

## Lability in Caucasian languages and its relation to aspectual properties (in typological perspective)

### 1. Usual approach

[Haspelmath 1993]: inchoative/causative alternations: *break* ‘get broken/make broken’.  
In fact, labile verbs are not identical by their aspectual properties:

*boil* – process verb;

*break* – momentary event verb.

Spontaneity scale for distribution of pairs:

freeze-dry-melt-burn-fill-rock-gather-open-break-spill ([Nedjalkov 1969], [Haspelmath 1993], [Ljutikova 2002]).

The situations on the left end are prototypically spontaneous (take place without an agent), whereas those on the right end are non-spontaneous. For situations, which contain agent-oriented components (cf. ‘wash’) the alternation is impossible.

The scale often cannot explain why a verb is or is not labile:

**German:** *treiben* ‘lead/drift’ (presuppose a second argument in the intransitive use).

Verbs with the meaning ‘destroy’ in many languages are **not** labile, whereas verbs like ‘break’ are labile ([Levin 1993]).

Questions:

- ❖ are there correlations between lability and aspectual properties?
- ❖ are there correlations between aspectual properties and type of language.

### 2. Types of systems

#### 2.1. Caucasian type

**Adyghe:** only **the right side** of the scale:

- (1) a. čaške-r            q<sub>w</sub>əta-ɬe  
CUP-ABS            BREAK-PAST  
‘The cup broke’;
- b. čaške-r            se-q<sub>w</sub>əte  
CUP-ABS            BREAK-PRS  
‘I break a cup’.

Adyghe labile verbs are of the event type ([Vendler 1967]). Moreover, the only verb which does not belong to the scale is also of this type: *jəhan* ‘come in/take in’ (cf. *k<sub>w</sub>en* ‘go’ which is not labile).

**Lezgian:** primarily verbs of the right side: *xun* ‘break’, *kun* ‘burn’. *q’in* ‘die/kill’, *q0azunun* ‘tear’, *aTun* ‘tear’.

**Agul:** a large group of labile break-verbs:

- (2) a.            BaḡW            ar<u-ne  
                 mirror(NOM)    broke.PF-PFT  
                 The mirror broke.
- b.            BaḡW            na            ar<u-ne ?  
                 mirror(NOM)    who(ERG)    break.PF-PFT  
                 Who broke the mirror? [Daniel, Majsak, Merdanova 2006].

**Avar:** also has a group of break-verbs.

#### 2.2. European type

**French:** only **the left side** of the scale:

- (3) a.            *La viande cuit*  
                 ‘The meat cooks’;
- b.            *Je cuit la viande*

‘I cook the meat’.

However, we can interpret the same facts in another way:

**Adyghe:** only event verbs;

**French:** only process verbs.

### 3. Arguments for aspectual analysis

#### 3.1. Haspelmath’s predictions and their violations

- ❖ Even in [Haspelmath 1993] pairs are restricted to inchoative/causative type. However, in fact these restrictions are not so strict:

*hang*: state/event:

- (4) a. *La poire pend à la branche* ‘A pear hangs on the branch’;  
b. *Il a pendu un tableau au mur* ‘He hung a picture on the wall’.

#### 3.2. Other aspectual restrictions

- ❖ In Caucasian languages, there are other aspectual restrictions:

**Adyghe:**

When a labile verb is used in a transitive construction, the final state of the patient is relevant and the agent is not salient. On the other hand, if a marked causative is used, the agent is salient<sup>1</sup>:

- (5) a. *xərbəzə-m*                      *žane-r*                      *je-wəš<sub>w</sub>ejə*                      *zəpətə*  
WATERMELON-ERG                      CLOTH-ABS                      3SG.A-SOIL                      ALWAYS  
‘A watermelon always soils clothes’ (the causer is not salient);
- b. *xərbəzə-r*                      *arə*                      *s-jə-žane*                      *z-jə-ke-wəš<sub>w</sub>ejə-ke-r*  
WATERMELON-ABS                      FOC                      1SG-POSS-CLOTH                      RFL-3SG.A-CAUS-SOIL-PAST-ABS  
‘That was a watermelon which soiled my clothes’ (the causer is salient).
- (6) a. *se*                      *wəne-m*                      *sə-qe-na-ɤ*  
I                      HOUSE-ERG                      1SG.S-DIR-STAY-PAST  
‘I stayed home’.
- b. *sabəj-əm*                      *žeg<sub>w</sub>ake-xe-r*                      *wəne-m*                      *qə-r-jə-na-ɤ*  
CHILD-ERG                      TOY-PL-ABS                      HOUSE-ERG                      DIR-3SG.A-LEAVE-PAST  
‘The child left his/her toys at home’ (not on purpose);
- c. *sabəj-əm*                      *žeg<sub>w</sub>ake-xe-r*                      *wəne-m*                      *qə-rjə-ke-na-ɤ*  
CHILD-ERG                      TOY-PL-ABS                      HOUSE-ERG                      DIR-LOC-3SG.A-CAUS-STAY-PAST  
‘The child left his/her toys at home’ (on purpose);

In (6b) the focus also is on the resulting state, whereas in (6c) the process phase is focused – correspondingly, the manner of the causation is salient.

On the other hand, labile verbs like *qwəten* ‘break’, *zəpjəč’an* ‘break’, *ze?etχən* ‘tear’ do not combine with the causative marker at all. These are momentary verbs which do not have any process phase but have a final state: the causative marker cannot focus anything.

Spontaneity cannot explain it: the agent could in principle be focused.

On the other hand, in **European** languages lability is also subject to aspectual restrictions.

#### 3.3. Occasional lability in Russian

Occasional lability in Russian: primarily strongly telic verbs in the perfective aspect (verbs of entry into state):

*vzburli* ‘boil up’ (about water), *zaplesnevet* ‘grow musty’, *ottaivat* ‘become defrozen’ (about food) – telic verbs, which have intransitive and occasional transitive uses:

- (7) a. *Vod-a*                      *vzburli-l-a*  
water-NOM                      boil.up-PAST-3SG

<sup>1</sup> Adyghe is an ‘increasing’ language by criteria proposed in [Nichols et al, 2004]. Therefore, it has a very productive morphological causative.

- ‘The water boils up’;
- b. *Lodk-a*      *vzburli-l-a*      *vod-u*  
boat-NOM      boil.up-PAST-F      water-ACC  
‘The boat boiled the water up’.
- (8) a. *On*      *ushe-l-Ø*      *s*      *rabot-y*  
he.NOM      go.out-PAST-M      from      job-GEN  
‘He went out from the job’
- b. *Jego*      *ush-l-i*      *s*      *rabot-y*  
he.ACC      go.out-PAST-PL      from      job-GEN  
‘They made him go out from the job’ (‘They discharged him from the job’, perfective aspect).

Correspondent atelic or imperfective verbs – *uxodit’* ‘go out’ (in the imperfective aspect), *burlit’* ‘boil up’ – do not get transitive uses:

- (9) a. \**Lodk-a*      *burl-it*      *vod-u*  
boat-NOM      boil.up-3SG      water-ACC  
‘The boat boils the water up’.
- b. \**Jego*      *uxod’-at*      *s*      *raboty*  
he.ACC      go.out-3PL      from      job-GEN  
‘They discharge him’.

### 3.4. Lability and prototypical causation

- ❖ Prototypical causation: the causation precedes the caused event.
- ❖ Lability: often simultaneous events: cf. Greek *dzo* ‘live/support’

Therefore, aspectual properties can account for emerging of lability.

### **4. Examples, which are problematic for the traditional approach**

- ❖ “slightly agentive” verbs like Agul *ruXas* ‘bear/be born’ are not explained:

- (10) a. *zun*      *gada*      *ruXune*  
I.ERG      son.NOM      bear.PAST  
‘I bore a son’.
- b. *za-s*      *gada*      *ruXune*  
I-DAT      son.NOM      bear.PAST

‘I born a son’ (lit. ‘A son was born to me’) [Daniel, Majsak, Merdanova 2006].

The situation ‘be born’ can not take place without the second participant. Perhaps, lability of this type can be accounted for in aspectual approach.

In fact the situation “be born” does not have a process stage, relevant for the speaker – therefore, only the final state of the patient is relevant.

Cf. also lability of the type ‘die/kill’ (only in ergative languages): Lezgian *q’in* ‘die/kill’.

- ❖ “Partially labile” European verbs are labile in **present** forms, but not in **past forms** (11):

- (11) a. *turc-i-te*      *izgor’-i-xa*      *сърква-ta*  
turk-PL-DEF      BURN-SUFF-AOR.PL      CHURCH-DEF  
‘The turks burnt a church’;
- b. *mnogo*      *grad-ove*      *izgor’-a-xa*  
many      city-PL      BURN-SUFF-AOR.PL  
‘Many cities burnt’.

- ❖ Verbs which do not tend to be labile:

‘throw’ vs. ‘lead’, ‘push’, ‘pull’:

All of these verbs have agentive components of their meaning, and should not be labile.

But **throw-verbs** do not have a process phase, and, therefore, the sole phase is the initial one, controlled by the agent. **Push-verbs** have process phase, which can be conceptualized as not

fully controlled by the agent.

(12) \**The stone throws.*

(13) French: *pousser jusqu'à la ville* 'go to the city' (lit. 'push to the city');

(14) German: *Die Wolken ziehen* 'The clouds fly' (lit. 'pull').

❖ Non-labile verbs with the meaning 'destroy':

(15) a. *A bomb destroyed the building.*

b. \**The building destroyed.*

The situation 'destroy' is prototypically a **process**. Therefore, a transitive variant 'destroy' and an intransitive 'be destroyed' differ in aspectual characteristics.

### 5. Relations between ergativity and aspectual properties

It is difficult to see a relation between ergativity and non-spontaneity.

Possible explanation: in ergative languages, the final state of the patient is focused (see [Kibrik 2002] about the fact that patient is generally very salient in ergative languages).

Language strategy: process is not focused, **change of state of the patient and its final state are focused**

**Verbs of the right end of the scale:** change of state of the patient and its final state are focused.

Therefore, *break*-lability leads to the same result on both scales.

Besides it, cf. [Hopper, Thompson 1980]: momental verbs are "more transitive" than process verbs. In ergative Caucasian languages, this fact is much more apparent than in accusative ones.

All languages: lability occupies the zone of syntactic transitivity.

Ergative languages: lability occupies the core zone of semantically transitive verbs.

### Additional example of focusing the final state

❖ Cf. Adyghe *zebɣərətəq<sub>w</sub>ən*: the prefix focuses the final state of the patient.

Non-prefixal verb *teq<sub>w</sub>ən* 'spill, throw' is **only transitive**.

(16) a. se      š<sub>w</sub>eš'əɣ<sub>w</sub>ə-r      s-teq<sub>w</sub>ə-ɣe  
I      SUGAR-ABS      1SG.A-SPILL-PAST  
'I spilled sugar';

b. \*š<sub>w</sub>eš'əɣ<sub>w</sub>ə-r      teq<sub>w</sub>ə-ɣe  
SUGAR-ABS      SPILL-PAST  
'The sugar spilled'.

Cf. opposition of manner verbs and result verbs in [Levin, Rappaport Hovav 1995]: verbs like 'throw' are a type of manner verbs – therefore, they do not focus attention on the **final state**.

Example (16) does not illustrate aspectual proper distinctions. However, this opposition is close to the opposition between break verbs, which focuses the final state, and other groups of verbs.

## 6. Rare aspectual types of labile verbs

### 6.1. Stative verbs that can be labile

Verbs of position: 'hang', 'lay' etc.

Verbs of relations: 'be different', 'be equal':

(17) a. *de Marcelli morte variant auctores* 'О смерти Марцелла существуют различные версии';

b. *laborem otio variare* 'Переменять работу отдыхом'.

However, generally these verbs are labile rarely: cf. English *lay/lie*.

### 6.2. Africa: unusual aspectual properties of labile verbs

In Africa, state verbs often are labile:

Kabyle:

- (18) a. mDl-n t ukSar  
bury-3PL.M him below  
'They buried him below';
- b. ugi-n ad y-mDl ukSar  
refuse-3PL.M IRREAL 3SG-bury below  
'They did not want him to be buried below'. [Chaker 1983: 294].

Compare [Haspelmath 1993]: verbs like 'bury' carry agentive components and cannot be labile. Stativity is a mechanism to take these components out.

For African languages (Ben, Bamana, Songhay, Kabyle) stative labile verbs are characteristic (Galiamina 2005): cf. Songhay *fiji* 'stick into the ground' / 'be stuck into the ground', *taka* 'create (of God)' / 'be created', *husu* 'damn / be damned'.

❖ "aspectual" spontaneity – focusing of the state phase.

This type lets a verb become labile, even if their meaning contain agentive components: the stative phase presuppose that the agent already does not take part in the situation.

❖ spontaneity proper – degree of spontaneity of the process phase;

Arabic: lability of state verbs:

- (19) al-fawz-u y-usa:wi-hi ma'a al-wuqrat-i  
DEF-victory-NOM 3M-equal.PRS.SG-3SG.M with DEF-Wuqra-GEN  
'The victory will make it equal with Wuqra (a sport club)'.
- (20) si'r-u ad-du:la:r-i y-aka:d-u y-usa:wi: si'r-a al-yi:wru:  
price-NOM DEF-dollar-GEN 3M-be.close-SG 3M-be.equal.SG price-ACC DEF-euro.GEN  
'The price of dollar is almost equal to the price of euro'.

Even transitive uses can be stative.

Cf. relation between **aspectual properties of labile** and **aspectual properties of transitive verbs**: in Arabic, stative verbs are much more often transitive than in many other languages. In African languages, stative verbs are very often lexicalized.

Therefore, type of lability depends crucially of aspectual properties.

❖ Lability and habituality:

German:

- (21) a. *Die Tür schliesst automatisch* 'The door opens automatically';  
b. *Die Tür schloss \*(sich) automatisch* 'The door opened automatically'.
- (22) a. *Der Baum neigte sich* 'The tree bent';  
b. *Er neigt zur Leichtsinn* 'He is inclined to light-mindedness'.

**State does not tend to be designated by anticausatives.**

We cannot explain these facts by spontaneity: verbs like 'close' are labile in many languages, but usually not of German type.

### 7. Spontaneity proper or aspectual characteristics?

What is spontaneity?

❖ **Semantic** spontaneity?

Cf. the following sentences:

- (23) *The wind broke the window;*  
(24) *The sun dried the grass.*

Both *breaking* and *drying* often take place because of external forces: see [Wright 2001] about external and internal causation of events.

Therefore, semantic spontaneity is difficult to count. We need to explain, why dry-events are conceptualized as spontaneous.

Besides that, problematic are cases with non-agentive subjects like (23): should we say

that such events are or are not spontaneous?

Finally, how can we deal with stative/causative alternations like ‘hang (transitive)/hang (intransitive)’? Is the resulting state spontaneous or is it a part of non-spontaneous non-stative situation?

- ❖ “**Textual**” spontaneity – tendency to occur in texts in transitive/intransitive uses?

Maybe, *break*-verbs occur more readily in transitive uses than *dry*-verbs.

However, this characteristic depends crucially on a particular lexeme:

**English:**

(25) *As a result of this disaster, twenty people died/were killed*

**Russian:**

(26) \**Dvadcat’ chelovek bylo ubito/umerlo v katastrofe* ‘Twenty people were killed/died in a disaster’.

Cf. also **Agul** verb ‘die/kill’.

- ❖ Aspectual approach:

“more spontaneous events” = events with a process phase which is not controlled by an agent;

“less spontaneous events” = events without such a phase.

Events without a process phase are usually not conceptualized as spontaneous:

- ❖ process is more difficult to control (usually the agent controls only some sub-phases of the process);
- ❖ events, on the other hand, prototypically involve an agent.

On the other hand, perhaps, this approach cannot account for all examples.

### **Conclusions**

- ❖ aspectual properties are connected with spontaneity;
- ❖ in many cases properties of classes of labile verbs can be explained by aspectual characteristics; verbs with the same degree of spontaneity, denoting the same situation, can be or not be labile because of aspectual characteristics;
- ❖ aspectual properties are one of means to take the agent out of the situation: another one is non-prototypical agents;
- ❖ aspectual properties of labile verbs (just as lability by itself) differ from one language to another. They correlate with general properties of transitivity in a language and relations between transitivity and aspect;
- ❖ labile verbs cannot be analyzed just as examples of unmarked “inchoative/causative” alternations. However, this type is the most obvious, especially for productive occasional lability.

### **Abbreviations**

DEF – definite article  
SG – singular  
PL – plural  
DIR – directive  
ERG – ergative  
ABS – absolutive  
NOM – nominative

GEN – genitive  
PF – perfect  
PFT - perfective  
CAUS - causative  
PAST – past tense  
PRS – present tense

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