Towards a typology of demonstrative verbs

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Abstract

Demonstratives have traditionally been recognized as a semantic category in which different members are classified as belonging to certain lexical or syntactic categories. Current research suggests there are at least 7 different distinct lexical categories: determiners, pronouns, adverbs, non-verbal predicators, verbs, adpositions, and articles. This study looks at one of the aforementioned category of demonstratives, demonstrative verbs, based on a sample of 101 languages with demonstrative verbs out of a total of 1182 languages examined. We present a typological classification of demonstrative verbs based on semantics, an exploration on the morphosyntactic properties of demonstrative verbs and their use in different pragmatic functions, and vast illustrative data in support of our analysis.

Keywords: demonstrative verb, deixis, demonstrative, verb, adverb, predication, grammaticalization, word class

1   Introduction and background

Demonstratives are a semantic class of deictic expressions which serve to focus joint attention onto a referent in the surrounding situation or unfolding discourse (Diessel 2012). According to Hanks (1992: 47), the basic communicative function of deictic forms is "to individuate or single out objects of reference or address in terms of their relation to the current interactive context in which the utterance occurs". Himmelmann (1996: 210) suggests the following criterion for identification of demonstratives: "the element must be in a paradigmatic relation to elements which […] locate the entity referred to on a distance scale: as proximal, distal, etc."

   Current data from around 1200 languages shows no exception to the generalization that all languages have demonstratives; the language with the simplest

Table 1. Classes of demonstratives

PoS	Function
determiner	used in apposition to a noun, e.g. *I like **this** book.*
adverbs	*He read the book **here**.*
pronoun	used to replace a noun, e.g. *I like **this**.*
non-verbal predicator	used in non-verbal clauses, e.g. ***Here-is/This-is** John.*
verbs	used for verbal heads of predicate, e.g. *The book **is-here**.*
articles	*I saw **the-here** dog.*
adpositions	*I bought soda **in-there** the store.*

demonstrative system known so far is Nimboran, where the single deictic *ndie* may mean variously 'this', 'that', 'these', 'those' (May 1997). Nimboran, however, has extremely complex spatial marking on the verb, and even verbal tense marking has allomorphs depending on whether the action takes place in the current location or not (ibid.).

Demonstratives have traditionally been classified as belonging to certain lexical or syntactic categories, with the vast majority of the research focused on demonstrative pronouns and demonstrative determiners. Diessel (1999) points out, however, that demonstratives can also fill other syntactic slots like adverbs and identifiers, such as English *here* and *there*, and Welsh *dyma* 'here-is/this-is' and *dyna* 'there-is/that-is'. Current research suggests at least 7 different distinct lexical categories of demonstratives, seen in Table 1; additional and more fine-grained distinctions may also be needed for the categories of determiners and adverbs, categories which contain under-researched semantic types such as manner, quality, quantity, and degree.

In comparison to such established categories as demonstrative pronouns, determiners and adverbs, demonstrative verbs have seen little research or awareness. One of the reasons is their referential meaning, which generally points out events rather than entities. For instance, Mosel (2004: 150) affirms with respect to demonstrative verbs in Samoan "Although both situational and discourse deictic uses can be observed, they [demonstrative verbs] cannot be classified as demonstratives because they do not refer to entities, but express how something is done or what someone thinks or says". Other reasons pertain to the frequent irregular behavior of demonstrative verbs compared to other verbs in that language, such as heavy restrictions on TAM marking. Even if a category of demonstrative verb is attested in a language, the demonstrative

verbs can lose deictic oppositions, cease to be used with deictic reference to an action, or can be grammaticalized away from their original deictic meaning. Finally, there is a frequent mismatch between morphosyntactic category and morphosyntactic function: although demonstrative verbs can function as verbal heads of predicates, they frequently occur in derived adverbial function. All these processes can make detection and analysis of demonstrative verbs a rather challenging task.

As a distinct morphosyntactic category, demonstrative verbs became known in the typological literature published in English[1] from Dixon (2003), where the author suggests a differentiation between nominal, adverbial and verbal demonstratives, based primarily on syntactic properties. Verbal demonstratives 'do like this/that', with a deictic reference to an action, were acknowledged in two languages, Bouman Fijian (Oceanic) and Dyirbal (Pama-Nyungan). In a later publication, Dixon (2010) retains the same classification strategy as Dixon (2003), but adds one additional language, Mapuche (Mapudungun).

Hagège (2008) is a study looking primarily at interrogative verbs such as Classical Mongolian (Mongolic) *je-ji* 'do what', but Hagège does mention the close relationship that interrogative verbs share with what he calls *deic-tic verbs* (what we call *demonstrative verbs*); as an example, comparable to Classical Mongolian *je-ji* 'do what' he finds *e-ji* 'do this' and *te-ji* 'do that' (Hagège 2008: 20). It should be noted, however, that demonstrative verbs had been identified as a separate morphosyntactic category in Mongolic languages already earlier, e.g. Poppe (1937) as well as the subsequent translation into English, Poppe (1964), and Rassadin (1991: 96).

More recently, Gruzdeva (2013) looks at demonstrative verbs, with a variety of semantic categories of verbs such as 'do like this/that', 'be like this/that', 'be this/that size', and 'be here/there'. Guérin (2015) focuses on demonstrative manner verbs in eighteen languages, although she also acknowledges that other types of demonstrative verbs exist, namely what she views as spatial and locational. Breunesse (2019) discusses demonstrative verbs in detail, focusing on three languages: Abui (Alor-Pantar), Musqueam (Salish), and Neverver (Oceanic). Moyse-Faurie (2019) examines demonstrative verbs and their role in expressing similarity, comparison of equality, and manner in Polynesian languages.

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[1] In his introductory book on general linguistics published in Russian, Maslov (1975: 218) suggested recognizing the category of demonstrative verbs ("местоглаголия"), or the broader category of demonstrative predicatives ("местопредикативы").

Demonstrative verbs are also distinguished in some grammatical descriptions of individual languages. Table 2 shows the ontological categories of demonstratives in Siar (Oceanic) and includes the singular and plural forms of two demonstrative verbs, which are translated as 'be here' and 'be there'.

In the same vein as Guérin (2015) and Breunesse (2019), we claim that the category of demonstrative verb fits semantically and pragmatically with other ontological categories of demonstratives, sharing the same deictic features, and performing similar functions. Based on form, morphological properties, and syntactic functions, demonstrative verbs form a distinct category belonging to the part of speech of verb. The most important verb-like properties include the ability to function as a clausal predicate without a copula, and inflecting for some of the different verbal categories such as tense, aspect, mood, and voice.

Both Guérin (2015) and Breunesse (2019) attempt to contrast demonstrative verbs with what they call demonstrative identifiers, relabeled here as predicative demonstratives. While we agree with both authors that a distinction exists, and indeed many languages show both verbal as well as non-verbal predicative demonstratives, some clarification must be made on the details. Predicative demonstratives are non-verbal predicators, heads of predicates which do not allow for the morphological marking of tense, aspect, or modality (Killian 2022b). Predicative demonstratives do frequently show person indexation, however. There is generally little functional overlap between verbal and non-verbal demonstratives, aside from some specific cases of ambiguity between certain subtypes of predicative demonstratives and demonstrative verbs, discussed further in the corresponding sections (cf. §§ 3.1 and 3.4.1).

Demonstratives are known to be used both in deictic and non-deictic functions. Deictic uses include exophoric (including the so-called *deixis am Phantasma*, following Himmelmann 1996) and discourse deictic, both of which are prolific with demonstrative verbs. Non-deictic use includes tracking (anaphoric and cataphoric reference), empathetic (what we call expressive), and recognitional, and are also attested within the class of demonstrative verbs. Figure 1 shows the different functions of demonstratives as presented in Levinson (2018).

The main goals of this article are to present a semantic typology of demonstrative verbs, to study their morphosyntactic properties, to explore their use in different pragmatic functions, and to provide vast illustrative data in support of the presented analysis. Comparing to previous works, the current study expands considerably both on the number of languages as well as the classification into different categories. The typology presented here is based

Table 2. Siar demonstratives, adapted from Frowein (2011: 333)

| Function	Root	Demonstrative determiner-pronoun		Demonstrative locative-existential verb		Demonstrative adverb	
		Singular	Plural	Singular	Plural	Locative	Allative
Proximal	a	da 'this'	na 'these'	ada 'be here (sg.)'	ana 'be here (pl.)'	ta 'here'	kata 'hither'
Indexical	è	dè 'that'	nè 'those'	adè 'be there (sg.)'	anè 'be there (pl.)'	tè 'there'	katè 'thither'
Anaphoric	ing	ding 'that'	ning 'those'	ading 'be there (sg.)'	aning 'be there (pl.)'	ting 'there'	kating 'thither'
Clockwise	óng	dóng 'that'	nóng 'those'	adóng 'be there (sg.)'	anóng 'be there (pl.)'	tóng 'there'	katóng 'thither'
Counter-clockwise	im	dim 'that'	nim 'those'	adim 'be there (sg.)'	anim 'be there (pl.)'	tim 'there'	katim 'thither'
Upward	-(i)sai	disai 'that'	nisai 'those'	adisai 'be there (sg.)'	anisai 'be there (pl.)'	sai 'there'	kasai 'thither'
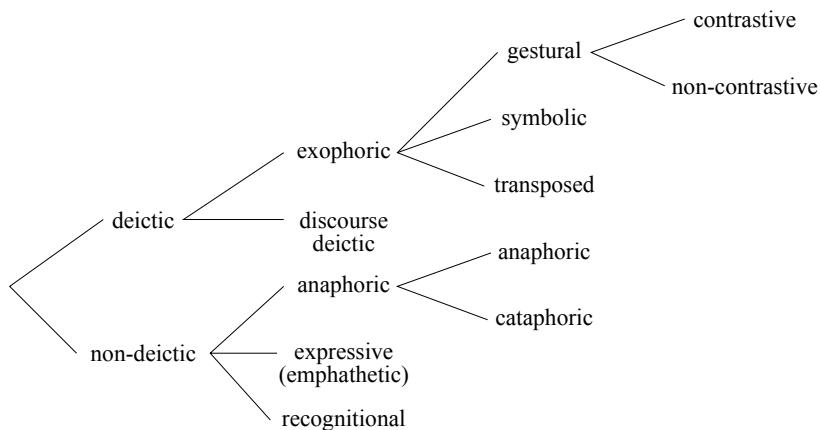
Figure 1. Distinct uses of demonstratives (Levinson 2018)

on 101 languages with demonstrative verbs (Appendix 1), out of a total of 1182 languages examined (Appendix 2).[2] The total sample has some bias, as the focus was on collecting as many descriptions of demonstrative systems as possible; the 101 languages included here as the focus of study are the languages with demonstrative verbs found out of the 1182 total.

Table 3 shows the total number of sampled languages and language families. Note that the total number of families is not simply a sum of the families for each macroarea. Families may be spoken in multiple macroareas and thus be counted multiple times. Afro-Asiatic for instance is counted in Africa as well as Eurasia, and treated as a family for both macroareas. The total, however, is rather the total of all families without macroareal partition, so Afro-Asiatic would only be counted once. Furthermore, the following non-genealogical "families" on Glottolog were excluded here: Unclassifiable, Pidgin, Unattested, Artificial Language, Mixed Language, Speech Register, and Sign Language.[3]

Despite the bias, the total sample is still reasonably diverse; using a chi-

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[2] The appendices "Appendix 1. Languages with demonstrative verbs" and "Appendix 2. Total language sample" are available at https://doi.org/10.61197/fjl.126939

[3] Note that although pidgins are excluded from the sample, creoles are included. Sign languages are excluded only due to practical considerations, and more research on demonstrative use in sign languages is desperately needed.

Table 3. Total number of sampled languages, families, and coverage (share of families sampled) in each macroarea

	Afr.	Eur.	Papunes.	Austr.	N. Am.	S. Am.	Total
Languages	478	170	301	60	81	92	1182
Families (sample/total)	28/53	28/38	63/126	16/33	36/75	57/110	228/421
Coverage	53%	74%	50%	48%	48%	52%	54%

square goodness of fit for number of top-level families in the sample compared to the total number of top-level families found on Glottolog returns a p-value of 0.5778. The greatest deviations from the expected are found in Eurasia and Papunesia; the number of sampled families in Eurasia is 8 more than expected, and for Papunesia it is 3 less than expected. Although the sample is not perfect (a sample with perfect proportions would result in the p-value 1.0), a p-value of 0.5778 is far above the threshold of 0.05, and the proportion of languages per macroarea is not statistically different.

The article starts with the overview of morphosyntactic properties of demonstrative verbs in § 2. § 3 forms the core of the article, and presents the semantic classification of demonstrative verbs based on their use in exophoric function. Discourse uses of demonstrative verbs are addressed in § 4, whereas various types of non-deictic uses are explored in § 5. The final conclusions are drawn in § 6.

2   The morphosyntax of demonstrative verbs

In this section we explore the morphosyntactic properties of demonstrative verbs, focusing on their form (§ 2.1) and function (§ 2.2).

2.1   Morphosyntactic form and behavior

Demonstrative verbs are typically at least bi-morphemic, composed of a deictic combined with the verb root (base). In Nêlêmwa for instance, the verb root *shum(a)* 'be like' combines with four different deictic markers: *winy* (proximal), *wena* (medial), *weli* (mentioned previously in discourse), and *bai* (known from shared experience) (Bril 2004: 107).

Crow (Siouan) works similarly, in that demonstrative roots "[…] combine with the locative verb *la* 'be at' to derive locative verbs meaning 'be here, be

there', etc. These are stative verbs, and they are inflected as ordinary statives
[…]" (Graczyk 2007: 84).

(1)   Crow (Graczyk 2007: 84)

    awaxaawé **íilakaa-la-k**
    mountains **DST-LOX.V-DECL**

    'The mountains are way over there.'

Demonstrative verbs can sometimes be derived further. Locative verbs in
Crow for instance can combine with the direct causative to form verbs meaning
'situate or locate oneself here, there'.

(2)   Crow (Graczyk 2007: 86)

    kootdák **éehkoo-n-n-aa-lak**   *chiláakshilak*
    all.right **DST-LOX.V-2SG-CAUS-COND**   tomorrow

     baa-w-asshihk-aát-boo-k   *he-k*   *huu-k*
     INDEF-1SG-consider-APPROX-1PI-DECL say-DECL say.PL-DECL

    ' "All right, if you take that spot over there, tomorrow we'll consider the
    matter", she said.'

Halkomelem (Salish) also can derive the verbs *ʔí* 'be here' and *lí* 'be there'
to create the verbs *xʷeʔí* 'come here, get here; arrive' and *xʷelí* 'go there, get
there'.
    Verbs can also be derived by other means. In many languages with demon-
strative verbs, deictic roots show partial ambiguity between adverb and verb. In
Reta (Alor-Pantar) for instance, there are a number of different demonstrative
verb types, including several verbs indicating location, as well as three verbs
indicating deictic comparison of amount, size, and height. Verbs indicating
location show great flexibility in their functions; in (3) and (4), *gi'e* '(be) here'
is used predicatively, but in (5) it is used in more of an adverbial sense.

(3)   Reta (Willemsen 2021: 207)

    meleng   *gang*   **gi-'e**
    yesterday 3SG.NOM **PROX-LOX**

    'Yesterday he was here.'

(4) Reta (Willemsen 2021: 183)

   na-vaal   ***gi-'e***
   1SG.POS-child **PROX-LOX**

   'I have children (lit.: my children exist [proximally]).'

(5) Reta (Willemsen 2021: 166)

   boma anu ***gi-'e***   *matee jia*
   old   one **PROX-LOX** stand   placed

   'A man is standing here.'

In Balantak (Celebic), adverbial demonstratives in the allative ('thither') may function verbally. As verbs, they take verbal morphology such as aspect and mood in the same way as other verbs do:

(6) Balantak (van den Berg & Busenitz 2012: 191)

   noko   daa   k<um>aan, kai ***no-mbaa-tu'u-na-mo*** *na   laigan-na*
   after.R finish INTR-eat   1PE **R-ALL.R-DST-3SG-PFV** LOC house-3SG

   'When we had finished eating, we went back to the house'

In Northern Subanen it is possible to simply add verbal affixes such as realis markers onto locative adverbial demonstrative bases directly, to make deictic motion and placement verbs, without any other overt morphology needed (Daguman 2004).

(7) Northern Subanen (Daguman 2004: 221)

   mə-ditu=ita   *sə   g=binaal*
   ITR.AG.I-DST=1PI.ABS OBL SCM=farm

   'Let us go to the farm.'

(8) Northern Subanen (Daguman 2001: 4)

   pi-diaʔ-u   *sə   k-siluŋ   su   kandiŋ*
   CAUS.AG.R-MD-1SG.ERG OBL SCM-below ABS goat

   'I placed the goat under the house.'

Table 4. Buryat Demonstrative verb forms (Poppe 1960: 74)

ii-/ii-ge-	'do like this'
ii-že/iige-že	'doing like this' (imperfective gerund)
ii-ge-ed	'having done like this' (perfective gerund)
tii-/tii-ge-	'do like that'
tii-že/tii-ge-že-	'doing like that'
tii-ge-ed	'having done like that'

In Toqabaqita (Oceanic), such lexical flexibility can even occur at the phrasal level with the phrase *quna qeri* 'this/that way' (Lichtenberk 2008). More rarely, this can also be with a different demonstrative than *qeri*. *Quna qeri* is treated as a lexical unit, a verb taking the appropriate subject markers in the same way other verbs do, and in (9) it also shows a type of verbal reduplication indicating iteration.

(9)   Toqabaqita (Lichtenberk 2008: 139–140)

    qe   ***quu-quna qeri***   *qana* *gwau-na,*   *ma* *ifu-na*
    3SG.NFUT **RDP-MANNER this** PREP head-3SG.PERS and hair-3SG.PERS

      ka   *katu*   *na=mai*   *labaa*
      3SG.SEQ hinder PERF=VENT there

    'He kept doing like this with his head [the speaker jerks his head several times one way to demonstrate what he was doing], and his hair held fast there'

According to their morphosyntactic behavior, demonstrative verbs may be grouped into a few categories. First, demonstrative verbs may occur as regular lexical verbs in the language, with complete and regular inflection, as in Buryat (Poppe 1960: 74), seen in Table 4.

However, morphosyntactic regularity of demonstrative verbs appears to be more of an exception than a rule, which can be explained by the specific semantics of these lexical items (discussed further in § 2.2 as well as throughout the article more generally). Demonstrative verbs frequently display features of atypical verbal behavior compared to other verbs in a given language, such as constraints on marking of certain morphosyntactic categories, including TAM, voice, and number.

In Halkomelem (Salish) for instance, mentioned previously, there are two locative-existential demonstrative verbs, *ʔí* 'be here' and *lí* 'be there'. These verbs can be inflected for subject, future tense, or subjunctive mood, but past and interrogative suffixes must be attached to a preceding auxiliary, and no continuative, imperative, participle, passive, or pluralizing inflection is possible (Galloway 1977: 350).

Icari Dargwa (Nakh-Daghestanian) has a series of localizing demonstrative verbs, which also show restricted number of forms. Using the proximal *le=b* 'be here' as an example, only the following forms are possible: present tense *le=w–da* (first person), *le=w–di* (second person), *le=w* (third person); participle *le=w-ci*, and converb *le=w-li*. Any other forms are replaced by forms of the verb *=ū* 'to exist' (Sumbatova & Mutalov 2003: 145).

2.2 Morphosyntactic function

In terms of syntactic functions, demonstrative verbs fill a number of roles. Prototypically as verbs, they function as main predicators of a clause, as in (10).

(10) Siar (Frowein 2011: 453)

    é   *Pasta* **a-d-óng**   *ma*   *an piu* *i*   *tur*   *tar*
    ART pastor **LOX.V-DEM.SG-CLK** TRANS at ground 3SG stand PERF

      k-i   *kòlòng* *laulau tar*
      FOC-3SG terrified bad   PERF

    'The Pastor was there outside, he was terribly afraid.'

Other examples come from Mauwake (Madang), Northern Subanen (Greater Central Philippine), Barok (Oceanic), and Korean (Koreanic).

(11) Mauwake (Berghäll 2015: 172)

    aa, *o*   *koora* **fan-e-k**   *a*
    INTJ 3SG house **LOX.V.PRX-PST-3SG** INTJ

    'Ah, his house is here.'

(12) Northern Subanen (Daguman 2004: 290)

məkpəd-ditu   *masiʔ   g=balay   g=bədiŋ   kiin*
ITR.AG.HAB.I-there   MIR   SCM=house   SCM=cat   that

'I'm surprised to know that that cat regularly goes to (our) house.'

(13) Barok (Du 2010: 99)

i=bo   ***bi~biringaan***
3SG.SM=HAB   **RDP~PQ.V.DST**

'He habitually does it like that (making faces).'

(14) Korean (Chingduang Yurayong, p. c.)

A: na socwu-pota   maykcwu-lul te   cohahay.
A: 1SG rice_wine-COMP   beer-ACC   more like.PRS.IND
  *B: na-to   **kulay**.*
  B: 1SG-also **PQ.V.MED**

'A: I prefer beer to rice wine. B: Me too. (lit: I am also like that.)'

Demonstrative verbs seem to commonly occur in other types of constructions than heads of predicates, however. In Musqueam, demonstrative verbs can be nominalized, functioning as arguments of predicates.

(15) Musqueam (Suttles 2004: 428)

wəl-híθ   *k'ʷə*   ***nə-s-ʔí***   *ʔə   tən'a*
already-last.long   ART   **my-NMLZ-LOX.V.PRX**   OBL   this

'My being here has lasted long.'

One very common construction type that demonstrative verbs occur in is multi-verb predicate constructions, or "serial verbs". In such constructions, they are structurally verbs, but they often show distinct adverb-like uses. Kratochvíl (2007: 103) mentions that in Abui for instance, locative-existential demonstrative verbs primarily occur in serial verb constructions, and only rarely are they inflected for aspect or person. In such constructions they are very adverb-like, both in form as well as semantically.

(16)   Neve'ei (Musgrave 2007: 128)

    utnen i-rong   ***Ø-menenang***   *i-mera'*   *i-ngang*
    when 3SG.R-hear **3SG.R-PQ.V.DST** 3SG.R-INCP 3SG.REAL-laugh

    'When he heard it like that, then he laughed.'

(17)   Kavalan (Jiang 2009: 3)

    nayau=ti   *ya*   *bai-bai-ta*   *m-Rimazuq*
    PQ.V.MD=PFV INTJ RDP-grandmother-1PI.GEN AF-foolish

    'Our ancestors were foolish like that.'

(18)   Siar (Frowein 2011: 366)

    é   *tata*   ***á-d-óng***   *ma*   *is*
    ART daddy **LOX.V-DEM.SG-CLK** TRANS return

    'Daddy was there now returning.'

Rundi (Bantu) is a language in which demonstrative verbs marginally occur, only in the most restricted sense. Demonstrative verbs do not occur as heads of simple predicates at all, instead occurring only as modifiers of a head in a complex predicate. However, they nonetheless have been considered verbs by previous researchers, as they take verbal agreement marking, seen in (19) below.[4]

(19)   Rundi (Rodegem 1967: 78)

    ba-vuga   ***bá-tyo***
    CL2-speak **CL2-PQ.V.DST**

    'They speak like that.'

Languages may also use derived forms of demonstrative verbs to function as (adverbial) modifiers, as converbs which function somewhat similarly to the serial verb construction. In Urarina (isolate) for instance, the verb *nitoania* 'be like that' overwhelmingly occurs with the "participle" suffix -*ĩ*, and rarely with other types of inflection (Olawsky 2006: 798–799).

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[4] Translated from the original French, with glosses added.

(20)   Urarina (Olawsky 2006: 798)

> **nitoaneĩ**   *hetau=te ɲukwana ha-ɨre-rehete ɲoaelɨ katɕa-ɨrɨ*
> **PQ.V.DST.PTCP** HRS=FOC 3=field   make-PL.HAB:3 earlier man-PL
>
>   *aherḭ+ku-teri ke   kufwihja-ĩ*
>   stone+ASC-axe INST fell-PTCP

'The ancient people made their fields like that, felling [trees] with stone axes.'

Korean demonstrative verbs show polysemy between 'to say' and 'to do'. To specify the meaning of 'do' rather than 'say', speakers can use derived converbs together with the verb *ha* 'to do'.

(21)   Korean (Chingduang Yurayong, p. c.)

> *wuli-nun manna-l   sikan-i   eps-umyen*   **ileh-key**
> 1PL-TOP meet-PTCP.FUT time-NOM not_exist-COND **PQ.V.PROX-ADV**
>
>   *ha-ca*
>   do-HORT

'If we don't have time to meet, let's do like this (as I suggested earlier).'

Demonstrative verbs are also frequently used in various types of clause linking. Demonstrative verbs in Nuaulu (Nunusaku) are used as relativizers for relative clauses.

(22)   Nuaulu (Bolton 1990: 165)

> *hiti tihu*   **a-po**   *pam rei roe*
> lift water **LOX.V-DOWN** pot this up

'Lift up the water that is in the pot.'

In Aguaruna (Chicham), demonstrative verbs are commonly used in clause linking, with the demonstrative verb anaphorically referring to the previous clause, indicating a temporal or causal relationship between it and the following clause.

(23) Aguaruna (Overall 2007: 410)

waamaki̱   *hu-hu-ki-ta-humi̱*   *waha-a-u*
quickly   take-1SG.OBJ-TRF-IMP-2PL   call-IPFV-REL

nuni-tai̱-ʃakama   *antu-ka-tʃa-aha-u*
PQ.V.DST-SBD:1/3:DS-CONCESS   listen-INTS-NEG-PL-REL

a-ina-wa-i
COP-PL:IPFV-3-DECL

'He was calling out, "quickly take me away!" Although he did that, they didn't listen.'

In Yurakaré (Yuracaré) and Nivkh (Amuric), converbs derived from demonstrative verbs are used as sentence connectives which can express a resultant relationship between the two events.

(24) Yurakaré (van Gijn 2006: 285)

na   *ishete buybu ka-n-dyuju-ø=ti lash* **achama** *lëtta dia nish*
DEM agouti word 3SG-IO-tell-3=DS then **PQ.V.DST** one day NEG

wita-ø=ya
arrive.SG-3=NVR

'When the agouti told him the news, he did not come home for a day.'

(25) Nivkh (Amur) (Gruzdeva 2020: 54)

luvr   *me-qr+ɲi-ra*   **noʁo-r**   *kʰrəz-ra*
spoon two-CLF+eat-COORD:3SG **PQ.V.DST-CVB:3SG** be.full-COORD:3SG

'[He] ate two spoons, then [he] was full.'

Identification demonstrative verbs in Makalero (Timor-Kasar) are also used for clause linking, in particular adverbial "reason" clauses.

(26) Makalero (Huber 2011: 119)

uere'=konai=ni   *ani esperensia ere*   *la'ane' konta [...]*
IDT.V.ADDR=CSQ=LNK 1SG experience DEM.PRX various tell

'that is why I tell these experiences'

For more information on demonstratives functioning as clause connectors, see Diessel & Breunesse (2020) and Guérin & Aiton (2018).

3   Semantic categorization of demonstrative verbs

In this section, we propose a semantic classification of demonstrative verbs based on their use in an exophoric function. The notion *exophoric* refers to entities physically present in the speech situation, located in the speaker's sphere of perception (Halliday & Hasan 1976: 57–76). Demonstrative verbs frequently indicate events (or locations) rather than participants, so the "entity" in this case is the event that is present in the speech situation. Being used exophorically, demonstratives serve a language-internal function — they focus the hearer's attention on entities in the speech situation and are characterized by a deictic reference to an activity, either actual or mimicked (Dixon 2003: 72). In the course of discussion, note that we do not typologize spatial oppositions found in demonstrative verbs. Levinson (2018: 19) points out that "[...] proximity is an elastic notion, and according to each language, it has different extents depending on multiple pragmatic factors". Too few grammatical descriptions take into account all the myriad differences that play a role in spatial oppositions, and how they are used in different contexts. The distinction between person-oriented and distance-oriented systems has been frequently discussed in cross-linguistic research on demonstratives (see e.g. Diessel 1999), but it remains unclear as to what extent three-term person-oriented systems for instance have been misanalyzed as egocentric distance-oriented systems.

Furthermore, many of the systems discussed here are rather heterogeneous, and defy easy categorization into a simple distance extending out from the ego. Nuaulu for instance creates existential demonstrative verbs by combining the root *wai* with a variety of clitics indicating proximity and direction: *mai* 'here', *kua* 'around here', *nau* 'seaward', *noi* 'unspecified direction', *pani* 'across', *poe* 'down', *ria* 'inland', *roe* 'up', and *hae* 'on' (Bolton 1990). Comparing this type of complex deictic system involving topographic or elevational notes with other types of complex systems is not trivial.

From a semantic point of view, demonstrative verbs can be classified into three major categories: locative-existential demonstrative verbs (§ 3.1), processive-qualitative demonstrative verbs (§ 3.2), and movement and placement demonstrative verbs (§ 3.3). Additionally, there are some minor categories

referring to identification, size, and speech (§ 3.4). In some cases, it is difficult to assign demonstrative verbs to a certain class, as will be shown in § 3.5.

3.1 Locative-existential demonstrative verbs

The first major semantic class is that of locative-existential demonstrative verbs, used to indicate the location of a referent relative to the deictic center. They serve to localize a participant or event in a certain space, establishing a figure-ground relationship. Such verbs are typically translated into English as 'be, exist here/there'.

Examples from Mauwake and Siar are given below.

(27) Mauwake (Berghäll 2015: 172)

> *No   ikiw-e,   irak-owa   maneka **fan-e-k**   a*
> 2SG go-IMP.2SG fight-NMLZ big   **LOX.V-PST-3SG** INTJ

> 'Go (home), the big war is here.'

(28) Siar (Frowein 2011: 232)

> *ép kirai n-a   ép   lakman **a-d-óng**   sén   an*
> ART time DEM.SG-PRX ART village **LOX.V-DEM.SG-CLK** EMPH at

> > *Kingén*
> > Kingén

> 'That time the village was further north, at Kingén.'

Existence and location share a strong semantic relationship. Creissels (2019: 38) explains that "[...] the semantic relationship between existence (in the usual sense of 'being an element of the world') and location follows from the fact that, for concrete entities (but only for concrete entities!), *X is an element of the world* is equivalent to *X can be found somewhere in the world*". Although Guérin (2015) was uncertain of the validity of this semantic type, locative-existential demonstratives in this study are well represented, with approximately 40 languages in the database showing locative-existential demonstrative verbs. Let us consider several examples.

In Momu (Baibai-Fas), there are two locative-existential verbs distinguishing proximal and distal usages. These locative-existential verbs not only express the relationship between the figure and the ground, but also include

Table 5. Lumun demonstratives (Smits 2017: 392)

C-ɛí	'be here (near speaker)'	ɛn-C-í	'this, these (near speaker)'
C-êrík	'be there (near addressee)'	ɛn-C-ərík	'that, those (near addressee)'
C-ɛɽê	'be over there (away from speaker and addressee)'	ɛn-C-əɽê	'that, those (away from both, but in sight)'

a further deictic specification of the figure to the deictic center, typically the position of the speaker (Blake 2007: 31).

(29)   Momu (Blake 2007: 30)

   *mi   teBu   Australia **yaiwo***
   mother 1SG.POSS Australia **LOX.V.DST.AN.3SG**

   'My mother is in Australia.'

(30)   Momu (Blake 2007: 33)

   *kaf anu   fiki **nouwo***
   cup DEM.PRX near **LOX.V.PRX.INAN.3SG**

   'This cup is near me.'

In Lumun (Talodi) the case is similar. There are three demonstrative verbs of location, which parallel adnominal demonstratives in structure and semantics (Smits 2017: 392); see Table 5, and (31) for an example of their use.

(31)   Lumun (Smits 2017: 393)

   *aɽık núṭṭətruk n-əɽɛk **n-ɛɽê***
   come pigs   C-some **C-LOX.V.DST**

   'Come, there are some pigs over there!'

The language Thao (Western Plains Austronesian) also shows a series of demonstrative verbs for expressing location: *inay* 'be here', *iutu* and *isa(há)y* 'be there', *isu(hú)y* 'be over there (visible)', and *itusi/itantu* 'be over there (not visible)' (Wang 2004: 303). Furthermore, derivational morphology on

locative-existential demonstrative verbs is possible, such as *mu-* to express movement such as come/go, or *pi-/ pu-* to convey the idea of putting something somewhere, i.e. *inay* 'be here', *mu-nay* 'come here', and *pi-nay* 'put here'.

(32)   Thao (Blust 2003: 399, cited in Wang 2004: 303)

>   *rumfaz* **in-inay**   *marfaz makitnahazish=iza*
>   bird   **PFV-LOX.V.PROX** fly   go.gradually.away=already

>   'The birds were here, but have flown off into the distance.'

Biak (South Halmahera-West New Guinea) has two sets of demonstrative verbs, one which carries a meaning of locative-existential, and a second for identification. Both sets of verbs allow for a number of different demonstrative form combinations, including directional marking, anaphoric marking, and topographic reference.

(33)   Biak (Steinhauer 2005: 817)

>   **mko-is-ya-m-ra**
>   **2P-LOX.V-MD-VEN-SEA**

>   'You (PL) are on your way towards the sea (where I am).'

In Makalero (Timor-Kisar), the addressee-centered verb *ue'* 'be there (near addressee)' is the most widely used demonstrative verb, including being used for general reference and existential predication.

(34)   Makalero (Huber 2011: 182)
>   *Huma' ni'isi*   *uari* **ue'**
>   soul   simultaneous still **LOX.V.ADDR**

>   'Ghosts really exist.'

Eskimo-Aleut languages show a large number of verbs involving demonstratives, most of which deal with location and movement. In Central Alaskan Yupik (Eskimoan) for instance there is a basic stative verb for being in a location, *+m(i)t- / +n(i)t-*, which combines with locative nouns and adverbial demonstrative roots. Another stative derivation is the verb *-qsiɣ-* 'to be in the

direction', which follows a similar pattern to *+m(i)t- / +n(i)t-* in that it also largely occurs with locative nouns or adverbial demonstrative roots.[5]

(35)   Central Alaskan Yupik (Miyaoka 2012: 368)

     ma-a-nt-ukut
     PRX-EXPND-LOX.V-IND.1PL.LOC

     'We are here.'

(36)   Central Alaskan Yupik (Miyaoka 2012: 368)

     aci-qsig-aa   *May'a-m*   *eni-i*
     AREA.BELOW-BE.IN.DIRECTION-IND.3SG   Mayaq-GEN   house-ABS.3SG

     'Mayaq's house is far below.'

A subtype of exophoric use exists known as *Deixis am Phantasma*, or *imaginary deixis*, following Himmelmann (1996: 222). In such instances, the perspective shifts from the utterance situation to the narrated situation. Although this use has not been studied in depth for demonstrative verbs, this perspective shift is also possible, seen in the Momu examples below. In the case of Momu, Blake specifies that the question was posed outside Antonia's house, and Speaker B was not close to Antonia.

(37)   Momu (Blake 2007: 31)

     A: Antonia ai-ta?   *B:* **naiwo,**   *fi*   *pə*
     A: Antonia stay-3SG.INTERR   B: **LOX.V.PRX.AN.3SG**   water   go.SG
       momu
       not

     A: 'Is Antonia there?' B: 'She's there (lit.: here), she hasn't gone to the water yet.'

Locative-existential demonstrative verbs are sometimes used to indicate possession, as is common for regular lexical verbs. Such use fits what has Stassen has labeled as a locational possessive (Stassen 2009). In Dargwa (Dagestanian), Puyuma (Austronesian), Makalero, and Kambera (Bima-Lembata) for

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[5] No glosses were provided in the original for (36).

instance, locative-existential verbs are described as being used in possessive predication constructions, with the possessor often in a genitive or locative case.

(38)   Dargwa (Icari) (Sumbatova & Mutalov 2003: 146)

    *di-la   mašin **te=b***
    1-GEN   car   **LOX.V.DST=NEUT.SG**

    'I have a car.'

(39)   Kambera (Klamer 1998: 150)

    Ningu   *kabela   lai   nyuna*
    LOX.V.PRX machete LOC he

    'He has a machete.' (lit.: 'There is a machete with him.')

Nuaulu also may use demonstrative verbs to mark general existential predication as well as predicative possession.

(40)   Nuaulu (Bolton 1990: 104)

    Sona   penne a-ro   mainae?
    sago.paste cold   **LOX.V-ABOVE** much

    'Is there a lot of cold sago paste?'

(41)   Nuaulu (Bolton 1990: 108)

    *Ami rua-ma mani akama   **wa-n***
    we   self-1PE our   religion **LOX.V-PRX**

    'We have our own religion.'

Locative-existential demonstrative verbs are also sometimes used as markers of ongoing activity, giving a durative or progressive reading. In Crow (Siouan) for instance, there is a construction where *koolá* is suffixed to another verb, to refer to ongoing activity (Graczyk 2007).

(42) Crow (Graczyk 2007: 85)

  is-bilaxpáake   *baaík-shii-ak*   *ihch-iiwaaíaschili-k*
  POSS.3-people   things-say-SS   REFL-sell-DECL

    huu-koola-k
    say.PL-LOX.V.DST-DECL

  '[Plenty Coups] people were saying things; they kept saying that he had
  sold himself (sold out).'

Similar constructions are found in Dargwa, where the "locative copulas" are
used for progressive or durative meanings, e.g. in Ashti Dargwa (Belyaev
2012):[6]

(43) Dargwa (Ashti) (Belyaev 2012: 196)

  uˁq'-uˁn   ***ti-w***
  [M]go.IPFV-CVB   **LOX.V.DST-M[3]**

  '(He) is coming' (removed from the speaker, at the moment).

(44) Dargwa (Ashti) (Belyaev 2012: 196)

  uˁq'-uˁn   ***li-w***
  [M]go.IPFV-CVB   **LOX.V.PRX-M[3]**

  '(He) is coming' (next to the speaker, at the moment).

Belyaev mentions that locative copulas in combination with other verbs specify
that the act has a longer duration; such uses are mirrored in Blagar, where
"their [demonstrative verbs] function is not only to localise the referent of the
rest of the (part of the) predicate to which they belong, but also to express that
that event is of some duration" (Steinhauer 1991).

    Locative-existential demonstrative verbs overlap heavily in function with
non-verbal predicative localizing demonstratives, discussed in Killian (2022b).
Both categories appear to show a preference for restricting TAM marking,
but may allow argument indexation or other verbal forms such as converbs.
This semantic category appears to be the most difficult to draw conclusions

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[6] Translated from the original Russian.

on differentiating verbal from non-verbal predicative demonstratives, and will require careful research.

Tagalog is an interesting case which shows at least 3 semantic types of demonstrative predicators, 2 non-verbal and 1 verbal, and historical evidence suggests two additional uses (existential and placement) which have now largely left the language. Table 6 shows demonstrative verbs and non-verbal predicative demonstratives in Tagalog. All forms except the presentative are derived from the oblique "*sa*" form, and it is interesting to note the part of speech ambiguity and variation among these derived demonstratives.

Oblique forms with meanings of 'here, there' are also included despite showing little synchronic evidence for a predicative nature, as historically they also allowed for verbal morphology, e.g. *d<um>oon* 'take (your) place there, situate (yourself) there'. Demonstrative verbs of placement ('put (t)here') have been largely lost, but survive in earlier descriptions. The distinction between 'near speaker' and 'near speaker and hearer' has also been lost in Standard Tagalog, but is still used in other dialects.

Tagalog presents an interesting case of grammaticalization, which leads one to wonder: was the non-verbal localizer originally verbal, and subsequently lost its verbal properties? Or did the non-verbal predicator derive directly from a verb? In either case, it's highly suggestive of the fact that predicators which express static location generally disprefer TAM marking, suggesting their non-verbal nature.

One distinction between verbal and non-verbal localizing/locative-existential demonstratives does appear to be the semantic extension towards existence that demonstrative verbs frequently show. Non-verbal localizers do not seem to allow for the expression of pure existence such as 'ghosts exist' (with the possible exception of archaic Tagalog seen in Table 6), nor do they allow for bounded existence, such as 'Lions exist in Africa'. Furthermore, whether any language with localizing demonstratives is able to make the distinction between what Creissels labels as *inverse locationals* (there is a book on the table) and *plain locationals* (the book is on the table) is currently unclear.

Locative-existential demonstrative verbs, in contrast, show more flexibility in their constructions; Makalero for instance was shown in (34) using demonstrative verbs for pure existence.

Table 6. Tagalog demonstrative forms

	Oblique	Presentative (nv)	Localizer (nv)	(Existential) (nv)	Movement (v)	(Placement) (v)
Near speaker	dine / rine	ere	nandine / narine	(mayrine / maydine)	parine	(magrine)
Near speaker / hearer	dito / rito	(h)eto	nandito / nar-ito	(mayrito / maydito)	parito	(magrito)
Near hearer	diyan / riyan	(h)ayan	nandiyan / nariyan	(mayriyan / maydiyan)	pariyan	(magriyan)
Remote	doon / roon	(h)ayon	nandoon / naroon	mayroon / maydoon	paroon	(magroon)

3.2 Processive-qualitative demonstrative verbs

Processive and qualitative demonstrative verbs refer to a process or quality with reference to the deictic center. Both meanings are frequently marked by the same demonstrative verb, and depending on the context can be translated as 'do like this/that' (processive) or 'be like this/that' (qualitative). Even for languages which have two different forms, it can be difficult to differentiate. Korean has two distinct series of demonstrative verbs, processive verbs 이러다 *ileta*, 그러다 *kuleta*, 저러다 *celeta* 'do (like) this/that', and qualitative verbs 이렇다 *ilehta*, 그렇다 *kulehta*, 저렇다 *celehta* 'be like this/that'. However, in practice the difference seems to be often blurred. Due to phonological reasons, the verbs show overlap in some of their conjugations, and it can be difficult to tell whether a form like the declarative 그래 *kulay* comes from the processive 그러다 *kuleta* or the qualitative 그렇다 *kulehta*.[7]

Processive-qualitative demonstratives are among the most researched of demonstrative verbs, discussed for example in Dixon (2003), and in Guérin (2015) under the label of manner demonstrative verbs. Around 50 languages in the sample show processive-qualitative demonstrative verbs.

Processive-qualitative demonstrative verbs may directly refer to a concrete action, seen in examples below from Dyirbal (45) and Vaeakau-Taumako (47). They may also refer to a gesture mimicking an action, as in example (46). In both cases the demonstrative verbs are used in a context typical of other proximal demonstratives.

(45) Dyirbal (Dixon 2003: 102)

bala *baja!* *ŋaja* **yalama-n** *baja-n*
there:N chew:IMP 1SG **PQ.V.PRX-TR.NFUT** chew-NFUT

'Chew it [the spear grass]! I'm chewing (it) like this.'

(46) Dyirbal (Dixon 2003: 101)

ginya-ginya garrgal yuba-n **yalama-n**
this:N-this:N arm put.down-NFUT **PQ.V.PRX-TR.NFUT**

'These arms were put down (stretched out) like this.' (narrator mimes what was done)

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[7] We thank 허진 for their kind assistance with understanding Korean demonstrative verbs.

(47)   Vaeakau-Taumako (Næss & Hovdhaugen 2011: 128)

Noho **phe-nē***!*
sit   **PQ.V-PRX**

'Sit like this!'

Processive-qualitative demonstrative verbs can also express comparison of
equality, seen in East Uvean (Oceanic) (48).

(48)   East Uvean (Moyse-Faurie 2019: 145)

*Kua **fēia***   *te   lahi o   te   tamasi'i*
PFV   **PQ.V.DIST** SPC tall POSS SPC child

'The child is that tall' (with a movement of the hand to indicate the size)

The following examples in Nêlêmwa (Oceanic) show the proximal and dis-
tal processive-qualitative verbs functioning as main predicators; note that
Nêlêmwa has two additional demonstrative anaphoric processive-quality
verbs.[8]

(49)   Nêlêmwa (Bril 2002: 285)

*co   **shu-mwela** i   na   me   da?*
2SG **PQ.V-DST**   REL 1SG SUBORD what?

'Why are you doing that to me? (why are you behaving like that?)'

(50)   Nêlêmwa (Bril 2002: 285)

shu-mwiny *wany bai   io   i   iyulî*
PQ.V-PRX   boat   that.ANPH FUT 3SG buy.TR

'It will be like this the boat he will buy.'

There are two processive-qualitative verbs in Eibela (Bosavi), which may be
used exophorically as well as in discourse.

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[8] Translated here from the original French.

(51) Eibela (Aiton 2016: 287)

sɛː-jaː   toːboː omaːniː-jɛː oː   goːla: **woːgaː**   *kɛi*
bank-ABS all   blood-LOC lake pool **PQ.V.ANPH:PST** ASSER

'All the sand was like an entire lake of blood.'

Kavalan (East Formosan) also has processive-qualitative verbs. Such verbs in Kavalan frequently show adverbial use.

(52) Kavalan (Jiang 2006: 120)

mana **nayau-an-su**   *biyat-ku   zin-na   sunis 'nay*
why   **PQ.V.MD-LF-2SG.GEN** frog-1SG.GEN say-3SG.GEN child that

'The child said, "Why did you do that to my frog?" '

(53) Kavalan (Jiang 2009: 3)

nayau-an-ta   *k<um>tun*
PQ.V.MD-LF-1PL.GEN   <AF>chop

'We chop (banana trees) like that.'

Similar adverbial uses of processive-qualitative demonstrative verbs are also found in Kalmyk (Mongolic).[9]

(54) Kalmyk (Bläsing 2003: 239)

en ködlmsh-ig **iig-j**   *ke-x   kerg-tä*
this work-ACC **PQ.V.PRX-CVB.IPFV** do-PTCP.FUT work-ASC

'This work has to be done in this way.'

3.3   Movement demonstrative verbs and placement demonstrative verbs

Demonstrative verbs of placement and demonstrative verbs of movement refer to the corresponding processes which take place in relation to the deictic center, and can be conventionally translated as 'move here/there' or 'place here/there'.

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[9] No glosses were provided for the Kalmyk examples in the original.

Table 7. Aklanon verbs of motion (de la Cruz & Zorc 1968: 116)

Root	Meaning	Verb	Meaning
iya	near speaker	ariya	'come here' (to speaker)
unaʔ	near addressee	arunaʔ	'go to addressee'
inhaʔ	near addressee, far from speaker	arinhaʔ	'go there'
idto	removed from both	adto	'go (away)'

Unlike locative-existential verbs and processive-qualitative verbs, movement demonstrative verbs and placement demonstrative verbs show no functional overlap. The two types of demonstrative verbs are rather grouped together in a single section, simply because they frequently occur together in the same language. Out of 15 languages in the database with verbs of either movement or placement, 11 languages have derivations both for movement as well as placement; 4 languages have movement without placement, and 2 languages have placement without movement.

Demonstrative verbs of movement or placement are rarer than the other two types of demonstrative verbs, and more restricted. They are more commonly found in languages of the Philippines, Taiwan, and Indonesia. Note that for practical reasons, we exclude any languages as having demonstrative verbs of placement or movement if they show no clear morphological connection to demonstratives of other categories.

In many Bisayan languages of the Philippines for instance, basic verbs of coming and going are derived from demonstrative based with a *ʔa-* or *ka-* prefix, e.g. Hiligaynon *karí* 'come here (near speaker)', *karáʔ* 'go there (to addressee)', *kádto* 'go yonder (removed from both)' (Zorc 1977). Table 7 and example (55) illustrate such forms in the Bisaya language Aklanon. In Aklanon, the prefix to derive verbs of motion is *(a)d/r-*, *d* sometimes alternating with *r*.

(55)   Aklanon (de la Cruz & Zorc 1968: 116)

> **pa-ar-iya-ha**   *gid*   *imáw*
> CAUS.OF-MOVE-PROX-IMP   EMPH   3SG

> 'Make him come here.'

In many languages movement and placement demonstrative verbs are derived from demonstrative verbs of location. Thao was previously mentioned in § 3.1

as showing derivational forms for placement and movement with demonstrative verbs, seen in Example (56).

(56) Thao (Wang 2004: 171)

*Numa **pu-sáy-in** baruku, lhimpania'anin, **pu-tu-an** shnir,*
then **PUT.V-DST-TR** bowl mix.vegetables **PUT.V-MD-TR** soup

    qtilha numa suksuk.
    salt and ginger

'Then (we would) put them in a bowl, mix (them) with vegetables, and put soup, salt and ginger in (them).'

Takivatan Bunun makes use of similar derivations, such as *pa-* 'dynamic causative marker', *mun-* 'go (to)', and *pan-* 'arrive'.

(57) Takivatan Bunun (Austronesian) (de Busser 2009: 338)

pa-ʔiti *aipun*
CAUS.DYN-PROX.LOC DEM.SG-MD

'He was sent here [to understand how we Bunun live].'

(58) Takivatan Bunun (de Busser 2009: 493–494)

*tuqas istun **ita-ʔa** **pan-maka-ʔita-in***
older.sibling 3SG.MD **LOC.DIST-SUBORD** **ITIN-ROUTE-LOC.DIST-PFV**

'Her older sister was also there, and she had come over.'

Biak shows a largely compositional demonstrative system in which there are 3 speaker-based distances which combine with positional/directional and motion markers. The same deictic roots underlie the demonstrative verbal system as well as the demonstrative pronominal system.

(59) Biak (Mofu 2005: 255)

*inai be-y-dya **i-is-ne***
daughter POSS-3SG-DET.SG **3SG-LOX.V-PRX**

'His/her daughter is here.'

Table 8. Kambera demonstrative verbs

Root	Meaning	Verb	Meaning
ni	near speaker	ni-ngu	'be here' (at speaker)
na	near addressee	na-ngu	'move towards addressee'
nàmu	motion towards	nàmu-ng	'move towards speaker'
nàhu	motion from	nàhu-ng	'move away from/go past'

(60)   Biak (Mofu 2005: 51)

     i-is-ne-m-pur
     3SG-LOX.V-VENT-BACK

     'He/She/It is moving towards my back.'

Kambera (Central Malayo-Polynesian) has four deictic verbs, one static locative-existential verb and three verbs of movement (Table 8). Note that there is no distal equivalent to *ningu*, nor does there appear to be a verb originating from demonstrative roots with the meaning of 'come to speaker'.

    Only two languages, Makassarese and Nivkh, are described as showing demonstrative verbs of placement, without movement, seen in Makassarese (61).

(61)   Makassarese (Jukes 2006: 197)

     ku=pa-anjoreng=i   *anu=nna*   *ri*   *balla'=na*
     1SG=CAUS-DST.LOC=3 INDEF=POSS.3 PREP house=POSS.3

     'I put his stuff there in his house.'

Central Alaskan Yupik, was mentioned previously in § 3.1 as having some verbs which derive from demonstratives, and two verbs of location were mentioned. There are additional verbs related to placement and movement, derived from demonstrative stems, shown in Table 9, and an example seen in example (62).

(62)   Central Alaskan Yupik (Miyaoka 2012: 379)

     uk-a-var-tuq
     VENT-EXPND-MOVE.FORWARD-IND.3SG

     'He is moving this way.'

Table 9. Central Alaskan Yupik demonstrative verbs (Miyaoka 2012)

-(q)vaẏ-	'to move/put forward'
(t)muẏc- and +viẏc-	'to go to/toward'
xuiẏ- ∼ +kuiẏ-	'to go through, by way of'
ŋu-	'to be'
n(ɨ)t- (or +m(ɨ)t-)	'to be at'
ŋiẏ-	'to move over/through'

In their semantics, demonstrative verbs of movement are close to non-demonstrative motion verbs with meanings of 'come' and 'go'; this comparison is rather problematic, however, as there is no current consensus on whether any universality exists for basic meanings of 'come' and 'go' (cf. Wilkins & Hill 1995).

Nakazawa (2007) for instance defines verbs such as 'come' and 'go' as 'MOVE TOWARD a point which is the location of the speaker' and 'MOVE TOWARD a point which is not the location of the speaker', respectively. Such definitions already point towards spatial deixis, so distinguishing 'come' from 'come here' on a cross-linguistic level may not even be possible. Types of variation such as the addressee effect (shifting the ground or deictic center to the addressee) are not universal. Further research is required on whether any cross-linguistic generalizations could be made to distinguish demonstrative verbs of movement from other basic motion verbs.

Aklanon was mentioned at the beginning of this section as having demonstrative verbs of motion with deictic direction. In the related language Cebuano, in contrast, despite superficial similarity, verbs appear to have generalized the meaning to a large extent, and no longer retain an inherent location. It is fairly common to use adverbial demonstratives immediately after the verb, e.g. *ari diri* 'come here', or *adto didto* 'go there'. Furthermore, in some dialects, *(ng)adto* has actually generalized to the point that it can mean any direction, including towards the speaker, e.g. *moadto ka diri* 'go here' instead of *moari ka diri* 'come here'. Cebuano thus does not have demonstrative verbs of motion, synchronically.

Although more research is needed in this area, we nonetheless present languages we are aware of with demonstrative verbs of this type, with the caveat that some languages may end up being like Cebuano, having generalized and grammaticalized away from the demonstrative meaning.

3.4   Minor classes of demonstrative verbs

Minor classes of demonstrative verbs, which are attested only in a few languages, include identification (§ 3.4.1), dimension (§ 3.4.2), and speech (§ 3.4.3).

3.4.1   Identification demonstrative verbs

Identification demonstrative verbs are used to identify a referent in the speech situation and can be conventionally translated as 'be this/that one'. The prototypical use of such is when the predicate is not a property but rather an entity, expressed with a spatial deictic in an equational predication. Verbal demonstratives of identification are rare, occuring in only three languages in the database: Biak, Ju|'hoan (Kxa), and Makalero; they are also found more marginally in Kokota (Oceanic). Despite the rarity, these lexical items do nevertheless behave as verbs.

   The following examples (63) and (64) demonstrate the use of identification demonstrative verbs as main predicators focusing attention on a referent in the immediate situation.

(63)   Makalero (Huber 2011: 184)

   Dotor ini leu ere=ni   ere'
   doctor 1PE call PRX.DEM=CTR **IDT.V.PRX**

   'The doctor that called us is this one.'

(64)   Biak (van den Heuvel 2006: 313)

   Piet, aw-s-i-yás-ya?
   Piet, **2SG-PRED-SPC-UP-MD**?

   'Piet, are you the one (lit.: that one) up there?'

Makalero (Timor-Kisar) shows a series of identification demonstrative verbs which are derived regularly from adnominal demonstratives by means of adding a word-final glottal stop, e.g. *ere* 'this' (near speaker), *ere'* 'be this' (near speaker).

(65)   Makalero (Huber 2011: 184)

*Lapis ere=ni   ani-isi'   ei-isi'=ini   **umere'***
pencil PRX.DEM=CTR 1SG-belong 2SG-belong=CTR **IDT.V.DST**

'This pencil is mine, yours is that one.'

Biak has two types of demonstrative verbs, one for locative-existential constructions mentioned previously, and a second formed from pronouns, used for identification.

(66)   Biak (van den Heuvel 2006: 382)

*i-ne   ido, nk-ór   ve vrim=ya   **is-i-ne***
3SG.SPC-PRX THM 1PE-call as tuber=3SG.SPC **3SG.PRED-IDNT-PRX**

'As for this, what we call *vrim* is this here.'

(67)   Biak (Mofu 2005: 69)

*Roi   be-fandun kaku-ya   **i-so-ine***
thing REL-need   indeed-DET.SG **3SG-IDNT-PRX.SG**

'The thing that you really need is this.'

Ju|'hoan (and to a lesser extent other Ju varieties) shows similar types of verbal demonstratives of identification.

(68)   Ju|'hoan (Dickens 2005: 49)

*jù   **hè***
person.1 **PRX 1\3**

'This is a person.'

(69) |'U (Lionnet 2014: 190)

*me n|ee ti **e***
1SG head IPFV **PRX**

'This is my head.'

However, the most frequent use of demonstrative identification verbs does not appear to be that of a main predicate. This appears to be the case in both Ju|'hoan as well as Makalero at least; whether identification demonstrative verbs have other uses in Biak remains unclear. In Ju|'hoan, verbal demonstratives appear to be most commonly used as adnominal modifiers in a relative clause construction; note that Ju|'hoan does not have distinct exophoric adnominal demonstratives.

(70) Ju|'hoan (Pratchett 2017: 160)

tjù=à **kè** *g|àöh*
house.3=REL PRX.3 strong

'This house is strong.' (lit. the house that is this one is strong)

(71) Ju|'hoan (Pratchett 2017: 77)

!'ú=à **kè** *ó !'u jäqn*
bone.3=REL **PRX.3** COP bone.3 nice

'This bone is a nice bone.' (lit. the bone that is this one is a nice bone)

In Makalero, the most frequent use of the identification verbs is not exophoric, but rather as an argument, to recapitulate an object mentioned in an earlier clause (Huber 2011).

(72) Makalero (Huber 2011: 185)

Meestri sa'a kerek uatu ki=atanana ma'u ere=si
teacher thing write day ATTR=first come PROX.DEM=LNK
  meestri ue-kerek-ini=ni taure-fani' ani
  teacher LOX.V.ADDR:RED-write-do:BD=LNK which:RED-be.like 1SG
  uere' *me'e mi-kerek*
  IDT.V.ADDR able along:RED-write

'What the teacher wrote down, (even) on the first day, I was able to copy that.'

Kokota, the remaining language to be mentioned here, shows structural parallels in having an existential verb *au* combined with demonstrative enclitics to

indicate identification.[10] This construction is more commonly used, however, as a single-word subordinating clause, e.g. *t-au-ao* 'that which is this' and *t-au-are* 'that which are those'.

Clausal demonstratives in Kokota function both as modifiers (73) as well as arguments (74).

(73) Kokota (Palmer 2009: 70)

> *ḡ-a*   *la*   *hod-i*   *gai*   *kala-na*   *gazu*
> GENR-1.SBJ   go   take-TR   1PE   leaf-POSS.3SG   wood
>   **_t-au-na_**
>   **SUBORD-exist-PRX.SG**

'We take the leaves of the tree which is this one.'

(74) Kokota (Palmer 2009: 71)

> *ara-hi*   *a-ti-ke*   *fufunu-di*   *bo*   **_t-au-de_**
> 1SG-EMPH   1.SBJ-NEG-PFV   begin-3PL.OBJ   CTR   **SUBORD-exist-PRX.PL**

'I didn't start these (arguments) (lit: the ones which are these).'

The fact that there are only several languages with identification demonstrative verbs can be explained by the strong tendency to express the relation of identity by non-verbal predicators, which were already mentioned in connection with locative-existential demonstrative verbs.

Our database includes 40 languages with non-verbal predicators used in a similar fashion to identification verbs. In general, non-verbal demonstrative identifiers occur more frequently in equational predicates to identify or present a referent; they also occur as independent sentences by themselves, or function adverbially in verbal clauses. As non-verbal elements they do not usually allow for the morphological marking of tense, aspect, or modality; however, functioning as predicates, they do show agreement marking. Identification demonstrative verbs on the other hand do not seem to be used presentatively, occur less frequently in equational predicates, and do not show adverbial usage in verbal predicates.

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[10] Note that demonstrative enclitics appear to be possible to cliticize to any verb, not just *au*, and is the primary reason that Kokota is only a marginal example.

3.4.2   Dimensional demonstrative verbs

Dimensional demonstrative verbs refer to a physical property of the referent, such as size, height, or amount.

Demonstrative verbs referring to the size of a referent occur in four languages in our database, Nivkh, Reta, Hidatsa (Siouan), and Mapuche (Araucanian), and can be translated as 'be this size' or 'be that size'.

(75)   Nivkh (East Sakhalin) (Gruzdeva 2020: 43)

> *cʰi   tʰana+gi+xiz-d=ara?   **Tuna-d-lu?***
> you:SG   what.size+footwear+wear-IND-INTERR   **SZ.V.PRX-IND-INTERR**
>
>   ***Tuna-d-lu?***
>   **SZ.V.PRX-IND-INTERR**

'What size is your footwear? Like this? [Or] like this?'

(76)   Reta (Willemsen 2021: 178)

> *geng   'anga   **po-vaang***
> 3SG.ACC   DIST   **BELOW-SIZE.V**

'He there, he's as large as that down yonder.'

(77)   Hidatsa (Park 2012: 405)

> *múá   **hirihgá-ahgá-c***
> fish   **SZ.V.PRX-RDPL-DECL**

'The fish was about this size.'

(78)   Mapuche (Smeets 2008: 321)

> *iñché ñi   tasa eymi mi   tasa **fante-n-üy***
> 1SG   POSS.1SG cup 2SG POSS.2SG cup **AMT.V.PRX-VRBLZ-IND.3**

'My cup is as big as your cup here.'

Demonstrative verbs of amount refer to the amount of a referent, translated as 'be this much/many' or 'be that much/many'. They occur as distinct forms in only two languages, Hidatsa and Reta (79–80); in Mapuche, size and amount are expressed by the same verb (cf. 78 and 81).

(79) Hidatsa (Park 2012: 405)

> *mii-siʔawí-ʔa-c*
> **1.STAT-AMT.V.DST-PL-DECL**
>
> 'There are that many of us.'

(80) Hidatsa (Park 2012: 445)

> *ii-siʔawí-ʔa-c*
> **INST-AMT.V.DST-PL-DECL**
>
> 'There are that many!' (speaker indicating the number by using his fingers)

(81) Mapuche (Smeets 2008: 69)

> *fante-n-mu*   *ngilla-n*
> **AMT.V-VRBLZ-INST** buy-IND.1SG
>
> 'I bought [it] for this much.'

Demonstrative verbs of height are known to occur in one language, Reta. No examples were given in Willemsen (2021).

3.4.3   Speech demonstrative verbs

Demonstrative verbs of speech occur in two languages, Crow and Motuna (Bougainville). Crow has two demonstrative verbs of speech, freely translated as 'say this' or 'say that'. Demonstrative verbs of speech in Crow are primarily used in discourse structuring, discussed further in § 4.

(82) Crow (Graczyk 2007: 87)

> *íiwahkoo-shii-ak* *hinne póopahta-chia-sh kuu-ák*
> **that-say-ss**   this owl-white-DET   give-ss
>
> 'That is what he said, this White Owl, and he gave it to him.'

Motuna is described as having two demonstrative verbs of speech, but it is unclear whether these verbs can be used in exophoric function. More on Motuna is discussed in § 4.

3.5   Problematic cases

There is at least one case where it is difficult to determine how to categorize the semantics of the demonstrative verb. In Puyuma, demonstrative verbs appear to be ambiguous between location (83), quality (84), and process (85).

(83)   Puyuma (Teng 2008: 109)

> ***kaDu=la***   *na*   *palakuan*   *na*   *ne-nem-a*
> **LOX.V.DST=PFV** DEF.NOM men's.house DEF.NOM RDP-six-NPRS
>
> 'There are six men's houses already.'

(84)   Puyuma (Teng 2008: 109)

> *an* ***k<em>aDu***   *i,*   *ta=sabung-ay=mu*
> if   **<INTR>LOX.V.DST** TOP, 1PI.GEN=compensate-TR2=2PL.NOM
>
> 'If that is the case, we would compensate you.'

(85)   Puyuma (Teng 2008: 109)

> *an* ***k<em>aDini***   *pa-ra-ragan=ta=Diyan*   *i,*
> if   **<INTR>LOX.V.PRX** CAUS-RDP-erect=1PI.NOM=IPFV   TOP
>
> > *puar=ta*   *i,*   *ka-ra-ruwa Da*   *sa-buLan maku*
> > slow=1PI.NOM TOP ka-RDP-can ID.OBL one-moon tag
>
> 'If we build like this, we are slow, maybe it takes a month.'

4   Demonstrative verbs in discourse deictic function

Demonstratives carrying a discourse deictic function do not refer to a location or entity, but rather to a segment of discourse adjacent to the speech act. They help the listener orient themself in the ongoing discourse by linking the clause in which they are embedded to the propositions to which they refer (Diessel 1999; Levinson 1983: 83).

   Discourse deictic functions are very common with demonstrative verbs, and demonstrative verbs also frequently either function as or even grammaticalize into sentence connectives. Different semantic groups of demonstrative verbs are typically responsible for certain discourse deictic functions, but there can

be language-specific differences, particularly when demonstrative verbs have multiple meanings. Additionally, marking of direct speech shows considerable diversity in employing different types of demonstrative verbs.

In Unua (Oceanic), proximal processive-qualitative demonstrative verbs are used cataphorically for discourse structuring, signalling that there is more to come.

(86)   Unua (Pearce 2015: 568)

    jirvaren nge i-vra   **i-mre-n:**
    story   PRX 3SG-go **3SG-PQ.V-PRX**

    'This story goes like this:'

(87)   Unua (Pearce 2015: 3)

    nebo nga   m-i-mo-rav-i   **i-mre-n:**
    song COMP REL-3SG-CONT-take-TR **3SG-PQ.V-PRX**

    'The song that she was singing went like this:'

Processive-qualitative demonstrative verbs can also be used to summarize descriptions of actions or events, most commonly in the addressee-proximal form or the distal form, as in Vaeakau-Taumako in (88).

(88)   Vaeakau-Taumako (Næss & Hovdhaugen 2011: 128)

    Ha-hano   na   a   langi e   tolu   lhatu=no hangaota
    RDP-go.SG DEM.MD COLL day   GENR three 3PL=IPVF fish

      *ai   **phe-nā**   na*
      OBL **PQ.V-MED** DEM.MED

    'Then for three days they fished like that (= in a manner previously described).'

Identification demonstrative verbs in Makalero can also be used in discourse, to indicate both the beginning as well as the end of a block of text. In contrast to Unua, however, Makalero appears to use the addressee-proximal form for cataphoric reference, and speaker-proximal form for anaphoric reference.

(89)   Makalero (Huber 2011: 127)

> [...] *ki-rata=ni*   *hai*   *hau*   **uere'**
> [...] 3:POSS-tell=CTR NSIT all   **IDT.V.ADDR**

> 'the story is that (one).'

(90)   Makalero (Huber 2011: 275)

> *Rata*   *ki-hau*   *hai'=ini*   **ere'**
> story   3:POSS-all   finished=CTR   **IDT.V.PRX**

> 'This is the end of the story.'

In Icari and Sanzhi Dargwa, locative-existential verbs may be used to express a type of thetic presentational, introducing a referent into the discourse. It is uncertain how spatially marked distance correlates with this use, however.

(91)   Dargwa (Icari) (Sumbatova & Mutalov 2003: 147)

> **le=w**   *nᵢša-la*   *ša=w*   *ca*   *palluq'al*
> **LOX.V=M**   we-GEN   village:INESS=M   one   fortune-teller

> 'There is a fortune-teller in our village.'

(92)   Dargwa (Sanzhi) (Forker 2020: 291)

> *hextːu-b*   *hin-na*   *k'arant'*   **k'e-b=de**
> there.UP-NEUT   water-GEN   spring   **LOX.V.UP-NEUT=PST**

> 'There was a spring up there.'

(93)   Dargwa (Sanzhi) (Forker 2020: 315)

> *Napisat*   *ka-r-ils-na-l-le-b*
> Napisat   DOWN-F-sleep-PTCP.LOC-OBL-LOC-N

>   *ka-r-ils-na-b*   **te-b=de**   *maˤlʔuˤn*
>   DOWN-F-sleep-PTCP.LOC-N   **LOX.V.DST-NEUT=PST**   snake

> 'Where Napisat was sleeping there was a snake.'

According to Daguman (2004), demonstrative verbs of motion in Northern Subanen signal a transition from one part of the discourse to the next.

(94)   Northern Subanen (Daguman 2004: 224)

    nandaw **ditu=ita**   *sə* *g=ʔuna* *g=bahin*
    now   **DST.LOC.ADV=1PI.ABS** OBL SCM=first SCM=part

    'Now let's *ditu* (lit:go there) to the first part [...]'

Demonstrative verbs of speech in Crow verbs refer to chunks of discourse occurring either previously or immediately after.

(95)   Crow (Graczyk 2007: 87)

    íiwahkoo-shii-ak *hinne póopahta-chia-sh kuu-ák*
    that-say-SS   this owl-white-DET   give-SS

    'That is what he said, this White Owl, and he gave it to him.'

(96)   Crow (Graczyk 2007: 87)

    John kuss **hilía-shee-k** *sáapa-ss da-luú-o-?*
    John GOAL **this-say-DECL** what-GOAL 2A-come.PL-PL-INTERR

    'John said this to them, "why did you come?" ' (Jn 3:7)

Motuna is described as having two demonstrative verbs of speech, *tiwo=tiik-* 'to say that way' and *tiwo=tiih-* 'to say that way to' (Onishi 1994). There does not appear to be a spatial distinction, with only the distal form possible. Examples are limited, but they suggest primarily being used anaphorically, for direct speech preceding the demonstrative verb.[11]

(97)   Motuna (Onishi 1994: 282)

    ["..."]   **tiwo=tiih-ku**   *roki*
    ["..."]   **say.to.that.way.3O.3A-GEN.DS** just
      mihw-or-u-ng
      move.vigorously-MD.3SG-RMPST-M

    'After he said to it (the leaf) that way, it just moved vigorously.'

---

[11] A reviewer rightly questions the inclusion of Motuna, as *tiwo* is simply a manner adverb, and *tiik* is translated as the verb to 'say'. Motuna does not appear to have specific morphology distinct to these specific constructions, and the roots are underived. We do not have enough data to conclusively decide whether Motuna should really be included or not. We tentatively include it as a marginal instance of demonstrative verbs, pending further evidence.

Demonstrative verbs more generally are also often used in connection with direct speech, either as the main predicator, or with another verb such as 'say' or 'do'. Deictic expressions of manner, quality, and degree are well attested as sources of direct speech, or *quotative*, markers (cf. Guérin 2015; Güldemann 2008; König 2015; König & Umbach 2018). Part of speech does not appear particularly relevant to the use of such forms to mark direct speech; both adverbial as well as verbal examples are easily found.

Güldemann mentions in Bengali for instance, that the phrase *emon kora* 'do thus' is employed for direct speech (Güldemann 2008: 321).

(98)   Bengali (Wurff 1996; cited in Güldemann 2008: 321)

> *Se emon korlo: a re baba eta ki*
> he thus did   oh, dear father, what is this?

> 'He was like: "Oh my, what is this?"'

Parallel constructions are found with processive-qualitative demonstrative verbs. In Vaeakau-Taumako, the distal form of the demonstrative verb *phe-* is used for introducing direct speech.

(99)   Vaeakau-Taumako (Næss & Hovdhaugen 2011: 128)

> *Ko au na, ko-i **phe-lā** ange po e: a*
> INCP come DEM.MD INCP-3SG **PQ.V-DST** go.along COMP hey COLL

>   *kaikai ko=no tuna-a napo ke a:*
>   food 2SG=IPFV cook-TR DEM.MD COMP HOR

> 'He came and (said): "The food you are cooking, what is it for?"'

In Wala, the verb *'uri 'e* '(be/do) like this' is predominantly used in combination with a speech act verb (Lovegren et al. 2015: 160), cf (100). In rare instances, it also occurs as a main verb reporting the contents of a book, song, or inscription (101).

(100)   Wala (Lovegren et al. 2015: 160)

> *ma daulu ka rii **'uri 'e** "Te alo-e 'are!"*
> and 3PC   SEQ shout **PQ.V.PROX** one spirit-INDEF.PERS thing

> 'And they shouted, saying, "It is a spirit!"' (Mt 14:26)

(101)   Wala (Lovegren et al. 2015: 160)

> *ma gera ka nu-li-a   te   fe   nuu fa'alu la 'e*
> and 3PL SEQ sing-TR-3.OBJ INDEF.SPC CLF song be.new DST 3SG
>
> ***'uri 'e***   *"'o totolia sake-na-la   buka"*
> **PQ.V.PROX** 2SG be.able take-NMLZ-3.PERS book

'And they sung a new song, saying, "you can take the book" ' (Rv 5:9)

Processive and qualitative verbs are not the only type of demonstrative verb to function as markers of direct speech. In at least one instance, locative verbs show similar functions. The anaphoric locative verb *koolá* in Crow is described as being used to introduce direct speech. It is interesting to note that the locative verb appears to be preferred for marking direct speech in Crow (102), despite the existence of both processive-qualitative verbs as well as demonstrative verbs of speech.[12]

(102)   Crow (Graczyk 2007: 85)

> *Bill huua-sh*   ***koolá-(a)k***   *'dáa-h óolapi-h' he-k*
> Bill say.PL-DET **ANPH.LOX.V-SS** go-IMP find-IMP say-DECL

'Bill it was "go find it", he said.'

No information is available on whether other languages can use demonstrative locative-existential verbs as quotatives, or whether other semantic types such as identification or movement can be used to mark direct speech. Buchstaller & van Alphen (2012) do mention that apart from some Germanic languages (English use of *go* as a quotative is widely described in the literature), motion verbs are only rarely attested source constructions for quotatives, and the only language they were aware of with clear evidence of a motion verb grammaticalizing into a quotative outside of Indo-European is Dongolawi. This suggests that movement demonstrative verbs at least may not easily carry this function.

5   Demonstrative verbs in non-deictic function

Non-deictic functions for demonstrative verbs include tracking (anaphoric and cataphoric), expressive, and recognitional. Very little is known about

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[12] Despite the non-idiomatic translation in English, we chose to keep this example, as we could find no other examples of *koolá* in the original source.

such functions for demonstrative verbs in any language. Few languages with demonstrative verbs have enough texts or descriptions to draw conclusions on tracking use for instance, and almost no grammatical description investigates recognitional or expressive uses.

Sporadic limited evidence does give hints that demonstrative verbs may be used in an anaphoric sense, keeping track of preceding discourse events, though in general non-textual anaphoric and cataphoric tracking reference, including events, actions, or locations, is rare. In the following example in Hidatsa, for instance, the demonstrative verb of amount directly refers to the amount mentioned by the addressee immediately before.

(103)   Hidatsa (Park 2012: 478)

> *íiwasi   dáàwiˀ?*   *– gihxú-haa-biragá-c*
> price   how.much-INTERR   – five-ADV-ten-DECL
> **– garu-siˀawí-hdaa?**
> **– LIM-AMT.V.DST-LIM**

'How much did it cost? – It was fifty. – Only that much!?'

A similar function is seen in Eibela, although (104) is somewhat open to interpretation whether it should be anaphoric or exophoric.

(104)   Eibela (Aiton 2016: 153)

> *A: gɛː haːnɛ wɛɸɛːniː   aːneː=jaː?*   *B: ɛː*
> A: 2SG water fetch:PURP go:PST=INTERR.NPRES? B: yes
> **woːgaː**
> **PQ.V.ANPH꞉PST**

'A: Did you fetch the water? B: Yes, I did that.'

When testing possible uses for such functions with native speakers of Cebuano and Tagalog, we discovered that Cebuano does not include overt deictic reference in its verbs of movement. Tagalog, however, does seem to be able to use demonstrative verbs of movement even in an anaphoric sense. In Example (105), the destination of 'go there' is coreferential with the location mentioned in the immediately preceding sentence.

(105) Tagalog (Stan Pineda, p.c.)

> *nawala ng   kasintahan ko   pitaka niya   sa   hotel*
> lost   INDR girlfriend   1SG.INDR purse 3SG.INDR OBL hotel
>
> *kagabi.   **p<um>a-roon**   siya   para hanapin*
> last.night. **<AF>-CAUS-DST.LOC** 3SG.DIR for search

'My girlfriend lost her purse in a hotel last night. She went there to look for it.'

For one language, Nivkh, it is overtly stated that demonstrative verbs are not used for tracking (Gruzdeva 2020). Note that this does not include discourse deictic reference.

A second non-deictic function of demonstratives is called expressive, also known as empathetic, emotional, or affective. Expressive use of demonstratives serves to express speaker attitude and psychological proximity. Expressive use of demonstrative verbs is rarely described, but some evidence is known. In Nivkh for instance, the proximal qualitative verb *təmra-* (East Sakhalin), *toʁa-* (Amur) is used expressively.

(106) Nivkh (Amur) (Gruzdeva 2020: 42)

> ***toʁa-ɹ***   *ha-re*   *u:məv+ɲivx*
> **PQ.V.PROX-NMLZ**   PQ.V.DST-EVID:DIR   be.brave+man
>
> *toŋgur*   *kins-tox*   *va-řa-ɹ*
> MANNER.PROX:3SG   devil-DAT   fight-ITER:3SG-IND
>
> *ha-re.*
> PQ.V.DST-EVID:DIR

'Such (by quality) a brave man fights with a devil in this way.'

Moyse-Faurie (2019: 147) mentions that verbal processive-qualitative demonstratives in Polynesian can occur as nominal determiners, which "expresses the surprise of the speaker".

(107) East Uvean (Moyse-Faurie 2019: 148)

> *Ko   taku   hoki sio ki te   me'a **fēnei***
> PRED POSS.1SG just see to SPC thing **PQ.V.PROX**

'It is the first time I have seen such a thing.'

In Abui, medial qualitative verbs combine with medial locative-existential verbs to express disapproval of a situation (108). Demonstratives of all types in Abui show extremely complex expressive functions, including additional uses such as modality and evidentiality (cf. Kratochvíl 2007: 107).

(108)   Abui (Kratochvíl 2007: 373)

> ***no-ma***   ***wa***   *naha*
> **1SG.REC–LOX.V.PRX**   **PQ.MD.CNT**   NEG
>
> 'I do not want it so.'

Similar functions have also been described for other Alor-Pantar languages. Steinhauer for instance mentions that in Blagar, demonstrative locative-existential verbs not only have different sets depending on visibility and duration, but that they can also indicate evidentiality and feelings. "They [the *ʔaʔa* series of demonstrative verbs] indicate sure knowledge by the speaker about the existence of the event" and the *ʔaʔe* series of demonstrative verbs can express "indignation and/or amazement" (Steinhauer 1991). In Reta, two demonstrative verbs indicating location and existence, *gi'e* 'be here' and *a'e* 'be there', are used to express epistemic modality, with the choice between them based on the relevance of the propositional content with regard to the respective interlocutors (Willemsen 2021).

   The final non-deictic function looked at here is recognitional. Recognitional use of demonstratives does not rely on the surrounding context of a demonstrative the way exophoric and discourse-deictic uses do; rather, it relies on shared knowledge between the speaker and the addressee. Recognitional use of demonstratives has had little discussion in the literature, with notable exceptions such as Diessel (1999) and Himmelmann (1996). Diessel (1999) furthermore states that recognitional demonstratives are restricted to adnominal environments. Although no clear example of recognitional use has been found for demonstrative verbs, the data in the grammatical descriptions has also been too limited to draw any firm conclusions. More data is desperately needed on whether demonstrative verbs truly do not show any recognitional functions.

6   Conclusion

This article has discussed the grammatical and semantic features of demonstrative verbs, and their uses in different pragmatic contexts. It was confirmed that

within a general class of demonstratives, it is possible to postulate a separate category of demonstrative verbs, with its own distinct semantic and morphosyntactic properties. We have shown that demonstrative verbs can be classified into three major semantic groups of locative-existential, processive-qualitative and movement and placement verbs, as a well as several minor types. Demonstrative verbs can be used in various pragmatic functions, though there is still a lot of questions to be answered in this area.

The mismatch between the morphosyntactic category of demonstrative verbs and their derived adverbial function is a particularly interesting area worthy of further study, not only for demonstratives specifically, but also fitting in a larger discussion in typologically-oriented research. Various form-function combinations of verb and adverb were discussed throughout this article. Verbal affixes can be used directly on some adverbial roots in languages like Northern Subanen; conversely, in languages like Urarina and Abui, demonstrative verbs are nearly always used in adverbial function rather than predicative. And in many languages, it is not even always possible to determine the lexical category of a given root. Moyse-Faurie (2019: 144) comments that demonstrative verbs in Polynesian languages are "[...] always polyfunctional, and can occur as verbal predicates, adverbs, connectives, quotative and optative verbal markers, and nominal modifiers". While the general connection between adverb and verb is abundantly clear when it comes to demonstrative verbs, the question on how to handle polyfunctional lexical roots when looking at lexical classes cross-linguistically remains a difficult question to grapple.

The study expands considerably on earlier investigations of demonstrative verbs, both in terms of the number of languages, as well as in terms of the scope covered by the analysis. We must admit that gaps in the data prevent conclusive evidence on a number of different topics, however. Due to practical considerations, an investigation into details of the spatial distinctions was not possible, and would be a fruitful area for future research.

We also note that nearly half of the languages in the study come from Austronesian languages. Although we did not conduct any statistical analysis, it is nonetheless highly unlikely to be a coincidence that so many languages with demonstrative verbs are Austronesian. Killian (2022a) notes a similar unexpectedly high frequency with adpositional demonstratives. One can only speculate that it is perhaps the part-of-speech flexibility many Austronesian languages show, combined with the rich collection of constructions devoted to space and direction, that has led to such a phenomenon.

Finally, we hope that the research presented here will spur on more detailed descriptive research in individual languages.

Acknowledgments

Abbreviations

1	first person
2	second person
3	third person
ABS	absolutive
ABSENT	absent
ACC	accusative
ADDR	addressee-proximal
AF	actor focus
AG	agent
ALL	allative
AMT.V	demonstrative verb of amount
AN	animate
APPL	applicative
APPROX	approximative
ART	article
ASC	associative
ASSER	assertive
ATTR	attributive
AV	actor voice
BACK	back
BD	bound form
CAUS	causative

CL	class
CLF	classifier
CLK	clockwise
CNT	continuative
COLL	collective
COMP	complementizer
CONCESS	concessive
COND	conditional
CONT	continuous
COP	copula
CSQ	consequantial
CTR	contrastive
CVB	converb
DAT	dative
DECL	declarative
DET	determiner
DIR	direct
DS	different subject
DST	distal
DYN	dynamic
EMPH	emphatic
ERG	ergative
EVID	evidential
EXPND	expander
FUT	future
GEN	genitive
GENR	general tense-aspect-mood marker
HAB	habitual
HOR	hortative
HRS	hearsay
I	irrealis
IDT.V	identification demonstrative verb
IMP	imperative
INCP	inceptive
IND	indicative
INDEF	indefinite
INDR	indirect
INESS	inessive
INST	instrumental
INTERR	interrogative
INTJ	interjection

INTR	intransitive
INTS	intensifier
IO	indirect object
IPFV	imperfective
ITER	iterative
ITIN	itinerary locative
LF	locative focus
LIM	limitive
LNK	linker
LOC	locative
LOCZR	localizer
LOX.V	demonstrative verb, locative-existential
M	masculine
MANNER	manner adverb
MD	medial
MIR	mirative
MV.V	demonstrative verb of movement
NEG	negation
NEUT	neuter
NFUT	non-future
NMLZ	nominalizer
NOM	nominative
NPRS	non-personal
NPRES	non-present
NSIT	new situation
NVR	non-veridical
OBJ	object
OBL	oblique
OF	object focus
PC	paucal
PE	plural exclusive
PERF	perfect
PERS	personal
PI	plural inclusive
PL	plural
POSS	possessive
PQ.V	demonstrative verb, processive-qualitative
PRED	predicative
PRX	proximal
PST	past
PTCP	participle

PURP	purposive
PUT.V	demonstrative verb of placement
R	realis
RDP	reduplication
REC	recipient
REFL	reflexive
REL	relativizer
RMPST	remote past
ROUTE	route
SBD	non-temporal subordinator
SBJ	subject
SCM	syntactic category for nominal
SEA	seawards
SEQ	sequential
SG	singular
SM	subject marker
SPC	specific
STAT	stative
SUBORD	subordinator
SZ.V	demonstrative verb of size
THM	theme
TOP	topic
TR	transitive
TRANS	event transition
TRF	transferred action
UP	higher elevation
VENT	ventive
VRBLZ	verbalizer

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The appendices "Appendix 1. Languages with demonstrative verbs" and "Appendix 2. Total language sample" are available at https://doi.org/10.61197/fjl.126939.

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