

CORPUS BASED ANALYSIS OF INDEFINITE ARTICLE USE BY SAUDI ESL LEARNERS

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INDEFINITE ARTICLES IN ARABIC

- Arabic has a morphophonological feature that is often present on indefinite nouns. This feature is called **nunation**.
- **Nunation** is defined as a /n/ sound added to the end of words following a short vowel sound and is represented in Arabic orthography with diacritics “◌ِ, ◌َ, ◌ُ”
- Articles in Arabic:
 - Definite article “al” is prefixed to the noun
 - Nunation is suffixed to the noun (Debated!!)

1-

- | | | |
|----|------------|--------------|
| a. | ʃtarait-u | ʔal-kitaab-a |
| | Buy.PAST-I | The-book-ACC |
| b. | ʃtarait-u | kitaab-a-n |
| | Buy.PAST-I | book-ACC-N |

INDEFINITE ARTICLES IN ARABIC

- There is a debate over the role of nunation in Arabic literature as an indefinite article:
 - As an indefinite article: nunation's complementary distribution with the definite article (E. Schulz 2004, K. Versteegh 2014, F. Abu-Chacra 2007, K. Ryding 2005)

1-

- | | | |
|----|------------|-------------------|
| a. | ʃtarait-u | ʔal-kitaab-a |
| | Buy.PAST-I | The-book-ACC |
| b. | ʃtarait-u | kitaab-a-n |
| | Buy.PAST-I | book-ACC-N |
| c. | ʃtarait-u | (*ʔal-)kitaab-a-n |
| | buy.PAST-I | (*the)book-ACC-N |
| | | 'I bought a book' |

INDEFINITE ARTICLES IN ARABIC

- Others argue against nunation as an indefinite article (Fassi 1993, 2012, Jarrah, M., & Zibin, A. 2016a, Jarrah, M., & Zibin, A. 2016b, Lyons 1999 , among others).
- Nunation appears on proper nouns as well, which are definite by nature
- Arabic marks indefiniteness with the absence of a definite article (null).

2-

a. raʔai-tu mohammad-a-n fi-s-suuq-i
see.PAST-1S Mohammad-ACC-N in-DEF-market-GEN
'I saw Mohammad in the market.'

INDEFINITE ARTICLES IN ARABIC

- Alzamil (2023) investigated the influence of nunation on indefinite article use in English by comparing the production of Najdi (nunation) and Hijazi (no-nunation) Arabic speakers.
 - “both groups struggled in using the target *a* in singular contexts”
 - “(the average for Najdi speakers was 52% and for Hijazi speakers 41%)”
 - “Najdi speakers used *a* more accurately than Hijazi speakers did in singular contexts”
- Interesting but not convincing enough

RESEARCH QUESTION

- Does Saudi ESL learner's production of the indefinite English article provide evidence that nunation is an indefinite article in Arabic?

CORPUS

Data:

- Data made available by (Vercellotti, 2017) in TalkBank was used for the analysis.
- Data form: speech transcripts

Participants:

- L1s: Arabic (n=43), Chinese (n=16), and Korean (n=7)
- Final number of participants: 43 Arabic speakers
- Adults in an Intensive English Program (IEP) in the United States.

Data collection

- During class meetings as part of the speaking curriculum of the program

Levels:

- low-intermediate | high-intermediate | low-advanced

Contributions:

- low-int = 54 | high-int = 120 | low-adv = 34

ANALYSIS

- Extracted ids and levels from file names with regex.

```
#this gives the ids listed in the file names
ids <- str_extract(speech, "\\d{3,}")

# this gives the level listed in the file names
levels <- str_extract(speech, "_\\d{1}[A-Z]")
levels <- str_remove_all(levels, "_[A-Z]")
```

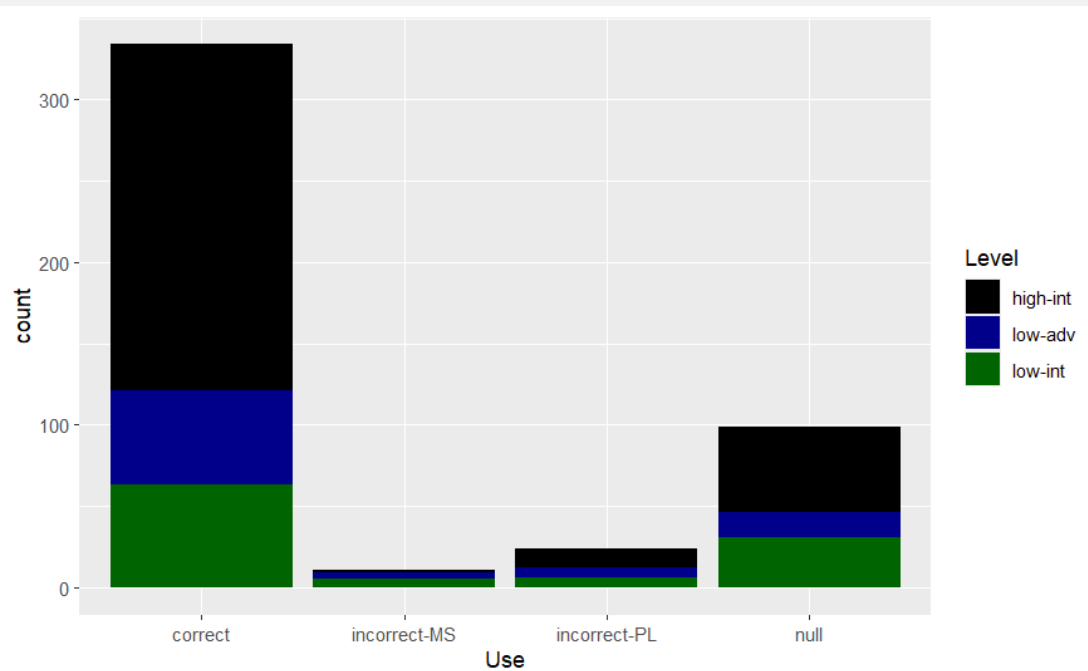
- Removed the lines of metadata from each transcript
- Created a data frame with IDs, Level, and Transcripts
- Started cleaning the transcripts from CHAT formatting

```
speechdf$Transcript <- speechdf$Transcript %>%
  str_remove_all("\\bNA\\b|\\d+_\\d+|\\*\\d+|\\d{3}|@...|\\\\\\\\t\\\\\\\\n|c\\\\\\\\(|[A\\\\\\\\w|\\\\\\\\s]|\\\\\\\\buh\\\\\\\\s|\\\\\\\\bah\\\\\\\\s|\\\\\\\\bPAR|\\\\\\\\bPAR0") %>%
  str_replace_all("_", " ")
```


ANALYSIS

- Created three df one for each level (low-int, high-int, low-adv)
- Loaded the POS tagger and language model
- Tagged the dfs
- Recreated the transcripts with each word tagged
- Created a list for mass nouns and replaced the tag on mass nouns with NNC (it should've been NNM)
- Extracted the contexts of article use (correct, incorrect-PL, incorrect-MS, null)

Use <chr>	n <int>
correct	334
incorrect-MS	11
incorrect-PL	24
null	99



RESULTS

A frequency count of each context of article use

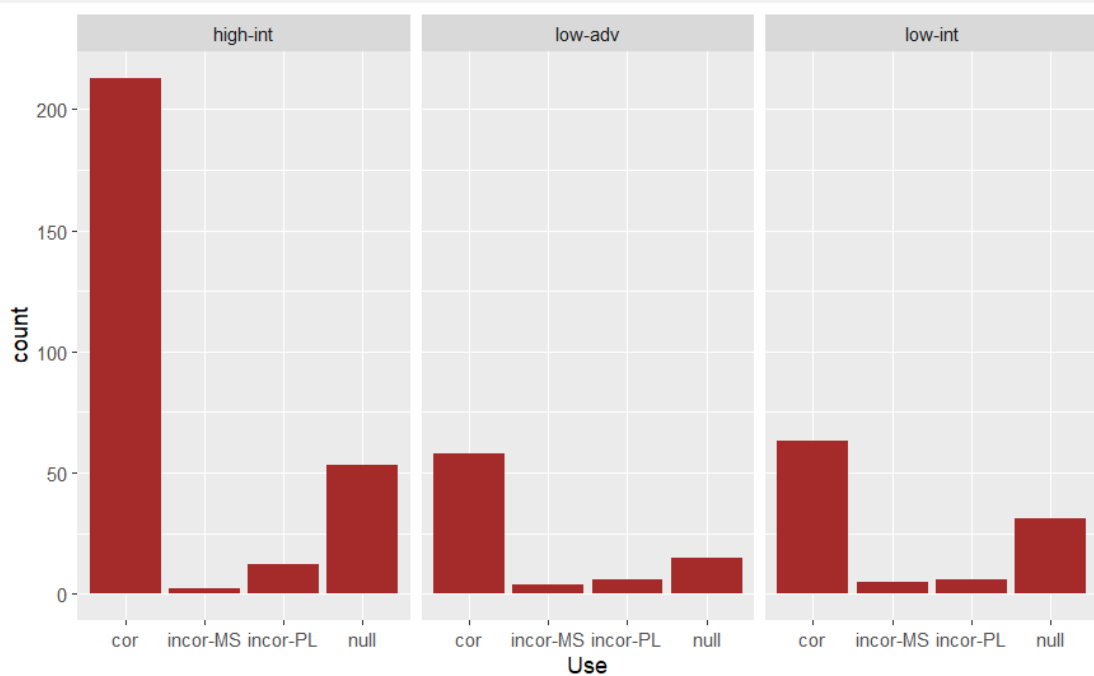
Overall, correct indefinite article use was much more frequent than null

RESULTS

High-intermediate contributed more than half (120/208)

The proportional difference of correct and null for each level.

	correct	null
Low-int	67%	33%
High-int	80.1%	19.9%
Low-adv	79.5%	20.5%



CONCLUSIONS

- there are two possibilities for how Arabic marks indefiniteness:
 - 1) it marks it overtly via nunation
 - 2) it marks via the absence of the definite article
- While the results point to the former, it should be taken with caution:
 - the participants in this corpus were students in a language program in the United States.
 - suggesting that nunation is a marker of indefiniteness in Arabic is contradicted by its presence on proper nouns.

CONCLUSIONS

- Errors made in the use of the indefinite article with plural and mass nouns could be used in support of the argument that nunation is an indefinite article.

- a. raʔaitu radʒula-**n** tʃawiːla
saw-I man-nun tall
'I saw a tall man'
- b. raʔaitu ridʒala-**n** tʃiwaːla
saw-I men-nun tall
'I saw tall men'
- c. ʔakaltu ʔruz-an ʔbjadʃ
Ate-I rice-nun white

CONCLUSIONS

- However, it is difficult to argue for one interpretation over the other when MSA is considered as the LI because it is not any Arabic speaker's LI.
- Arabic speakers use their varieties in everyday communication rather than MSA.
- Varieties can be vastly different from MSA
 - Najdi & Hijazi

FUTURE RESEARCH

- Comparing the influence of nunaion on the use of indefinite English articles from dialects that use nunaion might reveal more about the nature of this mysterious linguistic feature.

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THANK YOU!