

ИЛЛЮСТРАТИВНЫЕ ЖЕСТЫ КАК КЛЮЧ К МАКРОСТРУКТУРЕ ДИСКУРСА

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ILLUSTRATIVE GESTURES AS MARKERS FOR DISCOURSE MACROSTRUCTURE

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This article explores interrelations between discourse structure and gestures accompanying oral narration. It shows how illustrative gestures reveal discourse macrostructure. Also it discusses some issues of speech production and comprehension and the role gesture play in it.

Key words: gestures, discourse structure, macrostructure, illustrative gestures.

Discourse as a text in communication acquires additional dimensions. One of them is nonverbal component. According to A. Mehrabian, in face-to-face communication visual modality transfers more than 50 % of information. Visual means are poses of interlocutors, their face expressions, appearance and the most important — gestures.

Gestures add new possibilities to verbal modality, having much different characteristics. Language is grammatically determined, so the proposition is built according to presupposed rules, and gestures are free of any structure. Language has paradigmatic and syntagmatic oppositions, but in gestures such contrasting appears only if it approaches language (such as sign languages). Arbitrary mappings are determined by the necessity of distinguishing and contrasting. Gesture form is determined by its meaning (McNeill 1992: 23). These features let the gesturer to express with gestures only those meanings he considers relevant.

Russian language, as well as English, has very delimited possibilities to express discourse structure. It can be e.g. conjunctions (so, then), referential means (full

NP or pronoun), pauses in speech and paragraphs in written text. One can suppose that gestures have their own means to express discourse structure and, maybe, these means are more elaborated and more commonly used.

In this article we investigate gesture characteristics, which can reveal discourse structure. Also we use Van Dijk's (1978) model of macrostructure.

Macrostructure is a number of macropropositions, i. e. propositions built accordingly to special rules out of original text. These rules are:

- Generalization (several propositions are generalized by a super-concept)
- Deletion (for unnecessary information)
- Construction (when the new proposition is a condition, a component or a consequence of replaced propositions).

The text built upon these rules should still remain coherent. The rules can be applied to the new text, and so on recursively. It's worth to note that building macrostructures is similar to storing information in long-term memory. Also macrostructure reveals one of strategies of discourse understanding.

Illustrative gestures, accompanying oral speech, have no specified form and are created spontaneously in the moment of communication. This distinguishes them from emblematic gestures, such as “to put one's forefinger to one's temple and twist it” or “to cock a snook”. Emblematic gestures, or emblems, are specific in every culture; they are described in dictionaries and quite well studied by linguists, maybe, because they are very much similar to language. Illustrative gestures, having great prevalence in speech (one hundred to one, approximately), are studied far less, although many people use them every day, explaining the route to a stranger, talking to a foreigner and in many more common situations. In everyday life illustrative gestures are used very often and they perform some important functions. Some of these functions are discussed below.

Illustrative gestures are divided in four types:

1. Deictic gestures are usually performed by a hand or a finger. They are referred to a point in a space around the speaker. The referent of a deictic gesture may be within eyeshot, may be located somewhere far away, and may be fictional or abstract. Mostly these gestures accompany noun phrases (87%). Other uses fall on time and place adverbs.
2. Graphic gestures are complicated movements that directly or metaphorically depict some ideas, “draw” in air an illustration to speaker's words.
3. Illustrative regulators relate to accompanied word as metatext. The most often are conduit metaphors (Lacoff, Johnson 1980), when the speaker turns his palm up and moves his hand towards a listener, like giving him the story.
4. Beat gestures are divided into two groups — single and multiple. They are simple moves, depicted only by two vectors. They can be short cutting strokes or more smooth side moves (see Крейдлин 2003).

We will scrutinize graphic gestures meaning their special role in discourse. They mark key phrases in narration following clauses with new and least predictive information.

Graphic gestures help the speaker to process visual information (Goldin-Meadow 2005), and speaker — to make his/her own visual presentation for depicted events (Cassell et al. 1999). These gestures play a special role in discourse: they determine about 55% of acquired information, but remain almost unnoticed by a listener (ibid.).

Our study uses the case formed the retelling of the “Pear film” (Chafe 1980) by MSU students.

We propose a hypothesis that graphic gestures reveal discourse macrostructure. They mark the moments, which the speaker considers to be the crucial. Analysis of some similar narrations can show common tendencies and individual distinctions on the use of graphic gestures.

He is the example, how taking the clauses accompanied by graphic gestures we can get the discourse macrostructure.

The most speakers retold the film following this scheme (each item was present at half stories at least).

1. Introduction (describing the film or the listener’s task)
2. Scenery
3. Appearance of a gardener
4. The gardener picks pears on a tree
5. A man with a goat passes by
6. The gardener continues to pick pears
7. A boy on a bike rides by
8. He stops
9. Takes a basket
10. Puts it on the bike
11. And goes away
12. He rides further
13. And meets a girls on a bike
14. He is lost in contemplation of her
15. And loses his hat
16. He falls down
17. The pears scatter
18. There go three other boys
19. They help him to stand up
20. Then they notice his hat on the road
21. They give him the hat
22. He gives them pears
23. The three boys go past the tree, where the gardener picks the pears
24. The gardener climbs down
25. And reveals the absence of a basket
26. At the moment three boys pass by
27. The gardener is surprised
28. Coda (“That’s all”).

Here are two examples composed from only the clauses accompanied by graphic gestures. Number before each line relates to the plane’s items.

(1)

2. {.. (0.7) so mountains}¹
3. {(... 0.5) some bushes}
4. (...0.8) who(.. a 0.5) staying on a wooden steps (...0.8)a l- ladder,
Puts in his apron,
That guy so slowly picks them,
 {then climbs down the ladder},
 (...a 0.8) puts these pears in a basket.
 {there are (...0.5) three baskets,
 (...0.5) so, he fills them gradually.
I mean one is filled already,
 ..0.2) well, so {leisurely},
Takes them from his apron,
Puts in the basket,
 (.0.3) {then climbs back up the ladder},
 (...0.9) also {so
All so slowly},
5. A donkey so looks at the pears,
Passes by (laugh),
6. (...a 1.7) this man still is up on the ladder,
Picks the pears (...1.1) from the pear tree _
8. Looks anxiously at this (... 0.8) man,
 (...aa 1.3) and seemingly wants (... 0.6) the pears so to take,
 Thinks to take or not to take,
9. (. 0.2) well and then he sees that this man does not notices him,
 (.0.2) then he {...0.7) Ve}ry {calmly ta|kes the whole bas|ket of |pears},
10. {puts on his bi|ke} {at the front},
11. (...0.6) well, and goes.
12. (..a 0.6) he rides (.0.3) on (...1.0) a field,
13. (...0.7) also such a typical country girl with long plaits,
14. ...0.7) well, and he {at her looks},
She also rides a bike},
16. (.0.2) { well in general they |collide,
 (.0.3) and} { mhm | (... 1.1) | the boy | falls |from the bike},
17. The bike falls,
 {the pears scatter}.
18. he {sits among the pears,
 (...0.6)} and rubs hs leg.
15. (...a 1.6) he also} {let the hat fall down.

¹ The symbols used are following: underlined words were accompanied by lengthy gestures. Braces mark the words with any kind of hand movements: often preparative and concluding parts of gesture take some time. The gesture stroke, if it was remarkable, is pointed by vertical bar. About oral discourse notation see Кибрик, Подлеская 2009.

19. (...0.5) in general}{when the boys helped him to pick the pears,
20. he (.0.3) {leaves already,
They} {whistle him so,
Like “you} forgot {the hat»,
21. give him the hat},
(.0.2) {in general (...0.5) | the first boy on the bike} {goes with his plunder},
23. E|at these |pears.
(... aa .. 2.1) So they go| and go},
{and appear} {in a moment near this man},
24. (...0.6) he (.0.5) wants to put them in a basket,
25. (...0.7) and at| the mo|ment appe|ar these three boys,
And eat |pears with | such a gusto.
26. (.0.4) well, (.. a 0.6) this man {so perplexedly} {looks at them},
Sees there a basket} is absent,
(...0.9) and the pears they eat.
27. The boys go away,
(...0.5) and this man stays with |his pears.

(2)

4. And puts them in his (.0.2) apron,
(.0.4) and then in a bas|ket.
9. (...1.0) took one basket,
11. (.0.2) and stole it.
(.0.3) put on his luggage rack,
12. And went further.
15. (...0.5) aand he lost his hat.
16. And fell down.
17. (.0.3) scattered all the pears_
22. For that he gave them {three pears},
24. (...0.9) By that time the farmer climbs down {(..0.5) the tree},
25. (.0.3) sees {that there is no}one bas|ket,

The examples reveal that the speaker follows the line he considers the plot of the story, although details can differ a lot.

Another interesting nuance shown by these examples is that clauses with graphic gestures, marking the key events, are oriented on description of actions and state changes, so the characters in these clauses are often named by pronouns or are not mentioned at all. This corresponds to Vygotsky's ideas about internal predicate, which is actually the newest in the sentence (Выготский 2005).

There is also dependence between number of gestures and accuracy of the retelling. Our case is not great for detailed quantitative analysis, so these observations remain within the limits of a hypothesis. In the whole, we can suppose, that if the number of clauses with gestures is less than 50%, there is higher possibility of speaker's mistakes (when the characters or their actions are depicted

inaccurately, there are a lot of self-corrections and returns to the already told) or listener's misunderstanding (expressed, e. g., in questions such as "who rode away?"). It's not a rule, just a tendency. For example, in the narration with minimum gestures (only 7% clauses were with visual illustrations) there were no such mistakes and listener's questions.

Which of the factors (deficit of gestures or vagueness of narration) is dominant, is not yet clear. We have an example which can point out a possible answer.

Here is a part of this narration (bold are listener's remarks)

(3)

Then three boys pass by,
 From somewhere
 (.. 0.2) they help him to collect the pears,
 Shake him off,
 (... aaa .. 1.5) and the boy quickly leaves,
 (...0.5) then these boys=
 — **With the pears.**
 — Yes, | with the pears.
He went further already,
 Then these boys whistle,
 (... 0.7) (Like=
 (..0.2) A sort of= this story is without words)
But(...0.5) They wanted to give him his hat.
 They returned,
 Took three pears,
 (... aam 2.0) started eating them,
 — **You mean he came back,**
Gave them pears_
 — No, he went further,
 (...0.9) they whistled,
And he stopped,
They approached him,
Took the pears.
 (... 0.5) Well, they go=
 (aam0.7) they go,
And pass by the tree,
Where the man picks the pears.

This example shows, that after listener's questions the number of speaker's gestures increases. It's obvious, that the purpose of his gesticulation is to explain clearer who and where moves in the film. On the other hand, visual signs undoubtedly help the speaker to recall the plot and to process spatial-dynamic information, so it's easier for him to convey his ideas verbally.

Upon these observations we can suppose the following conclusions.

1. Graphic gestures mark the points in the narration the speaker considers to be key or turning for the story.
2. Their appearance, generally, correlates with lower number of speaker's mistakes.
3. Usually the listener understands the story better when there are enough illustrative gestures.

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