioned above, each organization should have a flawless communication system in order to be able to realize its objectives and profits. A communication system is a planned and designed network of information flow both horizontally and vertically along the organizational hierarchy, i.e. between the management and its employees, between management members, between different positions regardless of the hierarchical structure, and between the organization and its environment (the public). As can be seen above, organizational communication may be internal (within the hierarchical structure) or external (with the public and other organizations). Communication systems are composed of communication networks, i.e. relationships and communication channels used by organizational members to communicate. The implementation of these networks depends on the business period and the situation in the organization which may be used interchangeably. These types of communication belong to formal communication.

### 2.1. The role and significance of communication processes within corporations and institutions

Communication within an organization is a complex system of information exchange and the exchange of directives and requests transmitted through formal and informal communication networks. Formal communication is a pre-designed order of activities, duties and directives that are realized in a standardized spoken and written form, and are aligned with the goals and needs of the respective organization. A formal communication network is enhanced by the organization itself as well as its management, as it represents the foundation for successful communication, and consequently, the realization of organizational objectives (Bateman & Zeithaml, 1993:515). A formal communication network is realized through formal and informal communication channels. There are two formal communication channels which allow an adequate flow of important information, the vertical top-down and bottom-up communication channel, and the horizontal or diagonal communication channel. To ensure a timely flow of information, the management selects the most appropriate form of communication based on organizational objectives and needs.

Informal communication channels are always concurrent with formal communication. They consist of personal contacts and do not follow a standard line. This type of communication reflects the perception of employees, which, like their relationships, is liable to constant changes. It often contains information that the management has, intentionally or accidentally, failed to release, as well as rumors and gossip. Each of these forms of communication can serve in the capacity of internal and external communication. External communication is realized through the organization's interaction with the environment. Organizational communication with the environment affects its choice of corporate strategy (Samuelson & Nordhaus, 2010:300-315). Internal communication takes place within the organizational structure and therefore, it depends on the structural design (hierarchical or other) governing the organization4. Moreover, it is dependent on the organizational culture, i.e. it depends on the totality of beliefs, values, norms, etc. of all employees as they contribute to the creation of the organizational climate and realization of objectives<sup>5</sup>. Regardless of the type of communication (internal or external), the media used for communication in a corporate or institutional environment is of great importance. A corporate or institutional environment primarily implies a great number of standardized communication situations (Fox. 2006;58), Such communication situations require a specific communication medium. The usual media of communication used within an organization are: a conversation that can be face to face or via electronic technologies (characterized by flexibility and speed), a discussion that is based on mutual interaction (physical position, the size of the group and the number of participants may affect the discussion's effectiveness and intensity), business reporting, etc. (Rouse & Rouse, 2005:46). The written communication medium is mainly realized in standardized, typical forms of written communication within an organization, i.e. specific text genres such as letters, memos, reports, tenders and the like. The most common text genre in corporate and institutional communication is a standardized form. It ensures the rationalization of information flow within and outside the organization and the transmission of timely and accurate information. On the macrostructural text level, good forms are simple, understandable, have a logical chronological and conceptual order, are textually and visually clear, are of appropriate length (size) and are linguistically correct. Apart from forms, we should also mention reports, which are informative, concise, logical and transparent materials. On the microstructural text level, a good report should contain the purpose (the need for specific information, which usually includes the name of a person or group, the subject of the report, the agreed amount of information, and time frame), the procedure (states the source of obtained information, e.g. measurement, analysis, calculation,

<sup>4</sup> There are four types of organizational structures that are respected in communication: functional, divisional, matrix, and network structure.

<sup>5</sup> Corporate culture is an important factor in understanding an organization's success because its model of communication affects the way in which business is run, the type of organizational culture, the degree of centralization, management style, controlling mechanisms, etc. (Buble, 2006:40).

etc.), the findings or research results (a systematic presentation of the most important data), the conclusion (in which the author usually takes a certain attitude), recommendations (the author recommends further action - it should be positive, constructive and accurate), appendices (various documents such as tables, charts, etc.) the signature and the date.

Other very important means of communication are advertising and public relations. The organization presents itself, its products and services, and partly, the rules and relations governing its operations to the outside world, i.e. the public.

The text genres making up the corpus analyzed in this research include offers and application forms for different educational and training programs that may be viewed as attempts to advertise a particular organization. Advertising is closely related to public relations. Advertising and public relations are the most important communication tools of an organization with respect to its interaction with the environment. Advertising is a communication tool used to transmit messages and information to the public. The messages transmitted through advertising are not solely for the purpose of promoting products and services because they also include cultural assumptions, social values and beliefs. Advertising also reveals the relationships between genders, the young and the old, love relationships, corporate ethics, etc. (Rouse & Rouse, 2005:221). Advertising creates a cultural and cognitive understanding of a product, i.e. it creates the brand.

### 2.2. The organization as the sender and the recipient of information

The activities of an organization are brought into balance through communication. Therefore, it is necessary to channel the communication processes of an organization, as well as the attitudes and actions of its employees. This steering of communication processes, employee attitudes and actions is referred to as *Corporate Public Discourse* (CPD) in Anglo-Saxon literature (Schilling, 2000:225). Language ideology power is manifested through CPD just as institutionalization, legitimization, capitalization, and the implementation of corporate ideology are realized through CPD. Corporate ideology is reflected in everything that an organization does in its attempt to present, in an appropriate and standardized manner, its products or services outside the organization, i.e. to the public. Thus, it can guarantee the same quality of services and products continuously and maintain stakeholders' strong predispositions towards the brand.

Furthermore, corporate ideology serves as the foundation and philosophy behind employees' relations towards the brand (organization) and the public. Each employee within an organization is *brought up* in line with the corporate ideology and it forms the foundation on which their attitudes towards other employees and/or others in the organizational hierarchy are built. This process is realized through different activities such as team building, seminars, various training programs, symposia, conferences, publishing of internal cor-

porate newsletters, magazines and the like. These activities focus on the idea of the organization as something worth following. Such communication requires an employee to have unquestionable loyalty towards the organization in all its aspects, especially in terms of employee relations towards the public. In some cases, the power of corporate ideology may be so strong that it borders with brainwashing. Corporate ideology is accomplished by establishing a corporate identity and insisting on it. Balmer and Grav (2000;256-260) argue that corporate identity implies all uniform processes undertaken by an organization for the purpose of building its image. It is realized through corporate communication processes that link an organization's identity to its strategic objectives. Corporate identity clearly displays the organization, the recipient and the sender of information. Thus, the organization becomes the recipient of information when it acknowledges the public's impulses in regard to their demand for products and services, types of brands, and the impulses of the public opinion within the organization itself. Based on this information, the organization gives feedback and tries to realize the requested in the form of organizational image and reputation, and thus, by presenting its organizational image to the public, becomes the sender of information.

### 3. Text and text genres

### 3.1. Text

By the 1960s, linguists mostly explored phonological, morphological, lexical, syntactic and semantic features of languages, while at the end of the 1960s and beginning of the 1970s, the focus of study switched to text exploration. A new perspective in understanding texts developed at the beginning of the 1960s with a new trend in linguistics turning towards the pragmatic aspect of linguistics. As part of this reversal in linguistics, text linguistics developed as the study of the role of communication situations in the implementation of texts. The text was no longer construed as an isolated linguistic phenomenon. The text should not be studied by linquistic means as an exclusively linquistic unit (Glovacki-Bernardi, 1990:17). The text is a basis of every communication<sup>6</sup> and such communication is conducted via a social communicative act. The exploration of texts and text genres increased in linguistics at the end of the 1970s and beginning of the 1980s. In the 1980s and beginning of the 1990s, the study of text genres continued and was also approached from the perspective of cognitive psychology. The development of cognitive linguistics changed the understanding of language and texts, i.e. text analyses resulted in knowledge of mental concepts and models in linguistic structures.

There are several definitions of texts. De Beaugrande in his reflections on language, text and discourse (1997:11) suggests that the text is a "communicative event wherein linguistic, cognitive and social actions convergence. and not just a sequence of words that were uttered or written". De Beaugrande describes the text as a total of linguistic, cognitive and social actions, and therefore the text should be considered as a model for understanding the world. Through this model for understanding the world (De Beaugrande, 1997:128), the text provides information about items, utterances, facts, events and activities, which means information about the extralinguistic reality (which can be taken as a person, institution or state of affairs). Within a statement or a text, the whole body of the text stands in relation to its environment and possesses features which are inherent to the whole, and these features occur as a result of the whole or estimated value. The whole in an event can be "agentive or affected" (Fox, 2004:22). The initial whole or agentive possesses a driving force and in the realization of the process causes changes and thus affects other wholes. The whole which is being affected, or the target unit, changes its state of affairs or situation due to the event, and it is neither an initiator or agent nor an instrument (De Beaugrande & Dressler, 1981:95). De Beaugrande regards text as a global model. This model is a collection of interrelated data and facts which a person or organization possesses as acquired knowledge or experience. These data include identity, possibility of linking. time and space orientation, possibility of observation, dimensionality and pre-

<sup>6</sup> Glovacki (1990:17) claims that it is necessary to introduce the concept of textuality as the basis of every communication, and she finds textuality to be a superior category to the text.

dictability (De Beaugrande, 1997:85). De Beaugrande claims that the world should be understood, and that experience of processes and events should be gained. Items and events should have identity in order to be recognized, events should be visible to observe and vice versa. The text is a linguistic sign or a combination of signs based on social conventions. Plett (1989:43-45) points out that a group of linguistic signs, i.e. a text, is a "super sign" which comprises a certain number of minor signs (or parts of signs). The way these minor signs are divided or distributed in specific text realizations results in different classes, types and text genres.

Texts are made up of a certain inventory of linguistic signs which form a code. and the inventory of the code can be further divided into subcodes7. The code does not involve only a linguistic inventory of signs, but also the rules of linking them and meanings, and this is exactly what allows combinations of signs. All possible combinations of linguistic signs in a text are determined by text grammar. The code provides indications of a text, and the actual information or message allows the production of a text. It means that the text does not exist by itself, but the text refers to a realized item which successfully transferred a message, i.e. it realized communication. The text can be viewed as a sequence of linguistic signs or sets of signs which Brinker calls statements, but these sets cannot be characterized by having a single meaning since it is always necessary to put them into a communication situation (Brinker et al.. 2014). Therefore, the text is considered to be a product of communication. Brinker (2014:17) claims that the text is a number of linguistic signs which are liable to grammatical and thematic coherence and at the same time have a certain communicative function.

The text is also a result of linguistic activities of persons involved in social interaction, and these activities depend on cognitive evaluation of the participants in the communication process, and they use all sorts of the recipient's knowledge. This knowledge is manifested in texts in a specific way, and it constitutes their dimensional structure (Heinemann & Viehweger, 1991:126). Since there is a number of different definitions of the text, there are also numerous and various models of text analysis. Widely known and most commonly described models of text analysis are the communication function model and the integrative model.

The communication function model of text analysis observes interactions during communication because the social context with its parameters involves cognitive aspects of text production and reception, and determines how we communicate through a text or text genre (Ivanetić, 2003:28).

The communication function model assumes that the text is a means of action which is based on the theory of speech acts and communicative intentions.

<sup>7</sup> Plett (1989:44) explains the difference between a code and a subcode. Based on his explanation, the Croatian standard language could be an example of a code, and a language for specific purposes (LSP) or a dialect could illustrate a subcode.

Searle (1969, 1971) defines a speech act as a minimal functional unit in human communication which is composed of several simultaneously realized acts or parts which are called a locutionary act/utterance, propositional act/content, illocutionary act/intention, and perlocutionary act/causal effects. The locutionary act is the act of realization of a message through a number of phonemes, graphemes and words, while the propositional act or content of the information or message refers to the objects and events, or processes in the extra-lingustic reality which are ascribed certain properties, and thus, an intention is acknowledged, i.e. an illocution. The effect of an utterance on the recipient of the message is called a perlocutionary act.

There are different deviations in the application of the principles of the theory of speech acts in text analysis, for example, the illocutionary act, as the text sender's intention, is mostly the initial point for text study since it provides the communicative intention of an utterance, and at the text level, such an intention is usually called text function (Ivanetić, 2003).

Integrative models of text analysis tend to integrate all previous approaches (systemic, semantic and pragmatic approach), with the aim to analyze the thematic structure of the text and text genre. Brinker's (2014) model of analysis has been widely accepted. It is based on the criteria which are also used to distinguish text genres. They include the criterion of function, the criterion of context (which can be a communicative form based on 5 media, as well as, on the basis of the domain which can be private, official and public), and a structural criterion which distinguishes the type of the theme (time and local orientation) and shapes its development (descriptive, explicative, narrative or argumentative).

Brinker claims that texts (text genres) are analyzed at three levels. The first level is a communicative and pragmatic level which observes the text function during the communication process in order to identify the features of an utterance. Two aspects are determined here, the form of communication and the field of utterance (what the utterance comprises). The form of communication refers to the type of media used for the text production, i.e. media transmit a signal from the sender to the recipient of the text. Based on this definition, we distinguish a conversation, telephone call, radio or TV program, letter, newspaper article, flyer, advertisement, poster, book, e-mail message, SMS message, etc. Each of these communication forms is characterized by unique features of the specific medium which transmits the message, i.e. shapes the text. Brinker et al. (2014:80-85) assumes that these communication forms are not clearly characterized, i.e. they do not have clear boundaries and therefore Brinker recommends to analyze the texts through genres and the form of communication.

The field of an utterance or the field of the text involves specific social fields which observe particular utterances, norms and values, for example, private, official and public.

The second or thematic level of analysis is concerned with the context of an utterance which also affects the text structure. This refers to the structure of the content presented as part of the text whose meaning is analyzed, and which serves to decode the overall content and meaning of the text. The segments which are dominant in this analysis are the theme of the text and patterns of utterance themes. The theme of the text is a set of themes of particular parts of the text, where thematic hierarchy is established. It means that the themes of particular parts of the text, for the sake of understanding the whole text, undergo hierarchical evaluation, and relations between themes of particular parts are included based on the thematic schema<sup>8</sup>, i.e. modes of theme development. Currently known modes of theme development are descriptive, narrative, explicative and argumentative.

At this level of analysis, the sender's attitude towards the text theme is also important. This relation or the sender's attitude can be, for example, evaluative and here we distinguish positive and negative evaluations of the statement. This is a segment of the message sender's relation which can modify the text function.

At the third or linguistic-stylistic level, the syntactic-semantic relations of the text are observed. These relations may include recurrence, repeated use of linguistic units in the sentences which follow each other in the text, propositional connectives which can lead to explicit connections (using grammatical devices, conjunctions) and implicit (through semantic and cognitive devices), then, the lexico-semantic and stylistic features of text coherence are studied and they can involve isotopic levels, as well as, sociolectal and dialectal variations of the text style (Brinker et al., 2014).

Heinemann & Heinemann's integrated analytical model (2002:199-202) has several dimensions and acts as a model for a text classification based on multiple criteria. The model comprises the following components: an interactive framework (which means the determination of text genre, type of communication, construction of the text, domain and medium, as well as, the text function, which can be expressive, conative, informative and directive), and Heinemann & Heinemann's new element, i.e. the text's aesthetic function. Furthermore, the authors make difference between the global orientation component (involving the text macrostructure, theme, development of the theme, text segmentation, thematic sections, etc.), and the second component, description of local units such as paraphrases for the semantic content, relevant and lexical units and syntactic structures, coherence and intertextuality. The last component is an integrated characterization and evaluation of the text in relation to its function and communication outcomes, genre conventions, the mode of thematic development and stylistic adequacy.

<sup>8</sup> In this work, the term schema stands for Brinker's term "Muster".

### 3.2. Standards of textuality

De Beaugrande and Dressler (1981) set out seven basic criteria for the identification of the text. The first criterion is cohesion, i.e. grammatical and syntactic relations that provide links between various parts of a text. Škilian defines cohesion as syntactic connections of words into syntagmatic groups (Škilian. 1997:9-15). Ivanetić (2003:7) claims that: "Cohesion includes relations which link components of surface text structure by grammatical forms (...) and it refers to formal connective tools." Cohesive devices are mostly explicit and implicit repetitions of phrases which can be performed as recurrences or repetitions of the same utterance in new sentences, substitutions or repetitions using content-linked utterances, pronominalization or repetition using content empty words, for example, personal, demonstrative or possessive pronouns, or adverbs, parallelism or repetition of a structure, ellipsis or omission of a structure, metacommunication, tense and aspect, and connectors. Cohesion in the text is established through explicit repetition of an utterance or recurrence, lexical substitution such as synonymy, hyperonymy, paraphrase and pronouns, implicit repetition of utterances which do not have the same reference but are semantically similar, and connectors.

The second standard of textuality is coherence or conceptual dependency. text semantics. It refers to the dependences of concepts and relations in the textual world, i.e. logico-semantic connections between sentences in a text which result from cognitive processes of their users (Ivanetić, 2003:9-10 based on De Beaugrande & Dressler, 1981;7-13). These connections are realized by using cohesive devices, isotopy, selection of the same theme, time relationships which can be set up by lexical or morphological devices, and world knowledge. The text is considered as an entity because it is emerged in the context which helps to understand its meaning and interpretation. Ivanetić suggests that De Beaugrande & Dressler refer to the context as involving different kinds of knowledge which provide frameworks, and knowledge about stereotypical actions and events which are called scenes, as well as causal and time relationships. Particular communicative intentions cannot be transferred by linguistic devices only, but they need to be interpreted at the conceptual level of text interpretation, i.e. they should be meaningfully or coherently structured. Coherence is what distinguishes texts from a mere series of sentences put together. Coherent relationships are established by cohesive connections using pronouns and other functional words or repetitions of nominal phrases. Semantic links between different lexemes or isotopy, theme of the text, presuppositions, various types of linking elements of surface and deep structures play an important role, but actually, complete coherence is established at the conceptual level<sup>9</sup>.

The following is the standard of intentionality (on behalf of the text producer) which reflects the intention to organize the text coherently in order to achieve a specific communicative aim. Intentionality in its narrow sense includes the text producer's intention to produce a cohesive and coherent text, and the text recipient's readiness to accept the text.

The standard of acceptability includes the text recipient's recognition of a coherent text as a relevant communicative entity (Škiljan, 1997:13, based on De Beaugrande & Dressler, 1981), i.e. the recipient's intention to accept a cohesive and coherent text, to understand the information and message which are transmitted and successfully process them cognitively.

Informativity (for the text recipient) is a standard which is concerned with the amount of new information in the text, and the recognition of new information depends on the recipient's previous knowledge and world knowledge.

The standard of situationality observes the extralinguistic context and evaluates the adapatability of the text to the extralinguistic context. Situationality includes all elements in the text which determine text relevance in a given communicative situation.

Intertextuality or a relationship to other texts recognizes text dependence on previously produced texts, and it refers to the interdependence of production and reception of a text with the knowledge of communication participants about other texts. Ivanetić (2003:12) claims that the criterion of textuality can help define text genres as text classes with typical features since each text genre involves repetitions from previous texts of the same text genre, which is in literature known as typological intertextuality (compare Holthius, 1993).

De Beaugrande and Dressler suggest adding a standard of effectiveness to the existing standards. Effectiveness is described as making minimum efforts to establish adequate conditions in order to achieve the goal, as well as appropriateness or harmonization of the text with the standards it is based on (De Beaugrande & Dressler, 1981).

Besides the mentioned criteria, authors such as Helbig (1986) and Feilke (2000:64-82) emphasize a need for the recognition of the following criteria:

<sup>9</sup> Based on Pörings & Schmitz (2003:211), there are two types of coherent relationships, referential and relational relationships. Referential relationships occur by revising and reconsidering the same references which is accomplished by exophoric or deictic references when specific entities are pointed out in particular communicative situations. It can also be achieved by endophoric references when in the production of a text the reference points to entities within the text. Endophoric references can be divided into anaphoric (referring to already introduced entities) and cataphoric (referring to references which are mentioned later in the text). Referential coherence serves to introduce and identify linguistic units in the text, while these units can be realized as abbreviated or elliptic forms such as pronouns or nominal phrases. Referential coherence connects units in the text in a meaningful whole. Relative or relational reference illustrates relationships between specific events in the text.

complexity, thematic unity, integrity, communicativity (texts have a recognized communicative function), generativity (a speaker's ability to produce an infinite number of new texts), universality (universal communication skills and traditions), contextuality (contextually determined norms for text production, and knowledge of text and context links are part of communicative competence), processuality (the process of text construction), intentionality (linguistic entities are viewed as forms of social activities, and the text is a realization of a function) and dialogism (each form of communication, including the text, is basically a dialogue).

With advances in text studies, new criteria of textuality were introduced. Heinemann & Heinemann (2002:108) added a standard of discursivity which recognizes the involvement of each text in communication with other texts, i.e. building a network of relationships between the texts. They also mention the standard of declarativity to determine textuality which includes both the text sender and the recipient because they decide on text or discourse limits (Škiljan, 1997:9-15). Fix (1998:15-27) views the standard of culturality as one of the important criteria because the author believes that there is no text which is not marked by the culture of either the sender or recipient in its production or reception, because each text is located in a specific social environment and situation.

So, if the text is considered as a totality of all communicative items which in a particular communication situation form a coherent entity and therefore signal a specific communication function (Schröder, 1993:195), we can view the text as a communication unit with fixed linguistic, morphological and graphemic features (Sandig, 2006:312), with a theme, and containing several cognitively linked sentence entities which perform social, cultural and communication functions.

### 3.3. Text genres

Ivanetić (2003:6) claims that a text is just a theoretical construction which is organized on a genre-based model and only as such it is available to perception, thus the text is any form which can be categorized as a text genre.

Brinker et al. (2014:45) define text genres as conventional patterns of complex linguistic actions linked by typical situation-based, communication, functional and structural (grammatical and thematic) features. They are part of world knowledge and linguistic knowledge and, in texts, produce the effect of norms and standards for communication needs. Thus, they facilitate communication and interactions in a social community by providing assistance in orientation to communicators during the production and reception of texts.

Heinemann (2000a:523) follows the same track, but he is cognitively oriented and, consequently, he observes genres as linguistic manifestations of cognitive patterns which have shown to be efficient in achieving specific interactive goals.

According to Ivanetić, text genres are units which link cognitive, communicative and structural aspects and they represent a form of social practice. At the same time, they are models which facilitate orientation to participants in communication in an actual social, i.e. communicative situation. We can notice that Ivanetić puts cognitive aspects before communicative aspects in this definition because the author believes that cognitive aspects in the definition of the text and genres question the limits of the text and its integrity, and research findings in cognitive science initiated a discussion on the "annihilation" of the text.

Analyzing genres based on the standards of textuality, Ivanetić explains the status of marginal forms of text genres by the prototype theory. According to the prototype theory, all cognitive categories have their best members or prototypes. Other members of a category need not have all features of a prototype because category membership is scalar, i.e. sometimes prototypes have fuzzy borders. This characteristic can account for the marginal borders of texts genres. Ivanetić (2003:15) suggests that besides prototypical texts which form the center of the text genre category and meet all or most criteria of textuality, there are non-prototypical constructions with minimum compatibility with the standards of textuality, or texts genres with minimum compatibility with the prototype (for example, texts which are made up of only one sentence and do not meet some of the standards of textuality).

### 3.3.1. Text function as a standard for the determination of text genre

Besides all mentioned criteria, text function determines the text genre and classifies a text as a certain text type. Each text has its distinct function.

In order to clarify the concept of text function, we should start with the basic definition of text function. Text function is defined as a purpose or aim of a text in a specific communication situation, i.e. communicative intention of the text producer's message which is achieved in the communication community by conventional communication devices, and which is successful only when the recipient of the message decodes and understands it using the same conventional devices.

This definition of text function complies with the theory of speech acts which links illocutionary acts with intention and conventional aspects of a speech act.

According to De Beaugrande & Dressler (1981:190), text function contributes to an interactive process, and many linguists (Rolf, 1993; Heinemann, 2000; Brinker et al., 2014) view text function as being identical with the intention, aim and purpose of the text.

Based on the theory of speech acts, Brinker et al. (2014:101-121) provide a classification of text functions and allocates five basic functions of the text:

1. Informative function. The sender/text producer transmits specific contents, information or knowledge to the recipient/ text recipient.

- 2. Appellative function. The text producer uses the text to encourage the text recipient to provide his opinion, perform an action, movement, etc.
- 3. Function of obligation. The text producer of the message feels obliged to do something.
- 4. Function of contact. The text producer acknowledges to the text recipient that the text deals with nurturing a personal relationship and contact with the text producer.
- 5. Declarative function. The text producer informs the text recipient that his message or text changes reality, i.e. state of affairs, or that the text is an introduction of an institutional situation or process.

Rolf (1993) also views text function and the relationship of the text producer and text recipient in a communication act as an interactive process. However, Rolf's classification of text functions is linked to the terminology of Searle's illocutionary levels. Thus, Rolf distinguishes assertive, directive, commissive, expressive and declarative text functions.

Since a text genre never performs only one function (because when determining text function in order to determine text genre, several functions play a role, one of them is a dominant function and others are peripheral<sup>10</sup>), the criteria for the identification of the dominant function should be defined.

Brinker et al. (2014:92-97) connect indicators of text function<sup>11</sup> with illocutionary indicators in the speech act theory. They include conventional linguistic and grammatical devices which point to a specific type of linguistic utterance. These indicators may be explicit declaration, sentence types, modal particles and words, and so called propositional content (Brinker et al., 2014). The context of communication also plays an important part. It involves the role of the sender and recipient, institutional framework, communication background, etc., so that there are situations where only the context determines the type of illocution, which means that contextual indicators are more dominant than linguistic indicators.

Brinker et al. distinguish textual indicators such as grammatical indicators (for example, explicit performative formulae and equivalent sentence types, certain adverbs and particles), types of the theme and specific parts of the theme, selection of a theme development schema, linguistic and stylistic formation of the theme and text schema (Brinker et al., 2014:98-121), as well as non-textual indicators which can be linguistic and non-linguistic, such as graphs or figures.

<sup>10</sup> Brinker et al. (2014:117-118) give an example of a business letter which performs the function of establishing contact with the dominant function of obligation, e.g., confirmation of accepting an obligation or assignment, expressing gratefulness for the assignment etc.

<sup>11</sup> Following Brinker et al., indicators are linguistic or non-linguistic chatacteristics of the text which directly or indirectly point to specific categories or characteristics of categories in the text. (Brinker et al., 2014: 98).

Unlike the abovementioned textual indicators, contextual indicators help in the classification of texts into specific text genres (characteristics and correlations which mark the genre), for example, determination of (external) indicators of a text genre, such as a newspaper article characterized by big and bold fonts for headlines.

Among textual or genre indicators, we can distinguish stylistically marked indicators (such as the use of figures of speech and other linguistic devices which become stylistically marked in certain contexts), and stylistically neutral indicators of text functions.

Stylistic marking is usually an indicator of text function when the sender's attitude and perception are emphasized. These indicators of text function can be implicit or explicit, i.e. identify text function, and later a text genre signals a distinct informative function.

When discussing the signaling of text function, Brinker et al. (2014:92-101) distinguish the following two types of signaling:

a) direct signaling – when the text function is explicitly indicated by specific linguistic structures (so called basic indicators), and in this case, stylistic, thematic and contextual indicators of text function are completely manifested and adapted to the basic indicators, and b) indirect signaling which does not demonstrate any explicit indicators, and therefore, without basic indicators, text function is identified by the context.

As each text function can indicate indirect signaling, there are specific boundaries for particular text genres. Brinker gives an example of advertising genres when the text commonly signals its function indirectly, while in the case of "instructions for use" this type of signaling is inadequate, and direct signaling complies with the informative function of the text.

### 3.3.2. Different classifications of text genres

In the theory of text genre classification, some linguists distinguish text genres and text classes, e.g. Heinemann & Viehweger (1991:144), while others also make a distinction between genres and text types (e.g. Isenberg, 1983; Adamzik, 1995). Therefore, differences between these terms will be clarified in this section.

If we start with the definition that text genres are units which connect cognitive, communication and operating aspects, and represent a form of social practice, then, the text type can be considered as a higher level in the classification.

The text type is a reflection of a speech act in written language (Franke, 1987:263-281). The text type is viewed as a device aimed at introducing order, classification and periodization. Havelka (1990:624) defines the "type" as a means of bringing order and standardization in various areas of communication with text genres. The "type" provides a frame for a certain area of reality,

and it gives guidelines for cognitive understanding of the role of a text genre in a certain area of expertise. Although it is unlikely to find data in literature about a definition based on the differentiation between typology and classification (there are only attempts which are more or less successful), Große (1974:256), from the text linguistic perspective, defines the text type as an arbitrarily named set of texts, and the author uses the term as a synonym for the text class, regardless of the hierarchical position of a text<sup>12</sup>.

Text types are also regarded as ideal norms of text structures, i.e. text schemas related to the basic modes of linguistic utterances such as narration, description, exposition, argumentation and instruction. Sometimes, the term text type refers to text classes at a lower hierarchical level, which means that text genres and text types are equalized. However, text types are also seen as text classes at the same hierarchical level with text genres (Heinemann, 2000:520). So, the following example of text genre from our corpus which is used to illustrate the above mentioned can be classified in Heinemann & Heinemann's (2002:143) schema of the text class hierarchy:

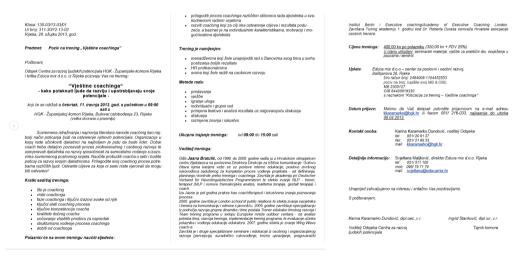


Figure 1.

Text type: Appellative text  $\rightarrow$  Call to a seminar  $\rightarrow$  persuade a

particular population to attend a seminar

Text genre class: Written text

Text genre class: Advertisement for the seminar

Text genre: Announcement (announcement of the seminar)

Text genre variant: Call for attendance

<sup>12</sup> The author also marks the class of written texts as a distinct text type.

To conclude, the basic difference between the text genre and text type lies in the level of their abstraction, where the text type represents a higher level of abstraction, and the text genre a lower level of abstraction.

Text genres are also construed as linguistic manifestations of text units which are linked by cognitive schemas, and serve to achieve specific interactive goals. They are characterized by both internal textual features of text structure and text formulation, and the text content (Heinemann, 2000:523-546). Text genres are also interpreted as prototypical examples of a particular context in a broad sense, as well as prototypical representatives of a specific communication function. Therefore, Heinemann believes that text genres are holistically connected and dependent entities whose characteristics and components pertain to text classes at a lower level of abstraction. Consequently, text genres are not closed systems or entities, but open systems dependent on currently given communicative and cognitive goals. Text genres are highly heterogenous entities in terms of scope, frequency and standardization, text content, thematic approach and text structure.

As attempts to classify text genres started from different aspects, and different classifications demonstrated their own inconsistencies, presently there are numerous classifications, and in this work we mention only the well-known ones.

Considering the attempts to classify text genres through history, we can say that classifications are divided into the following models (Heinemann, 2000:523-545): I. classifications based on traditional and empirical models, II. classifications derived from sequencing and content models, III. classifications from the pragmatic aspect following situational and functional models, and IV. classifications based on multilevel models.

Classifications based on traditional and empirical models developed in the 1970s. The aim of studying text genres was to recognize particular linguistic and grammatical indicators, as well as grammatically confirmed relationships between basic textual elements. Such a classification relies on the existence or non-existence of specific linguistic signals and their combinations in a genre; however, it could not provide a solution to the coherence problem<sup>13</sup>. Classifications by Weinrich (1969), Sandig (1972) and Gülich & Raiblea (1972) belong to these types of classifications.

When considering classifications derived from sequencing and content models, we can see that they take into account not only surface signals and their connections, but also complex linguistic structures and their related meaning. Werlich (1975:39) classifies text genres according to these models and ana-

<sup>13</sup> This approach to the analysis of text genres based on linguistic structures and linguistic signals is referred to as the signaling theory (*Signaltheorie*) (Bucher, 1986; Franke, 1991) because particular linguistic entities were assigned the features of a signal (according to the theory of communication models).

lyzes the relationships in sequences of text constituents during the construction of a large group of sentences or a text, with special interest paid to the rules applied when sentences are joined together in text units. So, in complex text units, each text type, i.e. text genre, is characterized by specific sequencing (Werlich speaks of text types and does not use the term text genre). The author attempts to identify characteristic forms which indicate sequencing, such as sequence initiators, signals and sequence terminators. These forms are situated in a context, and thus, different text types are recognized.

When discussing classifications of text genres based on sequencing and content models, Van Dijk (1980) should also be mentioned. However, his model of superstructures, which represent the theme of the text, i.e. text macrostructure and text content, has been explained in detail in literature by several authors (Heinemann, 2000; Ivanetić, 2003; Brinker et al., 2014). Following Van Dijk (1980:142-147), such superstructures correspond with a schema which determines the global order within a text. Classifications based on sequencing models fail to decode superstructures of all text genres. Dimter (1981) also categorized text genres based on these models. However, in studying text genres, he also takes into consideration the content and semantic aspects which, besides situational and functional criteria, act as a factor in the identification of text genres, although this aspect helps more in the determination of text subgenres, i.e. text genre variants.

Classification of text genres according to functional models focuses on the communicative function of texts and these models are primarily based on Bühler's (1934) communication model, Leontjew's (1975) model of linguistic action, and Searle's (1975) theory and taxonomy of speech acts.

Classification of text genres developed from situational and functional models increasingly takes into account internal linguistic factors in the categorization of genres. It starts with the observation that understanding and production of text genres involves syntactic and semantic structures which are situated in the framework of communicative situation and type of communication, i.e. factors of communicative situation determine specific genres (Diewald, 1991). Several classifications developed from this theoretical framework, and we shall mention the most relevant.

The first genuine classification based on the functional model in German literature was presented by Große (1976:254), and it depends on Bühler's communication model. According to his schema, text genres are classified into eight classes which perform their functions, and each class is illustrated by the prototypical representative.

Since the majority of functional classification models since the 1980s have been based on Searle's classification of speech acts, it is necessary to mention that his classification is based on the criterion of communicative intention of an utterance, the criterion of direction of action and the criterion of the sender's/text producer's psychological attitude<sup>14</sup>.

Brinker et al. (2014:101-121) employ Searle's classification criteria to which he added contextual and structural criteria. Brinker et al. classify text genres and text functions in the following way<sup>15</sup>:

- a) Informatives (Searle's term is representatives). Text genres whose basic function is providing information are news (newspapers, radio and television), reports and descriptions with different variants such as investigation findings, scientific and popular books, expertise, review, etc.
- b) Appellatives, the genres that occur as advertising messages, promotional materials in the form of newspaper articles, radio and television programs, commentaries, instructions for use, recipes, legal texts, claims, requests, sermons, etc.
- c) Obligates, text genres such as contracts, agreements (written), warranties, vows, oaths, offers, etc.
- d) Contactives (in Searle's terminology they are called expressives), this function is performed by text genres referred to as participation texts, such as texts expressing congratulations, condolences where the sender expresses his joy or sorrow. Text genres with contact function are also postcards, love letters and farewell letters.
- e) Declarations, such as a certificate of appointment, last will, verdict accusing or releasing a defendant, authorization, certificate, etc.

The classification of text genres based on the function and field of application also includes stylistic features of the text. Texts which are distinguished according to stylistic features (e.g. spontaneity, esthetics, characteristics which provide empirical evidence, behavioral criteria) can be representatives of different styles.

Silić (2006:36) distinguishes the scientific style, business and administrative style, newspaper and publicistic style, literary-artistic or belletristic, and conversational style.

<sup>14</sup> Based on these criteria, Searle (1972) distinguishes five functions of speech acts, and they are: declare the state, make someone perform an action, commit oneself to do something, express feelings and attitudes, change the world or state of affairs.

<sup>15</sup> When designing the model of text genre classification, Brinker takes into account the following criteria: 1. text function; 2. contextual criteria such as form of communication based on 5 media, and they are immediate communication, mediated communication, and written communication; and 3. structural criteria such as the type and development of the theme. Ivanetić suggests that the model of text genre classification based on these criteria is an integrative classification model (Ivanetić, 2003:34) because this model encompasses four levels of description, i.e. situational, communicative and functional, thematic, and linguistic levels.

Katnić-Bakaršić (2007:73-202) also includes the religious style, advertising style, comics style, rhetorical style, essayistic style and scenaristic style. Katnić-Bakaršić (2007:40-41) views linguistic units which provide stylistic information as stylemes and claims that each linguistic unit is stylistically marked by its use in a particular communicative situation, and by the functions of the unit in a given communication.

Tošović (2002:76), besides five functional styles (literary-artistic, publicistic, scientific, administrative, and conversational style), also analyzes texts which exhibit the characteristics of multifunctional styles (the author calls them interstyles). These are the oratorical, epistolary, advertising, memory, essayistic and scenaristic style.

The text genre classification based on multidimensional models develops from experience and as a result of previous attempts to classify genres, when linguists became aware that a unidimensional classification cannot encompass all text genres of a particular field or text genres of several fields. Text genre classifications start to rely on the multidimensional determination of prototypical representatives for each category or level (Heinemann & Viehweger, 1991:147). Thus, linguists like Heinemann & Viehweger (1991) attempt to classify text genres on the multidimensional basis, i.e. they observe several dimensions in their classification, more precisely five of them. In order to set up an adequate classification of text genres taking into account multidimensional models, classifications should primarily demonstrate compatibility with conventional knowledge about text genres. Heinemann & Heinemann (2002:199-202) expanded the model to include components of an interactional framework such as communicative outcomes, participants in communication, as well as their relationships and intentions, immediate situation and field, communication media. The component of global orientation consists of the macrostructure of the text, theme and segmentation of the text into smaller units. The component of description of local units involves semantic and lexical units, as well as syntactic structures, devices of coherence and intertextuality, and also a component of integrative characterization and evaluation of the text regarding the function and communication goal, conventionality, theme development and stylistic features of the text.

### 3.4. Text and text genres as a communication tool in management

Texts and text genres are tools used by the management of any modern organisation for achieving goals in accordance with a particular corporate ideology. It is very important to see in which ways such a text is understood and used in management, i.e. which text genre is used in a specific communication situation. Therefore, the vertical, horizontal, symetrical and asymetrical aspects of communication in organizations are being looked into. The aspects of interprofessional, intraprofessional and extraprofessional <sup>16</sup> communication are taken into consideration, as well as the aspects of internal and external communication. Considering the environment and communicative interaction of the enterprise with the environment, we distinguish internal and external communication with the environment. All social forces that affect business. communication and attaining objectives in organizations are indirectly part of the external environment (Samuelson & Nordhaus, 2010). External communication in relation to the environment can be seen as general or social environment and business or task environment (Buble, 2006;29). The general or social environment is also called the macroenvironment. It includes all events and situations outside the corporation; the corporation has no influence on events, but must respond to them. The business or task environment is also called the microclimate of the corporation (Kotler, Brady, Goodman & Hansen, 2009), and it is made up of all subjects involved in the immediate environment of an organization, thus affecting the ability of the corporation/organization to provide services to the environment. This means that task environment communication is frequent and it takes place in everyday interactions. Internal communication is the communication within the framework of the internal environment, i.e. within the environment of organizations. Therefore, such communication can be entirely modified. Internal communication is always present in the management, and management tries to control it completely. Any internal changes in the function of the company alert the management. External and internal communication therefore depend on a variety of phenomena in the organization environment, since a company is an open system. that is in constant communication with these developments, which depend upon the changes in the corporate environment and its complexity, the competitive forces as well as the rate of environmental changes (Griffin, 2016).

An analysis of texts has shown linguistic idiosyncrasies in the vocabulary and syntax of various text genres used by organizations. Text genres in management unite organized activities, whereby such activities become part of the social system. Text genres enable communication in management by means of modifying behaviour. The text is only a theoretical construct that is organized according to a text genre and can only be perceived as such (Ivanetić, 2003:6). Furthermore, the text is any entity that can be assigned to some text genre. Text genres link cognitive, communicative and active aspects. They are a method of social practice. Text genres also represent models that facilitate

<sup>16</sup> Here we have to consider the importance of the *professional status* of participants in professional communication (further p- communication). Thus, intraprofessional communication refers to p- communication between experts working in the same area of expertise. Interprofessional communication is the communication between people working in various areas of expertise, and extraprofessional communication is the communication between experts and laymen. This aspect is thoroughly discussed as part of the degree of familiarity and trust between participants in communication. Thus, a degree of familiarity in communication can range from a high level of familiarity and confidence to complete unfamiliarity or distrust. The degree of openness is also defined as a degree of public aspect in communication, thereby distinguishing between private arrangements among participants, and public presentations at major meetings, conferences, symposia, and larger private parties which participants of the communication attend.

participants' orientation in a particular communication situation. In order to extend the discussion, the following questions need to be answered: what is the role of text genres belonging to the commissive text type in the communication process of a corporation or institution/ organization? Which features do such texts exhibit at the microstructural and macrostructural levels?

### 3.4.1. Text in specialized communication

Communication which is realized by means of the commissive and assertive text types analyzed in this research is classified as communication for special purposes. However, specialized communication is not only realized by means of specialized language in texts, but also using general language. Due to the function of specialized texts and the presence of specialized vocabulary in such texts, the authors believe that a few lines should be devoted to specialized communication which is realized with certain text genres. Certain text genres which include specialized communication involve a terminologically defined specific subject (area, fact, field). In order to understand such a text, a person should have some knowledge about the field. Otherwise such a text is quite incomprehensible to a layman, since it is implicitly or explicitly linked to the knowledge of a profession and the vocabulary used in the same area of expertise (Hoffmann, 1988: 233-235). Such texts differ by function and content by exhibiting the same or similar features characteristic for their text genre. These texts are associated with a communication situation in a particular profession. The content and structure of texts used for specialized communication, and adequate usage of language resources in formulating and expressing the content structures reflect the communication function of such texts within the specialized area. In addition, these texts are also determined by the communicators' position, directed towards their communication and broader environment (including internal and external environment), their participation in specific communication situations, as well as their communication strategy and intention.

Furthermore, a text genre used in specialized communication is determined by formal communication constraints (internal or external), the subject and content of communication, since one and the same content of communication can be interpreted in different ways according to the communication intention (which can be assertive, directive, commissive, expressive and declarative) and availability and adequateness of lexical and grammatical devices.

### 3.4.1.1. Text genres as specialized communication tool in organizations

If we consider text genres as elements that carry out communication within a particular profession, then we are analyzing them as tools of specialized communication.

Texts used in specialized communication (Hoffmann, 1990:11) belong to a certain type of communication. Production and reception of such texts require

general world knowledge as well as additional specialized knowledge. Therefore, the analysis of such text genres cannot include linguistic means only, but also the frequency of occurrence of such means (Hoffmann, 1988:133).

An analysis of text genres used as specialized communication tools in organizations must include features of such texts. In other words, we must look at their structural descriptions, i.e. the internal and external text features that are at the same time their main features. The text is any entity that can be assigned to some text genre (Ivanetić, 2003). Text genres used as specialized communication tool in organizations cannot be clearly separated from texts used as non-specialized communication tools (Hoffmann, 1999:478-480), if we take their distinctive features into consideration. The differentiation of text functions is rather subjective. The macrostructure of the text still remains a very important feature, and it is manifested by the subject of the text as well as its function. The function of the text is what allows a rough classification.

The communicative function and implementation of text genres is discussed here. Available sources and references on this topic are based on German linguistics and text linguistics (e.g., Engel, 1988; Bolten, 1991; Hundt, 1995; Ivanetić, 2003; Gansel, 2010; Brinker et al., 2014, and others). However, little has been published and no research of text genres used in corporations has been conducted in Croatian so far.

In order to be able to understand the role and importance of text genres for communication purposes in organisations that made a profit and implement a certain coporate ideology and philosophy, we must take the function of each text genre as a starting point. A classification of text genres as assertives, directives, commissives, expressives and declaratives can offer a basis for this analysis.

### 4. Analyses of text genres

As already mentioned, Ivanetić (2003:67) argues that the classification of text genres depends on the author's understanding of text categories. In her analysis of text genres, Ivanetić embraces Brinker's definition of text as a limited and coherent set of linguistic items that have a certain communication function. According to Ivanetić, this definition allows for the inclusion of certain forms that we cognitively view as texts but which do not possess all the typical characteristics defining a text. This study takes this definition as the criterion for determining the text genre, and the most important parameter for classifying text genres used in organizations is their communicative function.

Ivanetić (2003:68) points out that in determining text genres, the author's interpretation of the corpus plays an important role. As a result, in the literature on text genres, there are situations where authors classify the same text genres into different functional types and there are non-prototypical text genres that are difficult to classify. Thus, the author argues that these situations support the theory of textual prototypes, i.e. the degree to which a text falls under a category as there are no sharp boundaries between them.

This study takes into account Brinker's classification of text genres (2014:39-43) developed on Searle's (1976:1-23) classification of speech acts based on 12 criteria, three of which are considered to be of the highest importance, the criterion of the speaker's (the author's) intention (to say how things are, to get someone to do something, to commit to do something, to express feelings and attitudes, to change the world), the criterion of the direction, i.e. word-to-world or world-to-word and the criterion of the psychological state of the sender (the condition of sincerity).

Brinker's et al. (2014:133) classification also draws a distinction between five text types which they term: instructive, appellative, obligative, contactive and declarative. This classification overlaps with Searle's classification and thus, instructives coincide with assertives, appellative with directives, obligatives with commissives, contactives with expressives and declaratives with Searle's declarations.

This research partly takes Searle's taxonomy and classifies text genres into assertives, directives, commissives, expressives and declaratives. Although there is a range of different text type classifications, the reason for embracing this classification is that these five text types can best explain the communicative function of individual prototypical text genres.

Brinker et al. further analyse each text (regardless of its text type classification) according to three textual levels. At the communicative-pragmatic level, we look at the function of the text in the communication process, i.e. the communicative intention of the sender (text producer) which is expressed and presented through conventional means to the text recipient, who in turn, decodes

the content and recognizes the communicative intention of the sender. The function of the text may be a) informative function, which is most commonly reflected in text genres such as news, report, description, reviews, etc., which are classified as assertives b) appellative function, which is reflected in text genres such as advertising texts, instructions, laws, applications, etc. which are classified as directives; c) obligate or self-obligate function<sup>17</sup>, which is reflected in text genres such as contracts, warranties, offers, etc. which are classified as commissives; d) contact function, which is reflected in text genres such as greeting cards, condolences cards, postcards, etc., which are classified as expressives and e) declarative function, which is reflected in text genres such as mandates, authorizations, etc., which are classified as declaratives.

The communicative-pragmatic level also includes contextual or situational parameters for determining the genre of the text, such as the form of communication (e.g. face-to-face conversation, telephone conversation, broadcast of a text through media, letter, advertising flyer, etc.) and the sphere of activity (their use in various social spheres and thus we have texts used in private, public and institutional communication). Brinker et al. (2014:139-146) claim that at this level of analysis, we observe the situational context, i.e. the circumstances in which information is transmitted. We then observe the social context or the sphere of activity, in other words, the sender's opinion and perception of himself/herself as well as some guidelines that show us the roles and the relationships between the sender and the recipient of information.

When talking about the thematic level, Brinker et al. (2014:52-57) state that it incorporates the content structure of the text referring to people, content and activities as well as the 'stream of thought'. The theme of the text is the basis, i.e. the core of the text content, and it is also observed through individual text segment themes which make up the thematic hierarchy of the text. The theme of the text and text segments are developed based on the thematic schema or pattern that may be descriptive, narrative, explicative and argumentative. In theme analysis, Brinker et al. also mention the sender's relationship towards the theme as a possible criterion in the analysis of text genres, where one of possible relationships is an evaluative relationship which expresses a positive or negative judgement of the content and text theme. Brinker et al. argue that an evaluative relationship contributes to determining the function of the text and its modifications.

When considering the language and stylistic level, we look at the syntax, lexis, stylistic and linguistic devices as well as other language specific qualities that are characteristic of individual text genres. From a textual aspect, we primarily speak of syntactic and semantic relationships contributing to text coherence. Brinker et al. (2014:45) talk about constitutive relations within the text such as recurrence achieved through the repetition and continuation of linguistic units

<sup>17</sup> Brinker et al. use the term "Selbstvepflichtungsfunktion" or the 'self-obligation' function (cf. Brinker, 2002:43).

in the sentences that follow in the text, as well as a connection or cohesion that is achieved by linking sentence or statement contents. Connection may be explicit, i.e. it may be achieved by using certain grammatical devices such as conjunctions or it may be implicit or based on cognitive semantic processes. Brinker et al. also argue that in addition to the abovementioned relationships, it is necessary to take into account the lexical-semantic and stylistic aspects of text coherence. These aspects refer to the isotopic levels of the text and different stylistic levels of sociolectal and dialectal types. At this level of analysis, Brinker et al. (2014:57) take into account the linguistic and stylistic devices, whether explicit or implicit, which contribute to the development of the theme and content of the text in grammatical and lexical terms.

Taking into account the abovementioned, text genres (as well as the commissive text type) can be analyzed according to the following model (Jurin, 2010):

#### PRAGMATIC CONTEXT

1

#### COMMUNICATIVE - PRAGMATIC LEVEL

- The intention of the sender
- The function of the text and its individual segments

1. The graphical design of the text

- 2. The macrolevel of the text
  - a) Introductory segment of the text:
    - The recipient of the text
    - The subject of the text
  - b) Central segment of the text (the main segment of the text)
  - c) Concluding segment of the text

#### THEMATIC LEVEL

- a) Development of the theme or the subject of the text:
  - Themes of individual text segments
  - Thematic schema (descriptive, narrative etc.)

#### LANGUAGE AND STYLISTIC LEVEL

- a) Introductory formulas
- b) Individual text segments (analysis of lexis, sentence types etc.)
- c) Concluding formulas (neutral, private, friendly, formal, etc.)

#### 4.1. Text genres in organizations

Communication is part of the functioning of every organization. Therefore, proper functioning and the realization of a business plan and making a profit are not possible without timely, accurate and precise communication. Communication in every organization should be considered within the functional aspect of the organization. So, Grochla (1999) claims that communication reflects the specializations and division of work in a corporation (organization) and the standardization of its procedures and processes. Moreover, communication also reflects the hierarchical configuration of the organization, and should therefore demonstrate flexibility as a reflection of changes.

The most important product of communication in organizations is the smooth exchange of information.

In order to successfully implement the process of information exchange, it is necessary for all communicators to be familiar with all corporate information channels which should be available to all of them at the same time (otherwise we can talk about delayed or untimely information which can result in far-reaching consequences). The information should be clear and authoritative, especially when referring to information issued by the management.

Managerial authority is achieved through information which should be characterized by content clarity because understanding information promotes an authoritative environment. The information flow in the organization should also comply with the goals and mission of the organization. Information should be available in both directions, top-down from the management to lower levels and vice versa with the bottom-up process.

This work studies the function and realization of communication through text genres.

In order to understand the role and significance of text genres for communication in an organization, the functions of text genres in organizations should be discussed first. So, we start with the previously mentioned five classes of genres which are called text types in our work, and they are assertive, directive, commissive, expressive and declarative text types.

What is the role of these text types in the communication process of an organization?

Hundt (2001:643) believes that schematization and standardization are the main characteristics of text genres involved in communication in organizations. Therefore, directive and commissive types are prevalent in corporate communication. Based on the investigations conducted by Hundt (2001:647), it has been demonstrated statistically that the use of commissives and declaratives dominates in the total number of text genres in organizations. Since the goal of an organization is business, management and gaining a profit, continuous communication, transfer of messages, correspondence, and information

exchange and processing are required. In this situation, the role of management is also to inform the corporation about business development strategies, to communicate with partners, employees and the public.

So, the main role of commissives and declaratives is to oblige the sender or the recipient of the message, whereby the declaratives create a new reality, and at the organizational level specifically state a need for realization, transformation, creation or maintenance of an institutional reality (Rolf, 1993:312), while the role of commissives is to oblige the recipient to accomplish or not to accomplish a certain task (goal or profit) in an organization. Therefore, we distinguish text genres such as an endorsement, application, contract, letter of intent, bank guarantee, offer, permit for the execution of work or realization of business or credits, service contract, tariff agreement, etc. which are classified as commissives and perform the function of expressing expectations or a possibility of achieving goals of the sender or the recipient of information in the organization.

Furthermore, there are text genres which belong to the declarative text type and they are an essential part of corporate communication. These text genres are, for example, a share certificate, shares, certificate of income, tax return, authorization form, etc.

The prototype of a commissive is a contract which is essential for corporate functioning, and at the communication and pragmatic level, it can be international, intersocial, interpersonal or intercorporate (Rolf, 1993:270), because the text function and the sender's intention is to determine business and financial relationships. Contracts are linguistically explicit, usually divided into sections, articles, paragraphs, and clauses considering the graphic design of the text genre. The text function and the intention of the text producer who writes the contract may be described as creating an obligation between parties under contract. These text genres at the macrolevel share some crucial elements such as the name of the contract object, terms and conditions, and signatures of both communication partners. The main commissive function of this text genre is to provide a detailed description of the contract object (for example, quantity, appearance and schedule of services or products).

The theme develops both explicitly and implicitly through cultural, logical and ontological modes of employing semantic and lexical contents, although, basically, at the thematic and language stylistic levels, explicit repetitions without a possibility of interpretation or self-interpretation are aimed at stating the text content in order to avoid misinterpretations of provisions and clauses of the contract.

The theme of the text refers to the future. As a rule, these texts at the language stylistic level have formulations which, in case the contract terms go unfulfilled, point out legal consequences (e.g., in case of dispute both parties ... refer to the Constitutional Court of the Republic of Croatia ... etc.)

Generally speaking, declaratives perform the function of business process documentation within a corporation, but also business processes that were already completed and referred to the past. Therefore, the activities in declaratives refer to the past with consequences for the future. So, a prototypical text genre of declaratives can be a confirmation of transaction which also includes some predefined standard elements. Specifically, at the microlevel the confirmation of transaction is signed by two persons, one who provided a service and the other who received the service or product, and there are some other elements. It should be pointed out that at the language stylistic level, linguistic devices in declaratives are highly reduced and compressed so that they provide only the essential data.

The role of directives in organizations at the communication and pragmatic level is manifested by the obligation of business partners, employees or the public to fulfill tasks, activities, accomplish business goals or make the business profitable. The text producer's intention and the main function of the text and all of its parts is the obligation of fulfillment. This obligation can appear in different forms depending on the nature of business of an organization. The following text genres are used for this purpose: prohibition of monopoly, provision of payment of fees, instructions, indefinite duration contract, bill, warning letter, credit demand, agreement on life insurance, complaint, prohibition, injunction etc. Directives in organizations at the text macrolevel often appear as a "form", i.e. a standardized written form for entering data, and it rarely allows deviations in its formulations. If we consider, for example, a bill as a typical text genre in directives, the following formulations and elements are written on the majority of bills: the receiver's name, description of the product or service, prices for each product or service, bill number, due date, etc. The thematic schema develops by explicit semantic and lexical contents, and the theme development refers to the future. Communication using directives in organizations is usually taken very seriously because at the text macrolevel these text genres also include clauses providing for the consequences of non-performance of terms or dates, and these consequences arise in the form of a warning, enforcement, confiscation and other forms of the extralinguistic reality.

When talking about assertives, it should be pointed out that they play an important role in the communication process and functioning of the entire organization because they regulate future relationships and activities by providing information about the past, present and future state of affairs in the organization. So, there are text genres which are commonly used in corporate communication such as final payment, tax preparation, balance sheets, stock list, expertise, half-year or annual balance sheet, payment balance sheet, etc. Assertives are marked by their informativeness, i.e. the amount of information they can transmit. It means that the function of assertives and all their text parts in an international organization is to provide information about all internal and external sectors. The aim of using such text genres is to store or

present as much information and data in as little graphic space as possible. These texts at the macrolevel very often contain compressed data presented as a table, graph, diagram or other types of data representation. They are characterized by a significant reduction of linguistic devices (content) at the language stylistic level, therefore, the use of abbreviations, acronyms, symbols and figures is common. Considering the coherence required by these texts, both the text producer and the text recipient should share common general and professional knowledge in order to understand the reduced contents.

The role of expressives in the communication process in an organization is minor in the part of communication dealing with business. It is understandable since the need to affect an emotional state or accept it in the business environment is poorly represented (it is slightly more represented in American corporate identity). However, an essential part of communication in an organization is not business-oriented because personal communication between employees and business partners is frequent (Fox. 2006:16). This type of communication includes an exchange of opinions, feelings and information about private matters and activities of individuals in the corporation. Thus, there are greeting cards for holidays, birthdays, promotions, congratulation messages for achievements, expressions of condolences in case of a disease, accident or death of a family member of business partners or employees, declarations of collective guilt or sympathy to the public addressed by the organization's spokesman. If we consider a birthday card, we can notice that it also has some standard elements which are, unlike in other types of text genres, liable to changes and modifications. A birthday card at the macrolevel commonly includes information about the text producer's address, the main part of the text where the celebrating person's age is mentioned, and the recipient's address. The text is usually short and witty, without symbols of another genre, although in e-mail communication besides a textual part, a witty graphic image or animation is attached (funny creatures, dwarfs, angels, flowers). Personal communication, unless it is exaggerated, contributes to a positive work environment in the organization, higher work efficiency and making profit.

Interactive text genres<sup>18</sup> are also involved in the communication process in a corporation. They contribute to communication and contacts outside a corporation or institution. Since external communication has changed due to the increasing use of technology-mediated and electronic communication, Fox (2006:17) claims that it has radically modified the use of language and imposed new forms of communication. The author primarily refers to the deformalization of e-mail correspondence, reduced forms in SMS and messaging communication, etc.

The function of interactive text genres in corporations can also be carried out by newspaper articles which deal with topics specific for an institution, text genres such as comments, articles in a scientific journal, etc. (Hundt, 2001:654).

<sup>18</sup> In this work, interactive text genre is a term which stands for Hundt's "vermittlungssprachliche Textsorten" (Hundt, 2001:654).

Interactive text genres play an important role in the process of creating an identity and trademark of an organization (since advertising texts have the most prominent function outside a corporation), and as far as their function is concerned, they are mostly assertives or directives.

## 4.2. Texts of the commissive text type used in multinational organisations

Text genres of the commissive type are mostly used in management communication for attaining objectives of a particular corporation or institution. Text genres of this type are the basic communication tools in organizations and can therefore show how the management uses distinct vocabulary, grammatical structures and syntax in specific communication situations. The microstructural and macrostructural features of those text genres represent a specific communication model that the management uses to accomplish its goals.

Text genres in general and thus text genres which belong to the commissive text type can be used in multinational organizations in order to realize corporate ideology and achieve the goals of multinational corporations.

It is assumed that every interaction that drives things, actions, processes and people in the organization can be interpreted as a language which is realized by linguistic and non-linguistic signs, and which serves as a message transfer agent. An interaction in which linguistic symbols are used is called linguistic communication. Communication takes place in the form of a communication act which can be described as a communication event in a specific situation, unfolding between at least two communication participants, the sender and the recipient of a message (whereas a message is any content or information that is the subject of interaction), which starts with an initial signal from the sender and ends with a signal/ response from the recipient.

Communication can be realized by various methods and media, and one of them is a text. The text is a product of language and communication performance which attempts in its representation and model to be received in every place and time regardless of its origin (Gansel & Jürgens, 2007:17).

Communication in management using text genres of the commissive text type is a means of modifying behavior, implementing change, raising productivity and achieving goals (Jurin, 2009:22-23 as per Barnard, 1999:378).

## 4.2.1. Classification and analysis of commissives

Text genres in this research will be classified as texts of the commissive text type, subtypes bilateral and unilateral commissives. This research uses Searle's terminology, but classifies text genres from the corpus according to Brinker's et al. classification into the commissive text type<sup>19</sup> (as explained above). The authors of this book propose a further analysis of each text according

<sup>19</sup> This classification is based on Searle's (1976:1-23) speech act classification.

to Jurin's (2010) analysis schema (see above). Additionally, all texts will be analyzed on three levels. These levels are taken over as description levels of each text in the corpus, thus resulting in: 1. communicative-pragmatic level, 2. thematic level and 3. language stylistic level (Brinker, 2002:39-43).

Hundt (2001:643) argues that the basic features of text types used in institutions and corporations are schematization and standardization. When talking about schematization and standardization, he refers to text types in which text differences are minimal (e.g. invoices, receipts or statements of account), text schema and linguistic tools are standardized and predefined. Therefore, the commissive text type is highly frequent in the communication of organizations (Hundt, 2001:647). Given the fact that the goal of a corporation is business, management and realization of business goals or profit, constant communication, conveying messages, correspondence, exchanging and processing information is required. Hence, the management takes the task of informing all structures of the organization about business strategies and development, and communicates with its partners, employees and the public.

The role of commissives is to oblige the sender to the implementation or non-realization of a business (goal or profit) in the organization. Text forms such as bank warranty, offer, construction permit or the realization of jobs and loans, agreements and heading contracts are typical examples of text genres of the commissive text type.

In the text linguistic theory, a commissive prototype is a contract which is very important for the functioning of an organization. It may be interstate, intersocial, interpersonal or intercorporate (Rolf, 1993:270), since it regulates a variety of business and financial relations. Contracts are linguistically explicit and their role in organizations can be reduced to binding the communication partners to the models of behavior which have been stipulated in the contract.

Senders/text producers are obliged to implement certain actions or a promise using commissives, and Brinker et al. (2014:64-109) state that commissives (they explain that they have an obligate function for the text producer) must primarily act bindingly, where the text producer agrees to perform an action, and normatively, where the text producer agrees that he, in the extralinguistic reality, will act in accordance with the standards. Commissives serve as peacemaking coordination between different spheres of interest (Methfessel, 1990:534) as well as legal norms and the establishment of order through self-determination of the communicator in the free zone (this definition specifically refers to the prototypical commissive text, which is the contract).

In communication with commissive text types, the text producer (sender) is committed to the behavior which is determined in the text and already accepted (Rolf, 1993:262).

Commissives are texts whose illocutionary function is to compel the text producer to perform or not to perform a particular activity (attain an objec-

tive or realize profit) in the corporation or institution. Communication is directed here from the world towards particular words. The text producer's psychological attitude expresses his intention to perform a particular activity (Ivanetić, 2003:73).

By using commissive text genres, the text producer is committed to perform an activity, to fulfil a promise. Commissives must primarily act bindingly, they express an obligation for the text producer, and thereby he agrees that he will act in accordance with the norms and standards of the institution or corporation. According to the direction of obligation in text genres of the commissive text type, we distinguish (Ivanetić, 2003:73): unilateral commissives or obligatives, and bilateral commissives. The direction of commissives' effect is equivalent to directives i.e. of the extralinguistic reality towards words, and mental attitude of the text producer is the intention to realize an action, so that there are unilateral and bilateral commissives according to the effect direction.

#### 4.2.1.1. Bilateral commissives

Text genres of the bilateral commissive text type serve to gain mutual identical behavior and commitment (Rolf, 1993:269), or realization of identical organizational goals made by two parties involved in the communication. So, using text genres of the bilateral commissive text type, both, the text producer and text recipient commit themselves to realize actions, fulfil tasks and conduct behavior stated in the text.

Self-imposed texts in general are strongly institutionalized and schematized, and therefore they are directly characterized by explicit perfomative formulas (that signalize the text genre and its function) expressed by verbs and syntagms: to promise, to pledge oneself, to swear, to take, to agree, to guarantee, to insist on something, to offer etc. The level of commitment of communicators is strongly connected with the mode of interpretation of the theme of the text genre. This mode can be expressed through following performative formulas: to intend to..; to plan to..; will..; to be determined..; to decide to... etc. (Brinker, 1997:117-118). The text producer can express different levels of willingness to fulfill his commitments by using the mentioned performative formulas. If the text has no linguistic or grammatical signals of the text function of the bilateral commissive text subtype, then the commitment can be expressed through intertextualization and contextualization of the thematic and semantic inventory of the text at the microstructural level (e.g. the title of the text, guarantee, contract etc.).

The following text genres are identified as the bilateral commissive text type in Croatian (Ivanetić, 2003:73): arrangement, pact/agreement (interstate), pre-contract, treatise (international agreement), contract (act of sale, nuptial, employment, and lease) and others.

In organizational communication, among others, text genres that perform the function of the bilateral commissive text type are application form (for education, seminars, workshops etc.), contract and notice of readiness.

#### 4.2.1.1.1. Text genre: application form

The application form is a text genre that realizes communication while preparing participation in various seminars, round tables, presentations, workshops, etc. 76 examples of the text genre application form were analyzed. The reasons for placing application form in the text subtype of the bilateral commissive are as follows (Hoffmann, 1998:538): 1. The first communicator is the text producer who has given basic information about education through the announced text of training, or has already lured the text recipient through directive and obligation statements. So, both the text producer and text recipient have access to basic information about the education, and the recipient confirms participation and interest by filling out the application form, 2. the primary purpose of communication is to establish a binding relationship of the text recipient towards the text producer and vice versa; obligations set forth in the application form are expected to be met, 3. the fundamental communication process of the application form is declaration and commitment, 4. the communication situation using the application form is to set the arrival and participation, and therefore the payments, and so to guarantee a place and the necessary materials and equipment for the seminar, and to prepare an invoice statement for education, and 5. the communication subject is the consummation of the education content.

Engel (1996:135) distinguishes between non-typified and typified application forms<sup>20</sup>, though the author does not recognize non-typified application forms as particular text genres, but categorizes them as the text genre business letter or private letter.

The text genre application form is standardized and schematized at the macro and the microstructure of the text. The text is entitled ... Application for participation in the seminar or workshop... The title Application for participation or Application form immediately gives the recipient, at the cognitive level, necessary information about the content and the theme of the text and, evokes thereby the efficient cognitive frame and relevant world knowledge. It is followed by the name of the topic of education as well as allegations of time and place on the level of the text function. That part still belongs to the introductory paragraph of the text. The sequences of structural segments of an introduction are partially determined by the logic of things, and partially by conventions e.g.:

Pay system and monitoring work performance (logic of things) on Wednesday, April 16th 20XX, 09:00 am, XX, Bulevar 23, Rijeka (large hall, ground floor)...

<sup>20</sup> Engel classifies application forms into informatives.

This is followed by a binding statement which guarantees the participation and represents the central part of the text. Graphics include a box in which the communicator – text recipient, using the cross sign, indicates his willingness to participate, which is followed by a binding formula in the form of a statement: ... YES, I apply to participate in the seminar ... Both partners expect the fulfilment of commitments or promises after signing this statement. The propositional content that the recipient is going to commit himself to participation at the seminar is presented by using the active verb to participate in present simple or future tense, or the syntagm I wish to apply to participate. The coherence of the introductory part and the central part of the text lies in the repetition of the nouns seminar, workshop or education.

An informative table follows, stating the basic information about the communication partner who has committed to participate in the seminar, i.e. company name, activity, position, title, address, fax, e-mail and telephone number, date and signature of the attendee. The statement that has an informative function as well as functions to direct and register serves as an implicit binding statement, since in a case of attempted manipulation, the text recipient has the basic information of the senders/text producers and vice versa, and may require the settlement of possible sanctions in both cases - the text producer and the text recipient. The theme of both the introductory and central part of the text is oriented towards the future where the text producer in the introductory part describes all services and programs offered in the seminar, education or workshop, and the recipient can use them by applying to participate, and in central part of the text the text recipient commits themself to be a participant in the future when the education will take place.

The final part of the text is a form of notes which inform the recipients, and notes that the application is time-limited, i.e. that the recipients may apply until a fixed date in order to participate in the event. This statement is entitled *Note*, for example:

Note: Please send filled application form via e-mail or fax no later than April 14<sup>th</sup> 20XX so that we can provide you a spot. Thank you!

After this final formulation there is no salutation formula or signature of the organizer (text producer).

If we analyze application forms whose communicative direction goes from the public to the organization, we have the situation in which the communicative function of the text is different and changed. However, it cannot be claimed that application forms that serve the purpose of external communication are strictly schematized and standardized as in the case of application forms for purposes of intracommunication and intercommunication, since they do not show stability (such as the text genres code of ethics or calendar of working hours).

The introductory signals follow in the form of an announcement of the meeting type or similar, together with the topic and title; it is also common to state the

time and place of the meeting. This is followed by a graphically separated section listing the information about the recipient: name, company, e-mail, fax, address, company registration number, stamp and signature of the recipient.

Part of a text that has the commissive function serves as an introduction into the above mentioned, e.g.:

... Yes, we accept the organizers' propositions and register for the participation in the...

After that, some of the terms and propositions of participation are cited, such as *Registration fee*, what is included in the registration fee (e.g. lunch, promotional materials, or something else). If a registration fee or any other form of payment is mentioned, then a statement from the directive function follows, for example:

... please pay the registration fee to the account of HUM-CROMA no. ....

Some application forms even have notes, e.g.:

... The number of participants is limited due to the capacity of the hall so please book your spot at the latest... because the hall will be booked according to the order of registration...

Such statements have an instructive function since they give advice to the recipient and, if he accepts it and fills in the application form, this goes in his favor.

The final signals again have a directive function since they usually refer to the filling in and sending the application form, followed by the statement that the sender is at one's disposal for further information.

Sometimes, the text genre application form contains a title: *Registration for the seminar* and unlike the above described application forms it does not state the topic of the seminar's time or venue as the introductory signal, but the prices of seminars for companies and individuals, for example:

... COMPANY: 1 application per person = 980,00kn.., INDIVIDUALS: private persons (pay in cash) = 650,00kn...etc.

Those titles have an informative and orientational function, and titling the text with prices brings the theme of consummation in focus, while the data about the recipient and his commitment are left out of focus of the main theme. While stating the prices, the theme of the text gets a new dimension, and that is the presentation of education in a more serious way in the sense that the price is supposed to give the recipient the assurance that the education will be performed in the latest and high quality mode.

Such an introductory part of application forms represents an advertising message of the text. Although the theme changes here in the commercial direc-

tion, the introductory part isn't incoherent because it refers to the relevant aspects of the frame of the education organization, and the text producer accomplishes that relevance by using the syntagm application per person.

Also, such applications are attached to the invitation or announcement of seminars, workshops, educations etc., and it is not necessary to quote the title or the topic of seminar once again. This statement, which specifies the cost, can be informative, orientative or sometimes instructive if it contains data on how and where the payment should be made, e.g.:

...application per person = 420kn (ADDIKO Bank, HR56 89XX XXX X,Model 01, purpose 123- 45XX-XX)...

Later on, we may obtain further information about the discounts that can be obtained. The application continues with a directive statement which indicates the fee payment:

...The registration fee will be paid in before the seminar opening, to the INTEGRA account no....

This formulation is in the passive voice which is quite unusual for text genres used in management communication, since such a statement has a dose of "patronizing" behavior, i.e., the manager - text producer patronizes the recipients as if they were a group that has to be guided and taught. The reason for this relationship probably lies in a longlasting collaboration of the organization with a specific group of translators and with the same recipients. The statement with a commissive function that obliges the text recipient to participate is also the central part of the text. This can be a graphically separated part which specifies the recipients' data, i.e. their names, company names, registration numbers, addresses, phone numbers, e-mail address, place of registration, date and signature of the person liable. Continuation gives a directive statement which indicates where to send the application form (e-mail, fax, address).

This is followed by an interesting formulation that is not usually found in application forms of organizations: ...General conditions of participation in seminars... and this implicit directive statement has the function of informing the recipient what to do, while at the same time not giving them a choice to decide otherwise, for example: ...

...Phone application for individuals (also by fax, mail or internet) with payment in advance...

The final signal of the application form is signature and the name of the organizer - text producer, followed by the company stamp and the date.

To conclude, the text genre application form is mostly used for external communication in organizations. Application forms are standardized and schematized and they have the following elements at the macrostructural level:

INTRODUCTION Header

Subject

CENTRAL PART Event information

Participants data (table) (Participation regulations)

CONCLUSION Instructions on how to apply

(The formulation of being available for further information)

(Signature)

At the lexical level in the introductory section and in the text subject, the occurrence of the noun *application form* can be confirmed in all texts.

The central part of the text presents figures that show the time and venue of the event, and they can be detected in the final section of the text which indicates event costs, as well, e.g.:

```
... April 16<sup>th</sup> 20XX at 09.00 pm... or... 1 application per person = 980,00kn... etc.
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The occurrence of nominal phrases from the field of education planning and symposia planning is a regularity, e.g. seminar, workshop, symposium, conference, participation, registration fee, conditions of participation, deadline for registration for a seminar or a conference, etc.

In addition, a frequent use of the verb *report* has been detected, which points to the need for filling out the application form and booking the event.

The final section of the text, with the instructions on how to apply, showing the payment and event costs contains a syntagm with the noun *price* or *payment*, e.g. *price* of the seminar, price for private persons, price for companies, registration fees, payment of registration fees, company bank account, prepayment etc.

At the syntactical level we recognize forms that do not contain all elements of a conventional sentence, but only a syntagm which, situated in a certain communicational situation, provides a syntactical function, e.g. "How to be a successful leader" Wednesday, 14th May 20XX at 09.00 am... But in general, dependent clauses prevail at the syntactic level.

#### 4.2.1.1.2. Text genre: contract

In the text linguistics theory, a prototype for text genres of the bilateral commissive text subtype is the contract which is very important for the functioning of the organization.

"A contract is a mutual pair of commitments made by two contracting parties. Party A promises to do something for party B in return for which party B promises to do something for party A. The two commitments are not independent; in a genuine contract one is made in return for the making of the other. And this gives rise to the standard doctrine of the quid pro quo element of contracts" (Searle & Vanderverken, 1985:197).

A contract is a text genre that has rather often been tackled in text linguistics<sup>21</sup>. Sager, Dungworth & McDonalds (1980:156) state that a contract is an agreement between two or more parties which confirms what has previously been agreed, or has been the subject of a debate in the oral form, and usually seeks legal mediation through third parties (lawyers) who, in a written form, lay out what has been agreed between the two parties and whose agreement is the subject of the contract.

The aim of the contract is an attempt to coordinate various interests on the basis of mutual trust and the parties alone can devise the content of the contract and may, through legal regulations, legally define that content to suit their goals.

The reasons for classifying a contract as a text genre of the bilateral commissive subtype are as follows (Hoffmann, 1998:538): 1. communicators are the text producer that, using directive and obligatory statements tries to "force" the text recipients onto a certain mode of behavior. Both the text producer and the text recipient demand the fulfilment of certain agreements determined by legally formulated regulations, 2. the primary communicative purpose of the contract is to establish a binding relationship between the text producer and the text recipient and vice versa, obligations set forth in the contract are expected to be fulfilled, 3. the fundamental communication process of the contract is binding according to the contract regulations, 4. the communication situation of the contract is to determine the behavior mode and, 5. the communication subject is consummation of the contract content.

A contract as a text form represents a unique blend of general and specialized knowledge, projected to the language (Hoffmann 1998:535), where general language is used in statements that describe and state the goal of a contract, and specialized language is used in legal provisions (and this is the part that is usually determined by third parties, i.e. a lawyer). Text genre sponsorship contracts of multinational corporations are the focus of analysis in this research. Thus, we are dealing with external, symmetrical and interprofessional communication.

At the macrostructural level, this text genre is divided into paragraphs or articles preceded by an introductory signal, i.e. names, registration numbers, addresses, their legal representatives and their positions and parties of the contract.

<sup>21</sup> e.g. Dimter, 1981; Brinker, 1985; Heinemann & Viehweger, 1991; Gläser, 1990; Hoffmann et al., 1998.

This is followed by the formulation:

... on the XXth May 2016 they have signed the following SPONSORSHIP AGREEMENT... ZZ... in Zagreb...

This statement is oriented towards the past, noting that the obligation and fulfilment of commitment of both parties was signed in the past but for gaining objectives in the future.

Therefore, the Past tense and a more effective Perfect tense are used with the formula ...they have signed... or ...both parties signed...etc.

Very common formulations are presented in continuous forms, e.g.:

... Corporation X and Corporation Y are signing a mutual SPONSORSHIP agreement for...

Some analyzed contracts (40%) show variation in using passive voice, such as

... Contract nr. DD is signed by the following parties: XX and YY in order to....

A strongly binding element in every variation of the text genre contract is the allegation of the date on which the contract is signed, e.g. *On the day YY...* (see above) or *...signed on the XX...* because the contract is valid from that date and all obligations and commitments are counted from this start date.

Mandatory formulation of the contract, which also falls into the category of introductory signals, is the contract number and contract subject.

Full text of the agreement is divided into articles (e.g. Article 1 - Article 9), whereas each article is a separate text section and a separate unit. Text parsing facilitates understanding the entire contract as well as understanding individual articles. At the same time, the commissive function is to engage both communicators to fulfilment of actions and it can be seen as a dominant function, while the content of any specific article is subsidiary (Brandt & Rosengren, 1992:9-51).

Each article is entitled, i.e. presents an opening signal and formulations that determine each article as a whole or as a separate topic, for example:

Article 2 Acting party obligations
Article 3 Employer obligations
Article 4 Service price ... etc.

Moreover, the function of each article of the contract supports the function of the entire contract.

Coherence of individual articles or text sections is achieved by a denotative "invocation" to acting parties (Hoffmann, 1998:536), or the denominations *acting party* and the *principal* within deadlines.

Pragmatic coherence is achieved by explicit or implicit repetition of the subject or content regulated by the agreement, and semantic coherence through nouns or verbs of the same semantic field, i.e. nouns: acting party, principal, contract disputes, agreement, rules of the profession, etc., or verbs: maintain, perform, publish, ensure, acknowledge, deliver, pay, etc.

If we consider the lexical level of the text, frequent repetition of nouns, verbs and phrases such as: ...acting party, principal, obligations, is due to, is obliged to, etc. indicates the use of terminology from the field of legislation, and we can say that the contract language is on the verge of legislative language, for example:

... Acting party obligations: The principal is obliged to ensure the production of promotional materials and promotional messages, according to Article 2 of the contract and deliver it forehand... etc.

The last or the penultimate article of each contract is entitled *Final provisions* ... and the statement that follows has a declarative function, e.g.:

... This contract comes into effect and becomes effective when signed by the authorized representatives of both parties, and is applicable from ... to...

The final signal of the contract usually refers to the number of copies:

This Agreement is made in 4 (four) copies, of which the acting party retains 2 (two) and principal 2 (two) copies.

The signatures of the text recipient and the text producer follow (when talking about contracts it is better to call them communicators): ...For acting party... and ...for principal... Signature has a directive and obligate function, since the directive function is manifested in signature in the case of conformity with the provisions of the contract and obligate function is reflected in the necessity of fulfilling the provisions of the contract signed.

All the characteristics of the text genre sponsorship contract are mostly bound to the process of their production and reception because both parties (both communicators) try to realize their goals by signing the contract.

However, unlike a large number of text genres (and not only them), communication with sponsorship contracts does not involve the process of cognitive evaluation of the situation (Heinemann & Viehweger, 1991:92). In order to plan and estimate all actions that connect goals and means of their realization, because contents of corporate contracts are schematized and standardized. Therefore, they leave the communicators no space and time for individual evaluations. They only follow prototypical patterns and the communicators behave in accordance with that model.

Schematized contracts are codes characterized by a conventional macrostructural form as an appellation of the text genre noting the date and signature. Therefore, the introductory and the closing part of the contract are standardized.

This standardization can be recognized in the repetition of compositional parts of the text and language forms, which is known as the text genre style in text linguistics. Authors like Sandig (1986:194-196) and Heinemann & Viehweger (1991:164-169) call it the typical text style or typical formulation patterns.

A contract serves to communicate between corporations and institutions, and at the macrostructural level contains the following elements:

INTRODUCTION Corporation data

Signing the contract formulation

CENTRAL PART Contract content

CONCLUSION Formulation on the number of copies of the contract

Signature

In text linguistics, the perception starts with the hypothesis that native speakers have an intuitive knowledge about text genres used in everyday life or daily communication, and about their prototypical structure. Accordingly, native speakers should also have intuitive knowledge about conventional situational circumstances of text genres, their content, phrasal structure and text design (Ivanetić, 2003:141). We cannot entirely apply this assumption on understanding and perception of the text genre contract because native speakers, unless they work in certain organizations and read and write contracts every day, don't have intuitive knowledge about its content, phrasal structure and text design. That is the area of specialized (legislative) knowledge. But communicators of that specialized field do have that intuitive knowledge at their disposal.

Furthermore, contracts are schematized in order to allow the communicators to immediately construe a necessary cognitive frame for understanding legislative contents. The usage of the text genre contract is limited to a certain communication area in organizations, i.e., certain social domains with their specific norms and codes. Social interactions exist in those domains containing specific communication models according to which the communicators need to act (Brinker et.al, 2014).

### 4.2.1.1.3. Text genre: notice of readiness

Notice of readiness is a text genre, in structure very similar to the contract. Eleven examples of notice of readiness (used for communication in multinational corporations INA and HSUP) were analyzed for this research. At the level of macrostructure they are schematized and standardized and thus guarantee communication stability and communication results.

The fundamental purpose of this communication is to oblige the text communicators to sign in a later phase, another text genre, contract, and to implement an act or a service. A notice of readiness is a form of pre-contract.

The reasons why a notice of readiness is classified as a text genre of the bilateral commissive type are as follows (Hoffmann, 1998:538): 1. communicators are the text producer that, using directive and obligate statements, attempts to force the text recipient to the behavior that is later fixed through a contract. Both the text producer and the text recipient demand the fulfilment of certain agreements that will be determined through legal formulations of the contract, 2. the primary communicative intent of the notice of readiness is to establish a binding relationship between the text recipient and the text producer and vice versa, in terms of signing a binding contract that follows, 3. the fundamental communication process of notice of readiness is binding in accordance with the agreement, 4. the communication situation of the notice of readiness is to determine behavior modes, and 5. the communication subject acts in accordance with the provisions of the notice of readiness.

The aim of the notice of readiness is to try to establish mutual trust between the text producer and text recipient in order to, at a later stage, communicate through means of a contract; hence the notice of readiness already determines the future provisions of the contract.

The implementation of some corporate affairs does not exceed the notice of readiness, i.e. does not proceed onto a next level - the contract. Therefore, business is performed in agreement with the notice of readiness' regulations, so this text genre can be characterized as an agreement rather than a notice of readiness.

The introductory signals of the notice of readiness are the same as in the contract (information about the text producer and the text recipient, addresses, registration numbers, etc.), and the function of the text genre is signalized through the title: *Notice of readiness between XX and YY...* This text genre is monothematic because it deals not only with one and only one function of the text (to agree the terms which will be stated and committed later in the contract), but it only has one theme (the pre-agreement conclusion).

The title is followed by a formulation that expresses the content or objective of the notice of readiness. All of this represents the introductory part of the text.

As mentioned above, the theme of the text is fixed in the introductory part and mostly influenced by the function of the text. Thus, it determines the language because the variety of the lexis depends on it. The correlation between the theme and language expressions gives a cognitive prediction of lexemes that will be used in the text (Ivanetić, 2003:50). Therefore, the introductory part of the text genre notice of readiness projects the usage of lexis from the semantical field of legislation - contract terms.

Later on, there is a statement: ... The parties agree to the following: ..., followed by the formulation of a commissive function for the sender and the recipient, entitled as XX's obligations and YY's obligations.

This represents the central part of the text which expresses the main theme of the text. The coherence of the introductory and central part lies in the reference of the name of parties in the title (*Notice of readiness between XX and YY*) and the syntagm in the central part: ... The parties agree to...

The function of the text determines the way the theme is described. The text linguistic theory recognizes more or less 4 modalities of theme description: descriptive, narrative, argumentative and explicative. It should, however, be pointed out that text genres rarely include only one description modality (Ivanetić, 2003:51). In reality, text genres mostly combine two modalities of theme description.

The theme description of the notice of readiness uses mainly the argumentative modality. The basis of the argumentative modality lies in the existence of a thesis and argument, because there is no argumentation if we don't have data to confirm the assumptions. Also, in argumentative texts we don't have explicit data support for the thesis and conclusions of the text, but they are rather implicit parts of the argumentation discourse, and they can be more explicit through the analysis of argumentation (Brinker, 1997:74).

Unlike contracts, the notice of readiness does not articulate the overall structure through articles or paragraphs, but descriptively states the commitments of both parties. The final formula is the same as in the contract...

... This notice of readiness is made in 2 (two) identical copies, each party retains one, and all changes and additions must be presented in written form and be signed by both parties...

This final formula has a directive function, as well as the signature of both parties which has a directive and obligate function, as is the case with the contract.

At the macrostructural level, the notice of readiness shows the following elements:

INTRODUCTION Corporation data

Formulation of content description

CENTRAL PART Notice of readiness content

CONCLUSION Formulation on the number of copies of the contract

Signature

A large number of text genres (or their text parts) show typical language patterns, or as Adamzik (1995:28) points out, texts that are stereotypes for certain communicational situations with standardized and partially fixed language structures and cliché-ridden expressions and syntagms which can always be recycled for similar communicational situations (Drescher, 1994:123).

Typical language formulations, words or sentences can signalize the typical text genre without a context.

In the case of the text genre notice of readiness the formulation ... The parties agree to... serves the abovementioned purpose, as well as the syntagms ... Sender's obligations... and ... Recipient's obligations... or (as in some text examples found) ... Obligations of Party 1... and ... Obligations of Party 2.., or denoting the names of interested parties, e.g. ... XX's obligations and YY's obligations...

At the language-stylistic level, the use of verbs that in some way bind to performing or not performing an action is evident, therefore verbs commonly used are: *must, sign, agree, committed, be bound, be obliged, prepare, do,* etc.

A frequent use of nouns and phrases whose function is to emphasize the obligations after signing the notice of readiness is also evident, such as: *obligation, agreement, obligations of the recipients, obligations of the senders.* 

Phrases from the semantical field of legislation are also present, e.g.: parties, identical copies of notice of readiness, must be signed by both parties, must be presented in written form, etc.

Abbreviations or anglicisms are not used in such texts, which is logical in the case of abbreviations since ambiguity should be avoided, therefore all data is cited in full

The result of all mentioned characteristics of the text genre notice of readiness (situational context, function of the text, content, structure, language structures and semiotic characteristics) and their combinations results in the functional style of this text. Text style is always a socially relevant way of language realization (Ivanetić, 2003:55), whereby the text producer and text recipient act (through language, its structures and their combinations) according to the conventional norm.

As for the functional style of the notice of readiness, the administrative-business style which borders on scientific style prevails in this text.

## 4.2.1.1.4. Concluding remarks about text genres of the bilateral commissive text type

The text genres of bilateral commissive text type from this corpus serve external communication (INTEGRA with application form, INA with contract, notice of readiness and application form, HGK-ŽKR with the application form), as well as internal communication purposes. These texts provide horizontal (application, notice of readiness), vertical (sometimes contract), and intra-professional communication.

At the macrostructural level, contracts and notices of readiness show great similarities, since they contain the same elements, specifically: subject of the

contract, terms and signatures of both communication partners. Application forms also exhibit some similarities (in the opening and closing part of the text), while other texts show rather great differences at all levels.

The text is mainly divided into sections, articles, or clauses (e.g. in a contract and notice of readiness), as shown in the corpus.

Text genres of the bilateral commissive text type use the following textual-linguistic devices: formulations which, in case of failure to comply with the conditions mentioned in the text, indicate legal consequences (e.g. in contract or notice of readiness), time restrictions (e.g. on the application forms as limits for application deadlines, or in notices of readiness as a time limit allowed for task completion), price and discount is often specified (e.g. in contract), formulation of detailed description of the text subject is often used (especially in the contract and notice of readiness).

When specifying the obligations of both parties, verbs are in the passive voice, numbers (e.g. prices) and other symbols are stated, (e.g. in the contract), abbreviations, acronyms, and anglicisms rarely appear (especially in notices of readiness and contracts) since ambiguity or wrong interpretation should be avoided.

Sentences are generally clear and explicit, dependent clauses are mostly used, the terminology used mainly belongs to the language of legislation (in the contract or notice of readiness), language of the education organization (in examples of application forms), or oil and gas technology. On the macrostructural level, graphics are not included in the text.

Bilateral commissives used in the communication of corporate and institutional management according to their structure and inventory represent a certain management communication tool which enables successful implementation of corporate and institutional philosophy and ideology. This ideology allows the achievement of institutional and corporate goals and profit.

#### 4.2.1.2. Unilateral commissives or obligatives

According to the direction of obligation in text genres we distinguish (Ivanetić 2003:73) unilateral commissives or obligatives. For this research the text genre offer used as a communication means (in the corporation INA, the company INTEGRA and the corporation FALKENSTEINER HOTELS AND RESIDENCES – FALKENSTEINER CLUB FUNIMATION Borik Croatia), as well as text genre authorization/approval (in INA) are analyzed as typical organizational text genres which belong to the text subtype of unilateral commissives.

Text genres of the text subtype unilateral commissives or obligatives are texts where the communicator takes an obligation towards the other communication participant (Ivanetić, 2003:73).

Text genres that perform an obligate function in the Croatian language are (Ivanetić, 2003:73): permit/license, offer, authorization, approval, guarantee, warranty and others.

This study analyzed the offer and authorization/approval as text genres performing an obligate function in organizational management.

There is a significant number of texts used in organizational communication that fulfill obligate functions. The reason lies in the very nature of organizations which need to communicate with the public through obligate texts, and among other things organize and implement activities related to management education.

For this research, typical text genres with the obligate function (in communication of INA and HSUP) are offers (32 examples) and authorisations/approvals (12 examples).

The text genre offer in this research is also not prototypical, since the medium of communication is e-mail. Therefore, it is assumed that the texts were adapted to e-mail correspondence. Intra-professional, horizontal communication is implemented in contacts with the public, as well as communication of the public with organizations.

The text genre offer (15 analyzed text examples) performs the function of unilateral text subtype during intraprofessional, internal and external communication (in FALKENSTEINER HOTELS AND RESIDENCES - FALKENSTEINER CLUB FUNIMATION). All analyzed texts demonstrate that they are used in interprofessional, horizontal and external communication.

#### 4.2.1.2.1. Text genre: offer

The offer is classified as a unilateral commissive or obligative for the following reasons (Hoffmann, 1998:538): 1. there are two communicators, whereby the text producer provides the text recipient with services and products, 2. the primary communicative intention of the offer is to bind the recipient to cooperation, 3. the fundamental communication process of an offer is presentation and commitment to collaboration, 4. the communicational situation using the offer is to offer products and services, hoping that they would be accepted and that the recipient will be obliged to implement the same, 5. the subject of communication is the presentation of products and services and thus, presentation of the corporation.

Through offers in INA and HSUP, the sender presents a product, service, project, process, etc. to the recipient with the basic information on objects offered, at the same time signaling quality, a good price and timely delivery.

Therefore, after the introductory routine formulations, the subject of the offer is presented, and that first section, which lists important information about the product or service, bears an informative function.

Afterwards, an obligate statement is used, which at the linguistic level is characterized by relatively short sentences (Hoffmann, 1998:538), often dependent or independent clauses, sometimes conditional sentences, and explicit verb formulations also occur in large numbers, which can be confirmed in this corpus, for example: we can offer, we have, we present, offer, manufacture, print, etc.

To illustrate this, the following examples have been found:

- ... We can promote you as a foreign media partner... or
- ... We also offer a video presentation that will be located in the ante chamber and where you can present your video material ... etc.

Formulations with verbs *to promote, to present, to give, to offer*, etc. express the sender's obligation to realize the subject of the proposal. This is the central part of the text.

Salutation as the final formulation is short as it is common in e-mail correspondence.

Communication through the text genre offer takes place horizontally and vertically, as well as symmetrically and sometimes asymmetrically. Also, examples of the text genre offer analyzed for this research were never directed from top management to lower structures, but symmetrically, at the level of middle management and horizontally.

Some analyzed texts communicated with the public, although there are no offers directed from the public towards organizations, so here we are concerned with communication from top to bottom, asymmetrical and vertical, intraprofessional.

As pointed out in the beginning, all communication goes from the managers to the public, due to the structured hierarchy of the company. Routine formulation is aimed at addressing the interest group of the recipients, as noted in the formulation of the addressing.

Afterwards, the text producer usually refers to a seminar that has already been held. So, the statement focuses on the past, evoking the success of previous seminars, e.g.:

- ... Dear translators, after a splendid and jubilee 100<sup>th</sup> course U7 (perfect 10), we continue with IT IN14 Translation with the help of TRADOS translation memory-training...
- ... Once we have learned a lot at the course E21 we can successfully proceed with further... etc.

The purpose of this informative statement is self-promotion, through formulations such as *the splendid course*, *perfect 10*, *a successful course* etc.

Self-promotion aims at relieving the recipient of the cognitive space for reflection on the quality and knowledge gained through the participation at the

previous course, and to prepare him to attend a new one that would offer even greater amount of knowledge and quality.

Such statements are the subject of the offer and they introduce the central part of the text and offer further seminars or round tables.

These transient formulations towards a statement with a purely obligate function can include:

... We believe it is absolutely necessary to raise the level of quality and productivity of translators, therefore, we recommend a seminar called ...etc.

The statement then turns to the future and thus offers a new seminar. This is expressed by formulations such as:

- ... So this is a special offer ... or
- ... That's why we have an excellent opportunity for you to ... etc.

At the linguistic level phrases such as *special offers, great offers, special occasions*, etc. frequently occur. Such syntagms wish to emphasize uniqueness and quality of the seminars being offered.

Also, the intention is to show the recipients that the organized event is not for everyone, meaning that the recipients have a privileged, special relationship with the corporation or institution and that the organizer of the education for them only, and only because they were involved in a number of seminars previously, has this special and very favorable offer. The aim of the text producer is to make the text recipient feel special and to pay for a new seminar.

This is followed by a statement regarding the specific content of the offer, and it is the central part of the text, e.g.:

... Everyone who, before 8/4/2008 (inclusive) and the IN14 seminar, orders an SDL Freelance (price 690 Euro + VAT or any other SDL package) is given a 50% discount per package on registration fee for the seminar IN14. So, registration fee is not 980, 00 kn + VAT but 490.00kn + VAT...etc.

The purpose of this statement is to commit themselves to giving discounts in case of purchasing a product or a similar condition when you sign up for the participation in education. However, we see that an implicit conditional relationship appears in these statements which indicates a directive function of statements, i.e. *if you buy ... then you have a discount...* 

At the linguistic and stylistic levels, this text consists mainly of dependent and explicit non-dependent clauses of the final or conditional type. The use of words and phrases from the translation profession, e.g.: *translators*, *translation memory*, *translational tools*, *IT tools* etc. is evident at the lexical level.

The use of abbreviations and acronyms (such as *TRADOS and IT* etc.), as well as the use of anglicisms, e.g. *freelance* (because the text is originally in Croatian), is also frequent. Technical phrases, abbreviations and anglicisms create an effect of greater expertise and competence of the sender.

If we consider the situation, function, content, structure of the text and structure of syntagms and sentences, and semiotic characteristics (typography and visual design of the text) of the text genre offer used in this particular social context which offers the realization of educational seminars and workshops for translators in a particular corporation, we must say that the prevailing style of the text is the administrative-business style.

The concluding formulations routinely deal with the signature of the manager.

In some examples of the text genre offer (which deal with organizational communication), all communication is directed from the managers to the public, due to the structured hierarchy of the company.

Routine formulations address the interest/target group of the text recipients, i.e. the consumers of services, as noted in the formulation of the addressing. Or, some examples of the texts do not include these routine formulations, but we can cognitively perceive names and data about the target group/recipients from the context.

Afterwards, the sender usually offers some services to customers (clients, recipients), therefore the statement focuses on the future, evoking possible joy in consuming the offer (on the beautiful Adriatic coast near Zadar), e.g.:

- ... Dear Guests, come and join us at the most beautiful part of the Croatian coast, the sea with a thousand islands... etc. or
- ... Dear Clients, enjoy the Kornati national park and Krka waterfalls, sun and wind...etc.

The purpose of this statement is self-promotion, and it is realized through formulations such as the splendid coast, beautiful islands, peace and tranquility, beautiful old town Zadar, etc.

Self-promotion aims at relieving the recipient of the cognitive space for reflection on the beauty and quality gained through descriptive and colorful pictures of beautiful nature like *islands*, *blue see*, *green waterfalls*, and it is intended to prepare tourists or clients to visit tourist resorts.

Such statements are the subject of the offer and the introductory part, because they introduce the central part of the text and offer specific tourism and hospitality services in a sentence with the obligate function:

- ... In order to oblige your needs and interests we had prepared for you and your family an offer in our funimation club in Borik...etc.
- ... We believe you can fulfil your desires with exclusive hotel offers for the period of... etc.

The statement refers to the future and thus offers hospitality services. This is expressed by constructions such as:

- ... Falkensteiner's funimation club offers a wellness week... or
- ... You can't miss the excellent offer for you to... etc.

Syntagms such as *special offers, great offers, excellent offer*, etc. emphasize uniqueness and quality of the prices and services being offered to the tourists. In this way, the recipients receive the information that they are privileged to be offered low prices and excellent services. This is usually followed by a statement on specific content of the offer, and this is at the same time the central part of the text, e.g.:

- ... Inclusive services: 3 nights in double room with Falkensteiner's full board.... or
- ... 4 overnights in a single room with 1 wellness treatment gratis... or
- ... 1 week in Falkensteiner's half board with the following offer that includes: Aquapura whole body massage (50min) + TUIna energetic-chinese massage and multivitamin facial treatment...etc.

The purpose of this statement is to commit (the text producer's commitment) to giving very attractive services in case of purchasing a product or a similar condition when you buy a specific package of services. In this case we can see, contrary to other corporations and companies (like INA, HSUP and INTEGRA), that implicit conditional relationships appear in these statements. Therefore, we cannot identify the explicit directive function of the statements. On the other hand, we can recognize the implicit directive function of the statements such as:

... 1 wellness treatment gratis: aromatheraphy massage of the body and head... or

Q10 facial treatment gratis included in this offer... etc.

Similarly to the other texts, at the linguistic and stylistic level, this text consists mainly of dependent and explicit independent clauses of the final genre.

The use of words and phrases from the tourism and hospitality profession, e.g.: single room, double room, half board, full board, gratis, inclusive, all inclusive etc. is evident at the lexical level. The use of abbreviations and acronyms (such as *TUI*, incl. etc.), numbers and other symbols is also frequent. e.g. 3 drinks, 1 welcome drink, 14 nights, 5 stays etc.

The use of tourism and hospitality phrases and abbreviations creates an effect of "getting to the client" expertise and competence of the text producer.

A prevailing style of the text is not pure administrative-business, but administrative-business style combined with some units from the semantic field of tourism and hospitality.

Concluding and closing formulations are not presented.

Finally, we can point out that the text genre offer serves the communication of corporations, institutions and educational institutions, and all analyzed examples show the same macrostructural elements:

INTRODUCTION- Header

Addressing (neutral, to a person or target group)

(Reference to a past event)

CENTRAL PART Description of the offer

Advertising

CONCLUSION Salutation (optional)

Signature (optional)

At the lexical level, the offer is presented in the middle section, in the segment of offer description confirmed by repeating the phrases from the field of sales, supply and services, for example: *great offer, special offer, unique opportunity,* etc.

The use of abbreviations and numbers is common

In addition, phrases from scientific language, field of oil and gas technology (in INA and HSUP), translation profession (in INTEGRA), and tourism and hospitality (in FALKENSTEINER HOTELS AND RESIDENCES) are used.

The use of explicit independent, dependent, and conditional clauses was demonstrated at the syntactic level in the central part of the text, in the segment of contents description.

#### 4.2.1.2.2. Text genre: authorization/approval

The text genre authorization/approval belongs to the commissive text types, subtype unilateral commissives because: 1. there is a text producer who grants funding to the text recipient with the requested products or services, 2. the primary communicative purpose of authorization is to oblige the text producer to grant the requests of the text recipient, 3. the fundamental communication process is commitment to the implementation of some actions, 4. the communication situation using the authorization/approval is to receive the demanded and bind the text producer to the implementation of the required, 5. the communication subject is the approval of the required, in favor of the recipient, and it forms the basis on which a business can be successfully realized.

The text genre authorization/approval is found only in corporate communication (INA). In corporate communication, the text genre authorization is a response to a request for approval, (which can be described as a text genre which belongs to the text type directives).

The text genre authorization/approval is limited to the communication domain of a corporation with all the characteristics of such a domain, as an answer to requests given in the same communication situation. The aim of the au-

thorization/approval is to meet the needs of the text recipient and to bind both communicators to realization. The direction of realization goes from the world to words, and the psychological attitude of the text producer consists of their intentions to act according to social (organizational) norms.

The text genres used in organizational communication need to be analyzed according to the intentions of the text producers and text functions. If we, while analyzing authorizations/approvals, ask who, what, to whom, when and where (Ivanetić, 2003:169), we can say that the text producer gives the authorization/approval to the text receiver, after his request, to fulfill his demands. The authorization/approval is of unique meaning, very explicit and binding for both communicators. At the communication-pragmatic level, this text has the function to approve the request of the recipient, i.e. allow the recipients to perform an action or use certain items or services. This is an example of internal, vertical and top-to-bottom communication.

The introductory formula of this text begins with a routine neutral formulation, e.g. ... Respected... then follows the text subject. The function of the text and the signalization of the subject are achieved by using performative sentences and syntagms with nouns permission and approval, for example:

... Subject: Permission to use the hall...

- or
- ... Subject: Approval for the purchase of books/technical literature... or
- ... Subject: Approval of travel expenses payment for attending the conference to be held in... etc.

Performatives always increase the impression of professionality which is a characteristic of text genres of schematized form used in organizations. This part of the text uses the directive discourse by using mentioned performative formulas like ...permission to use..., ...approval of travel expenses.., etc. Therefore, we understand authorizations/approvals as special commitment binding genres, in which text producers and text recipients are aware of that and sometimes they additionally emphasize it with special constructions, e.g.:

... Special permisssion is requested to...

or

... High level approval is presented to...

These formulations belong to the introductory part of the text. In the text subject, the producer always explicitly ties the subject of the requests for approval, i.e. authorization is the result of what is required in the request. These texts are standardized and consist of short answers to requests in the form of independent clauses or simple sentences.

Approval of the request is the central part of the text, e.g.:

... We are proud to make our professional journals' fund available to..,

or

... Payment of the amount of... ...kuna for the costs of promotion of new gas mass indicators is approved... etc.

The commissive function of these statements, at the linguistic level, is achieved by using the verbs in the passive voice for expressing consent, e.g., is granted, is made available, is given, is realized, is allowed, is received, is offered, etc.

Approvals/permits only list data in a short and clear form, presented as in the request, together with the amounts if required, for example:

- ... For the purposes of the presentation 21,000kn will be granted as a short-term... or
- ... The optimal amount is 1,200 pieces of plastic coated... etc.

Such a commissive statement is usually followed by the final formula of salutation and a signature. This part already belongs to the conclusion of the text.

Organizational communication analyzed in this research using text genre authorization/approval is an example of internal, vertical and top-to-bottom corporate communication.

After closer analysis, we can claim that the text genre authorization/approval shows the following macro and microtextual characteristics:

At the lexical level, the use of the verb *to permit* in the subject of the text expresses the approval required for service or product. The contents of the authorization confirm the use of phrases from oil and gas technology, e.g. *gas mass indicator, plastic cables*, etc., while the use of abbreviations and anglicisms has not been encountered.

Numbers are usually placed in the central part of the text, especially in statements approving the requested amount in cash or products and services that have their price, for example:

... 21,000kn short-term, 1.200 pieces of tubular plastic coated gas

If we consider the syntactic level of all analyzed texts, we can confirm the occurrence of simple and independent clauses/sentences.

Authorization/approval is a typical text genre of the commissive text type, subtype unilateral text type which is frequently used in organizational communication, especially in large international and multilingual corporations.

So the illocution or illocutionary point of these texts is that the text producer commits themself to act in favor of the text recipient, to supply the recipient with products or services or to permit him to do the same, and enable the producer to conduct activities and realize corporate goals and gain profit.

## 4.2.1.2.3. Concluding remarks about text genres of the unilateral commissive text type

Text genres of the unilateral text subtype in this corpus serve for external communication (FALKENSTEINER, INTEGRA and INA with text genre offer), as well as internal communication (with INA's approval). These texts serve as horizontal (offer) and vertical (approval), inter-professional and intra-professional communication.

At the macro structural level, analyzed texts show pronounced differences at all levels. The text is mainly divided into sections, articles, or clauses (e.g. offer).

Text genres of the text type unilateral commissive use the following textual-linguistic devices: formulations which, in case of failure to comply with the conditions mentioned in the text, indicate legal consequences, time restrictions, price and discount is often specified (e.g. in an offer). A formulation with a detailed description of the text subject is often used (e.g. offer), when specifying obligations of both parties, verbs in passive form, numbers (e.g. prices) and other symbols are stated (e.g. in an offer and authorization/approval). Abbreviations, acronyms, and anglicisms rarely appear since ambiguity or wrong interpretation should be avoided. Sentences are generally clear and explicit, mostly made up of dependent clauses, terminology mainly belongs to the language of the education (translation), organization (in examples of INTEGRA), or oil and gas technology (e.g. in offer and authorization in INA and HSUP), and tourism and hospitality management (in FALKENSTEINER).

Graphics are not included in the text.

The above analysis can substantiate the thesis set forth in the introductory part of this research, i.e. the thesis which proposes that a text genre (in this case the text genres offer and authorisation/approval) used in the communication of corporate management, based on structure and inventory, belongs to a specific communication model used by management (in text forms showed in this study). This model of communication is largely dependent on linguistic and cultural conditions and norms of the managers' community. Precisely, such a specific model of communication helps management successfully implement ideology and goals of the corporation.

# 5. About cognitive linguistic analysis of texts and about cognitive linguistic analysis in texts

In all areas of human behavior, existence, work and communication, different knowledge about the world and about language is activated. This knowledge varies greatly because it concerns different individuals with their personalities, and the resulting differences are a consequence of different emotional states of the communicators which arise from different social, political, educational, mental, geographical, climatic, situational and communicational experiences. A text is never understood in the same way by different individuals, and it does not provide the same information to several individuals, although the content of the text does not change, whereby identical morphological, syntactical, semantical and lexical forms are used on the macro and microstructural levels.

The differentiation ability and the classification competence of communication forms and modalities, as well as the capacity of identification of different text genres and their standardized forms and structures are directly connected with the importance and meaning of those text genres to the communicators, as well as with the frequency of contacts of the communicators with these texts. The capacity of identification of different text genres depends on the knowledge about prototypical text structures (macro and microstructures) which are connected with the function, context, composition (schema) of the text and prototypical language constructions and graphics (Ivanetić, 2003:232). But in general, the knowledge about language and about communication through texts is something that is internalized gradually and unconsciously through time and through communication experience.

In order to substantiate the abovementioned, we can say that texts and text genres do not exist without the understanding of the context. The widely accepted thesis (Van Dijk, 2000) proposes that for successful communication through texts, the most relevant are the context which can be the social domain (e.g. education, politics), the area of expertise (e.g. legislation, teaching, translating, etc.), the participants-communicators and their communicative, social and professional roles, also the relationship between communicators, time and location of communication with a certain text genre or text type, and specific social or interactional properties of the communicational event.

Graesser (Graesser et.al, in Van Dijk, 1997) summarized the process of strategic text<sup>22</sup> production and claimed that the text is something interpreted on line, unit by unit, word for word and on the basis of world knowledge and language knowledge (knowledge of words, syntactic structures, topics, aspects of the context) to which a provisional meaning is assigned.

While understanding this provisional meaning, language users-communicators activate already known constructs of texts, or produce a new (mental)

<sup>22</sup> Graesser conducted a discourse analysis.

model of the content of the text. So, a text genre is meaningful or understandable when the communicator is able to construct a model for it. Information from already known texts (old models) and previous experiences, as well as world knowledge which is shared socially help the communicators build up models- actually to understand unknown but prototypical texts.

Such new "text models" are built on mental representations of the text combined with mental representations of the "old text model" (earlier experiences), as well as with the socially shared knowledge (world knowledge and language knowledge).

A "text model" is a mental representation of a text genre that is prototypical for a certain communication situation (for the text producer and text recipient), but the mental representation is always personal because it features individual knowledge, beliefs, opinions, etc., and social because it applies general, socially shared knowledge.

Each "text model" is unique. Graesser implies that the same person may construct a different model or different interpretation of the same prototypical text genre tomorrow. He further thinks that the whole process of understanding text genres is coordinated by the prototypical model that communicators have of the communicative situation, namely the context.

The context tells the language users-communicators what the aims of the text are, who the participants – text producer and text recipient are, what they know and do not yet know, in what setting the text is being understood etc. All these pieces of information are crucial to understand characteristics of the text such as communicative-pragmatic, thematic, and language-stylistic characteristics (syntax, lexis, morphology and semantics), and which meanings are expressed or left implicit, and what text genres are being performed or used.

Once a mental representation model of a certain text genre is formed, communicators may generalize it in more abstract knowledge structures.

When the text production goes in the opposite direction, it starts with the mental model of the prototypical text, based on experiences and individual opinions. Then, it gradually transforms the meaning of the content which is expressed through specific characteristics on the macro and microstructured levels of the text. But, according to the cognitive theory, text genres are also produced and understood as functions of socially shared values, norms, attitudes and ideologies.

Because of the abovementioned, we need to understand that text production and text reception need to be analyzed as a communicative event and a form of social interaction. This communicative event provides a cognitive basis for social interactions. It means that a constant derivation of its meaning, function and coordination from the previous or first cognitive representation are necessary for the text production and text reception.

The authors of this book are concerned with the same matter, namely that text analysis cannot be complete without taking the cognitive analysis of text genres into consideration. Cognitive analysis of text genres is focused on the text and its structures which means that a cognitive analysis deals with properties of text genres that are accounted for in terms of cognitive concepts, such as various types of mental representations (Van Dijk, 2000).

Therefore, the authors illustrated this necessity by a cognitive analysis of the text genre medical research article. Namely, the study of metonymy and metaphors in medical articles which was conducted in our research demonstrated that cognitive processes at the conceptual level contribute to the complete understanding of information transmitted in the text genre.

### 5.1. Text analysis of text genre medical research article

The medical research article as a text genre is a common communication type used in the spheres of science and medical science. Medical research articles inform and explain certain topics to the audience or public, which can include scientists in the medical field and also medical practitioners (physicians and other specialized professionals) about the recent data and breakthroughs in the medical science. This text genre serves to fulfill needs of the intra-professional and inter-professional communication, the communication is horizontal, symmetrical, internal and sometimes external.

According to Ivanetić (2003:70), we can classify medical research articles in the text type assertives, subtype explicatives, i.e. text genres with the main function to explain something, to inform about the proposition and with the aim to present the current situation (data, information, actions) to the text recipient.

The reasons for classifying medical research articles as an assertive text type, subtype explicative are as follows (Hoffmann, 1998:538): 1. the communicators are the text producer, who informs the public and interested audience (text recipient) about the latest data in the field of medical sciences, and the text recipient who takes this information into consideration and informs himself in order to have at his disposal new information about recent medical research and treatments; 2. the primary communicative purpose is to publish and explain new medical research results; 3. the fundamental communication process of medical research article is transferring and explaining data; 4. the communication situation in which the medical research article functions is to present data at conferences, symposia and in medical journals; 5. the communication subject is research about diseases or medical treatments.

# 6. Metonymy as an impersonalisation device in medical research articles in English and Croatian

Medical research articles are vital for communication in medical sciences because they connect researchers with the scientific community. Researchers try to disseminate their results to the large audience and therefore prepare research articles as the medium to reach the public. Authors try to persuade the audience that the presented results are reliable and true. Therefore, they use the scientific language style which is supposed to be objective and impersonal. The use of the passive voice as an impersonalisation device in research articles is well known. Metonymy is another strategy available to mystify the agents.

Here we approach metonymy in research articles from a cognitive linguistic perspective and analyze the use of conceptual metonymy in medical research articles published in English and Croatian. This study presents part of a more comprehensive research on metonymy in medical research articles. Thus, it is limited to the types of referential metonymy in the location and production domains. The basic concepts that underlie the conceptual theory of metonymy in cognitive linguistics are introduced with special attention paid to conceptual metonymy in the location and production domains. Also, the analysis of metonyms from medical research articles in English and Croatian is presented and discussed.

# 6.1. Conceptual metonymy

One of the basic cognitive linguistic principles is the connection between human language and cognitive processes such as thinking, reasoning, imaging, metaphoric or metonymic mappings (Lakoff & Johnson, 1980; Lakoff, 1987; Langacker, 1987; Johnson, 1987). It is assumed that the human language capacity is based on the same conceptual system that is used for other mental operations. In this view, word meaning is constructed at the conceptual level and it includes all our knowledge, not only linguistic, but at the same time, world knowledge about a particular concept or field of experience (Taylor, 1995; Taylor, 2003). It is termed «encyclopedic knowledge» and arises from all our mental and physical experiences (Žic Fuchs, 1991). Thus, linguistic realizations provide evidence of processes involved in the functioning of the conceptual system (Lakoff & Johnson, 1980). A semantic structure that functions as an organizational unit for any sort of conceptualization, such as mental experience, concepts or a conceptual complex knowledge system is called a conceptual domain (Langacker, 1991). A concept, for example, can contain different meanings which can be highlighted in a specific context. A cognitive process that enables us to use one aspect of knowledge or experience or a sub-domain to stand for some other part or the whole domain is called metonymy. There is a consensus among cognitive linguists that metonymy is basically a mapping of conceptual content within one experiential domain or conceptual structure (Lakoff & Turner, 1989; Ruiz de Mendoza, 2000). Consider the example of the referential noun phrase Washington:

- a) Washington is the capital of the United States. (literal meaning)
- b) Washingtonisinsensitivetotheneedsofthepeople(Lakoff&Johnson, 1980).
   target meaning WASHINGTON FOR US POLITICAL INSTITUTIONS
- c) Washington does not like football. Few people attended yesterday's game (Barcelona, 2003).
   target meaning - WASHINGTON FOR ITS INHABITANTS

Within the experiential domain Washington there are several sub-domains, such as the city itself, its inhabitants, the US capital, political institutions situated in it, with further sub-domains referring to the decision-making people in these institutions (president, senators and spokesmen). We can say that Washington as a location can be considered as its literal meaning, as in (a) The metonymic process in examples (b) and (c) activates other sub-domains in the same functional domain Washington, depending on a specific communicative situation. In example (b), Washington is the source which triggers the target meaning US political institutions (which are situated in Washington as a city), and in example (c), the target meaning are Washington's inhabitants. Barcelona (2003) defines his example (c) as an active zone metonymy according to Langacker (1999), where the active zone of Washington is a reference point for an active zone target. The target meaning depends on the context, which means that a different context may activate a different target. Although Barcelona (2003) discusses the claim proposed by Langacker (1999) that metonymy is a reference point phenomenon, later on, Barcelona (2003) provides a schematic definition of metonymy based on the notion of functional domains: "Metonymy is a mapping of a conceptual domain, the source, onto another domain, the target. Source and target are in the same functional domain and are linked by a pragmatic function, so that the target is mentally activated" (Barcelona, 2003:246).

Metonymically linked domains do not normally exhibit the same structure, for example, a producer and a product in "*Proust* is tough to read" or "I bought a *Stradivarius*", as parts of the whole, and they are not structurally or functionally equivalent (Barcelona, 2003). The author explains the nature of the relation between the source and target in this situation: «But the choice of source (or «vehicle» in another terminology) constrains the way in which the target is activated. In the well-known Proust example, the literary works are activated mainly as produced by a given author. In other words, the author is mapped onto his works. This is the reason why metonymy is not only a matter of highlighting or activation, but also of mapping» (Barcelona, 2003).

### 6.1.1. General classification of metonymy

Metonymic concepts are systemic and can be seen in configurations as categorized in Lakoff & Johnson (1980):

PART FOR WHOLE We don't hire *longhairs*.

PRODUCER FOR PRODUCT He bought a *Ford*.

INSTITUTION FOR PEOPLE RESPONSIBLE Exxon has raised its

prices again.

PLACE FOR INSTITUTION Wall Street is in panic.

The sentences given as examples are the linguistic realizations of these conceptual metonymies.

Two general types of metonymy are distinguished in the conceptual configuration of metonymic relations, i.e. WHOLE - PART and PART - PART. Relations between a whole and one of its parts are further divided into metonymies PART FOR THE WHOLE and WHOLE FOR PART, while relations between different parts of the whole are classified as PART FOR PART metonymies (Radden & Kövecses, 1999). Radden & Kövecses (1999) were the first to systematically classify relationships which produce metonymy and to propose a typology of metonymic relationships. PART FOR PART metonymy usually includes mapping of one concept to another concept which is realized in a different lexical form. For example, as in Lakoff & Johnson (1980):

The buses are on strike.

Form A− concept A → form B − concept B

'Buses' – [BUSES] → 'bus drivers' – [BUS DRIVERS]

Since the word form bus doesn't have as one of its lexicalized meanings bus drivers, metonymic mapping occurs due to the pragmatics of a particular situation and our knowledge that buses and their drivers belong to the same functional domain public transport. The concept [BUS] as a metonymic source activates the concept [BUS DRIVERS] in the same domain public transport. They are linked by a general conceptual metonymic relation of control: CONTROLLED FOR CONTROLLER (Radden & Kövecses, 1999).

Ruiz de Mendoza (2000) claims that there are only two general types of metonymy: PART FOR WHOLE and WHOLE FOR PART, excluding PART FOR PART metonymy. This suggestion is in contrast to the existing tradition. The author makes his suggestion on the basis of the following facts: a tendency that one domain is conventionally included in another, functioning of anaphoric references and metaphor and metonymy. In the metaphor and metonymy

interaction, metonymy PART FOR PART represents the central inference for metaphorical mapping, while WHOLE FOR PART metonymy highlights only aspects of the target.

### 6.2. PART FOR PART metonymies in medical research articles

This research presents part of a more comprehensive study on metonymy in medical research articles. It includes the analysis of metonymy in ten research articles written in English and ten articles published in Croatian. We identified the total of 122 instances classified as PART FOR PART metonymy and divided them into several functional domains. In this research we focused on metonyms in the location and production domains.

Places are often connected with people who live there or institutions situated there. For example, in the location domain the conceptual metonymic relations linked to institutional organizations are: STATE FOR INSTITUTION, INSTITUTION FOR PEOPLE WORKING THERE and PLACE FOR THE PROGRAM IMPLEMENTED THERE.

There are two other conceptual situations in the location domain in which a place becomes the source which triggers the meaning of the inhabitants, or, in the Croatian data, an adverbial construction sometimes refers to the state (Croatia). These conceptual relations are STATE FOR INHABITANTS and PLACE FOR STATE.

In the production domain, the researchers' names are mainly not mentioned. The research itself with its participants and results plays a salient role. They are metonymically highlighted as a conceptual relation RESEARCH FOR AUTHOR (Krišković, 2008).

#### 6.2.1. The location domain

#### 6.2.1.1. STATE FOR INSTITUTION

In the functional domain location, metonymies in which the source is the name of a state and the target meaning is a state institution were common.

- (1) In efforts to increase access to EC, to date, 6 states (Alaska, California, Hawaii, Maine, New Mexico, and Washington) have implemented pharmacy access legislation whereby women can obtain EC directly from pharmacists without having to see a clinician or obtain a prescription first (JAMA Vol. 293).
- (2) In January 2002, *California* implemented pharmacy access legislation allowing women to obtain EC from pharmacies without consulting a physician (JAMA Vol. 293).
- (3) Several Asian countries reported widespread outbreaks of avian influenza A (H5N1) among poultry (JAMA Vol. 292)

(4) Since the end of the Cold War, *the USA* has been increasingly unilateralist, advancing its narrow national interests to the detriment of international agreements and institutions (The Lancet Vol. 365).

In Croatian medical articles there were only two cases of the use of STATE FOR INSTITUTION. This metonymic situation is rare in Croatian medical articles.

- (5) To je bio povod da 1997. godine Vijeće ministara Europe i Europski parlament pokrenu program akcija pod nazivom "DAPHNE", kojim se Europska zajednica odlučno bori protiv prodaje ljudi, seksualnog iskorištavanja, svih oblika obiteljskog nasilja i zlostavljanja, kao i nasilja u školi te nasilja na štetu manjinskih skupina i migranata (Liječ Vjesn 127, br. 5-6, 2005). (...European community vigorously struggles against trafficking, sexual exploitation, all forms of family violence and harassment...)
- (6) No država se mora očitovati kakav sustav zdravstva želi razvijati i u kakvim će odnosima biti državno i privatno zdravstvo jer se sadašn-je stanje više ne može tolerirati (Medix god.XI, br. 60/61, 2005). (But, the state must declare which health care system it seeks to develop...)

#### 6.2.1.2. INSTITUTION FOR PEOPLE WORKING THERE

Radden & Kövecses (1999) claim that the concepts of place and institution located at that place are so closely interconnected that the former is routinely used to stand for the latter. Also, it seems that the metonymy PLACE/STATE FOR INSTITUTION can be further developed to INSTITUTION FOR PEO-PLE WORKING THERE. The predicate usually denotes an action typical for human activities. A subtype of this metonymy is the commonly used relation GOVERNMENT FOR MEMBERS OF THE GOVERNMENT. In example (7), the metonymy GOVERNMENT FOR MEMBERS OF THE GOVERNMENT accounts for our understanding of the Bush administration as "members of the American government". The predicate complies with the agent in plural and the target meaning.

- (7) If the Bush administration were genuinely interested in protecting the health of the American people over and above the health of the US tobacco industry..., giving the Food and Drug Administration regulatory authority over tobacco products would be a start (The Lancet Vol. 365).
- (8) If the Government wins, the tobacco industry defendants will be seriously injured (The Lancet Vol. 364).

A similar situation applies to metonymy RESTAURANTS FOR OWNERS OF THE RESTAURANTS:

(9) Fast-food restaurants may argue that the evidence that customers are being super-sized by their meals is too weak (The Lancet Vol. 365).

(10) He suggests appropriate action for *fast food restaurants* would be to reduce portion sizes and to sell food items with lower amounts of fat and sugar than at present (The Lancet Vol. 365).

What follows are instances of the use of INSTITUTION FOR PEOPLE WORK-ING THERE which are lexicalized for the use in scientific language. This metonymy became conventional in medical texts because the institution is the salient and decision-making factor in many activities. Individuals realize their creative potentials through cooperation and team work in the institution. Thus, the predicates mostly include verbs denoting creative or practical activities performed by people. Therefore, we can say that predicates are in compliance with the target meaning, i.e. people who work in these organizations.

- (11) The Department of Epidemiology and Biostatistics at UCSF, which was not involved in any other study procedures or analyses, created the randomization sequence and filled and labeled the study boxes (JAMA Vol. 293).
- (12) The American Academy of Neurology recognizes four main guidelines for vascular dementia diagnosis (Postgraduate Medicine Vol. 117).
- (13) »Merck's activities with respect to Vioxx before its withdrawal were ethical and reflected Merck's belief in the safety of its product« (The Lancet Vol. 365).
- (14) The American College of Rheumatology published its updated management guideline in 2002, recommending that disease-modifying anti-rheumatic drugs (DMARDs) should be started within 3 months of diagnosis of rheumatoid arthritis (Postgraduate Medicine Vol. 116).

In the Croatian language of medicine, the name of a society or an association was also commonly used for the members responsible for certain activities.

- (15) Američko društvo za gastrointestinalnu endoskopiju i Društvo kirurga alimentarnog trakta izdali su smjernice da minimum obrade bolesnika s hematokezijom uključuje anoskopiju i fleksibilnu sigmoidoskopiju (LiječVjesn 127, br. 5-6, 2005).

  (The American Society for Gastrointestinal Endoscopy and the Society for Surgery of the Alimentary Tract have issued guidelines...)
- (16) Postupnici su prvenstveno usmjereni na najčešće zdravstvene probleme djece, kako bi se pomoglo prije svega primarnoj zdravstvenoj zaštiti u postupcima dijagnostike i terapije (Medix, god.XI, br. 60/61, 2005). (Protocols primarily cover the most common health care problems in children, in order to help primary health care in diagnostics and treatment.)
- (17) Na sastanku u Ženevi prvi puta je Nacionalni centar Kine izvijestio o nuspojavama od osobitog interesa (Pharmaca 43:4, 2005). (At the Geneva conference, the China National Center has reported for the first time about side effects of special interest.)

#### 6.2.1.3. PLACE FOR THE PROGRAM IMPLEMENTED THERE

Among metonymic relations in the location domain there is the use of the PLACE FOR ACTIVITY metonymy in English. The place is the source domain and the medical program implemented in the area is the target meaning:

(18) Sub-Saharan Africa could become a model for improving the management of epilepsy in a context of poor medical infrastructure, high prevalence and incidence, severe prognosis in terms of morbidity and mortality, and a strong link to infection (The Lancet Vol. 365).

Or, in Croatian, there is a conventional use of the expression roundtable as a meeting when participants discuss about a topic. The image of the round table metaphorically means the equal position of all participants in the discussion. The source is a place, and the target meaning is a discussion: ROUNDTABLE FOR CONFERENCE FOR DISCUSSION.

(19) Idući dan kongresa protekao je u prezentaciji prijedloga strategije razvoja za opću obiteljsku medicinu u Hrvatskoj i okruglom stolu o toj temi (Medix god.XI, br. 60/61, 2005).

(...a roundtable about that topic.)

#### 6.2.1.4. STATE FOR INHABITANTS

The state as a source can activate the meaning of the inhabitants of the state in a different context. We found only one example in English to illustrate this conceptual relation.

(20) Since few *states* have direct pharmacy access and small numbers of providers give women advance provisions, we considered access through clinics the standard of care (JAMA Vol. 293).

#### 6.2.1.5. PLACE FOR STATE

In (21), the adverbial construction "at home" is used for the name of the USA. For an ordinary citizen at home refers literally to his home, but for the President of a state, it usually metonymically means the whole country and not his own home. This is conceptually possible because the public function of a person carries more salient conceptual content compared to a private person.

(21) Over the next 4 years, US President George W. Bush faces formidable challenges both *at home* and abroad (The Lancet Vol. 365).

The metonymic situation PLACE FOR STATE was mostly found in research articles in Croatian. Croatian authors when writing in Croatian frequently use expressions *u nas, kod nas, u našim krajevima* (with us, in our regions) meaning *u Hrvatskoj* (in Croatia). The explanation is that authors write in the Croatian language and address primarily other Croatian scientists. This usage implicates a local level of communication that is based on the conceptualiza-

tion of limited space. This metonymic relation was not encountered in English. Consider the following examples:

- (22) Na tržištu u svijetu dostupni su acetazolamid, diklorfenamid, metazolamid i dorzolamid. *U nas* se primjenjuje samo acetazolamid (Pharmaca 43:4, 2005).
  - (Acetazolamid is the only one administered with us.)
- (23) Činjenica je da je prodaja dodataka prehrani u značajnom porastu kako *u našim krajevima*, tako i u ostalim "zapadnjački orijentiranim" zemljama (Medix god.XI, br. 60/61, 2005).
  - (...food supplements are increasingly sold *in our regions*, as well as in other "western oriented" countries.)

# 6.2.2. The production domain

#### 6.2.2.1. RESEARCH FOR AUTHORS

The production domain includes actions in which one of the participants is produced by this action. There are several metonymic relations where the target is the product. Radden & Kövecses (1999) listed most of them. For example, PRODUCER FOR PRODUCT (I've got a Ford), or its subtype IN-VENTOR FOR THE THING INVENTED as in macadam. A similar situation is present in the metonymy ARTIST FOR HIS WORK (They are playing Mozart tonight) due to an intrinsic connection between an artist and his creation. In these situations a person, as a producer, inventor or artist, is the source, and the work created is the target. However, a reversible situation is possible. Namely, there is another conceptual metonymy guite typical and increasingly used in medical research articles, which occurs in the common functional sub-domain of research. In this communicative situation, the research article, the investigation or its results appear as the agent of an action which denotes typical human cognitive activities. It is apparent in the predicate where we see examples that the investigation selected or surveyed subjects, or the investigation discusses or claims something.

The passive voice is a well-known strategy used in scientific texts to create impersonal authors/agents. But at the conceptual level, the research, as an important result produced by several authors, becomes the source domain. Moreover, research is usually multidisciplinary and involves contributions from different professions. The authors are usually mentioned in the title of the paper, and the research is salient further on in the work.

In the following examples, the concepts [STUDY], [REPORT], [SURVEY], [IN-VESTIGATION], or [TRIAL] are metonymically used for the researchers.

(24) A 2002 study of healthy young adults in Boston found that of 165 men and women aged 18 to 29 years screened at the end of the winter, 36% were vitamin D deficient (JAMA Vol. 292).

- (25) Second, *the study* enrolled a disproportionately high number of patients with diabetes (68%) and hypertension (78%) and thus predominantly evaluated patients with small-vessel events (52%) (Postgraduate Medicine Vol. 117).
- (26) This report (1) summarizes information collected by World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, state and local health departments, health-care providers, vital statistics registries, and CDC and (2) describes influenza activity in the United States and worldwide during the 2003-04 influenza season and the composition of the 2004-05 influenza vaccine (JAMA Vol. 292).
- (27) This authoritative *survey* discusses how tumor cells cause bone metastases by producing both local and systemic factors that disrupt the balance between bone formation and bone resorption (New England Journal of Medicine Vol. 350).
- (28) This investigation of 285 cases of acute myelogenous leukemia combined sophisticated analyses of gene-expression profiles with cytogenetic findings, mutational status, and morphologic characteristics to identify distinct groups of patients (New England Journal of Medicine Vol. 350).
- (29) It has been 8 years since the Gambia *probe trial* used radiology to provide the first solid evidence of the effectiveness of Hib vaccination in reducing childhood pneumonia (The Lancet Vol. 365).

These metonymic relations also include concepts such as [APPROACH] and [CRITERIA] since the authors are those who develop the methodology and approach to work, and determine the criteria. The metonymic motivation in these examples is concise presentation and emphasis on key aspects of work.

- (30) This *approach* ignores pharmacodynamic differences between naproxen and other NSAIDs, and placebo (The Lancet Vol. 365).
- (31) The *criteria* of both NINDS-AIREN and ADDTC cite neuroimaging to distinguish between vascular dementia and Alzheimer's disease (Postgraduate Medicine Vol. 117).

In Croatian medical research articles, the metonymic use of RESEARCH FOR AUTHOR is also present. However, the majority of authors prefer to use an adverbial construction (In this work). We can say that parallel metonymic and non-metonymic uses are found in scientific papers in Croatian. It seems that the metonymic use was introduced into Croatian by translations from English, whereas non-metonymic use of an adverbial construction followed by the passive or active voice of the verb is inherent to the Croatian language. Examples (32), (33), (34), (35) illustrate the metonymy RESEARCH FOR AUTHOR in Croatian.

- (32) Sve je više studija koje nastoje rasvijetliti učinkovitost dodatka prehrani (Medix god.XI, br.60/61, 2005). (An increasing number of studies try to clarify the effectiveness of food supplements.)
- (33) Imunosna teorija osniva se na promjenama imunosnog sustava u starosti, dok neuroendokrinološka teorija smatra da su ta dva sustava važni u procesu starenja (Liječ Vjesn godište 127, br.9-10, 2005).
  (...while the neuroendocrine theory claims that these two systems are vital in aging.)
- (34) Primarna prevencija raka prostate nastoji ukloniti najčešće rizične čimbenike (Medix god.XI, br. 60/61, 2005).
  (Primary prevention of prostate cancer aims to eliminate the common risk factors.)
- (35) Zanimljivo je da *Lista* i dalje ne rabi (što začuđuje!!) ATC klasifikaciju lijekova, nego svoju vlastitu (Pharmaca 43:4, 2005). (Interestingly, the *List* does not continue to use (what is surprising!!) the ATC drug classification, but its own).

Examples (36) and (37) show non-metonymic use of the adverbial construction in this work followed by the active voice of the predicate in Croatian.

- (36) U ovom radu cilj nam je bio odrediti kretanje tjelesne težine bolesnika liječenih kontinuiranom ambulantnom peritonejskom dijalizom... (Liječ Vjesn godište 127, br.5-6, 2005).
  (In this work, our aim was to determine the body weight range in patients treated with continuous ambulatory peritoneal dialysis ...)
- (37) U svom istraživanju testirali smo dvije grupe ispitanika (LiječVjesn godište 127, br.9-10, 2005). (In our investigation, we tested two groups of subjects.)

The impersonalizing role the passive voice plays in scientific discourse is well known. In Croatian, it is a preferred strategy to avoid mentioning the authors. This is a non-metonymic situation since the passive voice is used and the concepts such as investigation or study are part of an adverb of place.

- (38) U ovo su istraživanje bile uključene 43 žene koje su u postmenopauzi više od godinu dana, u dobi od 44 do 71 godine (55, 53±7, 61godina) s ustanovljenom osteoporozom na temelju denzitometrije (Acta Medica Croatica Vol.58, br.1, 2004).

  (In this investigation, 43 women were included...)
- (39) U studiji SoLVD proučavalo se učinke enalaprila na gotovo 7.000 bolesnika sa srčanom disfunkcijom (Acta Medica Croatica Vol.58, br.2, 2004). (In the SoLVD study, the effects of enalaprl were investigated in almost 7000 patients with heart dysfunction).

# 6. 3. Concluding remarks about metonymy as an impersonalisation device in medical research articles

This analysis included medical research articles written in English and Croatian and showed that, besides the passive voice, metonymy is another impersonalization device in medical research articles in both languages. It suggests that medical language is characterized by metonymies in the location and production domains.

In the location domain, the metonymic relations refer to STATE FOR INSTITUTION, STATE FOR INHABITANTS and INSTITUTION FOR PEOPLE WORK-ING THERE which are commonly used and lexicalized for research articles in English and Croatian. In scientific texts, a very frequent metonymic situation in the common sub-domain of institutional organizations is the use of concept [INSTITUTION] as a source domain, where the target is [PEOPLE WORKING THERE]. Thus, the organization as the coordinator of a project is highlighted. However, the predicates usually belong to verbs denoting creative and practical activities performed by men. So, the predicates restrict the target meaning. This use is frequent in both English and Croatian. Interestingly, in Croatian, we observed a number of examples of metonymy PLACE FOR STATE. Croatian authors often use expressions *u nas, kod nas, u našim krajevima* (with us, in our region) in the sense in Croatia. We suggest it is motivated by the local audience the papers address. This metonymic situation is unusual in English.

The main conceptual relation in the production domain was RSEACH FOR AUTHOR. In this situation the researchers' names were not mentioned, so, the authors are mostly anonymous. The research itself with its participants and results played a salient role. The research itself became the agent although the authors were understood to be the target agents. They are metonymically highlighted as a concetual relation RESEARCH FOR AUTHOR. This usage is increasingly found in Croatian, as well. It is not characteristic for the Croatian language, but it was introduced via translations from English. The passive voice is still a preferred strategy for impersonalisation in medical research articles in Croatian.

The comparison of PART FOR PART metonymies in English and Croatian showed that many metonymic situations were used equally in both languages. However, the English language used metonymy more commonly and in more conceptual relations than Croatian. Since the English scientific literature is available to Croatian scientists, the influence of English scientific texts is present in the Croatian scientific language which changes and develops parallel and new uses. Finally, we can say that metonymic relations are common in medical research articles and they are one of the characteristic features of scientific conceptualizations.

# 7. Predicative functions of metonymy in medical research articles

The role of conceptual metonymy in grammar has been one the topics of research in the cognitive linguistic theory. One of the basic principles of cognitive linguistics is that semantic structures and grammar are not separate levels but that they form a continuum (Langacker, 1987:2-3). Starting from this perspective, research in cognitive linguistics has shown that metonymic mappings are not limited to lexical semantics. They are also operative in grammar and often act as motivating factors in the grammar system. Although most interpretations of metonymic mappings refer to metonymy as a lexical phenomenon, metonymy is studied in grammatical constructions (e.g. Goossens, 1999; Waltereit, 1999; Panther & Thornburg, 1999, 2000, 2003; Brdar, 2000, 2005, 2007; Brdar-Szabó & Brdar, 2003; Brdar et al., 2001; Brdar et al., 2003; Barcelona, 2004a) and in discourse and inferencing (Barcelona, 2003a, 2004; Panther & Thornburg, 1998, 2003a and papers therein; Krišković & Tominac, 2009).

This research presents a study of the role of metonymy in predicates in some cases from medical reserach articles. Scientific language is considered to be objective and impersonal, but it is part of human linguistic communication and thus, involves all the processes pertaining to the cognitive basis of language. A brief survey of the literature on metonymy in cognitive linguistics and studies concerning the role of metonymy in predications is presented here. Then, we analyzed the cases of metonymic use of PREDICATIVE ADJECTIVE FOR VERBAL CONSTRUCTION and TENTATIVE ADJECTIVE OR VERB FOR VERBAL CONSTRUCTION which were classified as predicative metonymy following the pragmatic typology of metonymic functions proposed by Panther &Thornburg (1999).

## 7.1. Definitions of metonymy

Metonymy was originally defined as a figure of speech and was mostly studied in the context of literature and rhetoric (Nerlich, Clarke & Todd, 1999; Koch, 1999). It was a lexical phenomenon which included the substitution of one linguistic expression for another which was associated with it by a relationship of contiguity. Most cases of metonymy in the traditional sense were expressions used for referential purpose. However, cognitive linguists consider metonymy to be much more than a relationship between words. It is a cognitive process which plays an important role in human thoughts and language. The basis for understanding metonymic concepts is our knowledge and experience, both physical and mental (Lakoff & Johnson, 1980; Lakoff, 1987; Langacker, 1999).

There are several definitions and typologies of metonymy in the cognitive linguistic literature, but a unique and generally accepted definition of metonymy does not exist. We can say that definitions have evolved over decades as the

study of metonymy increased. In their early works, cognitive linguists were more interested in metaphor than metonymy. Metonymy was considered a stand-for relationship at the level of reference (Lakoff & Johnson, 1980; Lakoff & Turner, 1989:100), i.e. denoting a relation of substitution where one entity stands for another or provides mental access to another entity (Radden & Kövecses, 1999). Langacker (1999) explains metonymy as a reference point phenomenon. Radden and Kövecses (1999) also provide an extensive typology of conceptual metonymies elaborating the relationships between idealized cognitive models (ICMs) or conceptual domains (Langacker, 1987;147; Taylor, 1989:84) which result in metonymic mappings. Traditional cognitive accounts of metonymy are based on the two-domain approach to metaphor and metonymy, or the conceptual theory of metaphor and metonymy. According to this theory, it is generally accepted that metonymic mappings occur within one conceptual domain (Lakoff & Turner, 1989:103; Lakoff, 1987) or within one domain matrix (Langacker, 1987). One interpretation of this principle is that metonymic mapping results in a domain shift within a domain matrix. Croft (2003:179) explains that the domain that is secondary in literal meaning becomes primary in a metonymic sentence. This conceptual effect is called domain highlighting (Cruse, 1986:53), Croft (2003:178) illustrates these processes on the Proust example:

- (1) a) Proust spent most of his time in bed.
  - b) Proust is tough to read.

In the encyclopedic view of semantics, Proust as a person (1a) and his works (1b) are both included in the domain matrix of the concept [PROUST]. But, Proust was primarily a person, and Proust's literary work, i.e. the domain of creativity is secondary to the domain of Proust as a human being. The metonymic shift involves a shift of domains within the domain matrix for the concept [PROUST] and Proust's work becomes a salient element in the given situation.

A more elaborate explanation of metonymic mapping is given by Barcelona (2003). The author deals with one of the unsolved issues in cognitive linguistics, i.e., the definition of boundaries between domains, because the conceptual material involved in a domain can vary from one person to another. Barcelona (2003:246) proposes the function of a domain as a criterion for distinguishing between conceptual domains. Applied to metonymy, it means that in metonymic mapping the source and target domains are in the same functional domain.

Barcelona (2003:83) uses the term *mapping* as a projection of knowledge in the sense that the source domain is connected to the target domain by imposing a perspective on it. So, this is a substantially different analysis since there is no stand-for relationship between the source and the target. The main

property of metonymy is that the source only *activates* the target domain from a certain perspective. For example,

(2) The *cirrhosis* in the emergency room is vomiting blood.

This is a realization of the conceptual metonymy CONDITION FOR A PERSON AFFECTED BY THE CONDITION. The source domain is a disease and it is mapped onto the target domain a person having this disease. Metonymy is possible because the source and target are linked by a pragmatic function which is the context, i.e. hospital setting. This is in agreement with Panther & Thornburg (1999:334; 2003) who assume that source meanings remain active to some degree, so that both the source and target are conceptually present when metonymy is used. The definition of metonymy is extensively discussed in contributions published in Benczes, Barcelona & Ruiz de Mendoza (eds.) (2011).

## 7.2. Metonymic functions

Referential function of metonymy was originally part of its description. But, Lakoff (1987) observes that metonymy is not necessarily used for reference, but also for judgements. Croft (2003:179) poses the referential function of metonymy as a necessary and sufficient condition for metonymicity, but Taylor (2003:325) states that metonymy is not limited to the act of reference. Moreover, Ruiz de Mendoza & Díez (2003:494) argue that referential quality of metonymy should not be regarded as part of its definition since there are cases of referential uses of metaphors. Barcelona (2003) offers a reconciliatory attitude regarding the referential function of metonymy:

"...metonymies are *not* to be regarded as necessarily restricted to the act of reference; however, especially in metonymies for individuals (Lakoff, 1987:85), this is the most frequent «limited discourse-pragmatic purpose» (Lakoff, 1987:79) for which they are used" (Barcelona, 2003:223).

Ruiz de Mendoza (2000:114) says that metonymy need not have a referential function. In some cases it has a predicative function although metonymies are more apt for referential than for predicative use. Ruiz de Mendoza (2000:114) claims that predicative uses of metonymy are possible only when the metonymic relationship allows the mapping of a salient feature of the source to be projected to the target. It is often accomplished in cases when the source is obviously a subdomain of the target (PART FOR WHOLE) since only a subdomain can give a relevant trait which becomes a focus of the domain it belongs, but not vice versa.

Defining typology of metonymy is another attempt to understand the nature of metonymy. A necessary theoretical tool for understanding the scope of metonymy is provided by Panther & Thornburg (1998, 1999:335). The authors propose a systematic typology of metonymic functions which they call the

pragmatic typology of metonymic functions. It includes two main groups, *propositional* and *illocutionary* metonymies. Propositional metonymies are further classified into *referential* and *predicational*. An example of referential metonymy can be

### (3) the White house

which can refer to the executive branch of the US government, its spokesperson or even the President himself.

An example of predicational metonymy can be an instance of POTENTIALITY FOR ACTUALITY metonymy:

#### (4) a) I can hear music

when the speaker predicates the ability of the subject to hear music, in contrast to

## b) I hear music

where the speaker predicates the actuality of action.

In illocutionary metonymies one illocutionary act stands for another illocutionary act, as, e.g. in the statement (5a) which may metonymically stand for the question or inquiry in (5b):

- (5) a) I don't know where the bath soap is.
  - b) «Where is the bath soap?» (Panther & Thornburg, 1999: 335).

Panther & Thornburg (1999) were among the first cognitive linguists who explicitly included predicative and illocutionary functions of metonymy, besides the referential function, in their interpretation of metonymy.

All these metonymic functions can occur in parallel in the same utterance. Moreover, Gradečak-Erdeljić & Vidaković (2005), on an example of illocutionary metonymy, show the appropriateness of an integrative cognitive approach to language compared to approaches which prefer separate language categories such as semantics, grammar and pragmatics.

Regardless of different arguments and explanations about the definition and typology of metonymy, research in cognitive linguistics has shown that metonymy occurs at all linguistic levels, including syntax and discourse (e.g. Goossens, 1999; Waltereit, 1999; Brdar, 2000, 2007; Panther & Thornburg, 2000; Brdar et al., 2001; Barcelona, 2005, 2011). Moreover, Barcelona (2005, 2011) argues that purely lexical metonymies are less frequent than text-level inferential metonymies and that metonymy also operates at sub-lexical levels, e.g. in morphology and phonology. These facts broaden the understanding of metonymy and change the widespread view of metonymy as a most commonly lexical phenomenon. Barcelona (2011:13) shows that lexical metonymies and metonymies operating at grammatical levels are often inseparable. Through his recent work, Barcelona (2011:16) claims "...that metonymy is a multi-level

phenomenon, often simultaneously present at more than one grammatical level in a given sentence".

The relationships between metonymy and grammar are also studied in Brdar (2007) and Panther, Thornburg & Barcelona (eds) (2009).

# 7.3. Predicative metonymy in medical research articles

Scientific texts include the exploration of a limited part of reality and making referential statements about the studied object. Science is not focused on a person, either as the author or audience, and therefore, figurative language use is present only rarely or implicitly. One of the basic characteristics of science is the notion of system which it poses on a diversity of phenomena. The other components in scientific approach to the reality are certainty and proof because science gives proof for the certainty of a statement (Kinneavy, 1971:151). However, scientific communication is part of general language use and language makes the understanding of scientific facts easier. Therefore, cognitive processes that govern the production and understanding of language are also present in scientific texts. Metaphor and metonymy commonly occur in research articles. Moreover, they form the basis for understanding the processes of health and disease and conceptualization of scientific facts (Krišković, 2008, 2009, 2011).

We analyzed metonymic phenomena that had a predicative function (Panther & Thornburg, 1999:335) taking into account some of its occurrences in medical research articles in English. Predicative metonymies mostly represent relationships in events, and occur as an interaction of relations and participants. Here we concentrated on metonymic situations:

PART FOR WHOLE metonymy in the action domain:

PREDICATIVE ADJECTIVE FOR A VERBAL CONSTRUCTION
TENTATIVE ADJECTIVE OR VERB FOR A VERBAL CONSTRUCTION

PART FOR PART METONYMY in the action domain (TENSE FOR A SPECIFIC ACTION)

PRESENT PERFECT FOR A PERFECTIVE ACTION
PRESENT SIMPLE FOR A FACTUAL STATE
PAST SIMPLE FOR A FINISHED ACTION

WHOLE - PART METONYMY in the action domain ONE ACTION FOR ANOTHER ACTION

The interpretation of cases was based on the schematic definition of metonymy by Barcelona (2003). The context of scientific language becomes the pragmatic function that connects the source and target meanings.

#### 7.3.1. PREDICATIVE ADJECTIVE FOR A VERBAL CONSTRUCTION

The first group includes a metonymic situation PREDICATIVE ADJECTIVE FOR VERBAL CONSTRUCTIONS which represents an interaction of the predicate and other participants. In the following example:

(6) But the proposal that he seems most *enthusiastic about* is a plan to promote health-savings accounts (HSAs) (The Lancet Vol. 365).

The adjective *enthusiastic+preposition* is used for the predicate including verb+adverb construction *speaks most enthusiastically about*. This is metonymy MANNER FOR ACTION according to Panther & Thornburg (1999:335). The source domain is the predicate which includes action and its participants such as manner of action, object of action, cause or effect of action. In this case, there is a metonymic relationship between the predicate and one of its participants (manner of action). The source domain is explicitly realized by means of an adjective + preposition construction. Thus, predicative adjective shows the aspect of the source which is salient. According to Ruiz de Mendoza, this is an example of source-in-target metonymy which is based on domain expansion (Ruiz de Mendoza, 2000). Domain expansion means that conceptual content provided by the source is metonymically increased to larger content (Ruiz de Mendoza, 2000, 2011:106).

The following is another example of the metonymy MANNER FOR ACTION:

(7) Whereas occurrence of AF in a first-degree relative is associated with new-onset AF, only parental AF has been demonstrated to confer risk *independent of* other AF risk factors (JAMA Vol. 304, No.20).

The predicative adjective *independent of* is a metonymy for the predicate including the explicit action *occurring* and manner of action *independently*. This is a case of a predicative adjective used for a verbal construction introduced by a relative clause *which occurs/occurring independently*. The preference of nominal constructions in scientific context is well-known and the role of metonymy is to provide a conceptual shortcut to the intended meaning with as few linguistic means as possible.

Brdar and his colleagues have extensively studied the role of predicative adjectives in metonymic relationships. Brdar (2000) claims that conceptual metonymies contribute to the motivation of morphosyntactic and semantic properties of complements to English predicative adjectives, particularly possessive constructions and predicative adjective constructions based on the metonymy MANNER FOR ACTION. For example, Sheila wasn't very *definite on* the point (Brdar, 2000:49). Brdar et al. (2001) compared predicative adjectives in some German and Slavic languages. One of their conclusions is that the equivalents of English predicative adjectives in the Croatian language frequently belong to other word forms (i.e. verbs and adverbs) although direct structural correspondences exist. The authors claim that the majority of adjectives employed

in a metonymic construction refer to the basic level properties (*clear, firm, open*). It seems that metonymic targets are non-basic level actions, i.e. specific modes of speaking, behavior or thinking, and most languages do not have compact lexical units for them. This metonymy provides access to the higher level concepts by means of concepts at the basic level. Brdar-Szabó & Brdar (2003) summarize three types of constructions with predicative adjectives ranging from those that play a vital part to those less important in the system of adjective complementation. Metonymic models that can be observed in the system of adjective complementation are possessive constructions with a predicative adjective: He was already *dry of throat* and *hot of eye* (Brdar-Szabó & Brdar, 2003:146); predicative adjective constructions as an alternation for indirect speech: Arthur was *brief about* his other teachers in his recollections (Brdar-Szabó & Brdar, 2003:146); and constructions with subject and object raising: The President was *hard to* convince (Brdar-Szabó & Brdar, 2003:147).

There is another example which shows that the use of predicative adjectives can be extended to metonymic use for the whole clause. Adjective + preposition *suggestive of* is used for a relative clause *which suggested*. The metonymic situation PREDICATIVE ADJECTIVE FOR A RELATIVE CLAUSE occurs between the source domain, result of the action, and the action itself. So, this construction is based on the metonymy RESULT FOR ACTION.

(8) At each Framingham Heart Study clinic examination, participants' medical histories, physical examinations, and electrocardiograms were obtained to ascertain symptoms and findings *suggestive of* cardiovascular disease (JAMA Vol. 304, No.20).

In (9), the predicative adjective high in is used for the whole predicate verb + attribute + noun, to show high values in the verticality domain. Adjectives high or low belong to the domain of verticality. Metonymic mapping occurs within the verticality domain when the salient property of the source, the adjective high, is projected to the target, the whole verbal construction show high values. However, there is another explanation of the predicative adjective high in at a deeper conceptual level. Scientific experiments and findings are based on exact measurements of quantities which provide values on a scale making the verticality domain prominent in conceptualizing quantities. Metonymic mapping occurs between the source domain of verticality (high) and the target domain of quantity (contain a large amount of). This is a manifestation of the metonymy VERTICALITY FOR QUANTITY. The domain of quantity is activated by the large amount of the substance included in the diet. The interpretation of high in (or low in) as a metonymy is possible because both source and target domains belong to the domain of scientific measurements. However, when the scale is used to denote quantity where there is no actual verticality, e.g. when it refers to abstract notions, we talk about a metaphor. In this context, metonymy VERTICALITY FOR QUANTITY becomes the conceptual metaphor MORE IS UP. VERTICALITY FOR QUANTITY metonymy is conventionalized is scientific discourse since the findings are based on measurements and reference values. Thus, this metonymy shows one feature of scientific discourse.

(9) As conventional dietary recommendations for gout have focused on restriction of purine intake, low-purine diets are often high in carbohydrates, including fructors-rich foods. (JAMA Vol. 304, No.20).

We can see form these examples that scientific discourse prefers nominal constructions with adjectives rather than verbal predicates. Generally speaking, this metonymy represents mental shortcuts because explicit verbal constructions including the verb and its complements exist.

# 7.3.2. TENTATIVE ADJECTIVE OR VERB FOR A VERBAL CONSTRUCTION

The second group of predicative use is the metonymy TENTATIVE ADJECTIVE FOR A VERBAL CONSTRUCTION which represents the conceptual metonymy PROBABILITY FOR GENERALIZATION in the action domain. The metonymic situation PROBABILITY FOR GENERALIZATION is highly productive in English scientific language. In our cases it is realized by the construction *likely + infinitive*, or verbal construction *tend+ infinitive*. Both of them denote probability. The adjective *likely* is usually preceded by a modifier *more* or *less*.

### For example:

(10) The Bosnia group were younger; *less likely to be married, more likely to have remained* in service, and only from the Army (BMJ Vol. 327).

In this example a tentative construction *likely to be* denotes that most of the subjects were not married and most of them remained in service after Gulf war. The author of the article emphasizes negative probability of the subjects to be married and generalizes the statistical data. In pragmatic terms it is an instance of a predicative metonymy introduced by Panther & Thornburg (1999). Panther & Thornburg (1999) explored the distribution of the POTENTIALITY FOR ACTUALITY metonymy in the domains of sense perception and mental states and processes in English and Hungarian and concluded that the most pronounced contrast between the two languages lies in the domain of sensory perception where English uses metonymy systematically, e.g. I *can* taste the vanilla (instead of: I taste the vanilla) (Panther & Thornburg, 1999).

The domain that we analyzed concerned scientific research and it is evident that the modality of probability was used in cases of claims that were based on scientific findings. In this domain we analyzed events such as the presentation of facts and measurements. All these sentences were about actually occurring actions although they literally asserted only the probability of the action occurring. The conceptual metonymy is PROBABILITY FOR GENERALIZATION

FOR ACTUALITY which underlies the metonymy LIKELY TO FOR MOST OF THEM FOR EXACT PERCENTAGE. The second metonymy is MODALITY FOR INDICATIVE which represents its grammatical realization. The third metonymy induced by the predicate is a WHOLE-PART metonymy which occurs in the subject where the whole domain (the Bosnia group) is used for its subdomain (most of the Bosnia group). The whole occupies the first position in the proposition because the whole is conceptually a more prominent entity than one of its parts.

We suggest that the role of metonymy in these cases is the attenuation of pure facts and generalization in the presentation of facts. The motivation for this metonymy is linked to the common knowledge that scientific measurements are just a step in research. They lead to a discussion which results in a conclusion. Another example is:

(11) Compared with control subjects, cases had significantly older parents and were *more likely to be firstborn* (JAMA Vol. 292).

In this case, most of the subjects were firstborn. In research, it is not commonly meant that subjects exhibited an inclination or tendency to be firstborn. The number and percentage of firstborns was calculated and there is no possibility of a different interpretation. The target meaning (indicative) is retrieved by inference which is possible because there is a link between modality and indicativeness. The link is the context of scientific discourse which implies that the meaning of possibility is in fact generalisation of actual scientific findings. The role of metonymy in our cases is to generalize the facts by linguistic means. At the linguistic level these metonymies are not only grammatical but also discourse level metonymies.

Here are two more examples:

- (12) Controlling for stage 1 sociodemographic variables reduced the differences, but the Era group remained *less likely to experience* new fatigue than the Gulf group (BMJ. Vol.327).
- (13) In elderly subjects observed for an average of 4.6 years, those with diabetes were over three times more likely to experience stroke-associated dementia (Postgraduate Medicine Vol.117).

The use of the verb *tend to be* for an actual situation (*there is*) is another example of a metonymic principle that is based on the conceptual contiguity of the modality of possibility and its actualization.

(14) There *tends to be* greater impairment of executive function and better preservation of recognition memory in vascular dementia than in Alzheimer's disease (Postgraduate Medicine Vol. 117).

Tendency means a direction towards a place, object, or proneness to a particular kind of action. The inferencing processes are explicitly revealed in the metonymic situation TENDENCY FOR ACTUALITY. We can say that it is used to render the pragmatic effect of actuality.

In academic writing, the use of *likely to, tend to, seem to* and similar reporting verbs is described in terms of tentative language. Tentative language is one of the traits of scientific texts and plays several roles in writing research articles. Firstly, this style allows scientists to present their findings with caution, as possible solutions refraining from giving absolute truths because one of the basic tasks of research is to question what is true and provide possible answers which may be shown as wrong in some other research. This is realized by attenuating the tone of the sentence and discussion. The other function of tentative language is to generalize the finding by emphasizing a tendency in the interpretation of facts and thus it facilitates the understanding of specialized scientific knowledge (Krišković, 2008).

## 7.4. Metonymy TENSE FOR A SPECIFIC ACTION

The third group includes a metonymic situation ONE TENSE FOR A SPECIF-IC ACTION which is a variant of the conceptual metonymy PART FOR PART in the action domain. Actions and time are closely related in our conceptual structures since actions are performed in time. Research articles report on studies which were conducted at specific time in the past, i.e. the year of publication is usually mentioned. Consequently, it would be anticipated to find the Past simple tense and Past prefect tense as common tenses denoting past finished actions. However, in research articles in English we noticed a distribution of tenses which is not based on time aspects but on some other factors such as relevance for the present or factual state. The literature data cited in the article is given in the Present simple tense or Present perfect tense. The Present simple is used for the results accepted as scientifically relevant for the research field, while the Present perfect tense denotes a perfective aspect of the action. Domain mapping occurs between a conceptual domain of TENSE (PRESENT PERFECT) as a source domain and a target domain of a PERFECTIVE ACTION in the common functional domain of action as a PART FOR PART relationship.

The category of tense and aspect is one of unsolved controversies in linguistics. Žic Fuchs (2009) explores the value of the English Present perfect (its functions and meanings), which can be relevant for our analysis. The Present perfect has been studied as a tense, an aspect or a combination of both, but a definition covering all situations has not been proposed so far. The author distinguishes four different meanings of the Present perfect - perfect of result, experiential perfect, perfect of persistent situation, perfect of recent past. Perfect of result due to its characteristic traits omits adverbs of time. The action does not continue now, but its outcome is currently present. According to this classification, the Present perfect used in research articles has the meaning of "perfect of result". Here are some examples of the use of the Present perfect tense when the design and methods of literature studies are rendered.

- (15) Some investigations *have shown* an association with obstetric complications but findings *have been* inconsistent owing to differences in sampling and methods (JAMA Vol. 292).
- (16) It has been demonstrated previously that the addition of EUS-FNA to mediastinoscopy can increase the sensitivity of detection of mediastinal nodal disease to 93% (JAMA Vol. 304, No.20).

In scientific text genres the Present simple tense denotes the factual state when the results and claims from literature are cited in another article:

- (17) Undetected mediastinal metastases *are* a major cause of unnecessary thoracotomies, occurring in 28% of patients. (JAMA Vol.302, No.20).
- (18) Unnecessary thoracotomies *result* in suboptimal treatment, significantly impaired functional health status, and avoidable mortality (JAMA Vol.302, No.20).

Brdar (2002-2003) explores the role of metonymy in the motivation of certain processes in the system of tense-aspect-mood of English verbs and demonstrates a consistency in metonymic mappings. In the example: Mary *speaks* Spanish (Brdar, 2002-2003:44), the use of the Present simple tense for a repeated and timeless action denotes that the situation is embedded in the reality or possibility and includes the metonymy STATE FOR A POSSIBLE ACTIVITY

The Past simple tense is used for the presentation of the design, methods and materials, and results of the author's current study. The use of the Past simple tense denotes only that the study was conducted and yielded the presented results, so the use of the Past simple tense refers to a temporary, finished action. Metonymic motivation in this example is based on PAST TENSE FOR A FINISHED ACTION FOR ACTUAL RESULTS.

The Present perfect tense or Present simple are not commonly used for this purpose, in the meaning of factual state recognized by the scientific community, although the article has been accepted and published in a scientific journal. For example, in (19-20) the Past simple tense is used for the presentation of the current study design and methods:

- (19) We *designed* interventions to have approximately equal time requirements. All exercises *were supervised* (JAMA Vol. 304, No.20).
- (20) The current study *used* a randomized design, *was* adequately *powered*, and *was performed* in a large and well-defined population, which are all important assets for internal and external validity (JAMA Vol. 304, No.20).
- (21) One patient underwent a thoracoscopy only (JAMA Vol. 304, No.20).

The study, as a process, is fragmented and specific phases are presented in the Past simple tense. Unlike the use of the Present perfect which denotes results of the study as a whole and mostly when compared to other studies, the Past simple tense is used for the presentation of the design, methods and findings of the current work. The current work is understood as finished.

In (22, 23), the Past simple tense is used for the results of the current study:

- (22) The combination training group *improved* peak oxygen consumption per unit time compared with the control and the resistance training groups (JAMA Vol. 304, No.20).
- (23) Mediastinal metastases *were found* in 41 of 118 patients (35%; 95% CI; 27%-44%) (JAMA Vol. 304, No.20).

The use of tenses in scientific texts is conventionalized. We propose that metonymic use of tenses in scientific discourse in English is based on scientific conventions which say that published and cited data have the value of confirmed facts. The author's current study is in the Past simple tense as a finished action without any additional meaning regarding the significance of the study.

#### 7.5. ONE ACTION FOR ANOTHER ACTION

The fourth group of predicative metonymies is an illustration of the metonymy ONE ACTION FOR ANOTHER ACTION which represents the WHOLE-PART relationship in the action domain. This metonymic situation can be described within the conceptual category. For example:

(24) Vitamin D deficiency often goes undetected (JAMA Vol.292).

Conceptual category *go* includes all our knowledge about the concept, prototypical meanings and other senses. In this example the whole category *go* is used as the source and the target is a habitual state through a time period. The targeted sense can be paraphrased as *is* or *remains*. The metonymic situation is WHOLE CATEGORY (ACTION) FOR PART (STATE IN TIME). The salient aspect is a static state in a period of time.

In (25) the verb *work* is used in the sense *works efficiently.* The metonymy is CAUSE (ACTION) FOR EFFECT (RESULT), the cause is the action itself, and the effect is a positive result of the action:

(25) Presumably, the technique works because the antibiotics used are sufficiently concentrated to kill bacteria growing in biofilms (Postgraduate Medicine Vol. 116).

The following is another example that includes metonymy motivated by the universal human knowledge that our cognitive abilities may be influenced by different aspects of information to be processed. That is, in (26), the verb see is metonymically used for *publish*. The reader saw the text, but the evidence

was published. Metonymy invloved is PERCEPTION (SEE) FOR REVEAL-ING (PUBLISH) some evidence:

(26) Last week's UK newspapers *saw* further evidence of lobbying by industry against a ban on smoking in public places (The Lancet Vol. 364).

Similarly, metonymy activates the meaning *find out* in the whole category *see*. Thus, conceptual metonymic situation is PERCEPTION (SEE) FOR REVEALING (FIND OUT) some knowledge:

(27) In contrast, we found reductions in risk similar to those *seen* after community interventions for HIV prevention that also have targeted changing social norms (BMJ Vol. 327).

In (28) the salient feature of the category *address* in construction *address* + *object* is to deal with or prepare, meaning to direct the effort or attention to something. The salient feature is the efforts involved in the preparation of future guideline:

(28) This evidence is valuable for *addressing* future guidelines to assess the burden of Hib disease worldwide (The Lancet Vol.365).

In the following two instances, actions of *saying* and *discussing* are the PART FOR WHOLE metonymy. *Say* means to express an opinion, indicates or estimates in his paper, and *discuss* stands for presentation, evaluation and discussion. In this particular situation part of the action (*say*) has adequate communication value, but other parts are implicitly included. The verb that is chosen has additional value as a general term that highlights the process of expression of his opinion and estimates derived from the understanding of the situation. In other words, metonymy serves to achieve the intended communication effect in text genres.

(29) In a Comment paper, Arne Astrup says that two important factors were not addressed by CARDIA: portion size and energy density (The Lancet Vol. 365).

To use the predicate *discuss* means that part of the action stands for the whole action which includes presentation, evaluation and discussion.

(30) In this comprehensive review, the author discusses the most common sources of catheter-related infections, current diagnostic and treatment methods, and graded evidence-based recommendations for prevention of these infections (Postgraduate Medicine Vol. 116).

In this group of examples the predicate has prototypical meaning which is different from the meaning in the sentence. However, this metonymic situation doesn't provoke any misunderstanding. This is a widespread situation in language and it seems that the verbs of "saying" are particularly prone to this metonymic situation. The conceptual category includes all our knowledge about a concept, prototypical senses as well as other different senses. The sense that is metonymically salient contributes to a more precise understanding of the action.

# 7.6. Concluding remarks about predicative functions of metonymy in text genre medical research article

A commonly accepted view in the cognitive linguistic theory is that metonymy is a cognitive process which includes mappings of knowledge within one conceptual domain or idealized cognitive model. Metonymy is mostly studied as performing its prototypical referential function, but it has been shown that metonymic mappings are also operative at the level of predication, proposition and illocution. In our study, we concentrated on some predicates and verbs that were used metonymically in the text genre medical research article in English. It is evident that predicative adjectives in scientific texts could perform a function of a predicate or a relative clause. The role of this metonymy was to activate the salient part of the predicate and contribute to a concise expression. Metonymy TENTATIVE ADJECTIVE OR VERB FOR A VERBAL CONSTRUCTION represented the conceptual metonymy PROBABILITY FOR GENERALIZATION FOR ACTUALITY in the action domain. These are examples of a metonymic principle based on the conceptual contiguity of the modality of possibility and its actualization. Metonymy in these cases activated the aspect of an action which was salient in a predicate and thus allowed a more precise understanding of an action. The role of metonymy was the generalization of findings and, additionally, it contributed to the attenuation of pure facts in their linguistic presentation. PART-PART relations in the tense system resulted in a conventionalized use of tenses in research articles in English. It has been noticed that the data in literature were presented in the Present simple tense (study results) or Present perfect tense (design and methods). The perfective aspect of an action denoted a factual state or results accepted by the research community. This usage was in accordance with scientific language conventions. The metonymy ONE ACTION FOR ANOTHER ACTION represented the WHOLE-PART relationship in the action domain where the whole category (go, work, see) was used for a part of the category (remain, produce a successful result, reveal). The role of metonymy in these cases was to activate the aspect of an action which was salient in a predicate and thus allowed a more precise understanding of an action. We can conclude that scientific text genres bring forward higher abilities than knowing the facts. Understanding and summarizing the facts and the comparison of findings with the literature data result in a process of drawing conclusions. Metonymic mappings in some situations involving predicates can demonstrate some characteristics of the text genre medical research article.

# 8. Positive or negative test results and human perception of disease

Cognitive linguistics assumes that the human linguistic capacity and reasoning are connected. Moreover, it is proposed that language processes are based on the same conceptual system that is used for other mental operations. In this view, word meaning includes all our knowledge, linguistic and world knowledge, which arises from all mental and physical experiences. Thus, language investigations of linguistic realizations provide evidence of conceptual processes involved in thinking and reasoning. Metaphor and metonymy are considered as cognitive mechanisms that contribute to concept formation and understanding. Fauconnier and Turner have offered a novel approach to the theory of meaning construction called the conceptual integration theory or blending. The main feature of blending is to project partial structures from input mental spaces into a blended mental space which can develop a new. emergent structure not existing or possible in input spaces. Conceptual blending is described and studied in terms of conceptual integration networks which consist of four basic mental spaces: two partially matched input spaces, a generic space, and the blended space. The conceptual integration theory is presented and discussed in Fauconnier (1994, 1997, 1999), Fauconnier & Turner (1994, 1998, 1999, 2003), Turner & Fauconnier (1995, 2000), Coulson (1997), Coulson & Oakley (2003), Coulson & Senna (2003), and other authors.

In this research possible connections between the conceptual integration theory and the role of metaphor and metonymy in the constructions of some meanings in text genres used for scientific medical communication will be examined. Specifically, some examples of adjective-noun constructions, such as an aggressive disease vs. aggressive treatment, can be analyzed as cases of conceptual integration. Partial structures from input spaces projected in the blend lead to new inferences in the form of affective meanings. The emotional meanings arise from human knowledge and perception of health and disease. In the conceptual integration theory, the meanings constructed in the blend may be viewed as a result of matching non-counterparts from input spaces in the blended mental space. This matching is activated by the conceptual metaphor DISEASE IS AN ENEMY and its variants. These metaphors represent the experience through which humans understand expressions connected with diseases. The role of conceptual metaphor is to provide a pattern of knowledge stored in long-term memory which allows counterpart and non-counterpart connections in blends. We'll make use of Grady's discussion (2005:1596) of the relationship between metaphor and blending theory when the author says:

"One of these, pursued in greater depth here, is the idea that conventionalized metaphoric patterns may provide "ready-made" counterpart connections for the real-time construction of blends - many metaphors are patterns stored in long-term memory, whereas blending is con-

ceived as an "opportunistic", "online" process, which allows us to combine conceptual material with astonishing speed, fluency and freedom".

Metonymy plays a more dynamic part by allowing the mappings of structures that are otherwise not connected, but in the blend there are metonymic connections between them.

In this research, the theory of conceptual integration is presented based on the literature data and compared with two-domain mappings as another approach to cognitive processes of metaphor and metonymy. Also, the analysis of constructions *positive test - negative test* and *aggressive treatment - aggressive disease* is discussed. The aim is to try to explain the meaning of these constructions as a result of conceptual integration involving input spaces, metonymy and metaphor.

## 8.1. The conceptual integration theory

Conceptual integration or blending is a basic mental operation that leads to the construction of meaning in everyday life and in arts and sciences. Conceptual integration includes the construction of a partial match of structure in two input mental spaces and selective projections of the structures from inputs into a new blended mental space. One of the main features of conceptual integration is the development of a new structure in the blend which was not inherited from input spaces. It is a cognitive mechanism that accounts for the richness and adaptability of meanings in language. This dynamicity of meaning constructions arises from "meaning potential" of a language form. Fauconnier & Turner (2003:79) talk about "meaning potential" of a language form as the power from which polysemy derives: "Meaning potential is the essentially unlimited number of ways in which an expression can prompt dynamic cognitive processes, which include conceptual connections, mappings, blends and stimulations." Such processes are creative, but in everyday life we do not recognize them because they are hidden in the myriad cognitive operations that produce our meaning constructions (Fauconnier & Turner, 2003).

#### 8.2. Mental spaces

The theory of blending represents an elaboration of Fauconnier's work on mental spaces (Fauconnier, 1994). Fauconnier's term mental space is increasingly used in cognitive lingustics. Unlike conceptual domains, which can include wider ranges of knowledge, mental spaces are smaller and contain more local and ephemeral knowledge. Coulson & Oakley (2003) explain that mental spaces contain partial representations of entities and relationships from a certain scenario as understood by the speaker. Entities are represented as elements in the mental space, and relationships that exist between the elements are represented as simple frames. Since the same scenario can be construed in multiple ways, mental spaces are selections of information

about elements in the speaker's representation. However, the relationships that exist between counterpart elements and relations represented in different mental spaces are sustained. Consequently, the notion of mappings between mental spaces is a central component of both mental space theory and the theory of conceptual integration: "A *mapping*, or *mental space connection*, is the understanding that an object or element in one mental space corresponds to an object or element in another" (Coulson & Oakley, 2003:52-53).

An illustration of mental space theory that Coulson & Oakley (2003) analyze is the sentence:

(1) Senna thinks the statue is hideous, Todd thinks it's just wonderful (Coulson & Oakley, 2003:52-53).

To understand the sentence the reader constructs two mental spaces: one to represent Senna's opinion, the other to represent Todd's:

Senna	Todd		
Thinks	Thinks		
S	s'		
hideous (s)	wonderful (s')		

(Coulson & Oakley, 2003:52-53).

In the sentence about Senna's and Todd's opinions about the statue, an identity mapping operates between the element s that represents the statue in Senna's opinion space, and element s that represents the statue in Todd's opinion space. It means that mappings between the mental spaces allow us to understand that the same statue is activated in both mental spaces in spite of different characteristics assigned to them in the two opinion mental spaces. Thus, mappings between different mental spaces based on identity allow speakers to refer to one element by naming its counterpart in another mental space.

Elements from mental spaces can also be linked by similarity, analogy or a pragmatic function. For example, Fauconnier (1994) says that the metonymy PATIENT'S CONDITION FOR THE PATIENT in the sentence

(2) The gastric ulcer in room 12 would like some coffee.

(Coulson & Oakley, 2003:53)

arises from a pragmatic function which connects hospital patients and their conditions. In such situations the predicate *would like some coffee* is appropriate.

In case of a pragmatic function operating between two elements, for example patients and their conditions, the two elements are metonymically connected within the same mental space.

Mental spaces are dynamic and temporary constructions that are modified as thoughts and reasoning develop. Two or more mental spaces structured by information from discrete cognitive domains act as input spaces in conceptual integration.

## 8.3. Conceptual integration

The original definition of conceptual integration proposed by Fauconnier & Turner (1999:77) is the following:

»'Conceptual integration'- often called 'blending'- is a basic and pervasive mental operation. It allows us to 'blend' two mental spaces to create a third that is not merely a composition of the first two but instead has emergent structure of its own. A typical conceptual integration network includes two input spaces, a blended space, and a generic space. The generic space has the structure taken as applying to both inputs. All conceptual integration networks have a partial cross-space mapping between the two input spaces and selective projection from the inputs to the blended space. The blended space inherits some structure from the inputs and also has emergent structure of its own obtained by elaboration and pattern completion."

In conceptual integration, the understanding of meaning involves the construction of blended cognitive models that include some structure from multiple input spaces, as well as emergent structure that arises through the processes of blending (Coulson & Oakley, 2003). It is suggested that the blend should retain the relations existing between the counterparts from input mental spaces, thus, two elements from inputs that are related by analogy or identity are mapped in the blend as counterparts interconnected by the same relation. This is the topology principle set up by Fauconnier & Turner (1998) as one of the six optimality principles operating within the conceptual integration theory (Coulson & Oakley, 2003).

The theory of conceptual integration involves three fundamental processes: composition, completion and elaboration (Grady, Oakley & Coulson, 1999:5). Composition involves the projection of content from each input into the blended space. Completion is the filling out of a pattern in the blend, evoked when structures projected from the input spaces match information in long-term memory. We complete the understanding of the scenario by introducing a new feature, prompted by the juxtaposition of elements from the inputs. Elaboration is the simulated mental performance of the event in the blend. Once the connections to long-term knowledge about an event have been made, we are able to imagine various scenarios which unfold as thoughts develop. Thus, structures which were not projected from the input spaces may arise in the blend through processes of completion and elaboration. Inferences, arguments, and ideas developed in the blend can lead us to modify the initial

inputs and to change our view of the corresponding situations. In general, the conceptual integration theory describes a set of operations for combining dynamic cognitive models in a network of mental spaces (Fauconnier, 1994). A typical conceptual integration network includes four connected mental spaces: two input spaces, the blended space and the generic space.

Fauconnier & Turner (2003:90-92) provide the analysis of the sentence *this beach is safe* as an example of conceptual integration. The sentence would be appropriately used when we want a child to play there and in that situation the child is safe. But then, the meaning of *safe* as NOT POTENTIALLY HARM-FUL changes to NOT LIKELY TO BE HARMED. To understand the meaning of *safe* we need to build a counterfactual space on the basis of a harm scenario in which there is a victim, a location, and harm to the victim. An integration network describes the way in which an element, for example *safe*, relates simultaneously to conceptual structure from different mental spaces. The meaning arises in the blended space which includes selected parts of structures from input spaces and, sometimes, a novel emergent structure is possible.

The blend is a dynamic structure, i.e. it can operate while its connections to other spaces remain in place. It means that elements in mental spaces can be activated, interconnected and blended by activating structures available from working and long-term memory.

As an example of a conceptual integration network we provide a schematic representation of Turner & Fauconnier's (2003:473-476) extensive analysis of the metaphor ANGER IS HEAT as in the sentence *He was so mad I could see the smoke coming out of his ears*:

Correspondences in the ANGER IS HEAT conceptual integration network

SOURCE	BLEND	TARGET	
Input Space 1	Blended space	Input Space 2	Input Space 3
"physical events"		"emotions"	"physiology"
container	person/container	person	person
orifice	ars/orifice		ears
heat	heat/anger	anger	body heat
steam/smoke	steam/smoke	sign of anger	perspiration, redness
explode	explode	show extreme anger	acute shaking, loss of physiological control
boiling point	boiling/highest degree of emotion	highest degree of emotion	

The authors do not mention the generic space, but we can expand their analysis by including the schematic structure common to all mental spaces. Belaj (2005) explains that: "This generic space licenses mappings between elements of the two input spaces in the case of metaphor; it allows for their common participation in the integrated space - the *blend* - in nonmetaphoric utterances" (Belaj, 2005:120). Belaj (2005:123) proposes a division of the mental spaces into defocused mental spaces, highlighted mental spaces and focal metal spaces. The generic space is classified as a defocused space because of its schematic nature which requires extra cognitive effort in utterance interpretation. It represents the highest level of conceptualization and includes superordinate terms which reflect generic concepts and generic properties.

So, in the ANGER IS HEAT conceptual integration network, the generic space connects the input spaces by the relationships of CAUSE and EFFECT. Emotions cause physiological changes that are manifested by physical signs of high intensity.

Generic space emotions/causation/physiological changes physiological changes/effect/physical signs

### 8.3.1. Conceptual integration and metonymy

Fauconnier & Turner (1999) and Turner & Fauconnier (2003) have discussed the role of metaphor and metonymy in the context of conceptual integration. Conceptual entities can be metonymically connected in the blended space. The authors present cases which illustrate that emergent meaning and inferences in the blended space are combinations of non-counterparts if there are metaphoric and metonymic connections between the selected elements. For example, Fauconnier & Turner (1999:83-84) illustrate metonymic connections of input elements in the blend by description of a symbolic representation of death as The Grim Reaper. Input elements a 'scythe', 'cowl' and 'skeleton' are conceptually integrated. Blending shortens metonymic distance between them. In the blended space the cowl becomes the attire of death, and the skeleton is its bodily form. The Grim Reaper emerges by blending different mental spaces using metonymic relations between the following input spaces:

"(1) a space with an individual human dying; (2) a space with an abstract pattern of causal tautology in which an event of a certain kind is caused by an abstract causal element: e.g. Death causes dying, Sleep causes sleeping ... (3) a space containing a prototypical human killer; and (4) a space with reapers in the scenario of harvest" (Fauconnier & Turner, 1999:83-84).

This complex blend allows combinations of non-counterparts by means of metonymic connections in the input spaces. For example, in cross-space

mapping there is no connection between a skeleton and a reaper, between a skeleton and a killer, or a skeleton and death. But, death as a cause is associated with the skeleton as an effect, so, there is a metonymic connection between them. Therefore, the reaper, death, killer and the skeleton can be combined in the blend. In the blend the killer-reaper is combined with the skeleton (killer-reaper is a person, and people have skeletons). Similarly, death in the input mental space of human dying is metonymically connected with priests who are present at dying. This metonymy allows the Grim Reaper to have the priest's attire although in cross-space mapping reapers and priests are not connected. Metonymy between death and priests in the input mental space is projected as PART FOR WHOLE metonymy in the blend. Thus, the blend shortens the metonymic distance between originally non-counterpart conceptual elements. In the blend the metonymic connection is direct: the cowl is the attire of death, and the skeleton is the bodily form of death.

Turner & Fauconnier (2003) demonstrate that metonymic correspondences in the blend map onto those in the target on the basis of *metonymy projection constraint*, one of the *optimality principles on integration network* which says:

"When an element is projected from an input to the blend and a second element from the input is projected because of its metonymic link to the first, to shorten the metonymic distance between them in the blend. (Example: the skeleton becomes the bodily form of The Grim Reaper.)" Turner & Fauconnier (2003:479).

Belaj (2005:129-131) broadens Fauconnier & Turner's (1999) analysis of metaphoric and metonymic relations in the input spaces and the blend which were neglected in their analysis of the Grim Reaper example. According to Belaj (2005:129-130), the basic meaning of the metonymy projection constraint is that metonymic relations in the blend are not only shortened, but they are tighter and clearer. It means that, for example, the link between death and priest is indirect in the input spaces, while in the blend the link is tightened so that the robe and the cowl of the priest becomes the attire of Death. However, another important relation which was neglected is the metaphoric-metonymic relationship between the harvester input space and Death as the reaper in the blend. Wheat in the input space is metaphorically linked to fertility which metonymically stands for life, and not for death. So, harvest and death are not counterparts in the input spaces, but in the blend there is a direct, tight link between them (Belaj, 2005). Coulson & Oakley (2003) further extend this analysis by discussing the role of metonymy in a range of conceptual blends from instances of ordinary language to examples of human creativity.

# 8.3.2. Many-space model of conceptual integration vs. two-domain mappings

Cognitive linguistics describes metaphor and metonymy as the processes of mapping of a source domain onto a target domain. This approach is based on

the two-domain model of conceptual mappings proposed by Lakoff & Johnson (1980). These mappings involve structures of knowledge existing between domains or within a domain. When Fauconnier & Turner (1994) replaced the two-domain model of conceptual integration by the many-space model, they suggested that the two-domain model is part of a larger many-space model of conceptual blending (Nerlich & Clarke, 2003:558). Conceptual blending has shown that besides mappings between input spaces, there are other integration processes which give rise to new mental spaces (blended space and generic space). In the many-space model of conceptual integration these mental spaces can develop a new construction of meaning.

Turner & Fauconnier (1995) have emphasized the main distinction between their model and the two-domain model of mapping:

"The many-space model assigns roles to the two input spaces ("source" and "target" in a metaphor or analogy) but also to two middle spaces – a generic space – which contains skeletal structure that applies to both input spaces – and a blended space – which is a rich space integrating in a partial fashion specific structure from both of the input spaces. The blended space often included structure not projected to it from either input space."

So, a specificity of conceptual integration is that the blended space often includes structures that are not projected into them from input spaces because they are not present or possible in input spaces.

However, Barcelona (2003:217-219) comments on the two aspects of the many-space model: the emergent conceptual structure in the blend and unidirectionality. Barcelona suggests that this approach is not incompatible with the standard two-domain theory of metaphor and metonymy because it presupposes it. Barcelona believes that the elaborations created in the blend can still be explained in terms of the two-domain model and that all seemingly new elements derive from the inputs (Barcelona, 2003:219). However, Barcelona specifically points out the value of the theory of conceptual integration as an attempt at setting up a general theory of conceptual mapping, and as an apparatus to represent a myriad of mappings occurring at any stage in discourse (Barcelona, 2003:219).

The second distinguishing feature between the two approaches is that in the conceptual theory, the mapping operates between exactly two conceptual structures, and conceptual integration typically uses a model with four mental spaces. These mental spaces include two input spaces which are related to the source and target in the conceptual theory, a generic space which represents conceptual structure common to both input, and a blended space where the material from inputs combines and come into interaction. The material is projected from both inputs into the blend. This is the difference between unidirectional projections from the source to the target.

Analogical mapping, traditionally studied in connection with reasoning, shows up at all levels of grammar and meaning construction, such as the interpretation of counterfactuals and hypotheticals, category formation, and of course metaphor, whether creative or conventional. For example, Grady, Oakley & Coulson (1999:2-3) present the analysis of the classical example from the literature, the metaphor This surgeon is a butcher which refers to an incompetent practitioner. The metaphor gives rise to a negative inference, but the two-domain analysis based on mappings from the source domain of butchery to the target domain of surgery cannot explain the crucial element of the surgeon's incompetence. The concept of incompetence is not projected from the source (butcher) to the target (surgeon) because a butcher is typically competent at his work. What conceptual theory does not take into account are the contrasts between the butcher and the surgeon. The conceptual integration theory accounts for the inference of incompetence. In the blended space. the butchery space projects a means-end relationship incompatible with the means-end relationship in the surgery space. Namely, the ultimate goal of the butcher (killing an animal) becomes incompatible with the ultimate goals of a surgeon (healing a patient). The incongruity of their goals leads to the inference of an incompetent surgeon.

Barcelona (2003:246) argues that metonymy involves mapping of one conceptual domain onto another conceptual domain so that the source and target domains are in the same functional domain and linked by a pragmatic function. This view is in accordance with Fauconnier's (1997:11) exploration of mappings which connect mental spaces. Their complexity surpasses the information which a language form can convey. In this context, metonymy is considered as a pragmatic function mapping in which two categories of objects are mapped onto each other by a pragmatic function. For example, authors are matched with the books they wrote, or hospital patients are matched with the illnesses for which they are being treated" (Fauconnier, 1997:11).

Grady, Oakley & Coulson (1999) claim that the conceptual theory of metaphor and metonymy and the theory of blending are complementary since the relations between domains as perceived by the conceptual theory form and limit a more complex process of conceptual integration. The basic unit of cognitive organization in blending is not a domain, but a mental space which they define as: "... a partial and temporary representational structure which speakers construct when thinking or talking about a perceived, imagined, past, present or future situation" (Grady, Oakley & Coulson, 1999:2). Mental spaces are constructions of specific scenarios set up for an immediate purpose. They are not domains, but are structured by domains.

The theory of conceptual integration provides a framework how to represent such selective conceptual structures and the ways they combine in new conceptual structures.

The accounts and suggestions regarding the conceptual integration theory were also discussed by Oakley (1998), Sweetser (1999), Brdar & Brdar-Szabó (2002, 2003), Ruiz de Mendoza & Cervel (2002), Brdar et al. (2003), Ruiz de Mendoza & Díez (2003), Belaj & Tanacković Faletar (2006), Matovac & Tanacković Faletar (2009).

### 8.4. Positive test vs. negative test

The multi-space model can account for the meanings of the adjective *positive* used in constructions such as a *positive test* or *positive finding* which are common in medical texts. But, they include a negative emotional meaning for the person. Patients are generally unhappy when they receive positive test results because they carry negative implications for the patient.

## For example:

- (3) Low risk of bacterial meningitis in children with a *positive* enteroviral polymerase chain reaction *test result* (Clinical Infectious Diseases 51 (10), pp.1221-1222).
- (4) Patients who *test positive* for RF are described as being seropositive (Postgraduate Medicine Vol.116).

The function of the linguistic form "adjective-noun" is prompt for blending (Fauconnier & Turner, 2003:90-92). In case of the adjective *positive*, the noun to which it is applied can lead to different roles in different scenarios. So, *positive* in *positive test results* evokes a different meaning from *positive* in *positive effect*. It is possible if we consider language as a system of conceptual prompts that are selected and integrated in the construction of specific meaning.

The adjective *positive* used with the nouns such as *test* or *finding* is an element in the mental space representing medical diagnostics. Medical diagnostics is the Input space 1 in the conceptual integration network of a *positive test*. The procedure represented in this space is the activity associated with measuring a certain substance or process in the body in order to confirm or exclude the presence of a disorder. It involves an examiner, material which is tested, instruments, reference values, and test results. The result of the measurement is a numerical value which is compared to the reference values for the condition measured. The evaluation of the results can be positive, negative or normal. Positive results indicate the confirmation of the presence of the substance or process of a disease.

In the medical diagnostics space, positive test results involve a causal conceptual metonymy EFFECT FOR CAUSE where the presence of a disease/condition (cause) yields positive test results (effect). The disease input projects the metonymic relationship RESULTS FOR CONDITION because positive test results are used for the presence of a disease.

At a more schematic level, there is also a metonymic connection EVALUATION SCALE FOR A QUANTITY between scientific facts (numerical values) and their representation in discourse (evaluation scale). That is, numerical values which represent quantities are mapped on the evaluation scale based on medical conventions. There is also a part-whole relationship between a test and diagnostics. A test is an element which serves as a reference point to access the whole procedure carried out to obtain the results.

The second mental space, patient, includes the person affected, the crucial property which is the presence of a dysfunction or a disease, and elements such as signs and symptoms, causes, treatment or outcome. Disease is the crucial element in the second Input space. So, disease is an element present in both mental spaces, in Medical diagnostics and in Patient inputs, and thus it is the element which is the most important for conceptual integration. Moreover, conceptualization of disease is almost impossible without the activation of the concept [HUMAN BODY]. Thus, we can say that [HUMAN BODY] represents an abstract domain, according to Langacker (1987:150), that functions as a domain for the characterization of the concept [DISEASE]. Metonymic relation in the second mental space occurs between patients who test positive and test results i.e. patients are used for the results of 'their' blood tests.

The common causal topology establishes a close relationship between the *positive test* input and the disease input in the blended space. In the blend, suspected disease is a cause and testing procedure is a means, and result is the confirmation of a disease. In the blend, suspected disease is a counterpart to testing procedure. Positive results are a counterpart of the affirmation of a condition.

However, confirmation of a pathological condition has a negative impact for the patient's health, so this is an unfavorable situation for him. Since the negative emotional impact does not arise from mappings of elements between the medical diagnostics space and the patient space, the third mental space is activated. It is the 'positive' space because one of the basic meanings of the adjective *positive* is 'to have something' and in the context of diseases it means 'to have a disease'. Each conceptual integration network includes elements from the world knowledge, in this context it refers to perceptions and experience about health and disease in humans. We all have inherent understanding of a disease as something negative and which is not good 'to have'.

The input spaces are linked by causal and metaphoric relations. Causal relations hold between the positive results obtained in medical diagnostics which are an effect of the presence of a disease as the cause. The other causal relation refers to the mapping of test results and their evaluation.

Conceptual integration is the result of three processes: composition, completion and elaboration (Grady, Oakley & Coulson, 1999:5). In our case, composition involves the projections of elements diagnostic procedure using a test, numerical results and positive evaluation from the input space of medical

diagnostics, and partial structure of a disease affecting the human body from the patient input into the blended space. The third mental space, the 'positive' space, projects elements of possessing something. The structure projected from the input spaces matches the counterparts with the content in long-term memory in the process of completion when meaning is constructed. In the blend, testing becomes a counterpart of a suspected disease, and positive results are mapped on the confirmation of a disorder as their counterpart. The complete understanding is construed by including elements from our long-term knowledge and experience about disease and health which are not projected directly from input spaces into the blend. We suggest the negative affective value emerges by the process of elaboration of the basic construction. In case of a positive test, the mental capacity to experience a disease as a metaphor DISEASE IS AN ENEMY and it is not good to have it allows the matching of non-counterparts and results in negative emotions. Thus, our encyclopedic knowledge contributes to understanding complete meaning and implications of a positive test result.

The topology principle established for conceptual integration suggests that the blend should retain the relations existing between the counterparts from input mental spaces. In the blended space, the test from medical diagnostics and a suspected disease from the patient space become counterparts interconnected by causal relation. Similarly, the positive test result is mapped on its counterpart presence of a disease from the patient space. The violation of the topology principle inherent in the mapping between the test in the blended space and the patient's emotions is supported by a conventional metonymic mapping between testing and its results. This metonymic mapping makes it possible to obtain a further metaphoric mapping based on the conventional metaphor DISEASE IS AN ENEMY in the blended space.

The negative implication of a *positive test result* has become conventional for the whole linguistic community, and so we can say in a sad voice *He is positive* alluding that he has a disease. The meaning extension is precisely and completely opposite. This emergent meaning does not occur as a result of linguistic properties of terms "positive" or "test". It arises as a product of conceptual change brought about by the conceptual integration network.

The generic space includes elements that refer to all input spaces as a schematic content. It is a schematic space of medical conventions which determine the criteria for evaluating health and disease. In this example, the generic space includes knowledge about disease from a scientific perspective, human perception, and experience of disease as a condition which has negative effects on humans.

Correspondences in the *positive test* conceptual integration network:

Input Space 1 Input Space 2 Input Space 3

"medical diagnostics" "patient" "positive property"

testing procedure examination of human evaluation

body

disease disease to have a disease

Blended space

positive test/ presence of a disease (medical conventions)

positive test / negative affective value (world knowledge about a disease, metaphor DISEASE IS AN ENEMY)

In the blended space, the element positive test maps on two elements - presence of a disease which is supported by medical conventions, and negative affective value which is activated due to human encyclopedic knowledge about health and disease where having a disease is something bad. We suggest that at the same time the conceptual metaphor DISEASE IS AN ENEMY contributes to additional meaning. Metaphors give an emotional aspect to diseases. Disease is an enemy that is feared, fought, and it has a negative affective impact on people. In the blended space, the evaluation of tests resulting in the presence of a disease triggers conceptual metaphor DISEASE IS AN ENEMY. It seems that our world knowledge and the metaphor are not projected from input spaces but they lead to new inference.

Another example from medical discourse is the construction a *negative test* which represents test results which are favorable for the patient. For example:

- (5) Allergic Rhinitis with *Negative Skin Tests* (2010. Current Allergy and Asthma Reports, pp.1-8).
- (6) A new tunneled catheter should not be placed until appropriate antibiotic treatment has been started and another set of blood cultures yields *negative results* (Postgraduate Medicine Vol.116).

The meaning of the construction can be interpreted as a particular property negative describing an object test. Negative has the meaning of denial or lacking of positive qualities. It is marked by the absence of something. But in collocation with the test in medical contexts, it would be appropriate to say that a negative test is beneficial for the patient since it confirms the absence of a substance or a pathological condition that was suspected. It indicates absence of a disease. The meaning of a negative test is based on our knowledge about medical conventions which are part of the long-term knowledge. In this situation the person's health is not damaged and they do not have a disease.

The two-domain analysis cannot explain the basic element of the meaning, that is, a negative test is positive for the person. The content of positive health is not projected from the source domain, medical diagnostics, to the target domain, disease because the results of medical testing can be evaluated as both positive and negative. The two-domain model cannot construct the implication of the test results to the person. In cases of *positive tests* vs. *negative tests* the complete meaning develops in the conceptual integration network. A new element of meaning which emerges from the relations between elements in the blend and the third input space based on the property of the adjective which arises from our encyclopedic knowledge and experience. We can say that complete meaning results from knowledge about medical conventions and mental capacity to construct affective values based on human long-term knowledge.

Conceptual integration present in case of a negative test results, combines elements from two inputs: the medical diagnostics space and the patient space. The basic relation between the two inputs is a cause-effect relation: there is a suspicion of damaged health which prompts the performance of a medical test to confirm or exclude the presence of a pathological condition. In the medical diagnostics space, there is an element which represents medical testing for determining the presence or nature of a condition or a disease or for detecting functional changes. The conceptual structure in the medical diagnostics space involves a scenario for testing results. Test results, being another element, are presented as a numerical value which refers to a certain point or a range of points on the scale of reference values. The evaluation scale represents a negative finding and is structured by relationships on scales. The element "being negative on the evaluation scale" is constructed as having the properties which indicate the denial of the presence of what was estimated. The evaluation of testing results on a scale has different conceptual characteristics from the medical diagnostic results. Elements of a negative test and measurement results are linked by a metonymy that allows scientific facts (numerical values), as results of testing, to be interpreted as evaluation values on a scale. The elements are linked by the cause-effect relationship: certain numerical values are mapped onto the scale of reference values resulting in a generalized property that is the final element.

The input space 2, patient, contains the roles of the person in good physical and mental condition. A partial structure from this space, the element of good health status, is projected to the blend and acts as a counterpart of the element negative test result in the blend. They are compatible and it means that a negative test conveys the meaning that the person is in good health.

The blended space in this network contains the element negative results/good health which is linked by property to the evaluation elements and by metonymy to the results elements in the medical diagnostics space. They are linked to the patient space by property and by medical conventions. Consequently,

the blend has some of the properties of the negative finding, i.e. absence of a pathological condition and some properties of medical diagnostics, a diagnostic procedure which yielded negative results is performed by using a test.

However, a positive inference cannot be construed as arising from mappings between these two input spaces. Also, there is no contextual prompt to indicate the opposite health impact of a negative test result. It develops as a conceptual inference which is usually thought, but not expressed by means of linguistic elements. Therefore, the implication of a *negative test result* can be analyzed by including a third input space to the conceptual integration network. The third input space, the 'negative property' space, is activated by the blend in order to construct a new meaning. One of the basic meanings of the adjective *negative* is 'not to have something' and in our case it is not having a disease, but having good health. The meaning 'having good health' produces positive affective value and leads to positive emotional reactions.

Once the elements are linked, the access principle allows speakers to refer to an element in one space by naming, describing, or referring to its counterpart in another space. From Fauconnier (1994) the access principle allows reference across different spaces because of the existence of similar connectors operating within a single mental space. Thus, pragmatic function connecting (say) patients and their illnesses can allow speakers to access and refer to an associated element in the same mental space, while cross-space mappings based on identity and analogy (e.g. metaphoric mappings) can allow speakers to access and refer to one element by naming or describing its counterpart in a completely different space.

The mappings between elements of the medical diagnostics space, patient space and negative property are listed as follows:

Correspondences in the *negative test* conceptual integration network:

Input Space 1	Input Space 2	Input Space 3
"medical diagnostics"	"patient"	"negative property"
testing procedure	examination of the human body	not having something
negative results	health	not having a disease

Blended space
negative test/ absence of a disease
(medical conventions)

negative test / good health negative test / satisfaction

(world knowledge, mapping GOOD HEALTH IS A VALUABLE PROPERTY)

Why does a *negative test* in the medical diagnostics scenario trigger the positive inference in the blended space?

Analysis of the *negative test* example in terms of conceptual blending is motivated by the violation of the topology principle in the disanalogous mappings that are set up between negative finding and good health in the blended space. It also fulfills the unpacking principle<sup>23</sup> by utilizing conventional metaphoric mappings between good health and valuable property. The measured values of the test map metonymically to the scale of reference values which causes the exclusion of a disease, which then maps onto its counterpart from the physiology scenario - good health. In the blended space, the good health element also maps to the emotion of satisfaction based on our world knowledge about health. But, the emotion of satisfaction is not projected from input spaces into the blend. The emotion element arises in the blend from cross-space mappings of elements and their relation to encyclopedic knowledge and human experience metaphorically stored in the metaphor GOOD HEALTH IS A VALUABLE PROPERTY. Thus, the development of a positive meaning rests on the metonymic interpretations between the numerical values and their presentations on the scale in the medical diagnostic scenario. their mapping to the element good health from the patient space as their counterpart, and then by the projection of the element 'not having a disease' which is triggered by the human metaphoric experience of good health as a valuable property. In our case, the negative test connected to the patient space and the negative test connected to the negative property space are identical and there is an identity mapping between them. The test assessment based on medical conventions and its consequence for the patient are linked by the relationship of opposition.

### 8.5. Progressive disease vs. progressive treatment

One of the basic meanings of the adjective *progressive* is moving forward, advancing in a positive direction. This meaning emerges from the metaphor FRONT IS GOOD/BACK IS BAD. However, in combination with our knowledge about diseases it may mean something bad. Describing the course of a disease, it denotes an increase in severity.

The following are examples from medical texts with the construction *progressive disease* which means the disease is worsening and thus carries a negative inference:

(7) The natural history of the disease may vary greatly and ranges from self-limited disease to *progressive arthritis* with severe outcomes (Postgraduate Medicine Vol.116).

<sup>23</sup> The unpacking principles says: "it is optimal for the blend alone to allow reconstruction of the inputs, the cross-space mapping, the generic space, and the network of connections between all these spaces" (Turner & Fauconnier, 2003:478).

(8) *Progressive conduction diseases*. (2010. Cardiac Electrophysiology Clinics 2 (4), pp. 509-519).

Three distinct mental spaces act as inputs: the disease, progression, and the patient. The disease input space projects the content of damaged health and the progression space activates the conceptual material of moving forward and in time. So, the idea of motion is present and the quality which is advanced is negative. We can interpret *progressive disease* as an expression of the metaphor DISEASE IS A JOURNEY. It is well known in a community that a disease has its beginning - an onset, the course, stages, destination (that would be the outcome), and it changes in time. The disease and progression inputs are metonymically connected by the property relation because the progressive nature is one of the salient aspects of a disease. Disease progression means increasing in extent or severity of the disease. The elements and property relations from input spaces are projected in the blend. The inputs share a more schematic scenario of forward movement in the development of a disease. This is a generic space which connects them.

To give rise to a new element in the blended space, the third input space, the patient, is involved. There is a mapping between progression and signs and symptoms of a disease affecting the human body. It projects structure and relations triggered by the metaphor DISEASE IS AN ENEMY and gives rise to a new meaning, a negative affective value for the patient. As in previous similar cases, emotions and diseases are structures that are not matched in cross-space mappings, but in the blended space they are connected by metaphoric relations because the worsening of a disease activates the understanding of a disease as an enemy which is captured in a metaphor and stored in human long-term knowledge.

Correspondences in the *progressive disease* conceptual integration network:

Input Space 1	Input Space 2	Input Space 3
"disease"	"progression"	"patient"
disease	motion forward	human body
signs and symptoms	change of manifestations	disease
pathological changes	increase in intensity	worsening

# Blended space disease progression / worsening of a disease (medical conventions)

disease worsening / negative affective value (world knowledge about a disease, metaphor DISEASE IS AN ENEMY)

The interpretation of the example leads to the inference that the noun involved in the construction, disease, projects into the blend partial conceptual content, but also its metaphoric relations. The metaphor DISEASE IS A JOURNEY prompts the creation and understanding of the literal meaning of the progressive disease. The metaphor DISEASE IS AN ENEMY accounts for the negative emotions of the expression. Both meanings develop in the blended space. In this situation the disease element maps to two elements in the blend - to the element of forward motion, but with negative implications for the patient.

In other constructions *progressive* has no negative elements. For example:

(9) Static progressive stretch brace as a treatment of pain and functional limitations associated with plantar fascitis: a pilot study (2010. Foot & Ankle Specialist 3 (3), pp. 117-124).

We need an integration network involving a general schema for medicine and medical treatments, and appliances used in therapy. A brace is an appliance that gives support to movable parts as a joint or a fractured bone. Progressive stretch brace or orthosis is used in the treatment of pain and to restore lost range of motion to contracted joints.

One input is the mental space of medical appliances which includes therapies, procedures and devices used in the treatment. The other input is the progression space, with its role of gradual forward movement in time and space. The third input space, the patient, contributes the role of person treated and benefits provided by using the brace. In the blended space, the element from the medical appliances space is linked by the instrumental function to the elements from the progression space. Even in this simple blend we can see that the implications that the relation between elements in the blended space have for the patient are rooted in conventional metaphoric mappings between PROGRESS AND MOVEMENT ALONG A PATH.

Correspondences in the *progressive stretch brace* conceptual integration network:

Input Space 1	Input Space 2	Input Space 3
"medical appliances"	"progression"	"patient"
brace	gradual stretching	stretching motion
brace	movement forward	restoration of movements
brace	support	relief of pain

Blended space brace / gradual increase in motion

brace / positive effects for the patient (metaphor PROGRESS IS MOVEMENT ALONG A PATH)

There is selective projection to the blend from each of the three input spaces. Elements 'brace' from Input 1 and 'stretching motion' from Input 3 are connected by relation of effect. There is a generic space containing the structure and elements taken to apply to all these spaces, which constitute the fairly rich frame of using an appliance for a therapeutic purpose.

### 8.6. Aggressive disease vs. aggressive treatment

The blending framework allows the treatment of examples that require many sorts of conceptual mappings to be set up in parallel in the course of meaning construction. The constructions aggressive disease and aggressive treatment can be interpreted as cases of conceptual integration in which literal and inferential meanings arise from mappings of counterparts and non-counterparts in the conceptual integration network. In the following cases metaphors play a crucial role. For example:

- (10) Pixantrone for the treatment of *aggressive non-Hodgkin lymphoma* (2010. Expert Opinion on Pharmacotherapy 11 (11), pp. 1915-1923).
- (11) Early aggressive treatment strategy against myasthenia gravis. (2010. European Neurology 65(1), pp. 16-22).

Conceptual integration can account for the example *aggressive disease* which is known to have a negative emotional impact on the person. The expression is based on the conceptual metaphor DISEASE IS AN ENEMY in which the presence of a disease is a hostile condition for humans. Both metaphoric source and target are included as input spaces in the blending process. So, the integration network involves three input mental spaces: the disease space, the enemy space, and the patient space.

The blend inherits some structure from each of the inputs. From the disease input space it includes signs and symptoms of a disease, characteristic behavior, course of the condition and outcome. The enemy input space projects the roles of an agent performing adverse activities, characteristic behavior, aggressive mode of action inducing fear and threat. From the patient input space it inherits the identity of a person affected by a disease or damaged health.

The generic space is represented by structure in which a condition exerts an adverse effect on a person affected by the condition. The concept of emotional impact is not included. The disease mental space projects a characteristic behavior-effect relation compatible with the characteristic behavior-effect relation in the enemy space. The structure characteristic behavior from the enemy mental space is projected on the behavior structure from the disease space as its counterpart. Similarly, in the enemy space, the characteristic behavior is aggressive behavior aimed at the defeat of the enemy. In the disease mental space, the goal of the condition is also to inflict harm to the person. In the blended space, the characteristic behavior of the enemy is combined with the

characteristic behavior of disease. Their goals are compatible and lead to the inference that the disease is the person's enemy. Besides inheriting partial structure from input spaces, the blended space develops a novel, emergent structure. Based on human world knowledge, a disease which attacks a person and manifests severe signs and symptoms produces a negative affective value for the patient which also appears in the blend.

Metonymy occurs in the disease mental space because it includes several structures - attack of the disease, symptoms, characteristic behavior, outcome. The behavior of the disease is not always and necessarily aggressive. But, the metaphor DISEASE IS AN ENEMY activates one of the structures included in the disease mental space, and that is characteristic behavior (aggressive behavior). The conceptual metonymy activated is PART FOR WHOLE, because metonymy highlights the structure of imposing high intensity with a negative impact on a person from the aggressive behavior of an enemy. It means that in the disease mental space, there is characteristic behavior and then aggressive behavior which is based on the metaphor DISEASE IS AN ENEMY. It is possible because in our cognitive system, in long-term memory, disease is metaphorically construed as an enemy, and attacks of a disease and damaged health are aggression.

Correspondences in the *aggressive disease* conceptual integration network:

Input Space 1	Input Space 2	Input Space 3
"enemy"	"disease"	"patient"
attack	attack	human body
characteristic behavior	characteristic behavior	damaged health
aggression	severe signs and symptoms	serious disease

goal-to defeat goal-to hurt goal – to hurt a person

#### Blended space

severe and dangerous attack of a disease aimed at hurting a person metaphor DISEASE IS AN ENEMY)

goal- to hurt / effect - danger, alertness (world knowledge about health and disease)

The blended space is constructed through selective projection from the inputs, pattern completion and dynamic elaboration. The characteristic behavior, aggression, and goal of the enemy mental space and the characteristic behavior, severe signs and symptoms, and goal of the disease mental space are selected and projected to the blended space. These elements are mapped and they are compatible in their structure: the goal of an aggressive disease is to inflict harm to the patient.

The negative impact for the person can be viewed as a dynamic elaboration of the blended space. It emerges from the partial projection from human knowledge about health and disease to the blended space.

The third input space, the patient, is structured by cause-effect relations: danger and alertness are effects which are triggered by certain behavior (aggression). These relations are projected to the blended space. The new meaning is produced as an emotional effect of the goal of an aggressive disease on the person. It is based on our long-term perception of a disease as something dangerous and threatening. The role of metonymy is to connect the goal of the disease as a cause with its emotional effect causing the feeling of danger and alertness. In the cross-space mapping, emotions are not counterparts to the goal of an action, but in the blended space they are connected by the underlying metaphor DISEASE IS AN ENEMY. In the blended mental space, the goal of the metaphor DISEASE IS AN ENEMY becomes a cause which activates the effect of a negative implication for a person. Thus, the two meanings of the construction aggressive disease are to hurt the person and induce a negative emotion.

In the following example we consider a similar adjective-noun construction aggressive treatment which usually produces a positive effect. For example:

(12) Aggressive operative treatment for emetogenic rupture yields superior results (2010. The American Surgeon 76(8), pp.865-868).

To understand the meanings of the construction *aggressive treatment*, three input mental spaces are activated. They are based on the schematic characterization of the conceptual metaphor DISEASE IS AN ENEMY, or more specifically, on its variant FIGHT AGAINST DISEASE IS WAR. The first input mental space is the metaphoric source structured by the domain of war. The second input is the metaphoric target which includes conceptual material involving fight against disease. The third space is the patient who undergoes the treatment.

Elements which are represented in the input space 1 are selected from the scenario of war. The elements are metonymically connected by the meansgoal relations. These elements are matched to their counterpart elements in input space 2 which represents the fight against disease mental space. There is a partial cross-space mapping between the inputs: the attack in war is the counterpart of the treatment in the fight against disease scenario. Similarly, aggressive war activities are counterparts of intensive treatment procedures. There are also metonymic correspondences between them arising from the conceptual metonymy means-mode of activity and goal relations. The goal of war is to defeat an enemy and the goal of fighting against a disease is to defeat/cure a disease.

The blended space is constructed through selective projections from the input mental spaces. In the blended space the mode of activities of the war space corresponds to the activities and goals in the fight against disease space. This blend has the organization framework from the fight against disease input space: it has a mode of activity characterized by intensive procedures and a goal of successfully accomplishing an action. The structure of characteristic behavior as a means of achieving the goal is projected from the war mental space because aggression is an element from the war scenario. In the blended mental space the means is a compatible element to the structure of goal.

Correspondences in the *aggressive treatment* conceptual integration network:

Input Space 1	Input Space 2	Input Space 3
"war"	"fight against disease"	"patient"
attack characteristic behavior	treatment characteristic behavior	human body
aggression war activities strategy	intensive procedures herapeutic procedures planning	cure
goal-to defeat an enemy	goal- to cure a disease	goal- to cure a patient

# Blended space means- mode of activities / goal- to cure a disease (metaphor FIGHT AGAINST DISEASE IS WAR)

goal-to cure a disease / feeling of success (positive meaning)

The generic space has the structure that applies to both inputs: all elements and human knowledge about struggles and war, enemy, strategy, victory, defeat, withdrawal etc. The generic space is always based on world knowledge. In this example we can say that one property which is used to achieve a goal in one activity can also be used to yield the same result in another activity. In the generic space the emotional impact of the behavior is not included.

The positive inference is constructed by the compatibility of the elements of goal in the blended space. For the construal of the effect of success, the most important mappings are between the goal in the fight against disease space, to cure a disease, as a cause, and positive emotions for the patient triggered as an effect. The metonymic relationship existing between them is the cause-effect relationship. In the blended space structure from input space 1, mode of activities to reach the goal is related to the positive emotions for the patient from the input 3. Mode of fight (war) to defeat an enemy (a disease) is a positive thing. War in this scenario is justified because of its goal.

Conceptual integration works optimally only if the representations can be compressed into one tightly integrated form. Satisfying the integration constraint entails considerable metonymic tightening, such as the attribute-noun construction which can convey two meanings. It means that characteristic behavior from the mental space of war is schematically projected to the fight against disease. In the blended space, aggressive behavior from the war scenario is related to intensive procedures in the fight against disease scenario. Metonymic interpretation develops by partial selection of structure (characteristic behavior) from the input mental spaces of war and fight against disease.

The meaning of the blended space is projected back to the space fight against disease in which the mode of activity (intensive procedures) is compatible with the goal of activity (to cure a disease). Thus, a novel meaning of success in the fight of a disease develops and it emerges as a positive meaning.

We suggest that conceptual context of the attribute aggressive triggers the metaphor FIGHT AGAINST DISEASE IS WAR when the adjective is used in the construction with treatment, therapy or prevention because all these elements are structures from the fight against disease mental space. They develop a positive meaning since in their structure the goal is directed towards the avoidance or cure of a disease. New meanings of the concept aggressive develop by metaphoric projections and they are all involved in the conceptual structure of the adjective. The meaning emerges from interaction of the context and meaning potential of the words. If the representations of elements of meaning potential depend on temporary activation of its parts depending on the interaction between elements of representation and the contextual stimulation, then all meanings can be described as metonymic, including metaphoric mappings.

The means-goal relation from the blended space is simultaneously projected to the third space of the patient. The element of achieving a goal from the patient mental space is compatible with the goal from the blended space and the resulting inference is positive emotion.

# 8.7. Concluding remarks about positive or negative test results and human perception of disease

The conceptual integration theory was established as a development of mental space theory to account for cases in which some of the content of two or more mental spaces is combined to yield an emergent structure.

This research shows, on theoretical and practical grounds, the applicability of the conceptual integration theory presented by Fauconnier and Turner to the analysis of instances of meaning construction from medical texts, and its efficiency for the interpretation of cognitive processes which result in additional meanings.

Since the creation of blends often invloves the exploitation of metaphor and metonymy, we proposed the analysis of metonymic and metaphoric mappings which operate in conceptual integration of expressions where the construction of meaning includes both meanings projected into the blend from the input spaces and a meaning with a novel affective value.

Blending involves the establishment of partial mappings between cognitive models in different spaces in the network and the projection of conceptual structure from a space to the blend. Mental spaces are small and established for a temporary function. Human world knowledge and perception of health and disease are also projected in the blend although they are not present in input spaces. The role of the conceptual metaphor is to provide the understanding of structures based on knowledge from long-term memory. Metonymy plays a more dynamic part by allowing the mappings of structures that are otherwise not connected, but in the blend there are metonymic connections between them.

We illustrated these relations with several examples. It is known that a *positive test result* is unfavorable for the patient since it means the presence of a disease. The meaning of positive test results arises in the blended space from the integration of elements from the medical diagnostics space and disease input. Test results and their evaluation are metonymically linked by a cause-effect relationship, that is, the presence of a disease leads to a specific numerical value which is mapped to the evaluation scale. In the blend there is a positive test result, a causal relation, and a cause, which is the presence of a disease. The presence of a disease is an input which triggers the metaphor DISEASE IS AN ENEMY. Our long-term knowledge and experience with diseases are structured in the form of this metaphor and their projections yield a negative implication for the patient which arises in the blend.

Similarly, the conceptual integration network for the example a *negative test* involves three inputs: medical diagnostics mental space, health space, and patient space. The blended space includes the evaluation of the test as negative, not having something, which is related to the element in the health space because the cause of a negative test is good health. In the patient space, it means absence of a disease, not having something bad. Good health has a positive subjective value for the person because subjective cultural or emotional values are based on experience. In our case, the experience is stored in the form of a metaphor in long-term memory.

In this study we provided examples of the role metaphor and metonymy play in conceptual blending. Metonymic language can thus be construed as referring to compressed elements in the blended space, while conventional metonymies help speakers unpack mappings from the compressed element in a blended space to its various counterparts in the input spaces in the integration network (Coulson & Oakley, 2003:61). Coulson and Oakley (2003:61) claim that "the presence of metonymic connections in the blend performs the crucial

function of holding together the network of mental spaces that are necessary for reasoning on a particular topic to be sustained over time". For example, the adjective *positive* in *positive test* maps onto both the disease and patient mental spaces activating a metaphor which yields a new meaning in the blend. We also suggested that metonymic mappings may help sustain a metaphoric blend, such as in *aggressive treatment* when the mapping schema shifts.

Another finding was that conceptual integration allows connections of contradictory contents from mental spaces to operate simultaneously in a language expression. Thus, mental spaces of health and disease, which are incompatible and mutually exclusive, are activated simultaneously in human thought.

These analyses suggest that meaningful acts are not always supported by orderly structures with neat analogical mappings, but adhere to a few basic principles which Fauconnier and Turner call optimality principles. In the expressions that employ both metonymic and metaphoric mappings, the two types of mappings are used to combine structures resulting in a novel understanding. Such examples often violate the topology principle, that is, the pressure to preserve a shared relational structure. But they do so in order to promote the construction of an integrated mental scene that is useful for the projection of inferences. In general, the presence of metonymic connections allows us to maintain connections between networks of mental spaces composed of conceptual structures from unrelated spaces that, nonetheless, contribute to reasoning. Understanding the role metonymy plays in this process is thus crucial for understanding how human beings produce meaningful thoughts.

# Summary

This book is a product of the researchers' interest in different text genres which are used in different social domains. The social domain of corporate communication and scientific medical research are the domains interpreted in this work. Furthermore, text linguistic analysis and cognitive linguistic analysis have shown characteristic text features at the macrostructural and microstructural level. It is obvious that the role of commissive text types is crucial for the functioning of the management in different corporations and institutions. Additionally, ideology and branding as corporate processes leave specific marks on the communicational-pragmatic, thematic, and language-stylistic level of text genres used for organizational communication. This supports the process of standardization and schematization of text genres used in organizations.

This analysis has also demonstrated that metonymy is a conceptual processs present in scientific text genres, specifically in medical research articles. It is illustrated in its use as referential metonymy, predicative metonymy and also in the analysis of mental spaces created in human perceptions of health and disease through different meanings of some nominal constructions.

Our conclusions can stimulate further investigations in the area concerning theoretical and analytical studies about text linguistic analysis, analysis of different text types, as well as cognitive linguistic analysis of text genres.

# Kratki sadržaj

Ova knjiga je rezultat interesa autora za različite tekstne vrste koje su u uporabi u različitim društvenim domenama i služe različitim tipovima komunikacije.

Domene interpretirane u ovom radu uključuju domenu korporativne komunikacije i domenu znanstvenih medicinskih istraživanja. Osim toga, lingvistička analiza i kognitivnolingvistička analiza teksta pokazuju specifična obilježja na makro i mikro razini teksta.

Iz istraživanja je vidljivo da je uloga tekstnog tipa komisiv od velike važnosti za funkcioniranje menadžmenta unutar korporacija i institucija.

Slijedom te spoznaje moramo istaknuti da process stvaranja korporativne ili organizacijske ideologije i process stvaranja brendova također standardizira te shematizira tekstne vrste koje su dio komunikacijskog procesa organizacije na komunikacijsko-pragmatičnoj, tematskoj i jezično-stilističkoj razini.

Osim toga, ova analiza pokazuje da je metonimija kao konceptualni process prisutna u tekstnim vrstama koje služe komunikaciji u znanosti i znanstvenim istraživanjima.

Primjeri metonimije kao konceptualnog procesa u tekstu prikazani su i analizirani kao referencijalna metonimija, predikativna metonimija te kao analiza određenih mentalnih prostora koji se stvaraju tijekom ljudskog poimanja zdravlja i bolesti kroz različita značenja nekih nominalnih konstrukcija.

Rezultati istraživanja i zaključci prezentirani u ovoj knjizi mogu potaknuti daljnja istraživanja u području teorijske i analitičke percepcije tekstnih vrsta i tekstnih tipova, kao i kognitivnolingvističkih istraživanja tekstnih vrsta.

### References

- Adamzik, K. 1995. Aspekte und Perspektiven der Textsortenlinguistik. In: K. Adamzik (Eds.). Textsorten-Textypologie. Eine kommentierte Bibliographie. Nodus: Münster. pp.11-40
- Adamzik, K. 1998. Fachsprachen als Varietäten. U: L.Hoffmann, H. Kahlverkämper & E. Wiegand. Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1. Halbband, Walter de Gruyter: Berlin, New York. pp.181-189.
- Adamzik, K. 2000. *Textsorten. Reflexionen und Analysen.* Stauffenburg Brigitte Narr GmbH: Tübingen.
- Adamzik, K. 2000. Was ist pragmatisch orientierte Textsortenforschung? In: K. Adamzik (Eds.). *Textsorten.Reflexionen und Analysen*. Stauffenburg Brigitte Narr GmbH: Tübingen. pp. 91-112.
- Adamzik, K. 2001. Kontrastive Textologie. Stauffenburg: Tübingen.
- Adamzik, K. 2004. Sprache: Wege zum Verstehen. A.Francke: Tübingen.
- Adamzik, K. 2004. Textlinguistik. Max Niemeyer: Tübingen.
- Antos, G. & Tietz, H.1997. *Die Zukunft der Textlinguistik.* Niemeyer: Tübingen.
- Balmer, J.M.T. & Gray, E.R. 2000. Corporate Identity and Corporate Communications: Creating a Competitive Advantage. In: *Industrial and Commercial Trainning*, 32/7, Glasgow. pp. 256- 260.
- Barcelona, A. 2000. On the plausibility of claiming a metonymic motivation for conceptual metaphor. In Barcelona, A. (Ed.). *Metaphor and Metonymy at the Crossroads*. Mouton de Gruyter: Berlin/New York. pp.31-59.
- Barcelona, A. 2003. Clarifying and Applying the Notions of Metaphor and Metonymy within Cognitive Linguistics: An Update. In: R. Dirven & R. Pörings. *Metaphor and Metonymy in Comparison and Contrast*. Mouton de Gruyter: Berlin and New York. pp. 207-279.
- Barcelona, A. 2003a. The case for a metonymic basis of pragmatic inferencing: Evidence from jokes and funny anecdotes. In K.U. Panther & L. L. Thornburg (Eds.). *Metonymy and Pragmatic Inferencing*. John Benjamins Publishing Company: Amsterdam/ Philadelphia. pp. 81-102.
- Barcelona, A. 2004. Metonymy as a ubiquitous multi-level conceptual mechanism in usage events. Paper presented at the 9<sup>th</sup>

- International Pragmatics Conference. http://webhost.ua.ac.be/tisp/viewabstract.php?id=674.
- Barcelona, A. 2004a. Metonymy behind grammar: The motivation of the seemingly "irregular" grammatical behavior of English paragon names. In G. Radden & K.U. Panther (Eds.): *Studies in Linguistic Motivation*. Mouton de Gruyter: Berlin. pp. 357-374.
- Barcelona, A. 2005. The multilevel operation of metonymy in grammar and discourse, with particular attention to metonymic chains. In F. Ruiz de Mendoza & S. Peňa Cervel (Eds.). *Cognitive lingusitics: Internal dynamics and interdisciplinary interaction.* Mouton de Gruyter: Berlin.
- Barcelona, A. 2011. Metonymy is not just a lexical phenomenon: On the operation of metonymy in grammar and discourse. In C. Alm-Arvius, N.-L. Johannesson & D. Minugh (Eds.). Selected papers from the 2008 Stockholm Metaphor Festival. Stockholm University: Stockholm.
- Barnard, C. 2003. *The Early Sociology of Management and Organizations*. Routledge: London.
- Bateman, S.T. & Zeithaml, P.C. 1993. *Management: Function and Strategy*. Irwin: Indiana.
- Baumann, K.D. 1996. Fachtextsorten und Kognition.-Erweiterungsangebote an die Fachsprachenforschung. In: H. Kalverkämper & K.D. Baumann (Eds.). *Fachliche Textsorten. Komponenten-Relationen-Strategien.* Gunter Narr: Tübingen. pp. 355-389.
- Beaugrande, R. de. 1997. New Foundations for a Science of Text and Discourse: Cognition, Communication and the Freedom of Acces to Knowledge and Society. Norwood. NJ: Ablex.
- Beaugrande, R.de. 1997. Textlinguistik: Zu neuen Ufern? In: G. Antos & H. Tietz (Eds.). *Die Zukunft der Textlinguistik*. Niemeyer: Tübingen. pp.1-11.
- Beaugrande, R.de. & W. Dressler. 1981. *Introduction to Text Linguistics*. Longmann: London.
- Belaj, B. 2005. On the cognitive status of mental spaces and of some types of metonymy within Conceptual Integration Theory. In: *Jezikoslovlje* 6.2. pp.119-144.
- Belaj, B. & G. Tanacković Faleter. 2006. Protučinjenične uvjetne rečenice, mentalni prostori i metonimija u kontekstu teorije konceptualne integracije. In: *Suvremena lingvistika*. 62. pp. 151-181.
- Benczes, R., Barcelona, A. & Ruiz de Mendoza Ibáñez, F.J. (Eds.). 2011. Defining metonymy in cognitive linguistics: Towards a consensus. John Benjamins Publishing Company: Amsterdam.

- Bolten, J. 1992. Fachsprache oder Sprachbereich? Empirisch-pragmatische Grundlagen zur Beschreibung der deutschen Wirtschafts-, Medizin- und Rechtsprache. In: T. Bungarten (Ed.). Beiträge zur Fachsprachenforschung: Sprache in Wissenschaft und Technik, Wirtschaft und Rechtswesen. Atticon: Tostedt. pp.57-72.
- Bolten, J., Dathe, M. Roennau, M.. Witchalls, P. & Ziebell-Drabo, S. 1996. Interkulturalität, Interlingualität und Standardisierung bei der Öffentlichkeitsarbeit von Unternehmen. In: H. Kalverkämper, H. & K.D. Baumann (Eds.). Fachliche Textsorten. Komponenten, Realtionen, Strategien. Gunter Narr: Tübingen. pp.389-426.
- Bolten, J. 1998. Fachsprachliche Phänomene in der interkulturellen Wirtschaftskommunikation. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband. Walter de Gruyter: Berlin, New York. pp.849-856.
- Brandt, M. & Rosengren, I. 1991. Zur Handlungsstruktur des Textes. In: *Sprache und Pragmatik* 24. pp. 3-46.
- Brandt, M.& Rosengren, I. 1992. *Zur Illokutionsstruktur von Texten*. Lili 86. pp. 9-51.
- Brdar, M. 2000. Metonymy as a motivating factor in the system of adjective complementation in English. In: *Suvremena lingvistika*, 49-50. pp. 41-55.
- Brdar et al. 2001. Predicative adjectives in some Germanic and Slavic languages: On the role of metonymy in extending grammatical constructions. In: *Suvremena lingvistika*, 51-52. pp.35-57.
- Brdar, M. & Brdar-Szabó, R. 2002. Nasljeđivanje argumenata i argumentacija. In: D.Stolac, N. Ivanetić & B. Prichard. (Eds.). Suvremena kretanja u nastavi stranih jezika. Hrvatsko društvo za suvremenu lingvistiku: Zagreb-Rijeka. pp. 77-86.
- Brdar, M., R. Brdar-Szabó, V. Pavičić, & M. Omazić. 2003. Metonimija tipa sudionik-umjesto-situacije i predikatni pridjevi. In: D. Stolac, N. Ivanetić & B. Prichard. (Eds.). *Psiholingvistika i kognitivna znanost u hrvatskoj primijenjenoj lingvistici*. Hrvatsko društvo za primijenjenu lingvistiku: Zagreb-Rijeka. pp.135-142.
- Brdar-Szabó, R. & Brdar, M. 2003. The MANNER FOR ACTIVITY metonymy across domains and languages. In: *Jezikoslovlje*, 4 (1): Zagreb. pp. 43-69.
- Brdar, M. & R. Brdar-Szabó. 2003. Uloga konceptualne integracije u usvajanju jezika. In: D. Stolac, N. Ivanetić & B. Prichard. (Eds.). *Psiholingvistika i kognitivna znanost u hrvatskoj primijenjenoj*

- *lingvistici.* Hrvatsko društvo za primijenjenu lingvistiku: Zagreb-Rijeka. pp.125-134.
- Brdar, M. 2005. Metonimija i gramatika. In J. Granić (Ed.). *Semantika* prirodnog jezika i metajezik semantike. Hrvatsko društvo za primijenjenu lingvistiku: Zagreb/Split. pp. 123-130
- Brdar, M. 2007. *Metonymy in Grammar, Towards Motivating Extensions of Grammatical Categories and Constructions*. Filozofski fakultet Sveučilišta u Osijeku: Osijek.
- Brinker, K.1996. Die Konstitution schriftlicher Texte. In: H. Günther & O. Ludwig (Eds.). *Schrift und Schriftlichkeit*. Bd.2.Art.136. Berlin. pp. 1515-1526.
- Brinker, K.1997. *Linguistische Textanalyse. Eine Einführung in Grundbegriffe und Methoden.* 4. Aufl. Erich Schmidt Verlag GmbH & Co:Berlin.
- Brinker, K. 2014. Textstrukturanalyse. In: Brinker, K. et.al. (Eds.). *Text-und Gesprächslinguistik.* 1. Halbband. Walter de Gruyter:Berlin. pp.164-175.
- Brinker, K. 2000a. Textfunktionale Analyse. In: *Text und Gesprächslinguistik.* Walter de Gruyter: Berlin, New York. pp.175-186.
- Brinker, K. 2002. Textsortenbeschreibung auf handlungstheoretischer Grundlage (am Beispiel des Erpressbriefs). *In*: Adamzik, K. (Ed.). *Texte, Diskurse, Interaktionsrollen. Analysen zur Kommunikation im öffentlichen Raum.* Stauffenburg: Tübingen. pp.41-61.
- Brinker, K. 2010. Linguistische Textanalyse. Eine Einführung in Grundbegriffe und Methoden. 4. Aufl. Erich Schmidt Verlag GmbH & Co: Berlin.
- Brinker, K., Cölfen & H., Pappert, S. 2014. *Linguistische Textanalyse. Eine Einführung in Grundbegriffe und Methoden.* 4. Aufl. Erich Schmidt Verlag GmbH & Co.: Berlin.
- Buble, M. 2006. Osnove menadžmenta. Sinergija, Zagreb.
- Bucher, H.J. 1986. Pressekommunikation. Grundstrukturen einer öffentlichen Form der Kommunikation aus linguistischer Sicht. Narr: Tübingen.
- Busse, D. 2000. Textsorten des Bereichs Rechtswesen und Justiz. In: Brinker, K.et.al. (Eds.). *Text-und Gesprächslinguistik.* 1. Halbband. de Gruyter: Berlin, NY. pp.658-676.
- Clyne, M. 1993. Pragmatik, Textstruktur und kulturelle Werte. In: Schröder, H. (Ed.), *Fachtextpragmatik*. G.Narr: Tübingen. pp.3-18.
- Coseriu, E. 1979. Der Mensch und seine Sprache. In: Coseriu, E. (Ed.). Sprache, Strukturen und Funktionen. XII Aufsätze zu allgemeinen und romanischen Sprachwissenschaft. Petersen: Tübingen.

- Coseriu, E. 1980. Textlinguistik. Eine Einführung. Jörn, A. (Ed.). Tübingen.
- Coulson, S. 1997. Semantic leaps: the role of frame-shifting and conceptual blending in meaning construction. Ph.D. dissertation, University of California: San Diego. Available online at: www.cogsci.ucsd.edu/research/documents/dissertations/coulson\_thesis.pdf. Accessed on: December 1, 2010.
- Coulson, S. & T. Oakley. 2003. Metonymy and conceptual blending. In Panther, K & L. L. Thornburg (Eds.). 2003. *Metonymy and Pragmatic Inferencing*. John Benjamins Publishing Company: Amsterdam, Philadelphia: pp.51-79.
- Croft, W. 2003. The role of domains in the interpretation of metaphor and metonymies. In R. Dirven & R. Pörings (Eds.). *Metaphor and Metonymy in Comparison and Contrast.* Mouton de Gruyter: Berlin, New York, pp. 161-205
- Cruse, D.A. 1986. Lexical Semantics. Cambridge University Press: Cambridge.
- Diewald, M. 1991. Deixis und Textsorten im Deutschen. Narr: Tübingen.
- Dijk, Teun van. 1980. Textwissenschaft. Eine interdisziplinäre Einführung. DTV: München.
- Dijk, Teun van 1980a. *Macrostructures*. Erlbaum: Hilsdale.
- Dijk, Teun van. 1997. The study of Discourse. In: Giles, H.& W.P. Robinson (Eds.). *Discourse as Structure and Process. Vol.*1, Sage: London. pp.1-34.
- Dijk, T. van. 2000. Ideology: A multidisciplinary approach. Sage LTD: London.
- Dimter, M. 1981. Textklassenkonzepte heutiger Altagssprache. Kommunikationssituation, Textfunktion und Textinhalt als Kategorien altagssprachlicher Textklassifikation. Niermeyer: Tübingen.
- Drescher, M. 1994. Zur Konstitution von Selbst- und Fremdbildern in der interkulturellen Kommunikation. In: Report Nr.9. der Forschungsgruppe 'Nationale und Fremdbilder'. Bielefeld,. Zentrum für interdisziplinäre Forschung: Bielefeld.
- Dressler, W.U. 1998. Kohärenz und Kohäsion in wissenschaftssprachlichen Texten: Ein Analysebeispiel. In: L. Hoffmann, H. Kahlverkämper& E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband. Walter de Gruyter: Berlin, New York, pp.602-610.
- Dressler, W.U. 2000. Textlinguistik und Semiotik. In: K. Brinker et.al. (Eds.). *Text-und Gesprächslinguistik.* 1. Halbband. Walter de Gruyter: Berlin. pp.762-772.
- Engel, U. 1988. Der Text. In: U. Engel. *Grammatik der deutschen Sprache.* Groos: Heidelberg. pp. 225-306.

- Engel, U. 1994. Der Text. In: U. Engel. Syntax der deutschen Gegenwartssprache. Erich Schmidt Verlag: Berlin. pp.225-285.
- Engel, U. 1996. Deutsche Grammatik. Julius Groos: Heidelberg.
- Fauconnier, G. 1994. *Mental Spaces. Aspects of Meaning Construction in Natural Language*. Cambridge University Press: Cambridge.
- Fauconnier, G. 1997. *Mappings in Thought and Language*. Cambridge University Press: Cambridge.
- Fauconnier, G. 1999. Methods and generalizations. In T. Janssen & G. Redeker. (Eds.). *Cognitive Linguistics: Foundation, Scope, and Methodology.* Mouton de Gruyter: Berlin, New York. pp. 95-127.
- Fauconnier, G. & M. Turner. 1994. Conceptual Projections and Middle Spaces. In *UCSD Department of Cognitive Sciences Technical Report 9401*. Available online at: http://www.cogsci.ucsd.edu/research/files/technical/9401.pdf. Accessed on: August 10, 2007.
- Fauconnier, G. & M. Turner. 1998. Conceptual integration networks. *Cognitive Science*, 22(2), 133-187.
- Fauconnier, G. & M. Turner. 1999. Metonymy and Conceptual Integration. In Panther, K. & G. Radden. (Eds.). *Metonymy in Language and Thought.* John Benjamins Publishing Company: Amsterdam, Philadelphia. pp.77-91.
- Fauconnier, G. & M. Turner. 2003. Polysemy and Conceptual Blending. In Nerlich, B., Z.Todd., V.Herman & D.D. Clarke (Eds.). *Polysemy Flexible Patterns of Meaning in Mind and Language*. Mouton de Gruyter: Berlin, New York. pp. 79-94.
- Feilke, H. 2000. Die pragmatische Wende in der Linguistik. In: K. Brinker et.al. (Eds.). pp.64-83.
- Fix, U. 1997. Kanon und Auflösung des Kanons. Typologische Intertextualitätein "postmodernes" Stilmittel?. Eine Thesenhafte Darstellung. In: G. Antos & H. Tietz (Eds.). *Die Zulkunft der Textlinguistik.* Niemeyer: Tübingen. pp. 97-109.
- Fix, U. 1998. Die erklärende Kraft von Textsorten. In: Orešnik et.al. (Eds.). pp.15-27.
- Fix, U. 2003. Interdisziplinäre Bezüge der Textsortenlinguistik. In: *Schriftliche und mündliche Kommunikation. Begriffe, Methoden, Analysen.* Stauffenburg, Brigitte Narr: Tübingen. pp. 89-101.
- Fox, R. & Fox, J. 2004. *Organizational Discourse*. Praeger: Westport, Connecticut, London.
- Fox, R. 2006. Poslovna komunikacija. HSN Pučko učilište: Zagreb.

- Franke, W. 1987. Texttypen-Textsorten-Textexemplare. Ein Ansatz zu ihrer Klassifikation und Beschreibung. In: *Zeitschrift für germanistische Linguistik*. 15H, 3. pp.263-281.
- Franke, W. 1991. Linguistische Texttypologie. In: K. Brinker (Ed.). *Aspekte der Textlinguistik*. Hildesheim. pp.157-182.
- Gansel, Ch. & Jürgens, F. 2007. *Textlinguistik und Textgrammatik. Eine Einführung*. 2. Aufl. Vandenhoeck & Rupreht: Göttingen.
- Gansel, Ch. 2010. Grammatik und Still. In: M. Habermann (Ed.). *Grammatik wozu?* Dudenverlag: Mannheim.
- Gansel, Ch. 2011. Textsortenlinguistik. Vandenhoek & Ruprecht: Göttingen.
- Gee, J.P. 2002. An Introduction to Discourse Analysis. Routledge: New York.
- Gerd, A. 2000. Ansätze zur Erforschung der Textproduktion. In: K. Brinker et.al. (Eds.). W.de Gruyter: Berlin, New York. pp.105-113.
- Gläser, R. 1995. Linguistic Features and Genre Profiles of Scientific English. Leipziger Fachsprachen-Studien 9: Frankfurt.
- Gläser, R. 1998. Fachsprachen und Funktionalstile. In: L. Hoffmann, L., H. Kahlverkämper, E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband.Walter de Gruyter: Berlin, New York. pp.199-208.
- Gläser, R. 1998. Fachtextsorten der Techniksprachen: Die Patentschrift. In: L. Hoffmann, H. Kahlverkämper, & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1. Halbband, Walter de Gruyter: Berlin, New York. pp.556-562.
- Glinz, H. 2003. Raum, Zeit, Sprache. Pragmatisches, Grammatisches, Textaufbau. In: Schriftliche und mündliche Kommunikation. Begriffe, Methoden, Analysen. Stauffenburg, Brigitte Narr: Tübingen. pp.33-49.
- Glovacki-Bernardi, Z. 1990. O tekstu. ŠK: Zagreb.
- Glovacki-Bernardi, Z. 1992. Recept za jelo-tekstna vrsta? In: *Domet*i 25 (7/8). pp. 319-324.
- Glovacki-Bernardi, Z. 1995. Gebrauchsanweisungen. In: J. Orešnik et.al. (Eds.). *Besedilne vrste Textsorten*. Linguistica XXXV,1. pp.213-218.
- Glovacki-Bernardi, Z. 1998. Die Textsorte "Fernsehennachrichten"-kontrastiv betrachtet. In: J. Orešnik et.al. (Eds.). pp.125-128.
- Goossens, L. 1999. Metonymic Bridges in Modal Shifts. In K.U. Panther & G. Radden (Eds.). *Metonymy in Language and Thought.* John

- Benjamins Publishing Company: Amsterdam, Philadelphia. pp. 193-211.
- Göpferich, S. 1995. *Textsorten in Naturwissenschaften und Technik. Pragmatische Typologie- Kontrastierung-Translation.* Forum für Fachsprachenforschung 27: Tübingen.
- Göpferich, S. 1996. Direktive Sprechakte im Textsortenspektrum der Kraftfahrzeugtechnik: Konventionen im Deutschen und im Englischen. In: H. Kalverkämper & K-D. Baumann (Eds.). Fachliche Textsorten. Komponenten, Relationen, Strategien. Gunter Narr: Tübingen. pp. 65-100.
- Göpferich, S. 1998. Fachtextsorten der Naturwissenschaften und der Technik. Ein Überblick. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft.

  1. Halbband, Walter de Gruyter: Berlin, New York. pp.545-556.
- Graesser, A.C., Forsyth, C. 2014. Learning by communicating in natural language with conversational agents. In: *Psychological Science*. 23. pp. 374-380.
- Gradečak-Erdeljić, T. & Vidaković, D. 2005. Ilokucijska metonimija u svjetlu kognitivnog pristupa komunikaciji. In J. Granić (Ed.). *Semantika prirodnog jezika i metajezik semantike*. Hrvatsko društvo za primijenjenu lingvistiku: Zagreb, Split.pp. 265-274.
- Grady, J. 2005. Primary metaphors as inputs to conceptual integration. In: *Journal of Pragmatics* 37. pp.1594-1614. Available online at www. sciencedirect.com. Accessed on November 20, 2010.
- Grady, J., T. Oakley & S. Coulson. 1999. Blending and Metaphor. In Steen, G.& R. Gibbs (Eds.). *Metaphor in cognitive linguistics*. John Benjamins. Philadelfia. Available online at: http://cogweb.ucla.edu/CogSci/Grady\_99.html. Accessed on: November 3, 2009.
- Griffin, W.R. 2016. *Management*. 12<sup>th</sup> edition. Texas A&M University: Boston.
- Grochla, E. 1999. *Organisationstheorie*. 2 Bände. Brochiert, Schäffer-Poeschl Verlag: Stuttgart.
- Große, E.U. 1974. *Texttypen. Linguistik gegenwärtiger Kommunikationsakte.* Kohlhammer:Stuttgart.
- Große, E.U. 1976. *Text und Kommunikation*. Verlag W.Kohlkammer: Stuttgart, Berlin, Köln, Mainz.
- Gülich, E. & Raible, W. 1972. *Textsorten. Differenzierungskriterien aus linguistischer Sicht*. Frankfurt.
- Gülich, E. & Raible, W. 1975. Textsortenprobleme. In: *Linguistische Probleme der Textanalyse*. Düsseldorf. pp.144-197.

- Gülich, E.& Raible, W. 1977. Linguistische Textmodelle. Fink: München.
- Hartung, W.D. 2000. Kommunikationsorientierte und handlungstheoretisch ausgerichtete Ansätze. In: K. Brinker et.al. (Eds.). pp. 83-96.
- Havelka, M. 1990. Typologie/Typus. In: H.J. Sandkühler (Ed.). *Europäische Enzyklopädie zu Philosophie und Wissen.* Hamburg. pp.624-626.
- Heinemann, W. & Viehweger, D. 1991. *Textlinguistik. Eine Einführung.* Niemeyer: Tübingen.
- Heinemann, M. 2000. Textsorten des Alltags. In: K. Brinker et.al. (Eds.). *Text-und Gesprächslinguistik.* 1. Halbband. Walter de Gruyter: Berlin pp.604-614.
- Heinemann, W. 2000a. Aspekte der Textsortendifferenzierung. In: K. Brinker et.al. (Eds.). pp.523-546.
- Heinemann, W. 2000b. Textsorte-Textmuster-Texttyp. In: K. Brinker et.al. (Eds.). *Text-und Gesprächslinguistik.* 1. Halbband. Walter de Gruyter: Berlin. pp.507-523.
- Heinemann, M.& Heinemann, W. 2002. *Grundlagen der Textlinguisti.* Niermeyer: Tübingen.
- Heinemann, W.& Viehweger, D. 1991. *Textlinguistik. Eine Einführung.* Niemeyer, Tübingen.
- Helbig, G. 1986. *Entwicklung der Sprachwissenschaft seit 1970*. Bibliographisches Institut: Leipzig.
- Hoffmann, Lothar. 1988. Vom Fachwort zum Fachtext. Beiträge zur Angewandten Linguistik. Narr: Tübingen.
- Hoffmann, L. 1990. Fachtexte und Fachtextsorten. Berichte der Sektion Fremdsprachen 5. Karl Marx Unibversität: Leipzig.
- Hoffmann, L. 1991. Fachsprachenlinguistik zwischen Praxisdruck und Theoriebedarf. In: *DaF 28*, Heft 3. Tübingen. pp.131-140.
- Hoffmann, L. 1993. Fachwissen und Fachkommunikation. Zur Dialektik von Systematik und Linearität in den Fachsprachen. U:Bungarten, Bd.2., 614-625.
- Hoffmann, L., Kahlverkämper, H. & Wiegand, E. 1998. Fachsprachen. Ein internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband, Walter de Gruyter: Berlin, New York.
- Hoffmann, L. 1998. Fachtextsorten: Eine Konzeption für die fachbezogene Fremdsprachenausbildung. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1. Halbband. Walter de Gruyter: Berlin, New York. pp.468-482.

- Hoffmann, L. 1998. Fachtextsorten der Institutionensprache III: Verträge. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1. Halbband. Walter de Gruyter: Berlin, New York. pp. 533-539.
- Hoffmann, L. 1998. Syntaktische und morphologische Eigenschaften von Fachsprachen. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft.
   1.Halbband. Walter de Gruyter: Berlin, New York. pp. 416-428.
- Hoffmann, L. 1998. Austauschprozesse zwischen fachlichen und anderen Kommunikationsbereichen: Theoretische und methodische Probleme. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband. Walter de Gruyter: Berlin, New York. pp. 679-689.
- Hoffmann, L. 1998. Sorten fachbezogener Vermittlungstexte II: Die Bedienungsanleitung für fachexterne Adressaten. In: L. Hoffmann et.al. (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband. Walter de Gruyter: Berlin, New York. pp.68-574.
- Hoffmann, L., Kahlverkämper, H. & Wiegand, E. (Eds.). 1999. Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 2. Halbband. Walter de Gruyter: Berlin, New York.
- Hoffmann, Ludger. 1989. Einleitung Recht- Sprache Diskurs. In: L. Hoffmann (Ed.). *Rechtsdiskurse*. Tübingen, pp. 24-38.
- Holthius, S. 1993. Intertextualität. Staufenburg Verlag: Tübingen.
- Hundt, M. 1995. *Modelbildung in der Wirtschaftssprache.* Reihe Germanistische Linguistik. De Gruyter: Berlin.
- Hundt, M. 2001. Textsorten des Bereichs Wirtschaft und Handel. In: K. Brinker et.al. (Eds.). *Text-und Gesprächslinguistik.* 1. Halbband. Walter de Gruyter: Berlin. pp.642-658.
- Isenberg, H. 1983. Grundfragen der Texttypologie. In: F. Daneš & D. Viehweger (Eds.). *Ebenen der Textstruktur.* Ling.Studien 112. Berlin. pp. 303-342.
- Ivanetić, N. 2000 . Struktura i jezik oporuke. In: L. Badurina et.al. (Eds.).
- Ivanetić, N.(2003), *Uporabni tekstovi.* Zavod za lingvistiku FF: Zagreb.
- Jurin, S. 2010. *Tekstne vrste u menadžmentu*. Unpublished doctoral dissertation, University of Zadar, Faculty of Humanities and Social Sciences: *Z*adar.

- Jurin, S. 2011. The Role of Text Genres Offer and Authorisation/Approval in Management Communication. In: *Tourism and Hospitality Management*. Vol. 17, No. 2. Opatija, Wien,Thesaloniki. pp. 251-265.
- Jurin, S. 2012. An Analysis of Text Genres Belonging to Bilateral Commissive Text Type Used in the Management of Multinational Corporations for Communication Purposes. In: *INDECS*. Vol. 10, No2. pp. 193-203.
- Jurin, S. 2012. Tekstna vrsta obavijest kao komunikacijski alat menadžmenta. In: *Foreign Languages and Tourism.* Rijeka pp. 136-146.
- Jurin, S. 2013. Funkcionalne karakteristike tekstne vrste *Izvješće*. In: *Filologija*. Nr.61, HAZU: Zagreb. pp. 165-178.
- Jurin, S. 2013. Tipologija uporabnih tekstova u jeziku medicine. Dijagnoza kao tekstna vrsta asertivnog ili deklarativnog tipa? In: *Jahr.* Vol.14. No.7. Rijeka. pp. 417-426.
- Johnson, M. 1987. The Body in the Mind: the Bodily Basis of Meaning, Imagination, and Reason. University of Chicago Press: Chicago and London.
- Kallmeyer, W. 1986. *Kommunikationstypologie. Handlungsmuster, Textsorten, Situationstypen.* Schwann: Düsseldorf.
- Kalverkämper, H. & Baumann, K.-D. (Eds.). 1996. Fachliche Textsorten. Komponenten-Relationen-Strategien. Gunter Narr: Tübingen.
- Kalverkämper, H. 1998. Fach und Fachwissen. In: L. Hoffmann, H. Kahlverkämper & E. Wiegand (Eds.). Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1. Halbband. Walter de Gruyter: Berlin, New York. pp.1-24.
- Kalverkämper, H. 1998. Darstellungsformen und Leistungen schriftlicher Fachkommunikation, diachrone und synchrone Aspekte. In: L. Hoffmann et.al. (Eds.) Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft. 1.Halbband. Walter de Gruyter: Berlin, New York. pp. 60-93.
- Kalverkämper, H. 2000. Vorläufer der Textlinguistik: Die Rhetorik. In: G. Antos, G, K. Brinker W. Heinemann & S.F. Sager (Eds.). *Text-und Gesprächslinguistik*. Bd.1. W. de Gruyter: Berlin. pp.1-17.
- Katnić-Bakaršić, M.(2007), Stilistika. Ljiljan: Sarajevo.
- Koch, P. 1999. Frame and Contiguity. In: K.U. Panther & G. Radden (Eds.). *Metonymy in Language and Thought.* John Benjamins Publishing Company: Amsterdam, Philadelphia.pp. 139-169.

- Kotler, Ph., Keller, K.L., Brady, M., Goodman, M. & Hansen, T. 2009. *Marketing Managment*. Pearson Education Limited: Harlow, Essex.
- Krišković, A. 2008. *Metonimija u engleskome i hrvatskome jeziku biomedicinskih znanosti: kognitivnolingvistička analiza.*Unpublished doctoral dissertation, University of Zagreb, Faculty of Humanities and Social Sciences: Zagreb.
- Krišković, A. 2009. Metaforička osnova za metonimijska preslikavanja u jeziku medicinske struke i u općem jeziku. *Suvremena lingvistika* 67. pp.23-43.
- Krišković, A. 2011. Uloga konceptualne metonimije u prezentaciji znanstvenih činjenica u medicinskom diskursu. *Filologija*, 57. pp. 133-154.
- Krišković, A. & Tominac, S. 2009. Metonymy based on cultural background knowledge and pragmatic inferencing: evidence from spoken discourse. *Fluminensia*, 21 (2). pp.49-72.
- Kuk-Hyun, C. 2000. *Kommunikation und Texherstellung*. Dissertation. Philosophische Fakultät, Westfalische Wilhelms-Universitä: Münster.
- Lakoff, G. 1987. Women, Fire, and Dangerous Things. The University of Chicago Press: Chicago, London.
- Lakoff, G. & Johnson, M. 1980. *Metaphors We Live By.* The University of Chicago Press: Chicago, London.
- Lakoff, G. & Turner, M. 1989. *More Than Cool Reason: A Field Guide to Poetic Metaphor*. University of Chicago Press: Chicago, London.
- Lakoff, G. & Johnson, M. 1999. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. Basic Books: New York.
- Langacker, R. 1987. *Foundations of Cognitive Grammar.* Vol. I: Theoretical Prerequisites. Stanford: Stanford University Press.
- Langacker, R. 1991. *Concept, Image, and Symbol.* Mouton de Gruyter:

  Berlin and New York.
- Langacker, R. 1999. *Grammar and Conceptualization.* Mouton de Gruyter: Berlin and New York.
- Leontjew, A.,A. 1975. *Psycholinguistische Einheiten und die Erzeugung sprachlicher Äußerungen.* W.de Gruyter: Berlin.
- Linke, A./Nussbaumer, M. 1997. Intertextualität. Linguistische Bemerkungen zu einem literaturwissenschaftlichen Textkonzept. In: G. Antos & H. Tietz (Eds.). *Die Zukunft der Textlinguistik*. Niemeyer: Tübingen. pp.109-127
- Matovac, D. & Tanacković Faletar, G. 2009. TCM I CIT: dvije suprotstavljene teorije ili krajnje točke istoga procesa? In: *Jezikoslovlje* 10, 2. pp. 133-151.

- Methfessel, W 1990. *Vertragsrecht.Band 1: Allgemeine Grundlagen. A*kademischer Verlag Spektrum.
- Möhn, D. 2000. Textsorten und Wissenstransfer. In: K. Brinker et.al. (Eds.). W. de Gruyter: Berlin, NY, pp. 561-574.
- Motsch, W. 1996. *Ebenen der Textstruktur.Sprachliche und kommunikative Prinzipien.* Niemeyer: Tübingen.
- Motsch, W. 1996a. Ebenen der Textstruktur. Begründung eines Forschungsprogramms. In: W. Motsch (Ed.). *Ebenen der Textstruktur. Sprachliche und kommunikative Prinzipien.* Niemeyer: Tübingen.
- Motsch, W. 2000. Handlungsstrukturen von Texten. In: K. Brinker et.al. (Eds.). pp.414-422.
- Muhvić-Dimanovski, V. 1995. Glagolski anglicizmi u njemačkom. In: *Filologij.* Br.24/25. Zagreb. pp. 267-273.
- Muhvić-Dimanovski, V. 1997. Anglicism in German: the problem of variants. In: *Studia Romanica et Anglica Zagabriensia*. No. 42. pp. 269-274.
- Muhvić-Dimanovski, V. 2004. Neology in Language. In: *Collegium Antropologicum*. No. 28, Suppl.1. pp. 140-151.
- Muhvić-Dimanovski, V. 2005. *Neologizmi. Problemi, teorije i primjene.* Zavod za lingvistikz FF: Zagreb.
- Müller, S. & Gelbrich, K. 2013. *Interkulturelle Kommunikation*. Vahlen Franz Verlag: München.
- Nerlich, B., Clarke, D. & Todd, Z. 1999. «Mummy, I like being a sandwich»: Metonymy in Language Acquisition. In K.U. Panther & G. Radden (Eds.). *Metonymy in Language and Thought.* John Benjamins Publishing Company: Amsterdam, Philadelphia.pp. 361-383.
- Nerlich, B. & Clarke, D. 2003. Blending the Past and the Present: Conceptual and linguistic intergration, 1800-2000. In R. Dirven & R. Pörings. (Eds.). *Metaphor and Metonymy in Comparison and Contrast.* Mouton de Gruyter: Berlin, New York. pp. 555-593.
- Oakley, T.V. 1998. Conceptual blending, narrative discourse, and rhetoric. In: *Cognitive Linguistics* 9-4. pp. 321-360.
- Oldenburg, H. 1992. Angewandte Fachtextlinguistik. Gunter Narr: Tübingen.
- Panther, K.U. & Thornburg, L.L. 1998. A cognitive approach to inferencing in conversation. In: *Journal of Pragmatics*, 30. pp. 755-769.
- Panther, K.U. & Thornburg, L.L. 1999. The Potentiality for Actuality Metonymy in English and Hungarian. In K.U. Panther & G. Radden (Eds.). *Metonymy in Language and Thought.* John Benjamins Publishing Company: Amsterdam, Philadelphia. pp. 333-357.

- Panther, K.U. & Radden, G. (Eds.). 1999. *Metonymy in Language and Thought.* John Benjamins Publishing Company: Amsterdam, Philadelphia.
- Panther, K.U. & Thornburg, L.L. 2000. The Effect for Cause Metonymy in English Grammar. In A. Barcelona (Ed.). *Metaphor and Metonymy at the Crossroads*. Mouton de Gruyter: Berlin, New York. pp. 215-231.
- Panther, K.U. & Thornburg, L.L. 2003. The roles of metaphor and metonymy in English —er nominals. In R. Dirven & R. Pörings (Eds.). *Metaphor and Metonymy in Comparison and Contrast.* Mouton de Gruyter: Berlin, New York.pp. 279-319.
- Panther, K.U. & Thornburg, L.L. (Eds.). 2003a. *Metonymy and Pragmatic Inferencing*. John Benjamins Publishing Company: Amsterdam, Philadelphia.
- Panther, K.U., Thornburg, L. & Barcelona, A. (Eds.). 2009. *Metonymy and Metaphor in Grammar*. Human Cognitive Processing 25. John Benjamins Publishing Company: Amsterdam.
- Plenković, M. 1991. Poslovna komunikologija. Alinea: Zagreb.
- Plett, H.F. 1979 *Textwissenschaft und Textanalyse. Semiotik, Linguistik, Rhetorik.* 2.Aufl.Quelle & Meyer Heidelberg: Stuttgart.
- Plett, H.F. 1989. Einführung in die rhetorische Textanalyse. Buske: Hamburg.
- Pörings, R.& Schmitz, U.(Eds.). 2003. Sprache und Sprachwissenschaft. Eine kognitiv orientierte Einführung. Gunter Narr: Tübingen.
- Pötschke, H. 1993. Funktional-kommunikative Textlingistik. Entwicklung, Themen, Probleme. In: H. Schröder (Ed.). *Fachtextpragmatik*. G.Narr: Tübingen.
- Püschel, U. 2000. Text und Stil. In: K. Brinker et.al. (Ed.). *Text-und Gesprächslinguistik*. 1. Halbband. Walter de Gruyter: Berlin. pp. 473-489.
- Radden, G. & Kövecses, Z. 1999. Towards a Theory of Metonymy. In: K.U. Panther & G. Radden (Eds.). *Metonymy in Language and Thought.* John Benjamins Publishing Company: Amsterdam, Philadelphia. pp.17-59.
- Rolf, E. 1993. Die Funktionen der Gebrauchstextsorten. De Gruyter: Berlin.
- Rosengren, I. & Reis, M. 1992. What do wh-imperatives tell us about wh-movement? In: *Natural Language and Linguistic Theory.* Vol. 10. pp. 79-118.
- Rouse, M.J. & Rouse, S. 2005. Poslovne komunikacije. Masmedia: Zagreb.

- Ruiz de Mendoza Ibáñez, F.J. 2000. The Role of Mapping and Domains in Understanding Metonymy. In: A. Barcelona (Ed.). *Metaphor and Metonymy at the Crossroads*. Mouton de Gruyter: Berlin, New York. pp. 109-132.
- Ruiz de Mendoza Ibáñez, F.J. & Cervel, S.P. 2002. Cognitive operations and projection spaces. *Jezikoslovlje* 3.1-2:131-158.
- Ruiz de Mendoza Ibáñez, F.J. & Díez Velasco, O.I. 2003. Patterns of conceptual interaction. In: R. Dirven & R. Pörings (Eds.). *Metaphor and Metonymy in Comparison and Contrast.* Mouton de Gruyter: Berlin, New York. pp. 489-532.
- Ruiz de Mendoza Ibáñez, F.J. & Hernández, L.P. 2003. Cognitive operations and pragmatic implication. In: K. Panther & L. L. Thornburg. (Eds.). *Metonymy and Pragmatic Inferencing,* John Benjamins Publishing Company.: Amsterdam, Philadelphia. pp. 23-49.
- Ruiz de Mendoza Ibáñez, F.J. 2011. Metonymy and Cognitive Operation. In: R. Benczes, A. Barcelona & F.J. Ruiz de Mendoza Ibáñez (Eds.). *Defining Metonymy in Cognitive Linguistics: Towards a Consensus*. John Benjamins Publishing Company: Amsterdam. pp. 103-123.
- Sachtleber, S. 1993. Textstile in der Wisenschaftssprache. In: H. Schröder (Ed.). *Fachtextpragmatik*. G.Narr: Tübingen.
- Sager, J.C, Dungworth, D. & McDonald, P.F 1980. English Special Languages. Principles and practice in science and technology. Wiesbaden.
- Sager, S.F. 1981. Sprache und Beziehung.Linguistische Untersuchungen zum Zusammenhang von sprachlicher Kommunikation und zwischenmenschlicher Beziehung. Tübingen.
- Sager, S.F. 2000. Bedingugen und Möglichkeiten nonverbaler K ommunikation. In: K. Brinker et.al. (Eds.). Text-und Gesprächslinguistik. 1. Halbband. Walter de Gruyter: Berlin. pp. 1132-1141..
- Samuelson, P.A. & Nordhaus, W.D. 2010. *Economics*. McGraw- Hill Companies: New Delhi.
- Sandig, B.1972. Zur Differenzierung gebrauchssprachlicher Textsorten im Deutschen. In: E. Gülich & W. Raible (Eds.). pp.113-124.
- Sandig, B. 1986. Stilistik der deutschen Sprache. De Gruyter: Berlin.
- Sandig, B. 2006. *Textstilistik des Deutschen.* W.de Gruyter: Berlin, New York.
- Schilling, M.A. 2000. Decades ahead of her time: Advancing stakeholders theory through the ideas of Mary Parker Follet. In: *Journal of Management History*, 6/7. pp.224-242.

- Schröder, H. 1993. Fachtextpragmatik. Gunter Narr: Tübingen.
- Schröder, T. 2003. *Die Handlungsstruktur von Texten. Ein integrativer Beitrag zur Texttheorie.* Gunter Narr: Tubingen.
- Searle, J.R. 1969/71. Speech Acts. An Essay in the Philosophy of Language. CUP: Cambridge.
- Searle, J.R.1972. Speech Acts. CUP: Cambridge.
- Searle, J.R. 1975. *A Taxonomy of illocutionary Acts.* CUP: Cambridge.
- Searle, J.R. 1976. A classification of illocutionary acts. In: *Language in Society 5*. pp. 1-23.
- Searle, J. & Vanderverken, D. 1985. Foundations of Illocutionary Logic.
  Cambridge University Press: Cambridge.
- Silić, J. & Pranjković, I. 2007. Gramatika hrvatskog jezika. ŠK: Zagreb,
- Silić, J. 2006. Funkcionalni stilovi hrvatskog jezika. Disput: Zagreb.
- Simmler, F. 1993. Zum Verhältnis von publizistischen Gattungen und linguistischen Textsorten. In: *ZfG*, *Neue Folge III*. pp. 349-363.
- Smith, N.& Vigor, H. 1991. People in Organisations. OUP: New York.
- Srića, V. 1993. *Principi modernog menadžmenta*. Zagrebačka poslovna škola: Zagreb.
- Sternkopf, J. 1996. Vorwort und Rezension: Nahe Textsorten für eine ferne Interaktion. In: H. Kalverkämper, & K.D.Baumann (Eds.). Fachliche Textsorten. Komponenten, Relationen, Strategien. Gunter Narr: Tübingen. pp. 468-478.
- Sweetser, E. 1999. Compositionality and blending: semantic composition in a cognitively realistic framework. In T. Janssen & G. Redeker (Eds.). *Cognitive Linguistics: Foundations, Scope, and Methodology.* Mouton de Gruyter: Berlin, New York. pp. 129-162..
- Škiljan, D.1997. Granice teksta. In: *Tekst i diskurs.* Zbornik radova društva za primjenjenu lingvistiku. Zagreb. pp. 4-15.
- Taylor, J.R. 1995. Linguistic Categorization: Prototypes in Linguistic Theory. 2<sup>nd</sup> ed. Oxford: Clarendon Press.
- Taylor, J.R. 2003 Category extension by metonymy and metaphor. In R. Dirven & R. Pörings (Eds.). Metaphor and Metonymy in Comparison and Contrast. Mouton de Gruyter: Berlin, New York. pp. 323-347.
- Tošović, B. 2002. *Funkcionalni stilovi*. Institut für Slawistik. Universität Graz:Graz.

- Turner, M. & Fauconnier, G. 1995. Conceptual Integration and Formal Expression. In: *Journal of Metaphor and Symbolic Activity* 10/3. Available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract id=1650417. Accessed on February 1, 2011.
- Turner, M & Fauconnier, G. 2000. Metaphor, Metonymy, and Binding. In: A. Barcelona (Ed.). *Metaphor and Metonymy at the Crossroads*. Mouton de Gruyter.Berlin, New York. pp. 133-145.
- Turner, M & Fauconnier,G. 2003. Metaphor, Metonymy, and Binding. In: R. Dirven & R. Pörings (Eds.). Metaphor and Metonymy in Comparison and Contrast. Mouton de Gruyter: Berlin, New York. pp. 469-487.
- Verčić, D., Zavrl, F., Rijavec, P., Verčić Tkalac, A. & Laco, K. 2004. *Odnosi s medijima*. Masmedia: Zagreb.
- Voßhagen, C. 1999. Opposition as a Metonymic Principle. In K. Panther & G. Radden. (Eds.). *Metonymy in Language and Thought.* John Benjamins Publishing Company.: Amsterdam, Philadelphia. pp. 289-308.
- Waltereit, R. 1999. Grammatical Constraints on Metonymy: On the Role of the Direct Object. In K.U. Panther & G. Radden (Eds.). *Metonymy in Language and Thought*. John Benjamins Publishing Company: Amsterdam/Philadelphia. pp.233-253.
- Weihrich, H. & Koontz, H. 1994. Menadžment. Mate: Zagreb.
- Weirich, H. 1969. Textlinguistik: Zur Syntax des Artikels in der deutschen Sprache. In: *Jahrbuch für Internationale Germanistik.* 1.Halb. Frankfurt. pp.61-74.
- Weinrich, H. 1972. Thesen zur Textsortenlinguistik. In: E. Gülich & W. Raible (Eds.). *Textsorten. Differenzierungskriterien aus linguistischer Sicht.* Athenäum: Frankfurt. pp. 160-169.
- Weinrich, H. 1993. *Textgrammatik der deutschen Sprache*. Mannheim, Leipzig.
- Werlich, E. 1975. *Typologie der Texte. Entwurf eines textlinguistischen Modells zur Grundlegung einer Textgrammatik.* Goos: Heidelberg.
- Wunderlich, D. 1976. *Studien zur Sprechakttheorie*. Suhrkampf Taschenbuch Wissenschaft: Frankfurt/M.
- Žic Fuchs, M. 1991. Znanje o jeziku i znanje o svijetu. SOL: Zagreb.
- Žic Fuchs, M. 2009. *Kognitivna lingvistika i jezične strukture: engleski* present perfect. Nakladni zavod Globus: Zagreb.

# Index

aggressive disease, 99, 100, 117, 118, 119 application form, 11, 17, 47, 48, 49, 50, 51, 58, 59 assertive, 11, 27, 35, 36, 40, 71 authorisation/approval, 11, 68 bilateral, 5, 11, 44, 46, 47, 51, 52, 56, 58, 59 bilateral commissive, 11, 46, 58 classification of metonymy, 75 cognitive linguistic, 11, 12, 19, 69, 73, 85, 86, 88, 98, 99, 105, 125 commissive, 11, 27, 35, 36, 37, 38, 40, 41, 44, 45, 46, 47, 49, 50, 51, 52, 53, 56, 58, 59, 65, 67, 68, 125 communication, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, 63, 65, 66, 67, 68, 69, 70, 71, 73, 79, 85, 89, 97, 99, 125 conceptual integration, 11, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 115, 116, 117, 118, 120, 121, 122, 123 conceptual metonymy, 73, 80, 85, 87, 92, 94, 98, 108, 118, 119 contract, 11, 32, 38, 41, 42, 45, 46, 47, 51, 52, 53, 54, 55, 56, 57, 58, 59, 116 Croatian, 11, 36, 46, 60, 63, 73, 76, 77, 78, 79, 81, 82, 83, 90 declarative, 27, 35, 37, 38, 40, 41, 54 definitions of metonymy, 85 definitions of texts, 19 directive, 22, 27, 35, 40, 47, 49, 50, 52, 54, 56, 57, 62, 64, 66 DISEASE IS AN ENEMY, 99, 110, 111, 115, 116, 117, 118, 119, 122 explicative, 11, 21, 22, 38, 57, 71 expressive, 22, 27, 32, 35, 40 generic space, 99, 102, 103, 104, 106, 110, 115, 117, 120 INSTITUTION FOR PEOPLE WORKING THERE, 76, 77, 78, 83 location domain, 76, 79, 83 management, 15, 33, 34, 40, 41, 44, 45, 50, 59, 60, 61, 68, 78, 79, 125 mapping, 73, 74, 75, 76, 85, 86, 87, 91, 94, 95, 98, 100, 101, 102, 104, 105,

106, 107, 109, 110, 113, 114, 115, 116, 117, 119, 120, 121, 122, 123

medical research article(s), 11, 71, 73, 76, 80, 81, 83, 85, 89, 98, 125

mental spaces, 99, 100, 101, 102, 103, 104, 106, 107, 109, 110, 115, 117, 119, 121, 122, 123, 125

metonymic functions, 85, 87, 88

metonymic mappings, 73, 85, 86, 95, 98, 123

negative test, 11, 99, 100, 108, 111, 112, 113, 114, 121, 122

notice of readiness, 11, 47, 55, 56, 57, 59, 98

obligatives, 37, 46, 59

offer, 11, 14, 17, 38, 41, 45, 59, 60, 61, 62, 63, 64, 65, 68

predicative metonymy, 85, 89, 92, 125

production domain, 11, 73, 76, 80, 83

referential function of metonymy, 87

RESEARCH FOR AUTHOR, 76, 80, 81, 83

source, 16, 36, 74, 75, 76, 79, 80, 83, 86, 87, 89, 90, 91, 94, 96, 97, 103, 105, 106, 107, 112, 117, 119

speech acts, 20, 21, 26, 31, 37

standards of textuality, 23, 26

STATE FOR INSTITUTION, 76, 77, 83

target, 19, 63, 65, 74, 76, 77, 78, 79, 80, 83, 86, 87, 89, 90, 91, 93, 94, 96, 97, 103, 105, 106, 107, 112, 117, 119

TENSE FOR A SPECIFIC ACTION, 89, 94

text classification, 22

text function, 21, 22, 26, 27, 28, 32, 36, 41, 46, 47, 66

text genre(s),11, 12, 14, 16, 17, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 65, 66, 67, 68, 69, 70, 71, 95, 97, 98, 99, 125

text types, 11, 28, 29, 31, 35, 37, 40, 45, 65, 125

unilateral commissive, 11, 44, 46, 59, 65, 68

The aim of this monograph is to present the main approaches in text research, the linguistic concept of the text in contemporary social domains, and the role of these texts in the process of contemporary communication. This monograph is intended for the scientific and professional audience, specifically students, linguists and anglicists. The authors view the text as a theoretical construct, but also as a communication phenomenon in which the information, during the process of linguistic understanding, is converted into endless usable values, and it becomes a reality for the sender and receiver of the transmitted message. Texts are always a result of a certain social context, which is reflected both in their content and in the standard models of communication. Text linguistics and business communicology, as markedly dialectical theoretical and practical scientific disciplines, start from the existing historical practice of verbal communication and establish modern communication practices and strategies of effective business communication. In this regard, the present publication provides a significant and valuable contribution to the development and research of text linguistics, as well as business communication, because it shows its interdisciplinary nature which opens new scientific and practical possibilities at all levels of global, regional and local communication.

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