

# Multimodal Messages

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## Abstract

The term ‘multimodality’ can be ascribed a range of meanings. The author focuses on the way it is used in linguistics – in text linguistics and computer-mediated communication in particular. In the article, an outline of current scientific discussion on ‘multimodality’ along with the author’s own definition of the term are presented. According to the author, multimodality incorporates a wealth of semiotic elements of a given message on the one hand, and the process of directing the message in the reception process to various senses on the other.

The need for communication is one among many others human-specific properties. Although there is communication among other living creatures, but none of those creatures has brought communication to such a high stage of development. Verbal communication is without a doubt one of the most important achievements of the human kind. People express something, share something with others and communicate not only linguistically, but also via para-language, non-verbally and pre-verbally, where the last option refers to children in their early stages of development. Linguistic communication is a distinctive feature of our species which must be considered as part of a complex, involved in other human behavioral interaction. As Silvia Bonacchi (2011: 28) emphasizes, the language of each man, his idiolect, is never actually ‘pure’. Verbal components are accompanied by para-verbal, extra-verbal and non-verbal ones so that a multimodal expression system is created. From the perspective of language development, there is a possibility of realization of complex linguistic expressions involving graphical, mimetic, gestural or tactile components. In texts that are prevalent in the modern language culture, this trend is fully realized. Although they consist of linguistic signs, they are always accompanied by other elements. In the literature, the term ‘multimodal texts’ (*multimodale Texte*) is established, and what I refer to as ‘multimodal messages’ (*multimodale Kommunikate*).

Communication itself has been, and is being, studied from different perspectives. Linguistics has drawn much on its early model proposed by C. Shannon & W. Weaver who provided a set of fundamental notions and terms such as *transmitter*, *message*, *receiver*, *decoding*, *channel*, *noise*, *information content*, or *medium*.

The term ‘medium’, introduced by Shannon & Weaver (1949), originally meant physical facilities or conditions which were used for information transmission. It was understood as a channel which includes three levels: Those body organs of the transmitter, which generated the signals, the receptor organs on the side of the receiver, and the physical phenomena, such as sound or movement (see: Häcki Buhofer 2000: 252).

‘Medium’ is understood as a physical transmission path or the path of realization (*Realisierungsweg*), which conveys the information (in this case signals) thanks to the support of different senses. We distinguish between the following channels: optical-visual, acoustic-auditory, tactile-kinesics and chemical-olfactory. The optical-visual channel, for example, is used for the visually detectable information transmitted in written language (Häcki Buhofer 2000: 252). It is becoming increasingly frequent in the literature to see the term ‘modality’ instead of ‘medium’ in the meaning of the channel used as the manner of execution. S. Bonacchi (2011: 54) points towards

D. Leathers' (2009: 28) differentiation of three interacting systems in human communication: the visual one, the auditory one and the non-visual. Accordingly, even a tri-modal system as a whole can be possible. Verbal communication is based on multi-modal elements: both visual and auditory as well as non-visual. The predominance of the traditional literary culture has contributed to the dichotomy of the sensory modalities eye vs. ear and held this *bimodalism* for a long time. W. Ong (1987) contributed to this concept significantly as he associated literacy with visuality, and orality with sound. On this basis, he developed the concept of externality, which applies to the written language, and the concept of inwardness, which refers to volume and tone.

The term 'multimodality', now used in linguistics, is understood in different ways. H. Stöckl (2011: 45) admits that is unfortunate in this context as it brings already established meanings, especially in the context of grammar. Nevertheless, new meaning currently seem to prevail, especially those like 'multimodal texts', 'multimodal communication' and 'multimodal messages'. U. Schmitz (2011: 24, 42) understands multimodal communication as communication based on several senses and achieved through a number of parallel channels. To perform such actions and to produce multi-modal texts, various components are required. Together they become a syntactic, semantic, and functional whole.

Most frequently static images and texts occur together. Today's technology facilitates the creation of complex multimodal or bimodal embassies especially by computerized transmission and storage of digitized data. In addition, moving images, sound (music, noise) and means such as typography, layout or design are added. Most of the communication is, nowadays, visual and multimodal, with much fewer mono-modal exclusively written texts.

H. Stöckl (2011: 47) understands modality as the coexistence and association of different characters (modalities) at several levels in a semantic and functional wholeness on the one hand, and as a "pan-cultural competence and an individual intelligence" on the other. The latter view is based on the fact that one converts characters from one modality to another, commented, explained or paraphrased. Multimodality is therefore a peculiar semiotic-cognitive activity that makes it possible to produce and understand such texts. W. Holly (2009: 392) distinguishes between codes and modes. Codes are material qualities in sign making, while modes embody the qualities of perception as processing modes in the character reception (auditory, visual, etc.). Also S. Ballstaedt (2005: 61) emphasizes the difference between code systems, sensory modalities and media. For example, we have to deal with different codes in the written sign and picture, but they remain within a single modality. For this reason he speaks of a multicode communication. It is possible to refer to communication as multimodal, should the communicate be oriented to other senses such as hearing. The concept of multimodality was characterized by Gunther Kress and Theo van Leeuwen (2001: 2; 20ff.) as "contemporary semiotic practice." Modes (abbreviation of "signing modes") are semiotic resources, i.e. simple signs of any kind – types of sign characters that allow for discourse and interaction. Media, however, are material resources (materials and tools) that are used in the production of a text (*Kommunikat*).

If today the term multimodality is mentioned on the ground of image linguistics (*Bildlinguistik*), it implies that communicates (*Kommunikate*) or texts consist not only of linguistic signs but also of other "symbolic elements" (Steinseifer 2011: 164), i.e. of different perceptual elements to which a communicative function and meaning can be ascribed. Multimodality is defined as the use and combination of different semiotic elements, including, e.g., design, layout, images, photographs, film, color and scent. These modes also include linguistic signs or expressions. It is evident from the thesis of G. Kress (1998: 186) that "language is no longer the central semiotic mode." Gunther Kress and Theo van Leeuwen were convinced that communication was never limited to only a sign system, and presented the thesis: "all texts are multimodal" (Kress 1998: 186). This finding was then literally translated into German and by the language absorbed, so that since then one speaks of multimodal texts, especially in image linguistics. There is no doubt that communication is complex, and the meaning results from the interaction of different semiotic modes: meaning is made in many different ways, always, in the many different modes and media which are co-present in a communicational ensemble" (Kress & van Leeuwen 2001: 111). The diverse modes reinforce and complement each other, which is partially supported by the new technologies (see: Bucher 2007: 53).

In social semiotics, modalities are very widely defined as a socially influenced, semiotic and resourceful concepts that are not recovered according to standard criteria but which fulfill certain communicative and meta-communicative functions. Kress (2009: 55) cites, as examples of linguistic elements, image (objective – such as photography, panel painting, drawing – and its non-representational variants), color, sound, gesture, layout, typography and design. Language can be regarded as a modality only in its actual usage. Some modalities are autonomous, others heteronomous, that is the reason why they are used as accompanying elements (cf. Steinseifer 2011: 171). G. Kress & T. van Leeuwen (2001) present a model of multimodal communication in which the semiotic resources of communication are used in particular communicative practices. The authors distinguish four areas of practice: discourse, design, production, and distribution which can also be interpreted as layers of meaning generation (*Bedeutungsgenerierung*) (cf. Bucher 2007: 54). This model covers the entire process of creating multimodal and media artifacts, including all dimensions and phases of multimodal text production. Modes have their place on the level of discourse and design (content aspect of communication), media play a role (expression aspect) in the dimensions of production and distribution. Multimodality would be a structuring of texts or communicate with different semiotic resources. Multimodality would therefore be design, production and distribution processes of texts and communicates with their respective physical and technical possibilities that affect the meaning of the text as well as its ability to understand and analyze it. According to S. J. Schmidt (2000: 94ff), media function in the interaction of semiotic elements is the technical dispositives or technologies and social institutionalization. The latter takes over the production, distribution, reception and processing of individual communication offers. Again, it is pointed out that modality includes ‘semiotic tools’ and resources related to a certain sensory aspect (acoustic, visual). Codeality (*Kodalität*) would be a semiotic structure, “mediumship” (*Medialität*) a strict technical infrastructure. In the discourse on technical media, the conviction of their representative function was predominant at the beginning. Media was used namely for communicating thoughts or information. Communication was reduced to “the art of transmitting, distributing and storing information” (Jäger 2000: 15), while media were reduced to the role of merely a carrier. The means of transmission were also reduced. Information remained sovereign, independent and not affected by the type of media.

What needs to be said at this point is that it is not the information which is transferred or conveyed but the signals which are then identified and recognized.

W. Holly (1997: 69) views media as technical aids, as distribution channels for original linguistic utterances. They serve not only the transmission but also the reinforcement of – both oral and written – utterances. However Holly (2011: 148) emphasizes that media should be not only seen as a transmitter and amplifier but also as an external factor. We must keep an eye on the embossing force of media and track the dynamic development of situation.

Media linguistics distinguishes between the communication form and a technically-understood concept of media. The technical properties of media draw certain forms of communication by themselves. However, W. Holly (2011: 148) highlights the fact that the dispositive power of mediumship and the media influence the form of communication. In the typology of forms of communication, W. Holly (2011: 151) considered the following characteristics:

1. Modes as available sensory channels (e.g., visual, auditory) and codes as types of characters (e.g., font, graphics, images);
2. the communicative space and its structuring (co-presence, reciprocity, addressing) and
3. the temporal structure (volatility, overtime).

At the same time, Holly (2011: 152) also points out the weakness of the feature lists, which should be due to the rapid development of technical media which is constantly updated; especially the type of character transmission and its temporal character are changing. In addition, W. Holly stresses (2011: 155) that media and culture come together so that the forms of communication are not only conditioned solely by the technical-media factors but rather they can be seen from the medial-historical-cultural viewpoint as media-related cultural practices. W. Holly (2011: 156) is convinced that only the cultural environment determines whether and which technical media evolve, and how they then affect communication. He also points out that nowadays “a form of

communication acts as a kind of platform for others.” Modern media only have to contribute to “cross-over movements” (*Cross-over-Bewegungen*), where especially the digital technology allows “data of various kinds and equally reduced materialized in zeros and ones” („Daten verschiedenster Art gleichermaßen und reduziert materialisiert in Nullen und Einsen“) to be stored and transmitted (Holly 2011: 158). This common variety of characters allows the author to speak of multi- or intermedia, where he also noted that people use, in almost every communication situation, different codalities (*Kodalitäten*) and modalities. Holly understands the development of the forms of communication as a differentiation of (inter) medial potential (Holly 2011: 159).

Monomodal forms of communication (auditory like telephone or radio or visual like photography or printed media) are different from bimodal ones, especially audiovisual (e.g., film or television). On the other hand, forms of communication, depending on the used codes, can be described as, for example, tones, sounds, music, pictures, written or spoken language. The technique goes towards the completion of “monomodal and monocodal Arrangements” (Holly, 2011: 159). The combination of image and text is the oldest because they have a common origin (Holly 2011: 160). The term “multimodality” therefore competes on one hand with the term (multi)codes or -coding, and on the other hand with the term (multi)mediumship. In the typology of media proposed by S. Habscheid (2005: 49), modality concerns the man himself. Modality is thus a natural medium or simply a channel. Not only visual but also auditory channels are used in communicates which create a multimodal communication space.

Habscheid operates with the following categories:

- a) channel (natural media);
- b) media (technical media);
- c) media institutions (social media);
- d) text types or genres (cultural media);
- e) sign systems or codes and styles of the characters use (stylistic media).

Ad. (a) Natural media can be divided into two subgroups:

- biological media;
- physical and chemical media.

Biological media can be distinguished according to the criterion of modality of the contact or the receiving organs. For this purpose, S. Habscheid mentions examples such as sensory cells, sensory nerves and sensory centers, each of which are responsible for the uptake of visual, auditory, olfactory, gustatory and tactile impulses. Physical and chemical media arise due to the contact of matter, for example electromagnetic fields, which transport optical waves, or acoustically conductive bodies.

Ad. (b) Technical media form a very large group (only selected examples are given in brackets):

- Sign-holder (pen), drawing materials (paper), sign manufacturer (ink);
- auxiliary or amplifying media (stage, glasses);
- asynchronous storage devices (CD-ROM);
- synchronous communication media (telephone, television);
- synchronous and unidirectional broadcasting or diffusion media (radio, television);
- asynchronous and unidirectional dissemination or distribution media (books, newspapers);
- synchronous or asynchronous, bidirectional dialogue or interactional media (telephone, e-mail);
- mass media (television, press);
- program media (broadcasting of a program structure: radio, television);
- interactive media (computers, interactive TV).

Furthermore, technical media can be considered as instruments (technical means) that permit to extend the dimensions (interaction, propagation, conservation, distribution of information) of

interpersonal communication. In some cases they can substitute it by delivering its surrogates. Today, however, it is recognized that media not only serves to transfer a media indifferent information (cf. Hunter 2000: 16), but they are constitutive and actional objects, especially in the computer technology field.

Ad. (c) Media institutions, also called social media, which are classified according to their place of usage:

- for visual semioses (press, museums);
- for auditory-semioses (radio);
- for audiovisual semioses (opera, cinema, television).

Ad. (d) Text types and genres (the so-called cultural media):

- information texts (news, non-fiction books);
- appeal texts (comments, advertisements).

Ad. (e) Sign systems or codes and styles of sign usage:

- acoustic sign systems (systems of speech, sound characters, tone marks, music characters);
- optical character systems (systems of sign language, signs, characters, static symbols, etc.);
- multimodal sign systems (film, architecture);
- styles.

It should be emphasized at this point, that the media today, as an overarching social system, operates on the level of distribution and production. From the above, it is clear that (multi) modality is interpreted in different ways. On the one hand it refers to the sensory channels and includes sensory modalities, the manner of execution of the communication, perception of quality, finish mode in the character reception (e.g., auditory, visual) and production. On the other hand, and under the influence of Kress and van Leeuwen, semiotic resources are meant by that, that is certain kinds of signs / sign-types that occur in a functional wholeness.

One could reconcile the two positions as follows: multimodality is based on the fact that complex communication addresses various sensory modalities and signals, which are then identified as information, and are mediated via different channels.

I understand multimodality primarily as the combination of different visual modalities, i.e. written alphabet and pictorial elements that fill in the so-called integrated visual surface, so that each *communicate* contains both linguistic signs as well as other semiotic elements.

It is possible that further modalities occur, especially the auditory modality, so that different combinations are possible: in the face-to-face communication (see: Bonacchi 2011) about the interaction of phonetic, facial, gestural components; in the electronic computerized surrounding tonal, phonetic, written and pictorial shares, to name just a few (cf. Steinseifer 2011: 165).

In my research I focus on internet-based texts or documents. I regard, as the highest analytical unit, a current web page. At first they present themselves as visually receivable communication messages. This phenomenon is amplified by the new media. Text and carrier, text-based and text display separate the text layout that includes the stylistic, material / physical and medial aspects as gaining importance. Images are directly linked to the substantive medial shape of expressions. In the Internet-based and computer-based environment, the communication is fixed manifold. As it becomes real it shows itself as pictures, moving images, texts, animations, music or sounds and then passes simultaneously through different modes, i.e. multimodal (cf. H.J. Bucher 2007: 72). It can therefore be communicated in the visual and the auditory canal, and from the semiotic point of view using different characters. As already indicated above, I will certainly support the term 'communicate' or 'communication bid' (*Kommunikationsangebote*) and the positions of K. Adamzik (2004: 43; 2011: 375) and H. Diekmannshenke (2011: 162) who use the expression of the complex *communicate* as a broad text term under which all expressions and elements of the communicative function can be subsumed. They may consist not only of linguistic signs, but also of non-linguistic signs – especially the visual nonverbal ones. I reserve the term "text" exclusively

for linguistic utterances. S. Bonacchi (2011: 63) proceeds similarly by distinguishing texts in the strict sense of the word and texts in the broad sense of the word. C. Gansel and F. Jürgens (2007: 16) distinguish spoken, written and visual texts as products of linguistic action. As for the visual text, they

*(...) lässt sich also unter medialen Gesichtspunkten einerseits nicht nur auf das sprachlich Formulierte reduzieren, sondern muss andererseits von den Gestaltungsprinzipien des jeweiligen Mediums her betrachtet werden. Vorstellungen von einem »visuellen Text« gehen davon aus, dass das Geäußerte mit der Abbildung eine Einheit bildet und somit erst den Text konstituiert. (Gansel & Jürgens 2007: 16)*

The verbal-written text therefore interacts with the image. In this way, context constitutes itself and then unfolds its efficacy. Together they form a multimodal communication range. In the case of linguistic signs, we are dealing with the classic syntactic relations. If non-linguistic signs occur together, especially visual, but also auditory, a new type of connection, a co-operation of different sign systems (cf. Gansel & Jürgens 2007: 22), a combination of different codes, is constituted. Following E. Rolf (1993), K. Adamzik (2011: 375) argues for a relation of proximity, namely contiguity. It is defined as a common occurrence of texts, text fragments and other components of messages that occur in various media environments. They can be newspapers, magazines, radio-magazines, TV-magazines, websites, textbooks and others.

According to M. Steinseifer (2011: 173) the compositionality and the presentation of elements in two dimensions depends on the surface, i.e. the non-linearity of the communication range with the multimodality. Temporal, sequential logic of linear communication is replaced by spatial (logic). Multimodal forms of communication have hypertext-like structures (Bucher 2011: 139). The non-linearity causes, unlike the traditional linear texts, to find out what is perceived as belonging together. The design has a great impact on the decisions that are made. H.J. Bucher (2007: 61) says, design is not only on the communicative, but also relevant at the operational level. The author understands the operations as an “identification and grouping of meaningful elements.” H.J. Bucher names certain problems such as identifying the type of communication space, the hierarchy of various parts of the communication bid, the navigation between related parts, the framing and relevant setting, sequencing, and finally problems of strategic, functional or thematic classification of the relevant elements. The design is so important that it is seen as a form of communicative action and is taken into account in the process of understanding. The design serves as an indicator: it shows the importance of their contribution, the togetherness of contributions (Bucher 2011: 151).

M. Steinseifer says (2011: 172), the design appears as a part of the Social Semiotics based on Kress & van Leeuwen as one of the heteronomous modalities, as an area of integration of different semiotic resources. The term text design is possible where the multimodal nature of communication is recognized, so where the communicate involves all the senses, especially the visual. Parallel visual language corresponds here to a possible grammar that represents the regularity and structure of their forms of presentation and facilitates understanding of their usage and function. The semiotization form places them into a cultural and social context. Meanings are ascribed to the media presentation forms which are culturally and socially specific (see: Bucher 2007: 52). The placement of components in the entire multi-modal communicate realizes a metafunction, so that certain areas of the site receive a stable value in terms of function. The design has the task to implement one of the three metafunctions of multimodal communication, namely the representative, interpersonal or textual metafunction (Kress & van Leeuwen 1996: 40). The design is responsible for the composition and it makes it also responsible, in a sense, for coherence. In order to fulfill its compositional function, the design can be expressed by placing information values, emphasizing elements (salience) and combining elements (framing) (Kress & van Leeuwen, 1996: 181-6; Bucher 2011: 133). But the most important is what kind of use is made of it. This requires a context-oriented interpretation. Human communication involves various sign systems which are based on materially different carriers. This results in multimodal and multicodal interaction. What is important is how they relate to each other, what kinds of metaphorical transfers

results from their contact. The meaning is alternately ascribed to the multimodal communicate. In this way, the notion of compositionality combines the areas of understanding and reception. Understanding has a procedural character that consists of partial understanding and reinterpretations, that combine themselves integratively (see: Bucher 2011: 135). In multimodal communicates, the meaning is due to the multiple articulations produced in the interaction between linguistic signs and non-verbal modes. Both alike – grammar and design – bring order to the visual surface and structure it. However, nowadays the visual design expands and is crucial, it bears striking messages on the visual surface and structures the sphere of action of the user, creating “a multimodal communication bid” (*multimodales Kommunikationsangebot*):

*Ein multimodales Angebot zu verstehen heißt (...) immer auch, zu erkennen, wie ein simultan präsentierte Kommunikationsangebot aus mehreren kommunikativen Elementen räumlich strukturiert ist: Welche Elemente gehören enger zusammen? Welche Zusammenhänge bestehen zwischen ihnen? Wie sind sie hierarchisiert? (Bucher 2011: 139)*

M. Steinseifer (2011: 178) considers the communication range thematically or functionally as a macro-unit comprising of several texts or posts. But if one is oriented to the perceptible form, it is possible that the object-like unit which stands for the potentially available reception, is construed as a document. M. Steinseifer focuses his reflections (2011: 178) on newspapers but his thoughts can also be applied to hypertexts that can be received by the smaller visual units – sides or smaller clusters of page elements. The units relate to the perception but should not to be equated with the individual texts, or even with the unified communications offerings. To these, one can only enter through the following subsequent phases of the reception process, for example through the activation of links. In addition, located on a surface, i.e. on the current site, are both elements that come from hypertext writers and web designers, as well as websites. For this reason, a number of other categories play an important role, namely layout, design and typography. The placement of elements, graphic design, modular arrangement of units of information, text outline, imaging, headings, captions clearly exceed the pure formal aspect. The form itself gains importance and a communicative function so that ultimately the form is semiotized, whereby its semiotization is culturally and socially specific. Based on H. J. Bucher (1996, 2007), the text design is viewed as a means of contextualizing communication elements that are not an absolute but relational relative to each other, and in relation to the author or recipient. Verbal and non-verbal, textual and pictorial means connect functionally to a whole. The text and web design is ultimately based on a social action; finally it is crucial what use is made of it. In the hypertext environment, the text style relates to certain levels, the macro-structural, contribution-border, intra-module and the internal level contribution. The typography, on the other hand, comprises the forms of text design such as font type, style, size, gaps between lines, optical awards, color, etc., which may also play a communicative function. In text and web design images of various kinds play a particularly important role.

A ‘multimodal message’ can be understood as a communicative-functional unit. The interest in multi-modal communication services has a strong presence in linguistics in recent years. There are various social conditions reflected, a substantial part of it forms the technical conditions of the digital text production and reception that have contributed to the fact that (written) texts, particularly in their appearance, have changed dramatically. Designs and image-related competences are expected today from both the recipient and the producer. It is important to adopt an event-related and communicative-functional concept of multimodality (see: Bucher 2007: 56-7). The meaning and the (communicative) value is assigned to the whole *communicate* and certain elements of the author, by attempting to convey to the recipient his intended assignment of meaning.

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