A Fresh Analysis of the Origin and Diachronic Development of "Dialectal *Tanwīn*" in Arabic

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Scholars of Arabic dialects have long noted the occurrence of a morpheme in a widespread number of dialects, realized *-ən* or *-an*, frequently suffixed to morphologically indefinite nouns, especially when followed by an adjective. Separately, another morpheme, realized *-un* or *-u*, is attested with a slightly different distribution in the dialects of western Yemen. Traditionally, scholars have interpreted both morphemes as reflexes of an etymological case vowel + *tanwīn* (Blau 1981), traditionally labeled "dialectal *tanwīn*." In this paper, I offer a new reconstruction of the origin and diachronic development of this morpheme. Throughout I integrate data and insights from comparative Semitics, as well as recently studied pre-Islamic epigraphic and textual materials, in order to break the familiar Classical Arabic / dialectal Arabic dichotomy and reframe the way in which historiography of features in the dialects is conducted.

1. INTRODUCTION

Scholars of the history and development of Arabic are becoming increasingly aware of, and interested in, features attested in contemporary Arabic dialects that can illuminate the history and development of Arabic. One of the most discussed, and debated, is the morpheme called "dialectal *tanwīn*" (henceforth DT). DT refers to the morpheme, typically realized as *in* or *an*, that is suffixed to a morphologically indefinite noun, primarily when followed by some type of adnominal adjective or clause, e.g., *bint-in zēna* "a pretty girl" (Holes 2016: 131). This distribution of DT is attested historically in texts from Andalusia ([Corriente] 2013), as well as in Judaeo-Arabic texts, with attestations dating at least as early as the beginning of the ninth century (Blau and Hopkins 2017: 382).[1] In the Tihama region of SW Saudi Arabia and Yemen, a similar phenomenon, also referred to as DT, occurs, but with a different distribution (Behnstedt 2016: 64–67).

Most scholars have believed that the morpheme is made up of a frozen case vowel and *-n*, equivalent with etymological *tanwīn*, which was suffixed to syntactically unbound nouns that lacked the definite article. A few scholars have questioned such identification recently on the basis that the morpheme does not synchronically mark case, nor can it be reconstructed as having done so without relying on ClAr. Instead, they reconstruct it with its current function, sometimes dubbing it a "connecting morpheme" **-Vn* (Owens 2006: 106; Holes 2011; Ferrando 2018: 111).

Author's note: My sincere thanks to Na'ama Pat-El, Marijn van Putten, Ahmad Al-Jallad, Benjamin Suchard, Fokelien Kootstra, and three anonymous reviewers for their helpful comments, corrections, and suggestions on earlier versions of this paper. Any errors that remain are strictly mine. Abbreviations used through this text are: ADJ = adjective; ClAr = Classical Arabic; DT = dialectal *tanwīn*; JA = Judaeo-Arabic; MAr = Middle Arabic; MSA = Modern Standard Arabic; N = noun; PP = prepositional phrase; QCT = Quranic Consonantal Text; RelCl = relative clause.

1. All centuries are CE.

I argue here for a new account of development of the morpheme. I will argue that the current distribution of DT in both non-Tihama and Tihama dialects is perfectly compatible with a derivation from etymological *tanwīn*. We need not appeal to a separate, otherwise unattested morpheme to explain DT. However, I will argue that the prevalent reconstruction, laid out in detail by Blau (1981: 167–212), is incomplete and does not account for all available data in the most parsimonious and economic way. My proposal is that realization of DT represents a merger of the etymological case vowels following a loss of phonemic contrast, which itself possibly contributed directly to the breakdown of the case system. Further, I will make the case that the distribution of DT, which differs significantly between Tihama and non-Tihama varieties, should be understood against the background of the two patterns of pause attested in ClAr: prose and poetry. I conclude by contextualizing the foregoing discussion in the broader history of Arabic, including a discussion of the pre-Islamic epigraphic and early Islamic Arabic data.

Section two reviews DT, relying on examples from a number of dialects, both historical and contemporary. The non-Tihama data are presented together first, broken down by syntactic function, followed by a brief review of the Tihama data. Section three reviews previous proposals in more detail, highlighting what are, to my mind, the weaknesses of each. Section four is dedicated to the presentation of a modified form of the traditional argument, which I hope will be more complete and, therefore, more convincing than previous attempts at explaining the origin and development of DT. The paper concludes with section five, which contextualizes the evidence historically.

2. DATA

DT is attested in both historical and contemporary data. In this section I will review the attested functions of DT, which, as noted above, are remarkably similar across time and space. In most contexts, the noun to which DT is suffixed is followed by an adnominal attribute. This attribute is virtually always an attributive adjective, and less commonly a prepositional phrase or a verbal clause. In a handful of dialects, DT occurs on nominal forms acting adverbially. A few other, more restricted functions will be discussed below.

2.1. N-Vn + ADJ

By far the most common context in which DT occurs in every available corpus is suffixed to a noun followed by an adnominal attributive adjective (N-Vn + ADJ). In Classical JA, in a few examples primarily from one text (*High Ways*), DT is written by means of the two *kasra*s (-ٍ)or two *fatḥa*s (-ً) from Arabic orthography (Blau 1981: 173–74):

(1) לם ידהבהא אכתסאבٍ עלמי

lam	*yaḏhab=hā*	*iktisāb=in*	*ʿilmiyy*
NEG	leave.IMPF.3ms=SUFF.3fs	acquisition=DT	scientific

"And (an ignorance of) the acquisition of knowledge has not left it"

Elsewhere, DT was written as a separate word אן /in/ or /an/ (Blau 1981: 175–76):

(2) אלי בלאד אן בעידה

ʾilā	*bilād*	*an*	*baʿīda*
to	countries	DT	far

"To faraway countries"

The same practice of writing DT as a separate word is ubiquitous in the correspondence from Egypt and N. Africa found in the Cairo Geniza, dating from the eleventh to nineteenth centuries. The following examples are taken from Esther-Miriam Wagner's comprehensive study of these letters (2010: 178–79):

(3) ונחן תחת חאל אן עצים

wa=naḥnu	*taḥt*	*ḥāl*	*an*	*ʿaẓīm*
and=we	under	state	DT	terrible

"While we (were) in a terrible state"

(4) נביע מנה שי אן אכר

nabīʿ	*min=hū*	*šay(y)*	*an*	*āxar*
buy.IMPF.1CP	from=SUFF.3ms	thing	DT	other

"We will buy another thing from him"

The pattern N-Vn + ADJ is the only use of DT that Federico Corriente lists for Andalusian Arabic, dating from the eleventh century (2013: §3.1.1.1.1):

(5) *ʿayš=an* *ḍank*
life=DT miserable
"Miserable life"

(6) *maṣāyib=an* *ʿiẓām*
disgraces=DT great
"Great disgraces"

(7) (Ibn Quzmān, twelfth century, apud Ferrando 2018: 96)

wajh=an	*malīḥ*	*wa=šarrāb=an*	*aṣfar*
face=DT	nice	and.drink=DT	yellow

"A beautiful face and a golden wine"

This function of DT, marking a noun followed by attributive adjectives, is the most common one in the modern Arabic dialects. While especially concentrated in the Arabian peninsula, it is attested in dialects from across Anatolia and Mesopotamia, the Levant, sub-Saharan Africa, and even the isolated pockets of Arabic speakers in Central Asia:

Afghanistan Arabic (Ingham 2006: 30)

(8) *fad* *gapp=in* *maḥqūl*
one speech=DT reasonable
"Reasonable words"

(9) *zaġīr=id*[2] *darvīš*
small=DT dervish
"A dervish child"

Uzbekistan Arabic (Zimmerman 2009: 621–22)

(10) *bayt=in* *kabīr*
house=DT big
"A big house"

2. In this case, the DT assimilates to the following dental: **zaġīr-in darvīš* > *zaġīr-id darvīš*.

(11) *mū=hin*[3] *aḥmar*
water=DT red
"Golden water"

Bahraini Baḥarna Arabic (Holes 2016: 131–32)

(12) *bint=in* *zēna*
girl=DT beautiful
"A beautiful girl"

(13) *may=in* *bārda*
water=DT cold
"Cold water"

Omani Arabic (Holes 1996: 47–48)

(14) *in* *kān* *nāqt=in* *zēna*
if to be.PERF.3ms female camel=DT good
"If it's a good female camel"

(15) *u* *iḍa* *kān* *ksūr=in* *kaṯīra*
and if to be.PERF.3ms broken bones=DT many
"And if many bones are broken"

Najdi Arabic (Ingham 1994: 48)

(16) *jā=na* *ḥarbiyy=in* *ṭuwīl*
come.PERF.3ms=1cp Ḥarbī=DT tall
"There came to us a tall Ḥarbī"

(17) *beet=in* *kibīr*
house=DT large
"A large house"

Dialects of SE Najd, such as the dialect of Āl Murra, suffix the DT to the attributive adjective as well (Ingham 1986: 280):

(18) *rēna* *bʿīr=in* *ʿōd=in*
see.PERF.1cp male camel=DT large=DT
"We saw a large male camel"

Sudanese Arabic (Owens and Hassan 2009: 711–12)

(19) *rājil* *abu* *watīr=an* *hamra*
man father of car-DT red
"A man with a red car"

(20) *rajl=an* *šūm*
man=DT nasty
"A nasty man"

3. The *h* preceding DT in this instance is a phonetic insertion to break up the sequence of vowels.

(21) *šarēt* *sayyārat=in* *yadīdeh*
buy.PERF.1cs car=DT new
"I have bought a new car"

(22) *yabal=in* *aswad*
mountains=DT black
"Black mountains"

A few SW Saudi dialects, most notably that of Rijāl Almaʾ, pattern with SE Najdi dialects (see ex. 21 above), and attach the DT to the following attributive adjective as well (Asiri 2008: 72):

(23) *tahnah* *bint=in* *ṭayyibat=in*
that girl=DT good=DT
"That is a good girl"

2.2. N-Vn + Attributive Verbal Clause

DT is also attested suffixed to a noun followed by an attributive verbal clause. Although this pattern is decidedly less common across the contemporary dialects than N-Vn + ADJ, it is nevertheless attested both historically in JA as well as in contemporary dialects.

Judaeo-Arabic

(24) שאהד אן יחכי
šāhid *an* *yaḥkī*
witness DT tell.IMPF.3ms
"A witness who is telling"

(25) (Wagner 2010: 178–79)
ואכדך מעי לכל בית אן ארוח ליה
wa=āḫuḏ=ak *maʿ=ī* *li=kull* *bayt*
and=take.IMPF.1cs=SUFF.2ms with=SUFF.1cs to=every house
an *arūḥ* *lī=h*
DT go.IMPF.1cs to=it
"I will take you with me to every house I go into"

Andalusi Arabic (Ibn Quzmān; Ferrando 2018: 101)

(26) *šufayfāt=an* *yaṭūl* *fī=hā* *l=iʿtibār*
small lips=DT be long.IMPF.3ms in=3fs DEF-pondering
"Small lips that would be pondered long"

(27) *ilā* *yawm=an* *yulqā* *ʿalayya* *t-turāb*
until day=DT be thrown.IMPF.3ms upon=1cs DEF-dust
"Until the day they cover me with earth"

Bahraini Arabic (Holes 2016: 132)

(28) *arāḍ=in* *bayyaʿ=ha*
lands=DT sell.PERF.3ms=3fs
"Lands that he sold"

Najdi Arabic (Ingham 1994: 52)

(29) *awwal* *šiggit=in* *šift=aha*
first flat=DT see.PERF.1cs=3fs
"The first flat I have seen"

(30) *rāʿi* *šiggit=in* *kallamt=ih*
owner flat=DT talk.PERF.1cs=3ms
"The owner of a flat I have spoken to"

Afghanistan Arabic (Ingham 2006: 34)

(31) *darwīš=in* *šuft*
dervish=DT see.PERF.1cs
"I saw a dervish" (or "A dervish whom I saw")

(32) *wazīr=in* *kō* *ʿind=u*
minister=DT to be.PERF.3ms at=3ms
"He had a vizier" (or "a vizier whom he had")

2.3. N-Vn + PP

The final usage, attested in both historical and contemporary Arabic varieties, is to mark a noun modified by an attributive prepositional phrase.

Judaeo-Arabic

(33) (Wagner 2010: 39)
לא תעבדון רב אן סוואי
lā *taʿbudūn* *rabb* *an* *sawā=y(a)*
NEG worship.IMPF.2mp lord DT except=SUFF.1cs
"Do not worship another God beside me"

(34) (T-S 8J39.12/rm.16f; Blau 1981: 175)
לאן מא יקע שי אן פיה כיר פי אלצוק
li=ʾan *mā* *yaqaʿ* *šay(y)* *an* *fī=h* *ḫayr* *fī* *al=sūq*
for=that NEG fall.IMPF.3ms thing DT in=it good in DEF=market
"Because there is nothing of any good (quality) to be found in the market"

NE Najdi (Ingham 1982: 55)

(35) *jizʾ=in* *min=h*
part=DT from=3ms
"A part of it"

(36) *rifīź=in* *l=i*
friend=DT to=1cs
"A friend of mine"

Bahraini Baḥārna Arabic (Holes 2016: 132)

(37) *gitīʿ=in* *min* *il=hōš*
herd=DT from DEF=goats
"A herd of goats"

(38) *marr=in* *l=ik* *marr=in* *ʿalē=k*
time=DT for=2ms time-DT against=2ms
"Sometimes (life's) for you, sometimes against you"

Omani Arabic (Holes 1995: 48)

(39) *kill* *bēt=in* *ʿan* *rabʿ=a* *msāfa* *šway*
Each house-DT from neighbor=3ms distance bit
"Each household which is some distance from its neighbor"

2.4. Adverbial Uses of DT

The Semitic language family is relatively poor in true adverbials. In ClAr, most adverbs are indefinite nouns in the accusative case, e.g., Arabic *nahāran* "during the day." Reflexes of the accusative are found in certain common phrases in the modern dialects, such as *ahla wa-sahla* "welcome," etc. (see Al-Jallad and van Putten 2017). In many dialects, forms with *tanwīn* are also attested, e.g., *ahlan wa-sahlan* alongside *ahla wa-sahla* (in, e.g., Ammani Arabic; Al-Wer 2007). In most cases, with no other attestations of DT in a given dialect, the most likely source of the forms with *tanwīn* is Modern Standard Arabic. In dialects that possess DT, however, we find examples of adverbials suffixed with -Vn, some of which are not widely used in MSA. Examples of this adverbial use of DT include:

Najdi Arabic (Ingham 1982: 55)

(40) *ġaṣb=in*
force=DT
"By force, of necessity"

(41) *hagwit=in*
seem=DT
"It seems, seemingly"

(42) *ʿugb=in*[4]
after=DT
"Afterwards"

Bahraini Sunni Arabic (Holes 2016: 134)

(43) *baʿd=an*[5]
after=DT
"Then, next"

4. Aside from the nonclassical realization of adverbial *tanwīn*, this word also has a nonclassical realization of *qāf*, both strongly pointing in the direction of genuine dialectal form rather than ClAr borrowing.

5. This form is reminiscent of the more widespread dialectal form *baʿdēn* "then, after that, afterward." While it is possible that *baʿdēn* represents a development from *baʿdan*, it is not clear what would have caused a lengthening of the vowel, nor the reflex *ē*, usually corresponding to **ay* (or sometimes **īn*; see Behnstedt 2016 for examples in Yemeni dialects). Another possibility is that the form goes back to the phrase *baʿda ʾānin* "after a time." In this scenario, as the phrase became set, intervocalic ʾ would have been lost (**baʿda ʾānin* > *baʿdānin*), as well as *tanwīn* (*baʿdānin* > *baʿdān*). If speakers analyzed the ending *ān* as a dual, especially if dual case inflection was still present, this could have resulted in the dual oblique *ēn* being extended to this phrase as well. Alternatively, the phrase *baʿdēn* could represent the use of the dual suffix *ēn* to signify a more general "few, little," as it does in other instances as well. In that case, the idea would be "after a little," which eventually just because "after a period of time." For an alternative interpretation, see S. Procházka (2000).

(44) *lazm=an*
necessary=DT
"Inevitably, for sure"

(45) *aqallat=an*
least=DT
"At least"

(46) *bil=ʿamd=an*
in.DEF=intention=DT
"Intentionally"

Intriguing in the case of these Bahraini examples is the fact that adverbially, DT is *-an* rather than the otherwise attested *-in*. Clive Holes emphasizes the fact that his informants were uneducated and functionally illiterate, reducing the likelihood of a borrowing from MSA (2016: 134 n. 65), which is strengthened even more by the fact that these examples are either unattested in MSA (e.g., *baʿdan* and *lazman*) or are ungrammatical in MSA (e.g., *aqallatan* and *bil-ʿamdan*). Of the ungrammatical forms, *aqallatan* is based on the masculine singular comparative or superlative **ʾaqallv*,[6] which does not take *tanwīn* in either ClAr or MSA, nor is the feminine form made by adding *-at* to the masculine *aqall* base. The example of *bil-ʿamd-an*, "intentionally," is even more remarkable for the co-occurrence of DT and the article.

2.5. Other Syntactic Functions

Whereas the above functions are widely attested across the Arabic-speaking world, a subset of dialects from the Arabian peninsula attests limited use of DT in other contexts as well. Often, these uses of DT are peculiar to a particular dialect or dialect group. In Bahraini, for instance, DT is suffixed to the quantifier *kill* "each, every; all" as well as a few other distributive expressions (examples from Holes 2011; 2016: 132–33):

(47) *iylisaw* *kill=in* *maḥall=ah*
sit.PERF.3mp each=DT place=3ms
"They sat down, each in his place"

(48) *kill=in* *ya* *yifṭar*
all=DT come.PERF.3ms breakfast.IMPF.3ms
"All who passed by (were given food to) break their fast"

(49) *nās=in* *rāḥaw*, *nās=in* *inzalaw*
people=DT go.PERF.3mp people=DT stay.PERF.3mp
"Some people left, some people stayed"

In other dialects, such as Najdi and Andalusi, DT is suffixed to participles used verbally. In Najdi varieties, DT is suffixed to these participles as long as the object is not expressed in a pronominal suffix (Ingham 1994: 49).

6. It is not clear why speakers have added *at* to the base. If one wanted to make an adverb out of the comparative *aqall*, it would have certainly been possible to simply add *an*, i.e., ***aqallan*. Holes does not offer speculation.

Andalusi Arabic ([Corriente] 2013: §3.1.1.1.1)

(50) *haléft . . .* *cáyl=en* *izm* *allah*
swear.PERF.2ms say.PART.ms=DT name God
"Did you swear . . . saying: by God . . . ?"

Najdi Arabic (Ingham 1994: 49)

(51) *ana* *jāyb=in* *hāḏa*
I bring.PART.ms=DT this
"I have brought this"

(52) *ana* *gāyl=in* *l=ik*
I say.PART.ms=DT to=2ms
"I have said to you"

2.6. Tihama DT

The dialects of the Tihama,[7] located in SW Saudi Arabia and NW and western Yemen (on which, see Behnstedt 2016; T. Procházka 1988), attest DT, but often with a different distribution and different vowel than the dialects attested outside of the area. Typically, in these dialects, DT is suffixed to any morphologically indefinite noun, not just those followed by an attributive adjective or clause. In some dialects, the form is identical to DT elsewhere, namely, *-in*:

(53) im-Maṭṭah (Behnstedt 1987: 209)
staʿd=in
stalk=DT
"a *ḏura* stalk"

ʿaṭm=in
bones=DT
"bones"

ṭiʿl=in
rib=DT
"rib"

ṭayf=in
guest=DT
"guest"

Additionally, in a few dialects on the edge of the Tihama, the distribution of DT resembles that elsewhere outside of the Tihama, namely, occurring on a noun followed by a qualifying adjective (Behnstedt 2016: 65):

7. My inclusion of the phenomena found in the Tihama as parallel to the DT outside of the Tihama might be problematic for some. For example, due to the dearth of detailed dialect descriptions, we are unable to elaborate on the synchronic discourse status of final *-u*, nor do we have a nuanced picture of what, if any, social factors affect its synchronic distribution. Such gaps in our knowledge could lead to criticism of my including these phenomena in a diachronic study. However, while I acknowledge throughout the often tenuous nature of the evidence available to us, we nevertheless have sufficient information on the syntactic distribution of DT in these dialects to merit its inclusion. Since there is remarkable consistency across the dialects surveyed in, e.g., Behnstedt 2016, and the present study is a diachronic examination of its syntactic distribution, I see no reason to exclude it.

(54) Abha
manti *marat=in* *sanʿah*
NEG.you.2fs woman=DT good
"You aren't a good woman"

The morphology of DT in many Tihama varieties differs from that of non-Tihama dialects. In these Tihama dialects, a final *-u* (or *-ū*), without *-n*, is attested, while in a smaller group of dialects in that same region *-un* is attested (Behnstedt 2016: 64–66):

(55) Zabid *bayt=u* "house" = Mīdi *bayt=un* "house"

Unfortunately, as Behnstedt (2016: 66) acknowledges, the nature of the data collection does not allow a complete picture of the pausal distribution in many of these *-un* (or *-u*) dialects. A few dialects for which text-length data is available, however, attest an intriguing distribution, e.g., non-pausal *-in* / pausal *-u*:

(56) Bal-Qarn (T. Procházka 1988: 47–49)
rēt *rāyīl=u*
see.PERF.1cs men=DT
"I saw men"

but

rēt *rāyīl=in* *fi=m=ḥugnah*
see.PERF.1cs men=DT in=DEF=field
"I saw men in the field"

(57) *bēt=in* *aḥmar=u*
house=DT red=DT
"A red house"

This same distribution is also reported for the dialects of ar-Rāyṭ and the Banī Malik in the Saudi Tihama, as well as in the dialect of the Banī ʿAbādil (Behnstedt 2016: 65).

Thus, while the synchronic function of non-Tihama and Tihama DT phenomena are different, their shared distribution—occurring only on indefinite, unbound nouns—in my view strongly suggests a shared origin. Blau has further observed (2006: 29) that in many of Tihama dialects, DT is often absent on a number of nominal patterns that were diptotic in ClAr, including the comparative patterns **ʾafʿal* and **faʿlay* (also a color adjective pattern), and the **ān* suffix. It is also frequently absent on the feminine singular ending **-at* (*tāʾ marbūṭa*). Thus:

(58) Minabbih (Behnstedt 2016: 65)
Masc.sg. *astnaġ* (=*aṣnaǧ*) "deaf" but Pl. *stunǧ=in*
abyaṭ "white" but *bīṭ=in*
astfar "yellow" but *stufr=in*

(59) im-Maṭṭah (Behnstedt 1987: 209)
marwah (not ***marwat-in*) "firestone" but *marawāt=in* "firestones"
sanah (not ***sanat-in*) "year"

This morphological distribution is unlike that attested in the non-Tihama dialects reviewed above, in which, as seen, DT occurs regularly on the feminine singular **-at* and broken plural patterns, and even occasionally on the sound masculine plural. The reasons for this, I will

argue, have to do with the degree to which *tanwīn* was reanalyzed outside of the Tihama, which did not take place in most of the dialects of the Tihama.[8]

Despite the dearth of data and the almost total lack of complete texts, we can nevertheless see from this partial picture several general trends. Pausal forms are noted in only a few dialects, perhaps as a result of elicitation techniques. In SW Saudi Arabia, we noted the existence of a few dialects in which nonpausally *-in* occurs, while pausally *-u* (or perhaps *-ū*) occurs (i.e., Bal-Qarn; T. Procházka 1988) (Table 1).

Table 1. Pausal Distribution in Tihama Arabic Dialects

Dialect	Nonpausal	Pausal
Bal-Qarn Banī ʿAbādil	*bēt-in*	*bēt-u*
Zabīd	*bēt-u*	*bēt-u*
Minabbih	*bēt-in*	*bēt-in*
Ḥarāḍ	*bēt-un*	*bēt-un*

Additionally, DT is often absent on originally diptotic nouns, which category here includes the feminine ending **-at*,[9] but this is not consistent across the dialects, nor always within the same dialect.

2.7 Review of Distribution

There are two clear patterns to the distribution of DT that are classifiable according to geography—non-Tihama dialects and those of the Tihama. Table 2 summarizes the distribution of each.

8. A certain amount of inconsistency concerning the distribution of DT on these CAr diptotic papterns should, however, be noted:

On *fuʿalāʾ*: Abha (al-Azraqi 1998: 73)

fuġara=nn	*masākīn*
poor=DT	poor
"They are poor [and] poor"	

On *ʾafʿal*

ʾabyaḍ=in	*mġabbir*
white=DT	dusty
"Dusty white"	

On *faʿālīl*

im-Maṭṭah (Behnstedt 1987: 209)

marāgīm=in	"letters"
mafātīḥ=in	"keys"
maṣāyb=in	"disasters"

9. See van Putten 2017 for a discussion of the Yemeni data in the context of evidence from the QCT.

Table 2. Summary of DT Distribution in Non-Tihama and Tihama Dialects

	NON-TIHAMA	TIHAMA		
nonpausal	*-in* / *-ən* / *-an*	*-in* / *-un* / *-u* *-in* / *-un* / *-u*		
pausal	*-Ø*			
			nonpausal	pausal
		Bal-Qarn Bani ʿAbādil	*-in*	*-u*

As we have seen, in the non-Tihama dialects, outside of a few frozen adverbs, DT occurs when suffixed to a morphologically indefinite noun when followed by an attribute. The attribute usually consists of an attributive adjective, but DT is also attested in a subset of these dialects when the noun is followed by a verbal or relative clause or a prepositional phrase. The vowel is typically realized either as *-i* or *-a*, and regularly matches the nonphonemic epenthetic vowel quality typical of each dialect. DT does not occur suffixed to nouns that occur utterance-finally.

In the dialects of the Yemeni and Saudi Tihama, typically any eligible noun occurs with DT regardless of its position in the utterance. Exceptions primarily include patterns that in ClAr are diptotic. The vowel is usually realized as either of the high vowels *-in* or *-u(n)*.

3. PREVIOUS SCHOLARSHIP

Most scholars connect the modern caseless varieties of Arabic dialects, wherein singular, broken plurals, and feminine singular and plural nouns are not marked with a short case vowel or final *tanwīn*, with pausal forms of ClAr. In ClAr, indefinite nouns ending in nominative *-un* and genitive *-in* have pausal allomorphs that end in *Ø*:

nonpausal	pausal
bayt=un/*bayt=in*	*bayt=Ø*

The accusative singular an, however, loses tanwīn and the a vowel is lengthened to ā:

nonpausal	pausal
bayt=an	*bayt=ā*

Th. Nöldeke (1963), followed by H. Birkeland (1952), argued that the modern dialectal forms originate in the generalization of pausal forms to all contexts, except, of course, forms that never had pausal allomorphs, like the feminine singular construct *-at*.

J. Cantineau (1960) developed a more detailed reconstruction with the following developments:

a. Final short high vowels weakened and lost; accusative *-a* remained.

b. By analogy with the definite forms, indefinite *-un* and *-in* were dropped.

c. A phonetic change led to definite accusative *-a* and indefinite pausal *ā* being lost, leaving only indefinite accusative nonpausal *-an*.

d. Based on analogy with all other, now *Ø*-marked forms, indefinite accusative *-an* was dropped.

Cantineau's proposal is marred by the fact that he does not connect it with other relevant linguistic features, such as the modal system on the imperfect verb. More importantly, while his account is certainly possible for dialects without DT, it does not account for those that retain it. Elsewhere (1936: 102), Cantineau connects DT with occasionally retained accusative *-an*.

The most detailed analysis offered that has specifically engaged ClAr and modern dialects with DT is that of Blau (1961; 1966–67; 1981). Blau apparently assumes that most modern dialects developed in essentially the same way as those varieties represented in the Middle Arabic texts, which developed in the newly established cities outside of the Arabian peninsula in the early Islamic period. Specifically, he attempts to account for all the examples of DT, along with the accusative marking in Middle Arabic, via one set of developments. Blau suggests that several factors induced the loss of case and mood endings, including the substrate languages of the conquered peoples, which lacked both, as well as a shift in stress and the generalization of pausal forms. He reconstructs the following steps:

a. Short vowels in open syllables, especially word-finally, weakened and were lost. This happened with high vowels first, so that definite nouns, and all diptotes, lost *-u* and *-i*.

b. Nominative and genitive pausal forms extended to nonpausal forms, leading to *-un* and *-in* > *Ø*.

c. Word-final long vowels shortened, which led pausal *-ā* (< *an*) to become *a*.

d. Short *-a* weakened and was lost, which left accusative *-an* as the sole case marker. Case began to break down.

e. Accusative *Ø* was leveled to context optionally.

f. Oblique case markers on the dual (*-ayn*) and plural (*-īn*) replaced nominative (*-ān* and *-ūn*).

Following Cantineau, Blau argues that all non-Tihama DT reflects accusative **-an*. Regarding the vowel of DT, which is everywhere outside of the Tihama either *-i* or *-a*, Blau noted that a fronting of *a* > *i* is common in many dialects, chiefly in the case of the definite article (1981: 188). Regarding Tihama dialects with *-u(n)*, Blau, along with others, assumes that it unambiguously reflects etymological nominative *-un* (Blau 1988: 529; Behnstedt 2016: 64).

Blau's claims are among the few specific arguments that deal with the identity of the vowel of non-Tihama DT (*-in* or *-an*), which though widely accepted as originally a case vowel (e.g., Fischer and Jastrow 1980: 120–21; Diem 1981), had not garnered much diachronic analysis. However, as Jonathan Owens (2006: 102 n. 24) has noted, the vowel in non-Tihama dialects typically corresponds to the nonphonemic vowels preferred in the particular dialect. In, e.g., the Sudanese example above (nos. 19, 20), DT is *-an*, which is in line with the realization of other preformatives, afformatives, and epenthetic vowels in those dialects, such as the article *al* (not *il* or *əl*), as well as the fpl verbal suffixes *-an* (not *-in*) (Owens and Hassan 2009: 711–12). Although it is certainly correct that *a* and *i* alternate in many dialects, given the tendency for the vowel to pattern with nonphonemic epenthetic vowels, no conclusions based solely on the realization of the vowel in these dialects can be considered decisive.[10]

10. An interesting and, as far as I can tell, unique situation obtains in many Najdi dialects, where the feminine plural verbal suffix is typically *in*, but is *an* on verbs in certain verbal stems, such as V and VI, as well as internal passives (Ingham 1982: 82).

Blau's scenario also rests on his belief that the MAr texts represent, in some form or fashion, examples of a historical stage of development that led from ClAr to the contemporary dialects (Blau 1981: 1–18). He is bound therefore to attempt to explain all of the manifestations of DT in MAr and contemporary dialects via the same process. Since the *alif* that in quranic and ClAr orthography marks the indefinite accusative is used in MAr texts, although with a different distribution, Blau believes that the accusative case must have remained longer than the other two cases across the board in all Arabic varieties.

Blau's historical framework is, however, rendered problematic by recent scholarship. First, linguistic analysis of pre-Islamic epigraphic evidence from the southern Levant and western Arabia has revealed a diverse, heterogeneous linguistic makeup of Arabic in that period (Al-Jallad 2018). While the accusative does appear to have been retained longer in some of the dialects in the pre-Islamic period, such as those written in the Safaitic script, elsewhere the case system seems to have broken down basically simultaneously, as in dialects in the Nabataean realm.[11] In a recent paper, van Putten and Stokes (2018) argue that the orthography of the QCT (*rasm*) suggests that the so-called pausal forms typical of ClAr prose are in fact attested in all contexts of the Quran. That is, **un* and **in* are -Ø, **-an* is *-ā.* However, the distribution of roots with final glides when word-final and nonword-final suggests that case, especially the genitive, persisted in nonword-final contexts in the Quran. A parallel, in which the genitive appears to have persisted longest when nonword-final, is to be found in the Psalm Fragment. Al-Jallad (2020) has adduced the following examples:

(60) βη αυθανιυμ /bi-ʾawtāni-hum/ "with their idols," cf. ClAr /bi-ʾawtāni-him/
(61) μιθλ αβαιυμ /miṯl ʾabāy(i)-hum/ "like their forefathers," cf. ClAr /miṯla ʾabāʾi-him/
(62) βη μενχοθτετηυμ /bi-menḫūtēti-hŭm/ "with their inscriptions" cf. ClAr /bi-manḫūtāti-him/

Conversely, the accusative had apparently ceased to function in the variety behind the document, with accusative *-a* attested only in a few adverbials: γεδδα /ǧeddā/ "very," cf. ClAr /ǧiddan/. We should thus not a priori privilege any one dataset over the other, nor assume that any one process must stand behind all the available data.

Furthermore, a closer analysis of the data reveals a more complicated picture than Blau reconstructs. In several dialects, DT is realized *-an* when suffixed to adverbs, but elsewhere as *-in*. A well-documented example is in Bahraini Arabic, e.g., *māy-in bārda* "cold water," but *lazman* "of necessity." This same distribution was reported for central Iraqi *fellāḥī* in poetic texts recorded at the beginning of the twentieth century (Meissner 1903: xxvii, §39e). Also unexplained in the traditional scenario is the Tihama dialects of Bal-Qarn and Banī ʿAbādil which, as we have seen, attest *-in* non-pausally but *-u* in pause.

More recently, a few scholars have argued against identifying DT with etymological *tanwīn* (Owens 2006: 104–6; 2018; Holes 2016: 132; 2018b: 132 n. 41, 134; Ferrando 2018; S. Procházka 2018: 266–67). While some of these scholars note the differences between the function of DT and *tanwīn* in ClAr, Owens (2006: 104–6) offers the only detailed diachronic argument and, thus, it is on his arguments that the current discussion rests. Owens (ibid.) argues that because the vowel associated with DT does not function to mark case, and the attested distribution of the entire morpheme is not identical to that of etymological *tanwīn*, then there is no a priori reason to identify DT with etymological case vowel + *tanwīn*. Furthermore, several scholars note that DT does not synchronically function to mark

11. I am grateful to Ahmad Al-Jallad for allowing me access to a forthcoming article, "One *wāw* to Rule Them All: The Origins and Fate of Wawation in Arabic and Its Orthography."

indefiniteness; instead, it functions to "limit the scope of an indefinite noun, i.e. to distinguish completely unspecified indefinites from those which are still indefinite but further specified by a qualifying element" (S. Procházka 2018: 267). Because of these differences between case + *tanwīn* in ClAr (and other Semitic languages) and DT, Owens et al. reconstruct DT as a linking morpheme *-*Vn*, with the same function as it currently has. Given its broad geographical distribution, these scholars argue that it must be archaic, probably pre-Islamic.

On account of the problems in the traditional interpretation, this proposed alternative origin has a certain attraction. However, the argumentation behind it is, ultimately, unconvincing. First, the primary argument advanced against the traditional identification of DT with etymological *tanwīn* is that synchronic differences in the distribution of case + *tanwīn* in, e.g., ClAr on the one hand and DT on the other require, or at least strongly suggest, separate origins. While a case must indeed be made linking DT with etymological *tanwīn*—it cannot simply be assumed—this particular assumption is nevertheless problematic. That the vowel associated with DT *no longer* marks case does not, of course, mean that it *never* functioned as a marker of case. Morphemes develop new roles, lose old ones, and are reanalyzed by speakers as something fundamentally different than their etymology.[12] And while the distribution of DT is not completely identical to etymological *tanwīn*, the idiosyncrasies in overlap are significant and indicative: both occur only on morphologically indefinite nouns, and in the Yemeni data DT, like etymological *tanwīn*, is often absent on diptotes (Blau 2006; van Putten 2017). Why, for example, would such a morpheme occur only on morphologically indefinite nouns? Such a morpheme as DT, with anything like its synchronic distribution, is unattested in other Semitic languages.[13]

Owens's rejection of *tanwīn* as the origin of DT can only be properly evaluated in the context of a larger methodological argument over the status of final case vowels and nasalization in proto-Semitic and proto-Arabic. For Owens, like Jan Retsö before him, the dialects are descendants of a proto-Arabic without case or *tanwīn*. Their arguments, ultimately, require the reconstruction of (at least) two proto-Semitics and proto-Arabics (Retsö 1994; Owens 1998; 2006: 79–118). Their arguments, however, fail to convince in the end, not only because they presume a very idiosyncratic view of proto-Semitic and proto-Arabic, but also because the starting assumptions require questionable historical linguistic methodology. Most problematic in my view is their insistence that the dialects constitute a separate branch of Arabic from the varieties of the *ʿarabiyya*, based not on any innovations but on their not possessing case.[14] When shared loss leads to shared innovation, then loss can indeed be meaningful for sub-grouping. However, any shared innovations that characterize all dialects

12. For example, the definite article in English, *the*, is ultimately derived from a Proto-Germanic distal demonstrative. The Proto-Germanic series **sa*/*sō*/*þat* inflected for gender, number, and case. This is retained in, e.g., Modern German articles (*der, die, das*). In English, however, case is no longer marked. In Dutch, the articles do not mark case, but they still mark gender and number (*de* marks both masculine and feminine nouns, as well as the plural, with *het* marking neuter singular). Also relevant is the fact that, in Dutch, while the article *de* is ultimately derived from the same series of demonstratives as English *the*, the neuter *het* is derived from a personal pronoun.

13. I do not consider, e.g., the enclitic *-m* suffix found in Ugaritic and Hebrew to be directly parallel to the *tanwīn* under discussion here. The distribution of the two is not parallel. In Hebrew, for example, it is attested mainly on adverbs, e.g., *yômām* "daily." In Ugaritic, it can be suffixed to any part of speech (Sivan 2001: 192–93): verbs, e.g., *ʾib tʿrbm b bhth*/taʿrubū-ma ʔ/"enemies entered his palace;" prepositions, e.g., *bm* (= Arabic *bi-mā*); nominals in construct, e.g., *bnm ʾumy*/banūm ʾummiya/"sons of my mother." As we have seen, this is simply not the same distribution as is attested in the dialects with DT. While I think it likely that some etymological relationship exists between the various nasal suffixes attested across the Semitic languages, it seems clear that such a relationship is only at the pre-Proto-Semitic stage.

14. For a more detailed discussion and critique of this methodology, see Al-Jallad and van Putten 2017.

over against ClAr have yet to be demonstrated. For our purposes, it is sufficient to note that, based on comparative evidence from, e.g., Akkadian and Ancient South Arabian, we can safely reconstruct nasalization to proto-Semitic, and, based on ClAr, to proto-Arabic (Huehnergard 2017). Table 3 illustrates non-Arabic Semitic data for both, taken from Ugaritic (West Semitic) and Akkadian (East Semitic) for case inflection, and Ancient South Arabian (West Semitic) for nasalization (modified from Al-Jallad and van Putten 2017: 89; Ancient South Arabian from Stein 2011: 1051).

Table 3. Case and Nasalization in Semitic

	Singular	Dual	Masc. Pl.	Fem. Pl.
Akkadian	Nom. *-u* Gen. *-i* Acc. *-a*	Nom. *-ā(n)* Gen. *-ī(n)* Acc. *-ī(n)*	Nom. *-ū* Gen. *-ī* Acc. *-ī*	Nom. *-ātu(m)* Gen. *-āti(m)* Acc. *-āti(m)*
Ugaritic	Nom. *-u* Gen. *-i* Acc. *-a*	Nom. *-ā(ma)* Gen. *-ay(ma)* Acc. *-ay(ma)*	Nom. *-ū(ma)* Gen. *-ī(ma)* Acc. *-ī(ma)*	Nom. *-ātu* Gen. *-āti* Acc. *-āti*
South Arabian	Nom., Gen., and Acc. *fʿl-m*	Nom. *fʿl-n* Gen. *fʿl-n* Acc. *fʿl-n*	Nom. *fʿl-n* Gen. *fʿl-n* Acc. *fʿl-n*	Nom. *fʿl-t-m* Gen. *fʿl-t-m* Acc. *fʿl-t-m*

Based on its attestation in both main branches of Semitic, in virtually identical distribution, the triptotic case system attested in ClAr can be reconstructed to Proto-Arabic (and, based on Ugaritic evidence, to Proto-Central Semitic at least; see Blau 2006). It is, therefore, to be seen as a retention in ClAr, not an innovation.

At this point it should be emphasized that discussions of features connected to etymological case in the modern Arabic dialects should in no way imply descent from ClAr, since, again, case was common to the ancestor of all Arabic varieties. Nasalization in Semitic, based on the South Arabian and ClAr, and partially by Akkadian (in which singular and feminine plurals are marked by final *-m*, but dual sound masculine plurals are not marked by *-n*), can be reconstructed originally with final *-m* suffixed on singulars and feminine plurals, and final *-n* on duals and plurals.[15] Proto-Arabic thus innovated a generalization of the *-n* of duals and plurals to singular forms as well, whereas, e.g., Hebrew apparently generalized the singular *-m* to duals and plurals (Huehnergard 2004: §3.3.2.1; Al-Jallad and van Putten 2017).

Therefore, while Owens (online) is right to point out that purported loss of word-final *tanwīn* does not affect other examples of word-final *-n*, e.g., *makān* "place," or other inflectional categories, e.g., *bēt-hin* "their f. house," this is less significant than his argument suggests. Given the loss of *tanwīn* originally suffixed to, e.g., *makān* "place," the retention of the *-n* of the root cannot be considered counter evidence because the *-n* in such a case would not have been word-final (i.e., *makānun*). Furthermore, derived nouns such as *makān* (noun of place from root *k-w-n*), and especially pronouns, have clear paradigmatic relationships with other forms—e.g., the suffixed pronoun *-hin* "their fpl," while word-final in this case, is also clearly related to the independent pronoun *hin(na)* "they fpl," which is rarely truly word- or utterance-final. Thus, the analogical pressure of the paradigm is likely responsible for the retention of word-final *-n* in

15. Al-Jallad (2014) has argued for a similar reconstruction based on attested data from Gəʿəz as well. However, given the indirect, and thus potentially circular nature of the argument, I have not listed it here.

many cases where otherwise it would have been lost. Unlike these examples, however, *tanwīn* is not obviously part of, or related to, other members of a paradigm—if lost, say, word-finally, there would be little paradigmatic pressure to restore them.

A third major problem with the linking morpheme proposal is that it does not address examples of DT (that is, examples of -Vn), occurring in many of the same dialects, that do not serve to mark nouns followed by a qualifier. For example, as we saw in section two, DT occurs in Najdi dialects marking a participle functioning verbally that is not followed by a qualifier (see, e.g., nos. 50–52), as well as a number of adverbs (see, e.g., nos. 47–49). The function of -Vn in these examples do have direct parallels in Arabic, as well as elsewhere in Semitic, and thus proponents of the linking morpheme must distinguish between -Vn when suffixed to a noun followed by a qualifier and -Vn when, e.g., marking an adverb. As far as I am aware, no one has yet offered an explanation for the presence of two -Vn morphemes, one of which functions exactly as adverbial *-an* does in ClAr, and both of which share largely share the distributional idiosyncracies of etymological *tanwīn*.

In the preceding I have dealt with the two major objections advanced against the traditional etymology of DT as case vowel + *tanwīn*. I have concurred with those who argue that case and *tanwīn* in Arabic represent retentions from their Semitic ancestor, and in my view are safely reconstructible to proto-Arabic. I further argued that the proposed linking morpheme fails to account for other functions of DT attested in the same dialects. Methodologically, the fact that DT does not function in a particular way synchronically does not constitute an argument against it ever having functioned thus, so long as a plausible explanation for the differences between the two is forthcoming. I would submit, finally, that it is more parsimonious to derive attested morphemes from other known morphemes if possible, rather than introducing an otherwise unknown one. Thus, if DT can be plausibly linked to *tanwīn* in a way that convincingly accounts for all of the data, then that explanation should be preferred to the introduction of a linking morpheme. In what follows I propose a scenario for the development of DT from *tanwīn* that builds on other scholarship, especially that of Blau, but addresses the problems in the previous explanations discussed above.[16]

4. RECONSTRUCTION FROM PROTO-ARABIC *TANWĪN*

In proto-Semitic, nasalization apparently functioned to mark a noun as unbound, with two forms: *-m* after short vowels, *-n* after long vowels (Huehnergard 2004: §3.3.2.1). In ClAr,[17] *tanwīn* was realized as *-n* following both short and long vowels, suffixed to most, but not all, nominal patterns when morphologically indefinite, following a case vowel. In

16. The foregoing arguments are all necessarily circular to a certain degree. If one does not believe that case or *tanwīn* is reconstructible to the ancestor of the dialects, then it is a given that DT must be explained otherwise. My own position is that case and *tanwīn* are reconstructible to the ancestor of all varieties of Arabic, and are thus a candidate for the origin of DT, for the reasons given above. Given the overlap in distribution between the two, the unattested nature of the linking morpheme, and the absence of a proposed derivation from an attested one, I believe *tanwīn* is the likeliest candidate. Ultimately, then, at issue is a principle of approach and methodology.

17. Throughout the remainder of the article I have decided to refer to a number of loosely related varieties and corpora as "Classical Arabic." In reality, what scholars refer to as "Classical Arabic" is a combination of the attested variation in the language of the pre-Islamic odes, the canonized reading traditions of the Quran, the descriptions and compilations of grammarians from the early Abbasid period, and especially the pronouncements of later grammarians on the proper and preferred forms from among those attested in the grammatical literature. This should further be distinguished from the relatively recently created artificial register used by authors and in contemporary media referred to as Modern Standard Arabic. While not intending to downplay the significance of the heterogeneous nature of the corpora, they do not play a significant role in my argument and, thus, I have forgone detailed discussion of them and opted to refer to this large body of data as "Classical Arabic."

addition to leveling the *-n* to all contexts, Arabic also attests another development, namely, the incompatibility of *tanwīn* with the definite article. As I have argued, the overlap between the distribution of etymological *tanwīn* and DT—only suffixed to indefinite nouns, absent on diptotes in some dialects—strongly suggests that the latter is derived from the former.

There is no evidence from other Semitic languages for an inherited system of pausal variants of case. However, two systems of pausal variants are attested in the ClAr corpora, *muṭlaqa* and *muqayyada*. In both systems, *tanwīn* occurs on all eligible unbound nouns in non-pausal position, but is absent in pausal position. The difference between the systems revolves around the realization, or lack thereof, of the case vowels in pausal position:

Table 4. Pausal Distribution in ClAr

	muqayyada	*muṭlaqa*
pre-pause	*-un* / *-in* / *-an*	*-un* / *-in* / *-an*
pause	*-Ø* / *-Ø* / *-ā*	*-ū* / *-ī* / *-ā*

The *muṭlaqa* pausal distribution is typical of *qaṣīda* poetry, whereas the *muqayyada* style is more common in other poetic traditions and prose. As seen in section two, the distribution of DT in non-Tihama dialects occurs only on nouns when followed by some attribute. Conversely, in the Tihama dialects, DT occurs in most dialects on any eligible noun. However, in a subset, DT on nonphrase-final nouns differs from the form suffixed to phrase-final nouns.

Again, given the overlap between the distribution of DT and *tanwīn*, and the lack of any otherwise attested alternative, the most probable origin of DT is *tanwīn*. Any reconstruction of DT from *tanwīn* has to account for two aspects of its realization and distribution: the realization of the vowel associated with DT, and the differences in distribution between DT and *tanwīn*. I turn now to a discussion of these two issues, relying on both Tihama and non-Tihama DT.

4.1. DT Vowel Quality

We have seen that the vowel quality associated with DT is normally *i*, less commonly *a*, and, in some Tihama dialects, *u*. Owens's observation (2006: 104) that the vowel in most non-Tihama dialects is that of the nonphonemic typical in each dialect is a crucial one and complicates any attempt to identify surface realizations of DT in contemporary varieties with a particular case vowel.

The interpretive key to the question is found in those dialects that maintain two different vowels. In the Tihama, these include dialects of Bal-Qarn and Banī ʿAbādil. It will be recalled that DT distribution in these dialects depends on the position of the noun in the phrase, with pausal forms realized *-u* and nonpausal forms *-in* (see Table 5).

Table 5. DT Distribution in Dialects of Bal-Qarn and Banī ʿAbādil

nonpausal	pausal
bayt-in	*bayt-u*

Peter Behnstedt (2016: 65–66) expresses confusion over why the genitive *-in* would be leveled in nonpausal position, but a nominative *-u* in pause. He suggests the possibility that dialect mixing could have led to the contemporary distribution. It is unlikely, however, that

mixing between dialects could have led to this situation, as no other dialects exhibit *tanwīn* in nonpause while possessing a vowel without *tanwīn* in pause. It is thus unclear why speakers of a dialect with nonpausal *-in*, and pausal *-Ø*, would have borrowed the *-u* from another dialect only in pausal position. Further, Behnstedt's assumption that *-in* represents genitive because of the surface similarity seems unsafe, especially given the pausal *-u* with no other apparent explanation.

A similar problem exists in, e.g., Bahrain, where we have seen that normally DT is realized *-in*, but in a few adverbials it is *-an*: *may-in bārda* "cold water," but *laẓman* "of necessity." With both of these having been elicited from older, functionally illiterate speakers, and otherwise unattested in contemporary MSA, it strongly speaks against any type of ClAr borrowing.

I propose that these data suggest a situation in which short vowels in final closed, unstressed position merged, via different paths. The Tihama evidence suggests a merger of short vowels in this unstressed word-final position: **-un* / *-in* / *-an* > $V^{+\text{High}}n$. This process might have also occurred on word-final short case vowels as well, which could potentially have played a role in the breakdown of the case system. Whatever the case, this scenario, which has parallels elsewhere (see below), can help make sense of the difference between nonpausal *-in* and pausal *-u* in these dialects that does not require us to posit different cases generalized based only on the position of the noun in the phrase.[18]

A similar process apparently stands behind the non-Tihama dialects as well. This might have started as a merger of high vowels in that environment, followed by a complete merger:

(i) *baytun* / *baytin* > *bayt-ən* or *bayt-in*, but *bayt-an*

(ii) *bayt-ən* or *bayt-in* / *bayt-an* > *bayt-ən* / *bayt-in*

Bahraini *bint-in* / *laẓm-an* suggest initially that high vowels merged everywhere to *i* but remained distinct from accusative *a*: (i) **bayt-un* / **bayt-in* > *bayt-in*, but **bayt-an* > *bayt-an*. This same distribution was reported for central Iraqi *fellāḥī* poetry (Meissner 1903: xxvii, §39e). The Najdi situation, where DT, in both adverbial and nonadverbial contexts, is realized *-in*, would then represent the end of the process of this vowel merging (ii). The result was a loss of phonemic contrast in this environment. Furthermore, this process enables us to understand why the vowel of DT in the non-Tihama dialects matches other nonphonemic vowels.

The developments proposed here enable us to understand the Bahraini and Mesopotamian data, the Tihama dialects such as Bal-Qarn and Banī ʿAbādil, and the correspondence between the vowel of DT and the nonphonemic vowel typical of each dialect. They represent loss of phonemicity via two similar but distinct processes. In the Tihama, this resulted in a high vowel, usually *-u(n)* but also *-in*. In non-Tihama dialects, it resulted in a nonphonemic vowel realized as whatever the nonphonemic vowel common in the dialect is. Or more simply: **i/u/an* > **ən* > dialectal realization of schwa.

The merging of short high vowels in a variety of contexts is attested across the contemporary Arabic dialects. In Najdi Arabic dialects, the high vowels **i* and **u* are in complementary distribution, being allophones depending on phonetic environment: *i* is the usual realization, with *u* only with emphatics, and, often (but not always), labials (Ingham 1994: 14): *libas*[19] "he wore" and *nišad* "he asked," but *ṭubar* "axe" and *muṭar* "rain." Other dialects in which a similar merger, often partial, is attested include Nigerian and Chad Arabic (Owens

18. Additionally, if for some reason case was frozen and distributed based on typical place in a phrase, we would expect that etymological nominative *-u(n)* would occur earlier, thus nonpausally, with *-in* in noninitial position. This is the opposite of what occurs.

19. This example is admittedly a bit awkward if indeed we imagine the source of the high back vowel *u* to be triggered by proximity to a labial. Alternatively, Marijn van Putten (private communication) has suggested a different explanation, namely, *g* (< **q*) still exercises an emphatic effect on the neighboring vowel and **-ar* is emphatic.

and Hassan 2009: 710); Uzbekistan Arabic (Zimmerman 2009: 614); Bahraini Arabic (Holes 2006: 243); and Muslim Baghdadi Arabic (Erwin 1963: 17–19).

Short high vowel merger is also attested in a number of Levantine dialects, such as Damascene. Cowell (1964: 28) is not quite correct when he says that "Short *e* and *o* coming after the accented syllable before a word-final single consonant both become *ə* when accented." Rather, the merger of *e* / *o* > *ə* is attested whenever *o* (<**u*) or *e* (<**i*) does not stand in VC# position. Cf. the following examples (Cowell 1964: 13, 28): *býəktob* "he writes" / *byəktəb-lak* "He writes/will write to you"; *ənṣol* "consul / *ənṣ́əl-na* "our consul." Note that, in both *byəktəb-lak* and *ənṣəl-na* the originally stressed vowels, which now occur in a prestressed position, nevertheless remain *ə*.

In other dialects, e.g., Mesopotamian *Qəltu* dialects, there has been an almost total merger of high vowels, regardless of phonetic environment. Thus, in Jewish Baghdadi Arabic, high vowels, which are elided in nonstressed open syllables, are in closed syllables, regardless of stress, realized as /ə/ (Mansour 2007: 234) (see Table 6).

Table 6. Merger of High Vowels in Jewish Baghdadi Arabic

stressed	**ʾuxt* "sister" and **bint* "daughter" realized *əxt* and *bənt*
unstressed	*yəktəb* "he writes" (< **yiktub*)

It is clear then that high vowel mergers, whether partial (conditioned) or complete, have occurred in a number of varieties of Arabic. Indeed, they occur in a wide range of modern dialects (on which, see Fischer and Jastrow 1980: §3.5, 43; see also Owens 2006: §2.4.1, 51–67 for a discussion of this same subject). Furthermore, we have already seen that in Najdi dialects, DT derived from accusative **-an* is realized as *-in*. The same sort of merger is also attested in poststressed position CVC syllables in some *Qəltu* dialects of Mesopotamia, cf. Mardin *ḍarabət* (< *ḍarabat*), where the poststress short *a* is realized as schwa, which is normally the realization of the merged high vowels **i* and **u* (Talay 2011: 917). Indeed, a high vowel realization of the 3fs perfect suffix is widespread: Cairene *ġasalit* "she washed" (Woidich 2006: 330); Beirut *katabit* "she wrote" (Naïm 2006: 281). In the majority of dialects in which DT is realized ubiquitously as *-an*, the 3fs perfect is *-at*, e.g., West Sudanic *katabat* "she wrote" (Owens and Hassan 2009: 713). Dialects with *-in* frequently attest 3fs perfect *-it*, e.g., Omani *galsit* "she sat"; *-at* is an allophone of *-it*, occurring only after gutturals, e.g., *simʿat* "she heard" (Holes 2008: 489).[20]

These two rules would explain all examples listed by Bruce Ingham with supposed labial rounding of the vowel, without the exceptions such as *libas*.

20. The Najdi data at first glance contradict this. Ingham (2008: 330–31) reports *-at* as the regular feminine ending for 3fs perfect verbs for both *k-t-b* and *s-m-ʿ*, "action" and "state" types respectively, i.e., *ktibat* "she wrote" and *samʿat* "she heard." A further datum to consider in this regard is the realization of the feminine plural suffix on perfects and imperfects. In Najdi, the following distribution is attested (Ingham 2008: 330):

Perfect 3fpl	*ktiban* / *samʿan*	but	2fpl *kitabtin* / *simiʿtin*
Impf. 3fpl	*yaktibin* / *yismaʿi*	and	2fpl *tiktabin* / *tismaʿin*

That is, on 3fs perfect conjugation the suffix is realized *-an*, whereas 2fpl perfects and all imperfects are realized *-in*. It seems likely, though, that some sort of analogy is responsible for this distribution. The masc. pl. suffix attested is *-aw*. The 3fpl form ultimately goes back to **katabna*, and is likely the result of a metathesis, i.e., **katabna* > *kataban*. Thus, the 3fs suffix could have remained *-at* as part of a third person perfect paradigm characterized by suffixes with *-a*. Alternatively, we might imagine that by-forms would develop when suffixes were attached: 3fs perfect **katabat* > **katabət*, but **katabát-hā* "she wrote it," which then could have been leveled. Unfortunately,

The primary challenge to the interpretation put forward here is the vowel distribution in the third and second person plural[21] pronominal suffixes, which in many of these same dialects maintain a distinction based on the high vowels *u* and *i*. A reconstruction of the proto-Arabic suffixes is generally safe: 3mp **hum(ū)* / 3fp **hin(na)* and 2mp *kum(ū)* / 2fp *kin(na)* (cf. S. Procházka 2014). This is the closest context to that in which *tanwīn* would have occurred. Dialects in which one high vowel was leveled to both forms are attested (see Tables 7 and 8).[22]

Table 7. Šawāwī Omani (Eades 2009: 90)

	Independent Pronouns	Suffixes
3mp / fp	3mp/fp: *həmma* / *hənna*	*him* / *hin*
2mp / fp	2mp/fp: *ntu* / *ntən*	*kim* / *kən*

Table 8. Jabal Fayfāʾ (Alfaifi and Behnstedt 2010: 58)

	Independent Pronouns	Suffixes
3mp / fp	*ihim* / *ihinna*	*him* / *hinna*
2mp / fp	*antim* / *antinna*	*čim* / *činna*

Most dialects, however, retain a distinction between the masculine and feminine plural forms based at least partly on high vowels (see Table 9).

Table 9. Sanʿānī (Watson 2009: 110)

	Independent Pronouns	Suffixes
3mp/fp	*hum* / *hin*	*hum* / *hin*
2mpl/fp	*antū* / *antin*	*kum* / *kin*

These forms seem to contradict the suggestion that short (high) vowels in closed, unstressed, word-final syllables merged. Several considerations mitigate the significance of these forms, however. First, as is readily observable in most Arabic dialects, the historical relationship between the suffixed forms, which would have occurred word-finally and unstressed, and the independent forms, which would not, is still transparent. This could have exerted a paradigmatic pressure to retain the distinction in many cases. Another factor for consideration is the fact that masculine suffixes typically end in *-m*, a bilabial nasal, which may have aided the retention of the back *u* vowel in a way that final *n* would not have. In Tigrinya, for example, where, as in Gəʿəz, etymological high vowels **u* and **i* merged to *ə*, the pronominal suffixes are still distinct: *gäza=ʾ(at)om* "their house" / *gäza=k̲(atk)um* "your (mpl) house" (Voigt 2011: 1158). Thus, in dialects like Najdi, where high vowels have

due to the dearth of complete descriptions of the various Najdi and Central Arabian dialects, nothing definite can as yet be concluded.

21. Singular suffixes, with the synchronic shape *-vC(v)* are less immediately relevant because historically they were probably still *-vCv(:)* when this merger occurred, and thus not truly word-final. Nevertheless, a number of dialects reflect a similar process.

22. Discussion of the quality of vowels in the dialects is complicated by the fact that dialectologists often transcribe a particular vowel phonemically and with reference to the ClAr triad of vowels, transliterated *u*, *i*, and *a*.

everywhere else merged, it is possible that the bilabial is responsible for the retention of *u* in this context. Alternatively, it is possible that the protoform of these pronouns was **-humu/-kumu*. This is consistent with the forms found in, e.g., Gəʿəz *-həmu/-kəmu* (< *humū/-kumū*); this is also likely based on ClAr forms *-humū/-kumū*.[23] Since, however, **i* and **u* merge elsewhere in Najdi dialects, it is more likely that the current distribution is attributable to either a labialization of **h* under influence of the high back *u*, i.e., **h* > **h*^{w}, or perhaps an emphato-labialization of **m*, i.e., **m* > **ṃ*^{w}, followed subsequently by delabialization.

I suggest, then, that non-Tihama DT represents two trajectories of development: (1) merger of high vowels before *tanwīn*: *un*, *in* > *ən* ~ *in*. At this stage, *an* was still distinct. This is attested in Bahraini, Omani, and some rural Iraqi *fellāḥī* varieties; and (2) total neutralization of vowel contrast: *in*/*ən*/*an* > *ən*/*in*/*an*. The synchronic realization of the vowel is generally that of the nonphonemic epenthetic vowel in each dialect.

To summarize, I have argued that the data from both Tihama and non-Tihama DT examples point toward a process by which etymological case vowels preceding *tanwīn* were neutralized, losing phonemic contrast, in this environment. The only datum not addressed in the above discussion is the occurrence in some Tihama dialects of *-u* without final *-n*. To understand these forms it is necessary to discuss the second of the issues mentioned above, that of the syntactic distribution of DT.[24]

4.2. Pause and the Syntax of DT

The second issue with which a treatment of DT must deal is that of the differences in distribution between DT and *tanwīn*. As several scholars have noted, and as seen in the examples above, DT does not usually occur noun phrase-finally in non-Tihama dialects (see Fischer and Jastrow 1980: 121). The nature of the process that resulted in the non-Tihama distribution of DT was first addressed by Blau (1981: 188 et passim), who argues that, at some point in time, *tanwīn* was lost in pausal position, at the end of what he calls a "breath-group," but protected in the middle of a breath-group. The most common breath-group is N + ADJ, where ADJ can be a nominal or clausal attribute. When this occurred, and regardless of the then-current status of the case vowel, the role of *tanwīn* would naturally have, synchronically, been to mark a noun followed by an attribute. A reanalysis is hardly necessary. To my mind, it remains the most likely scenario for the distribution of DT in the non-Tihama dialects as a marker of indefinite nouns followed by an attribute. This in turn provides a very

23. The long vowel in ClAr at least seems to be the result of the characteristic vowel disharmony in which a short vowel is followed by a long vowel and vice versa: *bayt-u-hū* "his house" but *ʾabū-hu* "his father."

24. One anonymous reviewer suggested thinking of the vowel alternation between *i* and *a* in the non-Tihama varieties in terms of *taltalta*, which, as was admitted, encompasses a number of diachronically separate alternations. It was further suggested that such an explanation obviates the need to explain the vocalic variation as I have done in this article. However, as the reviewer notes, *taltala* is not a diachronic explanation but rather a synchronic pattern (albeit attested historically), often illustrating differences between dialects, though occassionally within as well. While often obscuring data so as to make diachronic analysis difficult, it does not, as the reviewer seems to suggest, make it impossible when sufficient contextual data are available. For example, the differences between vowels in the prefix conjugation is synchronically classified as *taltala*, but is nevertheless explained diachronically: in proto-Semitic (and, possibly, proto-Berbero-Semitic; see Kossmann and Suchard 2018), the prefix vowel was *a* when the theme vowel was high (*i* or *u*), and *i* when the theme vowel was *a*: *yafʿil* / *yafʿul* but *yifʿal* (this is the so-called Barth-Ginsberg law; Huehnergard 2017: 16). This is reflected still in, e.g., Najdi: *yismaʿ* "he hears" vs. *yaktib* "he writes" (Ingham 2008: 330–31). We can thus deduce that proto-Arabic retained the Barth-Ginsberg distribution and that most dialects leveled one or another (e.g., ClAr leveled *a* to all contexts, whereas most dialects leveled *i*). I therefore disagree that because similar variation between high and low vocalisms is attested we cannot say a good deal about the diachrony of any or even all of them.

plausible explanation for examples of DT suffixed to, e.g., sound dual and masculine plural nouns—for example, Andalusi *ʿayn=ayn=an milāḥ* "beautiful eyes" (Ferrando 2018: 101). In other words, once phonetic developments eliminated DT in pausal contexts and its role was largely relegated to marking a noun followed by a qualifier, some speakers began attaching DT to previously ineligible noun patterns.

Complicating matters somewhat is the attestation in dialects with DT of adverbs that are often not in what might be considered a breath-group. Even in dialects that preserved DT in breath-groups, we might expect to attest the pausal accusative *-a* (< **ā* < **an*). The latter is found across the modern dialects, usually in a few frozen relics of adverbial accusative, e.g., *ahla wa-sahla* (< **ʾahlan wa-sahlan*) "welcome" and *marḥaba* (< **marḥaban*) "greetings." Thus, while dialects without DT attest exactly what we would expect were a ClAr prose pausal situation to have also occurred in the ancestor of the modern dialects, some dialects with DT, such as, e.g., Najdi, attest a state in which pausal **ā* was *not* generalized to all adverbs: *ʿugb-in* "afterwards." How can we understand this unexpected mismatch? If the dialects that attest DT also underwent a prose-like **an* > **ā* > *a* development, then something like the following set of developments would be required to explain the apparent mismatch:

(i) Loss of phonemic contrast of (high) vowels, with nonaccusative (*-in* or *-ən*) / accusative distinction (*-an*)

(ii) Accusative eventually limited to marking adverbs, which are lexicalized in many dialects

(iii) Pausal phenomenon results in eventual loss of realization on utterance-final nouns; DT comes to mark any morphologically indefinite nouns, regardless of syntax

(iv) Reanalysis of DT as marking nouns followed by adnominal (adjective or phrase/clause)

In other words, step (i) contributed to the breakdown of the tripartite case system. In most cases, the function of the accusative *-an*, when it remained distinct, was restricted to adverbs. Even in cases where non-accusative *-in* and accusative *-an* merged to a non-phonemic vowel, adverbs marked by DT were lexicalized with DT. Elsewhere, DT was retained only when non-phrase final, leading to its contemporary distribution.

While this is possible, another possibility worth exploring in relation to this discussion is that the pausal development **-an* > **ā* > *a* was never really a part of the dialects that attest DT. The QCT attests a dialect in which **-an* > *-ā* operated everywhere, in nonpausal and pausal contexts. Final short vowels, as well as **-u/in* were lost completely (van Putten and Stokes 2018). This "Hijazi" distribution was reflected, of course, in the QCT, as well as the early Islamic papyri, and was subsequently appropriated to write ClAr in the Abbasid period. The mismatch between the linguistic reality behind the QCT and Hijazi dialects and the varieties described in the Arab grammatical tradition led to writing ClAr *-an* with *alif tanwīn*. Further, as van Putten and Stokes (ibid.: 171–72) argued, this mismatch led to a so-called prose pause distribution for varieties in the ClAr tradition, in which final **-u/in* were lost, but **-an* > *-ā*. It is possible that the pausal *-ā* of ClAr prose pause was, in reality, the result of the imposition of a Hijazi-type QCT onto a pausal system in which **-u/i/an* were all lost, i.e., **-u/i/an* > *-Ø* / _#.

I would argue, then, that dialects that attest DT continue an early distribution: nonpausal *-Vn* / pausal *-Ø*. These dialects are reflected in, e.g., Najdi dialects in which DT is everywhere *-in*, even on adverbs. Other dialects continue the Hijazi continuum, in which nasalization and final short vowels were lost but final **–an* shifted to *–a* (or **–ā* > *-a).* The adverbial *-a* (< **-ā* < **-an*), attested in some DT-possessing dialects instead of expected adverbs with DT (e.g., Dōsiri *hala* "welcome" < **ʾahla* < **ʾahlan*), represents a borrowing from other,

more widespread dialects, likely due to the near-ubiquity of forms ending in *-a*. Thus, we could derive most modern dialects that lack *tanwīn* and attest relics of adverbial **-ā* (< **an*), such as Levantine or Egyptian *ahla wa-sahla* "welcome" and *barra* "outside," but no DT, from Hijazi-type dialects like that reflected in the QCT. Those that possess DT outside of the Tihama could be subgrouped together based on the innovation of DT as a marker of nouns followed by a qualifier, which was a result of a specific pausal phenomenon.

The dialects of the Tihama region are quite different than the non-Tihama ones, attesting two different distributions. The most common seems to be one in which any eligible morphologically indefinite noun is suffixed with DT (*-u*, *-un*, or *-in*). In most of these dialects, then, there is no pausal or nonpausal distinction. Others, such as the dialects of Bal-Qarn and Banī ʿAbādil, however, do have a pausal and nonpausal distribution. Specifically, they attest a pausal distribution that is essentially identical to ClAr poetic *muṭlaqa* pause. ClAr poetic pausal distribution is characterized by the absence of nasalization, with subsequent lengthening of the final vowel. Whether *-u* in these dialects (which, I argued above, likely represents a merger of high vowels) is the result of a lengthening of the final vowel or vowel length ceasing to be phonemic in that position, is unclear. This can be accounted for by positing the following:

(i) Nonpausal **-un*/**in*/**an* > *-in*/*un*

(ii) Pausal **-vn* > *v:*$^{+high}$

When lengthened pausally, the high vowel was realized as *-u*, as in, e.g., Bal-Qarn, which nonpausally has N-*in*, but pausally N-*u*. Thus, most Tihama dialects attest a generalized high vowel, either *-u(n)* or *-in*, regardless of the position of the noun in the utterance. A few, however, attest a generalized high vowel, typically *-in*, nonpausally, but lengthened *-u* pausally.

5. IMPLICATIONS AND CONCLUSION

In this article I have defended the traditional position concerning the origin of DT, namely, that it is derived from a case vowel + *tanwīn*. In doing so I argued against recent proposals that DT should be reconstructed as a separate linking morpheme, which is to my knowledge otherwise unattested among the Semitic languages. I did acknowledge, however, that a number of criticisms leveled by these scholars of the traditional explanation, exemplified by Blau (1981), were legitimate and had not been successfully addressed in previous iterations of the traditional argument. I hope to have shown that it is possible to account for the form and distribution of DT in all data, both non-Tihama and the dialects of the Tihama, via a set of attested and regular processes of change. Most significant are two points that differ from, or add to, earlier reconstructions of DT: (1) pace Blau, I argued that not all attestations of DT can, or should, be reconstructed to accusative **-an*, but rather most of the data suggest rather a process of vowel merger, perhaps beginning with the high vowels; and (2) the two sets of data, Tihama and non-Tihama, represent developments from two different sets of pausal phenomena, one similar to ClAr prose *muṭlaqa* pause, the other to ClAr *muqayyada* poetic pause. Thus, in the Tihama dialects, *tanwīn* was lost in pause, with possible lengthening of the vowel in pause; in non-Tihama dialects, *tanwīn* was lost in pause, with the loss of the short vowel as well; finally, most dialects in which DT does not occur, and in which the adverbial *-a* is retained in lexicalized forms, are reminiscent of old Hijazi developments (exemplified in the QCT), in which final *-un* / *-in* were lost everywhere, and final *-an* was simply *-a* (perhaps originally *-ā*).

Several important historical implications follow from these conclusions. It is well known that the traditions and varieties that were collected and described in the ClAr grammatical

tradition retained *tanwīn*. However, *tanwīn* is almost completely unattested in the pre-Islamic dialects discovered heretofore. Except for a few possible exceptions, the pre-Islamic Arabic varieties written in Safaitic, for example, do not attest *tanwīn* (Al-Jallad 2015: §4.6). *Tanwīn* is also not attested in Nabataean Arabic, or in the varieties written in the Ḥismaic script (Al-Jallad 2018: §3.2). Van Putten and Stokes (2018) showed that, with the exception of the phrase *kaʾayy-in*, the Arabic of the QCT is another variety in which *tanwīn* had been lost. When considered in the context of the attested corpora of Arabic then, it is significant to note that the presence of etymological *tanwīn*, with essentially the same distribution, across a geographically and chronologically widespread number of Islamic-era dialects suggests at once a close historical relationship between them, on the one hand, while distancing them from attested pre-Islamic dialects, on the other. Thus, many of the dialects that spread with the Muslim conquests were presumably from outside of the Hijaz, and largely displaced the earlier Levantine and Mesopotamian dialects present in the pre-Islamic period. This accords well with evidence in Greek transliterations of Arabic words from Nessana in southern Palestine. Al-Jallad (2017: §4.1) has demonstrated, for example, that pre-Islamic transliterations of the definite article *al* + nouns beginning with dental and alveolar consonants show that before Islam the coda of the definite article in the local dialect did not assimilate. In the early Islamic period, however, similar sequences indicate that the article did assimilate, as it does in most modern dialects as well as ClAr (ibid.). The data attested in the dialects that lack DT but exhibit relics of adverbial *-ā* do match the pre-Islamic dialects attested in the Hijaz, specifically those that stand behind the QCT and Hijazi writing tradition(s). These dialects lacked final short vowels, as well as *tanwīn*; however, **-an* had shifted to *-ā* in all contexts. To get from that situation to the distribution that stands behind the modern dialects lacking DT is simply a matter of the (gradual) restriction of the accusative *-ā* to adverbs.

To be clear, I am not arguing that the modern dialects are descended from ClAr. Indeed, as is well known, ClAr itself is an artificial collection of features, treated together because they come from sources that early Islamic grammarians considered trustworthy. However, the features discussed here, namely, nominal case, *tanwīn*, and pausal phenomena, are either well attested (i.e., case and *tanwīn*) by cross-Semitic and Arabic internal data, and thus safely re-constructible to proto-Arabic, or well-documented phonetic developments (i.e., pausal phenomena). Furthermore, given the apparent antiquity of the distribution of DT, it is plausible that these dialects continue trajectories documented by the grammarians, such as loss of *tanwīn* and short vowels in pausal position. My argument, therefore, is that the dialects that attest DT do not descend from ClAr because the latter was not a natural linguistic entity; rather, they retained features from proto-Arabic that were also retained in the ClAr tradition—a case vowel followed by *tanwīn*—and attest common pausal phenomena also attested in ClAr and the QCT. *Tanwīn* is not attested in the pre-Islamic material from the Levant and the Hijaz. Our being able to plausibly connect the synchronic data exhibited in a widespread number of modern dialects with that of pre- and early Islamic dialectal data does not necessarily imply direct descent. A tremendous amount of convergence and divergence, borrowing and mutual influence has undoubtedly occurred over the past millennium. Regarding the feature of case relics in these dialects, parallels and potential connections can be traced that tie together ends of Arabic's history in new and fresh ways.

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