Typology of systems of labile verbs

0. Introduction

Lability was primarily analyzed as one of the ways to express inchoative/causative opposition (see [Haspelmath 1993], [Ljutikova 2002] and also [Ljutikova 2002b] with analysis of situation in Nakh-Daghestanian group).

[Haspelmath 1993], [Ljutikova 2002]: spontaneity scale:

In the present work we discuss typology of systems of labile verbs. For lability, more than for causative and anticausative markers and for suppletion and equipollent oppositions, this approach is reasonable:
- absence of formal derivation (labile verbs does not obligatorily form a compact group in a particular language);
- relatively small number of labile verbs (lability does not usually spreads to all prototypically transitive verb but “chooses” a narrow group of verbs);
- high variance of classes of labile verbs (method of semantic mapping is not always applicable).

Such typology would allow us to speak about grammatical features of a language as factors making lability more or less probable.

1. Parameters of systems

1.1. Number of labile verbs

The most easy parameter is the number of labile verbs: cf. the data (partially from [Vajda 2005])

Language groups:
Kartvelian, Turkic Slavonian Semitic Romance Daghestanian
Chukchee Germanic (except English) Abkhaz-Adyghe Greek English, African

Languages:
Polish, Czech Russian Bulgarian, Italian, Spanish Bagvalal French, Sweden
German Avar Abkhaz-Adyghe Greek English, African

Even this parameter is not unproblematic:
1) Partially-labile verbs
2) Derived verbs.

Partially-labile verbs

Lability in some cases must be regarded as a gradual characteristic. Partially-labile are:

- verbs which have two asymmetric uses (one is much more frequent); for example, cf. occasional transitive uses of Russian and English intransitive verbs:

(1) Extremely hot sun blossomed all flowers [Wright 2001];

Russian:

(2) Petr- a uš-l-i s rabot-y
Peter-ACC go.out-PAST-PL from job-GEN
‘Peter was discharged from his job’, literally ‘They went Peter out from his job’.

- verbs which have two meanings with different meanings.

Derived verbs

Usually the authors analyze base labile verbs. However, some languages have big classes of derived labile verbs

French: deadjectival verbs:
grandir ‘make/get bigger’;
The problem is that these verbs admit two different approaches:

- “lability of verbs”;
- “lability of markers”: variance is caused by the properties of markers or declension types and does not depend on the meaning of the verb.

We can regard systems with a number X of base labile verbs “more labile” than systems with the same number of derived labile verbs: therefore, German is “more labile” than French, which is also proved by other facts.

1.2. Diathetic class of labile verbs

Lability can be divided into diathetic classes ([Lutikova 2002], [Letuchiy 2004]): anticausative, reflexive, converse, passive, reciprocal lability. We can see which class is the main one in a system:

Alutor: reflexive class;

(3) a. γομμα τα-tivla-tkαn
   Ι.ΝΟΜ 1SG.S-shake.off-IPF
   ‘I shake myself off’;

b. γοm-nan  τα-tivla-tkα-n   nαγο-n
   Ι-ΕΡΓ 1SG.A-shake.off-IPF-3SG.P skin-acc
   ‘I shake the skin (beat the dust out of the skin) off’.

Alutor is almost the only languages where reflexive lability prevails.

However, this case is rather rare: in almost all languages the anticausative type prevails, which is perhaps due to role of reflexive and causative/anticausative markers in language systems:

- almost all systems have reflexive markers, whereas many of them do not have either causative or anticausative markers;
- anticausative meaning combines naturally with a wider class of situations than reflexivity or reciprocity;
- lability tends to bind two “autonomous” situations, which can be presented as two variants of the same situation.

Reflexive, reciprocal and converse types are not only rare, but also hardly predictable: they do not strictly correlate with areals or grammatical properties of languages.

1.3. Semantic class of (anticausative) labile verbs

Anticausative labile verbs can, in turn, be divided into semantic classes. There are core and peripheral language systems:

Core system: Adyghe. Labile verbs belong to prototypically transitive class: they have a prototypical agent or causer and a prototypical patient, which is a material object and changes its properties during the situation:

(4) a. čaške-r qwọta-bẹ
cup-ABS break-PERF
   ‘The cup broke’;

b. se čaške-r se-qwọte
   I cup-ABS break-PRES
   ‘I break the cup’.

Core systems are of the following types:
1. **patient**-prominent systems;
2. **spontaneity**-prominent systems.

In 1, degree of patientivity of the second argument is important: the most prototypical are the patient of destruction verbs. On the other hand, some verbs like ‘begin’ or ‘sing’ do not have a prototypical patient at all.

**Lezgian**: verbs with prototypical patient: ‘kill’, ‘break’, ‘burn’ etc. Cf. also **Agul**: the most numerous class are destruction verbs ([Daniel, Majsač, Merdanova 2006]).

**Russian, Arabic**: no verbs with prototypical patient, cf. Arabic labile verbs of symmetric situations:

*Arabic*:

(5) a. y-as’ub-u ‘alay-hi ’an y-usa:wi:
   3M-be_difficult-SG on-3SG.M to 3M-equal.PRS.SG
   ma’a al-’a:har-i:na fi: al-mas’u:liyyat-i
   with DEF-other-GEN.PL in DEF-responsibility-GEN
   ‘It is difficult for him to be responsible equally with others’ (lit. ‘to be equal with others in responsibility’).

b. y-usa:wi:-hi ma’a al-Wuqrat-i
   3M-equalize.PRS.SG-3SG.M with DEF-Wuqra-GEN
   ‘It makes it (a football team) equal with Wuqra (a football team’).

In such systems characteristics of the **participant** are more prominent than those of the situation as a whole.

In 2, degree of spontaneity is important (see spontaneity scale above).

**Adyghe**: lability of non-spontaneous situations: *qWEten* ‘break’, *jEteqWEn* ‘spill’, *zepEBEn* ‘break’, *ze{etHEn* ‘tear’, *wEI&WejE* ‘dirt’; in the left end, lability is rare – most often a marked variant like in (6c) is used:

(6) a. psɔ-r ma-ʒwε
   WATER-ABS DYN-BOIL
   ‘The water boils’.

b. se čet-ɔr se-ʒwε
   i CHICKEN-ABS 1SG.A-BOIL
   ‘I boil a chicken’.

c. se čet se-ʁa-ʒwε
   i CHICKEN 1SG.A-CAUS-BOIL
   ‘I boil a chicken’.

The second variant, with a marked verb, is much more frequent.

**French**: lability of spontaneous situations: *brûler* ‘burn’, *fondre* ‘melt’, *sécher* ‘dry’. Verbs of the right end of the scale are either non-labile (‘spill’ *briser* ‘break’) or have both labile and non-labile patterns (*casser* ‘break’):

(7) a. *J’ai cassée la tasse* ‘I broke a cup’;

b. *La tasse a cassé* ‘The cup broke’;

c. *La tasse s’est cassée* ‘The cup broke’

See [Labelle 1990] on their distribution.

**Peripheral** systems: labile verbs do not belong to the prototypically transitive class: they either do not have a prototypical patient or a prototypical agent. The main classes which are labile in PS are **phase and motion verbs** (cf. the “move and change class”, usually analyzed as a single class which does not behave so concerning lability).

**Russian, Ancient Greek, partially Polish**: motion verbs:

*Russian*:
8. a. mašin-a mč-it po ulic-e
car-NOM rush-3SG.PRS along street-DAT
‘The car drives fastly along the street’;
b. pojezd-Ø mč-al nas na jug-Ø
train-NOM rush-SG.M.PAST we.ACC to south-ACC
‘The train drove us to South’.

Ancient Greek:
9. a. ball-o belos-Ø
throw-1SG arrow-ACC
‘I throw an arrow’;
b. potam-os eis al-a ball-ei
river-NOM to sea-ACC throw-3SG
‘The river flows into the sea’.

Motion verbs are not prototypically transitive:
- no prototypical patient;
- no prototypical agent (often express sociative causation).

Bulgarian and many other languages: phase verbs.
10. a. započčn-a da govor-i
begin-3SG.PAST CONJ speak-3SG.PRS
‘He began to speak’;
b. godina-ta započčn-a
year-DEF begin-3SG.PAST
‘The year began’.

(!) Variance even in Turkic languages, which does not have lability generally.
Lability of phase verbs is presumably of different type: cf. Samolet nachal padeniye ‘The plain began to fall’, with the transitive, but not causative variant.

Mixed types of systems:
French, though having a large class of prototypically transitive labiles, also has a group of motion verbs: descendre ‘go/lead down’, sortir ‘go/take out’, entrer ‘go/take in’, monter ‘go/lead up’. Not surprisingly, lability in French affects the left end of the spontaneity scale and agentive verbs of motion.

Adyghe, having many non-spontaneous labiles, also have labile phase verbs. This proves that lability of peripheral verbs does not depend on “core” lability – but peripheral systems grammaticalize lability less than core.

1.4. Homogenous/heterogenous systems
We expect a grammatical marker to apply to a semantically homogenous class of objects: for example, only a particular class of nouns. It is not always applicable to lability.
The more homogenous a system is, the more lability is characteristic for a language system:
German is “more labile” than French (many labiles on the scale, no motion verbs).
Bulgarian (a whole labile group of phase verbs) is “more labile” than Arabic (labile verbs from different classes).

BUT
Lability of a particular class can be a result of different processes: labile motion verbs in Russian presumably results from omission of objects.
Therefore, we can see the following types of systems:
- large, homogenous, core: Adyghe, Agul
- small, homogenous, core: Lezgian
- small, homogenous, peripheral: Russian
large, homogenous, peripheral: **no examples**
small, heterogenous, core: **Bagvalal?**
large, heterogenous, core: **German, English, Avar, Greek**
small, heterogenous, peripheral: **Bulgarian, Arabic**
large, heterogenous, peripheral: **French**

We can see that lability is more grammaticalized in **large, homogenous, core systems**: it serves as a derivational marker and not a lexical semantic process. French is, for example, more grammatically labile than Latin and other Romance languages, but less than German.

1.5. Compatibility of labile verbs with markers
Labile verbs can admit or prohibit addition of derivational markers: cf. Russian *kapat’* ‘drop/fall in drops’ - *kapat’ja* ‘fall in drops’ and Adyghe verbs *qWEten* ‘break’ (does not admit the causative marker) and *wEl&wejEn* ‘soil’ (compatible with the causative marker).

This factor can also prove stronger/weaker grammaticality of lability:

**French, Bulgarian**: labile verbs are compatible with the marker *se*;
**German, Adyghe**: non-spontaneous labiles are incompatible with the markers (be it causative or anticausative marker).

In German and Adyghe lability is the only way to express derivations of particular verbs – therefore, it is a sort of grammatical marker.

2. **Factors of lability in language system**
1. alignment ([Drossard 1998], [Vajda 2005]);
2. system of derivational markers ([Klimov, Alexeev 1980]);
3. pro-drop ([Vajda 2005]);
4. structure of verb form ([Polinskaja 1986], [Vajda 2005]).

2.1. Alignment
Does not really affect the number of labile verbs; rather their semantic classes:
Ergative: core, homogenous systems.
Accusative: peripheral, heterogenous systems.
Presumably it is connected with transitivity systems:
Ergative: “semantic” transitivity ([Testelec 1998]):

(11) se çale-m s-je-we
  I BOY-ERG 1SG.S-3SG.IO-HIT

‘I hit a boy’;

Accusative: transitivity characterizes a large class of predicates, not obligatorily prototypically transitive.
Lability characterizes “rather transitive” predicates, which are supposed to be prototypically transitive by a particular language system.

2.2. System of derivational markers
[Klimov, Alexeev 1986]: lability in Caucasian languages results from “absence of passive markers”, which does not really explain variety of Caucasian systems (11 labiles in Godoberi, 28 in Agul, about 80 in Adyghe).

More exact is the parameter of **degree of grammaticalization** of markers.
Indo-European languages:

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grammaticalization of anticausative markers

Ancient Greek Slavic Romance Germanic

number of “core” labile verbs

Germanic marker: case and person inflection;
French: only person;
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Slavic: neither person nor case.
Lability is particularly rare in languages with “middle inflection” (Ancient Greek, Latin, Arabic, Kartvelian), because in such cases markers are built into the system of inflection. In Greek and Romance it is more developed because of change in valency-changing markers.

**Indo-European vs. Caucasian languages:**
grammaticalization of anticausative vs. grammaticalization of causative
“spontaneous” labile verbs vs. non-spontaneous labile verbs
more peripheral labiles vs. less peripheral labiles

NB: generally, spontaneity scale tend to be included into “anticausative” zone.
Therefore, Indo-European languages tend to have more peripheral labiles. Lability, as predicted partially by [Nichols 2004], “substitutes” for anticausative and not causative – in the case of absence of the causative marker it occupies the peripheral zone.

Of course, these tendencies are rather scalar than binary:
- small Caucasian systems are more “core” than small European systems (cf. Lezgian – only verbs with prototypical patient);
- big Caucasian systems are more homogenous than big European systems (cf. Adyghe – only verbs of non-spontaneous situations).

Peripheral labiles almost do not correlate with the properties of grammar – therefore, they are rather a result of lexical semantic processes.

2.3. Pro-drop
[Vajda 2005]: lability is not developed in languages with pro-drop: cf. English, Kartvelian.

BUT: compare Adyghe, with developed pro-drop and lability:

(12) ə-qwətə-ɓ
 3SG.A-BREAK-PAST
‘(S)he broke it’.

Intransitive and “pro-drop” uses are not homonymous because of personal agreement in the verb form.

Cf. also Bulgarian which is “more labile” than Russian and has more developed prodrop:

Bulgarian:
(13) iska-Ø  da ni  vid-i
    want-3SG CONJ we.ACC see-3SG
‘He wants to see us’;

Russian:
(14) on xoche-t  nas  vid-et’
    he.nom want-3SG we.ACC see-INF
‘He wants to see us’.

Maybe pro-drop (of objects) is connected with A-lability – these two phenomena are generally hardly distinguishable. Both pro-drop and A-lability are connected with pragmatic properties of the object.

3. Areal features of lability
Lability characterizes particular language areals. [Nichols 2004]: Eurasia (which is not true for the whole Eurasia).

Areal with highly-developed lability:
1. Standard average European, Central Europe:
   - Germanic languages;
   - French – more than any other Romance.
2. Caucasus
3. Eastern Asia – Chinese (?)
4. Africa (see below)

**Areals with small groups of labile verbs:**

1. **South Europe:**
   - **Bulgarian** – more than any other Slavic (lability of all phase verbs); also is typologically more close to SAE than any other Slavic language: developed TAM system, not grammaticalized anticausative marker, non-developed case system.
   - **Romance**;
   - **South America** – many prototypically-transitive labile verbs.

2. **Semitic:** Hebrew, Arabic

**Areals (almost) without lability:**

1. **Eastern Europe:**
   Baltic, East Slavic.
2. **Central and Northern Asia:**
   Turkic, Iranian.

3.1. **Africa**

African languages tend to have lability of stative-passive type, which is generally unusual for all other areals.

- **Bamana:** passives proper [Vydrine 1994]: \(d\&\)n ‘plant/be planted’, \(s\&\)nsan ‘enclose/be enclosed’.
- **Songay** [Galiamina 2006]: some statives of the type \(t\&\)ka ‘create (of God)’/‘be created (by God)’, \(h\&u\) ‘damn’/‘be damned’
- **Cabiyle:** agentless passives (cf. a passive proper in 16c):

\[
\begin{align*}
(15) & \quad a. \quad & m\&l-n & t & u\&kS\!r \\
& \quad & bury-3PL.M & him & below \\
& \quad & ‘They buried him below’; \\
& \quad b. \quad & u\&g-i-n & ad & y-m\&l & u\&kS\!r \\
& \quad & refuse-3PL.M & IRREAL & 3SG-bury & below \\
& \quad & ‘They did not want him to be buried below’. [Chaker 1983: 294]. \\
& \quad c. \quad & y-Tw-aD\&f & s & w\&u\&n \\
& \quad & 3SG-PASS-pursue & by & jackal \\
& \quad & ‘He was pursued by a jackal’ [Chaker 1983: 312].
\end{align*}
\]

These different diathetic types are manifestations of the same tendency to “stativity-passivity” – cf. Caucasian languages without stative labiles.

**Conclusions**

- Properties of a system can show how much is lability “grammatical” – serves as a sort of grammatical marker. – but the main parameter is not the number but core/peripheral lability, homogenous/heterogenous etc. Whereas small homogenous core systems of lability are similar to grammatical markers, peripheral systems are not.

<table>
<thead>
<tr>
<th>Grammatical and non-grammatical lability</th>
<th>“Grammatical” (Caucasian languages)</th>
<th>“Non-grammatical” (Indo-European languages)</th>
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</thead>
<tbody>
<tr>
<td>many labile verbs</td>
<td>few labile verbs</td>
<td></td>
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<tr>
<td>“core” labile verbs</td>
<td>“peripheral” labile verbs</td>
<td></td>
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<tr>
<td>incompatible with markers of derivations</td>
<td>compatible with markers</td>
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<tr>
<td>homogenous</td>
<td>heterogenous</td>
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</tbody>
</table>

- Therefore, “non-grammatical” and “grammatical” systems of lability can be regarded as different phenomena – however, “non-grammatical” systems with lability of a particular small class of verbs can turn into “grammatical” systems.
Properties of systems depend on areals and grammatical properties. The main grammatical parameter is properties of derivational markers – non only their (non)-existence, but also degree of grammaticalization.

“Standard average European” and “Standard average Caucasian” not by number of labile verbs, but by their semantic class. Therefore, in the latter lability is more “grammatical” than in the former.

Properties of labile systems let us speak about lability as a typological parameter not only in terms of number of labile verbs.

**Bibliography**