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Demonstrative determiners in crosslinguistic perspective

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ABSTRACT

This paper provides a cross-linguistic overview of adnominal demonstratives (i.e., demonstratives that accompany a noun), with a particular focus on their syntactic function. Drawing on data from a wide range of languages, the paper compares the morphosyntactic properties of adnominal demonstratives to those of demonstrative pronouns and adverbs, examines their position relative to other constituents in complex NPs, and explains how they develop into definite articles and clause linkers, which are often difficult to distinguish from true demonstratives. Taken together, the patterns described in this paper suggest that the syntactic functions of adnominal demonstratives vary along a continuum ranging from free pronouns adjoined to a noun to syntactic determiners integrated into a tightly organized NP.

KEYWORDS

demonstrative, determiner, noun phrase, grammaticalization, deixis

1. INTRODUCTION

This paper examines a particular structural pattern or construction consisting of a demonstrative and a noun (e.g., Engl. *this man*). There is general agreement that the demonstrative modifies the co-occurring noun semantically, but its syntactic function is debated. Traditionally,



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adnominal demonstratives have often been treated as adjectives (Bloomfield 1933, 203),¹ but more recent studies tend to analyze them as grammatical function words. In particular, Abney (1987) proposed that adnominal demonstratives are determiners projecting a determiner phrase (DP) (Longobardi 1994), though later studies have argued that adnominal demonstratives can also function as specifiers of a DP, depending on the language (Giusti 1997; Cinque 2005; Alexiadou, Haegeman & Stavrou 2007). There is a growing body of research showing that the morphosyntactic properties of adnominal demonstratives vary across languages, but the nature and extent of this variation remain a matter of ongoing debate in both generative (Shlonsky 2004; Roehrs 2010; Blümel & Holler 2021) and functional frameworks (Himmelmann 1997; Sommerer 2018; Diessel 2023b).

Related to this debate, the current study provides a cross-linguistic overview of adnominal demonstratives, with a particular focus on their syntactic functions. Drawing on data from a wide range of languages, the paper shows that, while adnominal demonstratives consistently serve as semantic noun modifiers, their syntactic functions vary along a continuum from appositional structures with free demonstrative pronouns to tightly organized NPs where the demonstrative functions as a determiner or specifier.

The analysis builds on general assumptions of linguistic typology (Croft 2003) and usage-based linguistics (Bybee 2010; see also Diessel 2015, 2019, 2023a). In this approach, syntactic analysis concentrates on surface forms and avoids positing empty categories or syntactic derivations, as in many other theoretical approaches (e.g., generative grammar).

2. DEFINITION OF KEY TERMS

Demonstratives are deictic expressions that focus the interlocutors' attention on a particular referent in the surrounding situation or discourse context. Traditionally, demonstratives are often assigned to particular word classes (e.g., pronoun, adjective, determiner). However, since their word-class properties vary across languages, they are excluded from the definition of demonstrative in this paper. Instead, I use two semanto-pragmatic properties to define demonstratives as a cross-linguistic category or "comparative concept" (Haspelmath 2010). First, demonstratives are deictic expressions that are interpreted within a particular frame of reference (Diessel 2014). Second, demonstratives are used to create and manipulate joint attention (Diessel 2006). Note that this definition includes not only demonstrative pronouns and determiners (e.g., this and that), but also deictic adverbs such as English here and there (Himmelmann 1997; Diessel 1999; Dixon 2003).

The term determiner has two different uses in this paper: (i) a semantic use, referring to certain types of function words that specify the reference of a co-occurring noun, and (ii) a syntactic use, referring to a structural position in a noun phrase filled by a particular class of function words. Crucially, the semantic and syntactic uses of the term do not always align. All languages have adnominal demonstratives that act as semantic determiners, but in many languages, these elements do not function as syntactic determiners.

¹Bloomfield (1933, 203) characterized demonstratives as one of two sub-classes of "limiting adjectives", which he called "determiners".

In what follows, we will consider adnominal demonstratives from a cross-linguistic perspective. We begin with a brief discussion of their meaning and pragmatic functions, and then characterize their morphosyntactic properties.

3. THE MEANING AND PRAGMATIC USE OF DEMONSTRATIVES

In contrast to many other closed-class function words (e.g., conjunctions, auxiliaries, modal verbs), demonstratives seem to exist in all languages (Himmelmann 1997; Diessel 1999; Dixon 2003; Levinson 2018). They constitute a universal class of deictics that serve to coordinate the interlocutors' joint focus of attention (Diessel 2006; Stukenbrock 2015; Jara-Ettinger & Rubio-Fernandez 2022). Joint attention is a fundamental function of social interaction, in which two (or more) agents cooperate to accomplish a common goal, i.e., to share their attention (Bruner 1983; Tomasello et al. 2005).

Two main uses of demonstratives can be distinguished (depending on the type of referent): (i) the exophoric use, in which demonstratives refer to entities in the surrounding speech situation, and (ii) the endophoric use, in which demonstratives refer to linguistic elements in the surrounding discourse (Halliday & Hasan 1976; see also Diessel 1999, 93–114).

In the exophoric use, demonstratives are semantically contingent on a particular point of reference, which Bühler (1934) called the "origo". The origo is the center of a spatial coordinate system, or deictic frame of reference (see also Diessel 2012a), which is typically determined by the speaker's body and location (cf. Fillmore 1997; Diessel 2012b). In the unmarked case, demonstratives serve to indicate the location of an object or person relative to the speaker's body at the time of the utterance, but the origo can be shifted to the addressee or another person or fictive observer (Bühler 1934; Stukenbrock 2015).

In the exophoric use, demonstratives are often combined with nonverbal means of deictic communication such as eye gaze, pointing, and body posture (Bühler 1934; Cooperrider 2016; Levinson 2018). Consistent with this use, demonstratives have been characterized as deictic pointing words for coordinating the interlocutors' joint focus of attention (Levinson 2004; Diessel 2006; Jara-Ettinger & Rubio-Fernandez 2022, 2024).

A key semantic feature is the distinction between proximal and distal deixis (Anderson & Keenan 1985; Diessel 2005a; Coventry et al. 2023). All languages have at least two demonstratives to distinguish between competing referents based on their location (Coventry et al. 2008) or psychological factors such as the referent's cognitive accessibility or emotional distance (Hanks 2009; Rocca, Tylén & Wallentin 2019; Peeters, Krahmer & Maes 2021). Some languages have more than two deictic terms, but the number of deictic contrasts is limited. Analyzing adnominal demonstratives of more than 200 languages, Diessel (2005a) found that more than 90 percent of all languages have two or three deictic terms (see also Diessel & Coventry 2020, who found similar proportions of two- and three-term systems in adverbial demonstratives).

Some languages have larger deictic systems (e.g., Asmat, Hausa, Koasati, Navajo, Quileute, Somali, Tlingit), encoding additional semantic features such as visibility (West Greenlandic, Halkomelem, Quileute, Tümpisa Shoshone, Ute, Epene Pedee, Khasi), elevation (Lahu, Tauya, Dyirbal, Galo Khasi, Muna, Hua), or direction (German, Burushaski, Bardi, Menya, Nungubuyu, Kiowa, Limbu) (Breunesse 2019; Forker 2020; Nintemann, Robbers & Hober 2020); and a few languages have adnominal demonstratives that are not contrastive (e.g., German, French, Kera,

Koyraboro Senni, Supyire) (Himmelmann 1997; Diessel 1999; Breunesse 2019). However, non-contrastive demonstratives can often be combined with other deictics when it is necessary to differentiate between two (or more) referents or locations (Vindenes 2017). In German, for example, adnominal demonstratives (i.e., stressed *dér/die/dás* or *dieser/diese/dieses*) are used together with *hier* 'here' and *da* 'there' (or *dort* 'there') to indicate a deictic contrast (see Himmelmann 1997, 53–62 for discussion).

(1) Germanic (Germanic)

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... dás Ding hier, nicht dás da. ... this/that thing here not this/that there '... this thing here, not that over there.'
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Like exophoric demonstratives, endophoric demonstratives serve to coordinate the language users' joint focus of attention, but they refer to elements of the unfolding discourse, rather than to entities in the surrounding situation. The demonstrative in (2), for example, directs the interlocutors' attention to one of the participants in the preceding sentence, and the demonstrative in (3) refers to a previous clause or proposition.

- (2) In January 2006 in New York, the patient of a well-known psychiatrist draws the face of a man that has been repeatedly appearing in her dreams. In more than one occasion *that man* has given her advice on her private life.
- (3) After every connection, switch on the machine and check melting fuses; in *this way*, defective devices can be detected.

In both uses (exophoric and endophoric), speakers' choice between proximal and distal demonstratives (as well as other referring terms, e.g., third-person pronouns), is influenced by psychological factors such as the accessibility of a referent (Ariel 2001) or the conceptualization of the speech situation (Diessel 2014). For example, referents that are already in the interlocutors' shared focus of attention are usually referenced by anaphoric pronouns, whereas new and unexpected referents are commonly established by demonstratives (Gundel, Hedberg & Zacharski 1993; Ariel 2001; Strauss 2002).

In addition to exophoric and endophoric uses, there are more abstract uses of (adnominal) demonstratives that are not really deictic or referential (Diessel 1999, 105–109; Rocca, Tylén & Wallentin 2019; Rocca & Wallentin 2020). In some of these uses, the demonstrative indicates that the intended referent is included in the shared knowledge of the interlocutors. In example (4), for instance, the noun phrase *that dog* does not refer to a specific dog in the surrounding situation or discourse but indicates that the speaker and listener are familiar with the referent due to shared experience (see Gundel, Hedberg & Zacharski 1993, 278 for discussion).

(4) I could not sleep last night. *That dog* (which we both know) was barking.

Himmelmann (1997) refers to this use of *that* as the "recognitional use", which is only one of several abstract uses where demonstratives do not involve a perceptually accessible referent (see Diessel & Coventry 2020 for a discussion of other abstract uses of demonstratives; see also Rocca, Tylén & Wallentin 2019; Rocca & Wallentin 2020).

4. THE SYNTACTIC USES AND MORPHOLOGICAL FORMS OF DEMONSTRATIVES

Having characterized the main semantic and pragmatic features of demonstratives, let us now turn to their morphosyntactic properties. In this paper, we are concerned with adnominal demonstratives (i.e., demonstratives that modify a noun); however, demonstratives are also often used in other contexts. The demonstrative in (5), for example, is an independent pronoun that occurs in the argument position of a verb.

(5) Please give me **that**.

In English, adnominal demonstratives have the same forms as demonstrative pronouns, but in many other languages they are morphologically distinct from pronouns. In French, for example, the demonstratives *ce* and *cette* are noun modifiers that are always used together with a noun, whereas *celui* and *celle* are independent pronouns that cannot accompany a noun. Note that both types of demonstratives are often combined with the deictic particles *-ci* and *-là*, which differentiate between referents based on their location (or psychological factors such as emotional distance). However, while *-ci* and *-là* are obligatory with *celui* and *celle* (unless *celui* and *celle* are modified by a relative clause), *ce* and *cette* can appear without a deictic clitic on the noun (Harris 1978).

(6) French (Romance) Donne-moi livre-là celui-ci ce et garde pour toi. give-me book-there and keep DEM-here for DEM vou 'Give me that book and keep this one for you.'

Like French, Japanese has adnominal demonstratives that are formally distinct from demonstrative pronouns. The demonstratives *kono* 'near speaker', *sono* 'near hearer', and *ano* 'away from both speaker and hearer' are always accompanied by a noun, whereas *kore*, *sore*, and *are* are used in the argument position of the verb without a noun (7).

(7)Japanese (Japanese; Kuno 1973, 27) ADNOMINAL DEMS PRONOMINAL DEMS kono Ν kore V 'near S' V 'near H' Ν sore sono Ν V 'away from both S and H' ano

If we look at demonstratives from a cross-linguistic perspective, we find that most languages use the same demonstratives as independent pronouns together with a noun. However, in about one-third of the world's languages, adnominal demonstratives are formally distinct from demonstrative pronouns (Diessel 2005b). There are three common differences.

First, there are languages in which the stems of adnominal demonstratives differ from those of independent pronouns (as in French and Japanese). Interestingly, in some of these languages, demonstrative pronouns are morphologically composed of a deictic particle and a third-person

pronoun. In Ambulas, for example, a member of the Sepik language family, demonstrative pronouns consist of two deictic roots, *kén* 'proximal' and *wan* 'distal', and a set of third-person pronouns (*dé* 'he', *lé* 'she', *bét* 'they.DU', and *de* 'they.PL'), indicating gender and number (8).

(8) Ambulas (Sepik; Wilson 1980, 56)

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PROXIMAL DISTAL
dé-kén dé-wan SG.MASC
lé-kén lé-wan SG.FEM
bét-kén bét-wan DUAL
de-kén de-wan PLURAL
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In other languages, demonstrative pronouns have the (syntactic) structure of a noun phrase, consisting of a demonstrative determiner and a classifier or generic noun, as in examples (9) and (10) from Nùng and Korean.

- (9) Nùng (Daic; Saul & Freiberger Wilson 1980, 61) [tú té] non ca mu'n. CL that sleep all night 'That one slept all night.'
- (10) Korean (Isolate; Sohn 1994, 295)

 [c il-ul] nwu-ka mak-keyss-ni
 that thing-ACC who-NOM block-FUT-Q
 'Who would be able to block that?'

Second, there are languages in which adnominal demonstratives differ from demonstrative pronouns in terms of their inflectional behavior. In Turkish, for example, demonstrative pronouns are inflected for number and case (11a), whereas adnominal demonstratives are uninflected particles that precede an inflected noun (11b).

- (11) Turkish (Turkic; Kornfilt 1997, 315, 312)
 - a. Ali **bun-u** unut-a-m1-yor.
 Ali this-ACC forget-MOOD-cannot-PROG
 'Ali is unable to forget this.'
 - b. bu gazete-yithis newspaper-ACC'this newspaper'

A parallel contrast between inflected demonstrative pronouns and uninflected adnominal demonstratives occurs in Lezgian and Burushaski (Diessel 1999). In Persian, demonstrative pronouns can take a plural suffix, but adnominal demonstratives are not marked for number (Mahootian 1997, 218–219), and in Tamil, demonstrative pronouns are combined with gendernumber suffixes that do not occur with adnominal demonstratives (Lehmann 1989). In general, if adnominal and pronominal demonstratives differ in terms of their inflectional properties,

adnominal demonstratives typically occur with fewer inflectional categories than demonstrative pronouns (Diessel 2005b).

Third, in some languages, adnominal demonstratives are bound morphemes attached to an adjacent noun or noun modifier (Diessel 1999, 23–25). For example, in Gude, adnominal demonstratives are suffixes of the head noun (12a–b), and in Lango, adnominal demonstratives are post-clitics that attach to the last free form of a noun phrase (13a–c). In both languages (Gude and Lango), demonstrative pronouns are free forms.

```
(12) Gude (Afro-Asiatic; Dryer 2005b, 358)

a. zəmə-na
food-this
'this food'
b. zəmə-ta
food-that.far
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'that food (far)'

(13) Lango (Nilotic; Noonan 1992, 155, 155, 156)

```
gwók=kì
а
      dog=DEM.PROX
      'this dog'
b.
      gwôkk à
                      dw\hat{n}=n\hat{i}
      dog
                      big.sg=DEM.PROX
                ATT
      'this big dog'
c.
      gwóggî
                à
                      dànà
                               àryɔ́=nì
      dog
                ATT
                      big.PL
                               two=DEM.PROX
      'these two big dogs'
```

If adnominal demonstratives are formally distinguished from demonstrative pronouns (as in the above examples), it is reasonable to assign adnominal and pronominal demonstratives to different word classes. But how do we analyze adnominal demonstratives that have the same forms as demonstrative pronouns? Are they (syntactic) determiners or pronouns? In order to answer this question, we need to consider their distributional properties.

5. THE ORDER OF DEMONSTRATIVE AND NOUN

In English, adnominal demonstratives precede the noun they modify, but in many other languages they are postposed to the semantically associated noun, as, for example, in Amele (14) and Chalcatongo Mixtec (15).

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(14) Amele (Madang; Roberts 1987, 89)
dana eu
man that
'that man'
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(15) Chalcatongo Mixtec (Oto-Manguean; Macaulay 1996, 113) ñažíū **žá?a** people this/these 'these people'

According to Dryer (2005b), adnominal demonstratives are less flexible with regard to their position than other noun modifiers; notably the position of attributive adjectives appears to be more variable than that of demonstratives (see also Krasnoukhova 2012, 189). However, a recent study shows that in about one-third of all languages, demonstratives can occur on both sides of the noun (Breunesse 2019). In Warao (16a–b), for example, demonstratives "may indistinctly precede or follow nouns within noun phrases" (Romero-Figeroa 1997, 51).

- (16) Warao (Isolate; Romero-Figeroa 1997, 51–52)
 - a. noboto-ma ta-tuma child-PL that-PL 'those children'
 - b. ta-tuma noboto-ma that-PL child-PL 'those children'

Another language, in which adnominal demonstratives are common both before and after nouns is Gulf Arabic (17a-b).

- (17) Gulf Arabic (Semitic; Holes 1990, 175)
 - a. il-qaraar haadha the-decision this 'this decision'
 - b. **haadha** l-qaraar this the-decision 'this decision'

In Tigré (18a-b), proximal demonstratives precede the associated noun, while distal demonstratives are postposed to the noun (18a-b). But this is an unusual pattern.

- (18) Tigré (Semitic; Dryer 2005b, 359)
 - a. **?əllan** ?amʕəlāt this.F.PL days 'these children'
 - b. ?əb la?awkād **lahay** at time that.M 'at that time'

In Canela-Krahô, pre- and postposed demonstratives serve different functions: demonstratives that follow the noun function as determiners or syntactic noun modifiers (19a), while demonstratives that precede a noun are pronouns of a non-verbal clause (19b).

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(19)
        Canela-Krahô (Ge-Kaingang; Popjes & Popjes 1986, 177)
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- υĩ ita a. wood this 'this wood'
- ita b. ρĩ wood this 'this is wood'

In Swahili, adnominal demonstratives follow the noun, but the same forms are also used as definite articles when they precede the noun (20a-b) (Givón 1984, 419).

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(20)
        Swahili (Bantoid; Givón 1984, 419)
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- **m**tóto a. vúle child that 'that child'
- vule mtóto b. child that 'the child'

A parallel contrast occurs in Ute (21a-b).

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(21)
        Ute (Uto-Aztecan; Givón 1984, 419)
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ta'wáci

that man 'that man' Ъ. ta'wáci 'n man that

'n

a.

'the man'

The position of adnominal demonstratives correlates with the position of attributive adjectives. As Dryer (1989a) showed, in languages with prenominal demonstratives, adjectives are common on both sides of the noun, but in languages with postnominal demonstratives, there is a very strong preference for the order noun-adjective, suggesting that the positional patterns of demonstratives and adjectives are not independent of each other (see also Dryer 1988).

What is more, when demonstratives are used together with other noun modifiers, there is a cross-linguistic tendency for the demonstrative to occur in greater distance to the noun than adjectives, genitives, and other attributes. As Greenberg (1966, 87) already noted, when both demonstratives and adjectives precede the noun, the order is "always" demonstrative-adjectivenoun (Universal 20), as for example in Mam (22) (or English).

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(22) Mam (Arauan; England 1983, 149)

aj mati:j k'uxb'il

DEM big tool

'that big tool'
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When both demonstrative and adjective follow the noun, they typically occur in reverse order (Hawkins 1983, 117–120), as in example (23) from Semelai.

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(23) Semelai (Aslian; Kruspe 1999, 194) tɔm.dlɔŋ t<sup>h</sup>əy ke base.tree be.big that 'that big bole'
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However, the order noun-demonstrative-adjective is also attested (Greenberg 1966; Hawkins 1983; Cinque 2005) – for example in Noon (24).

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(24) Noon (Niger-Congo; Soukka 2000, 129)
enoh-cii cii ci-yaanaaw-cii ci-daankah-cii
cow-DEF DEM ATTR-white-DEF ATTR-ten-DEF
'these ten white cows'
```

Interestingly, in Chukchi, demonstratives can precede or follow the noun, but when they are combined with other noun modifiers (on the same side of the noun), they always appear at greater distance to the noun than adjectives or genitives (25a-b).

- (25) Chukchi (Northern Chukotho-Kamchatkan; Dunn 1999, 161, 162)
 - a. **ənqen** [?]eqe-nijw-in ekke-t=[?]m

 DEM.3SG.ABS bad.uncle-POSS.3SG.ABS son-3PL.ABS=EMPH

 'those sons of a bad uncle'
 - b. tite-kin pəcwetyaw mury-in **ənqen**then-REL3SG.ABS conversation 1PL-POSS.3SG.ABS DEM.3SG.ABS
 'that previous conversation of ours'

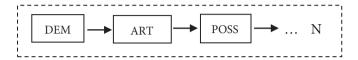
In general, there is a cross-linguistic tendency for adnominal demonstratives to occur either at the very beginning or at the end of a noun phrase (Dryer 1989b), but this tendency is stronger with prenominal demonstratives than with demonstratives that follow the noun. Assuming that adjacency is motivated by semantic relatedness (Behaghel 1932), it seems reasonable to assume that demonstratives are less tightly bound to the noun they modify than adjectives and other noun modifiers (Moravcsik 1997).

6. SYNTAGMATIC AND PARADIGMATIC RELATIONS BETWEEN SEMANTIC DETERMINERS

Adnominal demonstratives are closely related to articles, possessives, and quantifiers. All of these expressions characterize a co-occurring noun in terms of definiteness and specificity; but their morphosyntactic properties vary across languages. To simplify, there are two different

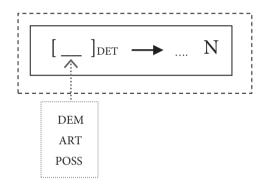
types of constructions. First, there are constructions in which adnominal demonstratives are syntagmatically combined with other semantic determiners within the same NP (26).

(26) Syntagmatically related determiners



Second, there are constructions in which adnominal demonstratives are paradigmatically related to other semantic determiners that appear in the same structural position as a demonstrative (27).

(27) Paradigmatically related determiners



To illustrate, the English demonstratives *this* and *that* occur in the same structural position as definite and indefinite articles, possessive pronouns, genitive nouns, and quantifiers such as *any* and *some*. Some English quantifiers can be used together with a demonstrative (*all that work*), but this is a marginal phenomenon. Since the various semantic determiners are paradigmatically related in English, they are commonly analyzed as a grammatical class of syntactic determiners (Jackendoff 1977).

However, in many other languages, the noun phrase does not include a particular syntactic position for determiners. In Hungarian, for example, adnominal demonstratives are commonly used together with a definite article, quantifier, and/or possessive noun (28).

Hungarian (Ugric; Moravcsik 1997, 307) (28)ez két szép nagy ... kerted. melvet eladtál te the your two nice big your.yard which.ACC you.sold 'these two nice big yards of yours which you sold'

Usually, the demonstrative occurs at the very beginning of the Hungarian NP, but genitive attributes can precede the demonstrative (29) (see Moravcsik 1997 for an in-depth analysis of the Hungarian NP; see also Dékány 2021; Tóth 2024).²

(29)Hungarian (Ugric; Moravcsik 1997, 307) Péternek eladott ez a két kertje, melyet szép nagy which.ACC he.sold Peter.poss this the two nice his.yard big 'these two nice big yards of Peter's that he sold'

Like Hungarian, many other languages combine demonstratives with other semantic determiners. In particular, the combination of demonstrative and definite article is very common. When used together, the demonstrative typically appears at greater distance to the noun than the article, as in examples (30) and (31) from Upper Chehalis and Lakhota.

- (30) Upper Chehalis (Salishan; Mithun 1999, 95)

 tecxcá tec słá:nay²

 that.fem def.fem girl

 'that girl'
- (31) Lakhota (Siouan; Dryer 2005a, 154) wic'asa ki he man the that 'that man'

However, the order article-demonstrative-noun is also attested in some languages, e.g., Pangasinen (Dékány 2011, 73).

(32) Pangasinen (Austronesian; Benton 1971, 53) sá-ma-y apók ART-DEM-LK grandchild.my 'my grandchild' (i.e., 'that grandchild of mine')

If article and demonstrative appear on different sides of the noun, they form some kind of bracketing construction, as for example in Ewondo (33).

(33) Ewondo (Bantoid; Redden 1980, 67)

é mod nó
the man this
'this man'

²Szabolcsi (1994) argued that the examples in (28) and (29) have different syntactic structures in Hungarian (see also Dékány 2021, 172–196).

Samoan has a similar bracketing construction, but the position of the demonstrative varies with the occurrence of the article. If the demonstrative is used together with an article, it follows the noun (34a); but if there is no definite article, the demonstrative proceeds the noun, as in (34b).

(34) Samoan (Oceanic; Mosel 2004, 10, 22)

- a. **le** tama'ita'i **nei**ART lady DEM

 'this lady'
- b. **nei** tagata

 DEM person

 'this person'

Spanish is parallel in this regard. If the demonstrative is combined with a definite article, it follows the noun (35a); but if the NP does not include an article, the demonstrative precedes the noun (35b).

(35) Spanish (Romance)

- a. **el** libro **este**ART book DEM

 'this book'
- b. **este** libro

 DEM book

 'this book'

In Swedish, adnominal demonstratives are generally used together with a definite marker; but the Swedish definite article is a suffix rather than a free form (36).

(36) Swedish (Germanic)

den här hund-en

DEM here dog-DEF

'this dog'

Like Swedish, Modern Hebrew marks definiteness by an article affix that can be accompanied by a demonstrative. The demonstrative can precede or follow the noun; but, interestingly, if it follows the noun, the definite article *ha*- does not only occur on the noun but is prefixed to every word of the NP (37).

(37) Modern Hebrew (Semitic; Givón 1990, 477)

ha-yeled ha-rishon ha-gadol ha-ze
the-child.m.sG the-first.m.sG the-big.m.sG the-this.m.sG
'this first big boy'

In general, in English, adnominal demonstratives are paradigmatically related to articles, possessives, and quantifiers, but in many other languages they are syntagmatically related to other

semantic determiners. Note that Old English did not have a particular class of syntactic determiners. In Old English, adnominal demonstratives could be combined with genitives, quantifiers, and other semantic determiners. There was a tendency for demonstratives to precede all other elements of a complex NP (38a), but a possessive noun could precede the demonstrative in Old English (38b).

- (38) Old English (Traugott 1992, 173, 173)
 - a. **þæt** min murnede mod that my sad spirit 'my sad spirit'
 - on Godes **þa** gehalgodan cyricean in God's that hallowed church 'in the hallowed church of God'

The Old English noun phrase was a loosely organized syntagmatic pattern that only later developed into a hierarchically structured syntactic NP (Sommerer 2018). In the course of this development, a phonologically reduced demonstrative developed into the definite article *the*, and all other semantic determiners became paradigmatically related with a particular structural position at the beginning of the English NP (see Van de Velde 2010 for a parallel development in Dutch).

7. MORPHOLOGICAL REINFORCEMENT

In the default case, a noun phrase includes one adnominal demonstrative; but very often demonstratives are reinforced by other types of expressions. In Vulgar Latin, for example, the demonstrative *ille* was routinely strengthened by the verb *ecce* meaning 'behold'. In the course of the development, *ecce ille* merged into a single lexical unit that was phonetically reduced (39) (Harris 1978).

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(39) ille > ecce ille > cest cel > ce
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Similar developments have occurred in other languages (Brugmann 1904; Evans 1990; Roehrs 2010; Vindenes 2017, 143–209). For example, the demonstratives of many Australian languages are reinforced by posture verbs (e.g., *stand, sit*) or verbs of perception (e.g., *see, look*) (Evans 1990, 142–146). Interestingly, Evans notes that in some of these languages (e.g., Lardil, Gunya, Yir-Yoront, Kungarakany) the original demonstratives are commonly omitted so that the reinforcing verbs have adopted the function of a demonstrative.

- (40) a. 'this/that X standing/sitting/lying here/there' > 'this.here/that.there'
 - b. 'look that one over there' > 'that/there'

Reinforcement is a well-known mechanism of language use and change (Lehmann 1995/2015, 24–27). The reinforcing element is either a verb (as in the above examples), or, more frequently, another deictic term, as in examples (41) and (42) from French and German.

- (41) French (Romance)

 ce maison-là

 DEM house-there

 'that house'
- (42) German (Germanic)

 dies Haus da

 DEM house there

 'the house (over) there'

Similar types of complex demonstratives occur in many other languages, including Soqotri (43), Milang (44), Galo (45), and Karimojong (46). In all of these languages, the head noun is surrounded by a previous and subsequent demonstrative.

- (43) Soqotri (Semitic; Shibatani & Makhashen 2009, 14)

 de mɒkʃəm dħəh

 DEM boy here
 'this boy'
- (44) Milang (Sino-Tibetan; Dryer 2005b, 358)

 yo miu yo

 this boy this

 'this boy'
- (45) Galo (Sino-Tibetan; Post 2007, 366)

 aló namó aló nó áa-káa-ró.

 DEM.DIST.LOC house DEM.DIST.LOC 1SG come-TENT-IRR

 'I'll go check that house over there.'
- (46) Karimojong (Nilotic; Novelli 1985, 118)

 lo-kile-lo
 this-man-this
 'this man'

A particularly interesting case of reinforcement occurs in Tümpisa Shoshone, in which demonstratives are sometimes repeated several times within the same phrase to strengthen a referring term (47).

(47) Tümpisa Shoshone (Uto-Aztecan; Dayley 1989, 140)

etü etü wihnu hipittsi etü etü utummin pia u punikka setü, ...

this this then old.woman this this those's mother it see this

'This one then, this old lady, this one, this one their mother, saw it ...'

Double- and multiple-marked demonstratives are motivated by pragmatic factors that can give rise to complex demonstratives in language change. However, if we look at these forms from a synchronic perspective, they are often difficult to analyze. In particular, it is unclear whether a noun phrase of this type includes separate slots for multiple demonstratives or if the demonstratives constitute a single (discontinuous) category (see Bernstein 1997; Guillemin 2011 for some discussion of this question in generative grammar).

8. GRAMMATICALIZATION OF DEMONSTRATIVES

Let us finally consider the grammaticalization of adnominal demonstratives and their relationship to historically derived expressions. Across languages, adnominal demonstratives provide a common source for definite articles such as English *the*, which evolved from an adnominal demonstrative in Old and Middle English (Sommerer 2018). Parallel developments of definite articles from adnominal demonstratives have occurred in many other languages, including French, German, Spanish, Romanian, Swedish, Dutch, Hungarian, Vai, Mandarin Chinese, and Basque (Givón 1984, 418–419; Huang 1999; Diessel 1999, 128–129; Heine & Kuteva 2002, 109–111).

Definite articles and demonstratives are different categories, but since grammaticalization is a gradual process, articles and demonstratives are often difficult to distinguish (Dryer 1989b, 84; Diessel 1999, 128–129). In German, for example, *der*, *die*, and *das* are used both as articles and as demonstratives. Both uses involve the same morphological forms, but in the demonstrative use, *der*, *die*, and *das* are more strongly stressed than in the article use (Himmelmann 1997, 53–62). Likewise, in Mandarin Chinese, *nèi* is a distal demonstrative, but very often *nèi* is used like an article indicating definiteness rather than distance (48) (Li & Thompson 1981, 131–132; Huang 1999).

(48) Mandarin Chinese (Sinitic; Li & Thompson 1981, 132) nĭ rènshi bu rènshi **nèi-ge** rén? you know not know that-CL person 'Do you know the/that person?'

Closely related to the development of definite articles is the development of linkers (Foley 1980). A linker is a formal element that combines a noun with an adjective or other attributes. In many Austronesian languages, for example, nominal attributes are linked to the head noun by a "ligature" (Foley 1980, 186–187) or "linking article" (Himmelmann 1997, 173), as in examples (49a–b) from Toba Batak. Like definite articles, linkers are commonly derived from demonstratives, but linkers are non-definite (Diessel 1999, 130–132).

- (49) Toba Batak (Austronesian, Malayo-Polynesian; Foley 1980, 186, 186)
 - a. bijang na balga dog LK big 'a big dog'
 - b. baoa **na** mang-arang buju i man LK ACT-write book the 'the man who wrote the book'

Apart from definite articles and linkers, adnominal demonstratives provide a frequent source for complementizers (e.g., English *that* and German *dass*) and various other types of clause linkers (see Diessel & Breunesse 2020 for a cross-linguistic overview). Internally headed relative clauses, for example, are often marked by determiners based on adnominal demonstratives (Basilico 1996). To illustrate, Lakhota has internally headed relative clauses marked by an article and the demonstrative *he* (50).

(50)Lakhota (Siouan; Van Valin & LaPolla 1997, 499) Wičháša ki [šuka ki igmú ø-ø-yaxtáke ki hel wa dog the 3sg.p-3sg.a-bite the man the cat a DEM wa-ø-ø-yáke yelo. 3sg.p-3sg.a-see DEC 'The man saw the cat which the dog bit.'

Similar types of internally headed relative clauses occur in Amele (51), Menya (52). and Mojave (53).

- (51)Amele (Madang; Roberts 1987, 51) mel [Mala heie eul iia f-ig-a. chicken boy illicit take-3sg-pst that 1s_G see-1sg-pst 'I saw the chicken that the boy stole.'
- (52) Menya (Angan; Whitehead 2005, 193)

 [Aŋä Bili i=qu ä-mät-k-qäqä i=qu] huäqi tä ä-n-q-qäqä=i.

 house Bill that=M ASS-build-TNS-3SG that=M yesterday fire ASS-eat-TNS-3SG=IND

 "The house that Bill built burned yesterday."
- (53) Mojave (Yuman; Munro 1974, 197)

 [[?-nakut-n^y ?ava: čo:]-**n**^y-č] vatay-m.

 1-father-DEM house make-DEM-SUBJ big-TNS

 "The house my father built is big."

The demonstratives of subordinate clauses can be seen as clausal determiners that occur in a structural position parallel to that of an adnominal demonstrative in a noun phrase. However, while the demonstratives of subordinate clauses are related to adnominal demonstratives, they do not indicate distance and definiteness but serve to nominalize the subordinate clause (see Basilico 1996; Diessel & Breunesse 2020 for discussion).

9. CONCLUSION

In conclusion, this paper has given an overview of the morphosyntactic properties of adnominal demonstratives in cross-linguistic perspective. Drawing on data from a wide range of languages, I have argued that all languages use demonstratives to semantically modify a noun. However, the syntactic properties of demonstratives show a great deal of cross-linguistic variation. To recapitulate the main points:

- First, in many languages, adnominal demonstratives have the same morphological forms as demonstrative pronouns, but in about a third of the world's languages adnominal demonstratives are formally distinct from pronouns.
- Second, there is a cross-linguistic tendency for adnominal demonstratives to occur at the very beginning or end of a complex NP, although postnominal demonstratives are also often placed directly after the noun (before any other noun modifiers).
- Third, in some languages, adnominal demonstratives occur in a particular slot for syntactic determiners, but in other languages, they are syntagmatically combined with definite articles, quantifiers, and possessives.
- Fourth, in the majority of the world's languages, nouns are accompanied by a single demonstrative, but since demonstratives are often reinforced by other deictics, many languages have complex demonstratives consisting of two separate word forms.
- Fifth, since adnominal demonstratives provide a common source for certain types of grammatical markers, they are often difficult to distinguish from definite articles, linkers, complementizers, and other grammatical function words.

Considering the amount of structural variation described in this paper, it is reasonable to assume that adnominal demonstratives do not form a universal class of syntactic determiners (as some older generative studies have argued). The adnominal use of demonstratives is universal, but their syntactic functions are language-particular. If we look at adnominal demonstratives from a cross-linguistic perspective, we find a continuum of constructions ranging from tightly organized NPs in which adnominal demonstratives function as syntactic determiners (e.g., English) to appositional constructions in which adnominal demonstratives are independent pronouns. A good example of the latter is Tuscarora, where adnominal demonstratives are only loosely adjoined to a cooccurring noun. In Tuscarora, adnominal demonstratives can precede or follow the noun, they do not fill an obligatory position (i.e., they can be omitted), and they are often separated from the noun by a pause and falling intonation (54a–c).

- (54) Tuscarora (Iroquoian; Mithun 1987, 184, 184, 186)
 - a. hè:ní:k̄ə: áha:θ
 that horse
 'that horse'
 - b. u²né:wa:k hè:ní:kǝ:
 ghost that
 'that ghost'

```
c. wa²tkahá:hi:θ hè:ní:kǝ̃:, ... ruya²kwáhehr.
it.met.it that dinasour (lit. 'he.body.carries')
'It met that dinosaur.'
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Given these features, Mithun (1987) argued that the Tuscarora demonstratives are best analyzed as "free nominals" in apposition to a juxtaposed noun. Thus, while demonstratives are universally available to modify a noun semantically, they can function syntactically as independent pronouns.

An issue that should be addressed in future research is the historical relationship between demonstrative pronouns and determiners. Previous research has argued that demonstrative determiners can develop from demonstrative pronouns in appositional constructions (Himmelmann 1997; Sommerer 2018). However, above we saw that demonstrative determiners may evolve into demonstrative pronouns when they are routinely combined with (third-person) pronouns, classifiers or generic nouns (Section 4). Moreover, a number of studies have claimed that demonstratives have no inherent syntactic function and that the different word-class categories of demonstratives have emerged from deictic particles through grammaticalization (cf. Brugmann & Delbrück 1911, 311; Himmelmann 1997, 21; Diessel 2006, 2013). Further research is needed to investigate how demonstratives have acquired their syntactic functions and how the various word-class categories of demonstratives are historically related.

ABBREVIATIONS

Α

agent

```
absolutive
ABS
         accusative
ACC
         article
ART
ASP
         aspect
         assertive
ASS
         attributive
ATT
         classifier
CL
         declarative marker
DEC
         definiteness marker
DEF
         demonstrative
DEM
         distal
DIST
         dual
DU
         emphasis
EMPH
         feminine
F(EM)
FUT
         future
         genitive
GEN
         hearer
Н
         indicative
IND
         locative
LOC
M(ASC)
         masculine
         nominative
NOM
```

P patient/undergoer

PL plural
POSS possessive
PROG progressive
PROX proximal

Q question particle

REL relational
S speaker
SG singular
SUBJ subject
TNS tense
TENT tentative

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