DE GRUYTER

Xiaojun Ji*

An analysis of the Q–A unities constructed by the interrogative pronoun *какой*

Abstract: Language is a symbolic system consisting of the signifier and the signified. There is an asymmetrical binary correspondence between them, which is also widespread in Russian linguistics. There are two main types of interrogative sentence formed by the interrogative pronoun *какой*. Traditional lexicography and grammar have limitations in their understanding of *какой* and of the interrogative sentences it forms. The analysis of such syntactic phenomena should be included in the Q–A unity, which can be described in terms of argument structures, generic relations, deixis, relevant characteristics, properties, or attributes of objects, etc.

Keywords: argument structures; natures or properties of objects; the features; *какой*

1 Introduction

According to Saussure, language is a system of signs that develops over time. There is an asymmetrical binary correspondence between the signifier and the signified. This phenomenon is also widespread in Russian linguistics. Russian belongs to the East Slavic group of the Slavic branch of the Indo-European language family. In its morphological structure, Russian is a predominantly inflective, synthetic language (Karaulov 1997, pp. 437–444). Russian lexicography holds that the interrogative pronoun *какой* asks about a certain quality or a certain attribute (USSR Academy of Sciences 1956, p. 693; Ozhegov and Shvedova 2006, p. 260). In addition, some dictionaries indicate that this interrogative pronoun can be used in spoken language to ask order (Shvedova 2002, vol. I, p. 30), such as the order of choice, the order of arrangement, or the temporal order in which things appear (Kuznetsov 2000, p. 410). *The Russian Grammar* (1980) categorizes it as an interrogative adjective subordinated to the adjective category and states that this interrogative pronoun can be used to ask time, time amount, space, cause, purpose, condition, distinction-restriction,

---

Copy editing by Alexander Brandt.

*Corresponding author: Xiaojun Ji, Soochow University, Suzhou, China,
E-mail: jixiaojun@suda.edu.cn

manner, quality, quantity, or other aspects (USSR Academy of Sciences 1980, vol. 2, pp. 160–162). However, as Kreidlin and Rakhilina (1984) pointed out, "this incomplete semantic representation of the interrogative pronoun *какой* in questions lies in, to a large degree, the fact that the studies on it are conducted outside of the conversational unity." That is, some answers may satisfy the semantic requirements established in dictionaries about the interrogative pronoun *какой*, but such answers are not acceptable, for example:

> – *Какие раскопки на территории Москвы проводил летом Институт археологии?*
> *– *Тщательные (длительные, интересные…).*
> (– *What kind of excavations in Moscow were carried out in the summer by the Institute of Archaeology?*
> *–*Careful, continuous, interesting …)*

Analyzing the question itself in isolation would lead to an incomplete understanding of the interrogative pronoun and a failure to fully understand its characteristics.

The *какой*-question is also fundamentally different from other *wh*-interrogative sentences. In interrogative sentences containing interrogatives such as *где (where)*, *кто (who)*, *когда (when)*, etc., the interrogative variant is closely related to its relevant semantic valency; hence such an interrogative is associated with a single semantic argument. In contrast, in the *какой*-question, *какой* is associated with several arguments, which the respondents can address freely and selectively, filling in multiple valencies. In view of this, we propose to study the *какой*- question in the context of the Q–A unity. The Q–A unity is a relationship of correspondence or consistency between the interrogative sentence and its reply. Analyzing the features that distinguish it from other *wh*-interrogative sentences, we try to clarify the understanding of this interrogative and fill the gaps in its traditional lexicographical interpretation.

2 Types of *какой* questions

According to the morphological-syntactic characteristics of *какой* questions, they can be divided into two categories,[1] which can be expressed symbolically as (I)

---

1 The phraseological structures are not included within the object of study, for example, *Какой (уж) из него солдат?*, *Какое (ему) дело до этого?* In addition, interrogative sentences formed by various prepositions with the indirect case of *какой* are not the subject of this paper, since such expressions are synonymous constructions of other special interrogatives, such as, *в какое время = когда (at what time= when)*, *в каком месте = где (in what place = where)*, *по какой причине = почему (for what reason = why)*, *с какой целью = зачем (for what purpose = why)*, etc.

Какой W P? and (II) *Какой S ∅ N?*[2] The first type is more complex in the construction of Q–A unities.

(I)   *Какой W P?*

In this construction, *W* refers to the noun or noun phrase while *P* the predicative. Grammatically *какой* is subordinate to *W*, but semantically *W* is subordinate to *какой*. That is, such interrogative sentences ask questions about *W*. From the perspective of logic, the answer to such interrogative sentences is in fact a choice of the object of the *W* set. The interrogative variant is the constructive part of the logical form of the questions, and linguists equate it with the semantic representations of the interrogative sentences.

(II)   *Какой S ∅ N?*

In this construction, *S* is a noun or pronoun functioning as a subject, ∅ is a zero-predicate, and *N* is a noun in the predicate phrase. When *S* is a noun, the above-mentioned two structures though different in grammatical nature can lead to the same syntactic form; in other words, the same interrogative sentence may be interpreted not only as structure (I) but also as structure (II), for example,

(a)   *Какая Маша? (Какой W P?, P=∅) = О какой Маше идет речь? (Which Masha are we talking about?)*

(b)   *Какая Маша? (Какой S ∅ ?) = Какова Маша из себя? (What's Masha like?)*

3 The syntactic-semantic relations of the Q–A unity constructed by the interrogative *какой*

(I)   *Какой W P?*

When constructing a qualified Q–A unity for such interrogative sentences, we need to take into consideration the grammatical properties of *W*.

If *W* is a gerund, the answer is usually the meaning of the variable term when it is interpreted, as the question mentioned above:

---

2 Here we use the formal structure that Rakhilina described in the monograph "Semantics or syntax?". The two types of structures are slightly different to the types given in an earlier paper co-authored by Kreidlin and Rakhilina (1984).

> *– Какие раскопки на территории Москвы проводил летом Институт археологии?*
> *(– What kind of excavations in Moscow were carried out in the summer by the Institute of Archaeology?)*

We can answer like this: – *Раскопки Кремля (– The excavations of the Kremlin)*, because the object argument of *W* in the question here is incomplete and it is supplemented in the answer. Answers in similar contexts are often not effective, straightforward or even difficult to accept if they follow the dictionary's interpretations of *какой* in terms of quality or attribute.

Another typical example given by Rakhilina:

> *– Сколько салютов было произведено в Москве за годы войны? Какие были первые?*
> *– Впервые Москва салютовала нашим доблестным войскам, освободившим Орел и Белгород, двенадцатью артиллерийскими залпами из ста двадцати артиллерийских орудий.*
> *(– How many salutes were produced in Moscow during the war? Which were the first ones?*
> *– For the first time, Moscow saluted our valiant troops who had liberated Orel and Belgorod with twelve volleys of artillery from one hundred and twenty artillery pieces.)*

In this Q–A unity, in response to the gerund *салют* in the question, all the arguments of this gerund appear in the answer: кто (who), кому (to whom), за что (for what), чем (how), из чего (from what).

It shows that the common practice when constructing the correct Q–A unity for such *какой* interrogative sentence is to fill in the free semantic valency of that gerund. Rakhilina summarizes its logical-semantic formula as *?X<{X | W (X)}P(W)>*, in which *X* is the interrogative variant used to complement the valency of the gerund W (Rakhilina 1990). In principle, when answering this type of question, the respondent can provide several or even all arguments. Nevertheless, usually only one or two arguments will appear in the answer. Moreover, the priority of these arguments varies, with the content argument appearing the most frequently and the subject argument appearing the least. However, this order of priority does not prevent the subject argument from appearing in answers in the context as:

> *– <Где и> по какому проекту будет сооружен памятник А. В. Суворову?*
> *– <Памятник А. В. Суворову сооружается на площади Коммуны у театра Советской Армии.> Авторы проекта памятника – скульптор О. Комов, архитектор В. А. Нестеров.*

(– <Where and> according to what design will the monument to A. V. Suvorov be erected?
– <The monument to A. V. Suvorov is being erected on Communes Square by the Soviet Army Theatre.> The monument was designed by sculptor O. Komov and architect V. Nesterov.)

The word *проект* in the question is bivalent, i.e. "who designed it" and "what was designed", and the content argument is already specified in the question, so it is necessary to point out the subject argument in the answer.

If *W* is not a gerund, then answers about characteristics, properties or nature is not always qualified, e.g.

– Какой французский писатель венчался в Бердичеве? – Бальзак.
(*Великий)
(– Which French writer was married in Berdichev? – Balzac. * Great.)

In similar contexts, it is preferred to indicate the proper name in the response. There is another situation that needs attention. That is, the content of the answer should be consistent with the object domain that the question refers to; if not, the answer will not be what is being asked. Here is an example given by E. V. Paducheva:

– Какую рыбу вы больше всего любите? – Я больше всего люблю мясо.
– Какой день был самым памятным в вашей жизни? – Это была ночь.
(Paducheva 2004, p. 237)
(– What fish do you like best? – I like meat best.)
(– What was the most memorable day of your life? – It was a night.)

The interrogative object domain is posed by the interrogative component and its degree of saliency varies. The interrogative sentence constructed by *какой* is characterized by the polysemy of the object domain of the question, which is caused first and foremost at the syntactic level. For example, the question *Какие чувства наполнили душу Ибрагима (What feelings filled Ibrahim's soul?)* can be understood in two ways, (a) the interrogative component is *какие чувства (what feelings)*, and (b) the interrogative component is *какие (what kind of feelings)*. In the first understanding, the interrogative object domain is the set of emotions (jealousy, fury, despair, etc.) that may occur, and in the second, the interrogative object domain corresponds to the set of attributes of the emotions (noble, base, violent, etc.). The polysemy of the interrogative component may cause communicative failure, such as,

– Какой анекдот он тебе расска-зал? – Глупый.
(– What joke did he tell you? – Stupid.)

The interrogative component referred to by the questioner in this situation should first be *какой анекдот (what joke)*, i.e. the questioner wants an answer about the joke itself, while the respondent understands the interrogative component as *какой* and answers only its attributes.

In some cases, when *W* is not a gerund, it is not clear that the answer is derived from the valency structure of the word. At this point, it is possible that the answer comes from its paraphrased component. Rakhilina explains the word *аппетит (appetite)* as "способность и желание У-а принимать пищу (Y's ability and willingness to eat)", and a respondent may answer the question *Какой у вас аппетит (What's your appetite?)?* with *отличный (very good)*, *превосходный (excellent)*, *так себе (just so-so)*, *etc*. The two predicates *способность (ability)* and *желание (willingness)* in the interpretation have a "parametric" valency (Apresyan 1974, p. 64), so the answer can be paraphrased like this:

> *умеренный аппетит = относительно слабая способность и*
> *относительно небольшое желание принимать пищу.*
> *(moderate appetite = relatively weak ability and relatively little desire to eat.)*

Thus, the valency of the predicate used to explain the word *W* can be filled in by the interrogative variant of the relevant *какой* question.

(II)   *Какой S ∅ N?*

Encyclopedic information relating to S is important when we answer this type of structure. This is clearly illustrated by the following examples:

(a)   *Женщины интересовались: – Какой он?*
        – Да такой – в кудрях!.. – объяснил Коля.
        (The women wondered: – What is he like?
        – He is just like that – He has curly hair!.." explained Kolya.)

(b)   *– Марина, поскольку наша газета называется «Свой дом», не могу не спросить о вашем доме. Какой он?*
        – Раньше я жила на пятом этаже «хрущевки» в маленькой квартире с пятиметровой кухней и двумя смежными комнатами.
        (– Marina, as our newspaper is called "Own House", I can't help asking about your house. What is it like?
        – I used to live on the fifth floor of a Khrushchevka in a small flat with a five-meter kitchen and two adjoining rooms.)

(c)   – А чем занимается Сандро? Какой он?
       – Наверное, каждой маме кажется, что ее ребенок – самый лучший.
       Александру 17 лет, он оканчивает Британскую школу в Москве. К моей
       радости, у него хороший музыкальный слух и голос.
       (– What does Sandro do? What is he like?
       – Every mother probably thinks her child is the best. Alexander is 17 years old,
       graduating from the British School in Moscow. To my joy, he has a good ear
       for music and a good voice.)

(d)   – Факты эти вы знаете?
       – Знаю! – отвечал, ядовито усмехаясь, Грохов.
       – Какие же они? – допрашивал доктор.
       – А такие, – продолжал Грохов, – что будто бы найдены в банковском
       портфеле господина Хмурина векселя с фальшивыми подписями от
       людей уже умерших…
       (– Do you know these facts?
       – I know! – replied Grouchov, grinning venomously.
       – What are they like? – questioned the doctor.
       – And such, – continued Groukhov, – as if bills with forged signatures from
       people already dead had been found in Mr Khmurin's bank briefcase…)

This structure has a number of variants in actual discourse; specifically, there are
two varieties. Firstly, the *какой N* used as a predicate element appears in the form
of indirect case:

       – Какого духа он? – спросила бабушка.
       Собеседник княгини поежился, поправил черную перевязь на своем
       больном лице и отвечал: – Слишком возвышенного.
       (– What kind of spirit is he? – Granny asked.
       – The Duchess' interlocutor shuddered, adjusted the black bandage on his sore
       face and replied: Too lofty.)

Secondly, the zero predicate tense is tagged with temporal markers:

       – А какой он был в его второй приезд?
       – Он был удивителен, как будто мы совершенно не расставались.
       (– What was he like on his second visit?
       – He was surprised, as if we hadn't broken up at all.)

4 Limitations of the Q–A unity constructed by *какой*

From the above analysis, we can see that for the first type of *Какой W P?* structure, the following conditions are required for the construction of its Q–A unity:

(a) The presupposition of such an interrogative sentence is that a certain set of objects must exist, called the interrogative object domain by Paducheva (предметная область вопроса, ПОВ);[3]

(b) The denotative status (денотативный статус)[4] of the noun in the answer should be consistent with the denotative status of the noun in the subject position (*W*) in the question.

Thus, in the case of condition (a), if a certain set of objects for that type of interrogative sentence does not exist, or if object selection in a certain set is not possible, then that type of interrogative sentence cannot be used, for example:

*Какой единственный W? (*What is the only W?)
*Какие всякие (некоторые, многие) W? (*What all (some, many) kinds of W?)

As for condition (b), in general terms, it means that the respondent should not use different expressions for the same object or the same expression for different objects when answering, for example:

– Какие книги ты уже прочел?
*– Некоторые (всякие…).
(– What books have you read so far?
*– Some (every …)).

The reason for the failure of this type of Q–A unity is that although it may be uncertain to the questioner about *книги (books)*, it also contains denotative meaning, whereas in terms of the answer, *некоторые (some)*, which denotes existence, and *всякие (every)*, which denotes universality, are noun phrases that do not contain denotative meaning. Thus, expressions with a denotative meaning and expressions without a denotative meaning cannot be put together.

The following example is a better illustration of the situation. The respondent can answer the question *Какое животное самое выносливое (Which animal is the most hardy?)?* with (a) *Наш слон Соня (Our elephant Sonia)*, or with (b) *Ишак*

---

3 Belnap and Steel named it the set of selection (множество выбора) (Belnap and Steel 1976). Hintikka defined it as the set of meanings related to the operator of interrogative variables (множество значений связанной оператором вопроса переменной) (Hintikka 1974).

4 For the denotative status, see Paducheva (1979).

(Ишаки) (The donkey(s)). When answering with (a), the respondent's understanding of *животное (animal)* is specific and referential, and is present in the common background knowledge of both parties. When answering with (b), the respondent understands *животное (animal)* in a non-referential sense and the answer has the referential status of a category attribute. Thus, if the questioner is specific and referential about *животное (animal)*, while the respondent answers with an expression of the category attribute, then it does not constitute a qualified Q–A unity, and vice versa.

In addition, if *W* is not a gerund, the replacement of the interrogative variant needs to be considered in terms of the following three aspects of the *W*:

(1) The domain of compulsory syntactics (зона обязательной синтактики): if *Какой W* refers to a proper name, then the respondent should, in most cases, point out that proper name, e.g.

> – *Какую картину видали?*
> – *"Человек из ресторана". Немое кино.*
> (– *What a picture did you see?*
> – *"The man from the restaurant". A silent movie.)*

The formal-logical representation of such interrogative sentences is *?X < {X|X∈Nom(W)} P(W)>*, in which *Nom (W)* denotes the set of meanings of the variables of the word W in the domain of compulsory syntactics. In some contexts, numerals can also be used as proper names, as they can also specify individuals in a set. However, there are still differences between numerals and proper names. Numerals must be within a finite set in order to have a definite meaning. Furthermore, there are finite sets in which the objects are ordered, such as the houses in the street, and some finite sets in which the objects are disordered, such as the trees in the forest. Thus, whether or not the object set of *W* is structured in some closed set determines whether or not substitution expressions can be made in the response with numerals. For example, we know that floors are ordered and this order is usually expressed with the help of ordinal numerals. In Russia, houses can be marked with compound numerals like 2/3. Thus, when the set of objects of *W* has a closed structured order, the numerals, like the proper names (the names of a person, objects etc.), can be considered as a means of filling the domain of compulsory syntactics.[5]

---

[5] There is a situation in the actual context where the question belongs to this category but is answered in a different way, for example, – *Вам какую квартиру (Which flat do you want?)? – Эту (This one)*. The respondent uses an indicative approach rather than a specific description of an object within the set of selection. In this situation, all syntactic, lexical and encyclopedic information relating to the word *квартира (flat)* is superfluous.

(2)   The domain of lexical functions (зона лексических функций):[6] some *W*s contain several subcategories, and this information is important to the Q–A unity, because the lexical-functional meanings associated with the *W* can be used to answer *какой* interrogative sentences with the formula expressed as *?X <{X|X∈Spec(W)} P(W)>*, for example,

> – *Какие небесные тела вращаются вокруг Солнца?*
> – *Вокруг Солнца вращаются планеты и их спутники.*
> (– *Which celestial bodies orbit the Sun?*
> – *The planets and their satellites revolve around the sun.*)

Some answers may be difficult to distinguish at first glance whether they belong to (1) or (2), for example,

> – *Какая у него машина?*
> – *Волга.*
> (– *What kind of car does he have?*
> – *Volga.*)

It depends whether the answer is considered to indicate the proper name (1) or the category (2). However, it is important to note that the subcategory information does not always coincide with the name of the object, for example: the subcategory of 'celestial bodies' - planets, the proper name – Earth; the category of literary works – novel, title of a work – *The Master and Margarita*.

(3)   The domain of encyclopedic information (зона энциклопедической информации): sometimes the answers are related to the encyclopedic information contained in the *W*. This kind of information may be either general, such as the information for all nouns on size, shape, color, etc., or narrow, only for certain categories of words, such as the material of an object, the character of a person, etc. The formula of asking for encyclopedic information related to *W* can be expressed as $?X <\{X|X \in U^i_j\}\ P(W)>$, in which U^i stands for the encyclopedic information of *W*, and U_j is the set of meanings corresponding to the semantic variables in the domain of encyclopedic information, such as the colors, the size and the materials, etc. For example,

---

6 The domain of lexical functions also applies when *W* is a gerund, for example, – *С каким выступлением вы едете на конференцию (What kind of speech are you going to the conference with)? – С кратким сообщением (With a short message)* (or: *С пленарным докладом (With a plenary address)*).

– Какую же мебель хотите вы в кабинет? – спросила она.
– Я бы желал орехового дерева с синей бархатной покрышкой.
(– What kind of furniture do you want in your study? – she asked.
– I would have wished for a walnut wood with a blue velvet cover.)

For the second type of structure *Какой S ∅ N?*, the conditions for answering it are much less restrictive. When answering interrogative sentences of this type of structure, in many cases, as traditionally understood in lexicography, it is possible to state the qualities, attributes, etc. associated with *S*, for example,

– Ты ведь еще ни разу не говорил мне об этом. Ну, расскажи, расскажи мне, милый, о своей любви! Какая она?
– Она огромная. Она необозримая. Она безбрежная.
(– You've never told me that before. Well, tell me, tell me, darling, about your love! What's it like?
– It's huge. It's vast. It's boundless.)

In some contexts, the above requirements of the domain of compulsory syntactics also apply to this structure, for example,

– Какой это город?
– Ну, Ялта.
(– What city is it?
– Well, Yalta.)

In this situation, undoubtedly, the name of the city takes precedence in the priority of the information when the respondent provides information to the questioner that he or she does not have.

5 Conclusion

The above analysis shows that the traditional lexicographical and grammatical understanding of *какой* and the interrogative sentences constructed with it has certain limitations and does not fully reveal the characteristics of *какой* interrogative sentences. Therefore, we analyze this syntactic phenomenon by including it in the Q–A unity. Based on the above discussion, when answering *какой* interrogative sentences and constructing Q–A unities, we should understand them in terms of argument structures, generic relations, deixis, relevant characteristics, properties, or attributes.

At the same time, the rich semantic content of interrogative sentences constructed with *какой* requires us to avoid analyzing them in two ways: firstly, to formalize them

in a one-sided way and to reduce the mechanism for generating answers to syntactic substitution, which would seriously narrow the category of correct answers, since substitution is based on the repetition of the syntactic structure of the question by the respondent. If the respondent does not repeat the syntactic structure of the question, then the substitution method is useless. Such an analysis would be divorced from the actual Q–A context and would be isolated from the Q–A unity. The second way that we need to avoid is to logicize it by reducing the meaning of the interrogative sentence to a simple answer set, which on the one hand would ignore the features of the question as a speech act; on the other hand, interrogative sentences are semantically richer than answer sets. For example, in some contexts interrogative sentences with different semantic structures can have the same answer set. Therefore, neither of these two approaches can fully reveal the characteristics of *какой* interrogative sentences.

References

Apresyan, Yuri D. 1974. *Лексическая семантика* [Lexical semantics]. Moscow: Nauka.

Belnap, Nuel D. & Thomas B. Steel. 1976. *The logic of questions and answers*. New Haven. London: Yale University Press.

Hintikka, Jaakko. 1974. *Questions about questions. Semantics and philosophy*. New York: New York University Press.

Karaulov, Yuri N. (ed.). 1997. *Русский язык. Энциклопедия* [Russian language. Encyclopedia]. Moscow: Drofa.

Kreidlin, Gregory E. & Ekaterina V. Rakhilina. 1984. Семантический анализ вопросно-ответных структур со словом *какой* [Semantic analysis of Q–A structures with the word *какой*]. *Izvestia, USSR Academy of Sciences, Literature and Language Series* 43(5). 457–470.

Kuznetsov, Sergey A. (ed.). 2000. *Большой толковый словарь русского языка* [The big dictionary of the Russian language]. St. Petersburg: Norint.

Ozhegov, Sergey I. & Natalia Y. Shvedova (eds.). 2006. *Толковый словарь русского языка* [The explanatory dictionary of the Russian language]. Moscow: A TEMP LTD.

Paducheva, Elena V. 1979. Денотативный статус именной группы и его отражение в семантическом представлении предложения [The denotative status of the noun group and its reflection in the semantic representation of the sentence]. *Scientific and Technical Information* 2(9). 25–31.

Paducheva, Elena V. 2004. *Высказывание и его соотнесенность с действительностью* [Speech and its correlation with reality]. Moscow: Nauka.

Rakhilina, Ekaterina V. 1990. *Семантика или синтаксис?* (*К анализу частных вопросов в русском языке*) [Semantics or syntax? (On the analysis of partial questions in Russian)]. München: Sagner.

Shvedova, Natalia Y. (ed.). 2002. *Русский семантический словарь* [Russian Semantic Dictionary]. Moscow: Vinogradov Institute of the Russian language.

USSR Academy of Sciences. 1956. *Словарь современного русского литературного языка. т. V. И-К* [Dictionary of Modern Russian Literary Language. vol. V. И-К]. Moscow: Leningrad.

USSR Academy of Sciences. 1980. *Русская грамматика. т. I, II* [Russian Grammar. vol. I, II]. Moscow: Nauka.

Bionote

Xiaojun Ji
Soochow University, Suzhou, China
jixiaojun@suda.edu.cn

Xiaojun Ji received his PhD in Linguistics from Shanghai International Studies University (2011), and has been a teacher of the Russian department in Soochow University since 2011. His areas of research include syntactics and pragmatics, with a special focus on language materials in Russian.