The mysterious IK-6
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Published in:
Studies in Slavic and General Linguistics

Citation for published version (APA):

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1. In the second edition of the Russian courseSounds and intonation of Russian speech), E.A. Bryzgunova distinguishes five main types of intonation, called IK-1 through IK-5 (Bryzgunova 1972). IK is the abbreviation of Интонационная Конструкция (Intonation Construction).

Of these five types, some can be implemented in more than one way, the difference between the variants being one of style. The fourth type has such a variant. The basic realization is called IK-4, its stylistic variant IK-4a.

In the third (revised) edition of the course (1977), the number of main types has been increased to seven. One of the new types is IK-6, which is the same type as IK-4a of the 1972-edition.

By changing the name of IK-4a into IK-6, Bryzgunova claims that the contour called IK-4 and the contour now called IK-6 have distinctively different meanings (Bryzgunova - henceforth: B. - 1977:4). This is an interesting assertion, because it is not supplemented by a clear description of the formal difference between the two contours. Indeed, two of the four illustrations on page 120-121 coincide except for the distance between the words and the contour above it. On page 99 the difference is said to be the higher pitch level in the centre and the postcentric part of IK-6. The question whether or not this difference is a discrete one is not discussed.
Elsewhere in the book other differences are mentioned.

Introducing IK-4, Bryzgunova describes the pitch movement in the centre as follows (B. 1977:46): "восходящее движение тона начинается ниже уровня предцентровой части и к концу слога достигает или превышает этот уровень." (a rising pitch movement starts at a level lower than the precentric part and to the end of the syllable reaches or exceeds this level).

Example (ib.): а на шестом этаже? (and on the sixth floor?)

On page 203 more details are given: "В реализациях ИК-4 широко варьируется уровень тона на гласном центре: от глубокого понижения до ровного движения на уровне предцентровой части." (In the realizations of IK-4 the pitch level of the vowel of the centre varies widely: from a deep fall to a flat movement at the level of the precentric part).

The pitch movement in the centre of IK-6 is described on page 100: "восходящее движение тона начинается на уровне предцентровой части." (a rising pitch movement starts at the level of the precentric part).

Example (ib.): сколько студентов! (how many students!)

If these data are combined with the remark in the 1972-edition (page 41) that the rise in IK-4 can be located in the postcentric syllable, the following picture arises:
- in IK-6 a fall is always absent, while it can be present in IK-4;
- in IK-6 the rise is always located in the centric vowel, while in IK-4 it can be located in the postcentric syllable.

One might wonder if Bryzgunova is right in claiming
that IK-4 and IK-6 are different intonations. In this article I shall adduce evidence to sustain her claim.

For the analysis of the forms of the contours use is made of a terminology which has been developed at the Institute for Perception Research (IPO) in Eindhoven for the description of Dutch intonation. The IPO-approach has the advantage that it makes available for semantic analysis a stylized pitch contour which does not contain anything but the perceptually relevant, discrete pitch movements from the original registration of the course of the fundamental frequency ('t Hart, Cohen 1973; 't Hart, Collier 1975). In my opinion, Russian intonation can also be described with this approach. Most data needed are known from the literature, they can be reformulated in such a way that the system underlying them becomes visible. The questions yet to be answered can be listed. In this article I am concerned only with the part of the system to which IK-4 and IK-6 directly belong.

After the formal analysis I shall try to describe the meaning of the relevant pitch movements in both contours.

Examples are taken from Bryzgunova 1977 (the book) and from the records that go with the course Russian язык для всех (Russian for everybody), third edition, 1976 (abbreviated: Rjdv plus the number of the lesson). This course, though spoken with more pitch accents than natural for normal speech, has the advantage that a contour called IK-4a or IK-6 does not belong to the instruction material (which can be concluded from the instructions to the teacher), so one can assume that
the frequent use of it is spontaneous. The assignment of IK-numbers to the examples from this course is mine. It is based on comparison with the records accompanying the 1972-edition of Bryzgunova (newer ones not being available). Instrumental evidence will be necessary to confirm the hypotheses put forward here.

2. The pitch movements with which Dutch intonation contours are built can be divided in rises and falls, each prominence-lending or non-prominence-lending. Relevant for the discussion are:

prominence-lending rise: /

prominence-lending fall: \n
non-prominence-lending rise: \n
non-prominence-lending fall: \n
A syllable is perceived as prominent if a change of pitch direction occurs on a well-defined place in it; the same change located elsewhere in the syllable does not lend prominence ('t Hart, Cohen 1973:315-316).

The movements take place between two reference lines, most often high and low declination line. A declination line is the stylization of the gradually falling pitches of successive syllables between two pitch movements.

Example:  

low declination line, prominence-lending rise, high declination line, non-prominence-lending fall, low declination line, prominence-lending rise & fall (i.e. in the same syllable), low declination line, non-prominence-lending rise.
I omit the declination from the figures, e.g.

\[ \text{\includegraphics{figure.png}} \]

The inversion of declination, a line of slowly rising pitches, is called inclination ('t Hart, Collier 1975, 241).

There are two modes of intonation, mode-1 and mode-2. In mode-1, for Dutch the normal one, the low reference line serves as base from which excursions are made to the high reference line (pitch accents are upward obtrusions). In mode-2, the high reference line is base line, pitch accents are downward obtrusions (for Dutch: van Katwijk 1974:150-152; for English: Bolinger 1965: 37-38).

Bolinger and van Katwijk mention something interesting about these modes. Van Katwijk (o.c. 151-152):

"The awareness of mode could be demonstrated by our listening to an ambiguous utterance, which contained two syllables in succession that could be accented. Its pitch contour consisted of an initial low-level declination, a rise between the two potential accent bearing syllables, and an upper-level declination, with which the utterance ended. As a listener one could either hear the earlier or the later of the two potential accents, depending on what mode of intonation was perceived. In mode-2 intonation the earlier accent is realized, and the utterance made the typical impression of mildly aggrieved exclamation intonation. In mode-1 intonation the second accent is realized [...], and the intonation suggested an unfinished utterance, presumably because the pitch did not return to the lower pitch level."

3. For a description of the Russian intonation system one needs at least the following inventory:

- high declination line
- low declination line
- inclination
line (maybe two: high and low, see note 3), prominence-lending rise, prominence-lending fall, non-prominence-lending rise, non-prominence-lending fall.
To complete this inventory in the future, some problems must be solved. The most important questions are at present:
1. How many prominence-lending rises must be distinguished?
Bryzgunova distinguishes four of them, namely:
a. the rise with which the IK-5 contour starts
(______); b. the rise in one of the contours called IK-2 (same form); c. the rise which is followed by a fall in the same syllable, most often called IK-2(a)
(_____); d. the rise which is followed by a fall in the next syllable or by a high reference line, called IK-3 and IK-6 respectively
(_______ and ________).¹
If all these rises are distinctively different, which I do not think is so, the prominence-lending rise meant in this article is the last one.
2. Can the movement rise & fall (i.e. in the same syllable) be described as the combination of prominence-lending rise (or one of them) and prominence-lending fall, or is it a separate unit?
3. The status of 'half' movements has to be examined.
It might be related to the first and second question.

In most Russian non-interrogative sentences with one prominent syllable, prominence is given by a mere fall. This is Bryzgunova's IK-1, in some cases IK-2. The part of the contour preceding the fall is not described clearly.² Some authors mention an inclination:
In Dutch, most frequently rise & fall is found, in Bryzgunova's system IK-2(a). Krušel'nickaja (1961:254) mentions the same difference between fall and rise & fall for the Russian and German systems.

On the syllable preceding the fall, an extra rise can be present, called 'zanos' (Kuznecova 1960:44,47; Nikolaeva 1977:81).

This little rise corresponds to rise 5 in the IPO-system, which in Dutch is also found after an inclination before a fall ('t Hart, Collier 1975:241).

If another pitch accent precedes the fall, the high reference line needed for the fall can be reached by the first accent: \( \overline{\text{}} \). (Krivnova 1978:135 figure 6'; Svetozarova 1975:509).

Van Katwijk (o.c.) describes a mode-2 contour as a contour which starts and ends on the high declination line. I propose to use this name for all contours in which prominence is lent by a fall without a preceding prominence-lending rise. So the one-peak IK-1 sentences are in mode-2.

The IK-4 contour is also a mode-2 contour. Prominence is lent by a fall, whether or not another accent precedes it. The fall is followed by a non-prominence-lending rise in the same or next syllable, after which the pitch remains high until the end of the sentence (part): /\ (one pitch accent), /\ (two pitch accents).

The Dutch contour with a comparable meaning is most often a mode-1 type. Its form is: low declination, prominence-lending rise & fall, low declination, non-prominence-lending rise in the last syllable of the sentence (part): \( \overline{\text{}} \). The Russian and Dutch 'IK-4' contours coincide if:
1. the last prominent syllable is preceded by a prominence-lending rise after which the pitch remains high up to the last prominent syllable, and 2. the last prominent syllable is the (pen)ultimate syllable of the sentence(part).

While the mode-2 contour IK-1 has a mode-1 pendant, IK-2(a), the mode-2 contour IK-4 does not seem to have a mate.

Now Bryzgunova mentioned (see 1.) that the fall in the IK-4 contour can be replaced by a flat pitch at the low reference line. Nevertheless, it is the segment preceding the rise which is accented. I place this segment between vertical lines: _|_'. Not surprisingly, replacement of a fall by a flat pitch on the low reference line is also found in IK-1 contours: _|_ (Kuznecova 1960:43-46 (figures); Nikolaeva 1977:82). For such a replacement to be possible, the relevant segment must be preceded or followed by a level-changing pitch movement, otherwise perception of prominence would not be guaranteed (assuming that pitch is the main cue for prominence perception). In the flat variant of IK-4 it is the segment preceding the level-changing movement which is accented, while in the IK-1 variant it is the segment following it. This difference is not a meaningful one, it is a consequence of the fact that IK-1 ends on the low, and IK-4 on the high reference line.

I conclude that the difference between IK-1 and IK-4 is located in the postcentric part of the contours.
4. The other contour under discussion, IK-6, is defined by the sequence: low reference line, prominence-lending rise, high reference line: . It is a mode-1 contour.

If the high reference line is left with a prominence-lending fall, the result would in some environments be called IK-2 or IK-5 by Bryzgunova.

If in the syllable after the prominence-lending rise the pitch returns to the low reference line by a non-prominence-lending fall, the result is an IK-3 contour: (B. 1978:22; the same conclusion can be drawn from descriptions of IK-3 and IK-6 as variants, e.g. Kuznecova 1960:57,60,70).

The opposition between IK-6 and IK-3 is neutralized if the prominent syllable is the last one of the sentence(part) (B.1978:22-24; Kuznecova 1960:61,70); the absence of postcentric syllable(s) can be compensated by lengthening the last syllable in the IK-6 case (B. ib.). This neutralization is interesting because in a comparable situation with IK-1 and IK-4 the opposition is not neutralized: the level-changing pitch movement of IK-4 simply takes place in the same syllable as the preceding fall. I think this difference between IK-3 and IK-6 on the one side and IK-4 and IK-1 on the other must be explained by the fact that IK-3 is opposed to IK-2(a), which is characterized by a rise and fall in the same syllable, while there does not exist a movement fall & rise to which IK-4 would be opposed.

Replacement of a rise by a flat pitch, this time on the high reference line, is attested for IK-2(a) (Kuznecova 1960:47-52): becomes . It would be no surprise to find that IK-6 can be
If now IK-4 and IK-6 are compared, the cause of their similarity is easily detected.

IK-4 is: \text{\textbackslash} and can be realized as: \underline{\text{\textbackslash}},

while IK-6 is: \underline{\text{\textbackslash}} (or \underline{\text{\textbackslash}}?).

Despite their formal resemblance, they are systematically different.

If this analysis is correct, it must be possible to conduct an experiment as described by van Katwijk (see 2.). Take for example the sentence \underline{\text{Мать вышла}} (Mother went out, accentable parts underlined), produce it with the contour: \underline{\text{Мать вышла}}. It must be possible to perceive as accented either the first or the second word (resp. IK-4 and IK-6), for example in the following contexts:

\begin{itemize}
  \item \text{IK-4: отец вышел в сад} (Father went out into the garden).
    \begin{itemize}
      \item \underline{\text{и матери вышла?}} (and where did Mother go?)
    \end{itemize}
  \item \text{IK-6: матери ждала отца.} (Mother was waiting for Father)
    \begin{itemize}
      \item \underline{\text{и матери вышла, как только он приехал.}}
    \end{itemize}
\end{itemize}

(And Mother went out, as soon as he arrived)

5. To find the meaning of a given pitch movement, it is necessary to know which pitch movements could have taken place instead.

In the mini-system consisting of IK-1, IK-3, IK-4, and IK-6, only two oppositions are found.

The first one is: prominence-lending rise versus prominence-lending fall (IK-3 and IK-6 versus IK-1 and IK-4).

For the second opposition there are two candidates:
a. absence versus presence of postcentric level-changing pitch movement (IK-1 and IK-6 versus IK-3 and IK-4);
b. contour ends on the low reference line versus contour ends on the high reference line (IK-1 and IK-3 versus IK-4 and IK-6).

Alternatives a. and b. account for the same facts. For example, if after a prominence-lending rise no level-changing pitch movement takes place, the contour ends on the high reference line. Alternatively, if after such a rise the contour ends on the high reference line, no level-changing pitch movement has taken place. Alternative b. is preferable, because the resulting groupings of contours are a better reflection of the intuitional differences between them. So, in my opinion, the difference between IK-1 and IK-3 is felt to be located in the accented syllables, while the postcentric parts are felt to be the same, although in reality the attainment of sameness requires partly different forms (the presence of a non-prominence-lending fall in IK-3). The grouping together of IK-4 and IK-6 hardly requires comment.

Between IK-4 and IK-6 the same difference in meaning exists as between IK-1 and IK-3, namely the one correlating with the opposition between prominence-lending fall and rise. It is, however, more difficult to detect because of the combination with a high ending.

Before these meanings can be formulated, a few words must be said about the position in the sentence of a prominence-lending movement (rise, fall, rise & fall).

The sentences Иван спит (Ivan is sleeping; with prominence on the word underlined twice) and Иван спит can both be used to evoke the thought of a situation
characterized by the fact of Ivan sleeping. They have a different meaning, however, because they picture this reality in different ways. The difference has to do with the information the sentences convey.

A message contains information in the cases where it cannot be predicted that this message, rather than another one, will be transmitted. A message containing information is chosen from a set of messages, all of which are possible candidates for the choice.

A message transmitted by language also is chosen from such a set. This set is not the set of all messages one can think of. It is a set which is defined by the linear and prosodical arrangement of the message.

Using the sentence Иван спит, the speaker not only communicates which situation must be thought of, but also which other situations he could have evoked the thought of, or in which other ways the situation referred to could have been pictured. With this sentence the speaker indicates that the projection of the situation referred to belongs to a set of projections, each member of which pictures the situation referred to with Ivan engaged in some action: reading, washing the dishes etc.

A common way to make one conscious of this meaning is by formulating a question which could be answered by the given sentence. Here: what is Ivan doing? The set of possible answers to this question correlates with the set of projections from which the projection transmitted is chosen.

The sentence Иван спит (in one of its interpretations) conveys the information that the projection of the situation referred to is chosen from a set of projections, each member of which pictures the situation with someone else doing the sleeping (cf. who is sleeping?).
Every pitch accent in a sentence defines a set from which the part of the projection involved is chosen. In the sentence Иван спит, так как устал (Ivan is sleeping because he is tired) there are two sets. The first one is mentioned above. The second part of the sentence is one reason chosen out of a set of reasons Ivan's sleep could have had. This second set is restricted by the choice made in the first sentence part: it does not contain reasons for anything other than the sleeping of Ivan. By being a further choice within the frame created by the first part of the sentence, the second part further specifies the situation of which the speaker wants to evoke the thought.

At the end of this process of progressive specification the hearer has formed not only the transmitted projection of the thing or situation referred to, but also a set of alternative projections of the same thing or situation.

6. The function of intonation in this process consists in signalling if and when the projection being transmitted identifies the thing or situation of which the speaker wants to evoke the thought.

By using IK-1, the speaker signals that the choice in the projection corresponding to the pitch accent in IK-1 completes the specification of the thing or situation referred to.

This information has two sides:

1. No further specification is necessary to make the
projection identify the thing or situation (IK-1 marks the last choice), and
2. it is the choice made, and not another choice from the same set, which identifies the thing or situation (IK-1 marks the correct choice) (cf. Ebeling 1978:242).

By using IK-3, the speaker signals that the corresponding choice does not complete the specification of the thing or situation referred to. This means that:
1. either the speaker is going to make the specification complete by further choices (he has not yet made his last choice),
2. or the speaker does not assert the correctness of the choice (it may be another choice from the same set which identifies the thing or situation) (cf. Ebeling ib.).

Which of these two possibilities applies becomes clear in the part of the sentence following IK-3: if another prominence-lending pitch movement occurs it is the first one, if no such movement occurs it is the second possibility.

Some examples are now given to clarify these formulations.
IK-1 and IK-3 are opposed to each other as 'intonation of completeness' and 'intonation of incompleteness' (B.1977:188-190). This is accounted for by 'last choice' and 'not-last choice'. These meaning need not coincide with interpunction. Compare:
Иван спит, так как устал. (Ivan is sleeping because he is tired)
Иван спит, так как устал. (Ivan is sleeping because he is tired)

In the second example Иван спит is a self-contained
thought, in the first it is not. In the following example the first part is not a separate projection:

Ей сделали операцию. Все хорошо.(Ей 22) (She had an operation. Everything is o.k.).

IK-1 and IK-3 are opposed to each other as 'declarative' and 'interrogative' intonation. This is accounted for in the second part of the definitions.

Examples:

Иван спит: The speaker leaves it to the hearer to decide if the situation meant is projected correctly by his choice. It is possible that another choice, e.g. Иван читает (Ivan is reading) is the correct one. In order not to complicate the discussion I assume that Иван не спит (Ivan is not sleeping) also belongs to the set.

Иван спит: It can also be e.g. Nikolaj who does the sleeping.

By the sentences Иван спит and Иван спит the speaker asserts that the action Ivan is engaged in is sleeping, respectively that it is Ivan who is sleeping.

Often IK-3 is used when the speaker does not know which of the members of the set involved is the one which identifies the situation meant. But it can also elicit affirmation of a choice which the speaker knows to be correct. This knowledge is not then communicated by intonation. It can be indicated by other means, e.g. Иван ведь спит (Well, Ivan is sleeping, isn't he?). The word ведь shows that the speaker is certain of Ivan's sleeping.
The affirmation expected need not be given by uttering a sentence. It can be given tacitly or by acting accordingly, e.g. эту книгу покажите, пожалуйста (that book, show -it-, please). Affirmation (yes, I will show it) is given by showing the book.

IK-1 communicates both the end of the choice process and the correctness of the choice, IK-3 marks either that the choice is not the final one or that the choice may be not the correct one, depending on the rest of the sentence. For example:

Студентам выставка не понравилась (B.1977:186) (The students didn't like the exhibition)

Студентам выставка не понравилась (ib.) (Was it the students who didn't like the exhibition?)

It is important to realize that, when IK-3 signals incompleteness in the sense that further specification is necessary, it does not signal that the choice may be not the correct one. Nor does it signal the correctness of the choice. As a consequence, there are sentences in which IK-3 is followed by IK-1 or IK-2 that are 'statements' (choice correct) and there are such sentences which are 'questions' (choice correct or incorrect). The last type I found only where one alternative choice is understood, mainly with verbs:

Вы любите смотреть телевизор (Rjdv 19) (Do you like to watch television?)

Ты не хочешь пойти вечером в кино (Rjdv 14) (Don't you want to go to the cinema this evening?)

With another order, more common in the spoken language, no ambiguity is possible:

А горячая вода у вас есть (Rjdv 9) (And hot water, do you have -it- ?)
7. IK-1 and IK-3 share the feature of not signalling whether the speaker wants the communication to be continued or not. They do this by ending on the low reference line.

IK-4 and IK-6 end on the high reference line, which means 'continuation'. This meaning is added to the meaning of the foregoing prominence-lending fall resp. rise, which is the same as in IK-1 resp. IK 3. As a result, the continuations announced by IK-4 and IK-6 have different contents.

Let me first state what they do not mean. There are sentences with IK-1 and IK-3 which with an imprecise label can be called 'questions', e.g. ктo спит (who is sleeping?) and Иван спит (is Ivan sleeping?). There does not exist a distinction 'questions which must be answered' and 'questions which need not be answered'. It is the context and the speech situation which determine if a question needs answering. When in these sentences a continuation contour is used, this can never be motivated merely by the wish of the speaker to obtain an answer.

In this section IK-6 is discussed, in the next one IK-4.

The two components of IK-6 put together, the first rough description results: 'this choice does not complete the specification of the thing or situation referred to, and the communication must be continued'.

The specification not having been completed, the continuation announced can only consist in a further specification of the projection: by making further choice(s) in the frame created by the choice(s) already made, the completeness aimed at will be attained. IK-6 has this meaning both in case the speaker himself
provides the necessary specification and in case the hearer is expected to provide it.

IK-6 and IK-3 can both be used when the speaker intends to go on with his sentence. The difference is that IK-6 can only mark further specification, while IK-3 can also signal non-identification in the sense that the speaker does not assert the correctness of the choice. If a further specification is articulated, the difference between IK-6 and IK-3 is a temporary one: IK-6 announces the specification, IK-3 does not. The announcement is overtaken at the moment when the thing announced occurs. The difference being slight, it is understandable that IK-6 and IK-3 are found described as variants (e.g. Kuznecova 1960:64).

There are two ways to arrive from the high reference line in IK-6 at the following pitch accent: with and without a contour break: 

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•/ ^^^_---''''^s_
cr
N^                     
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Compare IK-3: 

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•/ \---''''''''
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If the accented syllable is the last one of the sentence(part), IK-6 and IK-3 coincide. The IK-6 contour with a contour break is the result of postponing the non-prominence-lending fall of IK-3, This postponement has the function of boundary-mark, it eases the processing of the sentence by indicating which parts belong together (for Dutch: 't Hart 1975). Examples:

А сейчас я учусь в институте на вечернем отделении и скоро буду ... (Rjdv 27) (And now I study at the institute in the evening department and soon I'll be..

(He knows everybody in our house, and every-
body knows him)

... он живет и работает в Академгородке ...

(Rjdv 35) (he lives and works in Akademgorodok ...)

As IK-3 + IK-1/2, IK-6 + IK-1/2 is found both in 'questions' and in 'statements':

Антон Павлович, вы любите кино? (Rjdv 37) (Anton Pavlovic, do you like cinema?)

... завтракал и шел на работу. (Rjdv 28) (he had breakfast and went to his work.)

Ты ничего не забыла купить? (Rjdv 13) (Didn't you forget to buy anything?)

Нужно ничего не забыть, ...

(Rjdv 16) (One must not forget anything, ...)

Sentences ending with IK-6 are very different from those with IK-3. IK-3 marks a 'question' (the speaker does not assert the correctness of his choice), IK-6 remains a signal that a further choice must be made to complete the specification of the thing or situation meant.

The characterization Bryzgunova gives of some sentences with IK-6 is appropriate for all of them: "Эти предложения обещают информацию, но еще не раскрывают ее." (1977:206) (These sentences promise information, but do not yet reveal it)

Which information waits to be revealed, depends on the type of the sentence, the place of the pitch accent, and the expectations in the given speech situation.

Some common interpretations are the following:

1. In sentences containing an enumeration; IK-6 on the last item marks that the enumeration could be continued:

Аня посмотрела на девушку, потом на перевод, потом
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6. опять на девушку. (Rjdv 24) (Anja looked at the girl, then at the money order, then again at the girl.)

2. IK-6 is a 'colon intonation'. The open place is filled by the speaker or the hearer. If by the hearer, the speaker anticipates the specification by including it into his own projection:

И ФАМИЛИЯ ВИКТОРА - АКОПЯН (Rjdv 23) (And Viktor's surname is Akopjan).

Два плюс два будет: (Two plus two makes: ).

3. IK-6 is used to communicate that, of the things or situations appropriate as a referent of the meaning of the sentence without intonation, one with a high (or low?) degree of the quality involved is meant:

УСТАЛ ОН! (B.1977:205) (He is tired!) i.e. to a high degree.

Яблоки! (ib.) (Apples!) i.e. very good (or bad?) ones.

4. In sentences containing a question word, IK-3 is most often interpreted as a question, in this case as a question about a question:

СКОЛЬКО СТУДЕНТОВ? (How many students?) i.e. do you ask me how many students?

IK-6 means that only a part of the possible answers to the question is considered to be appropriate.

a. All answers below a high degree are not appropriate (see 3.):

СКОЛЬКО СТУДЕНТОВ! (How many students!)

b. All answers except the one the speaker is about to give are not appropriate. IK-6 activates the attention of the audience (B.1977:206) (see 2.):

А КОГО Я ВИДЕЛА! (-guess- who I saw!).

c. It is not known if there is an appropriate answer:

ЧТО ОНА ТАМ БУДЕТ ДЕЛАТЬ? (B. 1977:143) (What is she going to do there?) i.e. is there anything to do?
d. No answer is appropriate:

Зачем ты это сказали? (ib.) (Why did you say it?)
i.e. there is no reason why you should have said it.

е. Only the answer that is given in the preceding
conversation is appropriate. The speaker knows that
the answer to his question has already been given,
but he did not register it, often because he did
not hear it:

Что вы сказали? (Rjdv 29; also B.1977:144) (What
did you say?)

Куда идет этот поезд? (Where does this train go?)

This example is from a film. The speaker becomes
conscious of the fact that from the preceding
conversation he can draw the conclusion that he is
travelling in the wrong direction. He no wants
confirmation of his misgiving.

The meaning of IK-6 can be formulated as follows:

'In the frame created by the part of the projection
communicated, the further choice(s) must be made in
order to complete the specification of the thing or
situation of which the speaker wants to evoke the
thought'.

(for the see Ebeling 1978:165-166; very roughly: the
most obvious choice(s)).

8. In IK-4, the meaning of IK-1 is combined with the
meaning 'communication is to be continued'. As IK-1
signals the end of the projection, the continuation
announced by IK-4 can only be another projection.

This other projection can be a projection of which the
closed one is the first choice.
The most discussed sentences with IK-4 are "неполные вопросительные предложения с союзом а, имеющим значение сопоставления" (Rogova 1967:31) (incomplete interrogative sentences with the conjunction а, having the meaning of juxtaposition.

IK-6 is not used here (ib. note 2), more precisely, it would have the 'colon' interpretation.

An example of a sentence with IK-4:
- Где он учился? (Where did he study?)
- В Москве. In Moscow.
- А работает? And he works?
- В Волгограде. (B. 1977:143) In Volgograd.)

The sentence with IK-4 is not incomplete syntactically, compare:
- Он уже окончил университет. (He has already finished university.
- А работает? And he works?
- Конечно. (ib.) Of course.)

So it is incomplete in some sense because IK-4 is used, not the other way around. Further, the conjunction has the meaning 'juxtaposition' because IK-4 is used, in the sentence with IK-3 it does not have this meaning (which is thus an interpretation). To assume that there are two conjunctions а is to shift the problem.

The sentence with IK-3 is a question about the correctness of the choice he works: does he or does he not work? The sentence with IK-4 does not ask if he works, it asserts that he does.

The IK-4 sentence is not incomplete in the sense that the speaker has not yet transmitted his whole thought (in that sense IK-6 is incomplete). It is certainly a request for more information, but the speaker wants this information precisely because his own projection of the situation is finished, because he can not specify it
further. He wants the hearer to form a projection of the same situation which is more specified. Which specification is asked for is not indicated in the sentence itself. It must be inferred from the preceding context.

Both aspects of IK-1, last choice and correct choice, are found to be present in IK-4. The contour is a means to form a separate projection of a part of a more elaborate projection to follow.

The same characterization applies in the cases where it is not the hearer, but the speaker himself who is going to make the IK-4 projection part of a larger whole. For example: он спит, так как устал (he is sleeping because he is tired). From the descriptions given it follows that I assume there is a difference between IK-3/6 and IK-4 here. It amounts to this: with IK-3/6 the projection is not closed, the second part belongs to the same projection; with IK-4 the projection is closed, but a new one is opened by it. Bryzgunova allows only for stylistic differences (1977:102). Kuznecova holds a different view. With IK-3/6 in the first part, the two parts are related to each other as logical subject and logical predicate (1960:60), the second part is an utterance on the score of the first part (о.с.:70). IK-4 in the first part only communicates the incompleteness of the first part and the necessary presence of the following part (отношения незаконченности одной части и необходимого следования за ней другой части высказывания) (о.с.:71). This formulation seems to be equivalent to mine.

If the analysis is correct, it must be impossible to interpret a sentence with the sequence IK-4 + IK-1/2 as a question about the correctness of the choice corresponding with the IK-4 part (compare IK-3 and IK-6).
In the interpretation discussed, the projection announced by IK-4 was a projection of the same situation as the IK-4 sentence, only more specified. Other interpretations are possible. The constant factor is that the IK-4 projection is part of a sequence of projections.

I list some possibilities (some aspects may be present simultaneously).

1. The IK-4 projection starts the sequence. The speaker announces his own next projection: 'listen, I have something to say':

внимание (attention)
товарищи (comrades)

When IK-1 is used here, a continuation, if present, is not announced.

2. The projection announced is a projection of the same thing or situation as the announcing one, but more specified; a preceding context is not necessary to understand which specification is asked for:

ваш любимый писатель? (your favorite writer?)
ваша фамилия? (your surname?)

These are "вопросы анкетного характера" (B.1977:46) (questions with the character of a questionnaire).

Compare: ваша фамилия? is this your surname?
ваша фамилия:... your surname is:...
(the answer is included in projection of the speaker).

3. The announced projection of the hearer is expected to be the same as the announcing one:

до свидания (good bye); expected: до свидания.
ваш паспорт? (your passport?) i.e. form a projection of your passport and make reality correspond with your projection of it, i.e. show me your passport.
Compare: ваш паспорт? (is this your passport?).

The circumstances in which IK-4 is used in questions instead of IK-3 are described by Rogova (1967). With IK-3, the speaker does not decide whether the choice he communicates is correct, the hearer is left free to choose any alternative.
With IK-4, the choice of the hearer is biased by the conviction of the speaker. For example (Rogova o.c.36):

- Вопросов нет больше? are there no more questions?
- Вопросов нет больше? there are no more questions?

IK-4 transmits the same conviction as IK-1 would. The difference is, in my opinion, that with IK-1 the hearer is to take his belief in the correctness of what is said from the speaker ('I conclude that there are no more questions and I want you to believe me'), while with IK-4 he has to arrive at this belief on his own ('I conclude that there are no more questions, but I leave it to you to draw the same conclusion').

4. The projection announced is the projection following the preceding projection of the hearer in the frame created by the IK-4 sentence: 'now I have said this, go on where you had stopped'.

Here belong the discussed 'incomplete questions with the conjunction _a_'.

Also: IK-4 in answers, e.g.:
- Говорят, вы скоро едете в Москву? (They say you are going to Moscow soon?)
- Да, вовторник. Yes, on Tuesday.) (Rjdv 27)

The implication is: why did you ask, i.e. explain your question.
- Нехочешь пойти с нами в театр? (Wouldn't you like to go to the theatre with us?)
- Конечно, хочу. (Of course I want to) (Rjdv 26)
Implication: why do you ask, it goes without saying.
- Сколько стоит эта книга? (How much is this book?)
  - Два рубля. Two roubles.
Implication: explain your answer, I don't believe it.

When IK-4 is used where IK-1 would be enough to obtain an answer, the answer following IK-4 links up with the preceding conversation. IK-1 does not express such a link. Examples:
With IK-1:
A как вы отдыхаете? (And how do you spend your free time?) (Rjdv 14)
Как они познакомились. (How they made acquaintance) (Rjdv 33)

Both sentences are headings of texts. In Rjdv these are never spoken with IK-4 (there is no preceding context).
A что вы делаете вечером? (And what are you doing tonight?) (Rjdv 10)

This sentence is said to a girl in which the speaker is interested. Before, they spoke about something else. The question initiates a new topic (by the way, what ...). IK-4 would suggest that the topic had already been introduced; it would be appropriate if the girl had just been talking about her plans for the day.

IK-4 is used to direct the story of the hearer at the next point:
- Кто это? (Who is that?)
- Наш сосед. Our neighbor.
  - Как его зовут? What is his name? ) (Rjdv 23)
- ... это моя дочь. (this is my daughter.)
  ... в этом году кончает школу. (this year she
Sometimes, these questions make the impression that the speaker is not really interested in the answer. His main aim is to make the other speak, to not finish the conversation ('go on, I am listening').

Summarizing these uses of IK-4, its meaning can be formulated as follows:

'In the frame created by the projection communicated, the further projection must be formed in order to make the projection which is communicated part of a sequence of projections' (for the: Ebeling o.c.:165-166).

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NOTES

1The notation of IK-2(a) as /\__, and of IK-3 as /\ is based on the following literature: Bryzgunova 1972:23-24,34; Kovalev 1976:71; Kuznecova 1960; Svetozarova 1975:505 (figure 1).

The most clear descriptions of IK-1, IK-2(a), and IK-3 are given by Kuznecova (she does not use these names).

All remarks from other authors than Bryzgunova are translated in Bryzgunova's terminology, with the following modifications:

a. The contour /\ is transcribed as IK-6 + IK-1;

b. IK-2(a) is not used for falls, but only for rise & fall (or flat high & fall);

c. IK-1 is not used for rise & fall, but only for fall (or flat low).

The examples from Bryzgunova are, however, given in her transcription.

2The main confusing factor is the fact that often it is not indicated clearly whether the descriptions apply to sentences
with one or with two pitch accents. For example, Bryzgunova gives the sentence все билеты были проданы (1972:218), which on the records is spoken twice with a second pitch accent, first on все, then on билеты. Krivnova (1978:135) explicitly mentions two pitch accents in: ___, and one in: __ (figures 6' and 8). See also Svetozarova 1978.

The confusion is caused partly by the ambiguous status of the rise in the first syllable of an utterance (van Katwijk 1974: 153-155). This ambiguity is more difficult to resolve in Russian than in Dutch, because in Russian the pitch direction in the next pitch accent can in both cases (first syllable ± accented) be falling, while in Dutch a falling pitch accent normally indicates that the first syllable is accented (otherwise the pitch accent is rising (& falling)).

By this manoeuvre I avoid a discussion about the question if in (one of the realizations of?) the IK-1 contour two inclination lines must be assumed as reference lines. This possibility is present because it is mentioned in the literature that after the prominence-lending fall pitch can rise again, probably without this rise having meaning (Nikolaeva 1977:82). The data, however, are too vague to take a decision.

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