

## MULTIMODAL TEXT AND MEDIA RESOURCE: SEMIOTIC, COGNITIVE AND PEDAGOGICAL INTERPRETATIONS

---

**Suvanova Nilufar Akbarovna**

*Samarkand State Institute of Foreign Languages,  
independent researcher (PhD)*

**Abstract.** The article examines how the concepts of multimodal text and media resource are defined in three research traditions and what each definition implies for teaching reading in primary school. Social semiotics treats a multimodal text as a single message built from several modes, each with its own meaning potential. Cognitive psychology explains how verbal and pictorial information is processed and when their combination helps or hinders understanding. Pedagogy, drawing on the multiliteracies framework, regards the multimodal text as an object of teaching rather than an illustration of it. On the basis of this analysis, working definitions of both concepts are proposed for primary reading literacy lessons, together with a distinction between a text in which the image repeats the words and a text in which it adds meaning.

**Keywords:** *multimodal text, media resource, mode, social semiotics, dual coding, multimedia learning, multiliteracies, primary school.*

## MULTIMODAL MATN VA MEDIA RESURS: SEMIOTIK, KOGNITIV VA PEDAGOGIK TALQINLAR

---

*Suvanova Nilufar Akbarovna*

**Annotatsiya.** Maqolada “multimodal matn” va “media resurs” tushunchalarining uch ilmiy yo‘nalishdagi ta’riflari hamda ularning boshlang‘ich sinfda o‘qishni o‘rgatish uchun ahamiyati tahlil qilinadi. Ijtimoiy semiotika multimodal matnni bir necha moddan tuzilgan yaxlit xabar sifatida ko‘radi. Kognitiv psixologiya og‘zaki va tasviri axborot qanday qayta ishlanishini hamda ularning birikuvi qachon tushunishga yordam berishini tushuntiradi. Pedagogika esa multisavodxonlik konsepsiyasiga tayanib, multimodal matnni o‘qitish vositasi emas, o‘qitish obyekti sifatida qaraydi. Tahlil asosida ikkala tushunchaning o‘qish savodxonligi darslari uchun ishchi ta’riflari taklif etiladi.

**Kalit so‘zlar:** *multimodal matn, media resurs, mod, ijtimoiy semiotika, ikki tomonlama kodlash, multimedia orqali o‘qitish, multisavodxonlik, boshlang‘ich sinf.*

## МУЛЬТИМОДАЛЬНЫЙ ТЕКСТ И МЕДИАРЕСУРС: СЕМИОТИЧЕСКАЯ, КОГНИТИВНАЯ И ПЕДАГОГИЧЕСКАЯ ИНТЕРПРЕТАЦИИ

---

*Суванова Нилуфар Акбаровна*

**Аннотация.** В статье рассматривается, как понятия «мультимодальный текст» и «медиаресурс» определяются в трёх исследовательских традициях и что каждое определение означает для обучения чтению в начальной школе. Социальная семиотика понимает мультимодальный текст как единое сообщение, построенное из нескольких модусов. Когнитивная психология объясняет, как перерабатывается словесная и изобразительная информация и когда их сочетание помогает пониманию. Педагогика, опираясь на концепцию мультиграмотности, рассматривает мультимодальный текст как объект обучения, а не как его иллюстрацию. Предложены рабочие определения обоих понятий для уроков читательской грамотности.

**Ключевые слова:** *мультимодальный текст, медиаресурс, модус, социальная семиотика, двойное кодирование, мультимедийное обучение, мультиграмотность, начальная школа.*

### **Introduction**

Children now meet texts in forms that the traditional reading lesson was not designed for. A page of a primary textbook combines a short story with a large illustration, a speech bubble and a caption; an educational cartoon joins moving pictures, speech, music and on-screen words; a science poster arranges icons, arrows and labels in space. In each case the meaning is distributed across several channels, and a reader who attends only to the words receives part of the message. Terms such as “multimodal text” and “media resource” have entered methodological literature to describe such material, yet they are used in different senses, often interchangeably, and sometimes simply as a modern name for visual aids.

This terminological looseness has practical consequences. If a multimodal text is understood as a verbal text with pictures added, the pictures will be used as decoration or as a support for weak readers. If it is understood as a message whose meaning cannot be recovered from any single mode, the pictures become something to be read and questioned. The purpose of this article is to compare how the two concepts are defined in semiotic, cognitive and pedagogical research and to derive working definitions suitable for primary reading literacy lessons.

### **Materials and Methods**

The study is a theoretical analysis of key sources in three traditions. For social semiotics, the core texts were the grammar of visual design (Kress & van Leeuwen, 2006) and the social semiotic account of multimodality (Kress, 2010), supplemented

by the handbook of multimodal analysis (Jewitt, 2014). For the cognitive tradition, the dual coding theory (Paivio, 1986) and the cognitive theory of multimedia learning (Mayer, 2009) were examined. For the pedagogical tradition, the multiliteracies manifesto (The New London Group, 1996), its later elaboration (Cope & Kalantzis, 2009) and work on teaching multimodal literacy in schools (Serafini, 2014; Unsworth, 2001) were analysed. For each tradition the unit of analysis, the definition of a multimodal text and the implications for the reader were extracted and compared.

### **Results**

In social semiotics the central notion is the mode: a socially shaped resource for making meaning, such as writing, image, layout, colour, gesture or sound (Kress, 2010). Each mode has its own affordances. Writing is good at sequence and at naming causes; an image is good at showing spatial relations and simultaneous detail; layout signals what is important and what belongs together. A multimodal text is therefore not a verbal text with additions but a single sign complex in which the modes divide the communicative work between them. Kress and van Leeuwen (2006) describe images as having a grammar of their own, with composition, salience and framing that can be analysed as systematically as a sentence. For the reader, the consequence is that each mode must be read, and the relation between them must be interpreted.

The cognitive tradition asks a different question: not what a multimodal text is, but how the mind processes it. Dual coding theory holds that verbal and non-verbal information are handled by separate but connected systems, so that information encoded in both is better remembered (Paivio, 1986). The cognitive theory of multimedia learning builds on this and adds the limitation of working memory: learners understand better from words and pictures than from words alone, but only when the combination is designed to avoid overload (Mayer, 2009). Principles such as coherence (removing irrelevant decoration), contiguity (placing words near the corresponding picture) and signalling (highlighting the essential) follow from this account. Here the multimodal text is defined functionally, as material presented in more than one format, and its value depends on design.

The pedagogical tradition shifts attention from processing to practice. The multiliteracies framework argued that literacy teaching restricted to print ignores the multiplicity of channels through which meaning is made in modern societies (The New London Group, 1996). It proposed treating the reader as a designer who works with available meaning-making resources and produces new meanings. Later work translated this into classroom terms: students learn a metalanguage for talking about images and layout, analyse how picture and word interact, and create their own multimodal texts (Serafini, 2014; Unsworth, 2001). In this tradition the multimodal text is an object of instruction; understanding it is a learning outcome in its own right.

**Table 1. Three interpretations of the multimodal text**

| Aspect                       | Social semiotics                          | Cognitive psychology                       | Pedagogy                                        |
|------------------------------|-------------------------------------------|--------------------------------------------|-------------------------------------------------|
| Unit of analysis             | Mode and its affordances                  | Verbal and pictorial channel               | Literacy practice                               |
| Multimodal text is           | A single message built from several modes | Material presented in more than one format | An object of teaching and a product of learning |
| Role of the image            | Carries meaning of its own                | Supports or overloads memory               | Is read, discussed and designed                 |
| Key question for the teacher | What does each mode contribute?           | Is the combination well designed?          | What should pupils learn to do with it?         |

The notion of media resource is narrower and more practical. In the sources examined, it denotes a vehicle through which multimodal texts reach learners: a printed picture book, an audio recording, an animated film, a digital storybook, an educational website. Research on digital storybooks shows why the distinction matters. A meta-analysis found that multimedia features such as animation and background music can improve story comprehension when they are congruent with the text, whereas interactive features like games and hotspots tend to distract young readers (Takacs et al., 2015). The same story, therefore, may work well or badly depending on the resource through which it is delivered.

For the primary classroom, media resources can be grouped by the way they present modes. Static print resources (textbooks, picture books, posters) present image and word simultaneously and let the child control the pace of reading. Audio resources present speech and sound in time, so the child cannot return to a missed detail without replaying it. Dynamic audiovisual resources (cartoons, short educational videos) combine moving image, speech and music and impose their own tempo. Interactive digital resources add the possibility of acting on the text. Each group places different demands on attention and memory, and each requires different reading strategies from the pupil.

### Discussion

The comparison shows that the three traditions do not contradict each other; they answer different questions and complement each other. Semiotics explains what there is to be understood in a multimodal text, cognitive psychology explains the conditions under which it can be understood, and pedagogy explains how understanding it can be taught. A definition useful for primary reading lessons must take something from each. On this basis the following working definition is proposed: a multimodal text is a message in which verbal and non-verbal modes (image, layout, colour, sound,

movement) jointly create a meaning that cannot be fully recovered from any one of them; a media resource is the material or digital carrier that presents such a text to pupils and determines the conditions of its perception.

A further distinction follows from the definition. In some textbook pages the illustration repeats what the words already say; such a page is multimodal in form but not in function, because the picture adds nothing to be understood. In other pages the illustration adds information, shows an emotion the words do not name, or even contradicts the narrator. Only the second type calls for the integrative reading that international assessments reward. Research on picture books makes a similar point by distinguishing symmetrical, enhancing and counterpointing relations between words and pictures (Nikolajeva & Scott, 2001). For the teacher this distinction is a practical tool: it indicates which texts can be used to develop interpretation and which serve mainly to motivate or to support decoding.

It should also be noted that the cognitive tradition introduces a necessary caution into the enthusiasm of the other two. More modes do not automatically mean more understanding. For children whose decoding is not yet fluent, an image that competes with the words for attention may reduce comprehension. The choice of multimodal texts for the primary classroom therefore requires criteria that consider both the meaning potential of the text and the processing capacity of the young reader.

These conclusions are relevant to the Uzbek primary school, where the new generation of reading textbooks is richly illustrated and teachers increasingly use short videos and digital materials. Without a clear definition, such materials risk being used as a reward or a break in the lesson rather than as texts to be understood. The working definitions proposed here allow a teacher to ask of any resource two simple questions: what meaning is carried by each mode, and what must the pupil do to bring these meanings together.

A final point concerns the reader's own production. Both the semiotic and the pedagogical traditions insist that understanding a mode is closely linked to using it. A child who has drawn a picture to show what a character felt, or chosen a colour to express the mood of a poem, becomes more attentive to such choices in the texts of others. For this reason the working definition of a multimodal text should be complemented by tasks in which pupils create simple multimodal texts of their own: a picture plan of a story, a comic strip with three frames, a poster with a caption. Reading and creating then support each other in the development of reading literacy.

### **Conclusion**

The concepts of multimodal text and media resource are interpreted differently in semiotic, cognitive and pedagogical research, but the interpretations are complementary. Semiotics identifies the modes and their contribution, cognitive psychology sets the limits of processing, and pedagogy turns multimodal reading into

a learning goal. The working definitions proposed in the article separate the text from its carrier and distinguish images that repeat the words from images that add meaning. These distinctions provide a basis for selecting texts and designing tasks in primary reading literacy lessons, which is the subject of the subsequent stages of the research.

## REFERENCES

1. Cope, B., & Kalantzis, M. (2009). "Multiliteracies": New literacies, new learning. *Pedagogies: An International Journal*, 4(3), 164–195. <https://doi.org/10.1080/15544800903076044>
2. Jewitt, C. (Ed.). (2014). *The Routledge handbook of multimodal analysis* (2nd ed.). Routledge.
3. Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
4. Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design* (2nd ed.). Routledge.
5. Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
6. Nikolajeva, M., & Scott, C. (2001). *How picturebooks work*. Garland.
7. Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.
8. Serafini, F. (2014). *Reading the visual: An introduction to teaching multimodal literacy*. Teachers College Press.
9. Takacs, Z. K., Swart, E. K., & Bus, A. G. (2015). Benefits and pitfalls of multimedia and interactive features in technology-enhanced storybooks: A meta-analysis. *Review of Educational Research*, 85(4), 698–739. <https://doi.org/10.3102/0034654315568142>
10. The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–92. <https://doi.org/10.17763/haer.66.1.17370n67v22j160u>
11. Unsworth, L. (2001). *Teaching multiliteracies across the curriculum: Changing contexts of text and image in classroom practice*. Open University Press.