On Multi-functionality of the Arabic Plural Marker -a:t

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This paper investigates the morphosyntax of the plural marker -a:t in Northern Rural Jordanian Arabic from a generative viewpoint. We find that it has a diverse nature as it has several functions related mainly to the syntax of the relevant DP. It is a divider with count nouns, a counter with singulatives, a measuring head with mass nouns, and a category-assigning head in the derivational domain of some adjectives. Further, it acts as a transparent DP-adjunct with some nouns referring to parts of the day. Hence, this paper argues, against part of the literature on this subject, that the plural does not possess a unique syntactic position. The diverse nature of this marker adds to the growing body of research suggesting that some categories that were thought to be solely inflectional and with a unique function and syntactic position, including number (particularly plural), gender and diminutives, are in fact functionally and morphosyntactically heterogeneous in natural languages.

Keywords: Northern Rural Jordanian Arabic; plural formation; Measure Phrase; Division Phrase; Determiner Phrase.
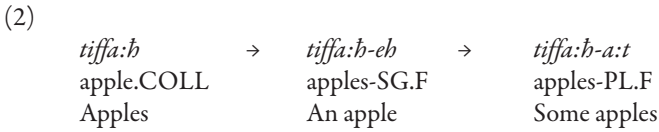
1. Introduction

Pluralization has attracted much attention since the seminal paper by Ritter (1991), which proposes Number Phrase (#P) (see also Picallo 1991; Valois 1991). Subsequent empirical and cross-linguistic evidence has, among other things, questioned the uniqueness of plural forms and markers with respect to their functions, syntactic realizations, and distributions, which are shown to be subject to cross-linguistic variation. A consensual view among these studies points out that plural markers are syntactic heads (or in some cases adjuncts distributed in different landing sites). However, relevant studies diverge on what functions these syntactic heads carry out. For instance, the plural marker is viewed as a lexical element (part of the lexical array of the relevant Determiner Phrase (DP)) carried by elements that project head under n (Ojeda 1992; Zabbal 2002; Borer 2005; Wiltschko 2008; Butler 2012). Lexical plural has been reported in several languages, such as Halkomelem Salish (Wiltschko 2008), Greek (Tsoulas 2007), Blackfoot (Wiltschko 2012) and Innu-aimun (Gillon 2015). In these languages, lexical plural targets mass nouns. The pluralization of mass nouns denotes abundance in quantity and does not co-occur with numerals because the latter require division and count projections which are absent in the inflectional domain of lexically pluralized words.
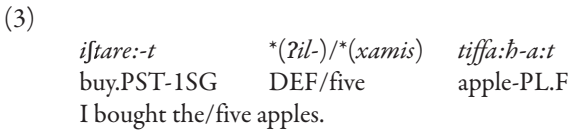
In other languages, plural markers are interpreted as classifying/dividing heads that project under Div (Borer 2005; Borer, Ouwayda 2010; Mathieu 2012a, 2012b, 2014). Borer has shown that all nominals are not lexically count nor mass.[1] Instead, they are specified as mass or count elements throughout the syntactic derivation. A word is specified as a count or mass element due to the (non-)emergence of Division Phrase (DivP). In (1) below, for example, Div^0 in English, which is occupied here by the plural marker -s, defines that the nominal *car* is a count element.[2]

(1)

DivP

Div   NP

s   car
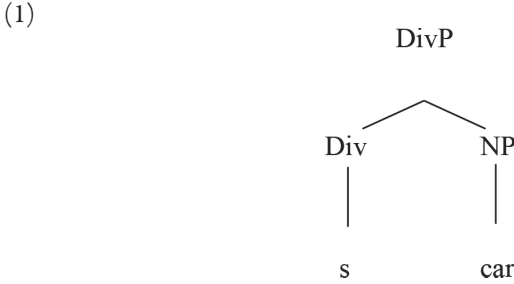
The plural maintains a dividing function under Div^0; otherwise, it is, to Borer, nothing but agreement. A case in hand is the plural marker -*a:t* in Lebanese Arabic which can occur with another singulative marker, -*eh*, as shown in (2).[3] The collective noun *tuffa:ħ* is divided by -*eh* and then pluralized by -*a:t* (COLL = collective).

(2)

tiffa:ħ	→	*tiffa:ħ-eh*	→	*tiffa:ħ-a:t*
apple.COLL		apples-SG.F		apples-PL.F
Apples		An apple		Some apples

Borer and Ouwayda (2010) have claimed that the singulative -*eh* in (2) occupies Div^0, while the plural marker is not a counter. For them, the plural marker is a pure agreement inflection given the fact that the plural of the singulative *tuffa:ħa:t* does not occur as a bare noun in Arabic grammar. Accordingly, the bare noun should be preceded by a numeral or a definite article to be accepted, as evidenced in (3).

(3)

iʃtare:-t	**(ʔil-)/*(xamis)*	*tiffa:ħ-a:t*
buy.PST-1SG	DEF/five	apple-PL.F
I bought the/five apples.		

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[1] To Borer, mass-count distinction is morphosyntactic.

[2] The NP *car* moves to a higher position in the derivation of the relevant DP, resulting in that the head -*s* appears as a suffix.

[3] The plural marker -*a:t* is predominantly used with elements with feminine grammatical gender to turn them into plural; whereas the plural marker -*i:n* (and -*u:n* in Standard Arabic) are used with elements that have masculine grammatical gender. As we show in this paper, the plural marker -*a:t* is used to serve other functions.

On the other hand, Mathieu (2012a, 2012b, 2014) has argued that the plural marker in the singulative nominal in (2 & 3) is not agreement. The plural marker *-a:t* should rather be a counter that projects under $\#^0$ because it is compatible with numerals. The counting function operates right after division is carried out by the singulative marker *-eh*. This counting function of the plural has also been found in other singulative languages, such as Ojibwe (Mathieu 2012a, 2012b, 2014) and Innu-aimun (Gillon 2015) where the division function is performed by animacy-shift[4]. Therefore, plural marking could be lexical or inflectional. The lexical plural normally gives rise to abundance reading, and the inflectional plural can be a divider or a counter. Therefore, the possible landing sites of the plural marker are n^0, Div^0 and $\#^0$.

In some recent studies, it has been shown that plural marking could be a type of adjunction that may land in a spot in the nominal spine of DP (Wiltschko 2008), or it can be DP-external (Butler 2012). Wiltschko (Wiltschko 2008) has brought evidence that the plural marker in Upriver Halkomelem is a root-adjunct, while Butler (2012) has shown that the plural morpheme *-o'ob* is a DP-adjunct in Yucatec Maya. Their diagnostics of a plural marker as an adjunct include the inability of the relevant plural marker to change any derivational or inflectional properties of a host nominal. Additionally, they are found to be optional elements and trigger optional number concord.

This paper investigates the functions, morphosyntactic behavior and possible landing sites of the plural marker *-a:t* in an Arabic vernacular: Northern Rural Jordanian Arabic as spoken in the governorate of Irbid (henceforth NRJA). The peculiarity of this plural marker in this dialect springs from its diverse nature. This paper thus provides support to several recent proposals that argue that the plural in natural languages is heterogeneous (i.e., it is not solely inflectional and has no unique morphosyntactic position that it systematically occupies). It has more than one function (and therefore can have more than one interpretation) and does not behave uniformly cross-linguistically. We essentially show that this plural marker is ambiguous; it may occupy different positions in the host DP. For instance, this marker can be hosted by count, singulative or non-count nouns, as exemplified in (4). In (4a), the plural *-a:t* is a divider with a count (singular) nominal. In (4b), it functions as a counter of entities over the singulative nominal, which is already divided in morphosyntax). On the other hand, it measures quantities in (4c).

(4)

	a.	*binit*	→	*ban-a:t*
		girl		girl-PL.F
		A girl		Girls
	b.	*gamh-ah*	→	*gamh-a:t*
		wheat-SG.F		wheat-PL.F
		A grain of wheat		Some wheat

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[4] Singulative languages may have different strategies to divide non-count nouns. The most common division strategies are gender-shift, animacy-shift and diminutivization.

    c. *laban*   →   *laban-a:t*
        yogurt   yogurt-PL.F
        Yogurt   Some yogurt

The plural *-a:t* can also be attached to adjectives and turn them into nouns.

(5)
    a. *mafru:ʃ*   →   *mafru:ʃ-a:t*
        furnish   furnish-PL.F
        Furnished   Furniture
    b. *naϑri*   →   *naϑrijj-a:t*
        scattered   scatter-PL.F
        Scattered   A miscellaneous collection

The plural marker *-a:t* can also be combined with nouns that refer to some parts of the day. Consider the examples in (6), where the plural marker is not inflectional or derivational. It is adjoined to nouns referring to some moments of the day.

(6)
    a. *ʕasˤur*   →   *ʕasˤrijj-a:t*
        Afternoon   afternoon-PL.F
        Afternoon   Afternoon
    b. *ðˤuhur*   →   *ðˤuhrijj-a:t*
        noon   noon-PL.F
        Noon   Noon
    c. *masa*   →   *masawijj-a:t*
        evening   evening-PL.F
        Evening   Evening

It is widely recognized that one language may have more than one plural marker, and each marker carries its own function (e.g., counting and dividing are functions performed by two different plural markers in Innu-aimun (Gillon 2015)). Less common in natural languages is the situation where a single plural marker can be of dual nature (i.e., performing two functions), such as the plural marker in Greek, which can be a divider under Div⁰ with count nominals and lexical (denoting large quantities) under n⁰ with non-count nominals. What seems extremely rare is the case of a single plural marker possessing diverse nature (i.e., it can carry out more than two functions), as is the case of *-a:t* in NRJA, a matter that makes the investigation of this marker of typological significance. Indeed, as we will show below, this marker can be realized as a syntactic head (i.e., more than one projection in the nominal spine are available to host it, and the hosting head is contextually determined). It can also be a transparent adjunct, and therefore it can have more than two possible landing sites in the nominal spine, a claim which has never been made for a single marker. This marker can divide or count individuals/objects (divide count nominals and count singulativized nominals) or measure small quantities. We show that counting

and measuring are unique functions for the plural marker *-a:t*, while dividing is shared with other plural markers in Arabic, including the masculine plural marker and the broken plural markers. Although these three functions of plurals have been previously reported for Arabic (Mathieu 2012a), the current work provides evidence that all of them can be carried out by one single plural marker *-a:t* which is not merged in a specific position in the DP. Thus, this paper provides typological evidence in favour of Wiltschko's view that plural marking is not a syntactic head by default because it can also act as an adjunct. It also supports the view that inflectional plural is not solely dividing (contra Borer 2005) nor exclusively counting (inconsistent with Ritter 1991). Dividing plural, which is often interpreted as singular-inclusive plural, and counting plural, the singular-exclusive one, are attested types of plural in natural languages. Further, a single language may have both types of inflectional plural.

This paper is structured as follows. Section 2 discusses the five possible functions of the plural marker *-a:t* in NRJA: a divider, a counter, a measuring head, a nominalizer, and a transparent adjunct. In section 3, we explain the possible distributions of this marker in the nominal spine. The possible landing sites for this marker include Div^0, $\#^0$, n^0. It can also be adjoined to a DP. Section 4 draws a comparison between this plural marker and the masculine sound plural marker *-i:n* and the broken plural markers. The use and morphosyntax of the masculine plural marker and the broken plural, unlike those of the marker *-a:t*, are shown to be restricted; they can only function as dividers. Section 5 discusses the implication of this analysis to the account of the extended projection of DP in NRJA. Section 6 recaps the main findings.

2. *The Plural Marker -a:t in Jordanian Arabic*

As stated, the plural marker *-a:t* in NRJA can have five functions: a divider, a counter, a measuring head, a nominalizer, and a transparent adjunct.

2.1 The Plural Marker as a Divider and a Counter

Borer and Ouwayda (2010) and Mathieu (2014) have put forward two proposals to account for the syntax and functions of the plural in Arabic. In our view, Mathieu's is more appropriate to account for the functions and syntax of the plural marker *-a:t* in NRJA. The plural marker *-a:t* can be combined with singular (count) nouns (as shown in (7) below) or the singulative counterparts of non-count nouns (as shown in (8)). With count nominals, the function of this suffix is to divide, whereas it counts with singulatives[5]. Note that the most common singulative marker with non-count nouns in Arabic is the singular *-eh* (Fassi Fehri 2018).

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[5] Arabic varieties have other singulative markers, such as the attributive suffix *-i* and the diminutive marker *-aajeh* which is common in Syrian and Egyptian Arabic (Jarrah, Jaradat 2002b).

(7)

    a. *tˤaːwl-eh*   →   *tˤaːwl-aːt*
        table-SG.F   table-PL.F
        A table   Tables

    b. *tˤaːb-eh*   →   *tˤaːb-aːt*
        ball-SG.F   ball-PL.F
        A ball   balls

(8)

    a. *tuffaːħ*   →   *tuffaːħ-eh*   →   *tuffaːħ-aːt*
        apples   apple-SG.F   apple-PL.F
        Apples   An apple   Some apples

    b. *ħadiːd*   →   *ħadiːd-eh*   →   *ħadiːd-aːt*
        Iron   iron-SG.F   iron-PL.F
        Iron   A piece of iron   Some pieces of iron

Borer and Ouwayda have treated the plural marker with count nouns as a dividing plural, while its use with the dividing singular *-eh* is suggested for agreement; the plural marker cannot divide in the presence of the dividing *-eh*. Borer and Ouwayda have added that the plural of the singulative is a marker of agreement as it cannot occur as a bare noun. It must be accompanied by a numeral or a definite article (see (3) above). However, the data discussed in Borer and Ouwayda are mainly taken from Lebanese Arabic, which in fact does not necessarily represent other Arabic varieties. In NRJA, for instance, the plural of a singulative can occur in its bare form, as evidenced in the sentences in (9), which are grammatical in NRJA despite the fact that the plurals of the singulatives (i.e., *tufaːħ-aːt*, *xubz-aːt*, *ðahab-aːt*, *fuːl-aːt* and *keːk-aːt*) are not preceded by the definite article *ʔal-* or a numeral.[6]

(9)

    a. *ʃufit*   *tufaːħ-aːt*   *ʕala il-tˤawleh.* *la-miːn* *kaːn-u*   *haðˤuːl?*
        see.PST.1SG apple-PL.F on   DEF-table to-whom be.PST-3PL.F these
        I saw some apples on the table! To whom were they?

    b. *fiːħ*   *xubz-aːt*   *bi-l-mitˤbax,*   *dʒiːb-hin*   *maʕ-aːk*
        in   bread-PL.F   in-DEF-kitchen bring.2SGM-3PL.F with-2SGM
        There are some loafs of bread in the kitchen. Bring them!

    c. *dawwir* *bi-l-ixzaːneh,*   *bit-laːgi*   *ðahab-aːt.* *kunit*
        look in   in-DEF-wardrobe   2SG.M find. gold-PL.F   was.1SG
        mxabiː-hin   *la-z-zaman*
        hiding-3PL.F   to-DEF-time
        Look in the wardrobe. You will find some golden pieces (some golden jewels).

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[6] Nominals in Modern Standard Arabic and some Arabic dialects do not appear bare; they occur with the definite article *ʔal-* or a nunation marker when there is no definite article (see Jarrah and Zibin 2016).

    d. *ʔil-joːm ʔommi   ʔimla-t-il-na,   fuːl-aːt   w-allah*
       DEF-day mother-1SG.POSS   made-SG.F-to-1PL broad beans-PL.F by-Allah
       inbasˤatˤ-na   bi:-hin
       geth.happy-1spl   with-3PL.F
       Our mother made us some beans. We enjoyed them.

    e. *marr   ʕaleː-na ʕali, w   dʒaːb-il-na   keːk-aːt,*
       passed   on-1PL   Ali   and brought.3SG.M-to-1PL cake-PL.F
       bas   miʃ   ʔil-kull ʔakal   min-hin
       but   NEG   DEF-all ate   from-3PL.F
       Ali paid a visit and brought some cakes, but some of us did not eat their share.

The possibility of using the plural of singulatives in NRJA without the definite article or a numeral strongly indicates that the plural marking with singulatives is not set for agreement purposes.

    On the other hand, Mathieu argues that the plural of count nouns is different from the plural of singulatives, which he takes further to claim that the plural of singulatives in Arabic is not mere agreement. He proposes that the plural of count nouns is weakly referential and has an inclusive reading (i.e., the singular is included). By contrast, the plural of singulatives is strongly referential, and it has an exclusive reading (the singular is excluded). This distinction is supported by NRJA. Consider the NRJA examples in (10 & 11) of which the plurals of count nouns and singulatives are formed by the suffixation of -*a:t*. The question in (10b) with the plural of the count noun *bana:t* can be answered with, e.g.*, one or more girls*, i.e., the singular is included in the answer in (10a). On the other hand, the question in (11), with the plural of the singulative *tuffa:ħ-a:t*, should be answered with, e.g., *two or more apples*, i.e. the singular is excluded in (11b). As obvious in (11c), the negation at the beginning of the answer indicates that the singular is excluded from the plural of the singulative.

(10)
    a. *ʕind-ak   ban-aːt?*
       with-2SG.M   daughter-PL.F
       Do you have daughters?

    b. *ʕind-i   binit/   bint-een/   θalaθ   ban-aːt*
       with-1SG   daughter   daughter-DUAL   three   daughter-PL.F
       I have a daughter / two daughters /three daughters.

(11)
    a. *ʕind-ak   tufa:ħ-a:t   ʔikba:r*
       *ʔ*at-2SGM   apple-PL.F   big
       Do you have some big apples?

    b. *ʕind-i   *tuffa:ħ-ah/   tuffa:ħ-t-een/   θalaθ   tuffaħ-a:t*
       at-1SG   apples-SG.F   apples-SG.F-DUAL   three   apples-PL.F
       I have *one apple / two apples / three apples.

    c. *laʔ, ʕind-i   tuffa:ħ-ah wahad-eh.*
       No, at-1SG   apple-SG.F one-SG.F
       No, I have only one apple.

Following this pattern, we propose that the plural of count nouns by the marker *-a:t* in NRJA is semantically unmarked (inclusive), but that of singulatives is semantically marked (exclusive). The plural of count nouns is a divider, while the plural of singulatives is a counter.

In the following subsection, we discuss the use of the plural marker as a measuring head.

2.2 The Plural Measures

The plural marker *-a:t* in NRJA can be directly combined with non-count nouns, in which case this plural marker cannot divide or count. In (12), the listed non-count nouns are indivisible (mass nouns) as they refer to liquids, i.e., they cannot be divided by a singulative marker, such as the singular marker, *-eh*. However, they can be portioned out by measure phrases, such as *ki:lo* (a kilo of) or *ka:s* (a cup of).

(12)

a.	ʕasˁiːr	→	*ʕasˁiːr-eh	kartuːnit	ʕasˁiːr
	juice		juice-SG.F	carton	juice
	Juice		One drop of juice	A carton of juice	
b.	ħaliːb	→	*ħaliːb-eh	ka:sit	ħaliːb
	milk		milk-SG.F	cup	milk
	Milk		One drop of milk	A cup of milk	
c.	ʃaːj	→	*ʃaːj-eh	bri:q	ʃaːj
	tea		tea-SG.F	jug	tea
	Tea		One drop of tea	A teapot	

Although such nominals cannot be morphologically singulativized, the plural marker *-a:t* can be attached to them. In such cases, the plural does not divide or count, but measures quantities. This is shown in (13) where the plural of mass nouns denotes paucity in quantity (i.e., a small amount reading).

(13)

a.	*laban*	→	*laban-a:t*
	yogurt		yogurt-PL.F
	Yogurt		Some yogurt
b.	*ħaliːb*	→	*ħaliːb-a:t*
	milk		milk-PL.F
	milk		Some milk
c.	*majj*	→	*majj-a:t*
	water		water-PL.F
	Water		Some water

Consider the example in (14) where *laban-a:t* denotes a small quantity (i.e., *-a:t* measures a small quantity). This example is an excerpt drawn from a real conversation between a mother (Speaker 1) and her daughter (Speaker 2). The mother in (14a) is making sure that she has enough amount of yogurt to prepare lunch for the relatives who will pay a visit

that day, but her daughter in (14b) informs her that there is just a small amount of yogurt remaining. Therefore, the mother is asking to buy more yogurt:

(14)

a. Speaker 1: *ʔil-jo:m   gara:jib-ku   dʒa:jji:n   ʔale:-na.*
DEF-day relatives-2PL.M coming.PL.M ON-1PL
bad-na   n-iʕmalil-hum   ɣada.   ʕinda-na   laban?
want-1PL   1PL-made-3PL.M lunch   at-1PL   yogurt
Your relatives are visiting us today. We invited them for lunch.
Do we have yogurt?

b. Speaker 2: *w-allah   ma: ʕinda-na   ɣe:r   h-al-laban-a:t*
by-Allah NEG   at-1PL   except DEM-DEF-yogurt-PL.F
By God, we don't have but this little yogurt.

c. Speaker 3: *gu:l-i   la-ʔaxu:-ki   ijdʒi:b   kama:n*
tell-2SG.F to-brother-2SG.F.POSS   bring.IMPER.   more
Ask you brother to bring more yogurt.

Note that the paucal meaning (small amount reading of the plurals in (13)) is asserted by the semantic contradiction emerging from combining these plurals denoting paucity in amount with adjectives of abundance, such as *kθa:r* (a lot of/much). Therefore, a structure like *labana:t kθa:r* is semantically contradictory.

Jaradat and Jarrah (2022a). have proposed that the plural of mass nouns aims to measure, not to divide or count. This is supported by the fact that the pluralized non-count nouns in (13) cannot be turned into dual or preceded by numerals unless they are combined with an appropriate measure phrase. For instance, the question in (15a) cannot be answered with the singular or the dual form of the non-count noun *laban* (yogurt) or with a numeral (see 15b). The plural in (15a) refers to a small quantity; it can be answered with the opposite (a large amount of yogurt), as in (15c)[7].

(15)

a. *ʕind-ak   laban-a:t? bad-na   inʃarrib   h-al-walad.   miʃ*
with-2SGM   yogurt-PL.F want-1PL   CAUS.drink DEM-DEF-boy.   NEG
raaðˤi   jo:kil   ʔiʃi   min   mba:riħ
accept.3SG.M eat.3SGM   thing   from   yesterday
Do you have some yogurt? We want this kid to drink some. He did not eat anything since yesterday.

b. *ʕind-i   *laban-eh   waħad-eh/   *laban-t-e:n/*
with-1SG   yogurt-SG.F one-SG.F   yogurt-SG.F-DUAL

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[7] In fact, *laban* (yogurt) can be marked by the feminine suffix; however, it is to derive a new nominal from *laban*. The nominal *labaneh* which is a dairy product that is different from *laban*. Roughly speaking, it is similar to soar yogurt. It does not mean one single portion of yogurt. Therefore, the feminine at the end of *labaneh* is not to singularitize. It is rather to derive another nominal from a nominal base, as shown in the linear morphosyntactic derivation of nP2 *labaneh* from the nP1 *laban* (yogurt):

a. $_{nP2}[_{n02}[-ah\ _{nP1}[_{n10}[laban]]]]$

> *ʕalaʕ laban-a:t
> three yogurt-PL.F
> c. ʕind-i (laban) kʕi:r. kam badd-ak
>   with-1SG (yogurt) much how much want-2SG.M
>   I have much yogurt! How much do you want?

This sharply contrasts with instances of the plural of count and singulative nouns (see section 2.1).

The data in (15) is at odds with Borer and Ouwayda's assumption that the plural marking is either a counter or agreement marker. In (15), the plural marker *-a:t* does not count or establish agreement. Rather, it measures with non-count nouns. Thus far, the plural marker *-a:t* has various functions in NRJA. It divides with count nouns (Borer 2009; Borer, Ouwayda 2010), counts with singulative nouns (Mathieu 2012a, 2012b) and measures quantities (amounts) with mass nouns (Jaradat, Jarrah 2022)[8].

The measuring *-a:t* is not considered lexical by Jaradat and Jarrah (2022) although it has some resemblances with the lexical plural in Halkomelem Salish (Wiltschko 2008), Greek (Tsoulas 2007), Blackfoot (Wiltschko 2012) and Innu-aimun (Gillon 2015). The plural of non-count nouns in these languages does not give rise to a count reading. It gives an abundance or small quantity reading. However, the measuring plural *-a:t* with non-count nouns in NRJA is considered inflectional in Jaradat and Jarrah because it shares with the plural of count nouns the concept of paucity; the plural marker *-a:t* with non-count nouns gives rise to paucity in quantity, and it denotes paucity in number (between 3-10) with count nouns. In (16a), the plural of the count noun *tʕa:wla:t* is used as the preceding numeral is between 3-10, whereas the singular form *tʕawleh* in (16b) is used as the available numeral is over 10.

> (16)
> a. *xamis* *tʕa:wl-a:t*
>   five   table-PL.F
>   Five tables
> b. *ʕiʃri:n* *tʕawleh*
>   twenty table
>   Twenty tables

The pair in (16) is interpreted as evidence that the plural that refers to paucity (either in number or quantity) is located in the inflectional domain, but not part of the lexical make-up of the NP. In the following section, we show that the plural *-a:t* can also be derivational/categorizing in NRJA.

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[8] It is worth noting that the dividing and counting functions of the plural *-a:t* are also manifested in Modern Standard Arabic and other colloquial varieties as reported by several studies, whereas the measuring function needs cross-dialectal investigations to determine whether or not it exists in other Arabic varieties.

2.3 The Plural Marker as a Derivative

In NRJA, the plural marker -*a:t* can be combined with adjectives changing the syntactic category of each word from an adjective into a noun. In (16b-f), the attributive suffix -*i* (ATT = Attributive) which indicates that the target words are adjectives are also present after the suffixation of the sound plural -*a:t*. This is strong evidence that the plural -*a:t* is basically a nominalizer that derives nouns from adjectives in (17)[9].

(17)

    a. *mafru:ʃ*   →   *mafru:ʃ-a:t*
        furnished   furnished-PL.F
        Furnished   Furniture

    b. *naϑr-i*   →   *naϑr-ijj-a:t*
        scatter-ATT   scattered-ATT-PL.F
        Scattered   A miscellaneous collection

    c. *tiknolo:dʒ-i*   →   *tiknolodʒ-ijj-a:t*
        technology-ATT   technological-ATT-PL.F
        Technological   Technological devices

    d. *samʕ-i*   →   *samʕ-ijj-a:t*
        hear-ATT   auditory-ATT-PL.F
        Auditory   Acoustics

    e. *xazaf-i*   →   *xazaf-ijj-a:t*
        ceramic-ATT   ceramic-ATT-PL.F
        Of ceramics'   Ceramics

    f. *bla:stik-i*   →   *blastik-ijj-a:t*
        plastic-ATT   plastic-ATT-PL.F
        made from plastic   A collection made from plastic

Additional corroborating evidence in favor of the nominalizing nature of the plural marker -*a:t* comes from the syntactic distribution of the singular adjectives and their pluralized counterparts. The listed singular adjectives in (17) and their pluralized forms cannot be used interchangeably in a sentence. In (18), the object position of the transitive verb *ʔiʃtare:t* which requires a noun, can be occupied by the nouns *mafru:ʃ-a:t* and *xazafijj-a:t*, but not by the corresponding adjectives *mafru:ʃ* or *xazafi*. This indicates that the adjectives in (17) have been turned into nouns by the suffixation of -*a:t*.

---

[9] The geminate -*jj* is sometimes inserted between the attributive -*i* and the plural -*a:t*, as in (17b-f), for the sake of ease of articulation. Glide epenthesis is a strategy to resolve vowel hiatus at the boundary between these bound morphemes.

(18)

> *ʔiʃtare:-t*   *mafru:ʃ-a:t/*mafru:ʃ*
> buy.PST-1SG   furniture-PL.F/furnished
> *w-xazafijj-a:t/*xazaf-i*
> and-ceramic-ATTRIB-PL.F/ceramic-ATTRIB
> I bought some furniture and ceramics.

A point that bears mentioning is that the plural marker when combined with adjectives can sometimes be a mere agreement inflection when they are preceded by a noun that they modify in (19a) or used predicatively in (19b). The adjectives *mafru:ʃ* and *blasti:ki* are pluralized by the suffixation of *-a:t*. The resulting forms *mafru:ʃ-a:t* and *blastikijj-a:t* are still adjectives.

(19)

> a. *ʔil-sidʒdʒa:d-a:t*   *mafru:ʃ-a:t*   *b-ɣurf-it*   *ʔil-gaʕd-eh*
>   DEF-carpet-PL.F   furnished-PL.F   in-room-F   DEF-sit-F
>   The rugs are placed in the living room.
> b. *ʔil-ka:s-a:t*   *blastikijj-a:t*
>   DEF-cup-PL.F   plastic-PL.F
>   The cups are plastic.

The context in such cases plays an important role in distinguishing cases whether *-a:t* is a nominalizer or an agreement marker. Nominalized adjectives have the same distributions of other nominals. Otherwise, they are pluralized adjectives and tend to behave as modifiers.

   Another piece of empirical evidence that indicates that the plural marker *-a:t* can be a nominalizer comes from the fact that nominalized adjectives are not compatible with numerals. In (20a), for example, counting cannot operate over *blastikijja:t* as the plural marker is a nominalizer not a divider. On the contrary, agreeing *blastikijja:t* can appear with the numeral *ʕaʃar* (ten) which operates over the post-modified plural noun *ħaffa:j-a:t* of which the plural marker is a divider (Borer 2005).

(20)

> *a. *ʔiʃtare:-t*   *ʕaʃar*   *blastikijj-a:t*
>   buy.PST.1SG   ten   plastic-PL.F
>   Intended: "I bought ten pieces of plastic."
> b. *ʔiʃtare:-t*   *ʕaʃar*   *ħaffa:j-a:t*   *blastikijj-a:t*
>   buy.PST.1SG   ten   barefoot-PL.F   plastic-PL.F
>   I bought ten plastic slippers.

In the next subsection, we discuss the use of the plural marker *-a:t* as an adjunct.

2.4 The Plural Marker as an Adjunct

The plural marker can be attached to nominals referring to some times of the day with no obvious function (neither inflectional nor derivational). It does not count, measure, or derive a syntactic category. It is neither grammatically motivated in the sense that it does not express

agreement. These observations lead us to suppose that the plural marker in such cases is used as an adjunct. Evidence in support of this proposal is that it is optional when it occurs with parts of the day. For instance, some words (nominals) that refer to times of the day and their pluralized counterparts in (21) can be used interchangeably to convey relevant meanings.

(21)

    a. *baʃu:f-ak*   *ʔil-ʕasˤur/*   *ʔil-ʕasˤrijj-a:t*
       see.PRES.1SG-you. DEF-afternoon/   DEF-afternoon-PL.F
       I will see you in the afternoon.

    b. *ħaka*   *maʕ-i*   *ʔil-sˤubuħ/*   *il-sˤubħijj-a:t*
       talk.PST.3SG.M   with-1SG   DEF-morning/ DEF-morning-PL.F
       He talked to me in the morning.

    c. *ʔil-masa/*   *il-masawijj-a:t*   *raħ* *jiftaħ*   *ʔil-maħal*
       DEF-evening/   DEF-evening-PL.F will open.IMPF.3SG.M DEF-shop
       In the evening, the shop will be open.

Note also that the plural marker in such cases does not change the derivational or inflectional properties of the modified noun, such as the syntactic category, number, or gender. In (22a), the word *ʕasˤur* (afternoon) and its derived plural form can act as the subject of the sentence. The suffixation of *-a:t* to *ʕasˤur* triggers an optional gender agreement on the pronominal copula when the latter is used. The copula may remain masculine even if the plural morpheme *-a:t* is suffixed to *ʕasˤur* (SUPER = superlative).

(22)

    a. *ʔil-ʕasˤur(-ijj-a:t)*   *hu:/hi:*   *il-ʔaħsan*
       DEF-afternoon-PL.F   PRO.3SG.M/SG.F   DEF-good.SUPER
       la-il-riħl-a:t
       to-DEF-journey-PL.F
       The best time to go on a picnic is Afternoon.

On the contrary, the plural of the count noun *ba:sˤ* (a bus), for example, triggers obligatory gender agreement on the pronominal copula as shown in (23); the plural form is specified as feminine (in Arabic all non-human entities are pluralized through the plural marker *-a:t* even if their singular is masculine).

(23)

    ʔil-ba:sˤ-a:t   *hi:*   *ʔil-ʔaħsan*   *la-l-tanaqqul*
    DEF-bus-PL.F   PRO.3SG.F   DEF-good.SUPER   to-DEF-moving
    The best mode of transportation is the bus.

Note here that the plural marker is incompatible with numerals when it is combined with nominals of times of the day, as can be seen in the ungrammatical sentence in (24).

(24)

    * *dawami-t*   *ϑalaϑ*   *ʕasˤrijj-a:t*
    work-1SG   three   afternoon-PL.F
    Intended: "I worked during afternoons for three days."

Given that numerals require division and count syntax in the inflectional domain of a word, the plural marker -*a:t* is not part of the inflectional domain (a divider or counter) when it occurs with nominals of times of the days.

    Alternatively, native speakers of NRJA can use the word *marrah* (a time) to refer to the number of times, as shown in (25).

(25)

    daawami-t   *ϑalaϑ*   *marr-a:t*   *il-ʕasˤur*
    work-1SG   three   time-PL.F   DEF-afternoon
    I worked three times during the afternoon.

It is worth highlighting at this point that the plural marker is compatible with the names of the days, unlike the nominals of times of the day in (26). Here, the plural marker -*a:t* is a divider, as it is compatible with numerals (Borer 2005).

(26)

    daawami-t   *ϑalaϑ*   *sabt-a:t*
    work-1SG   three   Saturday-PL.F
    I worked three Saturdays.

Against this background, we assume that the plural marker is neither derivational, nor inflectional when it occurs with nominals of times of the day[10].

---

[10] Note here that the sound -*i* that appears once the plural -*a:t* is combined with the head nouns is in fact epenthetic not an attributive suffix. This distinction is important as it rules out the assumption that the plural marker -*a:t* is derivational by turning adjectives that end with the attributive -*i*, into nouns. Evidence for this comes mainly from the fact that singular adjectives which are derived from the times of the day are not used in NRJA, such as (**(ʔil)-sˤubh-i* (DEF-morning-ATT); (*ʔil)-ðˤuhr-i* (DEF-noon-ATT). These derived attributive adjectives cannot be used as post-modifying adjectives. The right forms that can be used in this situation is *sˤaba:hi* and *masa:ʔi* as can be seen in the following pair.

    (i)   *a. *ʔil-naʃi:d*   *ʔil-sˤubh-i*
              DEF-anthem   DEF-morning-ʔ
              Intended: "The national anthem in the morning".
         *b. *ʔil-barnamidʒ*   *ʔil-masaw-i*
              DEF-program   DEF-morning-ʔ
              Intended: "The evening program".
    (ii)   a. *ʔil-naʃi:d*   *ʔil-sˤaba:ħ-i*
               DEF-anthem   DEF-morning-ATT
               The national anthem in the morning.
         b. *ʔil-barnamidʒ*   *ʔil-masa:ʔ-i*
              DEF-program   DEF-morning-ATT
               The evening program.

One anonymous reviewer interestingly asked why the adjoining morpheme *-a:t* cannot be annexed to other nominals referring to the parts of the day (and night), such as *fadʒur* (dawn) and *ʔiʃa:* (evening). This could be explained by referring to the main properties of the domain of inflection and that of adjunction. The domain of adjunction, unlike that of inflection, is optional and not productive. If the modifying *-a:t* in the examples in (21) is inflectional, it is expected to attach to the rest of nominals referring to the times of the day and night. Further, the optionality of the modifying *-a:t* in (21) explains why it is not semantically constrained. Specifically, native speakers of the target sub-variety (NRJA) select to optionally attach it to some nominals (but not all nouns that refer to times of the day and night). Concerning the semantics of *-a:t* with the parts of the day, we have consulted 30 native speakers of the target sub-variety of Jordanian Arabic (15 males and 15 females) with age ranges between 25 and 60. They have reported that it increases the time span to which a speaker refers. In (27a), for example, the speaker is informing his friend that they should meet approximately at the halfway point between noon and sunset (more likely after doing afternoon prayers). On the other hand, the speaker in (27b), by attaching *-a:t* to ʕasˤur, denotes that they may meet at any time between the halfway point and before sunset.

(27)
    a.   *baʃu:fa-k*   *ʔil-ʕasˤur*
           see.1SG-2SG.M   DEF-afternoon
    b.   *baʃu:fa-k*   *ʔil-ʕasˤur-a:t*
           see.1SG-2SG.M   DEF-afternoon
    See you this afternoon.

This denotation is somewhat in conformity with the basic function of *-a:t*, which is to count and yield pluralities. In other words, the basic function of the plural *-a:t* on singular nominals is numeral expansion (it covers more individuals or objects), and as an adjunct in (21), it carries out the function of time expansion (it covers a longer time span). Hence, *-a:t* when attached to nominals of times of the day, has a meaningful contribution, but this does not contradict with being adjunctive.

3. *The Morphosyntax of the Plural Marker -a:t*

Having discussed the various functions of the plural marker *-a:t*, we are now in the position to offer a morphosyntactic analysis to this plural marker, assuming that each function has a distinct syntactic position in the DP.

This essentially indicates that the sound *-i* that exists in the plural forms of the times of the day is not the attributive as it cannot derive adjectives from the singular nominals referring to times of the day. On the contrary, the sound *-i* (discussed in 2.3) is actually attributive, as can be seen in (17c). This is because it derives adjectives from nominals, such as *blastik* (Plastics) → *blasti:k-i* (Plastic).

3.1 The Plural Marker as a Dividing and Counting Head

According to Borer (2005), all nouns entering the syntactic derivation are neither count nor mass. The (non-)projection of DivP determines whether the nominal is count or mass. The plural marker -*a:t* as a divider merges in Di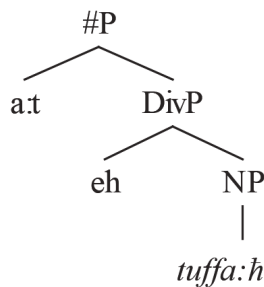v⁰, which is above the derivational head that categorizes *binit* in (28) as a noun. The division of *binit* paves the way for the counting function under #P to operate.

(28)

```
                    #P
                  /    \
                 #      DivP
                      /      \
                   Div        NP
                  /    \        |
               binit   a:t   <binit>
```
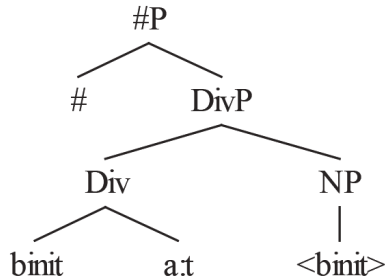
Mathieu (2014) has proposed that the plural marker can also be a counter in Arabic and occupies #⁰ when Div⁰ is filled by another suffix that has a dividing function, such as the feminine singular -*eh* that divides a non-count noun. In (29 & 30), the collective noun *tuffa:ħ* (apples) and the mass noun *xaʃab* (wood) are morphologically divided by the singulative -*eh*. Division results in an individuating reading with collective nouns as in (29). A collective noun in Arabic refers to a group of individuals or objects (Harrell 2004; Erwin 1963; Talmoudi 1980).

(29)

```
                    #P
                  /    \
                a:t     DivP
                      /      \
                    eh        NP
                              |
                           tuffa:ħ
```

On the other hand, division by -*eh* gives rise to a partitioning reading with divisible mass nouns as these nouns do not refer to a collection of individuals or objects. A mass noun refers to undifferentiated mass, such as *xaʃab* (wood) (Erwin 1963). Therefore, we can portion a piece or a quantity out of a mass noun by division, as can be seen in (30).

(30)

```
            #P
           /  \
         a:t   DivP
              /    \
            eh      NP
                    |
                   xaʃab
```
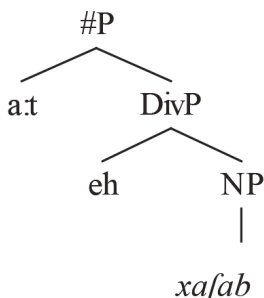
It is worth noting that Arabic dialects manifest other singulative markers, such the diminutive -a:jeh which is common in Syrian and Egyptian Arabic. In these varieties, this diminutive marker can be used to divide non-count nouns, especially those nominals referring to fruits, vegetables, and nuts. Consider the examples in (31) where the diminutive marker -a:jeh is a divider and therefore occupies Div⁰. The plural marker -a:t occupies #⁰ functioning as a counter.

(31)
  a. *batˤaːtˤa*   → *batˤatˤ-a:jeh*   → *batˤatˤ-a:j-a:t*
      potato.COLL   potato.COLL-DIM.SG   potato.COLL-DIM.SG-PL.F
      Potatoes   A potato   Some potatoes
  b. *mu:z*   → *mu:z-a:jeh*   → *mu:z-a:j-a:t*
      banana.COLL   banana.COLL-DIM.SG   banana.COLL-DIM.SG-PL.F
      Bananas   A banana   Some bananas
  c. *binduʔ*   → *bindʔ-a:jeh*   → *bindʔ-aj-a:t*
      Hazelnuts.COLL   Hazelnuts.COLL-DIM.SG   Hazelnut.COLL-DIM.SG-PL.F
   Hazelnuts   A hazelnut   Some hazelnut

Following Borer (2005) and Mathieu (2014), the plural -a:t is a divider (individuating or portioning) with count nouns and the resulting reading is inclusive to the singular. It also functions as a counter with singulatives with the reading excluding the singular.

3.2 The Plural Marker as a Measuring Head

Another function of the plural marker -a:t is to measure quantities. Specifically, it has a small quantity reading. This function recurs with mass nouns, such as liquids. This reading can be a product (or a type) of the paucal plural that is common in Modern Standard Arabic (Ojeda 1992; Zabbal 2002; Mathieu 2014). The main difference between the so-called paucal plural in Modern Standard Arabic and the one reported in Jaradat and Jarrah is that the former denotes paucity in number, while the latter denotes paucity in quantity. The plural -a:t with mass nouns occupies #⁰. With mass nouns, DivP does not project, and therefore the plural -a:t under #⁰ is not to count but rather to measure quantities. In this situation, numerals cannot merge at Spec-#P since the DivP does not project over these

mass nouns, as can be shown in (32). This is in line with Borer (2005) and Mathieu (2014) who have shown that division is integral in the syntax of number; DivP should project first, then count syntax can operate.
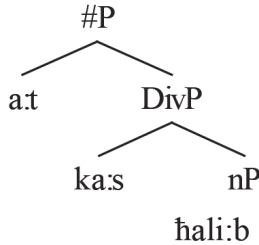
(32)

```
            #P
           /  \
         aːt    nP
             hali:b
```
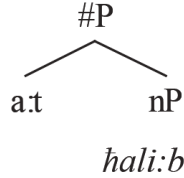
ħali:b-aːt
milk-PL.F
Some milk

DivP cannot project over mass nouns unless these nominals are preceded by a measure phrase, similar to English (Doetjes, Arregui, Cremers 1996). In this case, Div⁰ is occupied by the measure phrase, such as *ka:s* (a cup of). The projection of DivP instantiates count syntax by #P, as can be seen in (33).

(33)

```
            #P
           /  \
         aːt   DivP
              /   \
           ka:s    nP
                 ħali:b
```

ka:s   ħali:b
cup   milk
A cup of milk

In so doing, the plural marker *-aːt* can occupy Div⁰ with count nouns and act as a divider. It can also occupy #⁰, functioning as a counter with singulatives and a measuring head with mass nouns.

3.3 The Plural Marker as a Category-assigning Head

As shown in the previous section, the plural marker *-a:t* can be attached to adjectives. This normally occurs to establish agreement with post-modified nouns. In some situations, it is nonetheless combined with some adjectives, changing their syntactic categories to nouns. This combination points to the derivational nature of *-a:t* with a limited set of adjectives:

the derivational domain in the relevant literature is well-known by having poor (or even no) productivity and exhibiting lexical gaps (Wiltschko 2008). In this case, the plural marker projects under n^0, as schematically shown in the following tree.

(34)
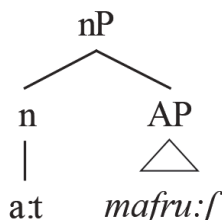
mafru:ʃ-a:t
furnished-PL.F
furniture

In nouns such as *naθrijja:t* (miscellaneous), the derivational marker *-a:t* operates over the category-assigning attributive suffix *-i* which turns nouns into adjectives. In (35b), for example, there should be three category-assigning heads. The low n^0, which is occupied by the templatic pattern C*a*C*i*C, nominalizes the uncategorized root √*nθr*, and then the resulting noun is turned into adjective by A^0. The last stage is re-nominalizing this adjective by the high n^0, which is occupied by the nominalizing *-a:t*. The meaning of the nominal emerged by the merger of the high n^0 is idiomatic but is still related to the meaning of the root (see 35c). (*-jj* is epenthetic to resolve vowel hiatus at the edge between the adjective *naθri* and the plural marker *-a:t*).

(35)

    a.   *naθr-ijj-a:t*
           scattering-ATT-PL.F
           Miscellaneous

    b.
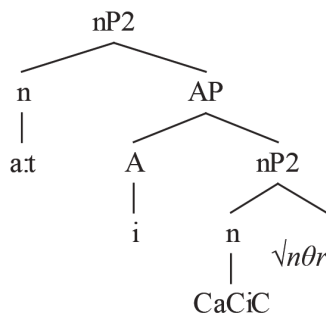
c.   √nϑr → naϑir (N)   → naϑr-i (A)   → naϑr-ijj-a:t (N)
     scatter   scatter.TEMP   scatter.TEMP-ATTRIB   scatter.TEMP-ATTRIB-PL.F
               scattering   scattered   miscellaneous

The DP of the resulting nominals lacks the inflectional domain that contains DivP and #P. However, these two functional projections can emerge in the inflectional domain of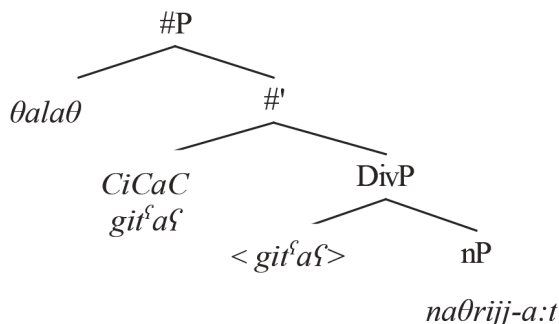 these nominals if they are preceded by a measure phrase, such as *qitˤʕit* (a piece of). See the sentence in (36a) and the relevant tree in (36b).

(36)

   a.   *ʔiʃtare:-t*   *ϑalaϑ*   *gitˤaʕ*   *naϑrijj-a:t*
        buy.PST-1SG   three   piece.PL   furnished-PL.F
        I bought three pieces of miscellaneous.

   b.

In (36b), *gitˤʕit* occupies Div⁰ which is then pluralized by the broken plural template *CiCaC* within #P where counting operates.

3.4 The Plural Marker as an Adjunct (DP-adjunct)

Adjuncts do not change the syntactic category of host words, nor would they assign a syntactic category to uncategorized elements (i.e., roots) (Wiltschko 2008). They are also transparent to the formal properties of host words, such as number and gender (Wiltschko, Steriopolo 2007; Steriopolo 2017. Following this, we propose that the plural marker *-a:t* is an adjunct when it occurs with nominals referring to parts of the day. In such cases, it merges with full DPs (i.e., a DP-level adjunct). This is mainly supported by the fact that it cannot occur at the right of a bare noun. In other words, it does not attach to nPs. For instance, bare nouns in Arabic can occur in the initial position of a construct state nominal, which is widely argued to be n⁰ rather than D (Fassi Fehri 2018). It is ungrammatical that the plural marker is hosted by the first element, which is a bare noun, when it behaves as an adjunct, as can be seen in the underlined construct state nominals in (37).

(37)

    a. *baʃu:f-ak*   *ʕasˤur/*ʕasˤrijj-a:t*   *bukrah/ju:m*   *ʔil-dʒumʕah*
        see.1SG-2SG.M   afternoon   tomorrow/day   DEF-Friday
        See you tomorrow/next Friday afternoon.

    b. *badd-u*   *ʔijʃu:f-ak*
        want.PRES-3SG.M   see.PRES.3SG.M-you
        masa/*masawijj-a:t   *ʔil-ju:m*
        evening   DEF-day
        He wants to see you today evening.

On the contrary, the plural marker -*a:t* can be attached to the bare noun of a construct state nominal under any of its other functions, as obviously shown in the following examples:

(38)

    a. *ban-a:t*   *ʔil-dʒa:mʕah*   (to divide)
        daughter-PL.F   DEF-university
        Female university students

    b. *xaʃab-a:t*   *ʔil-sari:r*   (to count)
        wood-PL.F   DEF-bed
        The pieces of wood taken from the bed.

    c. *majj-a:t*   *ʔil-bi:r*   (to measure a quantity)
        water-PL.F   DEF-well
        The water of the well

    d. *mafru:ʃ-a:t*   *ʔil-da:r*   (to derive a noun)
        furnished-PL.F   DEF-house
        The furniture of the house

We propose that the plural marker is an adjunct that merges with a full DP when it is attached to nominals that refer to times of the day[11]:

(39)
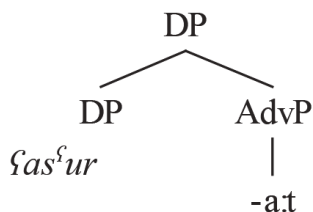
The structure in (40) identifies all possible landing sites of the plural marker -*a:t*, given its functions.

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[11] In this paper, we follow Abels and Neeleman (2009) that adjunction to right is allowed, while rightward movement is disallowed.

(40)

```
                              DP
                          ╱        ╲
                     DP              -a:t (adjunct)
                 ╱      ╲
            D⁰            #P
                       ╱      ╲
                   Spec        #'
                            ╱      ╲
    (Counting -a:t) →     #⁰         DivP
(or measuring -a:t in the absence of DivP)   ╱    ╲
        (Dividing -a:t) →      Div⁰       nP
                                        ╱    ╲
        (Nominalizing -a:t)   →              n
```

4. *The Plural Marker -a:t and Other Plural Markers*
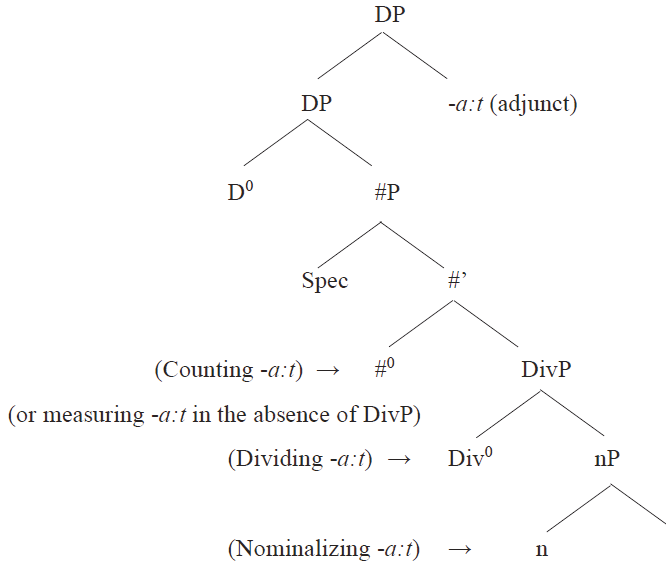
In sections 2 and 3, we have shown that the sound plural marker *-a:t* has five functions, each of which is related to some specific position in the nominal spine. This section explores the main differences between this plural marker and other plural markers in NRJA, *i.e.*, broken plural templates and the plural marker *-i:n*.

Similar to the plural marker *-a:t* with count nouns, the masculine marker *-i:n* gives rise to an inclusive reading. In (41), the question about the number of teachers in a school can be answered with one teacher or more. Hence, *-a:t* and *-i:n* can be dividers with count nouns and occupy Div⁰, following Borer (2005) and Mathieu (2014).

(41)
    a. *gade:ʃ*   *fi:*   *mʕallm-i:n*   *b-il-midraseh*
        how many   in   teacher-PLM   in-DEF-school
        How many teachers are at the school?
    b. *hassa*   *fi:*   *mʕallim*   *wahad*
        now   in   teacher   one
        Right now, there is one teacher.

As we have shown above, *-a:t* can be attached to count, singulative and indivisible or undivided non-count nouns and adjectives. On the other hand, *-i:n* can only be combined with count nouns or adjectives. These two categories must refer to human beings. It is worth noting that adjectives in Arabic, especially when they refer to human beings, act as nominal categories. They tend to be treated as de-adjectival nominals. A diagnostic of their nouni-

ness in Arabic is that they can be divided. In (42a), the question, which contains the plural adjective *ʃa:tˤr-i:n* has an inclusive reading, similar to the plural nominal in (41a); it can be answered by one or more than one.

(42)

    a. *gade:ʃ*   *fi:*   *ʃa:tˤr-i:n*   *b-il-sˤaff*
        How many   in   clever-PLM   in-DEF-class
        How many excellent students are in the class?
    b. *fi:*   *waħad*
        in   one
        There is one student.

The examples in (41 & 42) indicate that the masculine plural *-i:n* is a divider and unambiguously under Div^0. In contrast, the plural marker *-a:t* has four possible landing sites in the syntactic structure of nominals.

    The broken plural (or rather the broken plural templates) is created by modifying the internal structure of a singular word. In Standard Arabic, it can be of two types: abundance plural and paucal plural (Ojeda 1992). The former applies between 3 and 10, and the latter yields pluralities over 10. Each type has several templatic forms. Discussing these types and their templatic forms in Standard Arabic falls beyond the scope of this research paper. Concerning the broken plural templates in NRJA (and other vernaculars), a distinction between plural templates denoting abundance and templates yielding paucity has not been previously reported, indicating that Arabic vernacular varieties may lack this distinction.

    Similar to the masculine plural marker *-i:n*, broken plural templatic forms operate over count nouns or adjectives, as can be seen in (43 & 44) and give rise to the inclusive reading in NRJA, as in (45). Here, it is worth pointing to the morphosyntactic nature of the broken plural templates in Standard Arabic. Some of these templates, which are so-called paucal broken plural templates in the relevant literature, may count small numbers, excluding the singular and numbers above 10, and therefore are located in #^{0}. Regarding the abundant broken plural templates in this variety, it can be either to divide (i.e., it is located in Div^0, yields inclusive reading, and covers an extended range of numbers), or to count numbers above 10, and accordingly should be regarded as a counting head (#^{0}).

(43)

    a. *baħr*   >>>>   *buħu:r*
        sea   sea.PL
                         seas
    b. *sahm*   >>>>   *sha:m*
        arrow   arrow.PL
                         arrows
    c. *gami:sˤ*   >>>>   *gumsˤa:n*
        shirt   shirt.PL
                         shirts

(44)

    a. *baxi:l*   >>>>   *buxala*

        parsimonious person   parsimonious.PL

                                              parsimonious people

    b. *karim*   >>>>   *kurama*

        generous   generous.PL

                                              generous people

(45)

    a. *gade:ʃ*   *fi:*   *tˤulla:b*   *b-il-sˤaff*

        How many   in   student.PL   in-DEF-class

        How many students are in the class?

    b. *fi:*   *waħad*

        in   one

        There is one student.

Following these lines, we assume that broken plural templates in NRJA are solely located under Div⁰, unlike their counterparts in Standard Arabic, where some are mostly dividing, and others are typically counting. This implies that the masculine plural suffix *-i:n* and broken plural templates in NRJA exhibit one and the same morphosyntactic nature, which is counting plural, whereas the feminine plural suffix is of diverse nature, as far as this sub-variety of Jordanian Arabic is concerned.

5. *The Impact of the Plural Marker -a:t on the Architecture of DP in Jordanian Arabic*

Plural marking is expected to trigger an extended version of DP as in (46).

(46)

```
              DP
             /  \
           D⁰    #P
                /  \
             Spec   #'
                   /  \
                 #⁰    DivP
                      /  \
                   Div⁰   nP
```

On the other hand, the plural marker *-a:t* in NRJA triggers the projection of functional phrases once it is combined with some nominals, namely, count nouns and singulatives.

The marker *-a:t* is under Div^0 with count nouns and under $\#^0$ with singulatives. With regard to the measuring *-a:t*, it instantiates the projection #P within DP with undivided or mass nouns. In this case, the inflectional domain of these non-count nouns lacks DivP. $\#^0$, which is occupied by *-a:t*, directly operates over the nP of these nouns since its function is not to count but rather to measure small quantities.

The simplest version of DP of nominals in NRJA emerges when the plural marker *-a:t* is a nominalizer with some adjectives. The inflectional domain, as an intermediate stage between nP and DP, is in such cases absent (*i.e.*, it does not project) due to the nominalizing function of *-a:t* with adjectives. The plural marker *-a:t* merges under n^0. The projection of division and count syntax is conditioned by the projection of a measure phrase under Div^0. This entails that such nominalized adjectives are similar to mass nominals in that the merger of Measure Phrase is what gives rise to division and counting readings. As for the marker *-a:t* functioning as an adjunct, it is external to nominal DPs. Hence, the plural marker *-a:t*, similar to its function as a nominalizer, cannot trigger the full version of number syntax within the inflectional domain of the nominal DP in NRJA.

6. *Conclusion*

This paper has investigated the functions and morphosyntax of the sound plural marker *-a:t* in NRJA. This marker is found to be polysemous because of its morphosyntactically and functionally diverse nature. Its functions depend on its position in the syntactic structure of nominals. It is a counter or a measurer under $\#^0$, a divider under Div^0, a nominalizer under n^0 or a transparent DP-adjunct. This adds credence to previous studies that have proposed that the plural is not one cross-linguistically but can syntactically and semantically vary.

The significance of this study descends from this diverse nature. Once a word enters the syntactic derivation, the syntactic landing site of this marker is selected and its function is determined. It resides in Div^0 with count nouns, whereas it lands in $\#^0$ with singulatives (in the presence of DivP) or non-count nouns (in the absence of DivP). As a nominalizer in n^0, it is combined with adjectives. With nominals referring to times of the day, it acts as a DP-adjunct. Hence, the morphosyntactic analysis offered to account for the polysemous plural marker *-a:t* in NRJA in this paper is not in agreement with Ritter's (1991) and Borer's (2005) accounts where the plural is unique and monosemous (Ritter 1991; Valois 1991; Picallo 1991; Acquaviva 2008). It rather supports the proposal that the plural can be distributed along the syntactic structure of nominals, due to its diverse and polysemous nature (Wiltschko 2008; Butler 2012; Gillon 2015; Jaradat, Jarrah 2022a; Jarrah, Jaradat, Alkhawaja 2022).

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