Architectural Terms in Russian as an Art Form in Relation to Their Origin and Word-Formative Modeling:

Preliminary Observations

Radostina Stoyanova
Institute for Bulgarian Language "Prof. L. Andreychin", Bulgarian Academy of Sciences
Shipchenski Prohod Blvd., Block 17
Sofia, Bulgaria 1113
E-mail: r.stoyanova@ibl.bas.bg

Abstract—This article presents some preliminary observations on the origin and word-formative modeling of the Russian architectural term system. The phenomenon of borrowing as a way to replenish the composition of this term system is considered. The description of the structural design of technical terms is given.

Keywords—technical term; terminological system; nomination; architecture; borrowing

I. INTRODUCTION

Architecture is one of the oldest forms of art, the purpose of which is a design and construction of buildings necessary for life and work of people.

Architecture can be considered from different aspects – both from the point of view of the creation of an architect-artist and from a utilitarian point of view of engineering structures created by an architect-engineer.

Architectural monuments reflect the history of human society at all stages of its development. Thus, the architectural term system reflects one of the earliest areas of knowledge that makes up an integral part of human civilization.

The sources of the study were Russian-language dictionaries and textbooks [1], [2], etc.

II. TERMINOLOGICAL NOMINATION IN RUSSIAN ARCHITECTURAL TERM SYSTEM

The study and description of the laws of the formation of individual terminological systems, their structure and semantics is one of the essential tasks in modern science of language.

Scientific terminology is an extensive and rapidly developing layer of lexis, which is actively interacting with other layers of language, and above all – with the common-literary lexicon.

According to A. Superanskaya, N. Podolskaya, and N. Vasilyeva, "Within the special areas of knowledge, there is a continuous replenishment and update of the vocabulary, that develops much faster than a common parlance which does not have such an urgent need for the forced development of lexis"[3].

Nomination (from the Latin. nominatio – a name) is understood as the formation of linguistic units with nominative function, serving to name and isolate fragments of non-linguistic reality and the formation of corresponding concepts about them in a form of the meaningful linguistic units - words, combinations of words, phraseological locutions and sentences.

The term "nomination" is used by researchers both to designate the very process of labeling objects with the help of words and phrases and to denote outcomes of this process - specific language units.

The theory of terminological nomination is still not sufficiently developed in linguistics. The collective monograph "Yazykovaya nominatsiya (obschiye voprosy)" ("Language Nomination (General Questions)"") (Moscow, 1977), edited by B. Serebrennikov and A. Ufimtseva [4] discusses the features of the nomination and its units on each of the significant levels of language: types and kinds of lexical nomination, processes of derivational nomination etc. In the monograph "Teoriya na terminologichnata nominatsiya" (Sofia, 1990) ("Theory of Terminological Nomination") M. Popova makes a serious onomasiological and semasiological analysis of the terminological units in Bulgarian language [5]. Similarly, on the basis of Bulgarian language, K. Simeonova considers the terminological nomination in the modern Bulgarian political terminology [6]. Certain questions are addressed in the framework of general terminological works that systematize the main provisions related to the study and description of terms in Russian language [3], [7].

Besides nouns; adjectives, verbs, and adverbs can all be used as technical terms as well, however, their nominative
capacity is much lower. A. Superanskaya, N. Podolskaya, and N. Vasilyeva emphasize that "It is necessary to distinguish between verbs, adjectives, adverbs as a part of a special text and the forms of terms that can be included into a dictionary" [3]108. It is characteristic of terminology for "any" terminological "part of speech to be able to be transposed into a noun, nominativity of which is maximal" [3]108.

According to V. Danilenko, "Everything new in the nomination, whether it is the "technical capabilities" of a national language or of a foreign origin, is manifested primarily through the professional language, special vocabulary of which requires constant replenishment, and therefore, constant search for ways and means of nomination "[8]17.

Every standard language has its own peculiarities and tendencies in the process of term formation. The preference given to one or another way of nomination is not accidental or random.

The methods of nomination include all language techniques, which allows languages to produce naming units, in particular, they include word formation, calquing, borrowing, change of meaning, abbreviation, elliptization, etc. [9]105-109.

To form and replenish individual term systems, specifically architectural term systems, it is typical to intensively use already existent lexicosemantic reserves, as well as to search for other methods of nomination.

In Russian architectural term system there are terms that are taken directly from Russian, including (ба́бá [baba], ба́дешька [babyoshka], ба́дый кут [babiy kut], ба́бка [babka], бё́гунец [begunets], борода [borozda], бороздина [borozdina], ве́рейка [vereyka] = ве́ра [verea], воро́ба [voroba], воро́нец [voronets], воро́нцы [vorontsy], воро́та [vorota], воро́тки [vorotnki], зоде́ц [zodets], межа́ [mezha], перетя́жка [peretyazhka], хи́зык [khizyk], хо́лодник [holodnik], хо́лодница [holodnitsa] [2] и др.), as well as terms that are borrowed at different time periods from different languages.

Borrowing as a way of enriching the lexicon is widely used in the replenishment of the terminological corpus of architecture, too.

III. BORROWING AS A WAY OF ENRICHING THE ARCHITECTURAL TERM SYSTEM

The issue of language borrowing has been mainstreamed in recent decades in relation to the research of various aspects of contact and interaction among different languages.

Borrowing represents a universal linguistic phenomenon, that is defined as the adoption by one language of linguistic material from another language as a result of extra-linguistic contact between them. Let us give some definitions of the discussed concepts:

"Borrowing is an element of a foreign language (word, morpheme, syntactic construction, etc.) that is transferred from one language to another as a result of language contact, as well as the process of transition of elements of one language into another" [10: 158].

G. Mounin defines borrowing as "integration into one language of an element from the foreign language" [11]24. J.-F. Phélizon adheres to a similar interpretation that considers borrowing as a "process by which one language obtains linguistic units from another language" [12]5. E. Marinova expresses a similar point of view, considering borrowing (borrowing, loan, linguistic borrowing) as "the process by which units of one language system are accepted and assimilated by another" [13]7.

In terminology, "borrowing is considered as one of the ways to create terms in which lexical units are transferred from one natural language or language of special purposes into another natural language or language of special purposes" [14]41.

In the architectural term system, the borrowed terms occupy a significant place, reflecting the main stages, directions, and specifics of the formation of the conceptual system of the particular sphere in a language form.

A. GRECO-LATIN BORROWINGS IN THE ARCHITECTURAL TERM SYSTEM

Greco-Latin borrowings are lexemes that are composed of Greco-Latin morphemes. Greco-Latin morphemes have a great potential to designate international concepts. That is why they represent the basic source for the replenishment of individual term systems in various standard languages of the world.

A list of examples of Greco-Latin borrowings will be illustrated by terminological names according to the textbook by M. Ananin "Architecture of Buildings and Building Structures: Terms and Definitions" (Moscow - Ekaterinburg, 2018) [1]:

атти́к [attik] (lat. attikos);
ба́зилика [bazilika] (grk. basilikon, lat. basilica);
бестиа́рий [bestiariy] (lat. bestia);
ве́стибу́л [vestibul] (lat. vestibulum);
имбре́кс (имбри́ес) [imbreks (imbritses)] (lat. pl. imbrices from imbrex);
имплю́вий [implyuviy] (lat. impluvium);
ко́лонна [kolonna] (lat. columna; fr. colonne);
комплю́вий [komplyuviy] (lat. compluvium from compluere – 'flow together');
пило́н [pilon] (grk. pilon);
порти́к [portik] (lat. porticus);
стерео́бат [stereobat] (lat. stereobate old-grk. stereobates from stereo – ‘hard’, ‘tough’);
стило́бат [stilobat] (grk. stilobates);
урбс [urbs] (lat. urbs).
Some terms with Greco-Latin morphemes entered Russian language through an interlingua [1]:

внедрик [viaduk] (fr. viaduc from lat. via ‘way’, ‘road’);

внитраж [vitrazh] (fr. vitrage from lat. vitrum + duco ‘leading’);

декор [dekor] (fr. decor from lat. decoro);

интерьер [inter'yer] (fr. interieur from lat. interior);

карниз [karniz] (ger. Karnies from grk. koronis);

классицизм [klassitsizm] (fr. classicism, ger. Klassizismus from lat. classicus);

фронтон [fronton] (fr. fronton from lat. frons, frontis).

Discussing the source of borrowing, especially in cases where well-known terms are found in different languages, it is not always possible to accurately indicate the direct source of borrowing. Such terms require careful analysis of specialized literature on architecture. For example: газерия (fr. galerie from ital. galleria), грам (fr. grotte, ital. grotta).

The following terms have an international character and represent basic terminology for the nomination of the architectural concepts. They are quite firmly rooted in the word-formative system of the Russian language.

B. Borrowings from German, French, Italian and English in the Architectural Term System

Borrowings from German, French, Italian and English in the architectural term system can be illustrated by the following terms [1]:

- Borrowings from German:
  
  гурт [gurt] (ger. Gurt);
  
  аркатурра [arkatura] (ger. Arkatur);
  
  бург [burg] (ger. Burg);
  
  вальма [val'ma] (ger. Walm);
  
  вимперг [vimperg] (ger. Vimperg);
  
  гардина [gardina] (ger. Gardine);
  
  гурт [gurt] (ger. Gurt);
  
  кафель [kafel'] (ger. Kachel);
  
  мауэрлат [mauerlat] (ger. Mauerlatte);
  
  филенка [filyonka] (ger. Füllung);
  
  филенель [fligel'] (ger. Flügel).

- Borrowings from French:
  
  бельэтаж [bel'etazh] (fr. bel + étage);
  
  вестибуль [vestibul'] (fr. vestibule);
  
  газон [gazon] (fr. gazon);
  
  дебаркадер [debarkader] (fr. debarcadere from debarquer);
  
  донжон [donzhon] (fr. donjon);

- Borrowings from Italian:
  
  барокко [barokko] (ital. barocco);
  
  бельведер [bel'veder] (ital. bel vedere);
  
  граффити [graffiti] (ital. graffito, pl. graffiti, from graffiare);

- Безистени [bezisteni].

C. Borrowings from Other Languages in the Architectural Term System

Borrowings from other languages in the architectural term system will be illustrated with some examples from N. Sogoyan’s dictionary "Illustrated Dictionary of Architectural Terms and Concepts" (Moscow, 2017) [2]:

- Borrowings from Albanian:
  
  мористан [moristan];
  
  худжра [khudzhra].

- Borrowings from Afghan:
  
  балхи [balkhi];
  
  баранда [baranda];
  
  бирун [birun].

- Borrowings from Bulgarian:
  
  бухрия [bukhriya];
  
  пейка [peyka].

- Borrowings from Breton:
  
  долымен [dol'men] (Breton. tol 'table’ + men ‘stone’).

- Borrowings from Hungarian:
  
  хинши [khiishi].

- Borrowings from Dutch:
  
  дамба [damba];
домкрат [domkrat] (Dutch – dommekracht).
- Borrowings from Spanish:
artesonado [artesonado].
- Borrowings from Chinese:
daoguan (guan) [daoguan (guan)];
lan [lan];
мяо [myao].
- Borrowings from Mongolian:
bumba [bumba];
bухран [bukhran];
daцан [datsan].
- Borrowings from Persian:
айадана [ayadana];
arк [ark];
баг [bag];
бедгир [bedgir];
варпет [varpet];
едрик [yedrik];
tшемаран (чемаран) [tshemaran (chemaran)];
хачкар [khachkar].
- Borrowings from Azerish:
bенна [benna];
mухандис [mukhandis] = устад [ustad];
орюкдас [oryukdash].
- Borrowings from Armenian:
azаращен [azarashen];
анэтун [atsatun];
багаран [bagaran];
биакел [biakel];
варжаран [varzharan];
букс [buke];
ёсэги [yosegi];
нэцкэ [netske];
ханива [khaniva];
хиранива [khiraniva].
- Borrowings from Old German:
dанскер [dansker] (old-ger. Dansker, Danzker).
- Borrowings of Turkic origins:
айл [ail].
- Borrowings of Central Asian origins:
айванчи [ayvanchi];
бантка [bantika];
бодгир [bodgir].
Quite a large number of architectural terms entered Russian language from the languages of different nationalities of the former Soviet Union. Here are some examples [2]:
- Borrowings from Azerish:
бенна [benna];
mухандис [mukhandis] = устад [ustad];
орюкдас [oryukdash].
- Borrowings from Armenian:
azаращен [azarashen];
анэтун [atsatun];
багаран [bagaran];
биакел [biakel];
варжаран [varzharan];
варпет [varpet];
едрик [yedrik];
tшемаран (чемаран) [tshemaran (chemaran)];
хачкар [khachkar].
- Borrowings from Bashkir:
аш-уй [ash-uy];
аш-як [ash-yak];
бурама [burama].
- Borrowings from Belorussian:
азяроды [azyarody];
бугуны [beguny];
замет [zamet].
- Borrowings from Georgian:
аджилаки [adzhilaki];
баниани сахли [baniani sakhli];
dаванеба [davaneba] (georg.) = биакел [biakel] (arm.);
дарбази [darbazi];
хелечно [khelecho];
хис-палангеби [khis-palangebi];
хит-хуро [khit-khuro].
Borrowings from Kyrgyz:
darvaza [darvaza];
duval [duval].
Borrowings from Ossetian:
nyxhas [nyxhas].
Borrowings from Lithuanian:
numas [numas].
Borrowings from Tajik:
bang [bang];
boasha [boasha];
dandona [dandona];
darvazahona [darvazakhona;]
dakh [dakh];
mechmonkhona [mekhmonkhona];
xona [xona].
Borrowings from Uzbek:
dauri-pay [dauri-pay];
ilemi [ilemi].
Borrowings from Ukrainian:
babynets (babynets') [babinets (babynets')];
bodnytsya [bodnytsya];
bonii [bonii];
dranitsa [dranitsa];
dakh [dakh];
platva [platva];
xlizers [xlizers].
Borrowings from Chuvash:
irzan [irzan];
niokrep [niokrep].
Borrowings from Eskimo:
val'kar [val'kar];
iglu [iglu];
niyulu [niyulu].
Borrowings from Yakut:
bararna [bararna].

IV. STRUCTURAL DESIGN OF ARCHITECTURAL TERMS IN RUSSIAN LANGUAGE

Structural design of the terms is differentiated depending on the quantity and nature of root morphemes, as well as the presence of word-formative affixes.

The word-formative structure of the architectural terms in the synchronic aspect should be considered according to the following types: simple (primary), derivative (affixal), complex (compound) lexemes and collocations.

A. Simple Terms

Simple (primary) terms are words that are not derived from any other single-rooted word that exists in a language, i.e.: these are primitive words. Here are some examples: блок [blok], болт [bolt], брус [brus], город [gorod], цитт [tsipp].

B. Derived Terms

Derived term is a specific unit of word-formative system. The meaning of the new term is derived from the meanings of its components: the stems and derivational affixes.

Affixation, or the processes of attaching affixes to the roots or stems, is one of the most productive ways of word formation.

Prefixes and suffixes represent subordinate lexical morphemes that do not correspond with the stems of independently functioning lexical items in the language (prefixes precede the derivational stem, suffixes follow it).

Derivative terms in the corpus of our research are represented by terms-nouns (городище [gorodishche] and terms-adjjectives (карниза плата [karinznaya plita], карнизицый цитт [karinziyi shchit]).

Foreign architectural terms are characterized by high word-formation activity. New terms are also created on their basis: аэросолярий [aerosolyariy], аэротенк [aerotenk].

In a word-formation process of terms-nouns and terms-adjjectives that are formed in the prefixal-suffixal way in the Russian architectural term system, different prefixes and semi-prefixes are used (international and standard language prefixes). Here are some examples:

анти- [anti-]:
antiseysmicheskii pojus [antiseysmicheskii pojus];
antiseysmicheskii shov [antiseysmicheskii shov].
без-/бес- [bez-/bes-]:
bezgvozdevaa (samcvaya) kryshka [bezgvozdevaya (samcvovaya) kryshka];
b ezstakadnyy sposob [bezstakadnyy sposob];
b ezhovaa kamera [bezkhovaya kamera];
b espredmetnoe iskusstvo [bespredmetnoye iskusstvo ];
de- [de-]:
deaeratsiya [deaeratsiya] (lat. de-, обозначающее отделение, удаление + grk. – воздух);
deformativnost' [deformativnost' ];
deformatsionnyy shov [deformatsionnyy shov];
deformatsiya [deformatsiya].
de- [re-]:
реестрация [rekonstruktziya];
реестрация озеленения [rekonstruktziya ozeleneniya];
реестрация промпредприятий [rekonstruktziya prompredpriyatiy];
реестрация старинных парков [rekonstruktziya starinnikh parkov];
реестрация центра-города [rekonstruktziya tsentra-goroda];
реставрация ландшафта [reku'litivatsiya landshafta ];
реставрация [restavratsiya].

C. Compound Terms

The productive ways of terminological nomination include the creation and use of complex terms.

Complex terms are terms that designate combination of two or more stems that coincide with the forms given in dictionaries.

Complex terms are formed mainly by stem composition. In such terms, lexical elements can be connected by means of a connective morpheme (газобетон [gazobeton], дым(о)волок [dym(о)volok], дымоотвод [dymootvod], пылестенок [pyatistenok], хвостохранилище [khvostokhranilische], циркорама [tsirkorama]) or with a hyphen (мастер-кузнец [master-kuznets]).

In Russian architectural term system there are also compound terms which include two borrowed components: апартамент-отель [apartment-otel'];
фор-эскиз [for-eskiz] (ital.);
шишаган-сахли [shinagani-sakhli] (georg.) = шуа- сахли [shua-sakhli] (georg.);
шиси-одоши [shishi-odooshi] (jap.).

Complex terms in our corpus are represented by terms-nouns and terms-adjecitives:
железо-асфальт [zhelezo-asfal't];
голец-цемент [gol'ets-tsement];
дом-двор [dom-dvor];
мост-труба [most-truba];
храм-гора [krham-gora];
мастер-кузнец [master-kuznets];
архитектурно-строительная бионика [arkhitekteurno-stroitel'naya bionika];
архитектурно-художественные требования [arkhitekteurno-khudozhestvennye trebovaniya];
апт-перистильный дом [aptriumno-peristi'nyy dom ];
вечномёрзкий грунт [vechnomoryzlyy grunt];
жилищно-гражданское строительство [zhilishchno-grazhdanskoye stroitel'stvo];
легчено-лифтовой узел [lestchnico-liftovoy uzel];
фронтально-плохоостстная композиция [frontal'noploskostnaya kompozitsiya];
фронтально-пространственная композиция [frontal'noprostranstvennaya kompozitsiya];
одноквартирный дом [odnokvartirnyy dom].

There are examples of "lexicalized phrases" [15: 54] (место жительства [mesto zhitel'stva] – местожительство [mestozhitel'stvo]) and abridgements [15]55 (гидропарк [gidropark], гидропроект [gidroprojekt], гидрофобизация [gidrofobizatsiya]).

D. Terms Collocations

Syntagmatic nomination rep. naming by collocations also takes place when nominating architectural terms.

The syntactic method of forming a nomination is a fairly productive mean of replenishing terminological lexicon.

Depending on the number of components of the terminological collocations in the architectural term system, they can be divided into two - and multicomponent.

- Two-component terms

Two-component terminological combinations are such terms one part of which is common with other terms, and the other part is its distinctive characteristic in a number of related concepts. Such a model consists of a determinant and a term:
воловчатый потолок [volovchatyy potolok];
жилой район [zhiloy rayon];
зона комфорта [zona komforta];
легчено-клетка [lestchnichnaya kletka];
легческий марш [lestchnichny marsh];
ложный свод [lozhnyy svod];
микроклимат помещения [mikroklimat pomeshcheniya];
буронабивная свая [buronabivnaya svaya];
висячая свая [visyachaya svaya];
набивная свая [nabivnaya svaya];
шпунтовая свая [shpuntovaya svaya];
фрагментарная реставрация [fragmentarnaya restavratsiya];
фронтонный поя [frontonnyy poyas].

- Multicomponent terms

Multicomponent terms in our article are found in the form of three-component, four-component and five-
component terminological combinations. Here are some examples:

Three-component terms:

архитектурно-строительный контроль и надзор [arkhitektur'no-stroitel'nuyu kontrol' i nadzor];
гидкое внутреннее пространство [gibkoye vnutrennee prostranstvo];
гидкость внутреннего пространства [gibkost' vnutrennego prostranstva];
 zona археологического слоя [zona arkheologicheskogo sloya];
 zona охраняемого ландшафта [zona okhranayemogo landshafta];
 zona регулирования застройки [zona regulirovaniya zastroyki];
 зонирование городской территории [zonirovaniye gorodskoy territorii];
 функциональная организация территории [funktsional'naya organizatsiya territorii];
 шумозащитные жилые дома [shumozashchishchyonnye zhilye doma].

Four-component terms:

восстановительная стоимость основных фондов [vosstanovitel'naya stoimost'osnovnykh fondov];
 единая система конструкторской документации (ЕСКД) [yedinaya sistema konstruktorskoy dokumentatsii (YESKD)];
 модульная координация размеров в строительстве (МКРС) [modul'naya koordinatsiya razmerov v stroitel'stve (MKRS)];
 система обеспечения пожарной безопасности [sistema obespecheniya pozhar'noy bezopasnosti];
 система проектной документации для строительства (СПДС) [sistema proeyktnoy dokumentatsii dlya stroitel'stva (SPDS)];
 уровень ответственности зодчий и сооружений [uroven' otvetstvennosti zdaniy i sooruzheniy].

Five-component terms:

встроенные, встроенно-пристроенные и пристроенные учреждения и предприятия [vstroennye, vstroennoye-pristroyennye i pristroynoye uchrezhdeniya i predpriyatiya];
 физиономический принцип композиции растительного материала [fizionomicheskiy printsip kompozitsii rastitel'nogo materiala].

Six-component terms:

единная система модульной координации размеров в строительстве (ЕСМК) [yedinaya sistema modul'noy koordinatsii razmerov v stroitel'stve (YESMK)].

As the abovementioned examples show, abbreviations are also found in the architectural term system.

Multicomponent terminological collocations in the architectural term system are the result of the nomination of a complex conceptual apparatus of this field of knowledge.

In multicomponent linguistic units, the expression of new aspects of a concept is realized, united by elements of similarity as well as by elements of difference. Compare:

Требования технической целесообразности [trebovaniya tekhnicheskoy tsel'esoobraznosti];
Требования функциональной целесообразности [trebovaniya funktsional'noy tsel'esoobraznosti];
Требования экономической целесообразности [trebovaniya ekonomicheskoy tsel'esoobraznosti].

V. CONCLUSION

The architectural term system is a complex, complicated systematic formation. On the one hand it obeys patterns that are common to term systems, and on the other, it has a number of unique features; an abundance of borrowed from various languages terms, first of all from Greek and Latin; the productivity of affixation and stem composition in word formation of terms, the presence of multicomponent terms, etc.

Examples of Greco-Latin origin indicate a presence of a basic layer of international vocabulary in Russian language.

A significant number of borrowed terminological units in Russian architectural term system testifies to the active process of term creation and promotes internationalization of terminology in general.

Observations of the language material in this work can be used for further study of the architectural term system – to identify its semantic, structural and functional features, to establish both terminological universals and intra-linguistic specificity.

REFERENCES


