Genericity and habituality

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1 Topic and main goals

- Genericity is divided into two domains (Carlson and Pelletier (eds.) 1995):

(i) **KIND REFERENCE**: *The silk worm was first discovered in China.*
A generic predicate attributes a property to a kind that particular instances of that kind cannot have. Its expression is tied to an *NP* argument of a verb.

(ii) **CHARACTERIZING GENERICITY**: *The sun rises in the East. The glass breaks easily.*
A generic predicate describes a "non-accidental" generalization (Goodman 1955, Lawler 1973, Dahl 1975, Burton-Roberts 1977, and others), rather than a mere accidental correlation. What "non-accidental" here means can be understood as fitting into some larger and principled pattern (see also Pelletier and Schubert 1989, Carlson 2007), and this understanding may involve reasoning about some underlying cause or causes (Dahl 1975, Carlson 1989, 1995). Characterizing genericity is a feature of an entire sentence (or at least an entire clause), if it is marked formally, the relevant marker is closely related to the *verb*, rather than to some *NP* argument of the verb.

- KIND REFERENCE and CHARACTERIZING GENERICITY co-occur in a single sentence:
The silk is a fiber consisting of protein.
The generically-predicated property *is a fiber consisting of protein* is understood as being true of any possible specimen of silk, i.e., the kind SILK itself, as well as true of particular existing instances of silk.

- Two common ideas in the study of genericity:

(i) Lack of dedicated markers of GENERICITY

A hallmark property of genericity is taken to be the lack of dedicated markers, in both its subdomains—KIND REFERENCE and CHARACTERIZING GENERICITY (in the sense of Krifka et al 1995).

(ii) CHARACTERIZING GENERICITY is a subcategory of (imperfective) aspect or tense

- The encoding of characterizing genericity, and habituality (often taken as a special case of characterizing genericity), is manifested in a number of morphosyntactic ways.
- In languages with the grammaticized categories of tense and/or aspect, its encoding is centered in the distribution of tense and/or aspect morphology.
- Therefore, characterizing genericity is subsumed under (imperfective) aspect, and less frequently also under tense, rather than being an independent category in the grammatical system of natural languages.

Goals

- contest both these common ideas
- outline some consequences for our understanding of genericity

Main data: The Czech suffix *-va-* that formally marks generic sentences, and is often labeled as a "habitual" suffix.

2 Dahl (1995): MINIMAL MARKING TENDENCY OF GENERICITY in tense and aspect systems

Dahl (1995) gives one of the clearest formulations of the ideas that (i) genericity lacks any dedicated markers and (ii) characterizing genericity is not an independent category in the grammar of natural languages. Therefore, the arguments against the validity of these two ideas will be mainly framed as arguments against Dahl (1995), who is just one representative of a substantial body of work on genericity endorsing these ideas.

Dahl's (1995) main focus – and here as well – is on CHARACTERIZING GENERICITY.

- **Main claims**

  - Markers of characterizing genericity are rare in natural languages:

    3 languages out of the 76 in Dahl's (1985) corpus: Wolof (Niger-Kordofanian), Iṣẹkiri (Niger-Kordofanian) and Maori (Austronesian).

  - The semantic episodic/generic distinction—and by the same token genericity—has no direct relevance for the grammars of natural languages, instead it is only ***indirectly*** reflected in speakers' choices between grammatical markers in the ***tense-aspect systems*** of natural languages.

    HABITUAL markers--a large class and attested in a number of typologically distinct languages--are

    (i) "tense-aspect" markers, which
    (ii) exhibit a low degree of grammaticalization, and serve
    (iii) "as a kind of quantifier over situations with, roughly, the semantics of 'most'" (ibid., p.421).

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- In the majority of human languages, prototypical generic sentences are ***minimally marked with respect to tense and aspect***—that is, they either lack overt tense-aspect marking (e.g., *Birds fly*) or they use the least marked form in the tense-aspect category system.

The main challenge and puzzle for semanticists, for whom the episodic/generic distinction is of key importance, is the following question:

QUESTION: Why should it be the case that prototypical generic sentences (e.g., "Birds fly") tend to be devoid of any dedicated markers? (Dahl 1995 p.425)

- **Main problem:** Dahl's (1995) two key assumptions are flawed

D 1 : A generic marker is OBLIGATORY in *all and only* generic sentences.

- Counterarguments:

  - Absolute obligatoriness is not necessary for grammaticalization to take place (see e.g., Lehmann (1995 [1982]: 12), Heine and Kuteva (2002, 2007), and others).
  - Unjustified from the point of view of the functioning of markers of grammatical categories.
    Example: The past tense morpheme *–ed* does not occur in *all and only* sentences with past time reference. Other function of the *–ed* form: contrafactual statements (*If I worked at Google, I'd live in San Francisco*). When narrating past situations, the historic present tense is commonly used.

D 2: Habitual markers fail to qualify as generic markers, because they are

(i) "tense-aspect" markers, which
(ii) exhibit a low degree of grammaticalization, and serve
(iii) "as a kind of quantifier over situations with, roughly, the semantics of 'most'" (ibid., p.421).

- Counterargument:

The Czech suffix *-va-* is taken to best illustrate the above properties. However, it

- fails to exhibit Dahl's three signature properties of habitual markers,
- arguably behaves like a generic marker, i.e., a marker of characterizing genericity (see below, also Filip 2009 and elsewhere).

The main challenge and puzzle for Dahl (1995):

To the extent that Dahl's paradigmatic example of a habitual marker, the Czech suffix *-va-*, fails to have the three properties that habitual markers ought to have, according to him, this raises the question about the habitual status of markers in languages the Czech suffix *-va-* is supposed to represent:

- Arabic (Classical), Akan, Catalan, Didinga, Czech, German, Guarani, Hungarian, Kammu, Limouzi, Montagnais, Sotho, Spanish, Swedish, Swedish Sign Language, Yucatec Maya, Zulu (Dahl (1995, p.421, fn.8; also Dahl 1985).

- Some other examples: Awa (New Guinea), Haida (North American Native language), Lithuanian, Swahili (Bantu), West Greenlandic (Eskimo-Aleut).

QUESTION: Do the so-called "habitual" markers in the languages listed above and others like it also fail Dahl's three "habitual" signature properties, and if so, could they be viewed as markers of characterizing genericity?

- **Overall research strategy**

1) Confirm the hypothesis (Dahl 1975, Carlson 1988) that there is a significant number of languages that have dedicated markers of characterizing genericity.

   - Therefore, **reject the first common idea** that there are no dedicated markers of characterizing genericity, and also Dahl's (1995) claim that they are highly exceptional in the grammar of natural languages.

2) Genericity—and the semantic generic/episodic distinction—has *direct* relevance for the grammars of natural languages (*pace* Dahl 1995).

3) Characterizing genericity (and habituality) is an independent category (see e.g., Carlson 1977, 1982; Pelletier and Asher 1997; Krifka *et al.* 1995), not to be subsumed under tense and aspect.

   - Therefore, **reject the second common idea** that genericity/habituality is to be subsumed under (imperfective) aspect, or tense.

Next:

(i) Show that the Czech suffix *-va-* directly marks a part of the domain of characterizing genericity, but it is not just the habitual subdomain as is commonly believed.
(ii) It is independent of the categories of the TMA system, and therefore provides additional evidence for the independent status of characterizing genericity in the system of grammatical categories.
(iii) Show that the Czech suffix *-va-* can be viewed as a generic marker, which supports the proposal that characterizing genericity has dedicated grammaticized markers.

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3 The Czech "habitual" suffix *–va-* : Basic facts

NOTE ON TERMINOLOGY:

In what follows I will use "habitual" (in quotation marks) for the Czech suffix *–va-* to indicate that this label is strictly speaking incorrect, but it will be used to identify it as the same suffix that Dahl (1995) uses as a paradigmatic case exemplifying the properties of his class of habitual markers; for the same reason the Czech suffix *–va-* will also be glossed with HAB.

- Cross-linguistic Slavic perspective

  The use of the Czech "habitual" suffix *–va-* to signal a characterizing generic interpretation of a sentence is one of the distinguishing features of the Czech verbal system, which is not shared by other Slavic verbal systems (see e.g., Široková 1963, p.62; Comrie 1976, p.27; Kučera 1981; Petr et al 1986, among others).

  In Russian, for instance, the cognate suffix is morphologically unproductive and occurs only on some verbs that are marginal in usage: e.g., *byvat'* (< *byt'* 'to be'), *govarivat'* (< *govorit'* 'to speak'), *pivat'* (< *pit'* 'to drink'), *sizhivat'* (< *sidet'* 'to sit') and *xozhivat'* (< *xodit'* 'to go'). (See comments on 'frequentatives' verbs in Vinogradov 1986, pp.413-4; Forsyth (1970); Comrie 1976, p.27; Isačenko 1962, pp.405-7; Kučera 1981, p.177; Petr 1986.)

3.1 A clear separation between the "habitual" and imperfective suffix in Czech

The common allomorphic variants of the "habitual" suffix *–va-* may appear to be identical to the allomorphic variants of the imperfective suffix *–(o)va-*. Synchronically, these two suffixes are clearly separate, both formally and semantically.

3.1.1 The formal differences between the "habitual" and imperfective suffix

Table 1: Input/output conditions of the "habitual" and imperfective suffix

SUFFIX	input V stem	output V stem	EXAMPLE
"habitual" suffix ***–va-***	IMPERF [± HAB]	IMPERF **[+ HAB]**	→ : (1a-b), (1d-e), (2b-c)
imperfective suffix ***–(o)va-***	PERF [± HAB]	IMPERF [± HAB]	↓ : (1c-d), (2a-b)

(1) a. psát IMPERF → b. psávat IMPERF
write.INF — write.**HAB**.INF
(i) episodic: 'to be writing', 'to write' — (i) episodic: —
(ii) habitual: 'to write as a habit' — (ii) habitual: 'to write as a habit'
↓
c. přepsat PERF
ITER.write.INF
(i) episodic: 'to rewrite'
(ii) habitual: 'to rewrite as a habit'
↓
d. přepisovat IMPERF → e. přepisovávat IMPERF
ITER.write.**IPF**.INF — **ITER**.write.**IPF.HAB**.INF
(i) episodic: 'to be rewriting', 'to rewrite' — (i) episodic: —
(ii) habitual: 'to rewrite as a habit' — (ii) hab.: 'to rewrite as a habit'

(2) a. dát PERF
give.INF
(i) episodic: 'to give'
(ii) habitual: 'to give as a habit'
↓
b. dávat IMPERF → c. dávávat IMPERF
give.**IPF**.INF — give.**IPF.HAB**.INF
(i) episodic: 'to be giving', 'to give' — (i) episodic: —
(ii) habitual: 'to give as a habit' — (ii) habitual: 'to give as a habit'

3.1.2 The semantic differences between the "habitual" and imperfective suffix

Table 2: The interpretive range of the "habitual" and imperfective suffix

interpretation	episodic	generic/habitual
"habitual" suffix *–va-*	*	+
imperfective suffix *–(o)va-*	√	√

'*': uninterpretable
'+': always enforced
'√': contextually determined interpretation

- There is a clear division of labor between the habitual suffix *–va-* and the imperfective suffix *–(o)va-*, even if they both build imperfective verb forms:

  — The imperfective suffix *–(o)va-* marks the category of imperfectivity as a whole, covering both its episodic and generic/habitual interpretation subdomains, following the general interpretation pattern of markers of imperfective aspect. Imperfective verbs overtly marked with the imperfective suffix *–(o)va-* freely alternate between episodic and generic/habitual interpretations in dependence on context.

  — The "habitual" suffix *–va-* marks the generic/habitual subdomain of imperfectivity only, it *enforces* a generic/habitual interpretation of verbs it forms, and it excludes their episodic interpretation. derives generic/habitual verbs; a hallmark property of generic predicates is that they are aspectually stative.[1]

- Key differentiating data point: compatibility with episodic adverbials

➢ **"habitual" suffix**

Key grammatical property: clashes with episodic adverbials

— adverbials referring to specific time points, e.g., "yesterday at 3 pm":

(3) a. * *Včera ve tři hodiny* přepisovával IMPERF dopis.
yesterday at three o'clock ITER.write.**IPF.HAB**.PAST letter.SG.ACC
* 'He used to rewrite a letter yesterday at 3 pm.'

b. * *Včera ve tři hodiny* Pavel hrával IMPERF šachy s dědou.
yesterday at three o'clock Paul play.**HAB**.PAST chess with grandpa.
* 'Paul used to play chess with grandpa yesterday at 3 pm.'

'*' semantically uninterpretable

— iterative adverbials like "three times" counting particular episodes that are NOT a part of a larger pattern:

(4) a. Přepisovával IMPERF nejméně ? *třikrát* svůj proslov.
ITER.write.**IPF.HAB**.PAST at.least ? 3.times his speech.SG.ACC
'He used to rewrite his speech at least ? three times.'

b. Pavel hrával IMPERF ? *třikrát* šachy s dědou.
Paul play.**HAB**.PAST ? 3.times chess with grandpa.
? 'Paul used to play three games of chess with grandpa.'

➢ **imperfective suffix**

Key grammatical property: compatible with episodic adverbials, e.g., "yesterday at 3 pm" and iteratives like "three times":

(5) *Včera ve tři hodiny* přepisoval IMPERF ten dopis.
yesterday at three o'clock ITER.write.**IPF**.PAST this letter.SG.ACC
'He was rewriting this letter yesterday at 3 pm.'

(6) Přepisoval IMPERF nejméně *třikrát* svůj proslov.
ITER.write.**IPF**.PAST at.least 3.times his speech.SG.ACC
'He rewrote / was rewriting his speech at least three times.'

4 Arguments against Dahl's (1995) signature properties of habitual markers

The paradigmatic example of habitual markers the Czech suffix *-va-*

- is not a tense marker
- is not an aspect marker
- does not exhibit a low degree of grammaticalization
- cannot be analyzed in terms of *usually* or *most*

4.1 Independence of habituality and tense (marking) (see also Filip and Carlson 1997)

- **NOTIONAL ARGUMENTS**

(i) Tense is a deictic category, genericity/habituality is a non-deictic category.

(ii) Generic/habitual sentences that are of the "timeless" or proverbial type can be in any tense form – present, future or past tense form.

(7) a. Corruption **starts** at the top.
b. Men **were** deceivers ever.
c. The poet **will go** to any end to make a rhyme.

(iii) Habitual sentences are notionally compatible with any sufficiently large temporal interval, located in the present, past or future. They may express generalizations

[1] *Neaktuálnost* 'non-actuality' property of *–va*-verbs in traditional and structuralist Czech accounts (following Kopečný 1966, p.259).

that are restricted in time located in the present, past or future (Dahl 1975; 1985, p.100), despite the emphasis in some generic studies on the unchangeable, eternal, and universal nature of generalizations.

(8) a. The **current** President eats broccoli.
b. **Dinosaurs** (usually) ate kelp. [background knowledge: Dinosaurs are extinct]
c. **Starting next Monday**, this office will be open only from 2pm to 4pm.

(iv) Tenseles languages have specific "habitual" markers (American Sign Language) or may lack them (Chinese), in which case they convey habitual statements by other means (e.g., in Dyirbal and Burmese by means of a modal distinction between realis and irrealis; Comrie 1985, p.51).

(v) Overt markers of tense and "habitual" markers are semantically independent of each other, as each clearly contributes a different semantic component to the meaning of a sentence.

- **FORMAL ARGUMENTS**

(i) "Habitual" markers are formally independent of overt tense markers. They form verbs heading sentences that preclude the expression of tense, as we see below illustrated with the Czech "habitual" *–va-* in the infinitive and imperative forms. In this respect, "habitual" markers follow the general pattern of generic sentences that are compatible with constructions precluding the expression of tense: e.g. non-finite forms such as infinitives, gerunds and imperatives.

(9) a. Jídávát kaviár - to by se ti chtělo! INFINITIVE
eat.**HAB.INF** caviar - it COND REFL you wanted
'To eat caviar regularly - surely, that would be nice for you, wouldn't it!'

b. Nesedávej pořád v koutě! IMPERATIVE
NEG.sit.**HAB.IMP** always in corner
'Don't always sit in the corner!' [i.e., don't always be so self-effacing]

(10) a. To know her is to love her. INFINITIVE
b. Attending class (i.e. regularly) is very important).

(ii) "Habitual" markers are formally independent of overt tense markers, as the two freely co-occur on the same verb.

(11) a. Karel hrával hokej. PAST TENSE
Charles play.**HAB.PAST** hockey
'Charles used to play hockey.' [remote past]

b. Karel hrává hokej. PRESENT TENSE
Charles play.**HAB.PRES** hockey
'Charles usually plays hockey.'

c. Karel bude hrávat hokej. FUTURE TENSE
Charles BE.AUX.**FUT** play.**HAB.**INF hockey
'Charles will usually play hockey.'

- Motivation for **(ii)**

Complementarity of paradigmatic oppositions:

➢ Different formal members of the same grammatical category are in complementary distribution. Example: present and past tense markers:

(12) John *walk-s-ed.

➢ Formal members of different grammatical categories are not in complementary distribution. Example: tense and aspect markers:

(13) John is/was/will be walking.

Given that the "habitual" *–va-* and tense markers do not stand in a paradigmatic opposition to each other, they cannot be members of the same category, on the standard assumption of the basic complementarity of paradigmatic oppositions.

Table 3: Independence of "habitual" and tense markers (Filip and Carlson 1997)

[+ habitual, + tense]	Czech
[+ habitual, – tense]	American Sign Language
[– habitual, + tense]	English
[– habitual, – tense]	Chinese

Conclusions

- The Czech "habitual" suffix *–va-* is not a tense marker, it is independent of the markers of tense, formally and notionally.
- Habituality/genericity and tense notionally cross-classify (Filip and Carlson 1997).

Therefore, habituality/genericity and tense are independent of each other.

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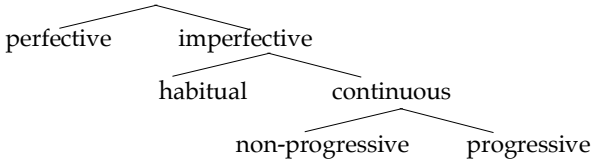
4.2 Independence of habituality and aspect (marking) (also Filip and Carlson 1997)

- Background: Dahl (1995) as many others assumes that CHARACTERIZING GENERICITY is a subcategory of (imperfective) aspect.

Some representative implementations:

- Comrie (1976)

Table 4: Classification of aspectual oppositions (see Comrie 1976, p.25, *Table I*)

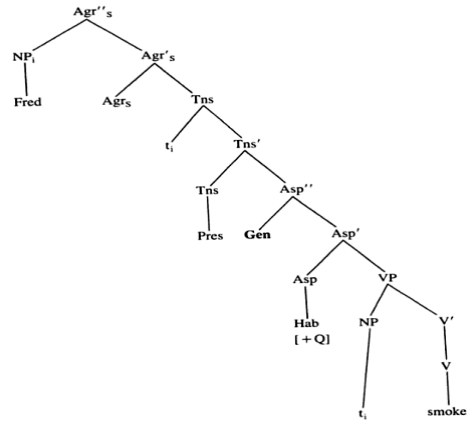


- Chierchia (1995)

(14) a. *Fred smokes.* Chierchia 1995

b. **Gen** s [C(**f**,s)] [**smoke**(**f**,s)]
'Every situation *s* of the appropriate type that contains Fred is a situation in which Fred smokes.'
'C': context variable, its value is provided by felicity conditions for the relevant activities (and absence of inhibiting factors)

c.



- Boneh and Doron (2013): *Hab* (a kind of aspectual-modal operator) is orthogonal to both imperfective and perfective aspect, but selected by an *AspP*.

- **FORMAL ARGUMENTS against subsuming genericity/habituality under aspect**

(i) Languages with the grammaticized perfective/imperfective distinction may have specific "habitual" morphemes (Czech) or not (French). Languages with no grammaticized perfective/imperfective distinction may have specific "habitual" morphemes (Guarani, see Dahl 1985), or lack both aspect and "habitual" morphology (German) and express habituality by other means. In short, all the possible combinations in the domain of formal expression of genericity and grammatical aspect are attested:

Table 5: Independence of "habitual" and aspect markers (Filip and Carlson 1997)

[+ habitual, + aspect]	Czech
[+ habitual, – aspect]	Guarani
[– habitual, + aspect]	French
[– habitual, – aspect]	German

(ii) "Habitual" and imperfective markers co-occur on the same verb (Filip and Carlson 1997). Example: Czech imperfective and "habitual" suffixes:

(15) a. dát PERF
give.INF
(i) episodic: 'to give'
(ii) habitual: 'to give as a habit'
↓
b. dávat IMPERF
give.IPF.INF
(i) episodic: 'to be giving', 'to give'
(ii) habitual: 'to give as a habit'
↓
c. **dávávat** IMPERF
give.**IPF.HAB**.INF
(i) episodic: —
(ii) habitual: 'to give as a habit'

(16) a. psát IMPERF
write.INF
(i) episodic: 'to be writing', 'to write'
(ii) habitual: 'to write as a habit'
↓
b. přepsat PERF
ITER.write.INF
(i) episodic: 'to rewrite'
(ii) habitual: 'to rewrite as a habit'
↓
c. přepisovat IMPERF
ITER.write.IPF.INF
(i) episodic: 'to be rewriting', 'to rewrite'
(ii) habitual: 'to rewrite as a habit'
↓
d. **přepisovávat** IMPERF
ITER.write.**IPF.HAB**.INF
(i) episodic: —
(ii) habitual: 'to rewrite as a habit'

- Argument based on the basic complementarity of paradigmatic oppositions:
  - Given that the imperfective **IPF** suffix and the "habitual" **HAB** suffix co-occur on the same verb, they cannot be members of the same grammatical category. (See above for a parallel argument for the formal independence of genericity/habituality from tense.)
  - Given that the **IPF** suffix is a formal member of the aspect category, as all agree, and given that the "habitual" **HAB** suffix freely co-occurs with it on the same verb, **HAB** cannot be a marker of a different member of the *same* category imperfectivity.

- **NOTIONAL ARGUMENT against subsuming genericity/habituality under aspect**

  Genericity and habituality notionally cross-classify both the domains of imperfectivity and perfectivity, because all their formal members are notionally compatible with generic/habitual uses, they are used to express generic/habitual statements in appropriate contexts.

➢ **imperfective (marked by the imperfetto suffix in Italian)**

(17) Teo mangiava ogni giorno due volte. ITALIAN
Teo ate-imperfective each day twice times
'Teo used to eat / ate twice a day.'

➢ **progressive (marked by the progressive construction in English and Italian)**

(18) a. Kim is always loosing her keys.
b. He's always sleeping in. temporary or new habits
c. He's eating a lot these days.
d. She's swimming every morning (she didn't use to do this).
e. They're working late every night.

(19) Stava mangiando un diverso numero di calorie ogni settimana. ITALIAN
AUX.IPF eating a different number of calories every week
'He was eating a different number of calories every week.'

➢ **perfective**

Dahl (1995, p.420) along with many others assumes that the expression of generic statements by means of perfective forms is rare and unusual. In Dahl's proposal, it does not even make a list of the exceptions to his minimal marking tendency of genericity. In particular, he dismisses the use of perfective verbs in generic/habitual statements in Slavic languages as yet another "case of deviant behavior" of their aspect systems.

However, the use of perfective forms in generic statements is not as exceptional as Dahl (1995) claims, they are commonly used in both Romance and Slavic languages, as the following examples show:

ITALIAN (passato remoto)

(20) a. Sempre, quando mi **vedeva**IMPERF, il custode **apriva**IMPERF la porta.
'Always, when the janitor see (past, imp.) me, he open (past, imp.) the door.'

b. Sempre, quando mi **vide** PERF, il custode **aprì** PERF la porta.[2]
always when me see.PASSATO.REMOTO the janitor open.PASSATO.REMOTO the door
'Always when the janitor saw me, he opened the door.' Bonomi 1997, p.508

(21) a. Arrivato al museo, **apriva**IMPERF la porta e sempre **scendeva**IMPERF la scala.
arrived at.the museum, opened the door and always walked down the stairs
'Having arrived at the museum, he opened the door and always walked down the stairs.'

b.' Arrivato al museo, **aprì**PERF la porta e come sempre **scese**PERF la scala.
'Having arrived at the museum, he opened the door and as always walked down the stairs.'

FRENCH (passé simple)

(22) Presque toujours, quand il **parla**PERF, il **détermina**PERF le vote du conseil.
almost always when he spoke.PASSÉ.SIMPLE he determined.PASSÉ.SIMPLE the vote of the Board
'Almost always, when he spoke, he determined the vote of the Board.'

RUSSIAN

(23) Nastojaščij drug vsegda **pomožet**PERF.
real friend always helps
'A real friend will always help you.'

[2] The examples (a,b) are taken from Bonomi (1997, p.508), his examples (67a,b), who observes that "... both aspectual forms are compatible with (most) explicit adverbs of quantification. For example, the following pairs of sentences are perfectly in order: ... ". However, some native speakers consider the use of passato remoto in the (b) example as highly odd.

SERBO-CROATIAN

(24) Svako jutro **popijem**[PERF] čašu rakije.
every morning drink glass brandy
'Every morning I drink a glass of brandy.' Mønnesland 1984, p.62

POLISH

(25) Ja codziennie **przepalę**[PERF] 20 papierosów.
I every.day smoke 20 cigaretted Lenga 1976, p.46
'I smoke 20 cigarettes every day.'

- **Perfectivity and KIND predicates**

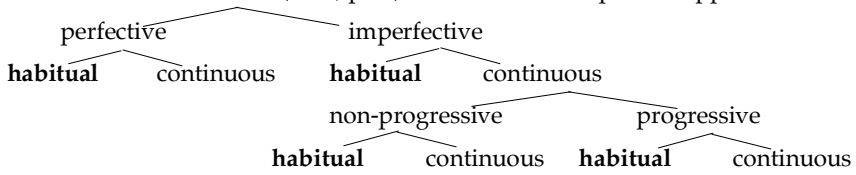
  Perfectivity is also notionally compatible with KIND predicates like "become extinct", "die out", "invent", which select for kind-referring terms in one of their argument positions. In Slavic languages, KIND predicates are commonly expressed by perfective verbs:

(26) a. Mamut **vymřel**[PERF]. b. Mamuti **vymřeli**[PERF]. CZECH
mammoth.SG.NOM died.out mammoth.PL.NOM died.out
'The mammoth is extinct.' 'Mammoths are extinct.'

c. Jízdní kolo bylo **vynalezené**[PERF] v roce 1817.
bicyle AUX invented.PAST.PARTICIPLE in year 1817
'The bicycle was invented in 1817.

- Taking the above data and observations to their logical conclusion leads to the following revision of Comrie's classification:

Table 6: Revision of Comrie's (1976, p.25) classification of aspectual oppositions



Conclusions

- The Czech "habitual" suffix *–va-* is not an aspect marker (*pace* Dahl 1995), it is independent of the markers of aspect, formally and notionally.
- Genericity/habituality and the categories of grammatical aspect notionally cross-classify (Filip and Carlson 1997).

Therefore, habituality/genericity is not to be subsumed under imperfective aspect as one of its subcategories.

Genericity/habituality and grammatical aspect are independent of each other.

4.3 "Habitual" markers do not exhibit a low degree of grammaticalization

- The Czech suffix *–va-* does not seem to exhibit a low degree of grammaticalization:
  - its presence is a **sufficient condition** for a generic/habitual interpretation in all its occurrences;
  - it exhibits a **high frequency** of occurrence, it is commonly used in all styles of speech and written language (see Kučera 1981, p. 177; Petr 1986);
  - it makes a consistently **predictable** and **transparent (compositional)** contribution to the meaning of a verb: it derives verbs denoting generic predicates used for the expression of generalizations over a set of entities, situations, or 'cases' (in the sense of Lewis 1975).

4.4 The quantificational and modal properties of the Czech suffix *-va-*

- Dahl (1995)'s proposal for an analysis:
  - Observation: Salient distributional property of habitual markers is their presence in the context of *usually*.
  - Proposal: "Habitual" markers serve as
    (i) a quantifier over situations
    (ii) with roughly the semantics of 'most' (see Dahl 1995, p.421).

(i) What it means to be a quantifier over situations is made explicit by Krifka et al (1995, p.32, [56]) and amounts to the delimitation of a habitual sentence:

(27) A sentence is *habitual* if and only if its semantic representation is of the form **GEN**[... s ... ; ...] (**Restrictor** [... s ...]; **Matrix**[... s ...]),
where *s* is a situation variable Krifka et al (1995, p.32, [56])

Examples:

The Sun rises in the East.
→ **GEN**[x,s] (*x* = **the_Sun** & *x* **in** *s*; *x* **rises_in_the_East in** *s*)
'In appropriate situations which contain the Sun, it will rise in the East.'

John drives to work
→ **GEN**[x,s] (*x* = **John** & *x* **in** *s*; *x* **drives_to_work in** *s*)
'In appropriate situations which contain John, John will drive to work.'

(ii) Saying that "habitual" markers have the meaning of a vague EXTENSIONAL quantifier *most* means that they cannot be generic markers, because generic sentences are INTENSIONAL, i.e., they may be true even if there are no contingent real world episodic conditions verifying them (Lawler 1973, Dahl 1975).[3]

Counterarguments against (i) and (ii)

(i) Quantificational properties of the Czech suffix *–va-*

- The suffix *–va-* semantically functions as a kind of generic Q-Adverb (see also Filip 1993, 1994, 2009). (It is not licensed by a null **GEN** operator, *pace* Chierchia 1995.)

- It introduces a quantifier into the logical representation which patterns with Q-adverbs in its variable-binding properties:

  Properties of Q-Adverbs (Chierchia 1995) and the Czech suffix *-va-*:

  (i) bind a situation variable;
  (ii) bind variables provided by singular indefinites and bare plurals;
  (iii) bind variables provided by kind-denoting definites;
  (iv) bind more than one variable;
  (v) relatively freely select the arguments for its binding, modulo context.

- *VA* can bind the situation variable (quantification over a set of contextually specified situations).

(28) a. V sobotu Honza sedává IMPERF v hospodě.
on Saturday John sit. **HAB.PRES** in pub
'On Saturday, Honza (usually) sits in the pub.'

a.' **VA** [s,x;] (x=**John** ∧ **Saturday**(s) ∧ x in s ; x **sits in pub** in s)
'For a given situation *s* such that *s* is located on Saturday, Honza sits in a pub in *s*.'

b. Moře **bývá** IMPERF v tuto dobu vyhřáté na příjemných 28°C.
sea.SG.NOM be.**HAB.PRES**.3SG in this time warmed-up on pleasant 28°C
'At this time the sea tends to be warmed up to a pleasant 28°C.'

- *VA* can bind individual variables provided by indefinites (singular and bare plurals).

(29) a. Čech bývá IMPERF dobrý muzikant.
Czech be.**HAB.PRES** good musician
'A Czech is usually a good musician.'
a.' **VA** [x;] (**Czech** (x) ; **a_good_musician** (x))
'When an individual has the property of being Czech, sh/e is a good musician.'
Quantification over individuals who are Czech, whereby some proportion of them are good musicians. What proportion exactly depends on the context of use.

b. Stoly **mívají** IMPERF čtyři nohy.
table.PL.NOM have.**HAB.PRES** four legs
'Tables (tend to) have four legs.'

- *VA* can bind variables provided by kind-denoting definites. In the sentences below, *člověk* 'man' and *rohozub nachový* 'fire moss' are both kind-referring terms, and *VA* is here used to quantify over instances of these kinds. The sentences express generalizations that are true by virtue of the fact that it also holds of most or all specimens of man

(30) a. Člověk se k stáru měnívá IMPERF
man REFL toward old.age change.**HAB.PRES**
'Man changes as he grows old.' Karel Čapek, *Ordinary Life*, 1934

a.' **VA** [x;] (**man** (x); **change_in_old_age** (x))

[3] Their logical formulas involve quantification over *episodic* formulas containing free variables; Generalized Quantifier Theory: extensional quantifiers are interpreted as a relation between two sets (Barwise and Cooper 1981; Keenan and Stavi 1986, among others).

b. Rohozub nachový bývá IMPERF rozšířený u lidských sídlišť.
ceratodon purpureus be.**HAB.PRES** widespread at human dwellings
'Fire moss tends to be widespread close to human dwellings.'

b.' **VA** [x;] (**ceratodon_purpureus** (x); **widespread_at_human_dwellings** (x))

- *VA* can bind more than one variable.
- *VA* can (by and large) freely select the arguments it binds, modulo context.

(31) a. Kočka honívá IMPERF myš.
cat chase.**HAB.PRES** mouse
'A cat chases a mouse.'

b. **VA**[s,x,y;] (**cat**(x) ∧ **mouse** (y) ∧ C(x,y,s) ; **chase** (x,y,s))

(32) a. Televizní hlasatel na Nově nosívá IMPERF kravatu.
television announcer on Nova wear.**HAB.PRES** tie.SG.ACC
'The TV announcer on the Nova station only rarely wears a tie.'

b. **VA** [x;] (**television_announcer_on_Nova** (x); ∃y[**tie**(y) ∧ **wear** (x,y))

(ii) not reducible to "most" or "usually"

- The Czech "habitual" suffix *–va-* occurs less often with *obvykle* 'usually' than with adverbials indicating a low frequency like *občas* 'from time to time', *někdy* 'sometimes', *málokdy* 'rarely', *tu a tam* 'here and there', *vzácně* 'rarely' (see Danaher's (2003) corpus-based study). Examples:

(33) a. Ten šuplík býval IMPERF ***jen velmi zřídka*** zamčený.
That drawer be.HAB.PAST only very rarely locked
'That drawer used to be only **very rarely** locked.'

b. Televizní hlasatel na Nově nosívá IMPERF ***jen málokdy*** kravatu.
television announcer on Nova wear.HAB.PRES only rarely tie.SG.ACC
'The TV announcer on the Nova station **only rarely** wears a tie.'

- The Czech *–va-* commonly marks generic sentences that are true even if most instances do not satisfy the generically-predicated property:

(34) Žraloci napadávají IMPERF plavce. TRUE
shark.PL.NOM attack.HAB bather.PL.ACC
'Sharks tend to / may attack bathers.'

Background knowledge: shark attacks on humans are rare.

- The addition of *obyčejně* 'usually' does not preserve the truth value of a sentence with the "habitual" marker *–va-*. While (34) is true, adding 'usually' renders a sentence that is false:

(35) Žraloci **obyčejně** napadávají IMPERF plavce. FALSE
shark. PL.NOM usually attack.HAB bather.PL.ACC
'Sharks usually attack bathers.'

- In some uses of the suffix *–va-*, the modal epistemic component, rather than some notion of quantity, seems to matter the most to the truth of a sentence. Whenever the suffix *–va-* is used its contribution has to do with epistemic uncertainty, it suggests our uncertainty about states of affairs or things we could/should know but do not, because of a lack of available data. In some cases, as in the (b) sentence below, it may its only contribution to the meaning of a sentence.

(36) a. U každého domu je IMPERF zahrada.
at each house is garden.SG.NOM
'At each house, there is a garden.'

b. U každého domu bývá IMPERF zahrada.
at each house is.**HAB.PRES** garden.SG.NOM
'At each house, there tends to be a garden.'

NOT: "In most/some/the majority of situations, and for each house in that situation, there is a garden next to it".

Conclusions

- The Czech suffix *–va-* freely co-occurs with a whole range of adverbials of quantification which clearly indicates that it on its own does not contribute any requirement on the frequency of the generically-predicated property.

  Therefore, any reductionist analysis of the meaning of the Czech "habitual" suffix *-va-* to that of *usually*, *most*, or any other *single* expression of quantity is implausible.

  This behavior is unsurprising if we assume that it is indeed a marker of characterizing genericity, which, as is well-known, concerns generalizations over different number of situations, and different types of generalizations tolerating a different number of exceptions.

- The Czech suffix *–va-* semantically functions as a kind of generic Q-Adverb. It introduces a quantifier into the logical representation which patterns with Q-adverbs in its variable-binding properties.

- It is used to mark not only sentences that are habitual, i.e., express generalizations over situations (see e.g., Krifka et al (1995), but also generic sentences which predicate generic properties of individuals only (see also Filip 1994, 2009 and elsewhere).

- It also contributes a non-quantificational meaning of epistemic uncertainty to the expressed proposition.

4.5 Summary

The Czech suffix *–va-*

- fails to exhibit Dahl's (1995) three signature properties of habitual markers:

  (i) it resists a classification as a marker of tense or imperfective aspect,
  (ii) its meaning cannot be reduced to that of a quantifier like *usually, most* or to any other *single* extensional quantifier or expression of quantity, and
  (iii) it enforces a generic interpretation of sentences in all its occurrences, exhibits a high frequency and regularity of occurrence, which is suggestive of a high degree of grammaticalization.

- has quantificational (and modal) properties that suggest that it be best viewed as a generic marker, i.e., a marker of characterizing genericity.

Given that the Czech suffix *-va-* fails to have Dahl's (1995) three signature properties of habitual markers, and given that Dahl (1995) takes it to be a paradigmatic example of a class of habitual markers, this raises two questions:

QUESTIONS:

1) What is the status of a large class of markers that Dahl (1995) classifies as habitual markers? Are they markers of characterizing genericity, independent of tense and aspect?

   See e.g., the relevant markers in: Arabic (Classical), Akan, Catalan, Didinga, Czech, German, Guarani, Hungarian, Kammu, Limouzi, Montagnais, Sotho, Spanish, Swedish, Swedish Sign Language, Yucatec Maya, Zulu (Dahl (1995, p.421, fn.8; also Dahl 1985); Awa (New Guinea), Haida (North American Native language), Lithuanian, Swahili (Bantu), West Greenlandic (Eskimo-Aleut).

2) What semantic type of a characterizing generic statement does the Czech suffix *–va-* delimit? Which part of the domain of characterizing genericity does it directly mark?

5 When may, must and cannot the Czech suffix *–va-* be used?

5.1 When cannot the Czech suffix *-va-* be used?

5.1.1 Limiting case 1: Exceptionless regularities

- Background: Generic sentences express "non-accidental" generalizations which **TOLERATE** exceptions.

(37) a. *Birds fly.*
is true, even if there are birds like penguins and ostriches that do not fly

b. *John drives to work.*
its truth is compatible with the existence of occasions on which John does not drive to work.

- **Exception-requiring property of the Czech generic suffix *–va-***

  - Key semantic property: Generic sentences formally *marked* with the Czech "habitual" suffix *–va-* **REQUIRE** the existence of exceptions to what would be the corresponding universal generalization, while the forms that are not formally marked for genericity merely ALLOW for the existence of such exceptions (see Filip 1993, 1994, 2009).

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- Key grammatical property: The Czech "habitual" suffix *–va-* is incompatible with universal quantification, explicit or implicit. It clashes with predicates expressing 'exceptionless regularities', i.e., regularities that necessarily hold for ALL the members of a class of entities.

Examples:

(i) incompatibility with an explicit universal quantifier

- The Czech "habitual" suffix *–va-* is odd or unacceptable with overt universal adverbs of quantification:

(38) ? Každou sobotu Honza sedává v hospodě.
? each Saturday John sits.HAB in pub
? 'Every Saturday John usually sits in a pub.'

! Co-occurrence with the universal quantifiers *vždy(cky)* 'always' and *nikdy* 'never': the universal quantifiers co-occuring with *-va-* indicate 'intensification of the habit's strength', which is overtly marked by the suffix *-va-*, rather than having their universal quantificational force (see Danaher 2003:45).

(39) Mládež ve Vídni se zabývala Hebblem — já jsem **vždycky býval** (HAB) skeptický k takovým módním proudům. Čapek 1990, p.57
'Viennese youth were all reading Hebbel — I **was always** skeptical about these fashionable influences.' Čapek 1934, p.82

(40) "Je to divný," pokračovala pak rychlým a věcným šepotem, "jeden šuplík má zamčenej, a **nikdy** ho **nemívá (HAB) zamčenej**. A nepasuje mi do něj žádnej klíč."
"It's strange," she continued in a quick and matter-of-fact whisper, "one of his desk drawers is locked and he **never has it locked**. And none of my keys fit the lock." Bělohradská 1992, p. 88, cited in Danaher 2003

This is similar to the effect of *always* in English sentences like *You always say that* or *You never listen to me*, where the speaker suggests that the addressee has a distinct and conspicuous habit of saying something or not listening on a given occasion. We also find the combinations of *usually always* and *usually never* to qualify a habit or its negation as a general tendency.

(41) a. I am *usually always* happy, but today I feel really depressed.
b. I am *usually never* neurotic about being messy and keeping things tidy, but I can't seem to go to sleep if clothes are hanging up to dry in my room.

(ii) incompatibility with an implicit universal quantifier, e.g., it is incompatible with predicates denoting

(a) analytic truths,
(b) a property that holds without exception for all the relevant instances, e.g., natural laws ("brute" physical facts, Searle 1995), and
(c) regulatory and constitutive rules of various kinds ("social facts" Searle 1995).

- (a)-(c) are expressed by generics that are analyzed within the *rules-and-regulations* model in Carlson (1995).

(a) analytic truth

(42) Trojuhelník má / ?mívá tři strany.
triangle has / ?has.HAB three sides
'A triangle has / ? usually has three sides.'

(b) a property that holds without exception for all the relevant instances, e.g., natural laws ("brute" physical facts, Searle 1995)

- regulatory sequences constituting the genetic code that defines a species

(43) Velryba je / ?bývá savec.
whale is / ?is.HAB mammal
'A whale is / ?tends to be a mammal.'

- chemistry of natural compounds

(44) Voda se skládá / ?skládává z kyslíku a vodíku.
water REFL consists / ? consists.HAB of oxygen and hydrogen
'Water consists / ?usually consists of oxygen and hydrogen.'

- rule of gravity

(45) Země se točí / ?točívá kolem slunce.
earth REFL revolves / ? revolves.HAB around sun
'The Earth revolves / ??tends to revolve around the Sun.'

(c) regulatory and constitutive rules of various kinds ("social facts" Searle 1995): constitutive rules (such as the rules of chess) that make institutional actions possible, regulative rules (such as the rules of etiquette) that pertain to actions that can be performed independently of such rules.

(46) Valčík je / ?bývá ve tříčtvrtečním taktu. constitutive rules
waltz is / ?is.HAB in three.quarter time
'A waltz is / ?is usually in three quarter time.'

(47) V Anglii se jezdí / ?jezdívá po levé straně. regulative rules
in England REFL drives / ?drive.HAB on left side
'In England, one drives on the left.'

(48) A: Jaké povolání má Pavel? job and vocational characteristics
What is Paul's job?

B: Učí na střední škole. [= Je učitel.]
teach.3SG.PRES on middle school [= is.3SG.PRES teacher]
'He teaches at middle school.'

B': # Učívá na střední škole. [infelicitous as an answer to (21)/A]
teach.3SG.HAB.PRES on middle school
'He tends to teach / usually teaches at middle school.'

5.1.2 Limiting Case 2: Disposition ascriptions with no realized verifying instances

- Background: Generic sentences are intensional.

  The intensionality of generic sentences clearly sets them apart from quantificational sentences. The truth or falsity of generic sentences goes beyond some observable real world episodic conditions or circumstance we have access to.

  They are law-like, they do not only describe what actually obtains at given worlds and times as a matter of some regularity, expectation or habit, but also determine what is possible; they may be true even if the generically-predicated property has never been actually realized, but is merely hypothetical.

  The verification of generic sentences relies on some default reasoning strategies (see Carlson 1995, and some relevant observations in Fodor 1987), which are non-monotonic in nature.

- **Generic sentences formally *marked* with the Czech suffix *–va-***

  - Key semantic property: **Actuality presupposition** They presuppose that there be verifying instances of the generically-predicated property in the *actual* world. They express weak descriptive generalizations.

  - Key grammatical property: Continuations that negate instantiating cases in the *actual* world lead to an oddity or unacceptability.

(49) a. Tento stroj drtí IMPERF pomeranče.
this machine crushes oranges
'This machine crushes oranges.' **(…but we have not yet used it)**

b. Tento stroj drtívá IMPERF pomeranče.
this machine crush.**HAB**.PRES oranges
'This machine (usually) crushes oranges.' **(* …but we have not yet used it)**

Note: The actuality inference of generic sentences with the "habitual" suffix *-va-* is a matter of presupposition, rather than entailment[4]. Episodic verifying instances

[4] Entailments cannot be cancelled. Cancellation leads to oddness, contradiction. Semantic presuppositions are non-cancellable. The entailments of a sentence are in general NOT preserved under negation. Semantic presuppositions are preserved under negation, in questions, in *if*-clauses.

Generic sentences with an actuality implication are sentences that require verifying instances in the *actual* world. What is at issue is then the status of such *actual* real world instances as entailment or presupposition.

(i) John walks to school.
(ii') John does not walk to school.
- Negation requires the absence of any pattern of the type specified, i.e. requires that there to be no such pattern at all (Carlson 2008, "Patterns in the Semantics of Generic Sentences".) The assertion of habit does not survive under negation: so habit is a matter of entailment.
- Negation does not require the total absence of instances of a given eventuality type.

Here, the proposition that there were some instantiating cases of John walking to school survives under negation. If it is true that John does not (normally, as a habit, usually, etc.) walk to school, he still might have done it on a couple of occasions. Given the existence of instantiating instances (of the type that can form the habit) survives under negation, I will refer to it as an actuality presupposition.

described by the base predicate in the scope of negation "survive" the negation, what the negation denies is the existence of a habit/pattern based on such episodes.

(50) Tento stroj **ne**drtívá IMPERF pomeranče.
this machine **NEG**.crush.**HAB**.PRES oranges
'This machine does not (usually) crush oranges.'

5.2 When must the Czech suffix *-va-* be used?

The Czech "habitual" suffix *–va-* must be used when there are known POSITIVE COUNTERINSTANCES to the generically-predicated property (see Leslie 2008)[5].

Consider the following contrast:

(51) Knihy jsou IMPERF brožované. FALSE unmarked generic S
book.PL.NOM are paperback
'Books are paperback.'

Formally unmarked generics (51) are judged false despite the vast majority of books satisfying the generalization.

(52) Knihy bývají IMPERF brožované. TRUE marked generic S
book.PL.NOM are.**HAB.PRES** paperback
'Books tend to be paperback.'

Formally marked generics (52) are judged true.

- Background knowledge: The kind BOOK is partitioned into paperback books and hardcover books (two subkinds). Books often come as paperbacks; only a small percentage of books are hardcover.

kind BOOK	
SUBKIND: paperbacks	SUBKIND: hardcovers
	positive alternatives, "counterinstances" to paperback books

[5] Leslie (2008): "a positive counterinstance to 'Ks are F' occurs when an instance of the kind K has a concrete alternative property, that is, when it has a positive alternative to the property F, whereas a negative counterinstance occurs when an instance simply fails to be F. Whether a counterinstance counts as positive or negative is highly dependent on the property being predicated. For example, if we are considering 'birds are female', then its counterinstances are positive ones; those birds that fail to be female do so in virtue of possessing the positive alternative property of being male. If instead we are considering 'birds lay eggs', the birds that fail to do so simply fail to do so. They do not lay eggs. They are merely negative counterinstances, failing to possess the property in question, without possessing a positive alternative property.

A similar contrast in English (see Leslie 2008):

(53) a. Books are paperbacks. FALSE
b. Greyhounds are English Greyhounds. FALSE

Such generics cannot be paraphrased using *generally*, *usually*, or *typically*, because adding such generic adverbs reverses the truth value (see also Leslie 2008):

(54) a. Typically, books are paperback . TRUE
b. Generally, greyhounds are English Greyhounds. TRUE

QUESTION: Why are some generics judged false despite the majority of instances falling under the description of the subject NP satisfying the predicate? (Leslie 2008)

- Motivation
  - Leslie's (2008): "contrastive" approach to the analysis of generics. The alternatives to paperbacks are hardcovers, i.e., not objects exhibiting the mere absence of the paperback property, but objects that have a concrete positive property, and are thus concrete positive alternatives.

    Such positive concrete alternatives (hardcovers) are particularly hard to ignore, because they constitute a subkind of the kind BOOK.[6]

  - The formally marked generic form blocks the unmarked one via competition: When there are positive counterinstances to the generically predicate property, the formally marked generic form and unmarked form are in pragmatic competition.

    The formally marked form blocks the formally unmarked form, because it is more specific in the relevant sense: Generic forms formally marked with the suffix *–va-* **REQUIRE** the existence of exceptions, here the positive counterinstances hardbooks, to what would be the corresponding universal

[6] Leslie's (2008): "contrastive" approach to the analysis of generics:

> "[I]n making a generic judgment that Ks are F, it matters how the non-F Ks fail to be F. If they fail to be F in virtue of having an equally salient, memorable, and striking feature, the generic is unlikely to be judged true. If, however, they fail to be F in a nonstriking, uninteresting way (such as merely lacking F), then we are far more likely to judge the generic to be true."

When we pit one concrete property (paperbacks) against another (hardbacks), the number of Ks (books) that must be F (paperbacks) is considerably greater. However, according to Leslie (2008), the positive concrete alternatives (hardcovers) are particularly hard to ignore, because they constitute a subkind of the kind BOOK, which motivates why *Books are paperbacks* is judged false.

generalization (all books being paperbacks), while the forms that are not formally marked for genericity merely **ALLOW** for the existence of such exceptions.

5.3 When may the generic forms marked with the suffix *-va-* be used?

GENERAL QUESTION: How do we motivate the use of formally marked generic forms to express characterizing generic statements, when such statements can also be expressed by related forms that are unmarked for genericity, imperfective, but also perfective?

- Possible answer regarding the Czech case:

Conversational implicature based on the different INFORMATIONAL STRENGTHS of the formally marked generic forms and unmarked ones:

Forms that are marked for genericity are weaker on a scale of informational strength than formally unmarked ones: ***<P, VA-P>***

(i) Formally marked generic forms (***VA-P***) *require* the existence of exceptions to what would be the corresponding universal generalization.
Whenever the generic suffix *-va-* is used it contributes the modal meaning component of epistemic uncertainty with respect to the generically predicated proposition.

(ii) Forms that are unmarked for genericity (***P***) merely *allow* for exceptions to what would be the corresponding universal generalization, and are true if there happen to be no such exceptions.

Quantity-based inference generates scalar conversational implicatures based on these two alternatives (i.e., pragmatic inference arising through the application of the first maxim of quantity, Grice 1967/89):

The use of formally marked forms conversationally implicates that statements conveyed by stronger forms, formally unmarked ones, do not obtain.

5.4 Summary

- The Czech generic suffix *–va-* **cannot** be used for the expression of generalizations that concern

(i) exceptionless properties (related to the exception-requiring property of forms marked with the suffix *-va-*), and
(ii) disposition ascriptions with no realized verifying instances.

- The Czech generic suffix *–va-* **must** be used to express generalizations based on generic properties to which there are known POSITIVE COUNTERINSTANCES.

- The Czech generic suffix *–va-* **may** be used when the speaker intends to convey his/her epistemic uncertainty with respect to the generically expressed property. The reason is that forms that are marked for genericity with the suffix *-va-* are weaker on a scale of informational strength than formally unmarked ones (related to the exception-requiring property of forms marked with the suffix *-va-*, and the modal component of epistemic uncertainty).

6 Conclusion

- Dedicated markers of characterizing genericity may not be as rare as is commonly believed (also *pace* Dahl 1995).

- In languages with overt generic markers, as in Czech arguably, the generic interpretation is clearly the "marked" case relative to the episodic one (see also Carlson 1988).

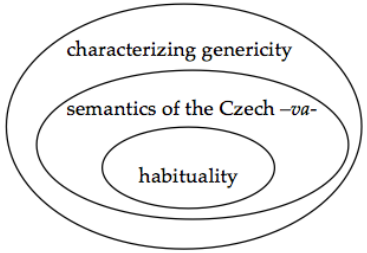
- Genericity—the generic/episodic distinction—has direct relevance for the grammar of natural languages (in support of Dahl 1975; Carlson 1988, 1995, and elsewhere; Filip 1993, 1994, 2009; Filip and Carlson 1997; and contrary to Dahl 1995, among others).

- The existence of generic markers like the Czech suffix *-va-* provides an independent formal and semantic support for arguments made elsewhere that characterizing genericity is a category in its own right, independent of imperfective aspect or tense.

Previous arguments for the independent status of genericity were mainly made on semantic grounds and grounded in notions developed in philosophy (e.g., dispositions, law-like regularities, capacities), artificial intelligence and computer science (probabilities) (see e.g., Carlson 1977, 1982; Pelletier and Asher 1997; Krifka *et al.* 1995).

- If dedicated markers of characterizing genericity are not rare in natural languages, while those of kind-reference are absent (as far as we know), we may conclude that linguistic means for the expression of characterizing genericity, but not of kind-reference, undergo grammaticalization, adding a new argument for kind-reference and characterizing (sentential) genericity being distinct in the grammar of natural languages.

One OUTSTANDING ISSUE (among many others): It was shown that the Czech suffix *-va-* marks sentences that are habitual (quantification over situations) but also sentences that are not habitual (quantification over individuals only), but it cannot be used in generic sentences that are true for all the relevant instances of the generically-predicated property, which are analyzed within the *rules-and-regulations* model (Carlson 1995).



QUESTIONS: What semantic type(s) of a characterizing generic statement do generic markers like the Czech suffix *-va-* delimit? Do they directly mark only a part of the domain of characterizing genericity? What kind of semantic/ontological commitments do sentences with generic markers entail and do they require a separate semantic/ontological model for their interpretation?

The answers to the above questions bear on the most fundamental question for a semanticist, which has been discussed since Carlson (1995):

Is it possible to provide a single unified analysis for all characterizing generics?

- Carlson (1995) discusses two main models for a possible unified analysis for all characterizing generic sentences: a *rules-and-regulations* model and an *inductive* one; he concludes that a *rules-and-regulations* model is a better alternative, and one which might ground the truth conditions of a generic operator **GEN** (Krifka et al 1995). For Carlson (1995), "one of the primary tasks must be to deal with those very examples which lend the most prima facie plausibility to the inductive model" (Carlson 1995).

- Challenge: Formally marked generic sentences in Czech express weak descriptive (inductive) generalizations that can be straightforwardly analyzed within an inductive model, and it is unclear how they could be analyzed within the *rules-and-regulations* model.

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