

Habitual markers and their lexical sources across languages

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Submitted: 03/09/2024 Revised version: 30/05/2025

Accepted: 26/06/2025 Published: 23/07/2026



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Abstract

This paper presents a cross-linguistic study of habitual markers, defined as morphs or constructions expressing that a situation typically occurs. We investigate the frequency, formal types, and lexical origins of dedicated habitual markers in the world's languages. On the basis of an areally and genealogically balanced sample of 102 languages, we find that such markers are cross-linguistically common, being reported in 52 of the languages in the sample; in 12 of these, more than one habitual marker was found. Affixes are the most commonly reported type of marker, followed by particles and auxiliaries. For the investigation of the lexical origins of habitual markers, we added a convenience sample of 85 languages and dialects where we knew habituais to be attested. This allowed us to collect a large catalogue of lexical sources of such markers, which includes lexemes meaning 'know', 'do', 'like/love', 'belong', 'be strong', and various verbs of movement.

Keywords: habituality; aspect; grammaticalization; semantic change; typology.

1. Introduction

Habitual markers are aspectual expressions indicating that a situation typically or usually occurs. In this paper, we present the results of a cross-linguistic survey of such markers, focussing in particular on the formal expression and likely diachronic origins

of habitual morphs and constructions. To this end, we surveyed descriptions of a variety sample of 102 genealogically and areally diverse languages, to which we added a convenience sample of 85 languages for which we knew information on habitual markers to be available. The findings from the variety sample suggest that dedicated markers of habitual aspect are quite frequent in the languages of the world, being attested in 52 of the 102 languages. The two samples combined allow us to create a catalogue of a large number of lexical items which may develop into habitual markers; in this way, our investigation supplements the lists of lexical sources (“grammaticalization pathways”) collected by Bybee et al. (1994) and Kuteva et al. (2019).

The paper is structured as follows. Section 2 gives a brief introduction to habitual meaning and some of the central literature on this semantic category. In Section 3 we explain the goals, methods, and language samples used for the investigation. Sections 4 and 5 then present the findings of the study, the former focussing on the frequency and formal characteristics of habitual markers, the latter on the likely diachronic sources of these markers. The discussion in Section 6 places our findings in the context of the earlier literature and points out some directions for future research on habitual markers. Section 7 is a brief conclusion.

2. On habituals

Habitual markers have been described for numerous languages of the world, and the term ‘habitual’ itself is commonly used in both cross-linguistic and language-specific work on aspect (e.g. Comrie 1976; Dahl 1985; Nurse 2008; Romeo 2008; Mattiola 2019, 2020; and many others). While there is no universally agreed upon definition of habitual meaning (or ‘habituality’), most scholars would probably agree that e.g. English *used to*, Spanish *soler* and the Yuchi affix *-ne* in (1a) count as examples of habitual markers. In Yuchi, the suffix *-ne* is used to express that a state of affairs “takes place regularly or frequently over a long period of time” (Linn 2001: 260), whereas verbs expressing episodic states of affairs, as in (1b), do not take this suffix:

(1) Yuchi (YUC; isolate, USA; Linn 2001: 263, 77)

- a. *sahã:de* *’i* *hẽ-wa-ne*
 always tobacco 3SG(YM).ACT-chew-HAB
 ‘He chews tobacco all the time’

- b. *ʔ* *hõ-wa = :le*
 tobacco 3SG(YM).ACT-chew = EMPH
 ‘He’s really chewing (and chewing) that tobacco!’

Habituality has often been described as a subtype of imperfective or pluractional meaning. Indeed, Bertinetto & Lenci (2012: 854) place habituality “at the intersection of pluractionality and gnomic imperfectivity”, the latter term covering expressions of ‘law-like’ generalizations about the world. Similar characterizations are found in several other works on verbal aspect, such as Bybee et al. (1994: 124), Xrakovskij (1997a: 53), and Mattioli (2019: 31–32), who discuss habitual meaning from different angles. The famous study by Bybee et al. (1994) uses a 76-language sample to investigate a number of TMA categories and their possible diachronic sources. Concerning habituals, the authors find 26 languages with one or more overt habitual markers, of which the marker in 9 languages is restricted to the past tense. The most commonly attested lexical sources are verbs meaning ‘know’ and ‘live’, but in most cases it is not possible to determine the origin of the marker in question. In the edited volume by Xrakovskij (1997b), habituality is considered as one of several types of ‘plurality of situations’, specifically one involving “some empirically observed probabilistic regularity” (Xrakovskij 1997a: 58). In a similar way, in Mattioli’s (2019) study of pluractional markers, habituality is described as a kind of ‘non-prototypical’ pluractionality which is closely related to, but distinct from, frequentativity, the repetition of the same state of affairs on different occasions. In some languages, the same marker may have both frequentative and habitual readings, whereas in others these meanings are distinguished formally. For Plains Cree, for instance, Wolvengrey (2026) describes a ‘frequentative–multiplicative’ construction with the formative *(C)āh~* (2a), which is distinct from the habitual construction with the particle *māna* (2b):

(2) Plains Cree (CRK; Algic, Cree; Wolvengrey 2026: 97, 107)

- a. ... *ē-kī-āh~it-iko-cik* *ēsa*
 CNJ-PST-FREQ~say.to-INV-3PL RPT
 ‘... they had repeatedly been told by them ...’
- b. ... *kī-itwē-wak* *ēsa* *māna* *kēhtē-ay-ak*
 PST-say-3PL RPT HAB old-one-PL
 ‘... the old people would say.’

Similarly, as Bybee et al. (1994: 125) note, habitual meaning “is sometimes expressed by a more general imperfective or present gram and sometimes has its own expression”. The present study focusses on the latter type, i.e. languages with markers dedicated to the expression of habitual meaning.

While detailed studies of habituality are available for a number of individual languages (see e.g. the contributions to Boneh & Jędrzejowski 2019a; Gregersen & Hengeveld 2026), there seems to be little cross-linguistic work devoted specifically to habitual markers. The few that we are aware of focus on very particular issues or rely on less than ideal language samples. Cristofaro (2004) focusses on the coexpression of habitual aspect and “various types of unactualized situation[s]” (Cristofaro 2004: 257), such as future, modalized, or negated events, which are subsumed under the label ‘irrealis’. This kind of coexpression was found in less than twenty languages in “a convenience sample of about two hundred languages” (Cristofaro 2004: 261). The relevant languages are listed in Cristofaro’s (2004: 260, 262) tables 1 and 2. Unfortunately, no information is given on the entire 200-language sample, and sources are only provided for a subset of the languages mentioned in the paper, making it difficult to verify Cristofaro’s general conclusions or carry out a follow-up study.¹ A recent study by Fortuin (2023) focusses on the relation between habituais and the perfective/imperfective distinction, arguing – against the received opinion – that habitual aspect should not be considered a subtype of imperfectivity.² The language sampling in this paper is much more transparent, but not areally and genealogically balanced, as the author acknowledges (Fortuin 2023: 12). Of the 36 languages in the sample, more than half are spoken in Eurasia (as defined by Glottolog), and more than a third are Indo-European. Finally, Carlson (2012) provides a survey of habitual expressions in various languages, but this is not based on any principled sample, and no overview is given of the languages surveyed by the author.

As mentioned above, habituais are discussed in some studies of tense and aspect categories, but have often played a somewhat marginal role. For instance, in Dahl’s (1985) questionnaire-based investigation of tense and aspect systems in 64 languages, it is concluded that few languages have habituality as a “major TMA category” (on

¹ A potentially interesting point is that among the 17 languages with habitual–irrealis coexpression mentioned by Cristofaro, only a single one (West Greenlandic; *KAL*; Eskimo-Aleut, Inuit) is native to the Americas. Because no information is provided on the entire sample, it is not possible to check whether this is accidental or might possibly reflect an areal trend.

² Though see also Dahl (1985: 78–79) and Boneh & Jędrzejowski (2019: 5–7) for similar views.

the definition of this term see Dahl 1985: 52–53), and that the questionnaire returned “too few instances of HAB [= habituals] to make clear statements about marking types” (Dahl 1985: 96). On a similar note, Thieroff (2000: 295–297) concludes that “fully grammaticalized” habitual markers are rare in the languages of Europe, as they are only attested in six of the forty languages in the sample. There are no chapters on habitual markers in either WALS (Dryer & Haspelmath 2013) or Grambank (Grambank Consortium 2023). The *World Lexicon of Grammaticalization* (Kuteva et al. 2019) catalogues a number of diachronic sources of habitual markers, such as verbs meaning KNOW, REMAIN, USE, and GO. For several of the pathways discussed, however, it is noted that the historical development is still poorly understood, e.g. the development of aspectual markers from existentials or the development from USE to a habitual marker (Kuteva et al. 2019: 165, 450).

3. Goals and methods

Because of the apparent lack of a cross-linguistic survey dedicated to habitual markers, we decided to carry out the investigation presented here. Our survey had two main goals. First, we wanted to investigate the frequency, distribution, and expression formats of dedicated habitual markers in the world’s languages, in other words to survey their diversity across the world. Second, we wanted to gather a catalogue of their likely lexical sources, thereby supplementing earlier work on grammaticalization by Bybee et al. (1994) and Kuteva et al. (2019).

For the first goal, we surveyed a variety sample consisting of 102 languages from different language families (see Appendix 1). The basis for this sample was composed by means of the Diversity Value Technique developed by Rijkhoff and Bakker (Rijkhoff & Bakker 1998; Bakker 2011) for the purpose of a recent study of verbal diminutives (Audring et al. 2021). Diversity Values, computed on the basis of nodes in language family tree, reflect a family’s internal complexity, thereby determining how many languages of that family should be included in a sample of a given size. However, this is irrelevant for a 102-language sample, in the sense that it constitutes the minimum one-language-per-family sample. This also clarifies why the sample is based on the Ethnologue classification (Lewis et al. 2015), rather than the more generally accepted Glottolog one (Hammarström et al. 2024): since the number of families in the latter is much larger than 102, a minimal sample would be much larger too. For practical reasons, a larger sample is not always feasible, and this applies to

our study too. Notably, however, we modified the sample from Audring et al. (2021) in a few ways. First, some languages were exchanged in cases where we managed to find more recent or more comprehensive sources for other languages from the same language family. Second, while the original sample was based on Ethnologue, in cases of disagreement between Ethnologue and Glottolog, we have instead followed the latter classification. This prompted us to remove two languages (Mbugu and Palula) whose families according to Glottolog were already represented by other languages in the sample.³ On the other hand, following Glottolog allowed us to include three additional languages from Australia, a macroarea which is underrepresented if one relies solely on Ethnologue.⁴

The information gathered from the variety sample was also useful for our second goal, i.e. the investigation of the lexical sources of habitual markers. However, dedicated habitual markers were not found in all languages in the sample, and for many of the attested markers we are not able to say anything about their possible diachronic origin. For this reason, we added a convenience sample of 85 additional languages and dialects for which we knew information on one or more habitual markers to be available (see Appendix 2). We encountered some of these while surveying the literature on habituals, whereas others were pointed out to us by other linguists during our survey. We have deliberately included many languages with periphrastic habitual constructions (e.g. auxiliaries and serial verbs) in the convenience sample, as the diachronic origins of such markers can be expected to be more transparent than e.g. affixes and clitics. Hence, the convenience sample is not representative of the full diversity of habitual strategies in the world's languages, and we will not make any quantitative generalizations on the basis of it.

For each language in the two samples, we surveyed relevant descriptive works and noted the following information relating to habitual markers:

1. Whether one or more dedicated habitual markers are described for the language.
2. The expression format of each habitual marker.
3. The likely diachronic source of each habitual marker.

³ Mbugu: MHD; Atlantic-Congo, Benue-Congo. Palula: PHL; Indo-European, Indo-Iranian.

⁴ In other words, while all 102 languages in the variety sample belong to different families according to the Glottolog classification, a few of them belong to the same families according to Ethnologue. For the sake of transparency we have included the genealogical information from both of these sources in the appendices. The genealogical information in the paper is taken from Glottolog (Hammarström et al. 2024).

4. Other relevant information mentioned in the source, e.g. tense or co-occurrence restrictions, semantic differences between markers, etc.

Although ‘habitual’ is a commonly known and used linguistic term, not all linguists use it in the same way, and the markers labelled ‘habitual’ in different languages are not necessarily functionally equivalent. In a cross-linguistic survey of this kind, the identification of the relevant phenomena of course depends on the analysis presented in the grammars and other sources used. However, we have done our best to check that the use of the marker in the linguistic examples corresponds to our definition of ‘habitual’. Our definition is given in (3):

(3) **Habitual marker**

A morph or construction expressing that a situation typically occurs.

This definition excludes a number of phenomena. As already mentioned above, we have limited ourselves to what we refer to as dedicated habitual markers, i.e. forms dedicated to the expression of habitual meaning, rather than imperfective or pluractional forms which may occur in habitual contexts.⁵ In other words, we have investigated habituality as a structural phenomenon rather than a substance category. This enables us to survey the possible lexical sources of habitual markers specifically, rather than e.g. imperfective or pluractional markers. Hence, aspect markers with a more general imperfective meaning were not included, such as the Semelai imperfective reduplication described by Kruspe (2004: 112–114); while this may occur in habitual contexts like (4a), it is also used for progressive situations, e.g. (4b).

(4) Semelai (SZA; Austroasiatic, Aslian; Kruspe 2004: 310, 113)

- a. *gn~gɔŋ* *ɲɔʔ*
 IPFV~bite always
 ‘(It) always bites.’

⁵ As independently pointed out to us by Andrey Shluinsky and an anonymous reviewer, it is also theoretically possible that habituality is a structural category in a language, but expressed through the absence of any marker. We have not come across any such ‘zero habituals’ in our survey. Note that the English simple present, which may be used in habitual contexts, also expresses a number of other aspectual values (cf. e.g. Quirk et al. 1985: 179–183; Carlson 2012: 832–833) and hence would not count as a dedicated habitual construction in our terms.

- b. *kəhn* *pk~pək*
 3SG IPFV~wash.clothes
 ‘She is washing clothes.’

Similarly, we did not include pluractional markers in the survey, which in some languages may also occur in habitual contexts (cf. Xrakovskij 1997b; Mattiola 2019). One example of this is CVC reduplication in Squamish (Skwxwú7mesh; SQU; Salishan, Coast Salish) as described by Bar-el (2008). While this construction is sometimes translated ‘usually, always’ (Bar-el gives the example *kw’elh~kw’elh* ‘always spill’), this may be regarded as an instance of its more general pluractional meaning ‘do X more than once’, as found also in *7exw~7exw* ‘cough many times’ (iterative) and *sek’~sak’* ‘slice’ (event-internal plurality, from *sak’* ‘cut’). For the purposes of this investigation, Squamish CVC reduplication would thus not be considered a habitual marker. In Section 6, we briefly discuss some of the possible differences between dedicated habitual and pluractional markers.

Adhering to our definition in (3), we have occasionally decided to exclude markers or constructions labelled ‘habitual’ in one of our sources. For instance, we have not included the Chukchi (CKT; Chukotko-Kamchatkan) ‘habitual’ described by Dunn (1999: 194–195), which appears to be a more general imperfective marker, or the Doromu (KQC; Manubaran) ‘habitual’ which according to Bradshaw (2012: 85) “denotes an on-going, continuous event” in the past. Similarly, “habitual nouns” (Wang et al. 2006: 32) or agent nominalizers were not included. On the other hand, markers have sometimes been included which are not described with the term ‘habitual’ in the source. While this term is clearly the most common one in the literature, several other terms are also encountered, especially but not exclusively in some older works. Some examples of alternative terminology – some from languages included in the survey, others from other sources which we have consulted – are given in Table 1. We discuss some of these works in more detail in Section 6.

In the majority of cases, we surveyed the most comprehensive grammar of a given language, focussing on chapters covering aspectual and related categories, verb morphology, and auxiliary constructions. While we have done our best to include all (and only the) relevant markers in our survey, in some instances one could undoubtedly have made different analytical choices. For a few languages, we managed to find studies dedicated to habitual expressions (or the aspectual system more broadly), which we of course consulted as well. In several cases we have relied on information from experts working on

particular languages. Finally, in the case of Japanese (JPN; Japonic), where the picture presented by the linguistic literature was not entirely clear, we conducted a small elicitation task with three native speakers in order to gather additional information.⁶

Term	Source(s)
CONSTANT FEATURE	Smeets 2008
CONSUEUDINAL	O'Donovan 1845; Bliss 1972
CUSTOMARY	Kennard 1936; Lipkind 1945; Hancock 1971; Young 1971; Miyaoka 2012; Mihas 2015; Ennever 2021
HABITIVE	Janhunen 2012
HABITUATIVE	de Angulo & Freeland 1930; Strange 1973; Louwerse 1988; Hill 1975
NORMAL	Bromley 1981; Louwerse 1988
TRADITIONAL	Jacobsen 1964
USITATIVE	Kennard 1936; Jacobsen 1964; Ultan 1967; Parks 1976; Silverstein 1974; Klokeid 1976; Nedjalkov & Otaina 2013

Table 1: Alternative terms for habitual markers.

4. Habitual markers across the world

In this section we present the findings on the frequency and expression format of habitual markers in the 102-language variery sample, i.e. the first two research questions mentioned in Section 3.

4.1. Frequency and distribution of habitual markers

The first question is whether one or more habitual markers are attested in the languages in the sample. This question could be answered positively for 52 out of the 102 languages, i.e. about half of them. Out of these 52 languages, we found reports

⁶ The elicitation was carried out in Osaka between 11 and 18 June 2024. The participants were three BA students of Danish (DAN; Indo-European, Germanic) at the University of Osaka. The elicitation task consisted of translation and discussion of a number of written English sentences with habitual contexts; additional clarification and explanation was provided in Danish. See the discussion of (18) below for the main conclusion.

of more than one habitual marker in 12 languages.⁷ The distribution of these according to the six macroareas is shown in Table 2.

Macroarea	Languages in the variety sample	Languages with at least one habitual	Languages with more than one habitual
South America	33	22	5
North America	25	13	2
Eurasia	19	9	3
Papunesia	15	5	1
Africa	6	2	–
Australia	4	1	1
Total	102	52	12

Table 2: Habitual markers per macroarea in the variety sample.

Note that we have only included languages in Table 2 in which we found positive evidence of at least one habitual marker according to our definition in (3). In a few cases, the available source merely mentioned the existence of a habitual marker without providing any further analysis or examples; see e.g. Briley (1997: 129) on Bauzi (BVZ; Geelvink Bay). These have not been included in the count in Table 2. In other cases, we found no mention of any habitual markers, but this of course does not rule out the possibility that the language may have one. In particular in cases where the only available source is a sketch grammar, it is quite possible that a marker has been overlooked.

4.2. Formal characteristics of habitual markers

For each of the habitual markers identified in the survey, we noted the expression format, i.e. the formal type of marker. Because 12 languages in the sample were found to have more than one habitual marker, the total number of markers ($n=75$) is greater than the number of languages with habituais ($n=52$). In Table 3 we list the number

⁷ In the context of our survey, “more than one habitual” means that there is more than one form expressing habitual meaning and that these forms are not (synchronically) derived from each other. In some cases, the habituais may be used more or less interchangeably; in other cases they form a paradigm, e.g. positive vs. negative or past vs. non-past habitual. For further discussion see Section 6.

of markers in the sample belonging to the different types of expression format; each type will be exemplified below the table.⁸

Type of marker	SAm	NAm	Euras	Papu	Afr	Aus	Total
Affix	14	14	4	3	–	2	37
Auxiliary	9	–	–	1	–	–	10
Particle	1	1	5	–	2	–	9
Clitic	4	1	–	–	–	–	5
Serial verb construction	2	–	1	1	–	–	4
Complex construction	2	–	2	–	–	–	4
Reduplication	1	–	–	–	–	–	1
Variable/unclear	2	–	2	1	–	–	5
Total	35	16	14	6	2	2	75

Table 3: Expression format of habitual markers in the variety sample.

As Table 2 shows, **affixes** are the most commonly reported type of habitual marker, accounting for about half of the markers in the sample (37 out of 75). An example from Yuchi was given in (1a) in Section 1. Another example, the Yagua habitual suffix *-sara*, is shown in (5):

(5) Yagua (YAD; Peba-Yagua; Payne & Payne 1990: 392)

ramyééchara

ray-mááy-**sara**

1SG-sleep-HAB

‘I’m always sleeping.’

There were ten examples of habitual **auxiliaries** in five languages in the sample. An example is Cófán/A’ingae *atesû*, which means ‘know (how to)’ as an independent verb, but is also used as a habitual auxiliary in the construction illustrated in (6):

⁸ We rely on our sources for the classification of expression formats, but of course recognize that the boundaries between these are not always clear-cut, in particular in the case of particles vs. clitics and auxiliaries vs. serial verbs (the latter case is discussed in Gregersen & van Lier *forthc.*). A combined “particle-clitic” category would result in 14 examples in the material, as would a combined “multi-verb” category consisting of auxiliaries and serial verb constructions.

- (6) Cofán/A'ingae (CON; isolate, Colombia/Ecuador; Hengeveld & Fischer 2018: 335)
Je'nda pûshesû = ndekhû = khe = ti setha'pue-ñe atesû = 'fa.
 then woman = HUMPL = ADD = Q sing-INF HAB = PLS
 'So the women too used to sing?'

Habitual **particles** were attested nine times in seven different languages. For instance, Kiowa uses a dedicated particle *àn* to express habitual meaning:

- (7) Kiowa (KIO; Kiowa-Tanoan; Watkins 1984: 192)
hò· jó-hò· àn è-kíl
 yes there-DEF HAB 1DU/PL-dwell
 'Yes, that's where we used to live.'

Habitual **clitics**, such as the Nuu-chah-nulth enclitic = *?a:la* in (8), were found five times in four different languages, all of them spoken in the Americas.

- (8) Nuu-chah-nulth (NUK; Wakashan, Southern Wakashan; Davidson 2002: 202)
má?a?ama?a:la
má?- 'a?a = ma' = ?a:la
 cold-on.rocks = IND = HAB
 'It is always cold on the rocks.'

Habitual **serial verb constructions** were found in four languages. An example is the Lao verb *mak1* 'like', which may be used in a serial verb construction with habitual meaning (glossed 'tend' or 'TEND' by Enfield 2007):

- (9) Lao (LAO; Tai-Kadai, Daic; Enfield 2007: 175)
thèèw3 nii4, khaw5 bòø mak1 ngaam2.
 area DEM rice NEG tend look.good
 'In this area, rice tends not to be of good quality [lit. 'look good'].'

In three languages, we found other **complex constructions** (four in total), which we have grouped under this label for lack of a better term. They all involve some kind of biclausal structure, such as the Japanese past habitual construction exemplified in

(10). This uses the sentential nominalizer *mono* (< ‘thing’), which nominalizes the preceding clause, followed by a copula:

(10) Japanese (Japonic; Horie 2008: 176)

[*Yoku mukasi=wa umi=ni oyogi=ni it-ta*] *mono=da*.

often past=TOP sea=DAT swim.CONJ=DAT go-PST NMLZ=COP

‘In the past I would often go swimming in the sea’ (lit. ‘It’s that in the past I often went to the sea for swimming’)

The rarest individual type of marker in the sample involves **reduplication**, which was only found in the South American language Kwaza. Note that the construction in question is in fact more complex than prototypical reduplication, as it involves the reduplication of the person index on the predicate, the addition of a dependent-clause suffix, and the cliticization of a person marker and mood suffix to this dependent clause, as in (11):

(11) Kwaza (XWA; isolate, Brazil; van der Voort 2026: 188)

itso-na ũi-xa~xa-ta=xa-re

hammock-LOC lie-2SG~2SG-DEP=2SG-Q

‘Do you always sleep in a hammock?’

The construction (on which see van der Voort 2003, 2004: 455–456, 2026) is similar to the Japanese past habitual construction in (10) in that the habitual predicate is embedded in a dependent clause, but because it also involves reduplication, we have listed it under this heading in Table 3. We discuss the apparent rarity of reduplication in Section 6.

Finally, we have listed five strategies in the material (in five different languages) as variable/unclear because they could not be assigned to one of the other formal types, either because the grammar provided too little information or because the strategy in question shows formal variation in the language. An example of the latter case is the habitual marker *bíg ~ -bi* in Hup, which according to Epps (2008: 144) represents “two marginally distinct forms of the same morpheme”, namely a particle and a reduced suffix form; compare (12a) and (12b):

(12) Hup (JUP; Naduhup, Eastern Naduhup; Epps 2008: 145–146)

- a. *ʔãh hám-áy bíg*
 1SG go-DYN HAB
 ‘I go regularly’
- b. *ʔãh ham-bí-h*
 1SG go-HAB-DECL
 ‘I go regularly’

We thus find a variety of ways to express habitual meaning in the 102-language sample, with affixes being the most commonly attested strategy (on which see Section 6). The high frequency of affixes in the variety sample turned out to be somewhat problematic for the other main objective of the survey, namely to identify the likely diachronic sources of habitual markers. All else being equal, affixes can be expected to have higher time depths and less transparent diachronic sources than e.g. auxiliaries or serial verbs. Because most of the languages in the variety sample do not have a historical record, it is impossible to trace the history of the markers in question directly, and for most of the affixes in the sample we have no information about their diachronic origin. By contrast, for all auxiliaries and serial verbs in the sample, the source lexeme was identified in the source; see the examples from Cofán/A’ingae and Lao in (6) and (9). For this reason, we decided to survey an additional 85 languages, as explained in Section 3. The findings from the combined samples will be presented in the following section.

5. Lexical sources

5.1. Overview

There is relatively little work on the diachronic development of habitual markers, and for languages without a written record such work will necessarily have to rely on internal reconstruction or comparison with related languages. For several of the lexical sources of habitual markers listed by Kuteva et al. (2019), the authors add remarks to the effect that “more research is needed on this pathway” (Kuteva et al. 2019: 262; cf. also pp. 245, 347, 450). We agree that more diachronic work on habitual constructions would be very welcome. We believe that the cataloguing of cross-linguistically

common – and less common – pathways of change is a good first step in this direction, so we decided to supplement the overviews by Bybee et al. (1994) and Kuteva et al. (2019) with a collection of likely diachronic sources of habitual markers.

To the original 102-language sample we added a convenience sample of 85 languages for which we had information on one or more dedicated habitual markers. These were surveyed in the same way as the original variety sample. For all markers we looked for information about the likely source meanings in the surveyed grammars; in some cases we have also consulted etymological dictionaries, articles, or other sources. The two samples added together, 187 languages in total, resulted in a collection of 184 different habitual markers. The full list of these can be found in the appendices. An overview of some of the markers and their likely origins is given in Table 4.⁹ The languages in each entry are listed in alphabetical order. The likely source meanings are represented by small capitals, which in some cases cover a variety of possible English translations. For instance, the habitual marker =*taʔ* in Burmese (MYA; Sino-Tibetan, Burmo-Qiangic) is also a verb with the broad meaning KNOW, for which the sources also give translations like ‘be clever’, ‘be skilled’, ‘be capable’, ‘know how to’, or simply ‘can’.

Meaning	Language(s)
ALWAYS/STILL	Hup <i>bíg</i> (- <i>bi</i>) ‘long time’, Pennsylvania Dutch English <i>still</i> , Tapieté - <i>pi</i> ‘always’
BE ABLE	Krio <i>kin</i> , Muklomic <i>jün</i> ³ -
BE ACCUSTOMED	Slovak <i>zvyknúť</i>
BE GOOD	Ambel (Waigeo) <i>hey</i> , Ma’ya <i>fī</i> ₃ , Matbat <i>fī</i> ³
BE SAME	Pnar <i>ǵoʔ</i>
BE STRONG	Abawiri <i>kare</i> , Mandan <i>sīh</i> -, Mungbam <i>gbâbə</i> , Ot Danum (Kadorih) <i>baas</i>
BE USUAL	Muna <i>nea</i> , Papuan Malay <i>biasa</i>

⁹ For ISO codes and genealogical information on the languages in Table 4, see the Appendices. We have not included habitual markers whose diachronic origin is only tentatively suggested in the source or where a specific source lexeme cannot be identified (cf. e.g. the Kwaza construction in (11)). As already mentioned above, we have limited ourselves to likely lexical sources. Some possible grammatical sources, such as a nominalizer in Yagua (Payne & Payne 1990: 282) or a “rhetorical question marker” in Mosetén-Chimané (CAS; isolate, Bolivia; Sakel 2004: 263), are also suggested by some authors. In such cases, however, the directionality of the change is generally much less certain, and we have decided not to include them in Table 4 (though they are of course mentioned in the Appendices). An investigation of non-lexical sources of habitual markers would certainly be worthwhile, but we believe this requires work on historical data rather than a cross-linguistic grammar survey.

Meaning	Language(s)
BEFRIEND	Pakaásnovos (Wari') <i>txipa'</i>
BELONG	Cornwall English <i>belong to</i> , Krio <i>blant</i>
CARE FOR	Danish <i>pleje</i> , German <i>pflügen</i> , Western Yiddish <i>fleg</i>
CARRY	Northern Paiute <i>-(?)yakwi</i> , older Basque <i>eroan/eraman</i>
CONTINUE	Lavukaleve <i>me</i>
DO	Anamuxra <i>d-</i> , Golin <i>ere-</i> , Irish English <i>do</i> , Kulsab <i>du</i> , Kwomtari <i>a</i> , Manat <i>-rha</i> , Muyu <i>kemi</i> , Palenquero <i>asé</i> , Southern Nisu N <i>m</i> ³³
EXIST/STAY	Bora <i>i*k^{jh}a</i> 'be', Chachapoyas Quechua <i>kawsa</i> 'be, live', Cofán (A'ingae) <i>kanse</i> 'live', Koro <i>ru/ri</i> 'stay', Lezgi <i>ḡun</i> 'be', Maldivian (Dhivehi) <i>uḡenī</i> 'live, exist', Mositén-Chimane <i>bae'i-</i> 'be, sit', Mungbam <i>nà</i> 'sit, stay', South Central Dinka <i>ḡe</i> , Yau-Nungon <i>it-</i> 'be'
GO	Cocama-Cocamilla <i>ukua</i> 'go around', Gants <i>kida</i> 'walk', Gunwinggu <i>re</i> 'go', Seze <i>jó:-</i> , Sirva <i>kida</i> 'walk', Southern Paiute <i>-mi(ya)</i> 'walk, go', Yace <i>aga</i> 'wander'
HAVE A LOT	Central Alaskan Yupik <i>-tu-</i>
KNOW	Bizkaian Basque <i>jakin</i> , Burmese = <i>ta?</i> , Cofán (A'ingae) <i>atesû</i> , Mositén-Chimane <i>chhiü-</i> , Papuan Malay <i>taw</i> , Serbo-Croatian <i>znati</i> and <i>um(j)eti</i> , Teanu <i>ovei</i> , Tok Pisin <i>save</i> , Vitu <i>lala</i>
LIKE/LOVE	Hualapai <i>sawál</i> , Khmu <i>kù?</i> , Lao <i>mak1</i> , Thai <i>chôp</i>
PASS	Mositén-Chimane <i>jyi-</i>
THROW	Kulsab <i>kev</i>
USE	East Danish <i>brøggæ</i> , English <i>used to</i> , Swedish <i>bruka</i>
WITH	Seeku <i>wē</i>

Table 4: Likely lexical sources of habitual markers.

It is clear from Table 4 that certain patterns are attested in several unrelated languages across the world, and some of these have already been mentioned in earlier cross-linguistic studies. Bybee et al. (1994: 154–155) point to the development of habituais from verbs meaning 'know' and 'live', the latter of which corresponds to our broader grouping EXIST/STAY (i.e. verbs expressing existence or location). They also note that habitual markers sometimes develop from verbs with "lexical meaning that is very close to the grammatical meaning of habitual" (Bybee et al. 1994: 155), e.g. 'be accustomed to' or 'follow a custom'; we have also found a few examples of such markers, listed under BE ACCUSTOMED and BE USUAL.¹⁰ Kuteva et al. (2019) also mention KNOW as

¹⁰ The English *used to* habitual is also thought to have developed through such a meaning ('follow a custom') from its original meaning 'use' (see Neels 2015: 185). We have only found examples of a

a possible lexical source of habitual markers, along with GO, USE, and several existential and locational meanings corresponding to our EXIST/STAY group. At several points, the authors suggest that such existential or locational verbs often develop into habitual markers through an intermediate progressive stage (see Kuteva et al. 2019: 208, 261, 347). We can neither confirm nor refute this hypothesis on the basis of our survey.¹¹

The survey turned up a number of likely source meanings which – as far as we are aware – have not been discussed in the cross-linguistic literature. Some of these are found scattered across the world and surely reflect independent developments, whereas others are most likely historically connected. We will discuss a few examples of each category.

5.2. Transitive motion

In addition to intransitive motion verbs – ‘go’, ‘walk’, etc. – we have found a few instances of transitive motion verbs as likely sources of habitual markers, namely verbs meaning THROW and CARRY. One is the Papuan language Kulsab (Kursav). Daniels (2015: 923–924) mentions three habitual strategies in this language: a dedicated habitual suffix *-di*, which appears to be infrequent on its own, and two serial verb constructions where the habitual suffix is added to the serial verb; one of these constructions uses the verb *du-* ‘do’, the other is formed with *kev-* ‘throw’, as in (13):

(13) Kulsab (FAJ; Nuclear Trans New Guinea, Madang; Daniels 2015: 924)

Mot gapira, sarua ka vu kevi-d-o.
 day all work MD get throw-HAB-3PL
 ‘Every day, they do the work.’

habitual from a verb meaning ‘use’ in Northern Europe. Kuteva et al. (2019: 450) mention only English *used to* as an example of this pathway.

¹¹ Note that Kuteva et al. (2019: 249) also seem to suggest that the development from KNOW to habitual (through BE ABLE) is especially frequent “[i]n pidgin and creole languages”. Based on our survey we would rather say that the development is cross-linguistically widespread in general, not just in pidgins and creoles.

Another example is the Northern Paiute habitual marker *-(?)yakwi* as illustrated in (14a), which almost certainly derives from the transitive motion verb *yakwi* ‘carry’ (Thornes 2003: 410–411, 416–418), as shown in (14b):

(14) Northern Paiute (PAO; Uto-Aztecan, Numic; Thornes 2003: 186, 542)

- a. *yaisi* *owi-u* *yotsi-u-ga-ʔyakwi* *tui-haʔu-tui*
 then DEM-SUFF fly.SG-PUNCT-TRNSL-HAB any-how-any
 ‘... and it [a mythical creature] would fly off from there in every direction’
- b. *uuni-ku* *ti-ma-yakwi-na* *su = ti-woitsami-di* *ka = tokaano*
 that.kind-OBL AP-IP(hand)-carry-PTCP NOM = AP-watchman-NMLZ OBL = night
 ‘That’s what he was carrying, that night watchman’

Similarly, in their grammar of Basque (EUS; isolate, Spain/France), Hualde & Ortiz de Urbina (2003: 296) mention that “[o]lder forms of the language” had a habitual construction with the verb *eroan/eraman* ‘carry’. According to the authors, this habitual use of ‘carry’ was restricted to transitive predicates, whereas intransitive predicates formed the habitual construction with *joan* ‘go’.¹² We have not found any other examples of habitual markers from transitive motion verbs, but given that the three markers mentioned here are certainly not the result of language contact, it may be a more common pathway than our three examples suggest.

5.3. BE STRONG

In four languages in the convenience sample, lexemes meaning BE STRONG are reported to have developed habitual meaning. In Mandan (MHQ; Siouan), Mixco (1997: 27, 52) reports the use of the verb *sîh-* ‘be strong’ as a habitual auxiliary. For Mungbam (MIJ; Atlantic-Congo, Volta-Congo), Lovegren (2013: 235) mentions a habitual serial verb construction with the verb *gbâbâ* ‘be strong’, and in Ot Danum (Kadorih; OTD; Austro-nesian, Malayo-Polynesian), Inagaki (2013) describes a habitual marker derived from the adjective *baas* ‘strong’. Finally, Yoder (2020: 320) suggests that the postverbal habitual marker *kare* in Abawiri (FLH; Lakes Plain, East Lakes Plain) “likely developed

¹² While Basque was one of the languages in our variety sample, we did not include the constructions with *joan* ‘go’ and *eroan/eraman* ‘carry’ in our initial survey (Section 4), as these are reported to be obsolete in the modern language.

from the adjective *kare* ‘strong, hard’, where it was used attributively after a nominalized verb”. Although the markers in Abawiri and Ot Danum might reflect a more general areal tendency, the Mandan and Mungbam constructions are certainly the result of independent developments. It would be interesting to investigate whether other instances of this pathway can be found and whether it developed through an intermediate stage BE ABLE or in some other way.

5.4. BE GOOD

Another pattern which we have only found in a few languages is the use of a predicate meaning BE GOOD as a habitual construction. Unlike transitive motion and BE STRONG, this has so far only been attested in one specific area, namely the Halmahera and Raja Ampat archipelagos in eastern Indonesia. Arnold (2018: 550) discusses the use of *hey* ‘be good’ as a habitual marker in Ambel (Waigeo; WGO) and points to parallels in Matbat (XMT; Remijsen 2010) and Ma’ya (SLZ; van der Leeden n.d.). These three languages all belong to the same subbranch of Austronesian (Raja Ampat-South Halmahera), so the development could conceivably be a case of shared inheritance. However, Arnold (p. c.) notes that a similar use of a lexeme meaning ‘good’ appears to be attested in the unrelated language Tidore, though this is not discussed as a habitual construction by van Staden (2000); consider the example and van Staden’s translation in (15).

(15) Tidore (TVO; North Halmahera, Northern North Halmahera; van Staden 2000: 319)

<i>mina</i>	<i>gahi</i>	<i>ngam</i>	<i>laha</i>
3SG.F	make	food	good
‘She can cook and does it often’			

If this use of *laha* in Tidore indeed qualifies as a habitual construction, it would suggest that at least some languages in the area may have developed habituals from a lexeme meaning ‘(be) good’ through language contact. To confirm this, however, further documentary and descriptive work on the languages of Halmahera and Raja Ampat is necessary.

5.5. BELONG

Finally, we will consider habitual markers from a verb meaning BELONG. This is attested in two languages in our convenience sample, the English dialect of Cornwall in southwestern England and Krio, an English-lexifier creole. The Cornwall English construction is attested both with infinitive and gerund complements, as shown in (16).

(16) Cornwall English (ENG; Indo-European, Germanic; EDD, s.v. *belong*, sense 4)

- a. *I am not so ill as I belong to be.*
'I am not so ill as I generally am.'
- b. *I don't belong going to Church, but I will this once.*
'I don't usually go to church, but I will this once.'

The Krio habitual, called a “customary action marker” by Hancock (1971: 127), has the form *blant*, which as an independent verb means ‘belong’ and historically derives from English *belong to*. Yillah & Corcoran (2007: 180–181) report that some speakers only use habitual *blant* in past contexts, contrasting it with present habitual *kin*, whereas for other speakers *blant* is an “emphatic” habitual; compare (17a) and (17b).

(17) Krio (KRI; Indo-European, Germanic; Yillah & Corcoran: 181)

- a. *Kabba blant kam*
K. HAB.PST come
'Kabba used to come'
- b. *Olu blant go London fo Krismes*
O. HAB.EMPH go London for Christmas
'Olu always goes to London for Christmas'

In this case, as in the case of the BE GOOD habituals in eastern Indonesia, there is very likely a historical connection between the constructions. According to Hancock (1971: 122–126), southwestern dialects of English were among the main sources of the Krio lexicon, and habitual *blant* is identified as one such “dialect-derived” item (see Hancock 1971: 127–128). Hancock notes that it is also attested in Gullah (GUL), another

English-lexifier creole with significant southwestern input (see Hancock 1994; McWhorter 2019), although Rickford (1974: 101–102) characterizes the construction as obsolete in modern Gullah. At any rate, it seems likely that the use of *BELONG* as a habitual marker was a dialectal English development which was later transferred to Krio and Gullah. A closer study of the construction in traditional Cornwall English would thus also be of great interest to the history of English-lexifier creoles.

6. Discussion

6.1. Prevalence and form of habituals

The findings from our 102-language variety sample suggest that dedicated habitual markers are cross-linguistically common, being attested in 52 of the languages in the sample. Affixes were the most common type of marker in this sample. These findings may at first glance seem surprising in light of some earlier work, so it is worth briefly reflecting on what they may or may not tell us.

First, consider Dahl's (1985: 96) finding that habituality is only a "major TMA category" in a few languages in his survey. This might initially seem at odds with our finding that dedicated habitual markers are cross-linguistically common. However, it is important to keep in mind that Dahl's questionnaire-based study used a very specific "and indeed somewhat arbitrarily" defined notion of "major TMA category" (Dahl 1985: 52). A tense-mood-aspect form in an individual language was only classified as "major" if it occurred in at least six of the translations in Dahl's questionnaire and was attested in non-negated declarative main clauses. As Dahl (1985: 96) explicitly notes in connection with habitual markers, it is "fairly plausible that similar categories can be found in other languages" even if they are too infrequent to qualify as "major" in his terms. By contrast, we have not applied any frequency criteria in our survey, but simply asked whether one or more habitual markers are attested in the languages in the sample (cf. also the point that "target uses are not all of the same kind" in Kuteva et al. 2019: 8). Our method is thus not directly comparable to Dahl's and should not be taken to contradict his conclusions. Consider the Japanese past habitual construction with the nominalizer *mono* in (18) (see also (10) above):

(18) Japanese (own data; F22 from Kantō region)

hebi = o mikakeru to, ishi = o hiro-tte hebi = ni
 snake = ACC catch.sight when stone = ACC pick.up-CONJ snake = DAT

muka-tte nage-ta mono da-tta yo
 go.towards-CONJ throw-PST NMLZ COP-PST AFF

‘When I saw a snake, I would pick up a stone and throw it at the snake.’

This habitual construction is clearly part of the Japanese grammatical system in the sense that speakers understand it and can produce examples of it when prompted, but it appears to be marginal in the contemporary vernacular language.¹³ It is thus no surprise that it did not make it into Dahl’s overview of major TMA categories in Japanese (Dahl 1985: 158), and it is quite possible that some of the other markers in our survey would not qualify as major tense-mood-aspect markers if investigated with Dahl’s questionnaire. One way to control for such frequency differences in future work would be to study habitual markers in a cross-linguistic corpus, thus allowing for a comparison of usage frequencies between languages.

On a similar note, Thieroff (2000: 295) concludes that “there are only a few languages with a commonly accepted habitual category” in his sample of European languages. Again, however, the findings from our variety sample cannot be directly compared to this earlier survey. First, because we used a global sample controlling for genealogical affiliation, we only surveyed a small number of European languages and cannot make any conclusions about the languages of Europe in general.¹⁴ Second, Thieroff only includes “fully grammaticalized” markers in his survey, described as forms “obligatory in the appropriate contexts, and hence [...] belonging to the verbal

¹³ The consultant who produced (18) (as a translation of sentence B7 in Dahl’s TMA questionnaire) immediately remarked that it sounds literary and is probably not used much in the spoken language; our two other native-speaker consultants did not use the construction at all. Rie Obe (p. c.) confirms to us that the construction sounds old-fashioned and belongs to a formal or literary register.

¹⁴ For what it is worth, we found a dedicated habitual marker in two of the five European languages in our variety sample – Basque and Georgian (KAT; Kartvelian) – while none was found in the other three: Abkhaz (ABK; Abkhaz-Adyge), Sign Language of the Netherlands (DSE; LSFic), and Turkish (TUR; Turkic). Note that Thieroff’s sample is heavily skewed: 33 of the 40 investigated languages are Indo-European, of which 11 are Germanic and 10 Slavic. As the author himself notes, we think correctly, the results “probably would look less homogeneous if more languages, especially more non-Indo-European languages, were investigated” (Thieroff 2000: 267).

paradigm” (Thieroff 2000: 296). Swedish (SWE) *bruka* and German (DEU) *pflügen* are mentioned as habitual expressions which do not satisfy this criterion. By contrast, we have not applied any criterion of “full” grammaticalization in our study, as it is very difficult to operationalize in a survey of descriptive grammars. Note, however, that most habitual markers found in our variety sample belong to formal categories usually regarded as grammatical, e.g. affixes, clitics, and particles. Some of the auxiliaries in the survey are also explicitly described as grammatical in the sources,¹⁵ and we think it is fair to conclude that most of the 75 habitual markers in the variety sample can be considered grammatical. Even if grammaticalized habitual markers may be rare in European languages, our survey thus suggests that they are quite widespread outside of Europe. Especially noteworthy is their frequent attestation in South America (22 out of 33 languages in the variety sample), a finding which deserves further attention in future studies.

Finally, we will briefly comment on the relatively high frequency of affixes that we found in the variety sample (see Section 4.2), in particular because Bybee et al. (1994: 20) suggest that habitual meanings “typically have periphrastic expression”. At first glance, our survey seems to contradict this and indicate that dedicated habituals tend to be bound morphemes. However, a high frequency of bound morphemes may also to some extent be an artefact of the method of surveying descriptive grammars and grammar sketches: while such works can be expected to describe most or all inflectional morphemes in a given language, periphrastic constructions are probably more liable to be overlooked, in particular constructions with lower frequency. All else being equal, periphrastic constructions may thus also more easily be overlooked in a grammar survey, and for this reason, we do not think one can conclude that habituals in general tend to be expressed by bound morphemes. On the other hand, however, there is no indication in our survey that periphrastic habituals are especially frequent (*pace* Bybee et al. 1994).

6.2. Habituals and pluractionals

As noted above (see Section 2), in some languages pluractional markers may be used to express habitual meaning, and many linguists describe habituality as a subtype of pluractionality. Pluractional constructions in the languages of the world have recently

¹⁵ See e.g. Vallejos (2016: 372–379) on Cocama-Cocamilla (COD; Tupian, Tupi-Guarani) and Hengeveld & Fischer (2018) on Cofán/A’ingae.

been surveyed by Mattioli (2019, 2020), and it is worth pointing out a few similarities and differences between his and our findings.

Mattioli (2019: 20–42) distinguishes between ‘core’ and ‘non-prototypical’ functions of pluractional markers. The core functions are iterativity (repetition of an event on a single occasion), frequentativity (repetition on multiple occasions), spatial distributivity (repetition in different places), and participant plurality. Habituality, which for Mattioli involves the combination of repetition and typicality, is one of the many non-prototypical (or ‘additional’; Mattioli 2020) functions of pluractional markers. Note that a marker is only counted as a pluractional if it has at least one of the core functions; markers limited to one or more non-prototypical functions, such as habituality, are not included in the survey (see Mattioli 2019: 19–21). The habitual expressions included in Mattioli’s survey can thus be regarded as pluractional markers which ‘extend’ into the semantic domain of habituality.

Three expression formats are found to be prevalent for pluractional markers by Mattioli (2019: 65–82): affixes, reduplication, and lexical alternation. Because pluractional markers may be used in habitual contexts in some languages, these strategies may thus also be found with a habitual interpretation. For instance, verb reduplication in Paiwan may receive a habitual interpretation, as in (19a), but also has core pluractional functions like iterativity, as in (19b) (Chang 2006: 53–56; Mattioli 2019: 60, 206).

(19) Paiwan (PWN; Austronesian; Chang 2006: 54–55)

- a. *siu~siup ti zepul nu siaw*
 suck<AV> ~PLAC NOM.SG Zepul IRR.TEMP soup<AV>
 ‘Zepul sucks it when she eats soup.’
- b. *v<en>aridi~ridi ti kulele ta zua ?utubay nimadu*
 turn<AV> ~PLAC NOM.SG Kulele OBL that motorbike 3SG.GEN
 ‘Kulele kept turning his motorbike.’

Similarly, the ‘plural-action’ stems of verbs in Maricopa (MRC; Cochimi-Yuman) are said to indicate “that the activity expressed by the verb is repeated or habitual or that the object of the verb is plural” (Gordon 1985: 99–100). For dedicated habitual markers, by contrast, we found no examples of lexical alternation, and reduplication is very rare in our material, being found only in a single language in the variety sample

and three languages in the convenience sample, always in combination with some other marking.¹⁶ These expression formats thus appear to be marginal or non-existent for dedicated habituais, and our prediction would be that if habituality in a given language can be expressed through lexical alternation or reduplication alone, this construction will also have ‘core’ pluractional functions.

Mattiola (2019: 149–157) points to four possible lexical sources of pluractionals in his data. These are demonstratives (in Chadic languages), verbs of liking, verbs of position or location, and motion verbs. The last three are also attested multiple times in our material (see the categories LIKE/LOVE, EXIST/STAY, and GO in Section 5). The fact that we have gathered a longer list of potential sources of dedicated habituais should be no surprise, as our convenience sample was explicitly designed to identify as many of these as possible. Moreover, in the case of pluractionals expressed through reduplication or lexical alternation, it is of course not possible to point to any individual lexical source.

6.3. *Past habituais*

It has been observed that there seems to be a special relation between habitual meaning and past tense, in the sense that if a habitual marker is limited to particular tense contexts, these are more likely to be past than non-past tenses (see e.g. Dahl 1985; Bybee et al. 1994: 151–154; Carlson 2012: 838). Two different types of past habituais may be distinguished: unanalyzable portmanteau markers which simultaneously express past and habitual meaning, and habitual markers which obligatorily cooccur with past tense markers. Compare the Betta Kurumba portmanteau past habitual marker *-ott* described by Coelho (2003) with the Northeast Maidu habitual marker *-us*, which according to Shipley (1963) obligatorily occurs with the past tense suffix *-ʔ*:

(20) Betta Kurumba (XUB; Dravidian, South Dravidian; Coelho 2003: 45)

pin aḍəŋ atni:ri alka pəyottla

pina aḍən-ka atni:ri alka pəy-ott-il-a

then 3SG.REM-DAT onwards there.DAT go-HAB.PST-NEG-3SG

‘Then, from that day on, she never went there.’

¹⁶ The language in the variety sample is Kwaza, cf. (11), while the three languages from the convenience sample are Golin (GVT), Korowai (KHE), and Yagaria (YGR) (all Nuclear Trans New Guinea). In these three languages, habituality is reported to be expressed by a combination of reduplication and an auxiliary.

(21) Northeast Maidu (NMU; Maiduan; Shipley 1963: 52)

péne-m ník-kotò-c'o-m máj-c'o-m ʔyhéj-ʔ-us-a-n.
 two-NOM 1POSS-grandmother-DU-NOM 3NSG-DU-NOM accompany-PST-HAB-IND-3
 'My two grandmothers used to go with us.'

In the sample used by Bybee et al. (1994), only the second type was found, i.e. past habitual markers that always cooccur with overt past tense marking. Bybee et al. suggest a functional motivation for the restriction to past contexts in some languages: whereas habitual meaning is one of the default readings of simple present tenses, simple past tense forms are more likely to be interpreted as perfective. In other words, according to the authors, there is a stronger pressure towards explicit habitual marking in the past than in the present (Bybee et al. 1994: 153–154).

We also encountered past habituals while surveying our 102-language sample and decided to investigate the frequency of such markers. For each marker in the sample, we noted whether it was described as restricted to past-time reference and whether it was in paradigmatic opposition to one or more non-past habitual markers. The languages with habitual markers could then be grouped into three types: those where only a past habitual was recorded, those with an opposition between a past and a non-past habitual, and those without tense restrictions or contrasts in their habitual marker(s), i.e. where the same marker may occur in either past or non-past contexts. The figures are given in Table 5.

Habitual–past relation	No. of languages
Habitual limited to past	3
Past ≠ non-past habitual	4
Habitual without tense restriction	45
No habituals found	50
Total	102

Table 5: Past and non-past habituals in the variety sample.

Perhaps surprisingly, dedicated past habituals turned out to be fairly infrequent in the sample, being attested in only seven out of the 52 languages where we found at least one habitual marker.¹⁷ While languages restricting a habitual marker to past contexts

¹⁷ Of these, portmanteau past habitual markers were found in Berbice Dutch Creole (BRC; Indo-European, Germanic), Betta Kurumba, Japanese, Marind (MRZ; Anim), and Wambaya (WMB; Mirndi). Ket

are thus clearly found, this does not seem to be particularly frequent in the languages surveyed here. However, note that we have only counted a marker as a past habitual if the sources explicitly described it as restricted to past contexts. We thus cannot rule out that some such markers have been overlooked. Furthermore, there may also be languages where a habitual marker is more frequently – but not exclusively – used in past contexts (for two examples, see Olawsky 2006: 465–467; Vallejos 2016: 373–375). Again, we think that a promising way forward would be a corpus-based typological study allowing for the comparison of usage patterns across languages.

6.4. Subtypes of habitual meaning

In most of the cross-linguistic literature on aspect, habitual meaning is treated as a single semantic category (e.g. Comrie 1976; Dahl 1985; Bybee et al. 1994). On the basis of his survey, Carlson (2012: 842) concludes that languages with a grammatical habitual “seem to introduce just one marker of “habituality,” and nothing resembling a field of contrasting markers”. While this indeed seems to be the case also in most of the languages we have surveyed, we think the picture may be slightly more complicated. In a few of the languages where we found more than one habitual marker, the sources either explicitly state or hint at semantic contrasts between them. Hence, at least for some languages it seems to be necessary to distinguish between several different subtypes of habitual meaning.

Consider the case of Amur Nivkh as described by Nedjalkov & Otaina (2013). Here a distinction is made between what is termed a USITATIVE and a QUALITATIVE HABITUAL in the grammar. Whereas the usitative, illustrated in (22a), “denotes a repeated regularly performed action” and may occur with non-human subjects, verbs with the qualitative habitual suffix “characterize the subject (human) as inclined to perform an action [...] habitually” (Nedjalkov & Otaina 2013: 94, 139). The qualitative habitual, illustrated in (22b), is also said to be of more limited productivity than the usitative.

(22) Amur Nivkh (NIV; Nivkh; Nedjalkov & Otaina 2013: 95, 139)

- a. *Tolf* *if* *vi-řa-đ.*
 summer he go-USIT:3SG-IND
 ‘In the summer he usually goes [to that village]’

(KET; Yeniseian) is an intermediate case, as past tense is both marked on the verb and with the portmanteau habitual past particle *ba* (Vajda 2004).

- b. *Ōla va-xə-ḡ.*
 child fight-QUAL.HAB-IND
 ‘The child often fights’

Comparable distinctions have recently been described for Plains Cree (Wolvengrey 2026) and Slovak (Genis & Kyselica 2026). In many cases of multiple habitual markers, however, the semantic difference between them (if any) is less clear. The two habitual auxiliaries in Cofán/A’ingae, derived from verbs meaning KNOW and LIVE, are syntactically distinct, as the former requires an infinitival complement, the latter a same-subject form; see the examples in (23). Whether there is any semantic difference between them, however, is unclear (Kees Hengeveld, p. c.).

(23) Cofán/A’ingae (Fischer & Hengeveld 2023: 104)

- a. *munda = ma an-ye atesû = ti = ki?*
 peccary = ACC.REAL eat-INF HAB = Q = 2
 ‘Do you eat peccary?’
- b. *ja’ñu kundase = pa kanse = mbi = ’ya*
 now tell = SS HAB = NEG = ASS
 ‘Nowadays I don’t tell stories.’

Another such case is Pawnee (PAW; Caddoan) as described by Parks (1976). Here a distinction is made between a “habitual” suffix *-uku* and a “usitative” preverb *ut-*. The habitual is said to describe “[a]ctivities which occur according to habit or occur customarily”, while the usitative is used for “activities which are continuous, habitual, or usual; also activities which occur now and then” (Parks 1976: 199–200). From the descriptions alone, the usitative might appear to have a more general imperfective meaning, but based on the examples in the grammar, it seems that both constructions are to be characterized as dedicated habituals in our terms. The exact difference between them, however, remains unclear to us. We think such languages with multiple habitual markers – and the possible semantic and pragmatic differences between them – deserve more attention in future work.

6.5. Negative habituals

Finally, we wish to briefly mention a phenomenon which we have not seen any references to in the cross-linguistic literature. In some languages, a distinct (portman-teau) negative habitual marker is attested, expressing that a situation does not usually occur. This was found in four languages in the variety sample, including Amur Nivkh and Cofán/A'ingae:

(24) Amur Nivkh (Mattissen 2003: 200)

əyrəku ñivɣ-gu tʃaj-χavu-t ra-ysu-ta.
 former_times person-PL tea-heat-CV:3PL drink-NEG.HAB-ENU:3PL
 ‘In the past, the Nivkh did not heat tea and drink it.’

(25) Cofán/A'ingae (Fischer & Hengeveld 2023: 98)

Je'nda kûti'chu kuku = ta = ti tsa = 'ka = en fi'thi = masia?
 then tree devil = NEW = Q ANA = SIM = ADVZ kill = NEG.HAB
 ‘Then the *yachapo* demon is not killed like that?’

In addition, a dedicated negative habitual is found in Coptic, one of the languages in the convenience sample:

(26) Sahidic Coptic (COP; Afroasiatic, Egyptian; van der Vliet & Zakrzewska 2026: 64)

p-refčioue me = f-ei etbe laau eimētei čekas
 DEF.SG.M-thief NEG.HAB = 3SG.M-come for anything unless in.order.that

e = f-ehōbt

FUT.3 = 3SG.M-steal

‘The thief does not come for any other reason than to steal’

In all of these five languages, the negative habitual exists alongside a positive habitual marker. We have thus found no examples of languages with a grammatical negative habitual without a positive habitual, but we of course cannot rule out that such a language may exist. We also have limited information on the historical development of negative habituals, the only relatively certain source being a verb meaning ‘ignore,

not know' in Amur Nivkh (on which see Mattissen 2003: 199–200). More research into the origins of this type of marker would thus be welcome.

7. Conclusions

This paper has presented a cross-linguistic study of habitual markers, surveying their formal diversity and possible lexical sources around the world. To sum up, we present our main conclusions point for point, broadly corresponding to the questions we asked at the outset of the investigation (see Section 3):

1. In 52 of the 102 languages in our variety sample, at least one dedicated habitual marker was found. In 12 of these languages, more than one marker was found. Dedicated habitual markers are thus cross-linguistically common, and it is not exceptional for a language to have more than one such marker.
2. The most common type of marker in the variety sample was affixes, followed by auxiliaries and particles. Less frequent formal types in the surveyed languages include clitics, serial verbs, and other complex constructions.
3. The survey of lexical sources suggests that a very large number of different linguistic items may develop into habitual markers. We pointed to some more or less cross-linguistically common pathways, noting that some of the rarer ones may be indicative of language contact.
4. We found dedicated past habituais to be relatively infrequent, being attested in only seven languages in the variety sample. We also pointed to other possible distinctions in the domain of habituality, noting that some languages distinguish between more than one subtype of habitual meaning or between positive and negative habitual markers.

We hope that these cross-linguistic generalizations will be of interest to typologists as well as historical and descriptive linguists, and we are convinced that many interesting habitual constructions still remain to be described across the world's languages.

Acknowledgements

We are grateful to everyone who replied to our LingTyp query (17 Apr 2023) for their many helpful suggestions and comments. Thanks are also due to audiences in Helsinki, Paris, and Singapore, the two anonymous reviewers, and the members of the research groups “Habituals” and “Serial Predicates Across Modalities” (University of Amsterdam). Finally, the first author wishes to thank Rie Obe, Shion Sato, Shinnosuke Murakami, and the other students at the University of Osaka who shared their knowledge of Japanese with him during his research stay in May and June 2024.

Abbreviations

1 = 1st person	DET = determiner	OBL = oblique
2 = 2nd person	DU = dual	PL = plural
3 = 3rd person	DYN = dynamic	PLAC = pluractional
ACT = active	EMPH = emphatic	PLS = plural subject
ADD = additive focus	ENU = enumerative	POSS = possessive
ADJZ = adjectivizer	ERG = ergative	PST = past
ADVZ = adverbializer	FREQ = frequentative	PTCP = participle
AFF = affirmative	FUT = future	PUNCT = punctual
ANA = anaphoric	HAB = habitual	Q = question (interrogative)
AP = antipassive	HUMPL = human plural	QUAL = qualitative
APPL = applicative	IND = indicative	REAL = realis
ASS = assertive	INV = inverse	REM = remote
AV = actor voice	IP = instrumental prefix	RPT = reportative
CNJ = conjunct	IPFV = imperfective	S = intransitive subject
CNTR = contrastive topic	IRR = irrealis	SG = singular
COMP = complementizer	LOC = locative	SIM = similitive
CONJ = conjunctive	M = masculine	SS = same subject
COP = copula	MD = middle deictic	SUFF = suffix
CV = converb	NEG = negative	TEMP = temporal
DAT = dative	NEW = new topic	TOP = topic
DECL = declarative	NMLZ = nominalizer	TRNSL = translocative
DEF = definite	NOM = nominative	USIT = usitative
DEP = dependent	NSG = non-singular	YM = Yuchi male

Appendices (available at <https://doi.org/10.60923/issn.2785-0943/20272>)

1. Habitual markers in the 102-language variety sample.
2. Habitual markers in the 85-language convenience sample.

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