
The Development of Multimodality as a recent trend in Linguistics: A Critical Review

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Abstract

Semiotics or semiology (from the Greek, *sēmeion*, means 'sign') is an expression which stands for the science of signs. Semiotics is generally defined as the study of the sign. Sign is anything which stands for something else. The history of semiotic science returns back to medieval ages. However, semiotics gains its technicality after the first half of the twentieth century. Semiotics is explored by its founders Ferdinand de Saussure and Charles Peirce. After them, many semioticians develop the study of sign system like Roland Barthes, Umberto Eco, Marshall McLuhan, Algirdas J. Greimas, Charles Morris, and Roman Jakobson. Due to the recent development in media and in means of communication, there is a new shift from mono-sign system to multimodality. Based on Halliday's SFL, O'Toole's *The Language of Displayed Art* (1994), Kress and van Leeuwen's *Reading Images: The Grammar of Visual Design* (1996/2006). Multimodality occurs as a basic theory of

communication and social [semiotics](#); it is the use of several modes of communication other than language. This article aims to review definitions of Semiotics and Social Semiotics, Visual Social Semiotic and Multimodality.

Keywords: Semiotics, Social Semiotics, Visual Social Semiotics, Multimodality.

تطور المنهجية التعددية كاتجاه حديث في اللغويات: مراجعة نقدية

الملخص:

تشاركت اللغة والموارد (الأنماط) الاجتماعية المختلفة في عصر الوسائط المتعددة؛ بشكل كبير في التواصل اليومي؛ وتعتبر اللغة وسيلة للاتصال التي يستطيع الأفراد من خلالها تبادل الأفكار والخبرات والتعبير عن القيم، ونقل المعرفة، والحفاظ على الثقافة. و تقوم الدراسات اللغوية بإحداث تحولٍ في استكشاف وسائل الاتصال المختلفة غير اللفظية وتدقيق التفاعل فيما بينها؛ ومن ثم فإن المنهجية التعددية هي عملية استخراج المعاني من خلال تفاعل الأنماط المختلفة مثل الصورة، الإيماءات، الموقف، النظرة، الحركة، الموسيقى، الألوان؛ جنبًا إلى جنب مع الكلام والكتابة. وتميل الدراسة أيضًا إلى إظهار قابلية تطبيق نهج الوسائط المتعددة على عديد من النصوص التي تتضمن أكثر من وسيلة إتصال. كما يهدف البحث إلى تتبع تطور علم العلامات في اللغة مرورًا بأهم علماءه. ولهذا فيبدأ البحث بتعريف السيميائية، وروادها، والسيميائية الاجتماعية، والسيميائية الاجتماعية البصرية، والسيميائية متعددة الوسائط. ومن أهم رواد علم العلامات: فرديناند دي سوسور، تشارلز ساندرز بيرس، رولاندا بارت، امبرتو ايكو، مارشال ماكلوهان، الجيرداس ج، رومان جاكوبسون، و تشارلز موريس. وقد خلصت نتائج البحث إلى إمكانية تطبيق نهج الوسائط المتعددة (المنهجية التعددية) لتحليل النصوص، الصور، الحركة، الصوت و الألوان بطريقة علمية.

1. Introduction

Language and other different social semiotic resources (modes) are involved in daily communication. Among these resources, language is the most important; it is the vehicle of communication through which people can share ideas, exchange experience, articulate values, transmit knowledge, and sustain culture. It is a formal scheme of communication that uses words, sounds, and visual signs to deliver new information to public. Other resources such as music, color, and typography complement making-meaning process and they participate in effective communication. Multimodality as an interdisciplinary approach, involving linguistics, semiotics, cultural studies, media studies, computer science etc., has become an essential practical domain (O' Halloran &Smith, 2011, p.1).

2. Semiotics

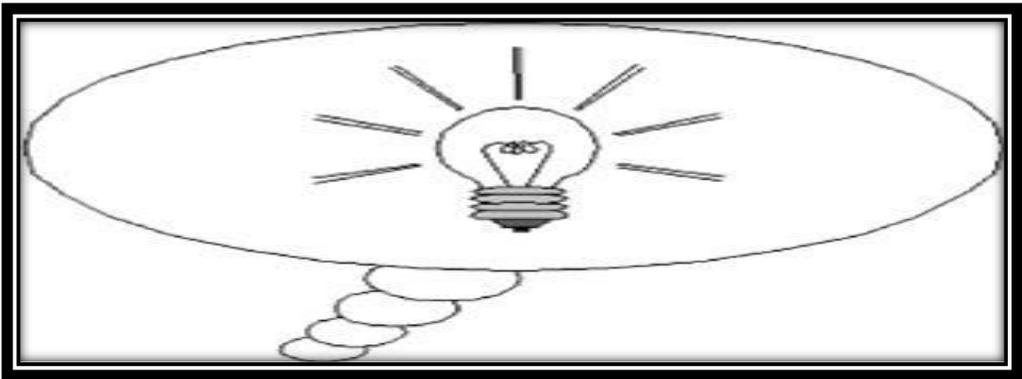
Semiotics is the "study of the rules underlying the sign system and helps us understand the use and implications of signs, and in particular, visual and verbal signs in communication" (Fan, 2006, p.123). Significantly, semiotics is concerned with studying the discrepancy between illusion and reality (Cobley, 2010, p.3). So, semioticians scrutinize "how meanings are constructed and how reality is mirrored and reflected (Berger, 2010, p. 4). According to Kress (2010, p. 54), the basic unit of semiotics is the sign; it is a combination of form and meaning. Semiotics focuses on

three major themes: the study of the sign, the systems which structure signs, and finally the social and cultural contexts within which these signs operate (Fan, 2006, p.123).

Semioticians view sign as a coin; sign has double face which cannot be separated (p.88). In a semiotic sense, signs can be represented in form of words, images, sounds, gestures or objects. So, semioticians examine signs not in their own entity but as part of semiotic 'sign-systems' (Chandler, 2007.p.2). Also, semioticians seek to investigate the connotation between signs and their meanings, or in other terms, between the 'signifier' and 'signified'. That is to say, Semiotics is both "a *science*, with its own corpus of findings and theories, and a *technique* for studying anything that produces signs" (Sebeok, 2001, p.5).

The following figure shows three questions to explicate the goal of semiotic theory and investigate how sign deliver its meaning:

Fig 1: How Semiotics Deliver Signs Meaning (Danesi, 2004, p.5).



1- What does the figure mean?

The answer: it means 'bright idea'.

2-How does it present this meaning?

The answer: by displaying a light bulb in bubble

3- Why is it indicative of this meaning?

The answer: The use of light in the sign is harmonious with the common belief in our culture of light as an analogue for intelligence.

3. Some Pioneers Semioticicans

- **Ferdinand de Saussure (1857-1913)**

According to the Linguist Ferdinand De Saussure, language is a system of signs. Saussure uses the term '*Semiology*' as a science which studies the role of signs as a vital part of social life. According to Saussure, signs consist of two components: a sound-image or '*signifier*' and a concept or '*signified*'. The relation between the *signifier* and *signified* is arbitrary and is referred to as the signification system (Berger, 2010, p.5). From the Saussurean viewpoint, '*the signifier*' and '*the signified*' are mental concepts. The sign is "a link between "a form that signifies" (*significant*) and "a concept that is signified" (*signifié*)" (Susan, 2018).

- **Charles Sanders Peirce (1839-1914)** According to Peirce, there are three elements that are dynamic to form sign system. The sign is a unity of what is represented (the object), how it is represented (the representamen) and how it is interpreted (the interpretant) (Chandler, 2007, p.29).
- **Roman Jakobson** advocates Saussure's sign model. Jakobson focuses on language as a tool of communication. He believes that communication is regulated by personal, social, and purely semiotic factors. Indeed, Jakobson calls for a semiotics which would study all the different systems of signs (Krebs, 2016).
- **Charles Morris** considers semiotics as a science that helps to understand the main systems of human activity and their inter-relationship, considering that signs mediate human activities and relations. Morris denotes that to understand the sign, we need to identify its relations to other signs, and to recognize what it denotes. Furthermore, Morris classifies sign to a threefold division: sign vehicle, designatum, and interpreter (Fan, 2006, p.124).
- **Roland Barthes** proclaims that semiology is a mere subset of linguistics; it "aims to take in any system of signs whatever their substance and limits; images, gestures, musical sounds, objects" (Bouzida, 2014). Barthes develops the concepts of '*signifier*' and '*signified*' to '*connotation*' and '*denotation*'.

Denotation is the literal meaning of the sign; it is a representation of the signified. Connotation is "the meaning that is evoked by the object, that is, what it symbolizes on a subjective level" (Moriarty, 2005, p.231).

- **Algirdas J. Greimas** puts what he called '*The Semiotic Project*', this project deals with surface and deep structure of the text. In other words, it deals with the process of creating a text and the process of understanding it. Greimas's project aims to analyze the surface which hides the depth. The surface-depth dichotomy developed by Greimas contributed to the specific nature of the semiotic framework (Grigorjevas et al., 2017).
- **Umberto Eco** mentions in his book *A Theory of Semiotics* that sign is "anything that can be used to substitute for something else" (Berger, 2010, p. 11). Eco seeks to understand the relation between signs and reality. He denotes that meaning of sign is not necessarily associated with the existence of the object. For Eco, the meaning of signs "is a process mediated by shared knowledge: the production and the interpretation of signs involve a wide set of norms and information that belong to a multidimensional system of knowledge, which interpreters and producers share and renew in the communicative practice" (Desogus, 2012).

4. Social Semiotics

Social Semiotics (or Sociosemiotics) is a branch of semiotic theory; it deals with meanings in all its appearances, in all social events, and in all cultural locations (Kress, 2010, p.2). According to Wong (2019), Social Semiotics is "a theory used to account for meaning-making (or sign-making) in social environments and social interactions" (p. 134). Social Semiotic theory is concerned with all forms of meaning. Indeed, meanings always appear in a social environment and in social interaction, so the theory is called a 'Social Semiotic' one (kress, 2010, p. 54). Furthermore, Social Semiotics is "an attempt to describe and understand how people produce and communicate meaning in specific social setting" (Sharif & Kamali, 2017). Every society is different from other societies, that why, signs have different meanings in diverse social and cultural contexts. For instance, the color red paradoxically can indicate mourning or life in different areas. Thus, the meaning of sign depends on its society (Harrison, 2003, p. 48).

By all means, Social Semiotics is interested in how language is used in social context or, in other words, how language is used to establish society. Moreover, social semiotics is concerned with how communicators utilize semiotic resources in language or visual communications to recognize their interests (Machin & Mayr, 2012, p.17). The following figure depicts how a student comprehends a lesson on cells in science classroom. When the teacher asked "what can you tell me about cells?" One student

answered " a cell has a nucleus and draw this image in the board". In the student's answer, knowledge is constructed: once in the mode of speech and once in the mode of image (Kress, 2011, p. 246).

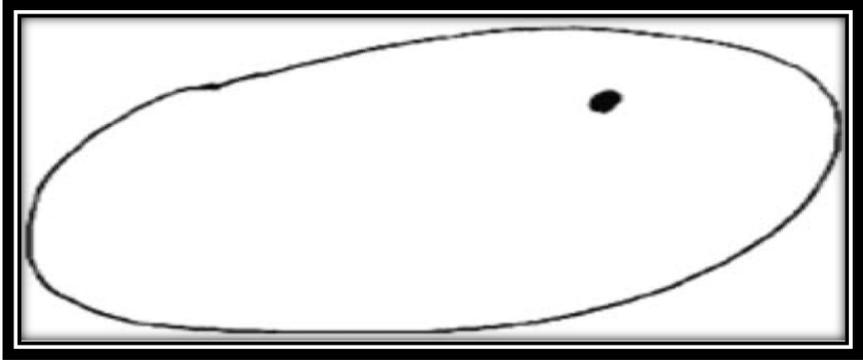


Fig 2: A Cell and Nucleus (Kress, 2011, p. 246).

5. Visual Social Semiotic

Visual Social Semiotics is defined as "the description of semiotic resources, what can be said and done with images (and other visual means of communication) and how the things people say and do with images can be interpreted" (Jewitt & Oyama, 2001, p.134). Visual Social Semiotic approach is initially envisaged in the work of O'Toole (1994) *The Language of Displayed Art*, and Kress and van Leeuwen's (1996) *The Grammar of Visual Design*. Visual Social Semiotic theory is employed in a broad range of resources including newspaper articles, websites, journalistic photographs, textbook illustrations, children's picture books, social media photographs, etc. The aim of visual social semiotics "is to make visible the social

dimensions of meaning-making by focusing on the agency of the sign-maker and the social context in which the sign is produced" (Wong, 2019, p.4-5).

Kress and van Leeuwen (1996&2006) outline four Visual Social Semiotic elements that represent how the interaction order can be visually constructed:

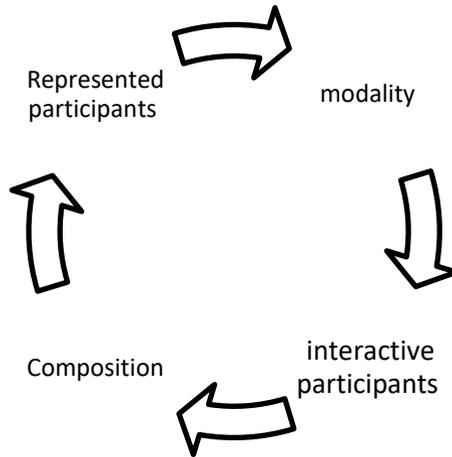


Fig 3: Four Visual Semiotic Elements (Al Zidjaly, 2014, p.75).

6. Multimodality

Multimodality is a recent phenomenon referred to as Critical Multimodal (CM), Multimodal Analysis (MA), Multimodal Critical Discourse Analysis (MCDA), Multimodal Semiotics (MS), or Systemic-Functional Multimodal Analysis (SF-MA). This approach extends a deeper insight into significant issues and investigates the interaction between verbal and nonverbal modes of

communication (Waugh et al., 2015, p. 98). Indeed, MA is a new shift in linguistics; this approach sheds light on the developing theories and practices. In the following section, the researcher explains the most important-related terms to multimodality. Multimodality is an interdisciplinary approach; it is developed over the past decade (since the 1990s) to investigate the issues about alterations in society, for instance, the development of new media and technologies (Bezemer, 2012).

As the prefix “multi-” hints, multimodality maintains the amalgamations of different semiotic resources in each communicative event. The term 'modality' is quoted from the concept of modality in grammatical studies of languages (modal verbs i.e., can, could, may, should), and is extended to refer to different modes of communication. Therefore, modality is "polysemous in that it might make reference either to the grammatical system of existential stances or simply to the presence or use of modes of communication" (LeVine & Scollon, 2004, p. 2).

Correspondingly, there are two general facts about multimodality: firstly, human beings have more than one sense, so it is fair to address and pay attention to all of them in communication. Secondly, sign- users seek for a perfect simulation of reality, thus, semiotic modes must convey information in a true to life manner. These two facts denote that, the more senses and modes used in multimodal

communication, the more effective meaning expressed and conveyed ([Stöckl](#), 2009, p.205).

Hence, in order to understand multimodal texts, reader need to draw upon a multiplicity of interrelated perspectives as social, cultural, and political contexts. Serafini (2010) outlines three analytical perspectives for investigating multimodal texts:

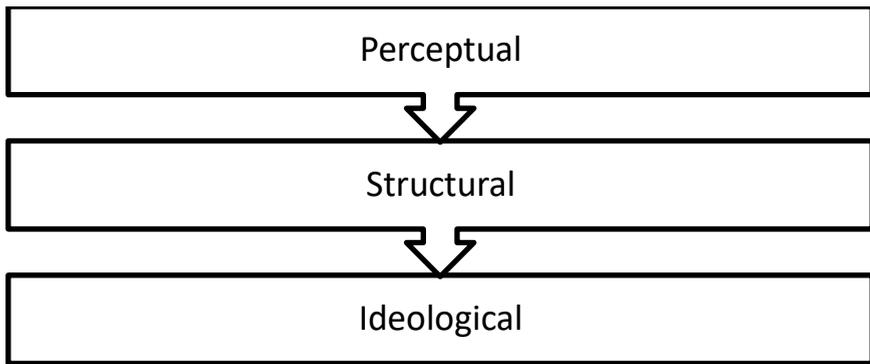


Fig 4: Three Analytical Perspectives of Multimodal Texts (Serafini, 2010, p.88).

Perceptual perspective is governed by preceding knowledge, personal experience, and the context-social, cultural, and historical- of production and reception. Structural perspective stabilizes inventories of compositional structure and examines how they construct meaning. Finally, ideological perspective results from the viewers' perception to basic elements of text and its

structure through social context and through certain social practices (Serafini, 2010, p.89).

According to Jewitt (2013) there are four core concepts that are common across multimodal research, they are as follows:

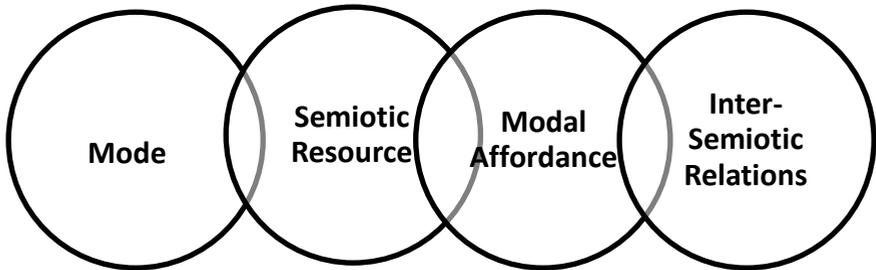


Fig 5: Four Core Concepts of multimodal Research (Jewitt, 2013, p.142).

Mode → is the product of the cultural forming of a material through its use in social interaction.

Semiotic Resource of Mode is the association between representational resources and what people mean with them.

Modal Affordance → is a concept connected with the material, the cultural and social historical use of a mode. It asks the question what it is possible to express and

represent easily with a mode? Or in other words, what a mode is 'best' for?.

Inter- Semiotic relations→ express how modes are constructed in specific contexts? (Jewitt, 2013, p.142).

In any one society, there are different semiotic modes that complement each other to achieve meaning. Multimodal analysts see that those modes are multifunctional as they can articulate more than one meaning (Bowcher, 2012, p.219). Indeed, the main difference between social semiotic and multimodal analysis is that, social semiotics focuses on understanding meaning in social context. While, multimodal analysis concentrates on deconstructing meanings according to different signs in multimodal text.

Indeed, Multimodal theory of communication focuses on two essential elements:

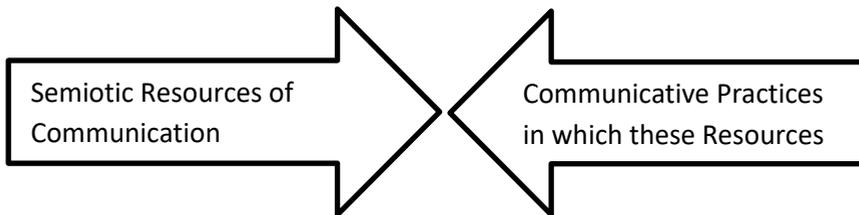


Fig 6: Function of Multimodal Theory of Communication (Kress& van Leeuwen, 2001, p.111).

According to Serafini (2011), there are three essential elements for comprehending and understanding multimodal texts, and they are as follows:

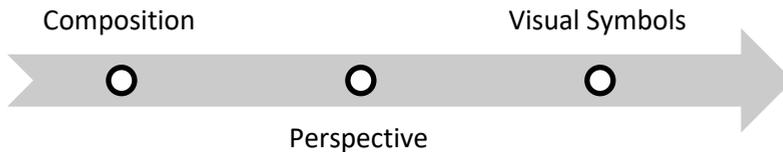


Fig 7: Three Structures for Comprehending Multimodal Texts (Serafini, 2011, p. 346).

Composition stabilizes how visual elements are arranged and organized. Regarding perspective, it determines the relationship between visual components. Besides, a visual symbol depicts ideas that are conventionalized through their usage in sociocultural contexts; they convey meanings beyond the literal ones. For instance, a 'Rose' connotes 'Love' and a 'Cross' denotes 'Christian Ethics' (Serafini, 2011, p. 346).

Ultimately, Multimodal texts are investigated from two perspectives: Inter-semiotic relations and Logico- semantic relations. Inter-semiotic relations scrutinize how visual and verbal elements complete each other to form a consistent text. Logico- semantic relations connote the relations across diverse semiotic modes (Wu, 2014). The goal of MA is to scrutinize the interaction between different semiotic modes; it focuses on the

representation and interaction of communicative practices rather than static entities. Every semiotic mode has diverse resources that put forward potentials for meaning.

Halliday's SFL theory paves the way and builds a platform for theorizing how multi semiotic modes combine to generate meaning in multimodal phenomena. Many scholars develop theoretical, descriptive, and methodological resources for the study of multimodality (e.g. van Leeuwen (2005), Kress and van Leeuwen(1996)& (2001), O'Halloran(2005), Baldry and Thibault(2006), Royce and Bowcher(2006), Unsworth(2006), Bateman (2008), Lemke (2009), and so on .

Multimodal theory aims to:

Produce a meta-theory capable of theorizing semiotic resources, their functionality and meaning potential, and their integration in multimodal phenomena that are interpreted in the context of situation and culture. The emphasis is placed on understanding and describing semiotic resources and principles of their systems of choice in order to understand how people use these resources in social contexts for specific purposes. (Jewitt, 2014, p. 130)

7. Multimodality and Visual Images

Visual image is a tool for meaning construction. Visual image is a term used "to refer to the photographs, paintings, and other images included in multimodal ensembles" (Serafini, 2013, p.14). In the modern digital world, texts integrate different modes of communication i.e. words and

images are called 'multimodal texts'. As a carrier of messages, image has a meaning and power on its own; it performs a particular commission, and its analysis reveals its secrets and power. The designer or maker of the image finds in its depiction an answer to his/her sense of powerlessness in the visual age.

[Stöckl](#) (2009) outlines four poles to scrutinize image as a multimodal text as follows:

1. Function or Purpose the Image Fulfills → Ex.
Advertising image seeks to impress

the viewers.

2. Quality of Image → Simple or Complex?
→ Can be read or not?
→

If it comes up to any standard of aesthetics or not?

3. Discovering Pictorial Content → What is depicted?
→ In which context?

4. Integrating all Modes to Produce Overall Message
named Semiotic Coupling.

Fig 8: Meaning- Making of Image (Stöckl, 2009, p.209-210)

What constitutes and organizes the image is called image composition. There are three compositional techniques for designing image: (1) the size of the object, (2) colors and disparity, and (3) foregrounding and emphasis (Serafini, 2011, p. 346). Therefore, it is simply to note that images are the element of interaction between sender and receiver.

In order to analyze an image, the analyst needs to examine the elements that compose the whole image such as shapes, colors, and distance. Besides, image carries with it embedded messages to deliver to the viewers. Therefore, the combination of image's elements together provides its intertextual references:

Images, just like when we speak or write in language, are always part of Discourses, if the images are meaningful and communicative. Image are associated with words, settings, and other sorts of objects in the service of letting people enact or recognize different sorts of socially significant identities and activities (practices). Just as words need to be combined with other things (like ways of acting and interacting or using various sorts of objects or tools) to enact an identity, so, too, for images (Gee, 2011, p. 194-195).

Rose (2001, p.16- 17) outlines three different modalities for interpreting visual images as follows:

- 1) Technological: any form designed to be looked at.
- 2) Compositional: formal strategies of image such as color, content or spatial organization
- 3) Social: scale of economic, social and political relations and practices that encompass an image.

As shown above, images are able to signify social relation between the producer, the viewer and the object represented. Just like language, the images are made up of elements that can be decomposed through analyzing the meaning of them. For example, in the events of *11 September*, people were influenced by the images and verbal reports they saw on television. Thus, it is notable to note that, multimodal visual images establish closeness to the events and engaged people in social events (Paltridge, 2006, p. 189).

Conclusion

Semiotics – the science of signs – is explored by its founders Ferdinand de Saussure and Charles Sanders Peirce. Visual Social Semiotics approach has its root in the Systemic Functional Linguistics (SFL), which views language as a social semiotic. Semioticians contribute to semiotic change; this changes which leads to Visual Social Semiotics and Multimodality. Indeed, Multimodality is a new shift in linguistics; this approach sheds light on the developing theories and practices. Monomodality connotes the use of merely one mode of communication to express

ideas in writings, literary works, art forms, performances etc. Significantly, multimodality as a new field in linguistics is concerned with the study of language in combination with different semiotic resources such as images, scientific symbolism, gesture, action, music, sounds and so on.

References

Al Zidjaly, Najma. (2014). Geosemiotics: Discourses in Place. In S.Norris., &C. Maier (Eds.), *Interactions, Images and Texts : A Reader in Multimodality* (pp. 63–76). London: De Gruyter.

Berger, Arthur.(2010). *The Objects of Affection: Semiotics and Consumer Culture*. United State: Palgrave Macmillan.

Bezemer, Jeff. (2012, Feb 16). What is Multimodality. *Institute of Education*. Retrieved from <https://mode.ioe.ac.uk/2012/02/16/what-is-multimodality/> . Accessed in 12 April 2018, 6.29 a.m.

Bouzida, Feyrouz.(2014, Septmber 14). The Semiology Analysis in Media Studies. *Social Sciences and Humanities*, 1001- 1007. Retrived from <https://www.semanticscholar.org/paper/THE-SEMIOLOGY-ANALYSIS-IN-MEDIA-STUDIES-ROLAND-Bouzida/2349530dcaadce66f8298f2882c41157424529cc> .

Bowcher, Wendy. (2012). *Multimodal Texts from Around the World: Cultural and Linguistic Insights*. London: Palgrave Macmillan.

Chandler, Daniel.(2007). *Semiotics: The Basics* (2nd ed.).London: Routledge.

Cobley, Paul.(2010). *The Routledge Companion to Semiotics*. London : Routledge.

Danesi, Marcel. (2004). *Messages, Signs, and Meanings: A Basic Textbook in Semiotics and Communication* (3rd ed.). Toronto: Canadian Scholars' Press

Desogus, Paolo. (2012). The Encyclopedia in Umberto Eco's Semiotics. *Semiotica* 19(2), 501 – 521. doi: 10.1515/sem-2012-0068

Fan, Jiang. (2006). Charles Morris's Semiotic Model and Analytical Studies of Visual and Verbal Representations in Technical Communication. *J. Technical Writing and Communication*, 36(2), 121-139.

Gee, P,J. (2011). *An Introduction to Discourse Analysis: Theory and method*(3rd ed.) London: Routledge.

Grigorjevas,A., Gramigna,R.,& Salupere, S.(2017). A. J. Greimas: The Perfection of Imperfection. *Sign System Studies*, 45(2), 7-15.

Harrison, Claire.(2003). Visual Social Semiotics: Understanding How Still Images Make Meaning. *Technical Communication journal*, 1(50), 2-10.

Jewitt, C., & Oyama, R. (2001). Visual Meaning: a Social Semiotic Approach. In T. van Leeuwen& C. Jewitt(Eds.), *Handbook of Visual Analysis* (pp.134-158). London: Sage.

Jewitt, Carey. (2014). Multimodal Approaches. In S.Norris., &C. Maier (Eds.), *Interactions, Images and Texts : A Reader in Multimodality* (pp. 127–136). London: De Gruyter.

Krebs, Heike. (2016). Roman Jakobson Revisited: The Multimodal Trailer Event. *Ausgabe Journal*, 23 (1), 17-29.

Kress, Gunther., & van Leeuwen, Theo.(2001). *Multimodal Discourse: The Modes and Media of Contemporary Communication*. London: Arnold.

Kress, Gunther. (2010). *Multimodality: A Social Semiotic Approach to Contemporary Communication*. London& NewYork:Routledge.

Kress, Gunther.(2011). Partnerships in Research: Multimodality and Ethnography. *Qualitative Research*, 11(3) 239–260. doi: 10.1177/1468794111399836

LeVine, P., & Scollon, R.(Eds.). (2004). *Discourse and Technology: Multimodal Discourse Analysis*. Washington: Georgetown University Press.

Machin, David., & Mayr, Andrea.(2012). *How to Do Critical Discourse Analysis: A Multimodal Introduction*. London: Sage.

Moriarty, Sandra. (2005). Visual Semiotic Theory. In K. Smith, et al, (Eds.), *Handbook of Visual Communication: Theory, Methods, and Media* (pp.227-242). London: Lawrence Erlbaum Associates.

O'Halloran, Kay L. & Smith, Bradley A. (2011). *Multimodal Studies Exploring Issues and Domains*. London: Routledge

Paltridge, B. (2006). *Discourse Analysis: An Introduction*. New York: continuum.

Rose, Gillian. (2001). *Visual Methodologies*. London: Sage.

Serafini, Frank.(2010). Reading Multimodal Texts: Perceptual, Structural

and Ideological Perspectives. *Children's Literature in Education Journal*. 41(1), 85–104. doi: 10.1007/s10583-010-9100-5

Serafini, F. (2011). Expanding Perspectives for Comprehending Visual Images in Multimodal Texts *.Journal of Adolescent & Adult Literacy*, 54(5), 342-350. doi:10.1598/JAAL.54.5.4 .

Serafini, Frank.(2013). *Reading the Visual: An Introduction to Teaching Multimodal Literacy*. London: Teachers College Press.

Sebeok, Thomas. (2001). *Signs: An Introduction to Semiotics* (2nd ed.). Canada: University of Toron to Press.

Sharif, Forouzan.,& Kamali, Mozghan.(2017). Intersemiotic Study of the Linguistic and Non-Linguistic Signifiers in Cinematic Posters. *International Journal of Language Learning and Applied Linguistics World*, 15(1), 238-253.

[Stöckl](#), Hartmut.(2009). The Language-Image-Text Theoretical and Analytical inroads into Semiotic Complexity. *AAA, Arbeiten aus Anglistik und Amerikanistik* 34(2). 204-226.

Susan, Simon.(2018). Saussure, Ferdinand de: Short Biography. In B. S. Turner, et al. (Eds.), *The Wiley Blackwell Encyclopedia of Social Theory* (pp. 2001-2006). UK: John Wiley & Sons.

Waugh, L., Catalano, T., Al Masaeed, K., Hong Do, T., & Renigar, P.(2015). Critical Discourse Analysis: Definition, Approaches, Relation to Pragmatics, Critique, and Trends. *Interdisciplinary Studies in Pragmatics, Culture and Society*, 71–135. doi: 10.1007/978-3-319-12616-6_4.

Wong, May.(2019). *Multimodal Communication: A social Semiotic Approach to Text and Image in Print and Digital Media*. London: Palgrave Macmillan.

Wu, Shuxuan.(2014). A Multimodal Analysis of Image-text Relations in Picture Books. *Theory and Practice in Language Studies*, 4(7), 1415-1420. doi:10.4304/tpls.4.7.1415-1420