

**MODELS OF NOUN-VERB HOMONYMS  
IN GEORGIAN  
სახელებისა და ზმნების  
ომონიმური მოდელები ქართულში**

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**ირაკლი სალია**

ივანე ჯავახიშვილის სახელობის  
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თბილისი, საქართველო

**აბსტრაქტი**

ომონიმიასთან დაკავშირებით არსებობს ორი მცდარი შეხედულება. ლინგვისტთა ნაწილი ომონიმიას ენის ხარვეზად მიიჩნევს, ნაწილი კი მას შემთხვევით მოვლენად აღიქვამს. აღნიშნულ მოსაზრებებს ეწინააღმდეგება წინამდებარე ნაშრომში განხილული ენობრივი მოვლენა, კერძოდ, სახელებსა და ზმნებს შორის არსებული ომონიმების მოდელები. ომონიმური მოდელი გულისხმობს არა ცალკეულ სიტყვებს, არამედ მორფოლოგიურ/დერივაციულ კონსტრუქციებს შორის ომონიმიას, რაც განაპირობებს ასეთი ომონიმების სისტემატურობას, რეგულარულობას. მაგალითად, STEM-PL(eb)-DAT(s) კონსტრუქციის სახელები და STEM-THEM(eb)-3.SG(s) კონსტრუქციის ზმნები. ორივე იწარმოება ბურდლუნი ტიპის მოქმედების სახელებისგან და ერთმანეთის ომონიმურები არიან. ჩვენ ქართულში გამოვავლინეთ ამ ტიპის 115 ომონიმური მოდელი. ომონიმები რომ ენის ფუნქციონირებას ხელს უშლიდეს, ისინი არ იქნებოდნენ ენის სისტემაში ასეთი სახით წარმოდგენილი და იქნებოდნენ არარეგულარული და არასისტემური.

**საკვანძო სიტყვები:** ომონიმია, ომონიმური მოდელები, მრავალმნიშვნელობა, მრავალმნიშვნელობის უპირატესობა.

**Keywords:** homonymy, homonym models, ambiguity, ambiguity advantage.

There are two misconceptions about homonyms in linguistics. The first of them is based on the formalist view of language and refers not only to homonymy, but to ambiguity in general. Formal logic prefers unambiguous relations and compositionality, so both in formal logic and in linguistic theories based on the principles of formal logic, ambiguity is considered as an imperfection of language. For example, Gottlob Frege (Frege 1948) or Noam Chomsky share the opinion that ambiguity is a defect of a language:

“If you want to make sure that we never misunderstand one another, for that purpose language is not well designed, because you have such properties as ambiguity” (Chomsky 2002: 107).

Formalist view of ambiguity is contradicted by experimental data, according to which ambiguity rarely impedes communication (Ferreira 2008; Jaeger 2010), so the speaker rarely avoids it (Haywood... 2005; Ferreira... 2005). The main reason of this is linguistic (Frisson... 2005; Levy 2008) and extralinguistic context (Trueswell... 1994, Kamide... 2003). Due to the the context the listener can easily identify the proper meaning of ambiguous expression. Based on these observations “Ambiguity advantage” approach was proposed against the formal logic perspective (Piantadosi... 2012; Solé... 2014). The authors believe that ambiguity enables natural language to be effective during communication.

There is another erroneous tendency related to homonyms, namely, presenting homonymy as an irregular, accidental phenomenon:

“Homonymy {two lexical items which happen to have the same phonological form}” (Crystal 2008).

“Homonymy designates a situation in which different words (homonyms) happen accidentally to have the same form” (Goddard 1998: 22).

Against the formalist view of homonymy and its perception as an irregular phenomenon, and in support of ambiguity advantage approach we provide research<sup>1</sup> concerning a phenomenon not yet presented in the available scientific literature - models of homonyms between nominals and verbs. A homonym model means that homonymy is not between individual nominal and verbal word forms, but between morphological structures, that determines the systematicity and regularity of such homonyms. For example, nominals with STEM-PL(eb)-DAT(s) structure and verbs with STEM-THEM(eb)-3.SG(s) structure are both derived from *burdghuni* type action nouns and are homonyms to each other:

NOUN	VERB
<i>am burdghun-eb-s male sheechvevi.</i> this mumble-PL-DAT soon you.will.accustom “You will get used to these mumbling ones soon.”	<i>ar mesmis, ras burdghun-eb-s.</i> no I.hear what mumble-THEM-3SG “I can’t hear what you are mumbling”

Otherwise, nominals with the suffix *-a* are derived from action nouns of the *burdghuni* type, whose dative plural forms are homonymous to the third person, present tense verbs derived from the same *burdghuni* type nouns.

In order to get a complete picture about the issue we selected the largest (total 1,520,000,000 tokens, including 13,600,000 unique word forms) and the most well-balanced corpus and morphological analyzer, created by Vakhtang Elerdashvili. This corpus is comprised of original Georgian fiction or fiction translated to Georgian (11%), social media posts and their comments (34%), discussions on forums (18%) and various types of texts available on Georgian websites (37%).

<sup>1</sup> This research PHDF-21-1908 has been supported by Shota Rustaveli National Science Foundation of Georgia (SRNSFG).

To obtain the research material, each nominal and verbal words in the corpus was processed by a morphological analyzer. Words which were associated with at least one nominal and at least one verbal meaning were considered as homonyms. The analysis revealed 10,883 homonyms. Based on the data we identified 115 models. Their detailed description is given below. When describing a model, the sequential number of the model, the model nominal and verbal structures and their corresponding examples are indicated. For the annotation of nominal and verbal structures the following glosses are used:

ROOT	root	SUBJ	subjunctive
STEM	stem	S	subject
NOM	nominative case	O	object
DAT	dative case	1	first person
GEN	genetive case	2	second person
INST	instrumentalis	3	third person
VOC	vocative case	PV	preverb
ADJ	adjective	THEM	thematic marker
ABS	abstract	PTCP	participle
N	noun	BEN	benefactive
SG	singular	NEUT	neutral voice
PL	plural	MSD	masdar
PRES	present	IS	Indirect speech
FUT	future	AUX	Auxiliary verb
AOR	aorist	ENC	Enclitic
RES	resultative		

If in a specific position of the structure several morphemes are admissible, then only the gloss is indicated. If only one allomorph is admissible in a particular position, then such irreplaceable allomorph is indicated in parentheses. Grammatical categories which are not expressed by particular morphemes, but the whole structure are indicated in the square brackets:

I	N	ROOT(a)[NOM]	<i>kurka</i>
	V	ROOT-3SG(a)[3O.AOR]	<i>kurk-a</i>
II	N	ROOT-VOC(v)	<i>kurka-v</i>
	V	ROOT-THEM(av)[2SG.3O.PRES]	<i>kurk-av</i>
III	N	ROOT(e)[NOM]	<i>yobe</i>
	V	ROOT-AOR(e)[2SG.3O]	<i>yob-e</i>
IV	N	ROOT(e)-DAT(s)	<i>yobe-s</i>
	V	ROOT-3PL(es)[3O.AOR]	<i>yob-es</i>
V	N	ROOT(e)-DAT.PL(t)	<i>yobe-t</i>
	V	ROOT-AOR(e)-2PL(t)[3O]	<i>yob-e-t</i>

VI	N	ROOT-DAT(s)	<i>kvet-s</i>
	V	ROOT-3SG(s)[3O.PRES]	<i>kvet-s</i>
VII	N	ROOT-DAT.PL(t)	<i>kvet-t</i>
	V	ROOT-2PL(t)[3O.PRES]	<i>kvet-t</i>
VIII	N	ROOT-VOC(o)	<i>cecxl-o</i>
	V	ROOT-SUBJ(o)[2SG.3O]	<i>cecxl-o</i>
IX	N	PV-ROOT-PTCP(ul)-N(a)[NOM]	<i>a-sxm-ul-a</i>
	V	PV-ROOT-PTCP(ul)-3SG(a)[RES]	<i>a-sxm-ul-a</i>
X	N	PTCP(me)-ROOT-PTCP(e)[NOM]	<i>me-çaml-e</i>
	V	1O(m)-PASS(e)-ROOT-AOR(e)[2SG]	<i>m-e-çaml-e</i>
XI	N	PTCP(me)-ROOT-PTCP(e)-PL.DAT(t)	<i>me-çaml-e-t</i>
	V	1O(m)-PASS(e)-ROOT-AOR(e)-2PL(t)	<i>m-e-çaml-e-t</i>
XII	N	ROOT-ABS(ia)[NOM]	<i>rusopil-ia</i>
	V	ROOT-NOM(i)-ENC=3SG(a)[PRES]	<i>rusopil-i-a</i>
XIII	N	ROOT-ADJ(a)[NOM]	<i>tapl-a</i>
	V	ROOT-3SG(a)[3O.AOR]	<i>tapl-a</i>
XIV	N	ROOT-ADJ(a)-VOC(v)	<i>tapl-a-v</i>
	V	ROOT-THEM(av)[2SG.3O.PRES]	<i>tapl-av</i>
XV	N	STEM-PL(eb)-DAT(s)	<i>bancal-eb-s</i>
	V	STEM-THEM(eb)-3SG(s)[PRES]	<i>bancal-eb-s</i>
XVI	N	STEM-PL(eb)-DAT(t)	<i>bancal-eb-t</i>
	V	STEM-THEM(eb)-2PL(t)[PRES]	<i>bancal-eb-t</i>
XVII	N	STEM-PL(eb)-VOC(o)	<i>bancal-eb-o</i>
	V	STEM-THEM(eb)-IS(o)[2SG.PRES]	<i>bancal-eb-o</i>
XVIII	N	ADJ(u)-ROOT-ADJ(o)[NOM]	<i>u-col-o</i>
	V	BEN(u)-ROOT-SUBJ(o)[2SG.3O]	<i>u-col-o</i>
XIX	N	ADJ(u)-ROOT-ADJ(o)-DAT(s)	<i>u-col-o-s</i>
	V	BEN(u)-ROOT-SUBJ(o)-3SG(s)[3O]	<i>u-col-o-s</i>
XX	N	ADJ(u)-ROOT-ADJ(o)-DAT.PL(t)	<i>u-col-o-t</i>
	V	BEN(u)-ROOT-SUBJ(o)-2PL(t)[3O]	<i>u-col-o-t</i>
XXI	N	ADJ(u)-ROOT-ADJ(o)-PL(n)-VOC(o)	<i>u-col-o-n-o</i>
	V	BEN(u)-ROOT-SUBJ(o)-3PL(n)-IS(o)[3O]	<i>u-col-o-n-o</i>
XXII	N	ADJ(mo)-ROOT-ADJ(o)[NOM]	<i>mo-çaml-o</i>
	V	PV(mo)-ROOT-SUBJ(o)[2SG.3O]	<i>mo-çaml-o</i>
XXIII	N	ADJ(mo)-ROOT-ADJ(o)-DAT(s)	<i>mo-çaml-o-s</i>
	V	PV(mo)-ROOT-SUBJ(o)-3SG(s)[3O]	<i>mo-çaml-o-s</i>
XXIV	N	ADJ(mo)-ROOT-ADJ(o)-PL.DAT(t)	<i>mo-çaml-o-t</i>
	V	PV(mo)-ROOT-SUBJ(o)-2PL(t)[3O]	<i>mo-çaml-o-t</i>

XXV	N	ADJ(u)-ROOT-ADJ(es)[STEM]	<i>u-did-es</i>
	V	BEN(u)-ROOT-3PL(es)[3O.AOR]	<i>u-did-es</i>
XXVI	N	ADJ(u)-ROOT-ADJ(es)-VOC(o)	<i>u-did-es-o</i>
	V	BEN(u)-ROOT-3PL(es)-IS(o)[3O.AOR]	<i>u-did-es-o</i>
XXVII	N	ROOT-MSD(a)[NOM]	<i>kmn-a</i>
	V	ROOT-3SG(a)[3O.AOR]	<i>kmn-a</i>
XXVIII	N	ROOT-MSD(a)-DAT(s)	<i>kmn-a-s</i>
	V	ROOT-SUBJ(a)-3SG(s)[3O]	<i>kmn-a-s</i>
XXIX	N	PV-ROOT-MSD(a)[NOM]	<i>še-kmn-a</i>
	V	PV-ROOT-3SG(a)[3O.AOR]	<i>še-kmn-a</i>
XXX	N	PV-ROOT-MSD(a)-DAT(s)	<i>še-kmn-a-s</i>
	V	PV-ROOT-SUBJ(a)-3SG(s)[3O]	<i>še-kmn-a-s</i>
XXXI	N	ROOT-INST(it)	<i>zrd-it</i>
	V	ROOT-THEM(i)-2PL(t)[3O.PRES]	<i>zrd-i-t</i>
XXXII	N	ROOT-GEN(is)	<i>zrd-is</i>
	V	ROOT-THEM(i)-3SG(s)[3O.PRES]	<i>zrd-i-s</i>
XXXIII	N	PV-ROOT-INST(it)	<i>ga-zrd-it</i>
	V	PV-ROOT-THEM(i)-2PL(t)[3O.FUT]	<i>ga-zrd-i-t</i>
XXXIV	N	PV-ROOT-GEN(is)	<i>ga-zrd-is</i>
	V	PV-ROOT-THEM(i)-3SG(s)[3O.FUT]	<i>ga-zrd-i-s</i>
XXXV	N	ROOT-MSD(a)-VOC(v)	<i>kveb-a-v</i>
	V	ROOT-THEM(av)[2SG.3O.PRES]	<i>kveb-av</i>
XXXVI	N	PV-ROOT-MSD(a)-VOC(v)	<i>gamo-kveb-a-v</i>
	V	PV-ROOT-THEM(av)[2SG.3O.FUT]	<i>gamo-kveb-av</i>
XXXVII	N	STEM-PL(eb)-DAT(s)	<i>buzγun-eb-s</i>
	V	STEM-THEM(eb)-3SG(s)[PRES]	<i>buzγun-eb-s</i>
XXXVIII	N	STEM-PL(eb)-PL.DAT(t)	<i>buzγun-eb-t</i>
	V	STEM-THEM(eb)-2PL(t)[PRES]	<i>buzγun-eb-t</i>
XXXIX	N	STEM-PL(eb)-VOC(o)	<i>buzγun-eb-o</i>
	V	STEM-THEM(eb)-IS(o)[2SG.PRES]	<i>buzγun-eb-o</i>
XL	N	PV(mi)-ROOT-MSD(a)[NOM]	<i>mi-čv-a</i>
	V	1O(m)-BEN(i)-ROOT-3SG(a)[AOR]	<i>m-i-čv-a</i>
XLI	N	PV(mi)-ROOT-MSD(a)-DAT(s)	<i>mi-čv-a-s</i>
	V	1O(m)-BEN(i)-ROOT-SUBJ(a)-3SG(s)	<i>m-i-čv-a-s</i>
XLII	N	PV(mi)-ROOT-MSD(a)-PL.DAT(t)	<i>mi-čv-a-t</i>
	V	1O(m)-BEN(i)-ROOT-SUBJ(a)-2PL(t)	<i>m-i-čv-a-t</i>
XLIII	N	PV(mi)-ROOT-INST(it)	<i>mi-čv-it</i>
	V	1O(m)-BEN(i)-ROOT-THEM(i)-2PL(t)[AOR]	<i>m-i-čv-i-t</i>

XLIV	N	PV(mi)-ROOT-MSD(a)-VOC(v)	<i>mi-čv-a-v</i>
	V	1O(m)-BEN(i)-ROOT-THEM(av)[2SG.PRES]	<i>m-i-čv-av</i>
XLV	N	PV(mi)-ROOT-GEN(is)	<i>mi-tvl-is</i>
	V	1O(m)-BEN(i)-ROOT-THEM(i)-3SG(s)[PRES]	<i>m-i-tvl-i-s</i>

LXXIV	N	PTCP(m)-ROOT-THEM-DAT(s)	<i>m-gud-av-s</i>
	V	1O(m)-ROOT-THEM-3SG(s)[PRES]	<i>m-gud-av-s</i>
LXXV	N	PTCP(m)-ROOT-THEM-PL.DAT(t)	<i>m-gud-av-t</i>
	V	1O(m)-ROOT-THEM-2PL(t)[PRES]	<i>m-gud-av-t</i>
LXXVI	N	PTCP(m)-ROOT-THEM-VOC(o)	<i>m-gud-av-o</i>
	V	1O(m)-ROOT-THEM-IS(o)[2SG.PRES]	<i>m-gud-av-o</i>
LXXVII	N	PV-PTCP(m)-ROOT-THEM[STEM]	<i>ga-m-gud-av</i>
	V	PV-1O(m)-ROOT-THEM[2SG.FUT]	<i>ga-m-gud-av</i>
LXXVIII	N	PV-PTCP(m)-ROOT-THEM-DAT(s)	<i>ga-m-gud-av-s</i>
	V	PV-1O(m)-ROOT-THEM-3SG(s)[FUT]	<i>ga-m-gud-av-s</i>
LXXIX	N	PV-PTCP(m)-ROOT-THEM-PL.DAT(t)	<i>ga-m-gud-av-t</i>
	V	PV-1O(m)-ROOT-THEM-2PL(t)[FUT]	<i>ga-m-gud-av-t</i>
LXXX	N	PV-PTCP(m)-ROOT-THEM-VOC(o)	<i>ga-m-gud-av-o</i>
	V	PV-1O(m)-ROOT-THEM-IS(o)[2SG.FUT]	<i>ga-m-gud-av-o</i>
LXXXI	N	PTCP(me)-ROOT-VOC(o)	<i>me-brZol-o</i>
	V	1O(m)-PASS(e)-ROOT-SUBJ(o)[2SG]	<i>m-e-brZol-o</i>
LXXXII	N	PTCP(ma)-ROOT-PTCP(e)[NOM]	<i>ma-vn-e</i>
	V	1O(m)-NEUT(a)-ROOT-AOR(e)[2SG]	<i>m-a-vn-e</i>
LXXXIII	N	PTCP(ma)-ROOT-PTCP(e)-DAT(s)	<i>ma-vn-e-s</i>
	V	1O(m)-NEUT(a)-ROOT-3PL(es)[AOR]	<i>m-a-vn-es</i>
LXXXIV	N	PTCP(ma)-ROOT-PTCP(e)- PL.DAT(t)	<i>ma-vn-e-t</i>
	V	1O(m)-NEUT(a)-ROOT-AOR(e)-2PL(t)	<i>m-a-vn-e-t</i>
LXXXV	N	PV-ROOT-THEM(eb)-DAT(s)	<i>ga-mšral-eb-s</i>
	V	2O-NEUT-ROOT-THEM(eb)-3SG(s)[PRES]	<i>g-a-mšral-eb-s</i>
LXXXVI	N	PV-ROOT-PL(eb)-DAT(t)	<i>ga-mšral-eb-t</i>
	V	2O-NEUT-ROOT-THEM(eb)-PL(t)[PRES]	<i>g-a-mšral-eb-t</i>
LXXXVII	N	PV-ROOT-THEM(eb)-VOC(o)	<i>ga-mšral-eb-o</i>
	V	2O-NEUT-ROOT-THEM(eb)-IS(o)[1SG.PRES]	<i>g-a-mšral-eb-o</i>

LXXXVIII	N	PTCP(u)-ROOT[STEM]	<i>u-ŋex</i>
	V	BEN(u)-ROOT[2SG.3O.PRES]	<i>u-ŋex</i>
LXXXIX	N	PTCP(u)-ROOT-DAT(s)	<i>u-ŋex-s</i>
	V	BEN(u)-ROOT-3SG(s)[3O.PRES]	<i>u-ŋex-s</i>
XC	N	PTCP(u)-ROOT-PL.DAT(t)	<i>u-ŋex-t</i>
	V	BEN(u)-ROOT-2PL(t)[3O.PRES]	<i>u-ŋex-t</i>

XCI	N	PTCP(u)-ROOT-VOC(o)	<i>u-tex-o</i>
	V	BEN(u)-ROOT-SUBJ(o)[2SG.3O]	<i>u-tex-o</i> (subjunctive)
XCII	N	PTCP(u)-ROOT-VOC(o)	<i>u-tex-o</i>
	V	BEN(u)-ROOT-IS(o)[2SG.3O.PRES]	<i>u-tex-o</i> (indirect speech)
XCIII	N	PV-PTCP(u)-ROOT[STEM]	<i>mo-u-ksov</i>
	V	PV-BEN(u)-ROOT[2SG.3O.FUT]	<i>mo-u-ksov</i>
XCIV	N	PV-PTCP(u)-ROOT-DAT(s)	<i>mo-u-ksov-s</i>
	V	PV-BEN(u)-ROOT-3SG(s)[3O.FUT]	<i>mo-u-ksov-s</i>
XCV	N	PV-PTCP(u)-ROOT-PL.DAT(t)	<i>mo-u-ksov-t</i>
	V	PV-BEN(u)-ROOT-2PL(t)[3O.FUT]	<i>mo-u-ksov-t</i>
XCVI	N	PV-PTCP(u)-ROOT-VOC(o)	<i>mo-u-ksov-o</i>
	V	PV-BEN(u)-ROOT-SUBJ(o)[2SG.3O]	<i>mo-u-ksov-o</i> (subjunctive)
XCVII	N	PV-PTCP(u)-ROOT-VOC(o)	<i>mo-u-ksov-o</i>
	V	PV-BEN(u)-ROOT-IS(o)[2SG.3O.FUT]	<i>mo-u-ksov-o</i> (indirect speech)
XCVIII	N	PTCP(u)-ROOT-THEM[STEM]	<i>u-natl-av</i>
	V	BEN(u)-ROOT-THEM[2SG.3O.PRES]	<i>u-natl-av</i>
XCIX	N	PTCP(u)-ROOT-THEM-DAT(s)	<i>u-natl-av-s</i>
	V	BEN(u)-ROOT-THEM-3SG(s)[3O.PRES]	<i>u-natl-av-s</i> (present)
C	N	PTCP(u)-ROOT-THEM-DAT(s)	<i>u-natl-av-s</i>
	V	BEN(u)-ROOT-THEM-3SG(s)[3O.RES]	<i>u-natl-av-s</i> (resultative)
CI	N	PTCP-ROOT-THEM-PL.DAT(t)	<i>u-natl-av-t</i>
	V	BEN-ROOT-THEM-2PL(t)[3O.PRES]	<i>u-natl-av-t</i> (present)

CII	N	PTCP(u)-ROOT-THEM-PL.DAT(t)	<i>u-natl-av-t</i>
	V	BEN(u)-ROOT-THEM-2PL(t)[3O.RES]	<i>u-natl-av-t</i> (resultative)
CIII	N	PTCP(u)-ROOT-THEM-VOC(o)	<i>u-natl-av-o</i>
	V	BEN-ROOT-THEM-IS(o)[2SG.3O.PRES]	<i>u-natl-av-o</i>
CIV	N	PV-PTCP(u)-ROOT-THEM	<i>mo-u-natl-av</i>
	V	PV-BEN(u)-ROOT-THEM[2SG.3O.FUT]	<i>mo-u-natl-av</i>
CV	N	PV-PTCP(u)-ROOT-THEM-DAT(s)	<i>mo-u-natl-av-s</i>
	V	PV-BEN(u)-ROOT-THEM-3SG(s)[3O.FUT]	<i>mo-u-natl-av-s</i> (future)
CVI	N	PV-PTCP(u)-ROOT-THEM-DAT(s)	<i>mo-u-natl-av-s</i>
	V	PV-BEN(u)-ROOT-THEM-3SG(s)[3O.RES]	<i>mo-u-natl-av-s</i> (resultative)
CVII	N	PV-PTCP(u)-ROOT-THEM-PL.DAT(t)	<i>mo-u-natl-av-t</i>
	V	PV-BEN(u)-ROOT-THEM-2PL(t)[3O.FUT]	<i>mo-u-natl-av-t</i> (future)
CVIII	N	PV-PTCP(u)-ROOT-THEM-PL.DAT(t)	<i>mo-u-natl-av-t</i>
	V	PV-BEN(u)-ROOT-THEM-3PL(t)[3O.RES]	<i>mo-u-natl-av-t</i> (resultative)
CIX	N	PV-PTCP(u)-ROOT-THEM-VOC(o)	<i>mo-u-natl-av-o</i>
	V	PV-BEN(u)-ROOT-THEM-IS(o)[2SG.3O.FUT]	<i>mo-u-natl-av-o</i>

CX	N	PV(ga)-PTCP(na)-ROOT-VOC(o)	<i>ga-na-cxad-o</i>
	V	PV(gan)-NEUT(a)-ROOT-SUBJ(o)[2SG.3O]	<i>gan-a-cxad-o</i>
CXI	N	PV(ga)-PTCP(na)-ROOT-THEM(eb)[STEM]	<i>ga-na-cxad-eb</i>
	V	PV(gan)-NEUT(a)-ROOT-THEM(eb)[2SG.3O.FUT]	<i>gan-a-cxad-eb</i>
CXII	N	PV(ga)-PTCP(na)-ROOT-THEM(eb)-DAT(s)	<i>ga-na-cxad-eb-s</i>
	V	PV(gan)-NEUT(a)-ROOT-THEM(eb)-3SG(s)[3O.FUT]	<i>gan-a-cxad-eb-s</i>
CXIII	N	PV(ga)-PTCP(na)-ROOT-THEM(eb)-PL.DAT(t)	<i>ga-na-cxad-eb-t</i>
	V	PV(gan)-NEUT(a)-ROOT-THEM(eb)-2PL(t)[3O.FUT]	<i>gan-a-cxad-eb-t</i>
CXIV	N	PV(ga)-PTCP(na)-ROOT-THEM(eb)-VOC(o)	<i>ga-na-cxad-eb-o</i>
	V	PV(gan)-NEUT(a)-ROOT-THEM(eb)-IS(o)[2SG.3O.FUT]	<i>gan-a-cxad-eb-o</i>
CXV	N	PV(mo)-ROOT-THEM-PTCP(e)-PL(n)-VOC(o)	<i>mo-cur-av-e-n-o</i>
	V	PV(mo)-ROOT-THEM-3PL(en)-IS(o)[PRES]	<i>mo-cur-av-en-o</i>

There always is some derivational relation between the nominal and verbal equivalent of each model. In the majority of models, the nominals corresponding to the model structure are derived from verbs (86 models). These are the models where the nominal matches are infinitives. In some cases, verbs are formed from their homonym nominals (10): *kurka*, *kurkav*, *γobe*, *γobes*, *γobet*, *kvets*, *kvett*, *cecilo*, *asxmula*, *rusopilia*. In the rest of the models, both nominals and verbs are derived from the same nominal (30 models in total): *meçamle*, *meçamlet*, *tapla*, *taplav*, *bancalebs*, *bancalebt*, *bancalebo*, *ucolo*, *ucolos*, *ucolot*, *ucolono*, *moçamlo*, *moçamlos*, *moçamlot*, *udides*, *udideso*, *buzγunebs*, *buzγunebt*, *buzγunebo*, *mixvedrebs*, *mixvedrebt*, *mixvedrebo*, *gamšralebs*, *gamšralebt*, *gamšralebo*, *ganacxadeb*, *ganacxadebs*, *ganacxadebt*, *ganacxadebo*). For example, *meçamle* as well as *meçamlet* is produced from the noun *çamali*. Thus, from the point of view of derivation, there are 3 types of relations between nominal and verbal equivalents of the model, which can be graphically expressed as follows:



Where N denotes any nominal, V - a verb, and the direction of the arrow - direction of derivation.

#### Lexical, grammatical and derivational characteristics of the models

All main lexical groups of nominals in Georgian have model homonyms except for pronouns and numerals. From 115 models, nominal equivalents of 12 models are nouns. 14 models refer to adjectives. The largest share of the nominals comes on verb-nouns (total of 89), where 22 models contain masdars, 67 – participles.

Nominal equivalents of given homonym models are characterized by the following features:



1. There are only one *tapla* type animal proper names in the model homonyms. They are adjectives, but sometimes they are used as proper names;
2. There is only two models with superlative adjective. One in vocative (*udideso*) and one as a stem (*udides*) which is used as a prepositional attribute;
3. 9 out of 14 models containing adjectives are used as substantives (*bancalebs*, *bancalebt*, *bancalebo*, *ucolos*, *ucolot*, *ucolono*);
4. 19 out of 22 Masdar models have *-a* suffix. Another 3 models have *-an*, *-un*, *-ial* suffixes or are formed by reduplication of the root (*laklakebs*, *dgandgarebs*...). All preverbs and *-em*, *-eb*, *-i*, *-av*, *-am* thematic markers are present in masdar models, but there are no causative suffixes;
5. Participles are the largest group among the nominal equivalents of models, however they are represented with a few morphemes out of multiple suffixes of participles (*m-*, *ma-*, *me-*, *-al*, *u-*, *na-*, *ma-* *-e*, *mo-* *-e*). All preverbs, except for *čamo-* and *čamo-*, all thematic markers, except for *-i* are present in participle models and, like in masdar models, there are no causative markers in participle ones;
6. The following cases can be found among nominal equivalents of models: a) Nominative – most of them are vowel final, so they do not have a case marker, and the rest are consonant final, hence are marked with a case marker (a total of 15 models, where 12 are vowel final, and 3 – consonant final); b) Dative – this is the largest group (49 models in total), which is expressed, on the one hand, by the *-s* affix (25 models), on the other hand, by the *-t* morpheme, stands for plural and dative at the same time (19 models), or only serves as a dative case marker (5 models); c) Genitive – only 5 out of 115 models are in genitive and all of them are consonant final; d) Instrumental – just like the genitive case, only 5 models contain instrumental case forms and they are consonant final as well; e) Vocative – this case is represented by both *-o*, and *-v* allomorphs and together with the plural *-n* allomorph (in total 29, where *-v* allomorph is in 5 models, *-o* allomorph – in 24). In addition, nominal equivalents of 12 models are given in a form of a stem (*udides*, *maḵleb*, *momaḵleb*, *mḵvet*, *amomḵvet*, *mgudav*, *gamgudav*, *unatlav*, *mounatlav*, *mouksov*, *uṭex*, *ganacxadeb*);
7. Emphatic vowel is absent in model homonyms;
8. The plural number of the nominals is given by allomorphs *-eb*, *-n* and *-t* (a total of 37 models, where 10 models contain only *-eb* morpheme, 2 models *-n* affix, 20 models *-t* suffix, and 5 models *-eb* and *-t* morphemes simultaneously).

Morphological and semantic categories of verbal equivalents of models have the following properties:

1. Preverb – All the preverbs are present, which express perfective and imperfective aspects (*kmna* vs *šekmna*), direction (*mglej* vs *amomglej*) and orientation (*ga-dačera* vs *gadmočera*) and they change the lexical meaning of the verb (*gamcem* vs *gamomcem*);
2. Person and number - a) There is no first person subject marker in any model, although 1 model (*gamšralebt*) expresses first person without a marker. Forms containing the first person object marker (*m-*) are given in various and numerous models (39 models in total); b) Both subjective (71 models) and objective person (3 models) forms of the second person are presented in the models and all are unmarked; c) Third person subject is expressed with *-a*, *-s* (26 models) in singular, in the plural (6 models) with *-es*. The third person object is without a marker (56 models). In the verbal equivalents of model homonyms, there is also *-t* plural marker, which expresses the

plurality of both the subject and the object. 1-, 2- and 3-valence and 1- and 2-person verbs are found among model homonyms.

3. Version – Models with version markers contain a few forms, but the total number of models with version markers is 46, where 11 models contain *a-* marker of neutral version, 9 models – the *i-* morpheme of objective version, and 26 models – *u-* affix, which expresses objective version as well;

4. Voice – The majority (93 models) of the verbal equivalents of the models are of active voice and only a small part are of passive (14 models), medio-active (7 models) and medio-passive (1 model) voice. Only 3 models (*meçamle*, *meçamlet*, *mebrZolo*) contain voice marker, namely *e-*;

5. Thematic markers – Verbs contain *-eb*, *-ob*, *-av*, *-am*, *-em*, *-i*, *-op* thematic markers, which are scattered in different models. The most common are *-eb* da *-av*, which are attached to the majority of forms in some models (respectively, *-eb* is the dominant thematic marker in *bancalebs*, *bancalebt...* models, and *-av* in *gamgudav*, *gamgudavt...* models).

Only 54 model structures contain the thematic marker, i.e. the majority of model structures are formed without thematic markers;

6. Contact – contact-marked forms are not present in the model homonyms, therefore their discussion according to the category of contact is irrelevant.

7. Screeve – from the 11 screeves existing in Georgian, model homonyms are formed by only 5 screeves - present (46), future (29 models), aorist (17 models), second conjunctive (18 models) and present perfect (5 models) forms.

From tense markers only *-e* (10 models) and *-a* (4 models) of aorist and *-o* (13 models) of subjunctive is present in model verbal equivalents.

In addition to the described regularity these models are characterized by other systemic rules. Certain models form groups where the models differ from each other by one or two morphemes. We call such groups clusters.

On the basis of the first model in a particular cluster, it is possible to generate further models by adding one or two morphemes, while the rest of their lexical or grammatical features remain the same. For example, the models *mgudavs*, *mgudavt*, *mgudavo*, *gamgudav*, differ from the model *mgudav* by one morpheme, and the models *gamgudavs*, *gamgudavt*, *gamgudavo* - by two. Clusters altogether are shown in the following table:

I	<i>kurka</i>	XL	<i>miçva</i>	LXXXII	<i>mavne</i>
II	<i>kurkav</i>	XLI	<i>miçvas</i>	LXXXIII	<i>mavnes</i>
III	<i>γobe</i>	XLII	<i>miçvat</i>	LXXXIV	<i>mavnet</i>
IV	<i>γobes</i>	XLIII	<i>miçvit</i>	LXXXV	<i>gamšralebs</i>
V	<i>γobet</i>	XLIV	<i>miçvav</i>	LXXXVI	<i>gamšralebt</i>
VI	<i>kvets</i>	XLV	<i>mitvlis</i>	LXXXVII	<i>gamšralebo</i>
VII	<i>kvett</i>	XLVI	<i>mixvedrebs</i>	LXXXVIII	<i>uṭex</i>
VIII	<i>cecxlo</i>	XLVII	<i>mixvedrebt</i>	LXXXIX	<i>uṭexs</i>
IX	<i>asxmula</i>	XLVIII	<i>mixvedrebo</i>	XC	<i>uṭext</i>
X	<i>meçamle</i>	XLIX	<i>mjobni</i>	XCI	<i>uṭexo</i> (subjunctive)
XI	<i>meçamlet</i>	L	<i>mjobnis</i>	XCII	<i>uṭexo</i> (indirect speech)
XIII	<i>tapla</i>	LI	<i>mjobnit</i>	XCIII	<i>mouksov</i>

XIV	<i>taplav</i>	LIII	<i>gamgzavni</i>	XCIV	<i>mouksovs</i>
XV	<i>bancalebs</i>	LIV	<i>gamgzavnis</i>	XCV	<i>mouksovt</i>
XVI	<i>bancalebt</i>	LV	<i>gamgzavnit</i>	XCVI	<i>mouksovo</i> (subjunctive)
XVII	<i>Bancalebo</i>	LVI	<i>Gamgzavno</i>	XCVII	<i>mouksovo</i> (indirect speech)
XVIII	<i>ucolo</i>	LVII	<i>maḳleb</i>	XCVIII	<i>unatlav</i>
XIX	<i>ucolos</i>	LVIII	<i>maḳlebs</i>	XCIX	<i>unatlavs</i> (present)
XX	<i>ucolot</i>	LIX	<i>maḳlebt</i>	C	<i>unatlavs</i> (resultative)
XXI	<i>ucolono</i>	LX	<i>maḳlebo</i>	CI	<i>unatlavt</i> (present)
XXII	<i>moḳamlo</i>	LXI	<i>momḳleḳ</i>	CII	<i>unatlavt</i> (resultative)
XXIII	<i>moḳamlos</i>	LXII	<i>momḳleḳs</i>	CIII	<i>unatlavo</i>
XXIV	<i>moḳamlot</i>	LXIII	<i>momḳleḳt</i>	CIV	<i>mounatlav</i>
XXV	<i>udides</i>	LXIV	<i>momḳleḳbo</i>	CV	<i>mounatlavs</i> (future)
XXVI	<i>udideso</i>	LXV	<i>mḳvet</i>	CVI	<i>mounatlavs</i> (resultative)
XXVII	<i>kmna</i>	LXVI	<i>mḳvets</i>	CVII	<i>mounatlavt</i> (future)
XXVIII	<i>kmnas</i>	LXVII	<i>mḳvett</i>	CVIII	<i>mounatlavt</i> (resultative)
XXIX	<i>Ṣekmna</i>	LXVIII	<i>mḳveto</i> (subjunctive)	CIX	<i>Mounatlavo</i>
XXX	<i>Ṣekmnas</i>	LXIX	<i>mḳveto</i> (indirect speech)	CX	<i>Ganacxado</i>
XXXI	<i>zrdit</i>	LXX	<i>amomḳvet</i>	CXI	<i>ganacxadeb</i>
XXXII	<i>zrdis</i>	LXXI	<i>gamḳvets</i>	CXII	<i>ganacxadebs</i>
XXXIII	<i>gazrdit</i>	LXXII	<i>amomḳvett</i>	CXIII	<i>ganacxadebt</i>
XXXIV	<i>gazrdis</i>	LXXIII	<i>mgudav</i>	CXIV	<i>ganacxadebo</i>
XXXV	<i>ḳvebav</i>	LXXIV	<i>mgudavs</i>	CXV	<i>mocuraveno</i>
XXXVI	<i>gamoḳvebav</i>	LXXV	<i>mgudavt</i>		
XXXVII	<i>buzḡunebs</i>	LXXVI	<i>mgudavo</i>		
XXXVIII	<i>buzḡunebt</i>	LXXVII	<i>gamgudav</i>		
XXXIX	<i>buzḡunebo</i>	LXXVIII	<i>gamgudavs</i>		
		LXXIX	<i>gamgudavt</i>		
		LXXX	<i>gamgudavo</i>		

From 115 models, 112 models are grouped into clusters, which make 26 clusters in total. As can be seen from the given table, the cluster can include 2,3,4,5,8 or 12 models.

### Conclusions

Based on the given data, the following conclusions can be drawn:

1) In itself, the fact that homonyms between nouns and verbs are organized into models, suggests that they are regular, predictable, so homonyms are not a accidental phenomenon.

2) Clusters, which are an additional manifestation of systematicity among model homonyms, also indicate the regular nature of homonyms.

3) Most of the homonyms of nominals and verbs are organized into models. In our research material 65% are model homonyms, and 35% non-model homonyms;

4) Despite the fact that a Georgian words can contain up to eight morphemes, there are homonyms between words of two different lexical-grammatical classes and, at the same time, they are characterized by a visible regularity, which indicates that the language does not avoid homonymy, on the contrary, when there is an opportunity, the language tries to reduce number of different forms. Since nouns and verbs have different contexts (we mean context in a broad sense, i.e. all the linguistic and non-linguistic information needed to perceive the expression), it is least expected that their formal similarity will create any obstacle during communication, so that creates a fertile ground for the existence of homonyms.

These conclusions, without any further reasoning, contradict the consideration of homonymy as an irregular, accidental phenomenon. At the same time, the given discussion speaks against the formalist view and in favor of the Ambiguity advantage approach. If the homonyms were interfering with the functioning of the language, they would not be represented in the language in such a way and would have an irregular character.

#### References:

- Chomsky 2002: Chomsky N., An interview on minimalism, Noam Chomsky, on nature and language, Cambridge university press, 2002.
- Crystal 2008: Crystal D., A dictionary of language and linguistics, 6th edition, Blackwell publishing, 2008.
- Ferreira 2008: Ferreira V., Ambiguity, accessibility, and a division of labor for communicative success: *Psychology of Learning and Motivation*, 49, 2008.
- Ferreira... 2005: Ferreira V. S., Robert Slevc L., Rogers E. S., How do speakers avoid ambiguous linguistic expressions? *Cognition*, 96, Elsevier, 2005.
- Frege 1948: Frege G., Sense and Reference: *The Philosophical Review*, 53, 1948.
- Frisson... 2005: Frisson S., Rayner K., Pickering M. Effects of contextual predictability and transitional probability on eye movements during reading: *Journal of experimental psychology: learning, memory, and cognition*, 31(5), 2005.
- Goddard 1998: Goddard C., *Semantic analysis: A practical introduction*. Oxford: Oxford University Press, 1998.
- Haywood... 2005: Haywood S. L., Pickering M. J., Branigan H. P., Do speakers avoid ambiguities during dialogue? : *Psychological science*, 16(5), American psychological society, 2005.
- Jaeger 2010: Jaeger T., Redundancy and reduction: Speakers manage syntactic information density: *Cognitive Psychology*, 61, 2010.
- Kamide... 2003: Kamide Y., Altmann G., Haywood S., The time-course of prediction in incremental sentence processing, Evidence from anticipatory eye movements: *Journal of Memory and Language*, 49(1), 2003.
- Levy 2008: Levy R., Expectation-based syntactic comprehension: *Cognition*, 106(3), 2008.
- Piantadosi... 2012: Piantadosi S. T., Tily H., Gibson E., The communicative function of ambiguity in language: *Cognition*, 122, Elsevier, 2012.
- Solé... 2014: Solé R. V., Seoane L., Ambiguity in language networks, SFI working paper, Santa Fe institute, 2014.
- Trueswell... 1994: Trueswell J., Tanenhaus M., Garnsey S., Semantic influences on parsing, Use of thematic role information in syntactic ambiguity resolution: *Memory and Language*, 33, 1994.