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Zero-marked Nouns in Moroccan Arabic: Depictives or Adverbials?

ABSTRACT The major issue that is raised in this paper is how to delimit depictive secondary predicates from adverbials in Moroccan Arabic (henceforth MA). In syntactic description, depictives and adverbials are both adjuncts and hence are non-obligatory elements in sentences. A basic contrast between the two, however, is 'their different semantic orientation within the event-internal modification' (Schroeder 2008: 340). Depictive constructions are adjuncts that add a second predication to one of the participants involved in the main predication, while adverbials are event-oriented in that they add information about manner, time or place to the meaning of a verb. Cross-linguistic research has shown that while it is easy to make a distinction between depictives and adverbials in some languages such as English because they have different morpho-syntactic correlates, in other languages 'the distinction between participant- and event-orientation is often difficult to draw, and languages abound with constructions which straddle the line between the two' (Reinöhl and Himmelmann 2011: 131). Much of the research that has examined this issue of how to delimit depictives from other adjuncts such as adverbials was carried out on European languages. The goal of this paper is twofold. First, it provides data from MA, a typologically different language where in some cases depictives converge formally with adverbials and hence the need to find criteria that help distinguish between the two arises. Second, it analyses a special category of depictives that are realised by zero-marked nouns and that are under-resourced compared to the prototypical depictives, which occur in the form of adjectives.

KEYWORDS depictives, secondary predicates, adverbials, adjuncts, zero-marked nouns, Moroccan Arabic

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1 Introduction

Depictives are described as a kind of predicates that add a second predication to one of the participants involved in the main predication. They occur in constructions where 'a single clause contains two predicative constituents, which do not form a complex predicate in the way serial verbs or periphrastic predicates do' (Schultze-Berndt and Himmelmann 2004: 59). A depictive describes a physical or a psychological state or condition, and it can be semantically oriented to any one of the participants or what is also referred to as a controller; it can be subject-oriented as in (1), where the adjective *Sayyan* 'tired' describes the state of the subject, or object-oriented as in (2), where *barad* 'cold' describes the state of the direct object.

(1)	kla	вda-h	Səyyan	(subject-oriented)
	eat.PRF.3MSG lunch-3MSG 'he ate his lunch tired'		tired	
(2)	<i>ſŗəb</i> drink.PRF.3MSG 'he drank the t	<i>l-ħlib</i> DEF-milk milk <u>cold</u> '	<u>barəd</u> cold	(object-oriented)

One of the basic properties of depictives is temporal overlap. In his seminal paper, Halliday (1967: 63) defined a depictive as 'an attribute which characterises the attribuant (i.e. the direct object) in relation to the process, but as a concomitant, not a result, of the process.' As in (2), the depictive describes a state of affairs which holds at the same time as the eventuality encoded by the main predicate unfolds. The state denoted by the depictive *barad* 'cold' is linked to the temporal frame set by the main predicate in that it holds during the process of drinking; that is, while the event unfolds. Temporal overlap is also what distinguishes depictives from other secondary predicates such as resultatives as in (3).

(3)	səbв-at	ḍaṛ-ha	biḍ-a
	paint.PRF-3FSG	house-3FSG	white-FSG
	'she painted he	r house <u>white</u> '	

The object-oriented depictive *barəd* 'cold' in (2) and the resultative secondary predicate *bid-a* 'white' in (3) are not to be distinguished in terms of their syntactic structures. They rather differ as to the way they fit in the temporal frame set by the main predicate. As opposed to a depictive, the resultative *bid-a* 'white' designates 'the state of an argument resulting from the action determined by the main verb' (Asada 2012: 54).

Adverbials are entities which refer to the manner, place or time of an action. They may also modify an adjective or another adverb. The adverbs which are examined

in this paper are manner adverbs. A sentence such as 'John walked slowly,' with the manner adverb 'slowly,' 'makes the claim that there was a leaving event of which John was the agent and which was slow' (Katz 2003: 457). Furthermore, as in (4), they are VP-adverbs because they modify the predicate as opposed to S-adverbs, which are described as propositional modifiers (Jackendoff 1972). Another feature that characterises adverbs is that they occur with an eventive verb as opposed to a stative verb, which denotes a state predicate.

(4) $d \partial f \hat{Y} - u$ <u>b-3-3 $\partial h d$ </u> push.PRF-3MSG <u>by-DEF-force</u> 'he pushed him <u>by force</u>'

One basic contrast between depictives and manner adverbials is their semantic orientation within the event-internal modification. Depictives have a participant orientation while manner adverbials have a process or action orientation (Schroeder 2008). Depictive constructions, which are secondary predicates, add a second predication to one of the participants involved in the main predication, and they can be subject-oriented or objected-oriented as in (1) and (2). Adverbials, on the other hand, are event-oriented, and they add information about manner, time or place to the meaning of a verb or a clause as in (4), where the adverb *b-3-30hd* 'by force' modifies the main predication rather than assigns a specific property to one of the participants.

In syntactic description, however, both depictives and adverbials are characterised by optionality. They are both adjuncts and hence are non-obligatory elements in sentences; they are free supplements. A depictive can be omitted 'without rendering the remaining string ungrammatical or changing the structural relationship among the remaining constituents' (Schultze-Berndt and Himmelmann 2004: 65). The adjective *Sayyan-a* 'tired' is optional in *kla-t ¤da-ha Sayyan-a* 'she ate her lunch tired' because it can be omitted as in *kla-t ¤da-ha* 'she ate her lunch' without affecting the remaining structure of the sentence. Yet, it is non-optional in (5), where it constitutes a basic entity in the argument frame of the main predicate rather than an adjunction.

(5) *ka-t-ban* <u>Sayyan-a</u> IND-3FSG-look.IMPRF <u>tired-FSG</u> 'she looks tired'

The same optionality holds true for adverbials. In (6), the adverb *b-z-zərb-a* 'quickly' presents an instance of adjunction and hence can be omitted without having any impact on the structural relationship that holds between the remaining entities, namely the subject and the verb.

(6) xrəz <u>b-z-zərb-a</u> leave.PRF.3MSG with-DEF-quickness 'he left <u>quickly</u>'

Cross-linguistic research has shown that while in some languages such as English it is easy to make a distinction between depictives and adverbials given their different morpho-syntactic correlates, in other languages 'the difference between depictives and adverbials is much less clear-cut, both in formal and semantic terms, than is often assumed' (Schultze-Berndt and Himmelmann 2004: 59). Much of the research that has examined this issue of how to delimit depictives from other adjuncts such as adverbials was carried out on European languages. The major goal of this paper is to provide data from MA, a typologically different language where adjuncts functioning as adverbials and as depictives are sometimes morpho-syntactically similar. An attempt will be made to see on what grounds the line between the two can be drawn and what criteria can be used to delineate the extent to which these two constructions can be delimited.

2 Data

The data which informs the present study is twofold. It was elicited from native speakers of MA, and it was also drawn from Maas' corpus.

Typological surveys of secondary predicates have shown 'a high heterogeneity of coding devices for secondary predicates both intra- and inter-linguistically' (Schroeder et al. 2008: i). Many constructions are candidates for secondary predication, and there is a variety of formal means to express depictives across languages. MA, as other languages, also makes use of a range of formal means to express secondary predication. MA speakers resort to both nominal and verbal strategies to express depictive meaning (Maas 2008). Prototypical depictives, which are very common in many languages as shown by cross linguistic research, are those that occur in the form of adjectives as 'raw' in 'he ate the meat raw' in English or *sxun* 'hot' in *frab l-ħlib sxun* 'he drank the milk hot' in MA.

This paper examines another category of depictives that are realised by zeromarked nouns as in (7) because they are under-resourced compared to prototypical depictives.

(7) frəb-t l-ħrir-a təlʒ drink.PRF-1SG DEF-soup-FSG snow 'I drank the soup very cold'

The zero-marked noun *tal3* 'snow' is an adjunct that adds a second predication to the direct object *l-ħrir-a* 'the soup,' one of the arguments involved in the main predication. Its basic property is that it is a metaphor that is employed instead of 'very cold,' an

adjective modified by an adverb of degree to show the intensity of something. Nouns similar to *təlʒ* 'snow' in MA are *Ssəl* 'honey' to describe something very sweet or *ħədʒ-a* 'bitter melon' to describe something very sour. *Ssəl* 'honey' and 'very sweet,' for instance, lead to one another through their similarity according to the metaphorical way. *Ssəl* 'honey' is used outside its conventional meaning to express a concept that is similar to it, hence indicating 'mappings across conceptual domains' (Lakoff 1993). Building on the contemporary theory of metaphor, Lakoff (1993) made the strong claim that a metaphor is not only part of 'the realm of poetic language'; it is also part of the ordinary system of thought and language. This is why everyday language is loaded with metaphors.

In MA, zero-marked nouns can also occur in the same position in the structure of the sentence as in (8), where the substantive *dulm* 'injustice' is also an adjunct, but is event-oriented rather than participant-oriented and hence an adverb.

(8) dda-ha <u>dulm</u>
 take.PRF-3FSG <u>injustice</u>
 'he took it [the land]¹ unjustly' (Maas' corpus, J-93-1)

This suggests that, from a formal point of view, entities such as *tal3* 'snow' in (7) and *dulm* 'injustice' in (8) cannot be assigned to depictive or adverbial expressions on the basis of their morpho-syntactic properties.

3 Findings

3.1 Formal properties

Nouns such as *tal3* 'snow' and *dulm* 'injustice' exhibit formal overlap because they share many morpho-syntactic properties. First, they both allow syntagmatic expansion to the left because they can be both morphologically specified for definiteness as in (9) and (10).

(9)	<u>ḍ-ḍulm</u>	dyal	l-ʕaʔil-a		xayb	
	DEF-injustice	of	DEF-family-FSG		bad	
	' <u>the injustice</u> of	of the fa	amily [is] bad'		
(10)	dab	t-təlʒ	_	lli	ţaħ	b-z-zərb-a
	melt.PRF.3MSG	DEF-s	snow	which	fall.PRF.3MSG	with-DEF-quickness
	'the snow which had fallen melted quickly'					

^{1 &#}x27;it' refers to a piece of land.

Second, both nominal forms allow syntagmatic expansion to the right as in (11) and (12).

- (11) <u>d-dulm</u> f-xdamt-ha dfaf-ha t-xraz
 DEF-injustice in-work-3FSG push.PRF-3FSG 3FSG-leave.IMPRF
 'the injustice in her work pushed her to quit'
- (12) <u>t-təl3</u> dyal 3-3bəl qaşəħ DEF-snow of DEF-mountain harsh 'the snow of the mountain <is> harsh'

3.2 Delimitation criteria

Three criteria were found to delimit zero-marked nouns that are depictives from those that are adverbials, showing that they do not have the same semantic orientation and that *dulm* 'injustice' is event-oriented while *talg* 'snow' is participant-oriented.

3.2.1 Concomitance

One criterion that was found to delimit zero-marked nouns as adverbials from those that have the status of depictives is concomitance. A noun that expresses an adverbial modification can function as a manner concomitant preceded by the relator *b*- 'by' while a noun that expresses a depictive secondary modification cannot.

The domain of concomitance includes different instrumental and comitative relations that vary in their syntactic coding and that are classified on the basis of participant relations in a sentence (Seiler 1974; Stolz 1996, 2001). As Lehmann and Shin (2005) stated, concomitance is a subdomain of the functional domain of participation where the concern is with 'the internal linguistic structure of situations.' A situation involves participants (entities) that have specific features such as [+/– human], [+/– animate], [+/– concrete] and that fulfill distinct participant roles as in the following sentence.

(13)	Yazid	ta-i-lʕəb	mʕa	Rayhana
	Yazid	IND-3MSG-play.IMPRF	with	Rayhana
	'Yazid i	s playing with Rayhana		

In (13), there is a core situation where both participants are [+ human] and where Yazid is the actor and Rayhana is the concomitant. However, because this is a reciprocal situation, the roles are symmetric and hence could be subject to reversibility; that is, instead of having 'Yazid is playing with Rayhana,' we could also have 'Rayhana is playing with Yazid.' Based on this notion of participation, Lehmann and Shin (2005) posited a functional framework that includes seven concomitants, namely partner, companion, vehicle, tool, material, manner and circumstance.²

Manner is a concomitant that applies to the whole situation. In 'Linda opened the door by force,' 'force' applies to the situation core ('the opening was by force') (Lehmaan and Shin 2005). The examined zero-marked noun *dulm* 'injustice,' as illustrated in (14), can be preceded by the relator *b*- 'by' and hence functions as a manner concomitant, which asserts its status as an adverbial.

(14) *dda l-?ərd* <u>b-d-dulm</u> take.PRF.3MSG DEF-land <u>by-DEF-injustice</u> 'he took the land by injustice [unjustly]'

b-d-dulm 'by injustice' (that is, unjustly) applies semantically to the taking of the land, and the concomitant *dulm* 'injustice' can be conceptualised as an abstract [– concrete] instrument.

Nominal forms such as *tal3* 'snow,' on the other hand, cannot be used with *b*- 'by' and express manner, which stresses their status as object-oriented depictives.

(15)	?∫ŗəb-t	l-ħrir-a	<u>b-t-təlʒ</u>			
	drink.PRF-1SG	DEF-soup-FSG	with/by-DEF-snow			
	? 'I drank the soup with/by snow'					

frəb-t l-ħrir-a b-t-təlʒ 'I drank the soup with/by snow' is a possible proposition, but it conveys a different meaning where *b-t-təlʒ* 'with/by snow' is no longer a depictive.

3.2.2 The similitive marker bħal 'like'

Another criterion that was found to delimit *dulm* 'injustice,' as an adverbial, from *təlʒ* 'snow,' as a depictive, is the similitive marker *bħal* 'like.' The noun *təlʒ* 'snow' can be preceded by the similtive marker '*bħal*' as in (16).

(16)	∫rəb-t	l-ħrir-a	bħal	t-təlʒ	
	drink.PRF-1SG	DEF-soup-FSG	like	DEF-snow	
'I drank the soup <u>like snow</u> ' [that is, I drank the soup very col					

By contrast, *d-dulm* 'injustice' cannot occur with it, which betokens its status as an event-modifying entity.

² A detailed description and discussion of the different types of concomitants in Moroccan Arabic is beyond the scope of this paper.

(17)	*dda	l-?əŗḍ	bħal	<u>ḍ-ḍulm</u>
	take.PRF.3MSG	DEF-land	like	DEF-injustice
	*'he took the lar			

3.2.3 Referentiality

Referentiality is a criterion that was first used by Maas as an argumentative framework in his analysis of prototypical depictives in MA to delimit adjectives used as depictives from those used as modifiers of nouns in a noun phrase. The same criterion is drawn on in this paper to see to what extent it can delimit zero-marked nouns as adverbials from those that are depictive secondary predicates.

Semantic referentiality is defined as pointing to some existent entity in discourse. Thus, [+ Referential] (henceforth [+ REF]) implies the identifiability of the terms thus marked. Some of the nominal expressions that are intrinsically [+ REF] are proper names, demonstratives, and pronouns because they have a referential use. Definite descriptions are also described as referential expressions because they have a definite referent as in (18).

(18)	gal-t		li-a	<u>l- muħami-a</u>			
	tell.PRF	-3FSG	to-1SG	DEF-law	DEF-lawyer-FSG		
				[+ REF]			
	вadi i-ħəkm-u			Sli-h	вədda		
	FUT	3PL-sentence.IMPR		PRF-3PL	on-3MSG	tomorrow	
	'the lay	the lawyer told me they will anno			nounce the	verdict tomorrow'	

In (18), *l-muħami-a* 'the lawyer,' which is used with the prefixed morpheme /l-/, is a definite description. It has a referential function because it points to an identified referent. Pragmatically, a definite description usually represents information that has already been established in the discourse or is assumed to be present in the mind of the interlocutor/s. Pragmatic referentiality pertains to language use and is defined in terms of context-dependency.

Indefinite descriptions, on the other hand, are [– Referential] (henceforth [– REF]) because they rather activate a lexical concept and hence fall on the side of the lexicon, not on that of grammar. Example (19) is an illustration of this.

(19) gal-u li-ha xaşşə-k <u>muħami-a</u> tell.PRF-3PL to-3FSG need-2SG <u>INDEF.lawyer-FSG</u> [- REF] 'they told her you need a lawyer' The zero-marked noun *muħami-a* 'a lawyer' in (19), as opposed to *l-muħami-a* 'the lawyer' in (18), does not have a definite referent. It rather activates a lexical concept and hence has a predicative function. This function also holds in nominative sentences in MA as in (20), where the basic function of the nominal predicate *muħami-a* 'a lawyer' is to activate a lexical concept.

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(20) ana <u>muħami-a</u>
PRN.1SG <u>INDEF.lawyer-FSG</u>
[– REF]
'I am <u>a lawyer</u>'
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The investigated nouns *dulm* 'injustice' and *təlʒ* 'snow' are also [– REF]; they both have a predicative use.

From a formal point of view, [+ REF] has been associated with the definite article and [– REF] with the indefinite one. There is not, however, a one-to-one relation between referentiality and the concept of definiteness. Previous work that examined determination in MA (Harrell 1962; Marçais 1977; Youssi 1992; Caubet 1993) has been very biased by the European school tradition, and hence has contrasted the definite article /l-/ (as associated with [+ REF]) with the indefinite articles /ʃi-/, /waħəd l-/ and zero morpheme (Ø) (as associated with [– REF]). Maas (2011) asserted that determination in MA is more complex than this. For instance, he pointed out that the marker /l-/ 'the,' which is conventionally labeled as a definite article, is also used for indefinite referents as shown below.

(21) ma-b¤a-u-ha-f ħit ma-Sənd-ha-f l-wəld NEG-like.PRF-3PL-3FSG-NEG because NEG-have-3FSG-NEG DEF-boy 'they didn't want of her because she does not have the boy'

In (21), the noun *wald* 'boy' is marked with the determiner /l-/ 'the,' but it is [– REF]. It does not point to an existing entity, and it does not have an identified referent; no definite boy is denoted. This shows that there is an asymmetrical relation between referentiality and definiteness and that MA, a typologically different language, displays a different system of determination marking.

The examined zero-marked nouns *tal3* 'snow' and *dulm* 'injustice' behave syntactically and semantically in a different way depending on the referentiality of the direct object of the sentence, that is, the second argument of the main predicate. The nominal form *dulm* 'injustice,' as (22) and (23) show, expresses adverb content whether the second argument ??rd 'land' is [– REF] or [+ REF], which proves that it adds specific information to the verb and not to the argument.

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(22) dda waħəd l-?ərd dulm иma-qnə_{s-}[take.PRF.3MSG land NEG-have enough.PRF.3MSG-NEG а injustice and-[-REF]'he took a land unjustly, and he wanted more' (23) dda l-?əŗd lli ka-i-ħrət daba dulm take.PRF.3MSG DEF-land IND-3MSG-plough.IMPRF that now injustice [+ REF]

'he took the land he is ploughing now unjustly'

The nominal form *tal3* 'snow,' however, behaves syntactically and hence semantically in a different way as in (24). For it to be a depictive, it has to be [– REF], and the second argument it assigns a property to has to be [+ REF].

(24) frəb-t <u>l-ħrir-a</u> təlʒ drink.PRF-1SG <u>DEF-soup-FSG</u> snow [+ REF] [- REF] 'I drank the soup very cold'

When the second argument is marked [– REF] as the noun *tal3* 'snow' itself, which is [– REF], this has an impact on the constituent structure of the clause, as in (25).

 $\begin{array}{cccc} (25) & fr \partial b \cdot t & hrir-a & t \partial l z \\ & drink.PRF-1SG & INDEF.soup-FSG & snow \\ & & -REF] & -REF] \\ & 'I drank a very cold soup' \end{array}$

The noun <u>təl3</u> 'snow' does not express a depictive content anymore. It is an attributive modifier in the nominal group $\hbar rir$ -a təl3 'a very cold soup.' Schultze-Berndt and Himmelmann (2004), giving for illustration 'Carol drinks black coffee,' also pointed out that 'black' in this sentence is a constituent of the NP [black coffee].

The same holds true for cases where the category of the depictive is an adjective and not a zero-marked noun as in (26).

(26) $\int \vec{r} \partial b \cdot t$ drink.PRF-1SG $\frac{hrir-a}{INDEF.soup-FSG}$ $\frac{bard-a}{cold-FSG}$ 'I drank a cold soup'

The adjective *bard-a* 'cold' forms a low-level constituent with the noun *ħrir-a* 'soup'; it functions as its modifier and both of them constitute the direct object. The same type

of syntactic analysis applies when both the noun and the adjective are preceded by the definite article as in (27).

(27) *frab-t* l-bard-a l-ħrir-a drink.PRF-1SG DEF-cold-FSG DEF-soup-FSG [+ REF] ħitaſ ma-ʃəf-t-ſ l-ħrir-a s-sxun-a because NEG-see.PRF-1SG-NEG DEF-soup-FSG DEF-hot-FSG [+ REF]

'I drank <u>the cold soup</u> because I did not see the hot soup'

In the clause, *frəb-t l-ħrir-a l-bard-a* 'I drank the cold soup' both *l-ħrir-a* 'the soup' *and l-bard-a* 'the cold' are preceded by the definite article and form a nominal group.

The above data shows that referentiality can help draw a line between zeromarked nouns when used as adverbs or as depictives. Adverbs are unrestricted with respect to the referentiality of the second argument. Whether it is [– REF] or [+ REF], the zero-marked noun keeps its status as an adverb. With respect to depictives, they are sensitive to the referentiality of the second argument. There is a restriction requiring that the second argument should be [+ REF] and the noun should be [– REF] in order for the latter to express a depictive secondary predication. When the second argument and the noun are both [– REF], they rather constitute a noun phrase which consists of a noun and its modifier.

4 Conclusion

The major issue that has been raised in this paper is how to delimit depictives from adverbials in MA, a typologically different language where sometimes depictives converge formally with adverbials. The analysis has focused on zero-marked nouns such as *talz* 'snow' and *dulm* 'injustice,' which occur as depictives and adverbials respectively and hence as adjuncts of the main predication. *talz* 'snow' is participant-oriented because it describes a state pertaining to the second argument of the main predicate while *dulm* 'injustice' (unjustly) is event-oriented in that it adds information to the meaning of the verb.

The findings have shown that these entities exhibit formal overlap as they share many morpho-syntactic properties. First, they both allow syntagmatic expansion to the left and to the right when not used as adverbs and depictives. Second, when they occur as adjuncts, they occur in the same position in the clause, and they are zeromarked for definiteness because they have a predicative use and not a referential one.

However, a number of criteria have shown that although these nouns are similar from a formal point of view, they do not have the same semantic orientation. One criterion that was found to distinguish between the two is concomitance. Nouns that express adverbial modification can be used as manner concomitants preceded by the MA relator *b*- 'by.' However, nouns that express depictive secondary predication cannot fulfill this participant role in the domain of concomitance. A second criterion that also delimits *dulm* 'injustice' as an adverbial from *tal*₃ 'snow' as a depictive is the similitive marker $b\hbar al$ like.' The depictive $t\partial l_3$ 'snow' can be preceded by the similtive marker bhal as in frab-t l-hrir-a bhal t-tal? I drank the soup like snow' (that is, I drank the soup very cold), but *dulm* 'injustice' cannot as in *dda l-?ərd bħal d-dulm * 'he took the land like injustice.' The last criterion that was also found to delimit zeromarked nouns that are adverbials from those that are depictives is referentiality. Nominal forms such as *dulm* 'injustice' are unrestricted with respect to referentiality; they express adverb content whether the second argument of the main predicate is [- REFI] or [+ REF], which proves that they add specific information to the verb and not to the object argument. A noun such as talz 'snow,' however, is sensitive to the referentiality of the second argument. For it to be a depictive, it has to be [- REF] and the second argument has to be [+ REF].

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