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A DEEP INDEX OF
DERIVATIONAL MORPHOLOGY

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PREFACE

The present Memorandum brings together two tasks being performed at RAND. A derivational dictionary of Russian is being constructed as the basis for a series of studies of affixation, deep-structure morphophonemics, etc. To facilitate access to the extant literature in the field, a deep index is being prepared with the assistance of the "Catalog" system.[*]

The present Memorandum, which is concerned with classification and condensation of information dealing with substantive problems of Russian morphology, will be of interest principally to students of the language, including those in the Air Force who are using or developing systems for automatic processing of the language.

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[*]Martin Kay and Theodore Ziehe, The Catalog: A Flexible Data Structure for Magnetic Tape, The RAND Corporation, RM-4645-PR, October 1965.

SUMMARY

This Memorandum describes a projected "Deep Index" to the extant literature on Russian derivational morphology. The Memorandum describes the type of literature being abstracted, the classification of information into discrete categories for retrieval, the steps taken to prepare data for conversion to machine format, and the transliteration and abbreviation conventions used in the Index. An example of Russian scholarly text is appended, together with the format in which this text appears after processing.

ACKNOWLEDGMENTS

A DEEP INDEX OF DERIVATIONAL MORPHOLOGY

1. INTRODUCTION

In what follows we describe a project, called Deep Index, established to gather, file, and retrieve a large quantity of information concerning the derivational morphology of Russian. This work is part of a larger, ongoing study of the morphological structure of Russian, during which some 110,000 Russian words have been put on magnetic tape, segmented into their component morphemes, and organized into derivational families or wordnests.* The unusual size of the corpus available for analysis, together with the possibility of utilizing sophisticated computational techniques in this analysis, holds out the prospect of novel and interesting scientific conclusions. Such conclusions, however, must be matched against the substantial body of fact and opinion that has accumulated during many decades of more traditional study. The sterile rediscovery of known facts can be avoided only by thorough control of the relevant literature; the Deep Index project has been established to provide such control.

The first months of the Deep Index project were spent in devising and improving the format in which information from the literature was to be abstracted and filed, and with determining the optimal procedures for transferring abstracted

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*The 110,000-word derivational dictionary ("Word-Family Glossary"), prepared by D. S. Worth and A. S. Kozak, is described in more detail in a forthcoming RAND Memorandum. The dictionary itself will be ready for publication in early 1967.

material in English abbreviations onto magnetic tape. These
preliminary tasks, which will be described in more detail
below, have now been completed; during the next stage of
the project, the principal effort expended will be to abstract
and put into machine format as much relevant information as
possible. As the file of data grows, it will become possible
to ask for retrieval of increasingly valuable collocations
of information.

2. LITERATURE TO BE PROCESSED

The literature that has been, is being, and will be
abstracted and fed into the Deep Index deals primarily with
the derivational morphology of contemporary standard Russian
(CSR), with priority given to more recent works and to those
that utilize at least some of the attainments of structural
linguistics. Since, however, the morphophonemic processes
of the CSR derivational system (in particular, the phono-
logical alternations occasioned by the concatenation of
stems and affixes) are the result of phonetic changes that
reach back into the distant past, one cannot neglect en-
tirely the considerable literature dealing with the history
of derivational patterns, with increases or decreases in
productivity, and with the origin and development of in-
dividual affixes. Within the limits imposed by time, avail-
ability of competent staff, facilities (machine time, etc.)

and the availability of the literature itself, the Deep
Index project will attempt to abstract and to add to the
data file the bulk of the current literature on the topic,
and at the same time, but with lesser intensity, to extend
its coverage both temporally and in subject matter--that is,
to include in the file at least a portion of the enormous
bulk of extant literature from provincial universities in
the Soviet Union, from the scholars of preceding generations,
or from literature dealing with problems whose relevance to
the derivational morphology of CSR is tangential rather than
direct (e.g., comparisons between Russian and other Slavic
languages, the influence of productive derivational patterns
in nineteenth-century French on those of Russian at that
time, etc.). A tempting prospect for the more distant
future would be to expand the project to cover the deri-
vational morphology of all Slavic languages in all their
synchronic and diachronic variety. For the moment, however,
we are concerned primarily with providing a reliable re-
search facility for investigators of derivation in CSR
itself.

3. TYPOLOGY OF INFORMATION

The information that is extracted from literature being
processed deals with both items and processes. The primary
orientation, both in abstracting and in retrieving, is toward
affixes, partially because the overwhelming bulk of derivational

procedures involves specific affixes (although affixation
by no means exhausts the subject of derivation), and partially
because affixes provide more economical and less ambiguous
items of information for storage and retrieval than do state-
ments dealing with processes ("truncation", "palatalization",
"interfixation", "inclusion", etc.). While we agree com-
pletely with Stankiewicz that the derivational system of a
language must be treated in terms of its structural relations,
that is, indeed as a system,* we consider it essential
that this system be described in terms of items and their
frequency, and of processes and their productivity, with
both items and processes described explicitly and precisely.

Most but not all of the items of information abstracted
fall into a standard pattern. This includes an identifi-
cation of the specific affix under discussion, the stem type
or types (noun or verb stem, toponym, etc.) to which the
given affix can be added, the type of morphophonemic change
occasioned by the affixation (palatalization, truncation,
etc.), the meaning class of the resultant word, the gram-
matical features of the resultant word (feminine noun,
perfective verb, etc.), such historical information as may
be provided, and one or more examples of the given type of
derivation. In general, we have tried to devise a system

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* Stankiewicz, E., "The Interdependence of Paradigmatic
and Derivational Patterns," Word, Vol. 18, 1962, p. 3.

as flexible as possible, feeling that future experience
may well lead us to include different categories of infor-
mation into the file, and to search for combinations of
item information and process information within fixed para-
meters (e.g. -- a purely hypothetical example, which could
become real only when a much larger data file is available
-- it might be convenient to retrieve such collocations of
information items as "feminine substantives in -k(a) in-
volving stem truncation and forming toponyms in North Great
Russian dialects"). While we would not anticipate any
major changes in the format of the Deep Index itself, the
number and type of search categories (i.e., the information
items specifically classified and retrievable as members of
the specified class) have been left open for such future
additions as may prove desirable.

Let us examine the abstracting process in more detail.
When relevant information is encountered in text, it is
classified according to the affix being discussed. Page
number in text is stated, the affix is listed, and the
information pertaining to this affix is placed in abbrevi-
ated form in a specific format (see below) after the affix.
In cases where the information being recorded deals with
more than one affix, it is repeated for each individual
affix; this extra task in preparing the information for
filing is repaid in ease of retrieval. The information

thus provided for each affix is broken down into one or
more of the following categories (given with their abbrevi-
ations):

Affxd = Affixed. This category describes the morpho-
tactics of the affix, i.e., with which stem
types the given affix appears. E.g.: epen-
thetic hs is added to indeclinable noun
stems before further affixes are added
(kino ⟶ kino-hs-nyj, kino-hs-ka).*

Forms = Information in this category describes the
product of the given derivation, the result
of the particular affixation procedure de-
scribed, e.g., -k(a) forms feminine (occa-
sionally animate) nouns from adjective +
noun combinations (texnihceskaha sluhza-
hhaha ⟶ texnihcka).

Prod = Productivity--whether (and if so, to what
degree) an affix is used to form new words
in CSR.

Dist = Distribution. This category contains in-
formation concerning the morphophonemics
of the affix, i.e., the distribution of
allomorphs of an affixal morpheme in terms
of the stem types with which each can occur.

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*For the transliteration system used in this paper,
see Sec. 5.

E.g. the affix -hcanin occurs in the form
-hcanin after stems not ending in hc or
a consonant alternating with hc; the form
-anin occurs with such stems as Tambov
tambovhcanin; Kuzneck → kuznehcanin.

Chng = Change. This category contains information
concerning the morphophonemics of the stem
(cf. "Dist" above), i.e., the stem alternations
occurring in the presence of a given affix.
E.g., adjective stems in -telqn- lose this seg-
ment and add -1- before the -k(a) that forms
feminine nouns from adjective + noun combi-
nations (zahzigatelqnaha bomba → zahzigalka).

Mn = Meaning (of the affix, of the derived stem, or
of the stem to which the affix is added). E.g.,
the meaning of English common-gender nouns
formed with the suffix -tor is 'noun of agent'
or 'implement' (operator).

Stl = Style (of the affix or of the derived stem).
E.g., derivatives in -k(a) from adjective +
noun combinations are colloquial in style
(Vehcernhaha Moskva → vehcerka).

Hist = Historical information concerning the given
affix or ι process connected with it.

Rel = Relation of the given affix to other affixes
(whether it is homonymous, synonymous, etc.).
E.g., the affixes -lqn(yj) and -telqn(yj) are
synonymous in relative adjectives (promyvalq-
nyj, promyvatelqnyj).

Epen = Epenthetica or "interfixes" (empty morphs,
Verbindungsmorphemen). This is not a cate-
gory of information, but a class of items,
the morphemic status of which is so unusual
that it was felt appropriate to identify it
specifically for ease in retrieval. E.g.,
the hs in kinohska, the j in hsossejnyj, the
v in hemgeuvskij from MGU, etc.

X = Example (of an affix, process, etc.). This
marker is ordinarily followed by a represent-
ative example of the affix or process being
described, in transliteration from the Cy-
rillic alphabet. Not all examples given in
the original text are transcribed into the
data file. (This category is discussed
further below, pp. 9-10.)

Misc = Miscellany. This category includes informa-
tion that does not fit unambiguously into
any of the above categories, but that may
later be subdivided into additional specific
categories, and for which appropriate labels

will become evident only after larger quanti-
ties of text are processed. I.e., this cate-
gory is a means of getting data into the file
without at this time making a firm commitment
as to their classification; it is one way of
building flexibility into the system.

The information contained in each of these categories
forms a discrete unit, marked in the file by the fact that
the categorial heading begins with a capital letter and
that the category ends with a period. Every item of in-
formation that is appropriately classified under one of
these categories must be labeled by the appropriate abbre-
viation.

Information in the data file will thus be in the form
of paragraphs, each headed by a transliteration of the
affix to which the information in the paragraph pertains,
and each containing a number of categories of information
(cf. above) any or all of which can be specified in the re-
trieval process. Complete bibliographical information con-
cerning the document from which the information was abstracted
is filed and will be retrieved automatically together
with whatever information is asked for from the file.

In certain, undoubtedly infrequent cases, an item of
information may be appropriately classified in more than
one category. In such cases, the information will be filed

in the form of a single sentence, which will contain all the
appropriate category abbreviations. During the retrieval
process, this sentence will be printed out for one or all of
the category headings, according to which type of information
is requested. The most common example of this is the cate-
gory "X", or "example". It is used as an independent cate-
gory only where the given derivation is rare or otherwise
unusual; however, examples are also given (and called "X")
as part of another category-sentence to elucidate the ma-
terial contained in the category.

Thus if examples of a given affix are desired, they
will be printed out whether "X" is contained under another
heading or is independent. Should "X" not be independent
the whole sentence in which "X" is contained will be printed
out, i.e., the whole category will be printed out. Like-
wise, a call to print a heading that includes examples
will include "X".

4. TECHNICAL DETAILS

The process of abstracting must of course proceed ac-
cording to a fixed format and with fixed symbolic conventions.
The abstractor must read through the article or book chapter
completely before beginning to abstract the information con-
tained therein (this for the obvious reason that the value
of the entire Deep Index hinges on the intelligent classi-
fication of information by linguistically sophisticated ab-
stractors who understand thoroughly the material with which

they are dealing). During the second reading, whenever an
item of information is encountered that should be entered
in the data file (e.g., whenever some suffix is described
in terms of meaning, stems it can be added to, etc.), the
abstractors perform the following:

(1) The page reference is recorded. Since the article
or book title is given before any material is abstracted,
this makes it possible to print out complete bibliogoaphical
information for any items retrieved.

(2) The affix is transliterated in square brackets.
All allomorphs of the affix that are given in the source
are copied out, e.g. [-sk(ij)/-ovsk(ij)]. Square brackets
are used throughout the Index to provide an unambiguous signal
on tape indicating the beginning and end of every Cyrillic
sequence; the purpose of this signal is to make it possible
to print automatically from tape in both the Cyrillic and
Latin alphabets. (There are other methods of providing such
signals, but we have used brackets for convenience--they
appear on the preliminary typed copy and are easy to proof-
read.)

(3) All information in the source relevant to the
given affix is then entered in a single paragraph to the
right of the affix. This information must be in the form
of discrete sentences, classified into the categories dis-
cussed in Sec. 3. These paragraphs are of course
the heart of the project; the value of the Index depends

on the accurate interpretation and classification of the at
times diffuse and contradictory statements in the sources,
and these data must be filed in a fixed format to make it
possible to retrieve all instances of identically classified
information. Ideally, the Deep Index project would require
an elaborate taxonomy of knowledge, and one on which all
authors and all abstractors were in perfect agreement; there
would exist no vague statements, no terminological misunder-
standings, etc. The Deep Index project is predicated upon
the assumption not that such an ideal situation exists, but
that it is important to try to move in that direction.

When an article or book chapter has been completely
abstracted as outlined above, the material is typed
on a Dura Mach-10 typewriter, which provides typed copy
for proof-reading while simultaneously transcribing this
copy in coded form onto punched paper tape, thus facili-
tating both corrections in the copy (after proof-reading)
and the transcription of this copy onto magnetic tape for
storage in the data file. The data are transferred and
stored in the Kay-Ziehe "Catalog" format.* Since the
procedures and problems of searching and print-out are not
unique to this project, there is no need to discuss them
here.

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*Kay, Martin, and Theodore Ziehe, The Catalog: A Flexible
Data Structure for Magnetic Tape, The RAND Corporation,
RM-4645-PR, October 1965.

Two technical problems that had to be solved were that
of transliteration from the Cyrillic into the Latin alphabet,
and that of devising an appropriate set of abbreviations
to render the material being transcribed and filed less
bulky than if filed in unabbreviated English.

5. TRANSLITERATION

Thanks to a convenient coincidence, an ingenious sys-
tem of transliteration into and out of the Cyrillic alpha-
bet was proposed by R. Jakobson[*] just as the Deep Index
project was getting under way. Jakobson's proposals were
intended to facilitate telegraphic communication in Cyrillic,
but have proved extremely useful for the present project as
well. The transliteration system makes use of all twenty-
six letters of the Latin alphabet. Two of these are used
for Cyrillic letters having no natural correspondents in
Latin: q = ь and w = ъ. The only "diacritic" used in the
Jakobson system is the Latin h, which has no natural corres-
pondent in Cyrillic and is usually unused in transliteration
(except for digraphs like kh = Cyrillic x in the Library of
Congress system). Latin h in Jakobson's system serves as a
parameter shifter, giving the characters z, c, s and o, e,
u, a the "meanings" of Cyrillic ж, ч, ш, and ё, э, ю, я in-
stead of з, ц, с and о, е, у, а, respectively. Particularly
ingenious is the use of Latin h to change its own "meaning":

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[*] Jakobson, R., Voprosy hazykoznaniha, 1965, No. 1,
pp. 111-113.

the sequence <u>hh</u> corresponds to Cyrillic щ; i.e., the first
<u>h</u> has the "meaning" 'read an immediately following <u>h</u> not as
a parameter shifter but as Cyrillic щ'. The entire system of
correspondences is as follows (in the order of the Cyrillic
alphabet):

а	б	в	г	д	е	ё	ж	з	и	й	к	л
a	b	v	g	d	e	ho	hz	z	i	j	k	l

м	н	о	п	р	с	т	у	ф	х	ц	ч	ш
m	n	o	p	r	s	t	u	f	x	c	hc	hs

щ	ъ	ы	ь	э	ю	я
hh	w	y	q	he	hu	ha

This system, although somewhat disconcerting at first glance,
becomes as easy to use as any other after a very brief
period.

6. ABBREVIATIONS

As a space-saving device, the following list of abbrevia-
tions was drawn up, based on terms that occurred with par-
ticular frequency during the excerpting of the first articles
being entered into the Index (cf. also the categorial abbrevia-
tions on pp. 6-9 above):

A	Adjective, adjectival
Abb	Abbreviation: initial or syllabic ab- breviations that function as words
Abst	Abstract, of a noun

acc	according to. . .
Act	Active, active voice
Ad	Adverb, adverbial
Aff	Affectionate
Allm	Allomorph
An	Animate
-An	Inanimate
Anal	Analogy, as in "analogical leveling"
Aug	Augmentative
Bul	Bulgarian
BR	Belorussian
c	consonant, consonantal
Col	Colloquial
Comb	Combination
CSR	Contemporary Standard Russian
Cz	Czech
Decl	Declinable, declension
-Decl	Indeclinable
Der	Derivation, derivational, derived
des	designates, designating
Desc	Descriptive, as of an A
Det	Determined aspect
-Det	Non-determined aspect
Dial	Dialectal
Dim	Diminutive
Dsyl	Disyllable, disyllabic

Eng	English
esp	especially
Exp	Expressive
Fem	Feminine
For	Foreign
Fr	French
G	Gerund
Gen	Gender
Ger	German
Gr	Greek
Hom	Homonymous, homonym
I	Infix, interfix: cf. "Epen", p. 8.
Imp	Imperfective aspect
Incl	Inclusion, i.e., a morphological process involving the derivation of a single word from a common combination of two or more words such that the meanings of all the words in the combination are included in the single word derived.
incl	includes, inclusive
Int	Interjection
Lat	Latin
M	Morpheme
Mac	Macedonian
Masc	Masculine
Msyl	Monosyllable, monosyllabic
N	Noun
Neut	Neuter

Obj	Object as opposed to "person"; <u>predmet</u>, <u>predmetnoe</u> znahcenie
occ	occasionally
OCS	Old Church Slavic
Or	Origin
P	Prefix
Poid	Prefixoid
Pal	Palatal
Palzd	Palatalized
par	particularly
Pass	Passive, passive voice
Pej	Pejorative
Perf	Perfective
Plur	Plural
Pol	Polish
Pr	Pronoun
Prep	Preposition
Pt	Participle
Qual	Qualitative, as of an A.
Rl	Relative, as of an A.
Russ	Russian
S	Suffix
Soid	Suffixoid
SC	Serbocroatian
sel	seldom
Sem	Semantic: semantic groups, e.g., time expressions

Sing	Singular
St	Stem
Sub	Substantive
Subzd	Substantivized
Syl	Syllable, syllabic
Syn	Synonymous, synonym
Trans	Transitive
-Trans	Intransitive
Trunc	Truncated, truncation
Ukr	Ukranian
us	usually
V	Verb, verbal
v	vowel
Wd	Word
=	is, includes, etc.
-=	is not, does not include, etc.
#	Derivation involving loss of affix(es) and a reversal of the morphophonemic processes that occurred along with the affix(es), e.g., stolihcnaha vodka = stolica.
*	Zero affixation (i.e., derivation without affixation), e.g. uklonitq → uklon.

7. CAPITALIZATION

Those terms (abbreviated or not) that mark categories
of information, names of languages, parts of speech, deri-
vational procedures, etc., for which the data file will be
searched, are called "significant". Significant terms are
signalled by capitalization, without regard to their position
within a sentence; concomitantly, non-significant terms are
never capitalized, even in sentence-initial position. Non-
significant terms can of course be searched and retrieved
if the occasion should require this, but it appears unlikely
that this will be the case.

Capitalization also marks the difference between other-
wise homographic forms: "Incl" means 'Inclusion' (Russian
vklhuhcenie), whereas "incl" means 'inclusive', 'includes'
(non-technical terms).

8. EXAMPLE OF ABSTRACTING FORMAT

As an example of the manner in which source material
is abstracted and classified, we cite below a section of
text from an article on inclusion by N.A. Hanko-Trinickaha,
"Processy vklhuhceniha v leksike i slovoobrazovanii," which
appeared in the collection Razvitie grammatiki i leksiki
sovremennogo russkogo hazyka, Moscow, 1964, pp. 18-35. The
passage appearing below occurs on pp. 27-29 of this article,
and describes the inclusion of the meaning of a modified
noun into a derivative based on the adjective stem of an
original adjective + noun combination, with the suffix -k(a).

We give the passage in the Russian original, in full English translation, in the abbreviated format prepared by the abstractor, and finally in such a format with abbreviations resolved.

8.1. Russian Text

Б. Включение определяемого. При включении определяемого происходит изменение грамматического разряда слов, что выражается изменением основы слова (суффиксация) и системы флексий. Обычно это образование существительных от основы прилагательных на фоне сочетания данных прилагательных с существительными.

Наиболее типичным представителем данного явления можно считать существительные жен. рода, возникающие на базе привычных сочетаний прилагательных с существительными В основу производного слова кладется основа прилагательного, обычно освобожденная частично или полностью от суффиксов, и присоединяется суффикс -к- в сопровождении системы флексий первого склонения, например: *одиночка* 'одиночная камера', *ротационка* 'ротационная машина', *шоссейка* 'шоссейная дорога', *вечерка* '«Вечерняя Москва» или вообще вечерняя газета', *зачетка* 'зачетная книжка', *Публичка* 'Публичная библиотека', *Таганка* 'Таганская площадь' и т. п

Существительное, значение которого включается в производное слово, может принадлежать не только к жен. роду, но и к мужскому, и к среднему, а иногда даже к мн числу, например: *литейка* 'литейный цех', *земледелка* 'земледельный цех', *электричка* 'электрический поезд', *короткометражка* 'короткометражный фильм', *Александринка* 'Александринский театр', *касторка* 'касторовое масло', *караулка* 'караульное помещение', *родилка* 'родильное отделение', *валерианка* 'валериановые капли' и др.

Большинство слов этого образца возникает в непринужденной разговорной речи и как всякое стилистически окрашенное новое слово не всегда и не сразу становится общим достоянием, например *безымянка* 'безымянный палец', *бертолетка* 'бертолетова соль', *психиатричка* 'психиатрическая больница', *Можайка* 'Можайское шоссе', *фугаска* 'фугасная бомба', *пятидневка* 'пятидневная неделя', *водородка* 'водородная бомба', *обручалка* 'обручальное кольцо', и т. п.

Значительная часть таких образований имеет обращение в более или менее узком кругу, где хорошо известно соответствующее словосочетание, например: *Тургеневка* 'Тургеневская библиотека', *Горьковка* 'Горьковская библиотека', *зарубежка* 'зарубежная литература' (учебный курс), *мореходка* 'мореходное училище', *дивизионка* 'дивизионная газета' и т. п Ср : Но в группе туристов не случайно не очень весело шутили, что у нас на «*Воробьевке*» такой инструктор, как Экберт, за один сезон может сделать больше, чем целая команда московских тренеров, которые учат по старинке («Комс. правда», 21 марта 1961 г.).

Это настолько живой и продуктивный способ, что его не удерживает даже возникновение омонимов как со словами других образцов, так и со словами, образованными по этому же образцу, но включающими значение другого существительного, например: *комсомолка* (девушка и «Комсомольская правда»), *пионерка* (девочка и «Пионерская правда»), *санитарка* (женщина-специалист и санитарная машина), *вегетарианка* (лицо женского пола и вегетарианская столовая), *испанка* (лицо женского пола и испанская инфлуэнца, свирепствовавшая в 1918 г.), *ленинка* (последовательница Ленина и Ленинская библиотека), *кандидатка* (женщина-кандидат и кандидатская работа); *самоходка* (самоходная пушка и самоходный комбайн), *стационарка* (стационарная школа, стационарная больница, стационарная киноустановка), *районка* (районная поликлиника, районная больница) и т. п.

Интересно, что по этому образцу с включением иногда образуются названия лиц женского пола, например: *техничка* 'техническая служащая'; После «Генриады» славимой *«Орлеанку»* сочинил Волтер, повесть шуточную, вредную, но остроумную (М. М. Херасков, Бахарина, или Неизвестный). *Орлеанка* 'Орлеанская дева'.

Ср. появившееся в наши дни *Сикстинка* 'Сикстинская мадонна': Как бы нам количество переделать в качество? Это сделать очень просто, в плане творческого роста: в год хотя бы по картинке, но на уровне *Сикстинки* («Московский художник», 25 дек. 1958 г.); [Олег] Вы королева, вы богиня, вы *сикстинка!* [Маша] (возмущенно) Что ... что такое? [Олег] Это не ругательство, честное слово, Сикстинская мадонна! (Г. Трифонов, Обязательное свидание).

Формальное ограничение данного образца идет по линии производящих прилагательных: для него не используются прилагательные односложной основы. Поэтому не может возникнуть подобное существительное на базе, например, словосочетания *скорая помощь*, но легко возникает на базе словосочетания *неотложная помощь — неотложка*. В первые годы после революции было создано слово *стенка* 'стенная газета', но оно не удержалось и было заменено словом *стенновка*. Ср.: Л. Г. Бальян научно изучала воспитательную роль школьной *стенновки* («Лит. газета», 11 апр. 1961 г.).

Производящие основы прилагательных претерпевают некоторые изменения, утрачивая полностью или частично суффиксы: *моторная* лодка — *моторка*, *снайперская* винтовка — *снайперка*, *анатомический* театр — *анатомичка*, *карболовая* кислота — *карболка*, *комиссионный* магазин — *комиссионка*.

Однако суффикс, имеющий в своем составе гласный, не утрачивается, если без него основа оказывается односложной: *овсяная* крупа—*овсянка*, *ветряная* оспа — *ветрянка*, *взрывчатое* вещество — *взрывчатка*, *зубчатое* звено — *зубчатка*, *кирзовые* сапоги — *кирзовки*. Ср. также возникшее некогда путем включения *винтовка* (*винтовое* ружье).

Прилагательные с суффиксом -*тельн*- заменяют его на суффикс -*л*-: *зажигательная* бомба — *зажигалка*, *курительная* комната — *курилка*.

Пока слово с включением употребляется наряду со словосочетанием, оно имеет сниженную стилистическую окраску по сравнению с последним. Употребляясь все шире, оно оттесняет словосочетание, может становиться единственным, а потому и нейтральным обозначением данного предметного значения, и самое возникновение его на базе словосочетания забывается: *перчатка, косоворотка, землянка, открытка, пятилетка* и под.

8.2. ENGLISH TRANSLATION

B. Inclusion of the modified word: In inclusion of the word modified there occurs a change in the grammatical class of words, which is expressed by a change in stem of the word (suffixation) and in the system of inflexion. This usually involves the formation of a noun from an adjective against the background of a combination of the given adjective and a noun.

The most typical representative of this phenomenon may be considered to be nouns of feminine gender derived on the basis of ordinary combinations of adjective and noun. The stem of the adjective is taken as the stem of the derived noun, with the adjective usually losing its suffixes partially or wholly and the suffix -k- added, accompanied by the inflexional system of the first declension, for example: odinohcka < odinohcnaha kamera 'solitary confinement', rotacionka < rotacionnaha mahsina 'rotary press', hsossejka < hsossejnaha doroga 'macadam road', vehcerka < vehcernhaha Moskva 'Moscow Evening News', or in general, 'an evening newspaper', zahcetka < zahcetnaha knihzka 'record book', Publihcka < Publihcnaha biblioteka 'Public Library', Taganka < Taganskaha plohhadq 'Tagansk Square', etc.

The noun, the meaning of which is included in the derived word, can belong not only to the feminine gender but can also be masculine or neuter and sometimes even plural, for example: litejka < litejnyj cex 'foundry shop or department', zemledelka < zemledelqny cex 'agricultural department', helektrihcka < helektrihceskij poezd 'electric railway train', korotkometrahzka < korotkometrahznyj filqm 'short film', Aleksandrinka < Aleksandrinskij teatr 'Aleksandrinskij Thea ?r', kastorka < kastorovoe maslo 'castor oil', karaulka < karaulqnoe pomehhenie 'guard house', rodilka < rodilqnoe otdelenie 'delivery room', valerianka < valerianovye kapli 'tincture of valerian', and others.

Most words of this model occur in informal, conversational speech and like every stylistically colored new word, they are not always or immediately generally accepted, for example: bezymhanka < bezymhannyj palec 'ring finger', bertoletka < bertoletova solq 'potassium chlorate',

psixiatrihcka ∠ psixiatrihceskaha bolqnica 'mental
hospital', Mohzajka ∠ Mohzajskoe hsosse 'Mozajsk
Highway', fugaska ∠ fugasnaha bomba 'demolition bomb',
phatidnevka ∠ phatidnevnaha nedelha 'five-day week',
vodorodka ∠ vodorodnaha bomba 'hydrogen bomb',
obruhcalka ∠ obruhcalqnoe kolqco 'wedding ring', etc.

A significant portion of such formations
are restricted tc a more or less narrow circle
where the corresponding word-combination is well
known, for example: Turgenevka ∠ Turgenevskaha
biblioteka 'Turgenev Library', Gorqkovka <
Gorqkovskaha biblioteka 'Gorkij Library',
zarubehzka ∠ zarubehznaha literatura 'foreign
literature, an educational course' morexodka ∠
morexodnoe uhcilihhe 'nautical school', divizionka ∠
divizionnaha gazeta 'division newspaper', etc.
Cf.: "It was not by chance that in a group of
tourists someone joked rather sadly about the
fact that we have an instructor at the Vorobqevka
such as Ekbert who can do more in one season
than a whole team of Moscow trainers who teach
the old-fashioned way." (Komsomolqskaha pravda,
21/III/1961).

This is such a live and productive method
that it is not even restricted by the appear-
ance of homonyms based both on words of different
models and on words formed according to the very
same model, but including the meaning of a
different noun, for example: komsomolka 'girl
(member of the Komsomol)' and Komsomolqskaha
pravda, pionerka 'girl (member of the Pioneers)'
and Pionerskaha pravda, sanitarka 'woman spe-
cialist' and 'army ambulance', vegetarianka
'female vegetarian' and 'vegetarian dining hall',
ispanka 'Spanish woman' and 'Spanish influenza
which raged in 1918', leninka 'female follower
of Lenin' and 'Lenin Library', kandidatka 'female
candidate' and 'candidate's work', samoxodka
'self-propelled artillery' and 'self-propelled
combine', stacionarka 'stationary school', sta-
tionary hospital' or 'stationary cinema unit',
rajonka 'regional polyclinic', 'regional hospi-
tal', etc.

It is interesting that this model of in-
clusion sometimes forms the names of female per-
sons: texnihcka ∠ texnihceskaha sluhzahhaha
'female technical employee'. "After his cele-
brated La Henriade Voltaire wrote Orleanka, a
comic, pernicious, but sharp-witted story."
(M.M. Xeraskov, Baxarina, or the Unknown).
Orleanka ∠ Orleanskaha deva 'Maid of Orleans'.

Cf. the recent formation Sikstinka < Sik-
stinskaha madonna 'Sistine Madonna'. "How can
we transform quantity into quality? This is
easy to do in the plan of creative growth:
even if there's but one picture a year, but
then -- on the level of the Sikstinka." (The
Moscow Artist, 25/XII/1958); "[Oleg] You're a
queen, a goddess, a sikstinka! [Mahsa] (indig-
nantly) What... What's that....? [Oleg] It's
not a swear-word, cross my heart, it's the
Sikstinskaha madonna! (G. Trifonov, The Nec-
essary Meeting).

The formal limitations of this model are
set by the adjectives which serve as stems:
monosyllabic adjective stems cannot be used.
Therefore, a noun cannot be derived, for ex-
ample, from the word-combination, skoraha
pomohhq 'ambulance', but may easily be derived
from neotlohznaha pomohhq > neotlohzka 'first
aid'. During the first few years after the
revolution the word stenka < stennaha gazeta
'wall newspaper' was coined but it did not sur-
vive and was changed to stennovka. Cf. "L.G.
Balqhan made a scientific study of the educa-
tional role of stennovki." (Literaturnaha gazeta,
11/IV/1961).

The adjective stems serving as derivational
bases are subjected to changes, losing their
suffixes partially or wholly: motornaha lodka >
motorka 'motor boat', snajperskaha vintovka >
snajperka 'sniper's rifle', anatomihceskij
teatr > anatomihcka 'anatomical theater', karbo-
lovaha kislota > karbolka 'carbolic acid',
komissionyj magazin > komissionka 'second-hand
shop'.

However, a suffix containing a vowel is not
truncated if the stem would become monosyllabic
without it: ovshanaha krupa > ovshanka 'oatmeal',
vetrhanaha ospa > vetrhanka 'chicken pox', vzryvhcatoe
vehhestvo > vzryvhcatka 'blasting charge', zubhcatoe
zveno > zubhcatka 'gear', kerzovye sapogi > kerzovki
'Curzon boots'. Cf. the old inclusion vintovka <
vintovoe ruhzqe 'rifle'.

Adjectives in -telqn- replace that suffix
with -l-: zahzigatelqnaha bomba > zahzigalka 'in-
cendiary bomb', kuritelqnaha komnata > kurilka
'smoking room'.

As long as the inclusion is used side by
side with the word-combination, it has a lowered
stylistic coloring in comparison with the latter.
Becoming more widely used, it crowds out the
word-combination and can become the only (and
therefore the neutral) designation of the given
referential meaning and the very fact that it
was derived on the basis of a word-combination
is then forgotten: perhcatka 'glove', kosovo-
rotka 'blouse which fastens at the side',
zemlhanka 'dug-out, mud hut', otkrytka 'post-
card', phatiletka 'Five Year Plan', et al.

8.3. Abstractors' Format

Following is the above passage as abstracted and con-

densed; this is the format in which excerpted material is

filed in the catalogue:

[Hanko-Trinickaha, N. A., "Processy vklhuhceniha v leksike i
    slovoobrazovanii," Razvitie grammatiki i leksiki sovremen-
    nogo russkogo hazyka], Moscow, 1964, pp. 18-35.

25   [-sha]:   Affxd Trans V. Mn '-An Obj, reflexive,
                     mutual, or generalized Obj'.

27   [-k(a)]:   Affxd A-St of AN Comb; 'ncl mn of N, X,
                     [helektrihceskij poezd : helektrihcka];
                     N = Masc, Fem, Neut, Plur; A -= Msyl St.
                     Chng, St Trunc partially or wholly, X,
                     [motornaha lodka : motorka; anatomihceskij
                     teatr : anatomihcka], except if Msyl St
                     would result; A-St Trunc [-telqn-] and add
                     [-1-], X, [zahzigatelqnaha bomba :
                     zahzigalka]. Forms Fem N, occ An, X,
                     [texnihceskaha sluhzahhaha: texnihcka].
                     Prod, more Prod than [-ik] in Incl. Stl,
                     Col.

29   [-telqn(yj)]: Affxd, replaced by [-1-] before [-k(a)]
                     in Incl, X, [zahzigatelqnaha bomba :
                     zahzigalka].

29   [-1-]:   Affxd A-St where [-telqn-] Trunc before
                     [-k(a)] in Incl. Chng, St Trunc [-telqn-]
                     before [-1-k(a)] in Incl, X,
                     [zahzigatelqnaha bomba : zahzigalka].

29   [-ik]:   Affxd A-St of AN Comb; sel Incl mn of
Fem N, X, [maxovoe koleso : maxovik];
A-St not in [-sk-]. less Prod than
[-k(a)] in Incl; esp Prod with A in [-ov-].
Forms Masc N, occ An, esp with A-St in
[-ov-], X, [kadrovoj rabohcij : kadrovik].

29   [-sk(ij)]:   Forms, does not Form St for Der in Incl
before [-ik].

29   [-ov-]:   Forms, often Forms St for Der of Masc N
before [-ik] in Incl.

30   [-uhsk(a)]:   Affxd A-St of AN Comb; Incl mn of N.
not Prod. X, [teploe pomehhenie :
tepluhska].

30   [-nic(a)]:   Affxd A-St of AN Comb; Incl mn of N. not
Prod. X, [poloskatelqnaha hcahska :
poloskatelqnica].

30   [-ahc]:   Affxd A-St of AN Comb; Incl mn of N. not
Prod. X, [strogij vygovor : strogahc].

30   [-ov(oj)]:   Affxd N-St. Forms An Subzd A, X, [gorn :
gornovoj].

33   [*]:   Affxd A of AN Comb; Incl mn of N. limited
Prod. X, [stolihcnaha vodka : stolica].

8.4. Abstractors' Format with Abbreviations Resolved

Following is the same excerpt with the abbreviations
resolved:

[Hanko-Trinickaha, N.A., "Processy vklhuhceniha v leksike i
slovoobrazovanii," Razvitie grammatiki i leksiki
sovremennogo russkogo hazyka], Moscow, 1964,
pp. 18-35.

25   [-sha]:   Affixed to transitive verbs. Means
'inanimate, reflexive, mutual or gener-
alized object'.

27f   [-k(a)]:   Affixed to the adjectival stem of an
adjective-noun combination; it includes
the meaning of the noun, for example
[helektrihceskij poezd : helektrihcka];

the noun can be masculine, feminine,
neuter or plural; the adjective cannot
have monosyllabic stem. Change, the stem
is truncated partially or wholly, for
example [motornaha lodka : motorka;
anatomihceskij teatr : anatomihcka],
except if a monosyllabic stem would
result; adjective stems truncate [-telqn-]
and add [-l-], for example [zahzigatelqnaha
bomba : zahzigalka]. Forms feminine
nouns which are occasionally animate,
for example [texnihceskaha sluhzahhaha :
texnihcka]. It is productive, more
productive than [-ik] in inclusion.
Style, colloquial.

29   [-telqn(yj)]:   Affixed, replaced by [-l-] before [-k(a)]
in the process of inclusion, for example
[zahzigatelqnaha bomba : zahzigalka].

29   [-l-]:   Affixed to adjectival stems where [-telqn-]
is truncated before [-k(a)] in the pro-
cess of inclusion. Change, stems truncate
[-telqn-] before [-l-k(a)] in inclusion,
for example [zahzigatelqnaha bomba :
zahzigalka].

29   [-ik]:   Affixed to the adjectival stem of an
adjective-noun combination; it seldom
includes the meaning of feminine nouns,
for example [maxovoe koleso : maxovik];
the adjectival stem cannot end in [-sk-].
It is less productive than [-k(a)] in
inclusion; it is especially productive
with adjectival stems in [-ov-]. Forms
masculine nouns which are occasionally
animate, especially with adjective stems
in [-ov-], for example [kadrovoj rabohcij :
kadrovik].

29   [-sk(ij)]:   Forms, does not form stems for derivation
in inclusion before [-ik].

29   [-ov-]:   Forms, often forms stems for derivation
of masculine nouns before [-ik] in inclu-
sion.

30   [-uhsk(a)]:   Affixed to the adjectival stem of an
adjective-noun combination; includes
the meaning of the noun. It is not
productive. For example, [teploe
pomehhenie : tepluhska].

30 [nic(a)]: Affixed to the adjectival stem of an adjective-noun combination; includes the meaning of the noun. It is not productive. For example [poloskatelqnaha hcahska : poloskatelqnica].

30 [-ahc]: Affixed to the adjectival stem of an adjective-noun combination; it includes the meaning of the noun. It is not productive. For example, [strogij vygovor : strogahc].

.0 [-ov(oj)]: Affixed to noun stems; forms animate substantivized adjectives, for example [gorn : gornovoj].

33 [*]: Affixed to the adjective of an adjective-noun combination; includes the meaning of the noun. Its productivity is limited. For example, [stolihcnaha vodka : stolica].

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ABSTRACT

A discussion of a projected "deep in-
ex" to the extant literature on Russian
erivational morphology. The Memorandum
escribes the type of literature being
ostracted, the classification of informa-
ion into discrete categories for re-
rieval, the steps taken to prepare data
or conversion to machine format, and the
ransliteration and abbreviation conven-
ions used in the index. An example of
ussian scholarly text is appended, to-
ether with the format in which this
ext appears after processing.

II KEY WORDS

Information storage and
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