

Multimodality in glottodidactics: Some considerations on the glottodidactic analysis of internet specialist texts

Paweł Szerszeń

Institute of Anthropocentric Linguistics and Culturology, University of Warsaw

pszerszen@uw.edu.pl

Abstract

The main purpose of this article is to reflect on the question of multimodality in a glottodidactic context, by way of an analysis of internet specialist texts (IST). Here, I take multimodality to mean all the communicative modalities undertaken by man, as distinguished from multimediality, which is defined as an interaction of various technical media in delivering a message. These two dimensions (multimodality and multimediality) are strictly related and interdependent. First, I present a few terminological remarks about expressions that are of key importance for understanding the subject-matter at hand: multimodality, multimediality, electronic hypertext and internet specialist texts. Next, I describe selected changes to the glottodidactic system caused by the Internet, with particular emphasis on changes in the way in which internet texts are formulated. Referring to F. Gruzca's anthropocentric theory of human languages, I draw attention to the structure of internet hypertexts and internet specialist texts and the possibility of a glottodidactic description thereof. Regarding the latter, I present the criteria governing a glottodidactic analysis of internet specialist texts, after which I enumerate and discuss the determinants for applying internet texts to the teaching of specialist languages. Finally, I indicate new areas of research into the glottodidactic potential of IST, taking into account the multimodal dimension.

Key words: multimodality, glottodidactics, hypertext, glottodidactic analysis, specialist text

1 Introduction

The rapid development of the Internet and its services has caused far-reaching changes to the way in which people communicate, and at the same time has strongly influenced the form and content of messages themselves, as well as affecting the present shape and future development of so-called national languages. Apart from new ways of presenting and conveying information such as electronic text/hypertext, the changes to human communication caused by the Internet affect, among other things, the style of communication and the very manner of formulating texts, an example of which is the rather widespread use of emoticons, symbols expressing the emotional state of interlocutors. The above changes have also affected linguistic education, including the teaching of foreign languages, an expression of which are the new roles of the learner and teacher (cf. Szerszeń 2010: 112 et seq.).

The purpose of this article is to reflect on the question of multimodality as a characteristic category of messages in the form of internet specialist texts (IST) from a glottodidactic perspective. It thus serves as a springboard for investigations into the impact of the multimodal format of internet texts (in general) on the effectiveness of the glottodidactic process.

First, I present a few terminological remarks about expressions that are of key importance for understanding the subject-matter at hand: multimodality, multimediality, electronic hypertext and internet-based specialist texts.

Next, I describe selected changes to the glottodidactic system caused by the Internet, with particular emphasis on changes in the way in which internet texts are formulated. Referring to F. Gruzca's anthropocentric theory of human languages, I present a few remarks on the structure of internet hypertexts and internet specialist texts and the possibility of a glottodidactic description thereof. Regarding the latter category, I present the criteria governing a glottodidactic analysis of internet specialist texts, after which I enumerate and discuss the determinants for applying internet texts to the teaching of specialist languages. Finally, I indicate new areas of research into the glottodidactic potential of IST, taking into account the multimodal dimension.

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2 Terminological remarks

The media breakthrough in humanities has led to the appearance and spread of new forms of texts – electronic hypertexts, accompanied by a debate on the subject of interactive media and also key concepts (interpreted in various ways) of (multi) mediality and (multi) modality (cf. Żebrowska 2013: p.81 et seq., see also modern theories on the processing of information, Bonacchi 2013: 44, Szerszeń, due to be published).

Attempting to distinguish between the conceptual meaning of the last two expressions, Bonacchi (2014: 73) concludes that multimediality means an interaction of various technical media in conveying a message, whilst multimodality should be understood as all the modes of communication realized by man (literally by his body).

In other words, multimodality as a *terminus techniqué* in the latest linguistic research acquires a new nature. Communication with the aid of electronic texts (mainly via oral and written texts, still and moving images and sound) differs widely (due to its complexity and multi-dimensionality) from "traditional" communication realised with the aid of printed texts. It is a multimodal communication, which stimulates and activates all human productive and receptive resources which not only have great consequences for communication between Internet users, but also for the great impact that it has on the glottodidactic process, which may be optimized thanks to a conscious and rational use of multimodal communication techniques¹. In this connection, there arises an entire series of significant issues which require clarification. They include:

- 1) *Multicodality/Reinforced semiocity*: how semiotics processes are supported in the context of a more adequate interpretation of data via direct communication and optimised visualization. Internet texts occur in a visual environment (still and motion images), sound, and video recordings, which has a major influence on their reception (interpretation occurs not only by reading, but also by showing and listening, taking into account features that are typical of various cultures of communication (see Bonacchi 2013: 217) .
- 2) *Interconnection*. Simultaneous motion over a multi-level hypertext is reminiscent of the neurological process occurring inside the brain, as opposed to induced (steered) reception of a linear text.

¹ Linguists are particularly interested in the last two phenomena, as expressed by their reflections about the constitutive role of these phenomena in human interaction inside enterprises (Bonacchi 2014), as well as by their remarks on the manner of performing a multimodal synchronic analysis of Internet communications in the form of chat, see Beißwenger 2009. An example of another analysis of multimodal communication is the culturological and suprasegmental analysis of communication marked by politeness and impoliteness which is the subject of the international research project called "Multimodal Communication: Culturological Analysis" conducted at Warsaw University in cooperation with the University of Saarland (cf. www.mcca.uw.edu.pl), see also Bonacchi monograph, 2013.

- 3) *Interactivity*. Internet texts permitting a more advanced interaction between their users (including between learners and teachers), supported by various modes of communication (see point 1).
- 4) Partial *synchronicity* of Internet communication (e.g. in the case of chat services). Glottodidactic interaction by means of this service is reminiscent of face-to-face interaction.
- 5) *Media literacy*. To be able to communicate and learn effectively, every Internet user must develop broadly-conceived media literacy, which calls for the use of not only (electronic) media, but also the interpretation/creation of multimodal messages, and especially the ability to navigate around hypertext and interpret the information therein (including more multimodal and multimedia skills).

Apart from the concept of multimodality, the concept of hypertext occupies an important place in the debate on the role of electronic media in glottodidactics. Therefore, the following suggested interpretation of the meaning of electronic hypertext² is a certain compromise that takes into account the glottodidactic context (cf. Szerszeń 2010: p.74 et seq.). The way I understand it, an electronic hypertext is a text which, in certain places, e.g. after a particular word, sentence or paragraph, does not have a normal order of sentences, paragraphs and pages as in a conventional text, but instead there is a link with a different element in the form of text, image or sound, i.e. represented by another text (whether written or spoken) or image (graphic, diagram, drawing) etc. In other words, a hypertext is a text which, apart from possessing a linear structure, includes other "paths of action", i.e. the recipient of a hypertext can choose in which direction to proceed. These directions may include further links (componential units of a hypertext) containing written text, still and motion images and sound, as well as so-called multimedia links³, in other words the technology that joins the above-mentioned elements. I suggest that hypertext as understood by me be described by the term *hypertext sensu largo*⁴. In other words, electronic hypertext *sensu largo* is an electronic text which, apart from a classic text, includes such features as graphics, motion and still images, and sound. Their basic function is to consolidate (emphasise), supplement and clarify the information contained in the main text. Apart from hypertext *sensu largo*, one can also distinguish hypertext *sensu stricto*. This is an electronic text whose structure is created by a text projected at a given time, combined with links to other texts (so-called multi-linear text, cf. Grzenia 2006: 82).

Proceeding now to an attempt to define an internet specialist text, I assume that such a text is a highly specialist text in the Internet, whether didactic or non-didactic, which may be used in the teaching of specialist languages. Here, I take a specialist text to mean a text written by specialists in order to transfer specialist knowledge and characterized by a certain standard of professionalism of information and professionalism of expression (S. Grucza 2004c: 123, 127).

3 The role of internet specialist circles in the glottodidactic system

Internet community plays an important role in the way in which texts placed on the Internet are formulated, including internet specialist texts which in a global sense (through the spread of information and communication technologies) have exerted (and are still exerting) enormous influence not only on English as the official language of the Internet, but also on other national

² Another type of hypertext is so-called literary hypertext (cf. Szerszeń 2010: 55 e seq.).

³ The use of this name may suggest that we are dealing with the appearance of several different forms of information communication at the same time (e.g. text, sound, graphics, animation, video), which does not always occur in practice. Therefore it seems more correct to use the frequent term bimedia (a combination of written text and still image) or trimedia (combination of written text, moving image, still image and sound). The term multimedia is a pleonasm and is often referred to other designates, such as specific works created through a combination of media (e.g. specific applications) cfr. Mitschian (2004: 131), Szerszeń (2010: 67). Apart from the term multimedia, literature on the subject also uses the term hypermedia, meaning the use of "many media at the same time, though organized in a manner typical of a hypertext", and sometimes employing its complex structure and system of links (cf. Szerszeń 2010: 67).

⁴ The concept of hypertext brings it closer to the concept of hypermedium.

languages. The above phenomena occur because, as Tim Berners-Lee (1999), one of the creators of the Internet, observed over a dozen years ago: “The web is more a social creation than a technical one”, which eminently emphasizes the social or cultural dimension of the web, drawing one’s attention to the statements made in communication on the Internet.

Together with the appearance of this “form” of language, the term *netspeak* has arisen, which David Crystal (2001) used to describe the language of communication via the Internet. Another new term is *computer-mediated communication (CMC)*, which encompasses a broader group of phenomena and refers not only to *netspeak* itself, but also to computer communication outside the Internet, e.g. in a closed computer program. Crystal says that *netspeak* is certainly a modern linguistic phenomena and represents the fourth dimension of language after writing, speech and sign language (cf. Gajek 2002: 62). Crystal’s view appears controversial, most of all because the very way in which language is used on the Internet is described as *netspeak* and because this has been classified as a “language dimension” and not as a separate language governed by its own laws. Whatever way we relate to Crystal’s point of view, it is a problem worthy of further, including linguistic, analysis.

The most important changes in the manner of formulating texts on the Internet have been caused by two basic groups of factors: external factors (extratextual/contextual) and internal factors (intratextual). External factors are associated mainly with the impact of other spheres on the way in which Internet texts are formulated, whereas internal factors are connected with the internal development of the manner of communication. Extratextual factors are expressed, for instance, in borrowings, especially from the English language, or the coining of new phrases or changes to the function of words. Intratextual factors may be observed in such features as graphic symbols, emoticons, a mixture of the qualities of the spoken and written language in email correspondence, the possibility of altering the graphic presentation of words and the layout of text on a page (quite significant regarding a particular text or for determining its potential recipient) etc.

Under the impact of the above groups of factors, the forms of text used in the electronic media are undergoing significant changes. On the one hand, these processes can cause difficulties with communication (e.g. the use of increasingly specialist language in Internet texts, describing various forms of professional human activity, e.g. commerce), but also difficulties with learning a (foreign) language. On the other hand, new forms of text may help improve the process of learning (a foreign language), therefore it is essential to develop among Internet users (including teachers and learners) broadly-conceived media literacy (see point 5), which calls for a reflexive use of electronic media, together with the acquisition of more specific multimodal and multimedia skills required.

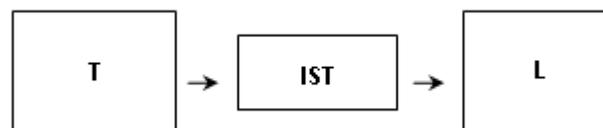


Figure 1.

Therefore, considering the fact that apart from broadly-conceived classic linguistic skills, the skills acquired during the learning of a language include media skills, a certain relationship occurs between the two. The question therefore arises whether it is possible to improve language teaching by developing media skills (cf. Warkus 2000). The combination of foreign language teaching with the development of media skills may result in an internationalization of language; communication, cultural and intercultural skills being regarded by language learners not only as a means with which to “master the language”, but also as a way with which to discover and get to know the world, including the new possibilities offered by electronic media and multimodal communication technologies. Thus, a learner of very young age, discovering way of obtaining the information he needs, learns (or should learn) with the help of a teacher, performing first an initial, and then an

increasingly more enhanced, evaluation of the linguistic data (Internet texts) available to him, so that he may choose the ones that are the most useful to him. The above situation is illustrated excellently by the following diagram which refers to F. Grucza's glottodidactic system. The diagram illustrates the important role of texts (in the context of broadly-conceived Internet specialist texts (IST), which is what we are concerned with in this article) in the process of learning a language (not just a foreign language), as the sole stimulus for creating language skills (T: teacher, IST: internet specialist text, L: learner).

One should add that in the process of shaping language skills (regarding one's mother tongue, not just a foreign tongue), texts (in this case internet texts) fulfil a dual role: Internet specialist texts ("foreign" texts) present the learner with the structural templates with which to produce his own texts in a given language, whilst the texts produced by the learner himself (LT) reflect the degree to which he has mastered the internationalized language skills (see F. Grucza 1988: 12, S. Grucza 2000, 2004a i b, 2008). In other words, on the basis of the texts produced by the learner, his language skills can be assessed. By comparing this assessment with the skills model that represents the culmination of the teaching process, it is possible to formulate conclusions about the language skills which (a) the learner has already internationalized, (b) which the learner has not sufficiently internationalized, and (c) which the learner has not internationalized at all yet. In an institutionalized didactic process, conclusions (a) and (b) cause (should cause) a didactic reaction from the teacher – a linguistic or non-linguistic reaction. The above remarks may be illustrated thus:

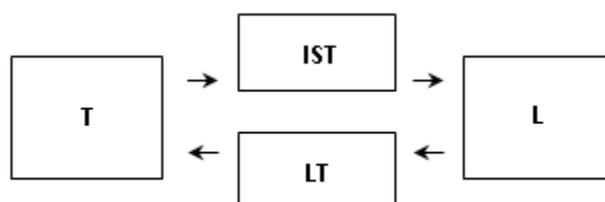


Figure 2.

Regarding the role of Internet specialist texts in the teaching process L2, one may ask three fundamental questions⁵: (1) How, and to what extent, can individual qualities of Internet specialist texts affect the development of language skills?, (2) How should Internet specialist texts be structured so that the learner acquires the required degree of internationalized language skills?, (3) With what methods can one make effective use of Internet specialist texts to internationalize language skills? (4) Can one, and if so to what extent and with the help of what hardware and software (employing a broad spectrum of multimodal communication), replace direct didactic interaction between learner and teacher with interaction between a didactic platform and learner, which is initiated by the teacher only indirectly? The last question provides the starting point for research fields into applied linguistics recently commenced by the Institute of Anthropocentric Linguistics and Culturology⁶ of the University of Warsaw (see Szerszeń 2006, 2007, 2010, Zwierchoń-Grabowska 2005, 2009a,b) and for research into computer linguistics conducted by the Chair of machine Translations⁷ at the University of Saarland (see Haller 2004, 2008, Rösener 2005, 2009) and in the Institute of the Society for the Propagation of Applied Information Research⁸ (see Maas, Rösener, Theofilidis 2009).

⁵More on this subject in S. Grucza 2000, 2004a i b, 2008.

⁶ www.ikla.uw.edu.pl (21.01.2014)

⁷ <http://fr46.uni-saarland.de/index.php?id=161> (21.01.2014)

⁸ <http://www.iai-sb.de/iai/> (21.01.2014)

4 The criteria for a glottodidactic analysis of Internet specialist texts (IST)

Since each glottodidactic process proceeds within certain confines dictated by a specific external (institutional) context, such as the type of school, technical infrastructure, curricula and curricular targets, teaching schedules and number of people in the group, and by an internal context (individual factors) such as: the needs of learners, knowledge of the foreign language being taught and/or other foreign languages, specialist knowledge of the specialist language being taught etc., the teacher's role is to take these factors into account in every glottodidactic practice. At the same time, one should bear in mind that learning a (specialist) foreign language in an institutional context in Poland takes place mainly at the level of higher education (e.g. courses for translators), and less often at secondary level (technical and vocational colleges) and various kinds of specialist language courses.

The following list of criteria for analyzing glottodidactic Internet specialist tests is an attempt to indicate possible paths of analyzing Internet texts/hypertexts for the purpose of teaching specialist languages, and should be referred every time to a specific glottodidactic context. It was drawn up following reflections upon literature dealing with analyses of specialist texts (including Schaefer 1995: 45 at seq., Lukszyn 2008) as well as an analysis of IST's used by me during lessons in a comparative analysis of specialist texts, lessons in business German, and translation exercises.

A. General characteristics of IST (Objective: preliminary assessment of the usefulness of IST in a specific glottodidactic context)
A1. Length and segmentation of IST: number of characters, words, complete/incomplete sentences, paragraphs, A2. Type of IST (e.g. example of a known/new type of text, hybrid variation), A3. Medial characteristic of IST (e.g. classic linear text or hypertext, presence of illustrations, pictures, animations etc.).
A. Communication parameters of IST
B1. The function of the text B2 The author of the text B3. The recipient of the text (explicit description of function, author, recipient of text, use of forms indicating the function, author and recipient, taking into account domestic recipients, presence of elements drawing attention to foreign culture).
C. Macrostructure of IST
C1. IST conception: Title, function(s), structure, information content (e.g. compliance of IST structure with title – external cohesion – and with the conception of a given type of text; development of subject, comprehensibility of the text – internal cohesion, presence of information on domestic/foreign reality ⁹ etc.), C2. Characteristics related to the medial and modal format: written/spoken text, still/moving image, sound, audio/video recording; hypertextual structure: external structure (hierarchical, linear, rymatic; open/closed hypertext, number of links) and internal (structure of link, number of hyperlinks), type of links in the hypertext etc., C3. Linguistic, metalinguistic (metacommunication) and non-linguistic forms of IST reception: cohesion resources, including prepositions, conjunctions, word order; metacommunication/metalinguistic elements: illustrations, tables, navigational aids, e.g. tables of contents, non-linguistic elements: graphic means, e.g. underlining, bold text, font size, use of pictures/images, layout, length/with of lines, suitable colour, background contrast etc.
D. IST Microstructure
D1. Correctness (regarding general/specialist language): spelling, punctuation, grammar (correct grammar in a particular type of specialist text), correct vocabulary and terminology, correct style and presentation, D2. Complexity (regarding general/specialist language), e.g. grammar: syntax, vocabulary/terminology, occurrence of neologisms, Anglicisms, jargon; style: choice of vocabulary, figures of speech, euphemisms, metaphors etc.
E. Glottodidactic relevance

⁹ See Bonacchi 2011: 60 et seq.

<p>E1. A preliminary assessment of the possibility of attaining the didactic goals of the basic/specialist language: specific sub-language, e.g. regarding the internationalization of grammatical and lexicological/terminological skills; development of (inter)cultural skills, input assessment (satisfactory, rich, restricted, unsatisfactory); text for a learner or teacher, presence of instructions regarding work with a IST, possibility of interaction with others, collaboration (Web 2.0) etc.,</p> <p>E2. Methodological assessment: e.g. regarding preferred methods of work, possibility of analyzing a specialist text, e.g. terminological, grammatical, stylistic, pragmatic, translational-didactic analysis; possibility of formulating various exercises (e.g. translation exercises) on the basis of the text) etc.,</p> <p>E3. Assessment of the glottodidactic process from the angle of organization: Compliance with the curriculum, adaptation to the learner's needs and current linguistic and specialist knowledge (and linguistic and specialist skills), assumed (initial) level of general linguistic and/or specialist knowledge, need/no need for adaptation (e.g. by explaining lexical, grammatical structures etc.); comprehensibility of instructions regarding work with a text, possible influence by text users on the choice and structure of the contents and/or forms used in the text (modality of message), application of IST to various forms of specialist language tuition, presence of indications, e.g. in the form of links, to enhance knowledge/develop skills etc.,</p> <p>E4. Medial assessment: Application of medial forms of text to the glottodidactic process, explanation of the use of multimedia elements and modal information transfer.</p>
<p>F. Final characteristics</p>
<p>An assessment of the glottodidactic relevance of IST, e.g. compared with a similar (regarding the subject) specialist text in printed form, e.g. in a textbook; the faults and advantages of IST, e.g. which glottodidactic goals an analyzed IST may or may not achieve, etc.</p>

On the basis of the above remarks, one may conclude that there are two basic groups of determinants for using (choosing) Internet specialist in the teaching of specialist languages: texto-exogenic determinants and texto-endogenic determinants.

Among these first one can distinguish between determinants:

A) resulting from the learner's qualities:

- (1) the level of development of linguistic skills regarding the general and specialist language (the higher the level of individual skills, the easier the choice and the broader the spectrum of texts);
- (2) the level of the learner's cognitive development,
- (3) the type and extent of the learner's interests (depending on age, personality etc.)
- (4) the learner's motivation,
- (5) the level of development of the learners media literacy,
- (6) the style and strategy of study preferred by the learner and available to him,
- (7) the learner's previous experience with learning a foreign language or languages, and especially with working with texts:

B) resulting from the teacher's qualities:

- (1) the level of language skills regarding the general and specialist language,
- (2) the style of teaching,
- (3) the level of development of media skills and

C) resulting from the qualities of the glottodidactic situation:

- (1) the standard of teaching,
- (2) the teaching curriculum,
- (3) the type of skills being exercised,
- (4) the technical-organizational condition of the glottodidactic process (place, time and facilities including electronic media, forms of tuition etc.).

Among the text-endogenic determinants, one must indicate those mentioned by S. Grucza (1999: 68 in.) glottodidactic, linguistic and metalinguistic determinants (relating to contents), and also such determinants as: (1) the lexical, grammatical, syntactic and morphological correctness of the text, (2) its length, (3) its structure (whether an adapted classical text or a single, dual or triple-level hypertext), (4) ease of moving about the text (hypertext) (help system: global and local tables of contents, page maps, adaptation of media elements to improve the modal coherence of the message of the text etc.)

Summing up the above, one may conclude that the rapid development of Internet services (including educational platforms) will have an important impact on their glottodidactic potential. An important role here should be played by further research into the issues raised at the beginning of this article, which are important from the angle of multimodality in a glottodidactic context, including support for semiotic processes towards an adequate interpretation of data, interconnectivity, interactivity and synchronicity of Internet communications.

An assessment of the Internet's current glottodidactic potential, especially the specialist glottodidactic services available in it, permits the view that the Internet is a source of texts for advanced learners first and for less advanced learners or beginners second, but it is mainly for those who possess the necessary media skills (including the ability to make a critical assessment of multimedia and receive and make best use of multimodal messages) with which to search, apply and differentiate between more relevant and less relevant material.

In connection with our reflection on the role of multimodality in the process of language teaching with the aid of Internet texts, new research issues emerge which may be formulated thus (the parentheses contain references to selected works whose authors have already tackled some of the following subjects regarding general and/or specialist languages):

- How to prepare an IST? What are the possibilities and limits of converting classic linear texts into multimodal messages, including hypertexts for a specific context of language teaching (depending on the level of skills and progress of learners.)? (Schmitz 1997: 131 et seq. Kotz 2005: 28 et seq.)
- How to gather, classify and release IST that satisfy the appropriate criteria of language teaching? What is the role of broadly-conceived e-/m-learning products, including (glotto) didactic platforms in this regard? (Halm-Karadenitz 2001: 389, Westhofen 2001, Mitschian 2010, Szerszeń, in the course of publication)
- How the reception of multimedial IST is related to the multimodal resources, including in hypertext form, using various technologies of multimodal communication ? (Bucher 1999, Storrer 1999)
- How to gauge the effectiveness of the use of a given type/category of IST (in the form of a classic linear text or hypertext) versus a specific glottodidactic context? (Kuhlen 1991, 175 et seq.)
- How to create and use systems that help one find one's way around Internet texts (e.g. tables of contents, maps of pages)? (Kuhlen 1991: 175, Lobin 1999: 1 et seq., Bucher 1999: 20 et seq., Müller-Kalthoff, 2006, Żebrowska 2013)
- How to use electronic media (realizing IST) in the face of current trends in language teaching (including the principles of constructivism, learner autonomy, learner subjectivity, teacher assessment, teaching via contents, approach based on exercises)? (Skowronek 1998, Borrmann/Gerdzen 1998, Müller-Hartmann 1999, Szypielewicz 2000, Richter 2002).
- How to create and manage Internet banks of educational materials based on specific sets of textbooks but independent of them? (Halm-Karadenitz 2001: 389; Rösler 2004: 82)
- How to train teachers so that they can evaluate electronic media (and co-create and use them effectively), including IST, in the glottodidactic process? (cf. Rösler 2004: 69 et seq., Meyer-Zollitsch/Donath 2005: 34 et seq.),
- How to shape the linguistic, communication, cultural, intercultural and media skills handicapped persons (including those with impaired vision or hearing) who are learning languages, including specialist languages ? (Zawadzka-Bartnik 2007: 432)

- How to use so-called cooperative forms of language work in the teaching of specialist languages? (Donath 1998, Biechele 2005a: 9, Biechele 2005b: 15, Schneider 2005: 42 et seq., Bolte/Costabiei 2005: 36 et seq.)
- How to use in language teaching the synchronic and asynchronous forms of communication now present in the Internet (blog, chat (ICQ), mail etc.) (Tamme 2003), as well as the results of culturological and linguistic multimodal analyses in order to achieve concrete glottodidactic goals.

In conclusion, one must stress that regardless of the extent of the glottodidactic applications offered by modern electronic media they play an “auxiliary role” in the glottodidactic process (especially in its institutionalized form), backing up the work of learners and teachers (cf. Habscheid 2005: 60). The most important aspect is that the new medias stimulate new communicative resources of the learner, they amplify them in direction of multimodality, which can lead to better glottodidactic results. Thus, the position of teacher-specialist, refuted by some, who during the glottodidactic process is capable not only of identifying and satisfying the ongoing needs of learners, but also to foresee them and encourage, plan and coordinate the actions of his learners, remains unquestionable. Nevertheless, the development of media literacy involving more detailed multimodal and multimedia skills, deserving separate reflection, is an important component in the professional training of teachers.

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