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Towards a typology of continuative expressions

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Abstract

This paper investigates the cross-linguistic diversity of continuative ('still') expressions. Based on a genealogically stratified sample of 120 languages, the continuative expressions are systematically analyzed according to the four following parameters: morphosyntactic type, emphatic vs. non-emphatic status, other (non-continuative) uses and semantic effects when combined with negation. The study shows that the most widespread type of continuative expressions is represented by monosemous emphatic continuative adverbials which in combination with negation acquire a 'not yet' meaning. In many languages, however, we also find continuative expressions which have followed evolutionary pathways towards morphologization, non-emphatic uses, rich polysemy networks, and less trivial types of interaction with negation. The paper discusses possible areal, genealogical and structural factors which might contribute to the "maturation" of continuative expressions in the world's languages.

Keywords: continuative; phasal polarity; typology; polysemy; maturation.

1. Introduction

This article is a study of linguistic encoding of the semantics of continuation: a domain that has not yet been a topic of a dedicated typological investigation. The term *continuative* covers expressions used in reference to the situations which started to exist before the reference time and exist at reference time (for a more detailed

definition and discussion, see Section 2.1). Examples of such expressions, hereinafter referred to as *continuative expressions*, are given in (1)-(4). It can be seen that continuative expressions vary greatly with respect to their morphosyntactic status.

(1) Spanish (spa; Indo-European, Italic; van der Auwera 1998: 30)[1]
Juan *duerme* ***todavía***.
Juan sleeps **still**
'Juan is still asleep.'

(2) Balanta-Ganja (bjt; Atlantic-Congo, North-Central Atlantic; Creissels and Biaye 2016: 201)
bá-n-tígtà-nà *yâaθ*.
INCL-INACP-AUX$_{CONT}$-INCL work
'We keep working.'

(3) Yine (pib; Arawakan, Southern Maipuran; Hanson 2010: 245; glosses adapted)
*r-halna-**wa***
3-fly-**IPFV**
'He is still flying.' / 'He continues flying.'

(4) Nanga (nzz; Dogon, Nangan Dogon; Heath 2016: 226)
[***níŋèy^{n}*** ***yŋà***] [*ò:^{L}* *gó*] *bù-*∅
[**now** **INST**] [field^{L} LOC] be-3SG.SBJ
'He/She is still in the fields.'

In the late 1990s, several studies dealt with continuative expressions from a cross-linguistic perspective within a broader semantic domain — phasality or phasal polarity (van Baar 1997; van der Auwera 1998; Plungian 1999) — which, apart from the continuative (~ 'still'), also includes 'already', 'no longer' and 'not yet'. More recent studies have focused on specific phasal meanings. For example, Veselinova (2015) addresses 'not yet' expressions in the languages of the world. Dahl and Wälchli (2016) investigate the iamitive ('already') meaning. The continuative meaning,

[1] Throughout the article the language names are provided according to Glottolog 4.8 (Hammarström et al. 2023). Transcription and glosses in the linguistic examples are provided as in the sources unless otherwise stated.

however, has never been a topic of a dedicated large-sample typological investigation. The present study is intended to fill this gap.

The research questions addressed in this paper deal with the problem of structural diversity and linguistic preferences. The specific goal of the study is to describe the cross-linguistic variation in the properties of continuative expressions, and what properties of continuative expressions are more or less typical of the world's languages. With respect to these questions, the continuative semantics is particularly interesting because it can be expressed by both lexical items and grammatical markers. Thus, the challenge of this study is to conduct a consistent cross-linguistic analysis of the highly diverse class of linguistic expressions combining methods of both lexical and grammatical typology.

The structure of the paper is as follows. Section 2 discusses the relevant theoretical concepts and the methodology used in this study. Section 3 is a detailed description of the analysis of the continuative expressions along four parameters: morphosyntactic type, emphatic vs. non-emphatic status, uses outside the continuative domain and semantic effects when combined with negation. Section 4 provides a comprehensive account of the typology of continuative expressions from a diachronic perspective. Finally, Section 5 discusses the main findings of the study.

2. Theoretical and methodological preliminaries

2.1. The continuative meaning: a definition

According to van Baar (1997), van der Auwera (1998), Plungian (1999) among others, the continuative meaning belongs to the phasal domain (also known as phasality or phasal polarity). The phasal domain consists of the four values: 'already', 'still', 'no longer' and 'not yet'. As shown in Table 1, phasal markers denote "existence or non-existence of a situation at several moments, as compared to some other moments" (Plungian 1999: 315). For example, 'already' indicates that the situation existed (+) at the reference time and that it did not exist (–) at some moment preceding the reference time.

t_i (preceding moment)	t_0 (reference time)	meaning	van der Auwera 1998	Plungian 1999
–	+	'already'	inchoative	inchoative
+	+	'still'	continuative	continuative
–	–	'not yet'	continuative negative	cunctative
+	–	'no longer'	discontinuative	terminative

Table 1: Phasal values.

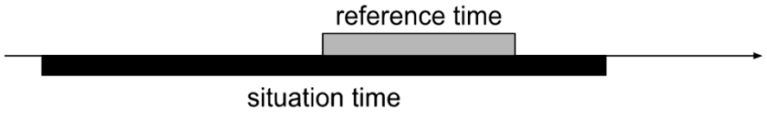
The phasal domain remains a rather vague semantic area for (at least) three reasons which will now be addressed in more detail.

2.1.1. Phasal polarity and aspect

First, it is not clear whether phasal polarity is a part of the aspectual domain or is a functional domain in its own right (Plungian 1999: 313-315). Following Klein (1994), in this study I define aspect as a relation between *reference time* and *situation time*. For example, in (5) reference time is the moment of coming into the room, whereas situation time is the whole period during which John was sleeping. Reference time is fully included into situation time (5'), and this type of the relation between reference time and situation time represents the *imperfective* aspect.

(5) [Context: I came into the room and saw…]
John was sleeping.

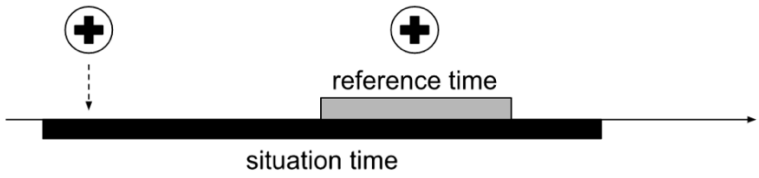
(5')



When the adverb *still* is added to the sentence, it brings the following information: the situation existed at reference time, and it existed at some moment preceding reference time. As shown in (6'), the semantic contribution of *still* does not interfere with aspect, the scheme of the imperfective remains the same.

(6) [Context: I came into the room and saw…]
*John was **still** sleeping.*

(6')



Thus, according to this view of aspectual domain, phasal polarity and aspect are two distinct categories which complement each other.

Note, however, that not all combinations of aspectual and phasal values are available, cf. Figure 1.

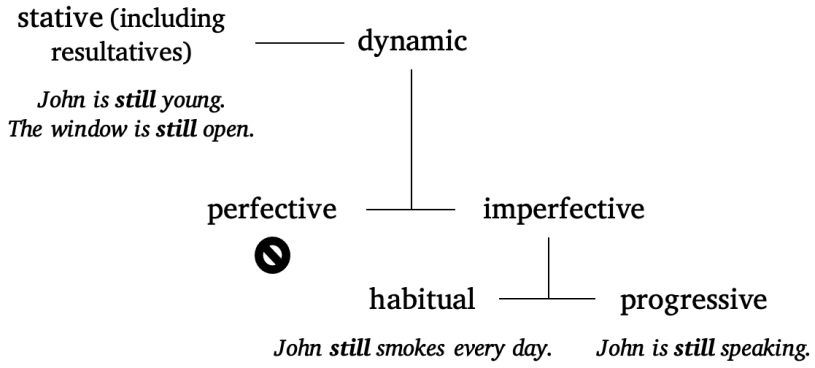


Figure 1: Compatibility of *still* with some actional and aspectual categories.

Importantly for this study, the continuative meaning is not compatible with the perfective aspect,[2] cf. (7)-(8).

(7) **John still arrived.* (telic)
(8) **John still slept.* (atelic) (the perfective interpretation is impossible; the reader is asked to ignore the habitual reading)

[2] Perfective implies that the boundaries of situation time are included in reference time (Klein 1994), and this condition is incompatible with the continuative meaning (it requires the situation to be true at some moment before reference time).

Examples (7)-(8) demonstrate that, contrary to the analysis in Michaelis (1993: 198), the reason for such restrictions on *still* is indeed perfectivity and not telicity: *sleep* is an atelic verb but its combination with *still* in the perfective context is forbidden.

2.1.2. Phasal verbs

The second issue crucial to understand the structure of the phasal domain is the relationship between phasal expressions, e.g., *still*, and the so-called phasal verbs, e.g., *continue*. There may be a substantial difference between these two types of expressions (cf. discussion of *already* and *start* in Gorbunova 2014), or their semantics may overlap.

The English verb *continue* is ambiguous. When used imperfectively as in (9a), it seems to be semantically identical to *still*. However, *continue* may also be used perfectively, being interpreted as 'continue after a break' (9b).[3]

(9) a. *The sudsy water **continues** working while it is slippery and you can still make bubbles by agitating it.* [BNC]
b. *After dinner we **continued** to fiddle around with tackle and were joined by Mr. Ferguson and his son, Paul, who were also booked in for the same week.* [BNC]

In this study only the imperfective uses of the phasal verbs like *continue* (9a), which do not presuppose any interruptions, are treated as examples of the continuative meaning. The meaning 'continue after a break' (9b), in turn, is considered a distinct semantic value and is not discussed in the paper.[4]

2.1.3. Counter-expectations

It has been suggested that the phasal polarity semantics involves a component of counter-expectations (Plungian 1999: 318). As was shown by van der Auwera (1998, 2021), that is not exactly true: the expectation of the contrary is not an obligatory semantic component of phasal markers, although it may sometimes be present.

[3] Xiao and McEnery (2004: 233) describe the same ambiguity with respect to the continuative *-xiaqu* in Mandarin Chinese (Sino-Tibetan, Sinitic).

[4] In Stoynova (2013: 128-129) the meaning 'continue after a break' is discussed as part of the repetitive semantic domain.

Van der Auwera distinguishes two possible scenarios where continuative markers may be used: a neutral scenario and a counterfactual (= counter-expected) scenario. Examples (10)-(11), taken from the overview of van der Auwera's discussion by van Baar (1997: 31-32), [5] illustrate neutral and counterfactual scenarios respectively.

(10) [Peter is going to fly from London to Amsterdam at 4 p.m. John and Peter meet at the airport at 3 p.m. At 3 p.m. it is possible for John to say:]
(*Yes, I know.) Peter is **still** in London.*

(11) [Peter is going to fly from London to Amsterdam at 4 p.m. John and Peter meet at the airport at 3 p.m. Then Peter makes an ad hoc decision to leave for Amsterdam on a later plane, which departs at 7 p.m. Suppose that their appointment was arranged in order to discuss some urgent matter which had to be transferred to Amsterdam as soon as possible. If John finds out at 6 p.m. that Peter will take a later plane, it is possible for John to say:]
(*Damn!*) *Peter is **still** in London.*

In English, as shown in (10)-(11), the adverb *still* can be used in both scenarios, while in some other languages continuative expressions may be available only in one of them. Thus, according to van der Auwera, the ability of phasal markers to be used in neutral and counterfactual scenarios is a parameter of typological variation. This approach is adopted in the present paper.

2.1.4. The definition

Based on the discussion above, the definition of the continuative meaning can be formulated as follows:

(12) Continuative is a phasal value which indicates that
(a) the situation X exists at reference time,
(b) the situation X existed at the moment t_i preceding reference time,
(c) the situation X has not been interrupted between t_i and reference time.

[5] The year of publication of van Baar's dissertation (1997) may be misleading. Although van der Auwera's article was published in 1998, van Baar discusses it in great detail.

To be absolutely clear on the expectations issue (see 2.1.3), it may be added that the state of affairs in (a)-(c) may (but does not have to) be compared with someone's expectations.

2.2. Methods and data

2.2.1. Methodology

The aim of this study is a large-scale typological investigation of a particular lexical-grammatical domain based on a stratified language sample. This approach allows to capture the world-wide variation of the parameters deemed relevant for the domain and to determine the observed relative frequency and areal distribution of their different values. I focus on four parameters which are relevant to the typological profile of a continuative expression and information on which can be found in the sources (see a more detailed description of each of the parameters in Section 3):

(13) (a) morphosyntactic type,
(b) emphatic vs. non-emphatic status,
(c) uses outside the continuative domain,
(d) meaning in combination with negation.

Information concerning these parameters for each individual language was obtained from grammatical descriptions and dictionaries. When necessary, information provided by experts on and speakers of particular languages was also used.

When it was possible, I searched for translational equivalents of the lexical items presented in Table 2 (cf. the use of the same method in e.g., Khanina 2008).

language of the source	**continuative expressions**
English	*still*, *continue*, *keep* (*on*), *stay*, *remain*
French	*encore*, *continuer*, *rester*
Spanish	*todavía*, *aún*, *seguir*, *continuar*
Portuguese	*ainda*, *continuar*
Russian	(*vsë*) *eščë* [(*всё*) *ещё*], *prodolžat'* [*продолжать*], *poka* [*пока*]

Table 2: Translational equivalents used when searching for continuative expressions.

When it was not possible to search for translational equivalents, I looked through sections dedicated to aspect, derivational morphology, auxiliary verbs, adverbials and particles. If some expression (in at least one of its meanings) fitted the definition of the continuative given in Section 2.1.4, it was included in the database.[6]

Some reference grammars contained a special section about continuative expressions where at least some of the parameters (a)-(d) were discussed. If there was no description of continuative expressions or if it was not detailed enough, the relevant information could often (but not always) be retrieved from examples found in the sources.

2.2.2. Sampling

To construct a genealogically stratified sample, I included one language per family by default and added more languages from the families which are the most diverse (Indo-European, Austroasiatic, Atlantic-Congo, Afro-Asiatic, Otomanguean, Athabaskan-Eyak-Tlingit, Arawakan, Pama-Nyungan). I used genealogical classifications in Glottolog 4.8 (Hammarström et al. 2023). To make the sample geographically balanced, I made sure that all macro-areas were represented by an equal number of languages. In dividing the world into macro-areas, I followed Hammarström & Donohue (2014) who distinguish Eurasia, Africa, North America, South America, Australia and Papunesia. The overall number of languages in the sample is determined by the quality of the available language descriptions. In particular, after applying the genealogical "filter" to the languages of Australia, the number of languages having descriptions which mention continuative expressions is hardly above 20, and a similar situation is observed with the languages of South America. As a result, I decided to take 20 languages per macro-area, and, in case of more than 20 good candidates, I included those which are geographically more distant from each other. The geographical distribution of all 120 languages included in the sample is shown in Figure 2.[7]

[6] The database is available online at https://anapanifica.github.io/continuative, the raw dataset is available at https://doi.org/10.5281/zenodo.8352034.

[7] All maps were created with the R package "lingtypology" (Moroz 2017).

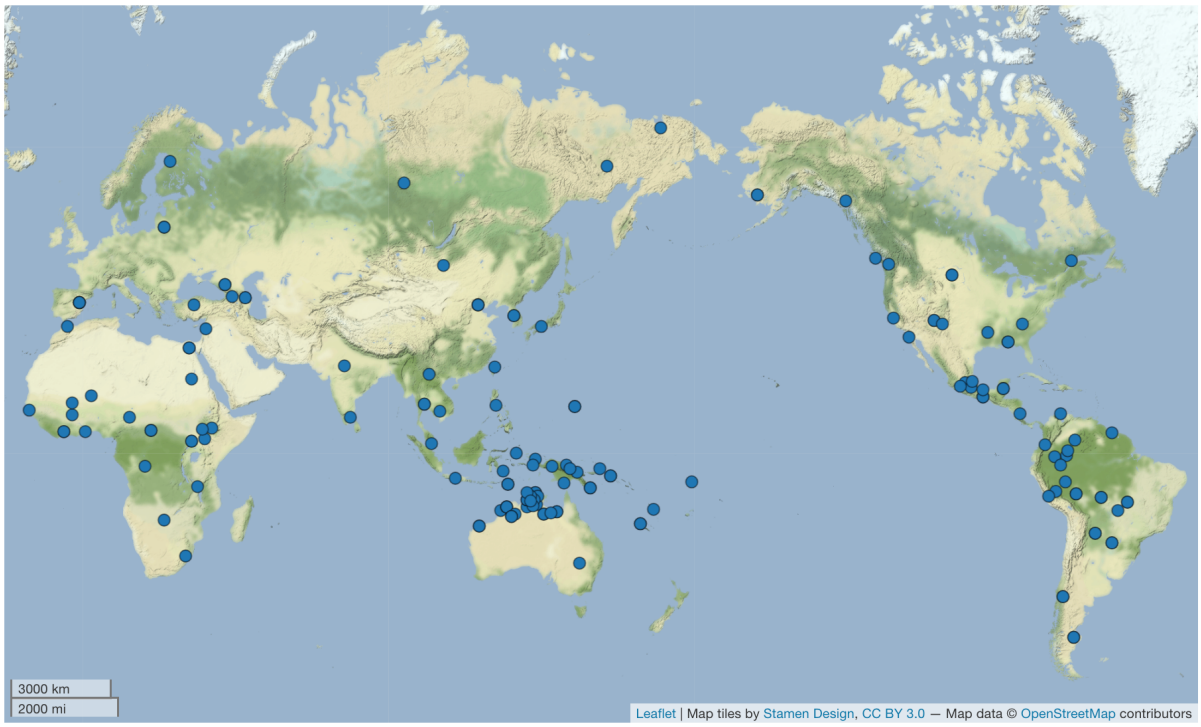


Figure 2: Languages included in the sample.

2. Analysis

2.1. Morphosyntactic type

2.1.1. Defining the types

The continuative meaning was defined in Section 2.1.4 in such a way that does not allow a continuative marker to constitute an independent predication itself: it must modify a predicate. Thus, the range of possible types of continuative expressions is restricted to those types of morphosyntactic elements that can function as predicate modifiers. The continuative markers identified in the sources can be classified into the following types of predicate modifiers: affixes, auxiliaries and adverbs/particles. Importantly, when using the terms "auxiliary" and "adverbs/particles" I mean exclusively morphosyntactic properties of continuative expressions and not their place on the lexical-grammatical scale (for example, particles may be both lexical and grammatical markers, but this difference is ignored in the annotation).

Working criteria used for assigning the morphosyntactic types are summarized in Table 3.

morphologically bound	**morphologically free (including clitics)**	
affixes	marking typical for verbs in the given language (e.g., agreement)	no verb-like marking
	auxiliaries	adverbs/particles

Table 3: Morphosyntactic types of continuative expressions.

If the continuative meaning is expressed by an element interpreted in the source as an affix on the predicate, this element is classified as affix, cf. (14). Several cases where the author's decision about the morphological status of an element seems debatable are discussed in Section 3.1.2.

(14) Central Alaskan Yupik (esu; Eskimo-Aleut, Yupik; Miyaoka 2012: 1232, glosses added)
*tai-**gur**-tuq*
come-**CONT**-IND.3SG
'He is still coming, keeps coming.'

Second, morphologically free continuative markers which can be identified as verbs in the given language, e.g., agree with the subject of the clause and/or have TAM markers, etc., and which combine with another (lexical) predicate, are labelled auxiliaries, cf. (2) repeated here as (15).

(15) Balanta-Ganja (Atlantic-Congo, North-Central Atlantic; Creissels and Biaye 2016: 201)
Bá-n-tígtà-nà *yâaθ*.
INCL-INACP-AUX$_{CONT}$-INCL work
'We keep working.'

Most of the rest of the continuative expressions fit into the category of adverbs/particles. To draw a boundary between adverbs and particles is hardly possible because in the literature on specific languages there are no common methodological grounds for using the terms. In addition, this type includes adpositional phrases and combinations of adverbs/particles with intensifiers. Examples of continuative adverbs/particles are given in (16)-(17).

(16) Montagnais (moe; Algic, Algonquian-Blackfoot; Oxford 2007: 209)
Tâpue ***eshku*** *mishta-minuâteu.*
truly **still** really-love.3>3'
'He truly still loves her.'

(17) Hup (jup; Naduhup, Eastern Naduhup; Epps 2008: 584)
dóʔ=dʼəh *bʼóy-óy* ***tœ́***
child=PL study-DYNM **YET**
'The children are still studying/at school.'

Finally, there are six continuative expressions whose morphosyntactic status cannot be defined based on the data provided in the sources. I mark such cases with the label "not clear".

3.1.2. Areal distribution

Figure 3 shows the distribution of morphosyntactic types of continuative expressions across macro-areas.

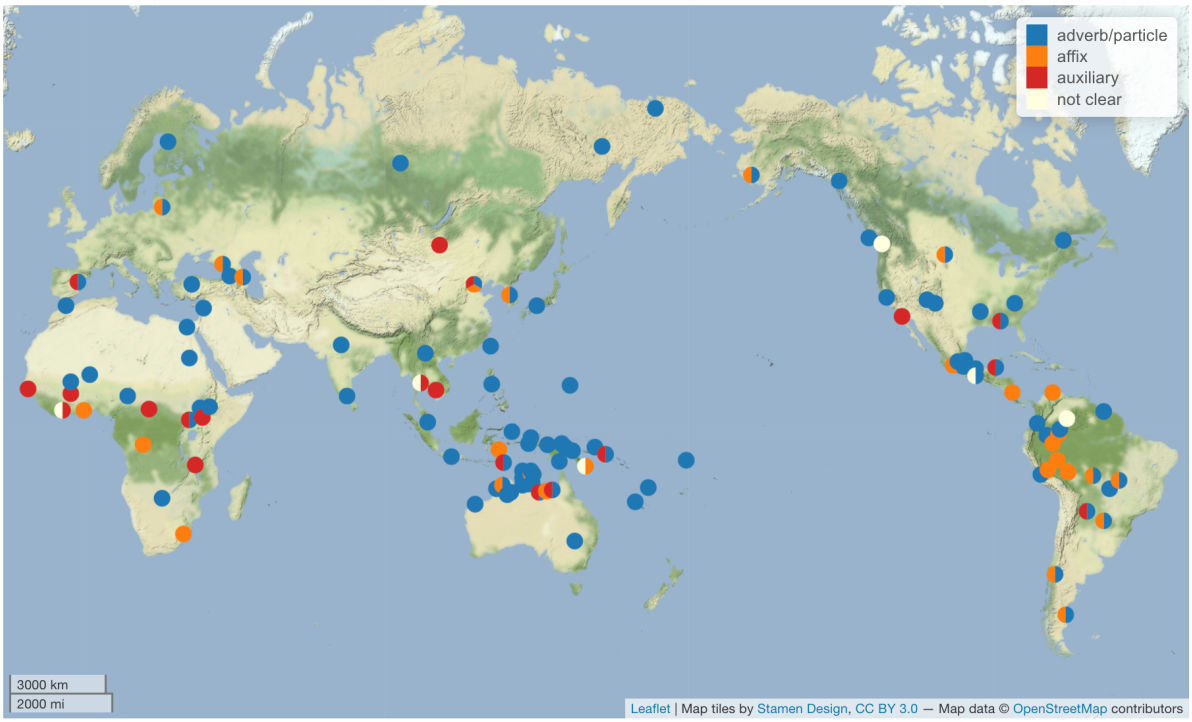


Figure 3: Morphosyntactic types of continuative expressions.

It can be seen that adverbs/particles constitute the most widespread morphosyntactic type of continuative expressions: they occur in many languages in the sample and are present in all macro-areas. Moreover, one may suspect that the adverbial strategy is actually possible in many more or even all languages in the sample. Since most of my sources are grammatical descriptions, and adverbial phrases tend to be lexical rather than grammatical items, some adverbs/particles might have been overlooked. This assumption is plausible from yet another perspective: although many languages have continuative adverbs/particles whose diachronic sources are no longer transparent, supposedly all languages can derive a continuative as a periphrastic expression, e.g., as a combination 'until'/'to'/'and' + 'now', cf. (18).[8]

(18) Mongolian (mon; Mongolic-Khitan, Mongolic; Pjurbeev 2001; glosses and transcription added)

odoo	*boltol /*	*odoo*	*xürtel*
now	until /	now	to

'Up to now; to this day; still'

Having established that the 'adverbs/particles'-type is the default morphosyntactic type of continuative expressions, let us now turn to the affix-type and auxiliary-type in each of the macro-areas.

Among 20 Eurasian languages included in the sample there are nine languages which feature either a continuative auxiliary or a continuative affix. The boundary between these two types is not always clear, especially in languages which lack inflectional morphology. For example, the Mandarin Chinese continuative (-)*xiaqu* is usually interpreted as one of the suffixes deriving verbal compounds (Li & Thompson 1989: 61-62; Ross & Ma 2014: 120), cf. (19a). However, the same element can occur in its lexical meaning as a morphologically independent predicate (19b). Thus, the affixal status of (-)*xiaqu* is not self-evident (at least, from a purely morphological perspective).

[8] Although 'now'-based periphrastic continuatives may be restricted to present tense, they are nevertheless considered continuative expressions in the framework of the study (cf. van der Auwera 2021: 26 on this issue for phasal expressions in general).

(19) Mandarin Chinese (cmn; Sino-Tibetan, Sinitic)

a. *kàn-**xià-qù***
read-**descend-go**
'Keep reading.' (Li & Thompson 1989: 61)

b. *wo xian **xiaqu** dating-dating zai shuo*
I first **get_off** enquire-enquire then say
'Let me get off (the car) and ask about it first before taking action.' (Xiao & McEnery 2004: 227)

Similar issues can be discussed with regard to almost all continuative auxiliaries/affixes in South East Asian languages included in the sample (Central Khmer, Thai, Korean and Halh Mongolian).[9]

In the European part of the macro-area there are four languages in the sample which possess continuative affixes or auxiliaries: Spanish (Indo-European, Italic), Lithuanian (lit; Indo-European, Balto-Slavic), Abaza (abq; Abkhaz-Adyge, Abkhaz-Abaza) and Lezgian (lez; Nakh-Daghestanian, Daghestanian). The degree of morphologization of the continuative markers in these languages clearly varies. The auxiliary verbs *continuar* 'continue' and *seguir* 'follow, continue' in Spanish do not show any effects of morphologization. Moreover, even their auxiliary status seems to be relatively new: according to van der Auwera (1998: 30), "Spanish *continuar*, when followed by the gerundio, could be considered to be an auxiliary or semi-auxiliary", while "English *continue* may still be a lexical verb". In contrast, the Lezgian continuative auxiliary *ama* 'stays' is univerbated with the preposed dependent verb inflected for aspect (20), see Haspelmath (1993: 145) and Maisak & Verhees (ms); but in other Lezgic languages, e.g., in Agul (21), the auxiliary 'stay' still functions as a morphologically independent verb (Maisak & Verhees ms).

(20) Lezgian (Nakh-Daghestanian, Daghestanian; Haspelmath 1993: 210; glosses adapted)
*Jusuf.a k'walax-**zama.***
Jusuf.ERG work-**IPFV.CONT**
'Jusuf is still working.'

[9] Central Khmer (khm; Austroasiatic, Khmeric), Thai (tha; Tai-Kadai, Kam-Tai), Korean (kor; Koreanic); Halh Mongolian (khk; Mongolic-Khitan, Eastern Mongolic).

(21) Agul (agx; Nakh-Daghestanian, Daghestanian; Merdanova 2004: 115, cited by Maisak & Verhees ms)

dad.a	*kːazit*	*ruχ.a-j*	***ame-a***
father.ERG	newspaper	read.IPFV-CVB	**stay-PRS**

'Father is still reading the newspaper.'

The diachronic source of the Abaza continuative *-rḳʷ(a)* (22) is not absolutely clear, although there is some partial support for its verbal origins (Genko 1955: 140). In the modern language, its affixal status is fairly certain.

(22) Abaza (Abkhaz-Adyge, Abkhaz-Abaza; Klyagina & Panova 2019: 7; glosses adapted)

a-kʷa	*ʕa-kʷa-**rḳʷ**-əw-n*
DEF-rain	CSL-rain-**CONT**-IPFV-PST

'[When I was going home] it was still raining.'

The Lithuanian prefix *tebe-* is a rare example of the continuative affix originating from an adverb. According to Ostrowski (2011, 2016: 176-177), the verbal prefix *be-*, reinforced by the deictic element *te-*, goes back to the adverb *be* 'yet, still'. As can be seen from texts, the prefix superseded the corresponding adverb in the first half of 19th century.

Auxiliaries and affixes are very frequent types of continuative expressions in the languages of Africa. With the exception of the Afro-Asiatic languages, which generally prefer adverbial phrases, all the seven Atlantic-Congo languages included in the sample as well as three out of eight languages belonging to the smaller African families (Gban, Mande; Ma'di, Central Sudanic; Turkana, Nilotic)[10] feature either a continuative auxiliary or a continuative affix. Moreover, in most of these languages, and especially in Bantu, continuative markers play a prominent role in TAM systems, so they are discussed both in grammatical descriptions and in specific papers, see Nurse (2008: 145-148), Maho (2008), Löfgren (2019), among others. Two main morphosyntactic types of continuative expressions in Bantu are exemplified in (23)-(24).[11] In Zulu the continuative marker *sa-* appears directly in the verb; in Nyakyusa-

[10] Gban (ggu; Mande, Eastern Mande), Ma'di (mhi; Central Sudanic, Moru-Madi), Turkana (tuv; Nilotic, Eastern Nilotic).

[11] The third possible option can be seen in Swahili (swh; Atlantic-Congo, Volta-Congo) where the borrowed adverb *bado* 'still' almost replaced an older continuative auxiliary *-ngali* (Nurse 2008: 145; Zahran & Bloom Ström 2022).

Ngonde the continuative marker *tʊ-kaalɪ* (glossed as SP1PL-PERS(persistive)) is a separate word consisting of the subject prefix and the root *-kaalɪ*. [12]

(23) Zulu (zul; Atlantic-Congo, Volta-Congo, Bantoid; Ziervogel et al. 1967: 91; glosses added)

a. *u-**sa**-phek.a*
3SG.G2.SBJ-**CONT**-cook
'She still cooks/ She is still cooking.'

b. *ba-**sa**-wadla* *ama-swidi*
3PL.G2.SBJ-**CONT**-eat PL.G4-sweet
'They are still eating the sweets.'

(24) Nyakyusa-Ngonde (nyy; Atlantic-Congo, Volta-Congo; Persohn 2021: 133; glosses adapted)
tʊ-kaalɪ *tʊ-kʊ-bop-a.*
SBJ1PL-PERS SP1PL-PRS-run-FV
'We are still running / still run.'

Historically, continuative markers attested in Bantu (often called "persistives" in the literature) go back to the Proto-Bantu marker **-kí(-)* (Meeussen 1967: 109; Nurse 2008: 145-148). According to (Maho 2008: 296), it originally had an imperfective and/or progressive meaning and functioned as an auxiliary in the construction structurally similar to the one in (24).

Outside Bantu, several African languages, e.g., Balanta-Ganja (Atlantic-Congo, North-Central Atlantic) and Ewe (ewe; Atlantic-Congo, Volta-Congo, Kwa Volta-Congo), show dedicated continuative auxiliaries similar to (24), while others — at least, Sango (sag; Atlantic-Congo, Volta-Congo, North Volta-Congo), Ma'di (Central Sudanic, Moru-Madi) and Gban (Mande, Eastern Mande) — demonstrate a different strategy, using the verb 'stay, remain'. Example (25) illustrates the case of Sango: in (25a) the verb *ngba* is a lexical verb, in (25b) it functions as an auxiliary, taking the nominalized verb form as a complement.

[12] The root *-kaalɪ* is very likely to contain the copula *lɪ* (Persohn 2021: 133), cf. Nurse (2008: 147) on this pattern in other Bantu languages.

(25) Sango (Atlantic-Congo, Volta-Congo, North Volta-Congo)

a. *mbi* *yí* *ála* ***ngbá*** *na* *ndo* *só* *pɛpɛ*
1SG want 3PL **stay** PREP ? DEM NEG
'I don't want them to stay here.' (Samarin 1970: 127; glosses added)

b. *mbi* ***ngba*** *ti* *hu-ngo* *pino*
1SG **remain** SBJ see-NMLZ suffering
'I am still suffering.' (Nassenstein & Pasch 2021: 114; glosses adapted)

Finally, one continuative marker in Africa in the database is classified as 'not clear'. This is a predicative marker *lé˝* in Gban (Mande). Predicative markers are portmanteau morphemes expressing TAM and polarity and occurring in the post-subject position. An example illustrating the predicative marker *lé˝* in the continuative meaning is given in (26).

(26) Gban (Mande, Eastern Mande; Fedotov 2015: 4; glosses adapted)
zíg̋g̋ő *ɔ̃* ***lé˝*** *blɛ̃*
then 3SG[…] **CONT** IPFV\walk
'[They walked all morning] and are still walking.'

Overall, the number of continuative auxiliaries/affixes in Africa gradually increases from north to south: continuative auxiliaries/affixes are not widespread in North Africa but in Central and especially South Africa (with the notable exception of the Khoisan language Ts'ixa[13] genealogically distant from most languages spoken in this area) they represent the dominant strategy of expressing the continuative meaning.

In North America non-adverbial continuatives are rare and scattered throughout the macro-area. Central Alaskan Yupik (esu; Eskimo-Aleut, Eskimo), Purepecha (tsz; Tarascan) and Lakota (lkt; Siouan, Core Siouan) are the only North American languages in the sample with continuative affixes (however, the Lakota continuative suffix *-akhe* is non-productive (Ullrich 2018: 190)), and two more languages have continuative auxiliaries (27)-(28). In addition, Yucatec Maya (yua; Mayan, Core Mayan) employs the auxiliary *sèegir* 'continue', borrowed from Spanish.

[13] Ts'ixa (Khoe-Kwadi, Khoe).

(27) Tipai (dih; Cochimi-Yuman, Yuman; Miller 2001: 293; glosses adapted)
nyaach *saaw* ***xkiiway***
I + SBJ eat **still.do**
'I'm still eating.'

(28) Creek (mus; Muskogean; Martin 2011: 306)
a:fack-itá *hámk-it* *ahô:sk-i:* ***mónk-ati:-s***
happy-INF one-T left.over.FGR-DUR **still-PAST5-IND**
'One game still remained.'

South America turns out to be the macro-area with the largest number of morphologically bound continuative expressions. Continuative affixes are attested in 12 of the 20 South American languages included in the sample, and only one language — Nivaclé (cag; Matacoan, Mataguayo I) — demonstrates a continuative auxiliary (based on the verb 'stay' (Fabre 2016: 360)). South America is often subdivided into two linguistic areas with different typological profiles: Amazonia and the Andes (Dixon & Aikhenvald 1999: 8-10). However, continuative affixes found in Amazonian and Andean languages are structurally very similar, see examples in (29)-(30). Usually these are optional suffixes occupying a specific slot in the verbal template along with a number of other suffixes having rather "lexical" meanings, e.g., 'again', 'for a long time', 'regretfully', etc. Diachronic sources of South American continuative suffixes are not discussed in the literature, which might suggest that they are not synchronically transparent.

(29) Tanimuca-Retuarã (tnc; Tucanoan, Eastern Tucanoan; Eraso 2015: 263) [Amazonia]
*ɟi-bá'írábé-~**ɟúhú**-ruɟú*
1S-work-**NO.COMPL**-FUT
'I will still be working.'

(30) Mapudungun (arn; Araucanian; Smeets 2008: 172, glosses simplified) [the Andes]
*müle-**ka**-y* *ta-mi* *chaw*?
be-**CONT**-IND-3 the-POSS.2SG father
'Is your father still there?'

In Australia continuative auxiliaries and continuative affixes are rare. The database includes two continuative expressions encoded as auxiliaries: *wirdija* in Kayardild (gyd; Tangkic, Southern Tangkic) and *mirra* in Wambayan (wmb; Mirndi, Ngurlun). Both verbs have a wide range of meanings: 'stay, reside' (in locative clauses), 'be', 'become', and only in ascriptive clauses[14] it is used in the continuative meaning (~ 'be still') (Evans 1995: 321; Nordlinger 1998: 178). Two examples of continuative affixes are also not straightforward. The continuative *-wa* in Garrwa (wrk; Garrwan) is described as a suffix which is exclusive to verbs (Mushin 2012: 199). However, there are examples where it also attaches to the temporal adverbial *wabula* 'olden times' (Mushin 2012: 321), which makes it more similar to a clitic. The continuative *djal-* in Bininj Kun-Wok (gup; Gunwinyguan) appears in the verb as a prefix (31) but "when it restricts nouns, it is a separate word rather than a prefix" (Evans 2003: 516).

(31) Bininj Kun-Wok (gup; Gunwinyguan; Evans 2003: 518)
*A-marne-**djal**-djare*
1/3-BEN-**just**-want.NPST
'I still love him/her' (first interpretation offered) / 'Only I love him/her' / 'I love only him/her.'

Papunesia is a very diverse macro-area, and it does not always make sense to discuss it as a whole. However, as for continuatives, the general tendency to lack continuative auxiliaries and affixes seems to hold for all major areal and genealogical linguistic units distinguished in the macro-area. The detailed data on continuative expressions in Malayo-Polynesian languages of South East Asia (MPSEA) are provided in (Veselinova et al. to appear). The distribution of morphosyntactic types of continuative expressions in their sample is presented in Table 4.

As Veselinova et al. (to appear) note, "the preference is clearly for morphologically free expressions; bound ones exist but are relatively few". Leaving aside differences in encoding, my data show the same pattern: seven out of eight Austronesian languages included in my sample have continuative expressions classified as adverbial phrases, and only Tukang Besi North (khc; Austronesian, Malayo-Polynesian) — which happened to be included both in my study and in the study of Veselinova et al. (to appear) — has the continuative suffix *-ho* (Donohue 1999: 173-174).

[14] Ascriptive clauses are clauses where the predicate "attributes a certain property to the subject" (Nordlinger 1998: 173).

type	number of languages
free markers	
adverb	15 languages
aspect marker	11 languages
free gram	9 languages
single morpheme	5 languages
auxiliary	4 languages
particle	3 languages
aspectual adverb	1 language
periphrastic construction/adverbial	1 language
several markers	
1. AUX-like 2. aspect marker	1 language
1. adverb 2. combination of adverb and clitic 3. clitic	1 language
1. AUX-like 2. aspect marker 2. aspect clitic	1 language
1. free aspect marker 2. proclitic aspect marker	1 language
enclitics	7 languages
suffix	1 language

Table 4: Types of STILL expressions in 61 MPSEA languages (Veselinova et al. to appear). [15]

Non-Austronesian languages included in the sample show a similar picture. There are only three non-adverbial continuatives and, in addition, none of them has continuative as a core meaning. The only putative example of the morphologically bound continuative marker is the suffix *-an* in Daga (dgz; Dagan, Central Dagan) described in (Murane 1974: 62) as the marker of the Prolonged Action Tense, but it is mainly used in the sense 'do smth until'. Two continuative auxiliaries found in the languages Bunak (bfn; Timor-Alor-Pantar) and Siwai (siw; South Bougainville, Buinic) show the continuative meaning only in examples with stative predicates (32)-(33), while in other cases they have meanings in the domain of pluractionality (cf. Section 3.3 on polysemy of continuative markers).

(32) Bunak (Timor-Alor-Pantar; Schapper 2022: 469)

Baqi	*u*	*niq*	*oa,*	*baqi*	*heser*	***liol.***
NPRX.AN	live	NEG	PFV	NPRX.AN	dead	**continue**

'He didn't live any more, he kept on being dead.'

[15] The data come from the map layer "MPSEA_STILL: bound or free expressions", https://arcg.is/0jnvHm.

(33) Siwai (South Bougainville, Buinic; Onishi 1994: 500; glosses adapted)

ong	*noo*	*toko = tokoh-ah*	***tu-ro-ng?***
DEM.M	possibly	REDUP = be.hot-PART	**COP.3SG-PERF-M**

'Is that possibly still hot?'

3.1.3. Discussion

The preferences for specific morphosyntactic types of continuative expressions can be to a certain degree explained by appealing to the typological profiles of the languages. Two linguistic characteristics which seem to be especially relevant for developing continuative auxiliaries and continuative affixes are multiple verb (i.e., auxiliary or serial verb) constructions and polysynthetic morphology.

Predictably, continuative auxiliaries tend to be found in languages with well-developed systems of multiple verb constructions. Good examples are Mandarin Chinese and Thai in Southeast Asia and the Papuan language Bunak, which are known for directional serial verb constructions and also use motion verbs as continuative markers (Li & Thompson 1989: 61; Iwasaki and Ingkaphirom 2005: 157-158; Schapper 2022: 468). Continuative auxiliaries that originated from the position verbs 'be at', 'stay', 'sit' or from copulas usually present a part of a diverse system of auxiliary verb constructions, as in Creek (Muskogean; Martin 2011: 306-307) or Ma'di (Central Sudanic; Blackings & Fabb 2003: 246-250). It must be specially noted that the Atlantic-Congo type of continuative auxiliaries can also be associated with the extensive use of multiple verb constructions in many of these languages: when an "old" continuative affix is fused with copula and then combined with a lexical verb, a new multiple verb construction emerges, cf. (24) above and the still transparent continuative construction in Ewe (34).

(34) Ewe (Atlantic-Congo, Volta-Congo, Kwa Volta-Congo; Ameka 2018, cited by Kramer 2021: 7; *ko* 'only' is an intensifier)

*é-**ga**-le*	*aha*	*no-m*	*ko*
3SG-**REP**-be.at:PRS	alcohol	drink-PROG	only

'He is still drinking alcohol.'

Polysynthesis and, specifically, elaborate derivational morphology is a characteristic of many languages featuring continuative affixes. In particular, morphologically

bound continuatives are found in such polysynthetic languages as Abaza (Abkhaz-Adyge), Central Alaskan Yupik (Eskimo-Aleut) and many South American languages. One may hypothesize that the widespread presence of continuative affixes in South America can be a part of the more general tendency concerning verbal derivational morphology as a whole. For example, as Müller (2014) reports, South America is the macro-area where the number of languages having special desiderative affixes is considerably higher than in the rest of the world.

Of course, polysynthesis and multiple verb constructions are not sufficient criteria for the development of a continuative affix/auxiliary: there are languages that show these features but still exclusively use continuative adverbials, e.g., polysynthetic Navajo (nav; Athabaskan-Eyak-Tlingit, Athabaskan-Eyak) or serializing Nêlêmwa-Nixumwak (nee; Austronesian, Malayo-Polynesian, Oceanic). However, in general it seems that a continuative affix or auxiliary can be easily developed only in a language with the relevant morphosyntactic profile.

3.2. Emphatic vs. non-emphatic status

3.2.1. Non-emphatic continuatives

In the literature on phasal polarity it has been noted that some phasal expressions tend to regularly occur in contexts where their presence seems to be redundant. For example, Dahl and Wälchli (2016) show that iamitives (a type of 'already'-markers) frequently occur with "natural development predicates, that is, predicates that become true sooner or later under normal circumstances" (Dahl & Wälchli 2016: 326). In (35) the change of state is a part of the semantics of the predicate 'rot', and, nevertheless, Indonesian *sudah* 'already' appears in such contexts almost obligatorily. Importantly, it does not seem to add any emphasis to the statement.

(35) Indonesian (ind; Austronesian, Malayo-Polynesian; Dahl & Wälchli 2016: 328)

Kamu	*tidak*	*bisa*	*memakan-nya.*	*Itu*	***sudah***	*busuk.*
You	not	can	eat-it	that	IAM	rotten

'You cannot eat it. It is rotten.'

A tendency to accompany natural development predicates has also been mentioned for some nondum ('not yet') markers by Veselinova (2015: 20).

Likewise, a tendency to regularly occur in contexts already implying the continuative semantics without adding any emphasis seems to be a characteristic of some continuative expressions. Continuatives of this type are most often found in the contexts ‘still alive’ (36), ‘still young’ (37) and ‘still morning’ (38). Less frequent contexts are ‘still night/dawn’, ‘still a virgin/unmarried’, ‘still in a belly/at the breast’, etc. All mentioned predicates already contain the semantic components typical for the continuative meaning: the situation existed at some moment before reference time, it was not interrupted, and it is expected to change in the future.

(36) Bunak (Timor-Alor-Pantar; Schapper 2022: 508)
Lui *Bert* *u* ***taq***.
Louis Berthe live **CONT**
‘Louis Berthe was still alive.’

(37) Mapudungun (Araucanian; Smeets 2008: 313, glosses adapted)
ĩnché *rumé* *llüka-nten-nge-wma* *pichi-**ka**-lu*
I very get.afraid-NMLZ-VERB-SCVN small-**CONT**-SVN
‘I really used to be someone who easily got scared when I was young.’

(38) Yeri (yev; Nuclear Torricelli, Wapei-Palei; Wilson 2017: 196)
awo ***ko*** *maleikia-pɨ* ***kua***
yes **still** morning-ADD **still**
‘Yes, it is still morning.’

In the framework of this study, the continuative expressions showing a high degree of obligatoriness in contexts like (36)-(38) will be called *non-emphatic*. In contrast, the continuative expressions which are usually omitted in such contexts (and, when present, have an obvious emphatic function) will be called *emphatic*.

One of the further development paths of non-emphatic continuatives is the gradual loss of productivity: they become available with a restricted set of stative predicates and appear only in subordinate while-clauses or secondary predications (in the depictive function). An example of the non-productive continuative comes from Lakota: the continuative suffix *-akhe* is found only in five constructions with the meanings ‘while still fresh’, ‘with clothes still on’, ‘while still healthy’, ‘while it still down’, ‘while still alive’ (39) (Ullrich 2018: 190).

(39) Lakota (Siouan, Core Siouan; Ullrich 2018: 279)

*ní-**akhe***	*thiyáta*	*ya-khí-pi*	*ktA*
alive-**DER.CONT**	home	2A-arrive.back.there-PL	FUT.IRR

'You will get back home alive.'

Judging by examples from grammatical descriptions, the continuatives *-aanjanu* in Worrorra (40) and *tǽ* in Hup (41) also tend to be frozen with certain stative predicates (although there are no restrictions on their combinations with dynamic predicates).

(40) Worrorra (wro; Worrorran, Western Worrorran; Clendon 2014: 269)

a. *wangalang-**aanjanu***
child-**ESS**
'While (someone) was a child.'

b. *lewarra-**aanjanu***
daylight-**ESS**
'While there's still daylight.'

(41) Hup (Naduhup, Eastern Naduhup; Epps 2008: 585)

a.	*tɨh=pœcǽw=d'əh*	***tǽ***
	3SG=adolescent.boy=PL	**YET**
	'Still young (boys).'	
b.	*wág* ***tǽ***	
	day **YET**	
	'Still day/light.'	

3.2.2. How to find non-emphatic continuatives

For the purposes of this study, we need a method which allows us to determine an emphatic vs. non-emphatic status of all continuative expressions in the sample. The approach proposed in this section is based on examples presented in grammatical descriptions. Since non-emphatic continuative expressions tend to frequently occur in the contexts like 'be alive' and 'be young', a substantial number of examples of the specific continuative expression in such contexts in the grammatical description may

signal the non-emphatic status of that continuative expression. Despite an obvious bibliographical bias, this method has an important advantage: it is applicable to all languages the descriptions of which contain at least several sentential examples with continuative expressions, i.e., almost all languages of the sample.

Figure 4 shows the distribution of continuative expressions which occur in at least three different contexts, already implying the continuative semantics, throughout the grammatical description. For example, the marker *koi* in Tuvalu (tvl; Austronesian, Malayo-Polynesian) in the reference grammar (Besnier 2000) occurs in the contexts ‘still young’ (Besnier 2000: 70), ‘still predawn’ (Besnier 2000: 82) and ‘still alive’ (Besnier 2000: 120), thus it is included to Figure 4.

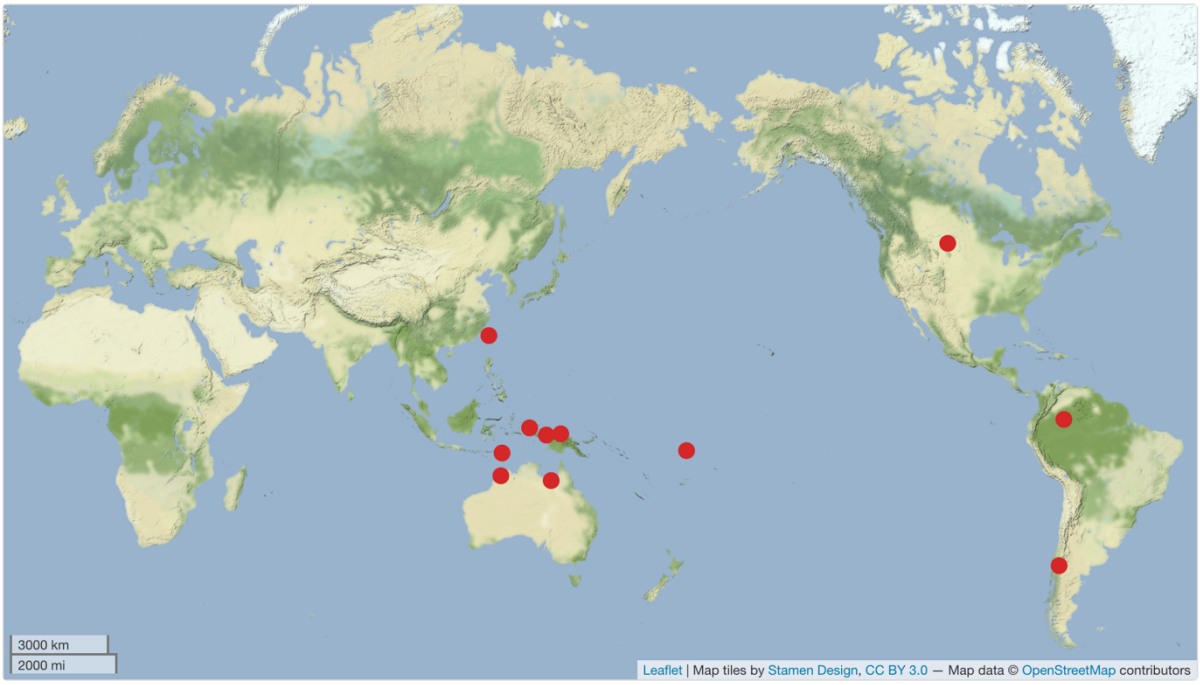


Figure 4: Non-emphatic continuatives.

Even taking into account the vagueness of this method, the areal patterns observed in Figure 4 do not seem accidental. Most continuative expressions typically used in natural development contexts are found in Papunesia and Australia, three more examples come from the Americas. Interestingly, Papunesia is an area where iamitive (‘already’) markers are also often found, cf. “Philippine” and “Indonesian” types of iamitives identified in (Dahl & Wälchli 2016).

3.3. Polysemy of continuative expressions

3.3.1. Iterative ('continuously, repeatedly, always'), repetitive ('again'), additive ('more, also')

Most often the continuative expressions have additional meanings related to pluractionality, i.e., repetition of the same or, at least, comparable situation one or more times. The semantic link between the continuative meaning and pluractionality is easily explained: both meanings imply the existence of some situation at several temporal points, but the continuative requires it to be precisely the same uninterrupted situation, while pluractionality allows it to be different situations (cf. McGregor 1990: 470). Languages with continuative markers which are also used to express pluractional meanings are shown in Figure 5.[16]

The continuative expressions which also have the *iterative* meaning ('constantly, repeatedly, always') are found in eight languages in the sample.[17] For example, in Kesawai (Nuclear Trans New Guinea) the enclitic *=apaie*, usually occurring in the serial construction with the verb *te* 'do', conveys the meaning close to English *still*, as in (42a). However, in the habitual/iterative contexts like (42b) the continuative meaning of *=apaie* is not seen anymore, instead it is paraphrased as 'continuously'.

(42) Kesawai (Nuclear Trans New Guinea, Madang; Priestley 2008: 382-383; glosses adapted)

a. *Hekeni ketin=**apaie** te-r-i.*
firewood cut:split=**continuously** do-PRS-1S
'I'm still cutting firewood.'

b. *Mo esame pi mipii somoru paru=**apai** tu-pu-r-a.*
this dog time many night bark=**continuously** do-HAB-PRS-3SG
'Often (many times) this dog barks at night continuously.'

[16] If a language has several continuative expressions, their non-continuative meanings are shown together (this applies to all maps in Section 3.3).

[17] Gooniyandi (gni; Bunaban), Central Alaskan Yupik (Eskimo-Aleut, Eskimo), Bininj Kun-Wok (gup; Gunwinyguan), Mawng (mph; Iwaidjan Proper), Mullukmulluk (mpb; Northern Daly), Kesawai (xes; Nuclear Trans New Guinea, Madang), Ngiyambaa (wyb; Pama-Nyungan, Southeastern Pama-Nyungan), Bunak (Timor-Alor-Pantar).

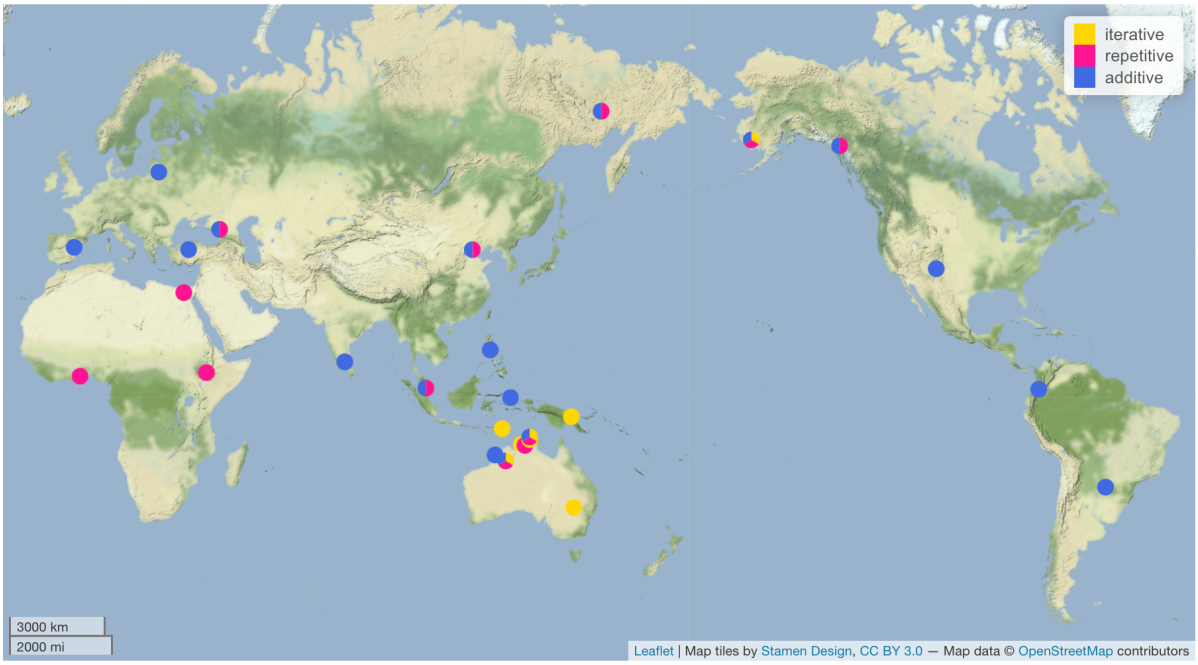


Figure 5: Additive, repetitive and iterative meanings of the continuative expressions.

Remarkably, the English *still* represents one more example of the close relationship between continuative and iterative meanings. With a reference to Kemmer (1990), Michaelis (1993: 205) notes that "temporal *still* at one time served as a durational adverb akin to *constantly* or *continually*".

The continuative-iterative ambiguity of some markers often poses a problem for determining what can be considered a continuative expression. For instance, in Paakantyi (Pama-Nyungan, not in the sample) there is the suffix *-ŋana* which "mainly describes a prolonged process" (Hercus 1982: 195) but in one of the examples provided (43) it seems to be used in the continuative meaning. In principle, the example (43) can be interpreted either as 'the dog started to sniff at the rat's nest some time ago and it is still sniffing' (continuative) or as 'the dog is being sniffing at the rat's nest continuously' (iterative). Since there is no evidence in favor of the continuative interpretation, this marker was not included in the database of the continuative markers.

(43) Paakantyi (drl; Pama-Nyungan,Yarli-Baagandj; Hercus 1982: 195)

gaḷi	*bāṛa-la-**ŋana***	*bulgu-na*	*yabara*
dog	smell-TOP-**ASP**	rat-GEN	camp

'The dog keeps sniffing at the rat's nest.'

The *repetitive* meaning ('again') is expressed by the same item as the continuative meaning in 10 languages of the sample.[18] Example (44) shows a copula verb with the repetitive/continuative prefix *gà-* in Ewe (Kwa Volta-Congo). Another well-known example of this polysemy is the French adverbial *encore* 'again, still'.

(44) Ewe (Atlantic-Congo, Volta-Congo, Kwa Volta-Congo; Rongier 2004: 75)
*Egà**le** zɔzɔm.*
'He walks again.' / 'He keeps walking.'

Finally, 17 languages of the sample possess markers which have both the continuative meaning and the *additive* meaning ('also, more').[19] An example of such a marker is given in (45): the particle *ql* in Towa (Kiowa-Tanoan) can mean both 'still' and 'also'.

(45) Towa (Kiowa-Tanoan; Yumitani 1998: 247; glosses adapted)

a. ***ql*** *i̱-wé·ɦí̱*
still INTR[1DU]-strong/STAT
'We are still strong/healthy.'

b. *vî·ʔwè* *tyê·tɨba-š* ***ql*** *sa̱pa̱-pǽ·*
both box-INV **also** TR[1DU:3INV]-make/PFV
'We both also made a box.'

The polysemy 'still'/'more' is illustrated with the suffix *-ve* in Paraguayan Guaraní (Tupian) (46). Another good example is the Turkish continuative *daha* which,

[18] Abaza (Abkhaz-Adyge, Abkhaz-Abaza), Kambaata (ktb; Afro-Asiatic, Cushitic), Coptic (cop; Afro-Asiatic, Egyptian), Tlingit (tli; Athabaskan-Eyak-Tlingit), Ewe (Atlantic-Congo, Volta-Congo, Kwa Volta-Congo), Semelai (sza; Austroasiatic, Aslian), Gooniyandi (Bunaban), Wageman (waq; Isolate, Australia), Mawng (Iwaidjan Proper), Southern Yukaghir (yux; Yukaghir, Southern Yukaghir).

[19] Abaza (Abkhaz-Adyge, Abkhaz-Abaza), Lithuanian (Indo-European, Balto-Slavic), Tlingit (tli; Athabaskan-Eyak-Tlingit), Semelai (sza; Austroasiatic, Aslian), Tagalog (tgl; Austronesian, Malayo-Polynesian), Totoro (ttk; Barbacoan, Coconucan), Gooniyandi (Bunaban), Tamil (tam; Dravidian, South Dravidian), Spanish (Indo-European, Italic), Mawng (Iwaidjan Proper), Towa (tow; Kiowa-Tanoan), Tidore (tvo; North Halmahera, Northern North Halmahera), Bardi (bcj; Nyulnyulan, Western Nyulnyulan), Mandarin Chinese (Sino-Tibetan, Sinitic), Paraguayan Guaraní (gug; Tupian, Maweti-Guaran), Turkish (tur; Turkic, Common Turkic), Southern Yukaghir (yux; Yukaghir, Southern Yukaghir).

similarly to *-ve* in Paraguayan Guaraní (46b), is extensively used as a marker of comparative constructions (Göksel & Kerslake 2005: 176-177).

(46) Paraguayan Guaraní (Tupian, Maweti-Guaran)

a. *o-ho-se-**ve***
3ACT-go-DES-**CMPR**
'He still wants to go.' / 'He wants to go on.' (Gerasimov 2020: 2; glosses adapted)

b. *che a-mba'apo-**ve** ndehegui*
I 1SG.ACT-work-**more** from.you
'I work more than you.' (Estigarribia 2020: 249)

From a historical perspective, the meaning 'also, more' tends to be older than the continuative meaning. In his study of European languages, van der Auwera (1998: 75-76) lists a number of continuative adverbials which originate from expressions denoting addition or comparison, whereas cases of the semantic development in the other direction, to my knowledge, are not documented.

3.3.2. Temporal (non-)simultaneity ('while', 'before', 'a while ago', etc.)

The continuative expressions often serve as markers of temporal simultaneity or non-simultaneity: they may express such meanings as 'while (still)', 'before', 'a while ago', 'just', 'recently', cf. Figure 6.

Note that in these functions continuative expressions might have syntactic properties fundamentally different from just being a predicate modifier: they may behave not only as standard adverbial expressions but also take a nominal or a whole clause as an argument, cf. English *before* vs. *before Christmas* vs. *before Christmas comes*.

The most common meaning from this semantic group is 'while (still)': it is attested in seven languages of the sample. [20] Syntactically the 'while'-clause can be more or less independent from the other clause: for example, in (47b) the 'while'-predicate can be analyzed as a depictive, whereas in (48b) the biclausal analysis is preferable.

[20] Tagalog (Austronesian, Malayo-Polynesian), Tuvalu (tvl; Austronesian, Malayo-Polynesian), Creek (Muskogean), Ngarinman (nbj; Pama-Nyungan, Desert Nyungic), Lakota (Siouan, Core Siouan), Tadaksahak (dsq; Songhay, Northwest Songhay), Siwai (South Bougainville, Buinic).

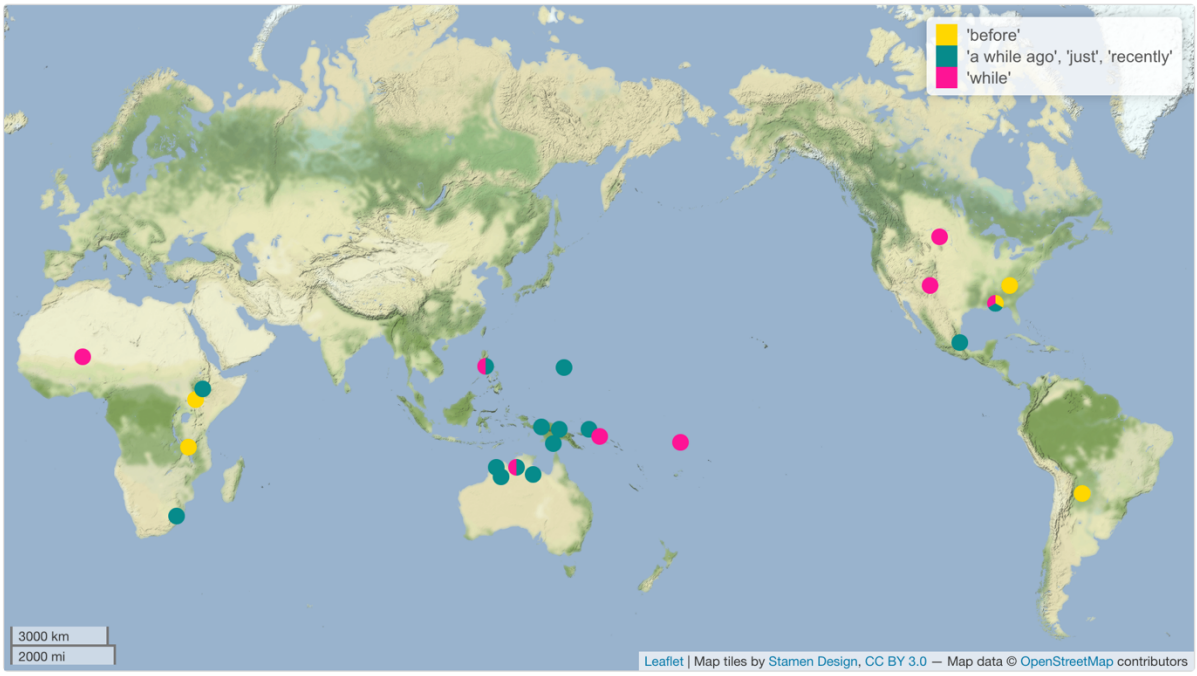


Figure 6: Continuative expressions functioning as markers of temporal (non-)simultaneity.

(47) Ngarinman (Pama-Nyungan, Desert Nyungic; Meakins & Nordlinger 2014: 387; glosses adapted)

a. *No* *nyawa=ma=rna* *janga=**rni**.*
no this=TOP=1MIN.SBJ sick=**ONLY**[21]
'No I'm still sick.'

b. *Lab* *ma-na* *magin-jirri=**rni**.*
pick.up get-PST sleep-ALL=**ONLY**
'He takes him while he's still asleep.'

(48) Tuvalu (Austronesian, Malayo-Polynesian; Besnier 2000: 90, 488; glosses adapted)

a. ***Koi*** *fai* *vaa* *ssuaa* *maaloo* *ki* *ssuaa* *maaloo.*
still have poor.relationship a+other government to a+other government
'The relationship between these countries is still bad.'

[21] The continuative is glossed ONLY because it also has a restrictive meaning, see Section 3.3.3.

b. [*Kee* *naa* *vau* *koe*] [***koi*** *nofo* *au* *i* *konei*].
SBJC please come you **still** stay I at here
'Please come while I'm still here.'

Examples with the continuative expressions in the 'before' function are attested in five languages: Turkana (Nilotic, Eastern Nilotic), Nyakyusa-Ngonde (Atlantic-Congo, Volta-Congo, Bantoid), Cherokee (chr; Iroquoian), Creek (Muskogean) and Nivaclé (Matacoan, Mataguayo I). The syntactic structure of these examples is also highly variable. In (49) the continuative marker in Turkana modifies a nominal ('tomorrow') as a preposition; the 'before'-clause in Nyakyusa-Ngonde presented in (50) is formed by the element *bo* 'as', the continuative auxiliary and the verb in the infinitive form.

(49) Turkana (Nilotic, Eastern Nilotic; Dimmendaal 1983: 360)
tò-boŋ-ṵ̀ ***è-ròkò*** *mòyì*
IMP-return-VEN **still** tomorrow
'Return before tomorrow.'

(50) Nyakyusa-Ngonde (nyy; Atlantic-Congo, Volta-Congo, Bantoid; Persohn 2017: 187)
m-ba-kooliile *ʊkʊtɪ* *m-ba-lagɪl-e* *a-ma-syʊ*
1SG-2PL-call.PFV COMP 1SG-2PL-dictate-SUBJ AUG-6-word
bo ***n-gaalɪ*** *ʊ-kʊ-fw-a*
as **1SG-PERS** AUG-15(INF)-die-FV
'I've called you (pl.) to give you instructions before I die.'

At first glance, the meaning 'before' seems more natural for nondum ('not yet') markers, cf. *I will return while it is not Sunday yet* > *I will return before Sunday*, and indeed, e.g., in Indonesian the word for 'before' *sebelum* is based on *belum* 'not yet' (Sneddon et al. 2010: 199). That the continuative expressions often have the 'before' meaning can be explained in two ways. First, the semantic shift can happen according to the model 'still to do > not yet done' discussed in Section 3.3.3. This seems to be the case in (50) where the embedded clause is formed with the infinitive, i.e., literally it means 'while I am still to die'. Second, according to Jin & Koenig (2020), 'before'-clauses represent one of the contexts where the phenomenon of expletive negation frequently occurs. In other words, 'before'-clauses involving negation and non-

involving negation often denote the same situation, and this factor could also contribute to the shift from ‘still’ to ‘not yet’ in the temporal clauses.

A whole group of meanings related to localization of the situation in the past (‘a while ago’, ‘just a moment ago’, ‘just’, ‘(immediately) after’) usually occurs in the perfective contexts, cf. (51). The mechanism of this semantic shift is not clear.

(51) Huehuetla Tepehua (tee; Totonacan, Tepehua; Kung 2007: 468; glosses adapted)

a. *xa-k-maq-sqoli-y* + ***ka7***
PST-1SUBJ-CAUS-whistle-IPFV + **JST**
‘I still played [music].’

b. *waa* *min-li* + ***ka7***
FOC come-PFV + JST
‘He just arrived.’

3.3.3. Other meanings (concessive, restrictive, delimitative, progressive, etc.)

Several more non-continuative meanings of continuative expressions attested in the data can be seen in Figure 7.

The *concessive* meaning (‘despite, nevertheless’) of the continuative expressions can be illustrated by the English continuative *still*: it is the meaning of *still* in the perfective contexts where the continuative interpretation is not available, cf. (52).

(52) *We told Bill not to come, but he still showed up*. (Michaelis 1993: 193)

The concessive meaning is tightly connected to the “counter-expectation” semantic component which is sometimes discussed as a part of the semantics of the phasal domain in general (Plungian 1999, see Section 2.1.3). Indeed, in the languages in the sample the concessive meaning is often combined with the continuative meaning and results in the sense ‘something is still happening, although it is expected to be over’, cf. (53). Bowern (2012: 650) describes the meaning of the Bardi (Nyulnyulan) continuative *gardi* in (53) as follows: “it refers to actions or states which persist, despite the action of the previous clause”.

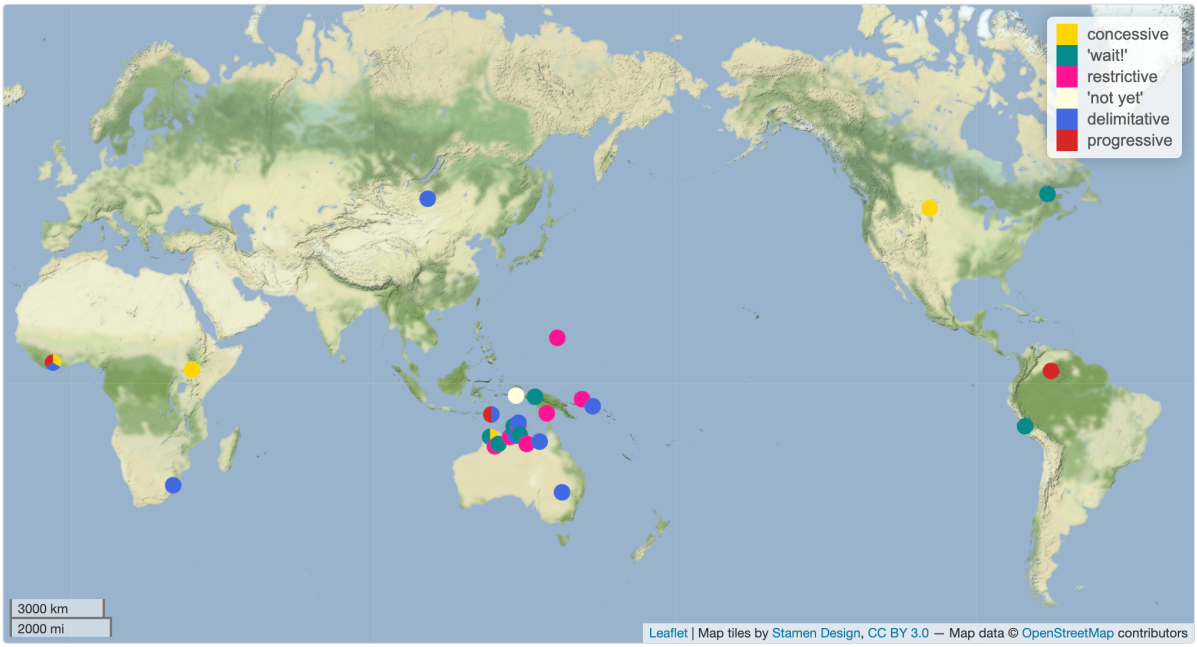


Figure 7: Continuatives which can also express concessive, restrictive, delimitative, progressive, 'not yet' and 'wait!' meanings.

(53) Bardi (Nyulnyulan, Western Nyulnyulan; Bowern 2012: 650; glosses adapted)

Ginyinggon	*i-ng-arr-bala-nyji-n,*	*arra*	
then	3-PST-AUG-fight-REFL-CNTS	NEG	
oo-la-rr-m-ala-nyji-n,	***gardi***	*ragal*	*irr-garda.*
3-IRR-AUG-REFL-fight-REFL-CNTS	**still**	uninjured	3AUG-body

'Then they fought, but it wasn't a serious fight; their bodies were uninjured.'

Moreover, sometimes languages develop two continuative markers, one of which has a "plain" continuative semantics, while the other one has an obligatory counter-expectation semantic component, see *gaa* vs. *gat* in Nêlêmwa-Nixumwak (Austronesian; Bril 2016: 93) and *jon* vs. *hum* in Mankanya (knf; Atlantic-Congo, North-Central Atlantic, not in the sample; Gaved 2020: 180-184). Overall, continuative expressions which are described as having the concessive/counter-expectation meaning (at least in some of the contexts) are found in four languages: Gban (Mande), Bardi (Nyulnyulan), Nêlêmwa-Nixumwak (Austronesian) and Turkana (Nilotic).

Continuative expressions in three Papuanesian (Chamorro, Austronesian; Taulil, Taulil-Butam, tuh; Anta-Komnzo-Wára-Wérè-Kémä, Yam) and four Australian (Gooniyandi, Bunaban; Wambayan, Mirndi; Bininj Kun-Wok, Gunwinyguan;

Ngarinman, Pama-Nyungan) languages also function as *restrictive* (‘only, just’) markers. Example (54) shows the continuative and restrictive uses of the particle *ha’* in Chamorro.

(54) Chamorro (cha; Austronesian, Malayo-Polynesian; Chung 2020: 344, 514)

a.	*Mungnga*	*hit*	*manburuka*		*mientras*	*ki*
	don’t	we.INCL	AGR.INF.make.noise		while	PRT
	mamaigu’	***ha’***	*i*	*neni.*		
	AGR.sleep.PROG	**EMP**	the	baby		
	‘Let’s (incl.) not make noise while the baby is still sleeping.’					
b.	*Para*	*hami*	***ha’***	*esti*	*na*	*inetnun.*
	for	us.EXCL	**EMP**	this	L	group
	‘This gathering is only for us (excl.).’					

The relations between the continuative and restrictive meanings are discussed by van Baar (1997: 110-113). In particular, van Baar (1997: 111) analyzes the case of the particle (*-pa/-wa*)*-rni* in Gurindji (gue; Pama-Nyungan, Desert Nyungic) and concludes that its continuative and restrictive meanings are connected through several intermediate meanings which this particle also demonstrates. Thus, the full semantic scale can be formulated as follows: ‘only’ — ‘right, exactly, really’ — ‘all the time’ — ‘still’. Likewise, Evans (1995: 248-249) suggests a diachronic path from continuative to restrictive for the affix *djal-* in Bininj Kun-Wok (Gunwinyguan): ‘keep doing A until B’, ‘still be doing A at reference time, keep on doing A’ > ‘only do A and no more’, ‘only do A and not something else one might expect’ > ‘only’. In addition, both van Baar (1997) and Evans (1995) point out that in some contexts the ‘all’ meaning, close to the continuative, turns out to be synonymous to ‘only’, cf. *all that happened was… .* Apparently, such contexts could also facilitate the continuative-restrictive semantic shift.

It is worth noting two non-continuative meanings of continuative expressions which belong to the aspectual domain: delimitative (‘for a while, for some period of time’) and progressive. Both meanings are close to the continuative in terms of types

of situations they can modify.[22] The *delimitative* meaning, illustrated in (54), is attested in Halh Mongolian (Mongolic-Khitan), Zulu (Atlantic-Congo, Volta-Congo, Bantoid), Gban (Mande), Wardaman (wrr; Yangmanic) and Siwai (South Bougainville).

(54) Halh Mongolian (Mongolic-Khitan, Mongolic; Kullmann 1996: 138; transcription and glosses added)

ta	*ger-eesee*	*zahia*	*av-**saar***	***l***	***bay-na***	*uu*
2SG	home-ABL	letter	receive-**CVB**	**PRT**	**COP-NPST**	Q

'Are you still receiving letters from home?' / 'Have you been receiving letters from home lately?'

The *progressive* meaning is mentioned with respect to the continuative *lḛ́* in Gban (Mande; Fedotov 2015). The second probable example is the marker *-ju* in Puinave (isolate): in (55a) it is used in the continuative meaning, in (55b) it can be interpreted as progressive.

(55) Puinave (pui; Isolate, South America; Higuita 2008: 262; glosses adapted)

a. *mam-da* *ka-peu-é-**ju*** ~ *mam-da* *ka-**ju**-peu-é*
PR2SG-ASR 3PL-load-AGT-**IPFV**
'You are still loading them.'

b. *ja-bêp-di-da-**ju*** *ó'o*
3SG-work-PST-ASR-**IPFV** PRNE
'He was working [when the speaker stopped seeing him].'

The continuative-progressive polysemy also played a significant role in the history of the continuative marker *(te)be-* in Lithuanian. As shown in (Arkadiev 2011, 2019;

[22] One more meaning close to the continuative in this respect is the non-phasal meaning 'keep on doing' called "continuative" by Bybee et al. (1994). It "involves a continued input of energy and implies that the situation is continued longer than normal" (Bybee et al. 1994: 170), but, as far as I can tell, it does not presuppose the moment t_i preceding reference time when the situation X was also true. This meaning can be illustrated, for example, by the suffix *-poki/ -pokya* in Ese Ejja (ese; Pano-Tacanan, Tacanan; Vuillermet 2012: 478-480) or by the construction V *vienā* V-*šanā* (lit. V in one V-ing) in Latvian (lav; Indo-European, Balto-Slavic; not in the sample; Nau 2019). My database does not contain clear examples of the "continuative" meaning in terms of (Bybee et al. 1994) colexified with the (phasal) continuative, so it is not considered further.

Holvoet & Kavaliūnaitė 2021), the prefix *be-* has a wide range of construction-specific meanings, including continuative (when used in this meaning, *be-* is reinforced by *te-,* see Section 3.1.2), progressive, avertive ("something was going to happen but did not") and mirative. Apparently, the avertive construction with *be-* historically developed from the progressive construction with *be-* in the past tense due to conventionalization of interruption implicature (Arkadiev 2011: 49-50; Arkadiev 2019: 103-104). Example (56) shows the progressive-avertive use of *be-* in the context with an interrupted process in Old Lithuanian.

(56) Old Lithuanian (Indo-European, Balto-Slavic; Arkadiev 2011: 49; glosses adapted)

Tawa	*tarn-as*	*buw-a*	***be**-gan-ans*
your	servant-NOM.SG	AUX-PST	**CONT**-pasture-PRS.PA.NOM.SG.M

aw-is	*sawa*	*Tiew-o,*	*ir*	*ateij-a*	*Lęw-as.*
sheep-ACC.PL	his	father-GEN	and	come-PST	lion-NOM.SG

'Your servant has been keeping his father's sheep, and a lion came…'

In six Australian languages and one Papunesian language (Western Dani, Nuclear Trans New Guinea) isolated continuative markers are used as exclamations 'wait!' or 'hang on!', cf. (57).[23] Supposedly, this meaning is a further development of the concessive meaning: one can introduce her speech in this way if what is going to be said contradicts what has been said before by another person.

(57) Limilngan (Limilngan-Wulna; Harvey 2001: 141, 142; glosses adapted)

a.

Ø-ayum-iji	*i-yi-jukgula-rri*	***ulik***	*i-y-im-ambijiwi-rri*
IV-go_back-here	3<3AUG-shoot-PL	**still**	3<3AUG-IPFV-hit-PL

'(The planes) had come back. They were shooting. They were still fighting.'

b.

Captain	*Gray-in*	*il-ami-ny,*	***ulik,***
Captain	Gray	II-say-PP	**wait**

'Captain Gray said: Wait!'

Interestingly, in certain contexts continuative markers may express the opposite phasal meaning 'not yet'. To start with, the English *still* becomes semantically close

[23] Worrorra (Worrorran, Western Worrorran), Mangarrayi (mpc; Mangarrayi-Maran), Kitja (gia; Jarrakan), Limilngan (lmc; Limilngan-Wulna), Wardaman (Yangmanic), Wageman (Isolate, Australia).

to *not yet* when combined with telic predicates, cf. *I am still crossing the street ~ I haven't crossed the street yet*. There are several more cases attested in the literature: in Kalamang (West Bomberai) the continuative expression is used in the sense 'not yet' when it occurs as a one-word fragment answer to a negative question (58), see also Fanego (2021: 342) on the same pattern in Tachelhit (shi; Afro-Asiatic, Berber, not in the sample).

(58) Kalamang (kgv; West Bomberai; Visser 2020: 388)

a. A: *ka* ***tok*** *sekola*
2SG **still** go.to.school
'Do you still go to school?'
B: ***tok***
still
'Yes [I still go to school].'

b. A: *ka* ***tok*** *sekola=nin*
2SG **yet** go.to.school=NEG
'Don't you go to school yet?'
B: ***tok***
not.yet
'Not yet.'

According to Nurse (2008: 148), some of the continuative markers in Bantu, following the model "We are still to buy > We haven't bought yet", changed their meaning to 'not yet'. Another interesting case is discussed in Veselinova et al. (to appear): the continuative *morə̃* in Lamaholot (slp; Austronesian, Malayo-Polynesian, not in the sample), when used with atelic predicates, has the continuative meaning, while when used with telic predicates, it has the meaning 'not yet'.

This is, of course, not an exhaustive list of possible meanings of continuative expressions. Due to space constraints, I do not discuss in detail the relatively rare meanings 'first', 'later', 'always', 'throughout', 'together', 'even', 'same', 'forever', 'barely' and several others.

3.3.4. Areal patterns

As for polysemy of continuatives in a geographical perspective, two macro-areas clearly stand out as exceptional — Australia and Papunesia. First, according to my data, two non-continuative meanings — restrictive ('only') and 'wait!' — occur exclusively in Australia and Papunesia (see the previous section). Second, many continuative expressions found in these two macro-areas are enormously multi-functional. The extreme case is the marker *-nyali* in Gooniyandi (Bunaban), which, according to McGregor (1990: 469), has 14 meanings. Other continuative markers normally have at least three-four meanings including continuative. Apparently, the existence of such a polyfunctional marker in the majority of Australian and Papunesian languages can be considered a phenomenon of areal nature.

3.4. Semantic effects when combined with negation

The so-called Duality Hypothesis (Löbner 1989) predicts that continuative markers in negative contexts can mean either 'not yet' or 'no longer'. Two meanings are possible because of the different scope of semantic operators: 'still (not)' = 'not yet', 'not (still)' = 'no longer'. Both strategies are found in the languages of the sample (59)-(60).

(59) Kalamang (West Bomberai; Visser 2020: 391)

a. *ma* ***tok*** *nawanggar*
3SG **still** wait
'He still waits.'

b. *Nyong esun* ***tok*** *bo-t=nin*
N. father.3POSS **yet** go-T=NEG
'Nyong's father doesn't go yet.'

(60) Lezgian (Nakh-Daghestanian, Daghestanian; Haspelmath 1993: 210; glosses adapted)
Jusuf.a *k'walax-**zama**-č*
Jusuf.ERG work-**IPFV.CONT**-NEG
'Jusuf is no longer working.'

In some sources continuative expressions accompanied by the markers of negation are translated into English as ‘still not’, cf. an example from Cherokee (61). As shown by van der Auwera (1993: 625; 2021: 32), the meaning ‘still not’ is not identical to ‘not yet’: ‘still not’ is more emphatic because, in contrast to ‘not yet’, it obligatorily presupposes speaker’s expectation of the contrary (see Section 2.1.3). However, for the purposes of this study, in the encoding of the data I unite the meanings ‘not yet’ and ‘still not’ into one value ‘not yet (still not)’.

(61) Cherokee (Iroquoian; Montgomery & Anderson 2008: 185)
tla + ***si*** *yi-uunii-anvhtha*
NEG + **still** IRR-3B.PL-know:PRC
‘They still don’t know.’

In addition to ‘not yet (still not)’ and ‘no longer’, three more values of this parameter are distinguished. The value ‘no longer, not yet (still not)’ covers cases where a language has two separate constructions for expressing the meanings ‘no longer’ and ‘not yet (still not)’ based on the same continuative marker, as in Turkana (62).

(62) Turkana (Nilotic, Eastern Nilotic; Dimmendaal 1983: 458-459, cited by Kramer 2017: 6; glosses adapted)

a. ***è-ròkò*** *apɛ̀sɛ* *ɲ-è-nap-à* *ewɔ̀rʊ̀* *kɛŋ̀* *lɔkɪʊ̀sɛt*
3-still girl not-3-wear-V cloth her wedding
‘The girl does not wear her wedding dress yet.’

b. ***ɲ-è-roko*** *apɛ̀sɛ* *è-nàp-ɪ̀t* *ewɔ̀rʊ̀* *kɛŋ̀* *lɔkɪʊ̀sɛt*
not-3-still girl 3-wear-ASP cloth her wedding
‘The girl no longer wears her wedding dress.’

The value ‘ungrammatical / marginal’ denotes the situation when the continuative marker is not compatible with negation or its use in the negative contexts is estimated as marginal.

The information on the semantics of continuatives combined with negation is available for 71 out of 159 continuative expressions in the database, and for the other 88 continuative expressions this field was left blank. The geographical distribution of types of continuatives according to this parameter is shown in Figure 8.

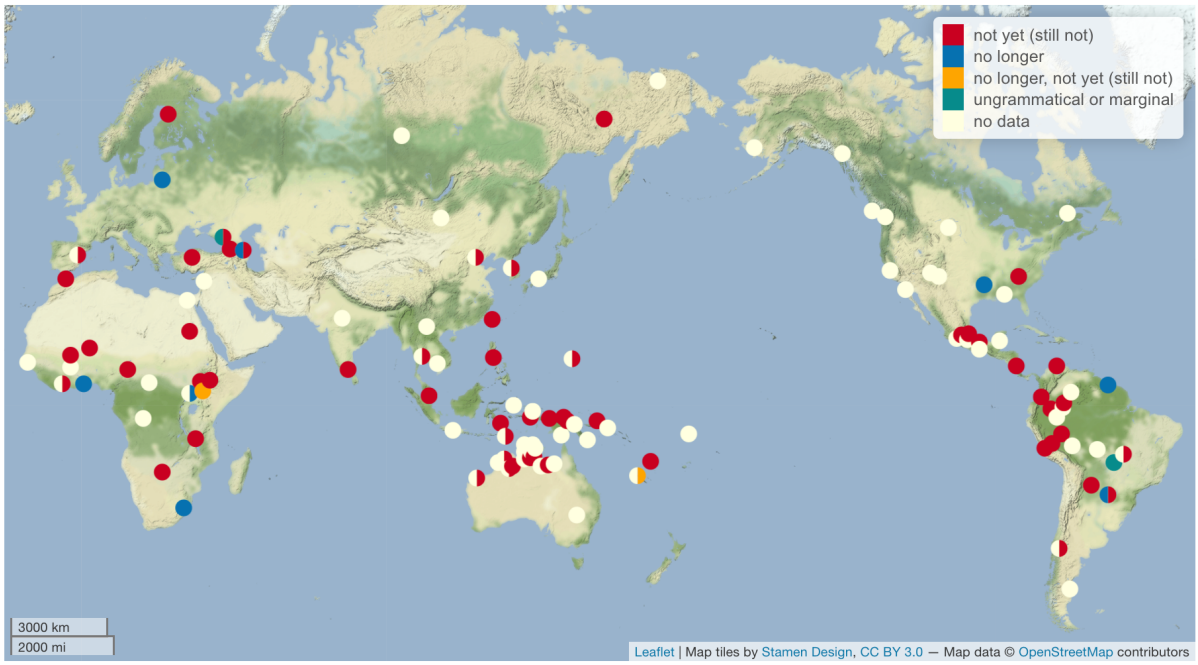


Figure 8: Semantics of continuative expressions in the negative contexts.

Figure 8 shows that continuative expressions in the negative contexts most frequently have the meaning 'not yet (still not)'. This pattern appears in the majority of languages in all macro-areas. That derivation of 'not yet' expressions from continuative markers is a very widespread strategy in the languages of the world has been noted in the previous literature. In particular, van Baar (1997: 179) mentions that in his sample more than 50% of 'still' markers are used to form the meaning 'not yet'. Diachronically the development of 'not yet' markers based on 'still' markers has been traced in such languages as Bantu (Veselinova & Devos 2021: 474-477), Austronesian (Veselinova et al. to appear) and even English. In English the adverbial *yet* is an old continuative marker which nowadays is mostly used in the expression *not yet*, whereas in the continuative function it has been almost fully replaced by the new continuative *still* (König & Traugott 1982, van der Auwera 1998: 53). Apparently, similar processes happen in the languages in the sample, e.g., in Wayuu (Arawakan) the use of the continuative suffix *-yülia* in positive contexts is restricted to specific locative phrases, while when combined with negation it can function as a 'not yet' marker in all types of clauses (Mansen & Mansen 1984: 535-539).

The meaning 'no longer' is generally less preferable and can be considered relatively frequent only in Africa where it is attested five times (cf. also Löfgren (2019: 29) who shows that in Bantu 'no longer' is a more frequent option). The diachronic relations between continuatives and 'no longer' markers appear to be less

straightforward than between continuatives and 'not yet' markers. Specifically, van Baar (1997) calls into question the existence of the diachronic path from continuatives to 'no longer' markers. He suggests that "whenever there is a coverage of the STILL/NO LONGER by means of one and the same expression, this is either the result of the development of NO LONGER into STILL or the result of independent development of two different PhP-uses of the same expression" (van Baar 1997: 195). In my sample there are no cases where there would be enough evidence to determine the (in)dependence of the diachronic development of phasal markers and its possible direction, but see van Baar's (1997: 191-192) suggestions on the evolution of the continuative *ga* in Ewe (Atlantic-Congo, Volta-Congo, Kwa Volta-Congo) from repetitive to 'no longer' and then to continuative marker.

Finally, two languages are marked on the map as having continuative expressions which are normally not combined with negation. In fact, the number of such languages must be larger. I suppose that quite a few reference grammars which lack the description of continuatives in the negative contexts do not include it because continuatives are not (widely) used in the negative contexts. One of the reasons for this incompatibility is the existence of the distinct markers expressing the 'not yet' (and 'no longer') meanings, so the combination of continuative with negation turns out to be redundant. For instance, the Papuan language Moskona (mtj; East Bird's Head, Meax; Gravelle 2010: 151) has the continuative adverbial *ros* and the separate adverbial *néesa* 'not yet'. Even though Gravelle (2010) does not say explicitly what happens to *ros* when it is used in the negative context, one may suggest that it is not used as a 'not yet' expression because this function is fulfilled by *néesa*.

4. Discussion: maturation of the continuative expressions

In this section I will pursue an integrative approach of the interplay of parameters of continuative expressions using Dahl's (2004) notion of *maturity* process. Dahl defines "mature" linguistic phenomena as "those that presuppose a non-trivial prehistory: that is, they can only exist in a language which has passed through specific earlier stages" (Dahl 2004: 2) and adduces such examples of mature phenomena as inflectional morphology, incorporation, and agreement (Dahl 2004: 111-115). Further, Bisang (2015) suggests to distinguish between two types of maturity: morphosyntax-based maturity (overt complexity, on which Dahl focuses) and pragmatics-based maturity (hidden complexity, in Bisang's terms). Pragmatics-based

maturity is driven by economy and can be illustrated by such phenomena as radical pro-drop and optional (in)definiteness marking in East and Mainland Southeast Asian languages (Bisang 2015: 180-181). In this section, both morphosyntax-based and pragmatics-based maturity are considered.

The least mature type of continuative expressions is synchronically compositional adverbial expressions based on the word 'now', e.g., *de yanna* 'still, until now' in Isthmus Zapotec (zai; Otomanguean, Eastern Otomanguean; Pickett 2007: 97). As suggested in Section 3.1.2, adverbial expressions of this type, if not yet conventionalized as a lexical item, can be coined at any moment in any language which has the word 'now', thus the time needed for their development is minimal. Just created, they do not show any signs of morphologization, are emphatic, do not have non-continuative functions and take the negated predicate in their scope.

The group of continuative expressions showing an initial stage of maturity are verbs with the meanings 'stay', 'remain', 'continue': they can function as continuative markers from the moment they become able to take a predicative complement. Apparently, English verbs like *stay*, *remain*, *continue* and *keep* represent examples of this group of continuative expressions.

There are many further maturation pathways by which continuative expressions can (although not necessarily have to) gradually change and acquire new features. As for their form, they often undergo univerbation with adjacent elements, cf. the adverb *in̲n̲um* 'still' in Tamil (Dravidian), which historically contains the root *in̲* 'the present moment' and the particle *um* (Dubjanskij 2013: 108). As for their semantics and functions, such expressions may become obligatory in continuative contexts and turn into fully-fledged grammatical markers, see, e.g., Gorbunova (2014), who argues for the grammatical status of the particles *na* 'still' and *la* 'already' in Atayal (tay; Austronesian, Atayalic). One more example of maturation is the morphological integration of the continuative expression into the predicate, which may result in that the predicate together with the continuative fall under the scope of negation and yield the 'no longer' interpretation. Finally, the existence of a high number of non-continuative uses, particularly typical for continuative expressions in the languages of Australia and Papunesia (Section 3.3.5), is also the result of the evolution which must have taken considerable time to occur. Note, however, that the starting point of such developments need not necessarily be a marker with the continuative meaning, its original function underlying a polysemy network (including the continuative as one of its meanings) may be different.

Table 5 represents an attempt to formalize the distinction between less mature and more mature continuatives based on the values of each of the discussed parameters. Note that since the semantic extension of the continuative expressions to additive and repetitive domains can be considered rather trivial, it is associated with less mature features.

parameters	less mature values	more mature values
morphosyntactic type	adverbial phrases	auxiliaries; affixes
emphatic vs. non-emphatic status	emphatic	non-emphatic
non-continuative meanings of continuative expressions	not attested; only additive and/or repetitive	other non-continuative meanings
meaning when combined with negation	not yet (still not)	no longer; no longer and not yet (still not); ungrammatical or marginal

Table 5: Less mature and more mature features of continuative expressions.

Figure 9 shows what mature features (if any) are attested for the continuative expressions in the sample. For better visibility only one continuative expression per language (the one that shows more mature features) is indicated on the map.

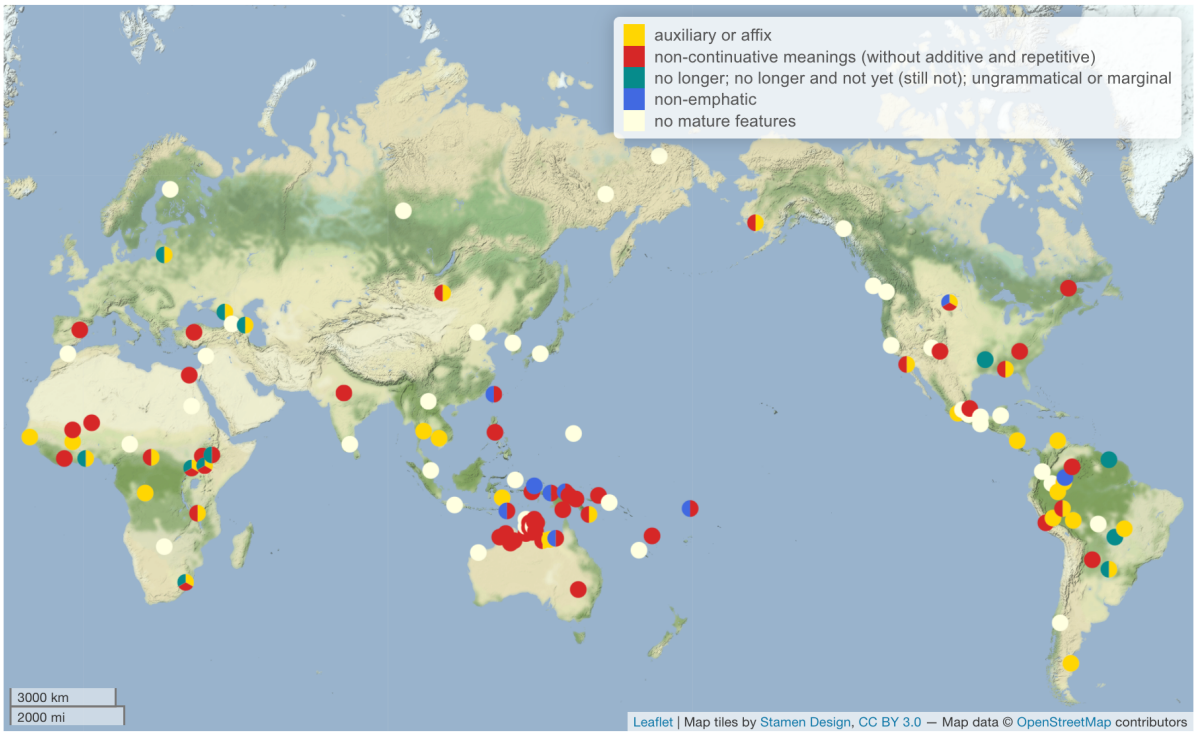


Figure 9: Mature features of continuative expressions.

It is possible to see several areal patterns that have already been discussed in the previous sections: for example, non-emphatic continuative markers tend to occur in Papunesia and Australia, the 'no longer' interpretation is most typical for continuative expressions in Africa and the Americas. In addition, Figure 9 shows that the morphosyntactic type "auxiliary or affix" has a week tendency to combine with the 'no longer' interpretation. This link can be explained: on the morphosyntactic grounds, we expect that adverbial continuatives take the negated predicate in their scope and, as a result, convey the meaning 'still (not)' > 'not yet'. Continuative affixes and auxiliaries, in turn, are more likely to themselves fall under the scope of the negative marker and hence express the meaning 'not (still)' > 'no longer'.

As for the continuatives not showing any mature features, it should be kept in mind that their real number is likely to be much higher. The first reason of that inaccuracy is due to their frequent co-existence with more mature continuatives; thus, they are not visible in Figure 9. The second reason is that synchronically compositional continuatives of the type 'and' + 'now' may be not specifically mentioned in the sources and thus are not included in the database.

5. Concluding remarks

In this paper, I presented a typological study of continuative expressions based on a balanced sample of 120 languages. The continuative expressions were analyzed according to specific parameters. It has been shown that, in terms of morphosyntactic properties, in the vast majority of languages it is possible to encode continuative semantics by an adverb or particle. However, many languages also develop continuative auxiliaries and/or continuative affixes; this is more typical of languages which already feature an elaborate system of auxiliaries and/or affixes. Continuative expressions may be emphatic and non-emphatic. Examples found in the sources indicate that some continuative expressions obligatorily accompany predicates already implying the continuative semantics, and this feature speaks in favor of their non-emphatic status. In addition to the continuative meaning, continuative expressions occur in various non-continuative functions. The most frequent meanings of continuative expressions outside of continuation are related to pluractionality ('again', 'also', 'continuously'); other possible meanings are temporal (non-)simultaneity (e.g., 'while' and 'before'), 'not yet', restrictive ('only'), concessive ('despite'), the meaning 'wait!', etc. The rich polysemy of continuative markers is especially common in languages of Australia and Papunesia. When combined with

negation, continuative expressions most frequently have the meaning ‘not yet’ (or the semantically very close meaning ‘still not’), much less frequently — the meaning ‘no longer’.

From a more integrative perspective, continuative expressions vary with respect to the parameter of maturity (Dahl 2004), i.e., the degree of non-triviality of their historical development. While there are many continuative expressions representing the least mature types of continuatives, such as adverbials derived from the word ‘now, the present moment’, we also find continuative expressions which follow one or several maturation pathways towards morphologization, non-emphatic uses, polysemy, less trivial interaction with negation. This study has shown that in all the parameters discussed above the more “mature” values are distributed unevenly across the languages of the sample, and areal, genealogical and structural factors affect the probability of the maturation of continuative expressions. It can be further hypothesized that the non-default, mature properties of continuative expressions, such as ‘being an affix’ or ‘have the additional ‘before’ meaning’, work similarly to more fundamental features of linguistic systems, such as, for example, the presence of ejective consonants, ergativity or VOS word order. Features of this type, first, need specific sociolinguistic conditions to develop: it is generally agreed upon that the probability of development of mature linguistic phenomena is higher in closed or “esoteric” communities, i.e., characterized by small size, dense social networks and low contact (Trudgill 2011). Second, mature phenomena often turn out to be diachronically unstable, i.e., they have low propensity to be inherited and/or borrowed (Nichols 2003) and are therefore prone to be lost. A more detailed account of the social and historical factors influencing the development of continuative expressions requires further studies focusing on the continuative expressions in specific linguistic areas or specific language families. Taking into account the cross-linguistic diversity of continuative expressions described in this study, it will be possible to estimate to what extent continuative expressions vary in geographically and genealogically close languages with respect to different social and historical circumstances.

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Abbreviations

1, 2, 3 = 1st, 2nd, 3rd person
A = actor
ABL = ablative
ACC = accusative
ACT = active
ADD = additive
AGR = agreement
AGT = agentive
ALL = allative
ASP = aspect marker
ASR = assertive
AUG = augment
AUX = auxiliaire
B = set B Prefix
BEN = benefactive
CAUS = causative
CMPR = comparative
CNTS = continuous
COMP = complementizer
CONT = continuative
COP = copula
CSL = cislocative
CVB = converb
DEF = definite article
DEM = demonstrative
DER = morphological derivation
DES = desiderative
DU = dual
DUR = durative
DYNM = dynamic
EMP = emphatic particle
ERG = ergative
ESS = essive
EXCL = exclusive
FGR = falling tone grade
FOC = focus
FUT = future
FV = final vowel
G2, G4 = gender
GEN = genitive case
HAB = habitual
IAM = iamitive
II, IV, 6, 15 = noun classes
IMP = imperative mood
INACP = incompletive
INCL = inclusive
IND = indicative
INF = infinitive
INST = instrumental
INTR = intransitive
INV = inverse number
IPFV = imperfective
IRR = irrealis
JST = 'just'
L = linker
^{L} = low (tone)
LOC = locative
M = masculine
MIN = minimal
NEG = negation
NMLZ = nominalization
NO.COMPL = incomplete/not fulfilled
NOM = nominative
NPRX.AN = animate non-proximal demonstrative
NPST = non-past
ONLY = restrictive
PA = active participle
PART = participle
PAST5 = remote past
PERF = perfect
PERS = persistive
PFV = perfective
PL = plural
POSS = possession
PP = past realis perfective
PR = pronoun
PRC = present continuous
PREP = preposition
PRNE = non-specific pronoun
PROG = progressive
PRS = present
PRT = particle
PST = past
Q = interrogative
REFL = reflexive
REP = repetitive
SBJ = subject
SBJC = subjunctive complementizer
SCVN = completive subjective verbal noun
SG = singular
STAT = stative
SUB = subordination
SUBJ = subjunctive
SVN = subjective verbal noun
T = thematic clitic
TOP = topic
TR = transitive
V = verb
VEN = ventive extension
VERB = verbalizer
YET = persistive

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