

MULTIMODALITY AS A DEVELOPMENT FACTOR OF LITERACY IN MULTILITERACIES: A THEORETICAL APPROACH

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ABSTRACT

In modern times, important and rapid changes are taking place in the composition of societies, concerning the need and the way of communication between their members. Within this transformational context, language is not the only semiotic communication system. Various semiotic ways with various ways of representation (image, sound, movement, etc.) are offered, in combination and synchronization with each other, in order to create multimodal meanings. In this way the multimodal communication is achieved, which is distinguished by an important dynamic since more than one sense (sight, hearing, etc.) participate in it, at the same time. As a result, it is necessary for individuals to develop specific skills, of multitasking, in order to cope with the understanding / creation of multimodal messages. The purpose of this article is the theoretical approach to the meaning of multimodality as well as to highlight its role in the need to develop literacy in multiliteracies.

Keywords: multimodality, literacy, multiliteracies.

1. Introduction

Multimodal communication.

Social and economic developments, globalization as well as the development of communication and representational media have led to the revision of modern communication practices. Therefore, the way of receiving and interpreting the texts requires new ways of reading (Papadopoulou, Pagourelia, Goria, 2019:331). In modern communication reality, the presence of images with authoritarian influence is almost self-evident and unquestionable. The "*depiction of reality*" transforms into a "*reality of depiction*" projecting an extremely charming aspect of it (Grosdos, 2008:13). The image is therefore the medium that allows ideas to be expressed and stereotypes and values to be promoted (Kress, 2010:46). It is gradually emerging as dominant, often weakening the important, as well as prevailing, role of language (Kress & Ogborn, 1998).

So now the texts involve multiple systems of ways (modes) which are considered a variety of social situations or events (such as writing, images, movies, plays, etc.) (Hontolidou, 1999). The result is the construction of multimodal texts. While in texts that transmit meaning through the language code only, the linear reading is followed (Eco, 1990:83) in the images, due to their different organization, diagonal, vertical or circular reading is applied (Kress & Van Leeuwen, 2006:208). This leads, in the first case to

interpretations with consistency, in the second makes possible the production of message according to the Principle of Concentration of Meaning, ie through the visual scan of the related parts (Badly & Thibault, 2006:19). But if there is a combination of verbal and visual or other (eg spatial, auditory, etc.) way of transmitting / creating meaning, then the result is based on the interaction relationships between the ways that vary and lead to an indivisible phenomenon (Royce, 2002:26). According to Kress (2000) "*in multimodal texts we have the distribution of information and content between different semiotic modes including language*".

Therefore, despite the fact that language is the pre-eminent semiotic code for transmitting / creating message, the increasing use of multimodal texts is leading to a change in literacy to multiliteracies. So in the future, in order to be considered literate, one must acquire skills with which will be able to utilize multimodal representations in addition to those based on the alphabet (Malitsa, 2015:195).

2. Multimodality

Since the end of the 20th century a new cultural landscape has appeared in western societies, due to rapid economic and social changes, technological developments and multiculturalism. Communication takes place in a reality, where different ways of producing a message are combined. As the transmission of information seems easier through the visual than in verbal way, the image and consequently the visual code is gaining ground over the written. Also, other semiotic systems that until recently were considered secondary, such as music, are upgraded and take their place in communication (Kress, 2000:182).

This phenomenon is based in the roots of civilizations, helping their development and has been operating since antiquity. As the human body functions through a set of interconnected perceptual systems, we understand that human communication is multimodal. So people have always used non-verbal ways to communicate (expressions, movements, postures, etc.). However, the context in which these methods are used has changed (books, television, mobile phone, etc.), thus creating new conditions for expression and behavior (Pourkos, 2011:63-64). As a result, we lead to the re-examination of the way of perceiving the written texts, as well as to the analysis and production of written information, through other processes, highlighting the various other means that contribute to the rendering of their meaning (Papadopoulou, 2005). In order for meaning to emerge from the texts we read, write, consume or create, we need the mediation of many communication channels (Anstey & Bull, 2006). Scientists are therefore led to introduce the term multimodality and monomodality.

Multimodality as a characterization comes from the multimodal (male/female) [arch.]: The one who, in order to face difficulties, devises many ways and tricks (Babinotis, 2008). As a scientific term, multimodality first appeared in a text-manifesto compiled by a group of ten scientists from different English-speaking literacy groups of the New London Group (1996) to discuss the future of teaching literacy in an ever-changing social and learning environment. Trying to document the differences that have implications in the forms that meaning can take but also in the ways and methods of its production, they have identified two important changes in the societies of the last 20-30 years. The first concerns their multicultural and multilingual nature, which is a result of migration and globalization, and the second the use of new technologies in communication. Also, the fact that the meaning is shaped by the use of

intralingual variants (multiple and often different), resulting in unusual but "functional" ways of speaking and writing in relation to workplaces, etc. (eg language of people who deal with computers or a hobby, eg skate board) (Katsarou, 2011: 404).

Taking into account the multifaceted and multimodal process of learning, which is formed through continuous reconstructions of points and texts, according to the experience of those involved and their learning and social space, it is understood that it is necessary to develop skills by individuals, in order to understand in different ways, a fact that led to the multiliteracies and is due to the multimodality (Voulgaridou, 2015:221).

Multimodality is related to the form of presentation of a cultural product in which many semiotic modes are involved and combined. These ways can be written speech, spoken word, image, photo, drawing, layout, color, font, animation, music, sound, rhythm, gestures, organized, that is, systems used to produce meanings (Jewitt & Kress, 2003:2-4).

In a multimodal text, in order to create meaning, first there must be multimodal patterns of meaning, in order to drastically combine linguistic meaning, visual meaning, auditory meaning, spatial meaning and the meaning of gesture, which are necessary anyway (Cope & Kalatzis, 2009).

"The multimodal text is another text, different from the simple articulation of its individual modes. The individual modes are not secondary and decorative in relation to the -supposedly- primary mode of language. These modes are equally important and necessary for the operation and decoding of texts (Hontolidou, 2005:93). Therefore, the characteristic of the multimodal text is the unity, since one mode can influence the other, adding, removing or correcting meanings (Rigopoulos, 1997). Language in both oral and written language is combined with other modes in order the meaning to be complete. In written word, apart from the language, we must take into account the material on which the text is written (paper, wood, papyrus, stone, etc.), the writing material (paint, ink, pencil, etc.) the form which have the letters, the layout. In oral speech the text is combined with facial expressions, movements and posture (Kress & van Leeuwen, 2010). In this way multimodal representations of information are achieved, a fact that leads to a multimodal communication with remarkable dynamics, stimulating at the same time different senses (Malitsa, 2015:196). In monomodality, the form in which a cultural product is presented, contains only one semiotic mode (Hatzisavvidis & Gazani, 2005:27). Therefore, it characterizes linear texts, as they use no other means of expression than the printed written word, in terms of their form and content. According to the traditional way of teaching, monomodality is the one-dimensional presentation of knowledge and production of meaning (Leander & Vasudevan, 2009). In contrast, in multimodality, all semiotic systems contribute equally to the production of meaning, with the result that language loses its central place in communication (Hontolidou, 1999:116-117). The synthesis of individual semiotic modes results in a multimodal semiotic product (Kress & Van Leeuwen, 2001:20). It is therefore understood that the relationship between monomodality and multimodality is supplementary and complementary at the same time. The mixing of different semiotic modes led to the detachment of the semantic approach from the concept of monomodality (Hatzisavvidis & Gazani, 2005:28-29). Therefore, multimodality is part of the semiotic environment and as a semiotic act, it produces and reproduces meanings, shaping ideology and perceptions, if it is part of the communicative function (Hatzisavvidis, 2007).

In everyday life, people come in contact with multimodal texts, where words and images work together to convey the same content, although they do not always contain the same information (Little, 2005). Due to the synergy of many semiotic ways, meaning in multimodality has multiple representations and is transferred from one way to another, through the process of synesthesia, since the ways of representation of meaning alternate with each other (Cope & Kalatzis, 2009a, 2009b). In this way, mass and individual communication is affected, changing perceptions and ideology and raise questions about how the differences between monomodal and multimodal speech affect the reception and construction of the child subject (Hatzisavvidis, & Gazani, 2005). Children, from pre-school age, come in contact and use multimodal texts in order to communicate, since they also combine skills they have acquired from one semiotic system to understand another (Giannikopoulou & Papadopoulou, 2004:82-83). After all, man perceives his environment in a multimodal way, since *"none of the human senses functions independently of the others"* (Kress, 1998: 166).

Therefore, we could characterize the difference between monomodality and multimodality as false, since purely monomodal texts do not exist, since in order to produce meaning, many semiotic systems are involved and interact. However, we could talk about the degree of multimodality of texts as cultural products, since the multimodal product is the result of the influence and entanglement of individual semiotic monotropic modes (Hatzisavvidis & Gazani, 2005:28-29). Also, a multimodal text can be a combination of written and spoken text, but it can also include other modifications beyond the semiotic system of language (Baldry & Thibault, 2006). Therefore, the knowledge of writing and reading, as it was understood in the context of classical literacy, is not enough for one to understand and produce messages in writing or orally (Papadopoulou, 2005).

3. Principles of Multimodality

It is understood that multimodality is an important parameter, fundamental and of essential value for any text (Apostolidou, Kaplani & Hontolidou, 2000) which is governed by at least six assumptions or principles:

1. Principle of the multiplicity of representational and communicative ways. For all our representational, cognitive and learning processes, both language and all other semiotic resources (gestures, gaze, expression, prosodic elements of voice, etc.) play a key role. Non-linguistic semiotic ways have their own dynamics, communicating separate meanings in addition to their complementary role in language. So in the process of receiving and producing meaning, all semiotic resources are equally important, in order people to represent the world and communicate with each other.
2. Principle of socio-historically culturally framed point or meaning. In order to perform specific social functions, all semiotic modes are shaped through their historical, social, cultural and real use. Obviously they change depending on the representational needs of the people. The role of non-linguistic modes is not fixed but is reshaped according to the spatio-temporal context in which they are used, in order to achieve communication as a process of production, reception and transformation of meaning.

3. Principle of orchestrated meaning. To make sense of a communicative event, it is necessary to orchestrate the choices of semiotic modes and their combinations. This makes the interaction between the modes very important because the meanings produced in one semiotic way are related to those produced by the others.
4. Principle of effect (agency). The center of the processes of production of meaning are the human subjects, as long as they operate actively and intentionally, choosing the semiotic resources with which they will construct and interpret the meanings, according to their own needs and interests.
5. Principle of the quoted or justified point (meaning). The meanings of the signs are formed according to the values that operate at the time of their production, depending on the needs and motivations of their producer, so they are based on socio-historical and cultural.
6. Principle of the dynamic effect of semiotic modes on human actions and interactions. Depending on the use and combinations of each semiotic way with the other ways, a wide range of possibilities is created for the production of meaning, having consequences in both communication and cognitive-learning processes. Therefore, the shift of interest from language to other semiotic ways, greatly differentiates our representational, communicative, cognitive and learning processes (Pourkos, 2011: 67-69).

As the relationships of communications' modern means are complex, the theory of multimodality creates the framework in which we will be able to approach and understand the new representational, communicative reality and at the same time equip specialists with the appropriate methods and specialized translation in order to analyze the relationships of these complex modes of communication (Kress, 2010). The theory of multimodality is based on three basic assumptions:

- Since people use multiple ways to understand and produce meaning, multimodality describes and analyzes how these ways work and organize.
- In order for communication to be effective, different ways are chosen for each communication occasion, so that the available resources are utilized according to the communication, social and cultural context of the subjects.
- The social norms, interests and motivations of the subjects influence each communication act, as well as the ways that will be chosen, in order to achieve communication (Goria, 2014: 33-34).

However, theories of Multimodality and Multiliteracies, have taken advantage of several elements of Halliday's theory that, unlike linguists who advocated an imaginary, ahistorical, and non-cultural linguistic ability, language cannot be cut off from meaning. Therefore, when studying the use and function of language, the real circumstances of communication and the socio-cultural context in which meanings are constructed through it should be taken into account. Thus, language shapes and at the same time is shaped by social reality, at which point grammar is also a mean of representing experience and deviates from formal rules. Halliday also first mentioned the genre and the mode, which were later used by fans of multiliteracies in order to lay the foundation for the integrated meaning of the design (Katsarou, 2011: 406-407).

4. From Literacy to Multiliteracies

In recent years, experts in Linguistics have contributed to the formation of the Communicative Approach of language, recognizing its communicative dimension, giving special importance to the cultivation of written and spoken language as expressions of it. Communication, which is a form of social interaction, is based on regularities, which, although basic, are difficult to describe. The Communicative Approach, however, emphasizes that these regularities are determined by biological, emotional, mental, ethnological, and social factors, transmitted, and acquired through use. Therefore, communication is use and not knowledge of language, but it is also a process through which the individual forms attitudes. The Communicative Approach, therefore, considered that the use of language in various contexts of communication, as an objectively measurable ability, limits the communicative ability. However, in the early 1990s, Linguistics pointed out that communication is a dynamic of selecting appropriate strategies that frame communication and not a list of linguistic acts (Hatzisavvidis, 2005). At the same time, a significant change takes place in the choice of the way of communication, which is achieved either through the language code, written or oral, or through other available ways of representing the message (codes of non-language communication, image, sound, etc.) (Hontolidou, 1999).

Therefore, in order the individual to have "*knowledge of the rules of the game*" but also to be able to "*read the world*" (Davies, 1999) in multicultural environments, it was necessary to develop the ability of literacy in order to communicate both with written as well as spoken, in different communication situations, through multimodal, written or non-written texts (Kalantzis & Cope, 1999).

4.1 Literacy

The development of literacy begins naturally in the family and social environment as the child learns his mother tongue. So he/she communicates with different people, in different social situations and through different types of text. Within a short period of time and in human society and communication with only the use of language, without intentional actions and procedures, the child learns the basic phonological, morphological, syntactic and semantic structures. This is due to the innate predisposition of man for the acquisition of language (Mitsis, 1996). According to Noam Chomsky's genetic theory of language, language is in an innate human infrastructure to conquer its structures in a natural way without systematic teaching, thus developing language ability (Chomsky, 1968). However, almost a decade later it became clear that in order for a person to communicate effectively, language skills are not enough, but communication skills are also needed, ie the ability of the speaker to adapt speech to the circumstances. Literacy mainly concerns the ability of the individual to understand and use communication patterns (Matsagouras, 2007), focusing more on reading the world than on reading the word (Freire, & Macedo, 1987). But growing up acquiring certain types of literacy becomes more complicated and differs from person to person, as their previous experiences are different. Moreover, since the term has been redefined, from linguist who was originally understood, its meaning has been extended, so that, next to it, aggressive definitions such as visual, technological, cultural, etc. are used. (Baynham, 2002).

If we wanted to create a list of skills we could say that literacy is:

- "*The ability to understand the meanings of words and*

- the ability to understand the meaning of texts and
- the ability to understand the meanings that are next to and beyond the words of the texts and
- knowledge of the social practice that each text represents and
- the ability to intuitively (or consciously) recognize the kind of speech to which a text belongs; and
- the ability to intuitively (or consciously) integrate the text into the social context in which it is produced, and
- the ability to react to the meanings of the text and
- the ability to produce texts that are needed to handle daily (professional and non-professional) needs" (Hatzisavvidis, 2015).

According to Bayman: "*Literacy is a charged word, to which a multitude of concepts and ideologies are connected, a multidimensional word, a genetic theme, according to Freire*" (Baynham, 2002:16). After all, in the opposite meaning of the words literate- illiterate, as well as literacy - illiteracy, this very type of literacy is detected.

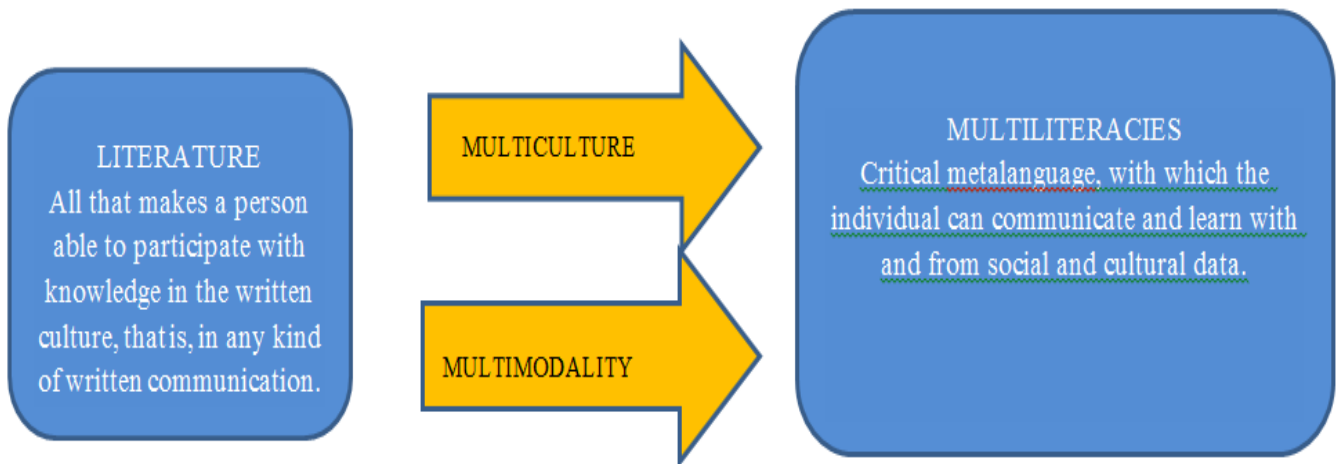
4.2 Multiliteracies

As the concept of literacy evolved, the concept of multiliteracies was developed. Linguistic diversity, both socially and geographically, as well as the variety of text forms produced in a multilingual and multicultural society through new information and multimedia technologies, make it imperative to develop multilingual skills (Hatzisavvidis, 2003). These are communication skills that individuals must be equipped to be able to function in the future as effective citizens (Hatzisavvidis, 2011). Therefore, due to the globalization of culturally and linguistically diverse modern societies, ie those societies that through an assimilative and anti-racist approach become the meeting point of people belonging to different economic and cultural realities (Modgit, et. al., 1997) , but also the multiplicity of codes and the means of modern communication, it was necessary to extend the term literacy to the term multiliteracies (Cope & Kalantzis, 2000).

The term was coined by the New London Group in 1996 to describe the growing importance of cultural and linguistic diversity as well as the impact of new technologies, recognizing the new cultural and social reality (Hatzisavvidis, 2003). Scholars of Linguistics and Applied Linguistics, Cadzen, Cope, Fairclough, Gee, Kalantzis, Kress, A. Luke, C. Luke, Michaels & Nakata, met in New London, Australia to review education and literacy, taking into account the globalization and rapid development of technology.

Specifically, they wanted to emphasize the following:

- The need someone to be able to cross cultural and linguistic boundaries, as cultural and linguistic diversity is of great importance in modern times.
- The multimodality of the texts. As in modern texts the production of meaning is not based exclusively on the linguistic semiotic way but on its interaction with other semiotic ways, such as visual acoustics, spatial type, etc., multimodality is a fundamental parameter of any text. As a result, language loses its central role in communication and all other semiotic systems function equally and not in a complementary way to it.



This group concluded that people should be able to negotiate the many worlds in which we live, which feed the language with multiple meanings (Hatzisavvidis, 2003). Also, open teaching, the use of available social reasons and their critical framing, is the basis of their educational proposals (Graikos, 2011). In particular, the learning process should include and not erase or ignore the different interests, intentions and purposes through which one learns as well as respond to the different ways and means by which this process is achieved. (Boche, 2014: 116). It is thus understood that there is an emerging world of meaning, where it is produced in more and more multimodal ways (linguistic, visual, auditory, spatial) with the result that multiliteracies are necessary as a communication skill (Hatzisavvidis, 1999). For this reason, in recent years, aggressive definitions have been used next to the term literacy, such as technological for those related to technology, arithmetic for those related to mathematics, optical for those related to any kind of image, etc. In this way, each of them is given a general (concerning literacy) and a specific content (concerning the social activity with which it is related) (Michalopoulou, 2011).

It would be utopian to refer to literacy in the singular or to combine it only with the written word, since modern societies are distinguished by linguistic and cultural diversity, a fact that requires the existence of multiple media and channels of communication (Koutsogiannis, 2007).

Multiplications therefore require a multi-literate person whose skills are reflected in the following figure:

INTERPRETS, USES AND PRODUCES TEXTS
(ELECTRONIC, LIFE AND MANUSCRIPTS)

USING THE LANGUAGE, OPTICAL, AUDIBLE,
EXTRACTIVE AND SPATIAL NOTE SYSTEM

FOR SOCIAL, CULTURAL, SOCIAL AND
ECONOMIC PURPOSES

WITHIN SOCIAL AND CULTURALLY
DIFFERENTIAL FRAMEWORKS

(Anstey&Bull,
2006)

According to Katsarou (2011: 409-410) the approach to language and communication proposed by multiliteracies can be linked to the three basic assumptions of Vygotsky's theory:

- 1) The perception of language. According to Vygotsky, language is energy, a process of creation and development, whose linguistic structures and their relation to social reality are constantly changing. The word is the result of social practice and not just the product of communication between two subjects. Subjects also have a transformative role in the formation of meaning. The fact that the experience of a culture is codified in the structure of language makes it a very powerful semiotic tool. At the same time as its users interact with each other, they can think and interpret this experience. The dialectical relationship between social and linguistic structures as well as the codification of experience by language are common points of Vygotsky's theory and multiliteracies. Also, regarding the transformative potential of the subjects in the importance of meaning, Kress (2000) emphasizes that according to the theory of multimodality, individuals transform the importance of meaning according to their social, cultural and historical interests.
- 2) The concept of mediation. Human behavior is mediated by tools, which depending on the way they are used, transform both human action and the relationships of individuals with each other as well as with the environment. According to the theory of multiliteracies, the means of producing meaning are shaped but also shape culture, while in the theory of multimodality the ways and means are combined to produce meaning.
- 3) Social learning. Learning, which is based on the interaction between experienced people with less experienced members of society, is a complex process that takes place within specific social, cultural and historical contexts. Accordingly, students learn from experienced adults and from their peers, which is related to the concept of "zone of imminent development", ie the distance between the actual developmental level and what can be achieved through pedagogical interaction. In this way the child acquires social reasons and practices that are manifested in certain social and cultural

contexts, through learning, which is a process of transformative and active receptivity as well as an interactive relationship between these social reasons and practices. In the theory of multiliteracies, the construction of meaning through design attributes the transformative and dynamic nature of the process of learning Vygotsky's theory, since through the phase of open teaching students process their planned developmental level, creating a learning scaffold. Also during the critical framing they recognize the social, cultural and historical context in which their reasons and experiences were produced, while in the transformed practice they redesign the experiences and the available resources, in order to reach their redesigned level of development according to Vygotsky.

It is therefore understood that since we have given a wide multisocial and cultural space of communication and learning, multiliteracies offer the framework for the development of a critical metalanguage, with which the individual can communicate and learn with, and by social and cultural data. After all, their development forms obvious and non-intra-social and often transnational discrimination, so that it becomes necessary to include them in education (Kimourtzis, 2013: 371).

5. Conclusions

In modern times both communication and message production are not only based on language code, but are realized using different semiotic ways, leading to a multimodal communication. The result is a "*textual landscape*" (Carrington, 2007) where different modes compose multimodal texts, whose meaning and reception differ from those in which language was the main code for expressing their meaning.

It is therefore understood that "accessibility" is a key word for the creation of multimodal texts, since different semiotic ways are used, as a result of which the recipients of their message activate more means of their reception. However, this does not lead to a simplification of the construction / reception of the meaning of the texts. On the contrary, the attempt to holistically deal with the resulting meaning, defines new strategies in the organization and construction of meaning. Therefore, the mixing of semiotic codes leads to multiplicity and fluidity, which makes it necessary to switch from literacy to multiliteracies in order for recipients of multimodal texts to acquire the appropriate reading and receiving skills (Papadopoulou, Pagourelia, Gorla, 2019: 331).

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