



# “Jumla” Project for Sign Language

# Digital tools to support Arabic Sign

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# Sign language project objectives

# The International Organization of the Deaf

80% of the deaf in the world cannot read and write



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# Several studies confirmed that

- Deaf children have trouble reading
- Many of them have difficulties understanding and reading
- Deaf children can read less than non-deaf children
- Marschark asserted that the learning speed of reading for deaf people is slower than the learning speed of reading for other children
- What a deaf child acquires in reading experience in four years is equivalent to what a deaf child acquires in one year.



# What are the causes of these difficulties?



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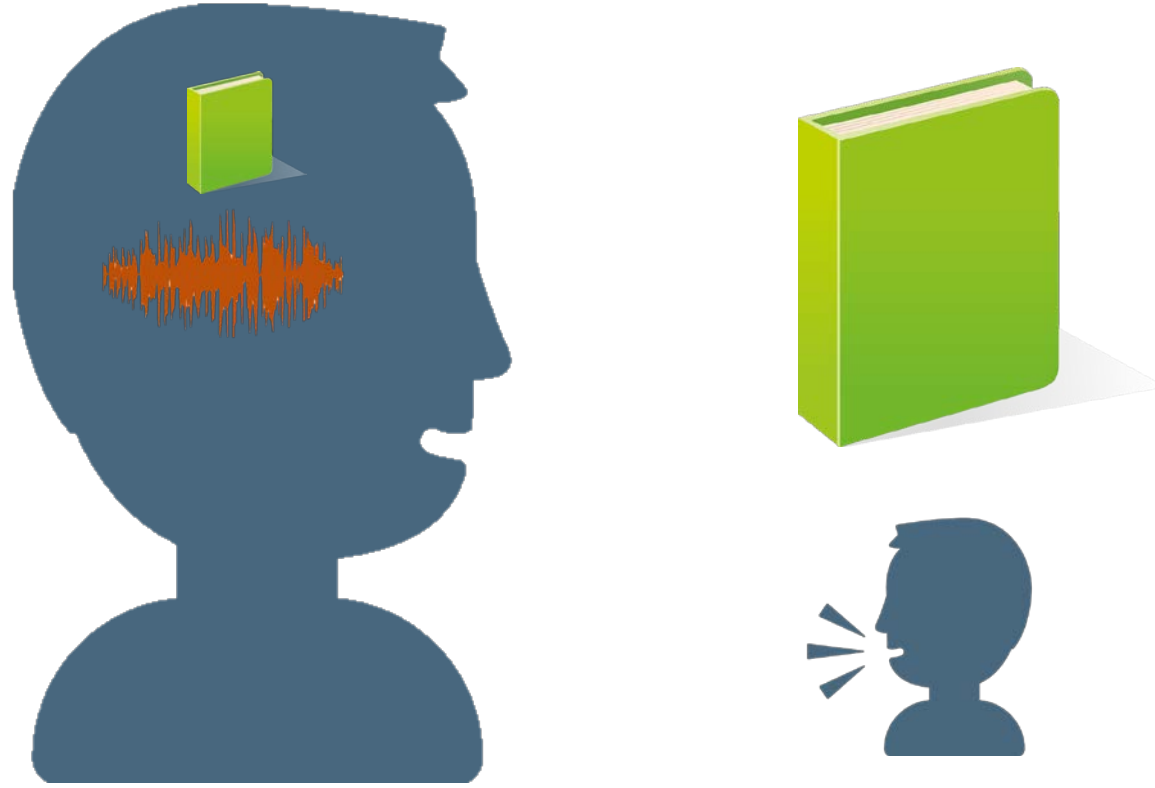
**Transcription  
of speech**

**Writing**



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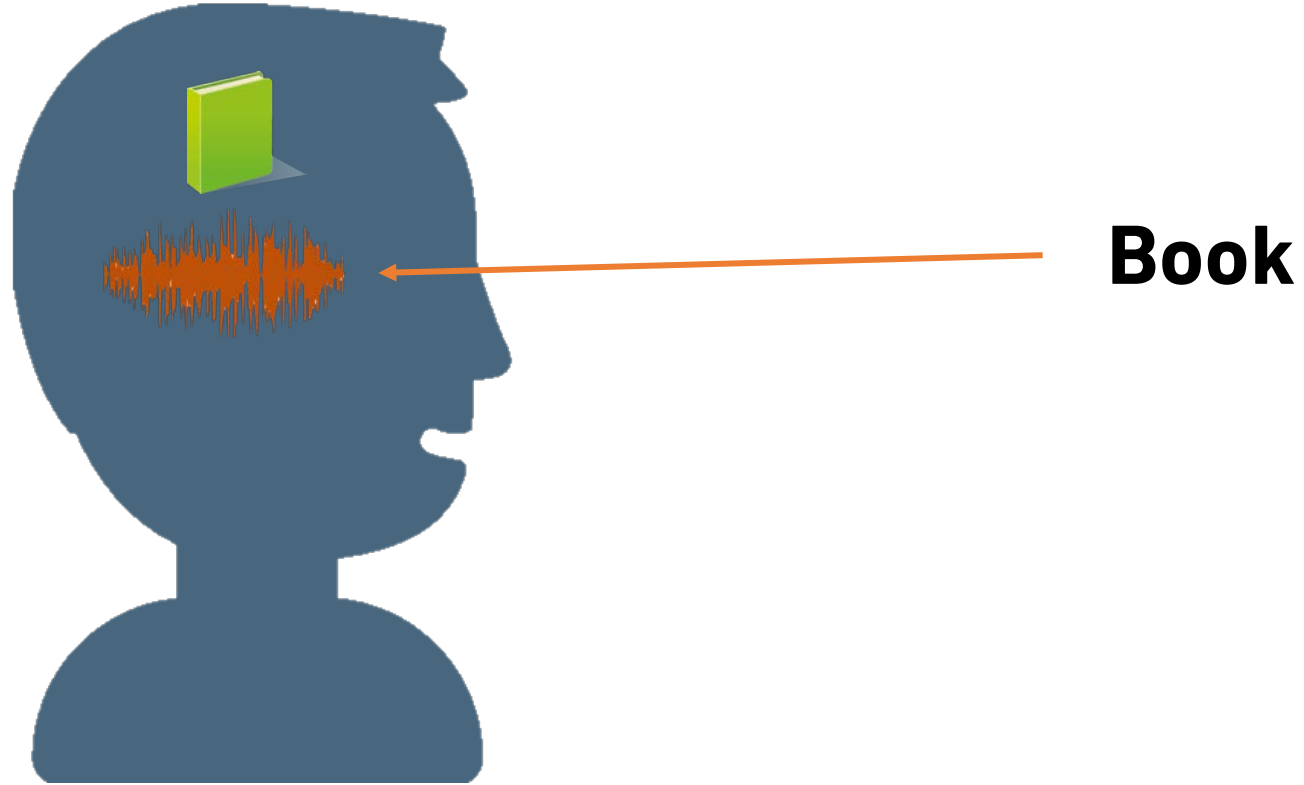


**When a child begins to learn,  
It associates objects with sound**



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**Book**

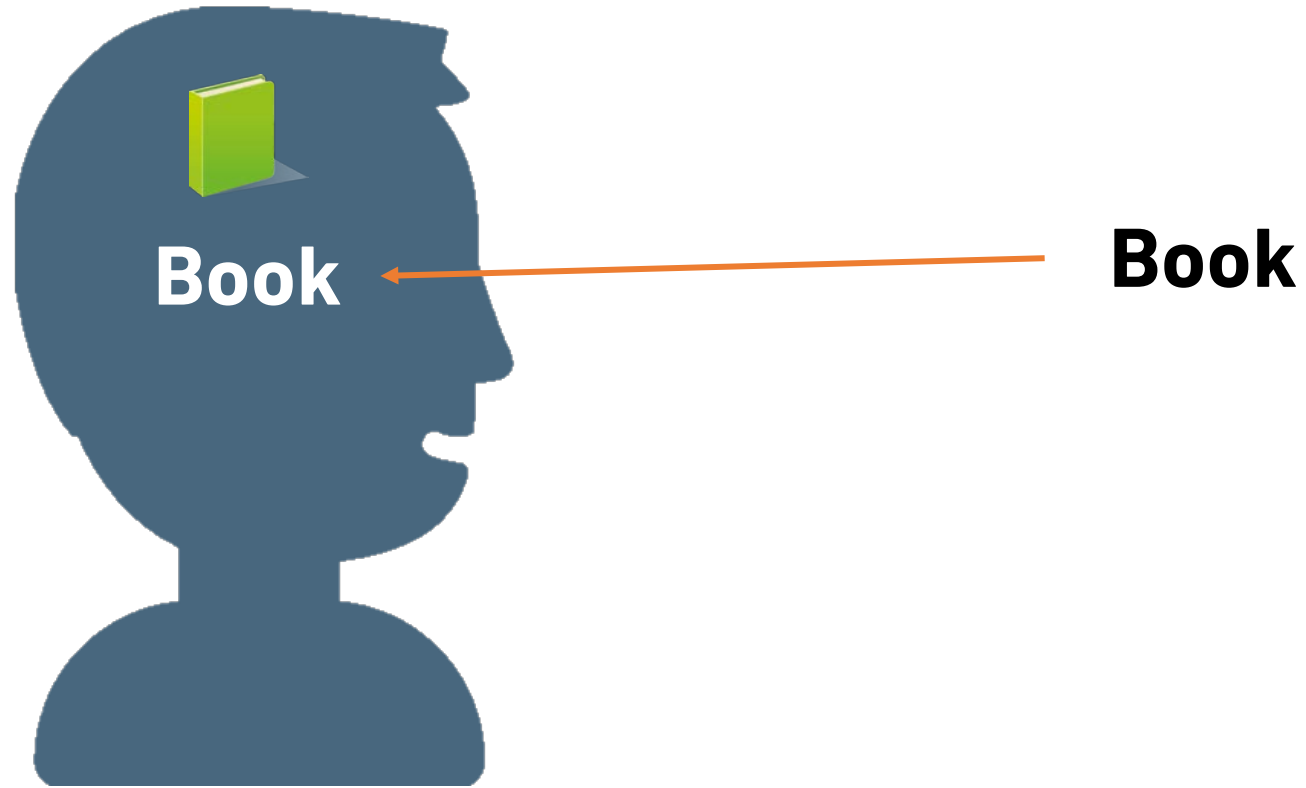
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**Deaf uses a graphical strategy to read**



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# The project objectives

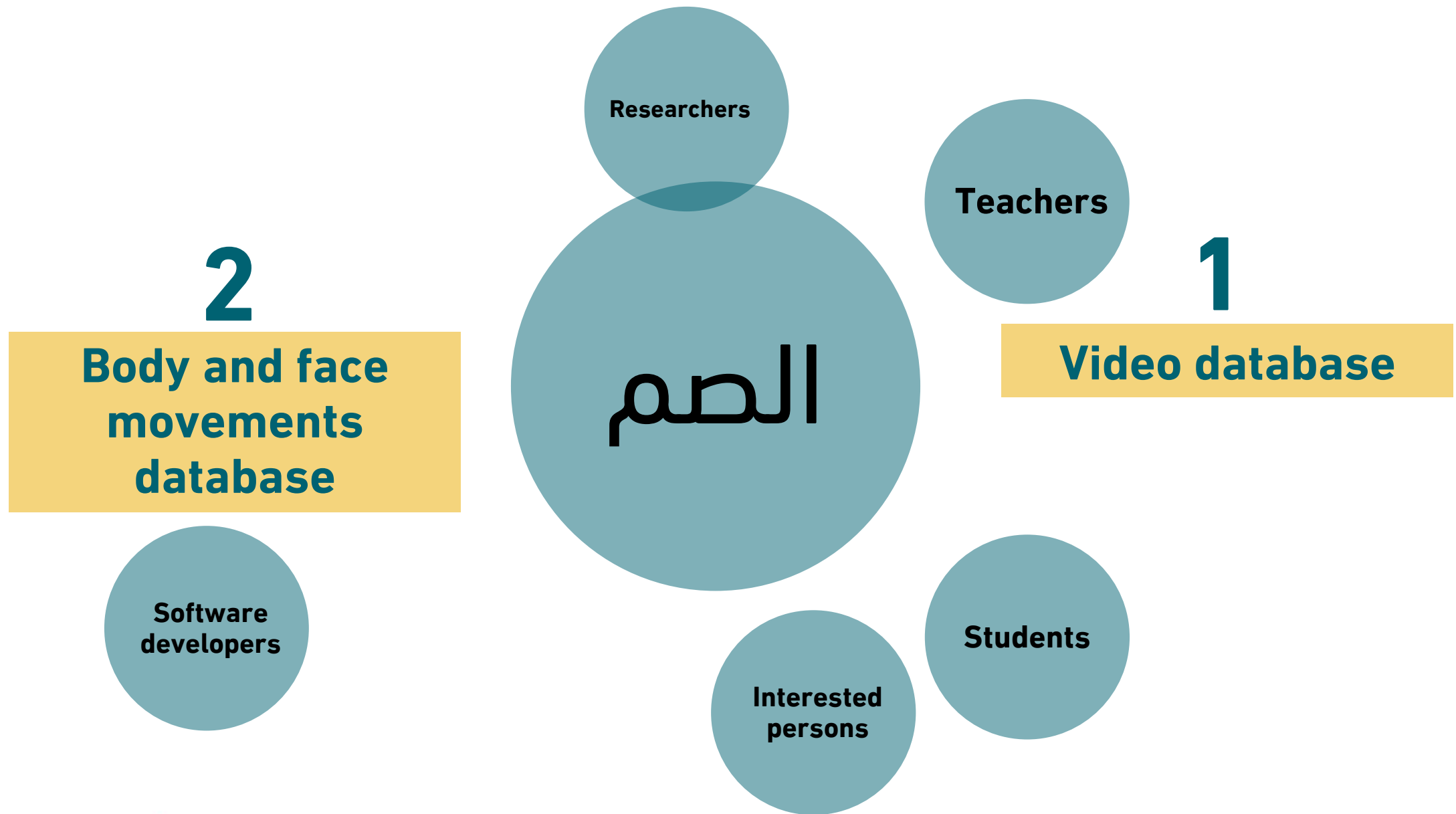
# Objectives

- Providing a database for Qatari and Arabic sign language
- Providing a digital platform for Qatari and Arabic Sign Language
- Providing digital services to software developers related to Qatari Sign Language and Arabic
- Create a programming language for coding sign language



# Beneficiaries of the project





# Automatic translation for Arabic sign languages

2

Body and face  
movements  
database

1

Video database



Grammatical rules



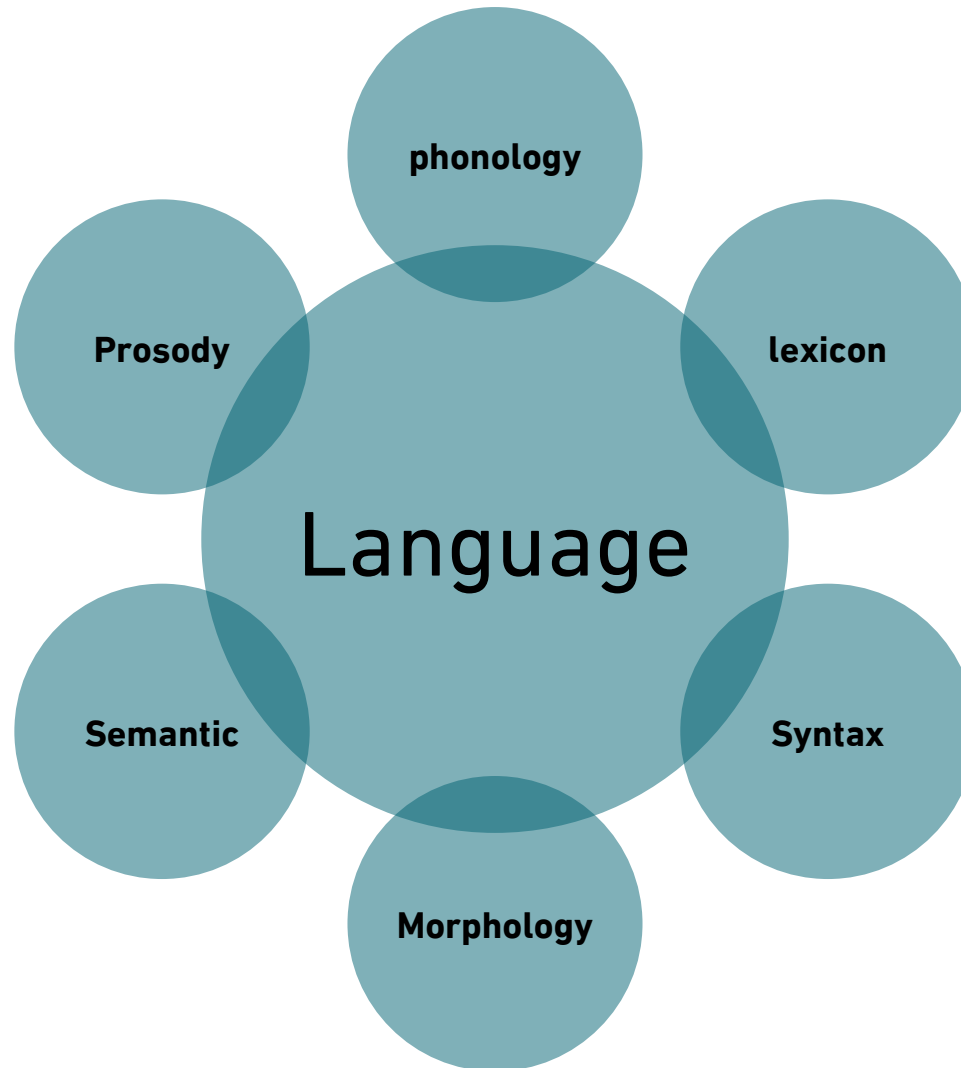
Automatic  
translation



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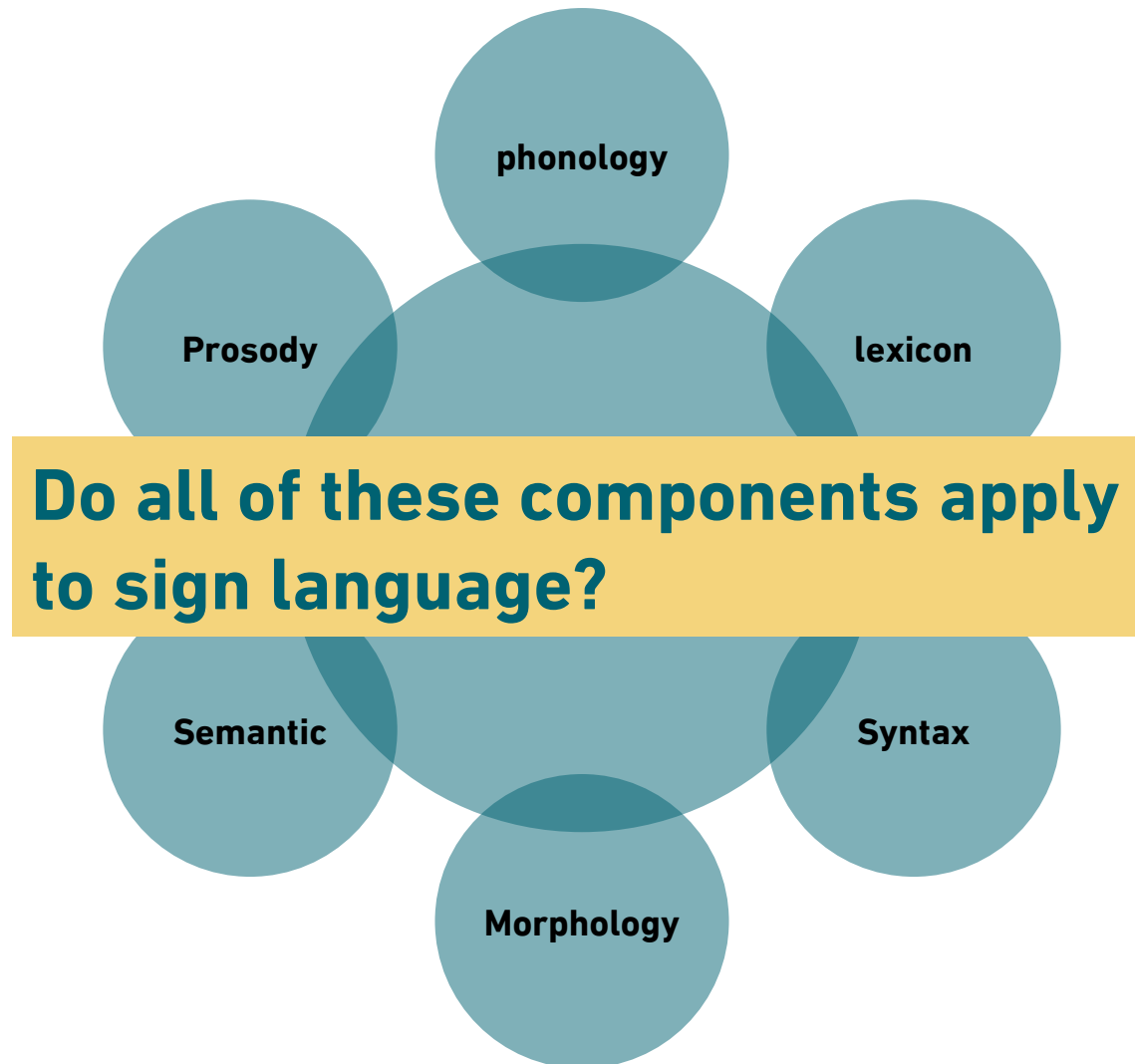
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# The structure and components of languages

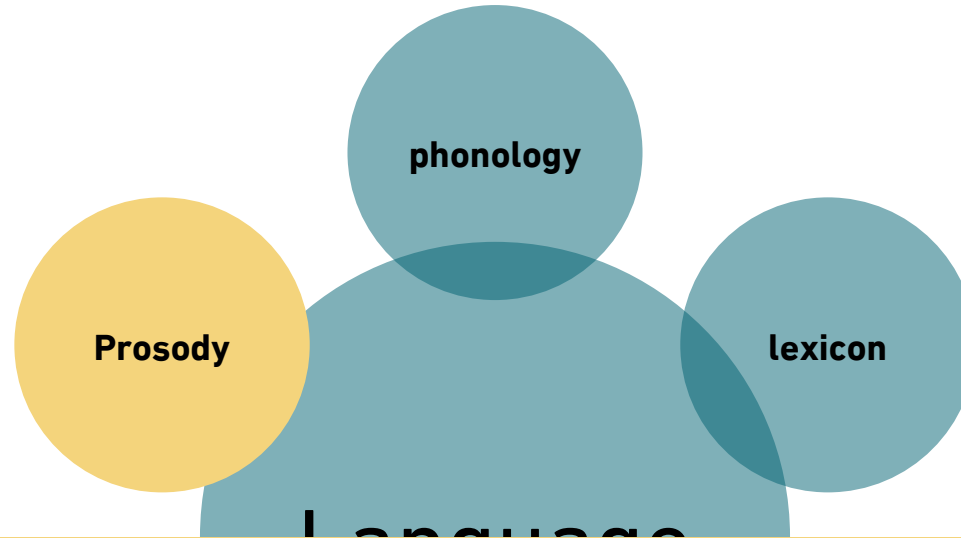




# The structure and components of languages

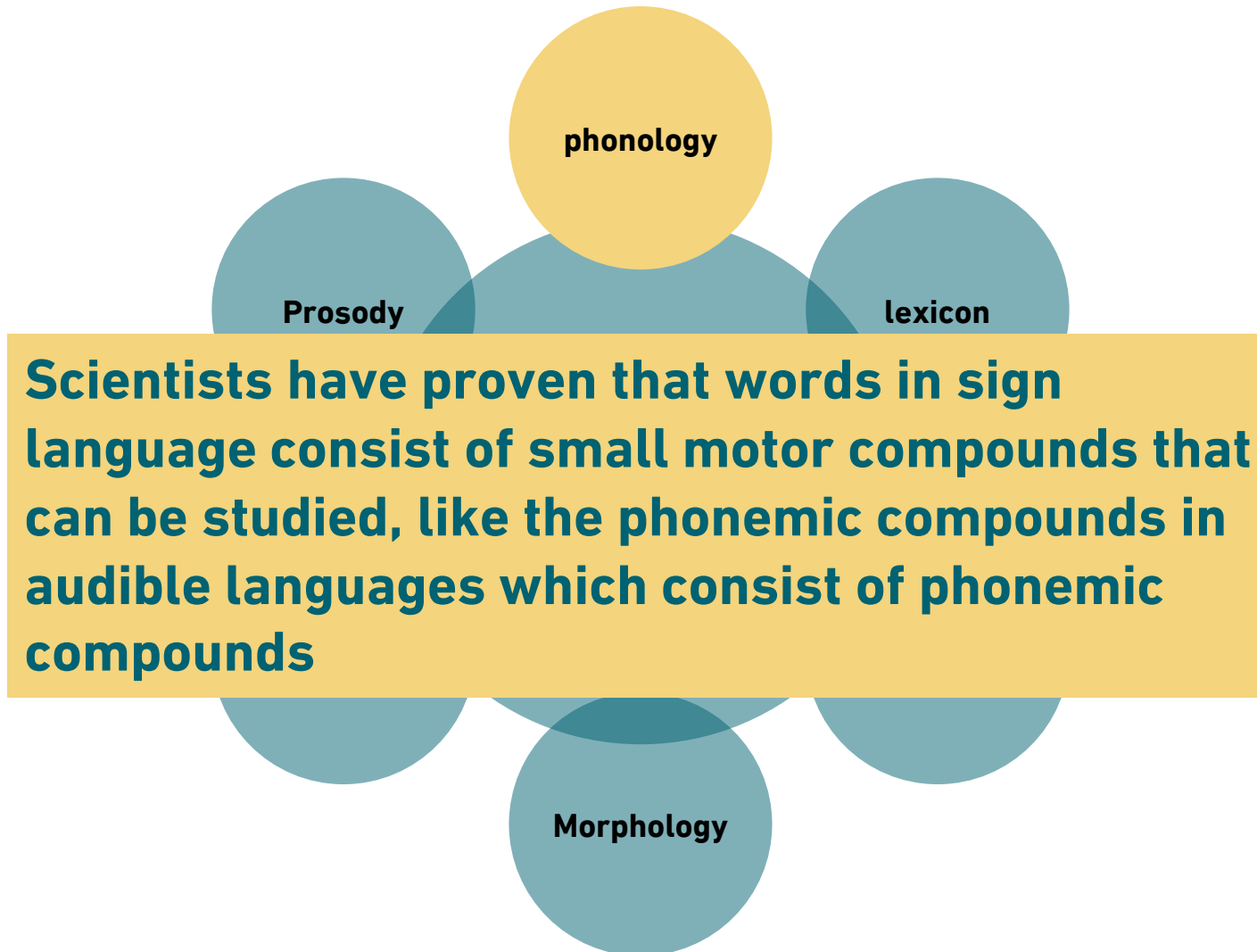


# The structure and components of languages

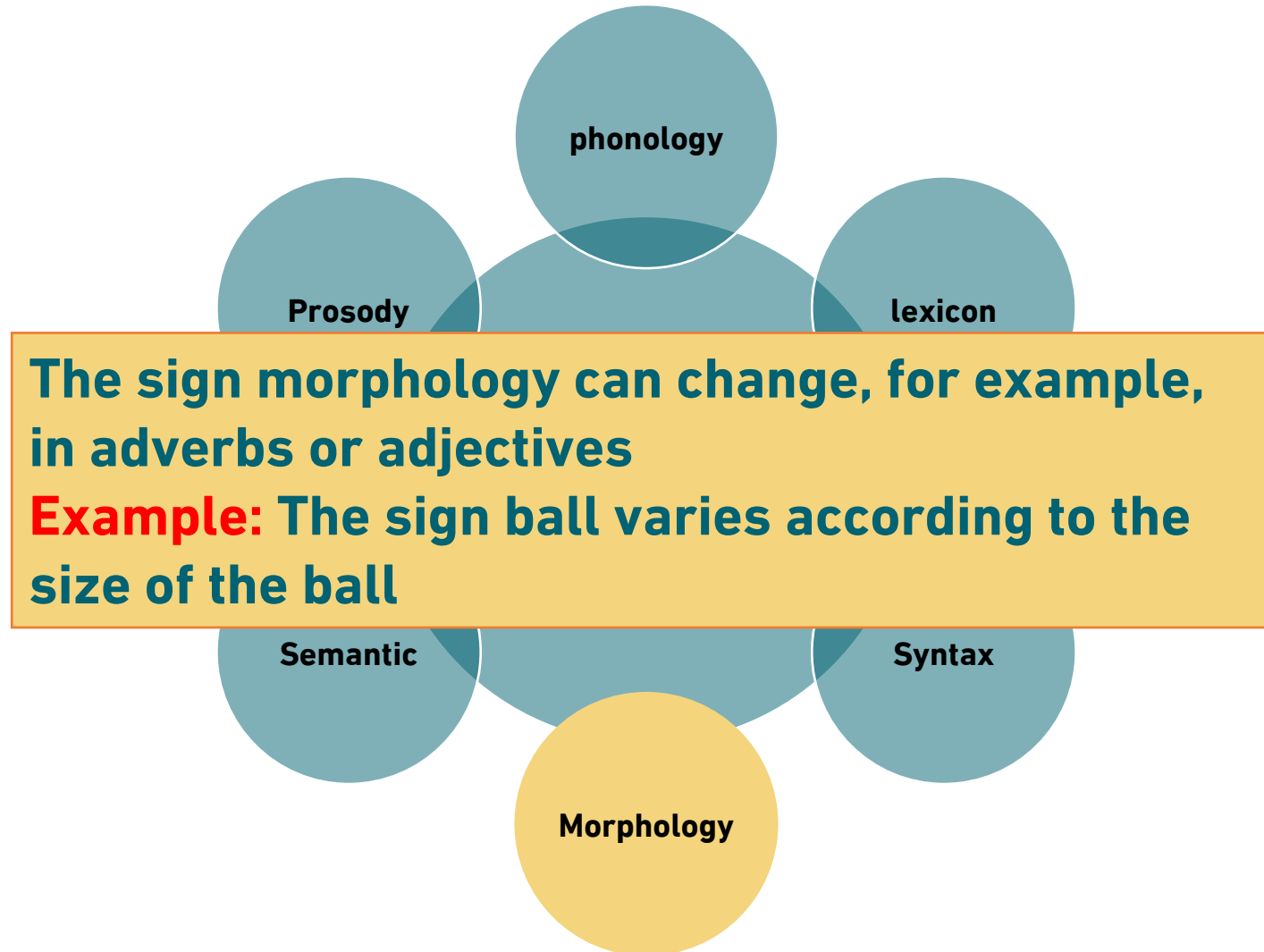


**Scientists have proven that the rhythm of movement can determine the wording of the sentence, for example, through the rhythm, the sentence can change from stress to interrogative**

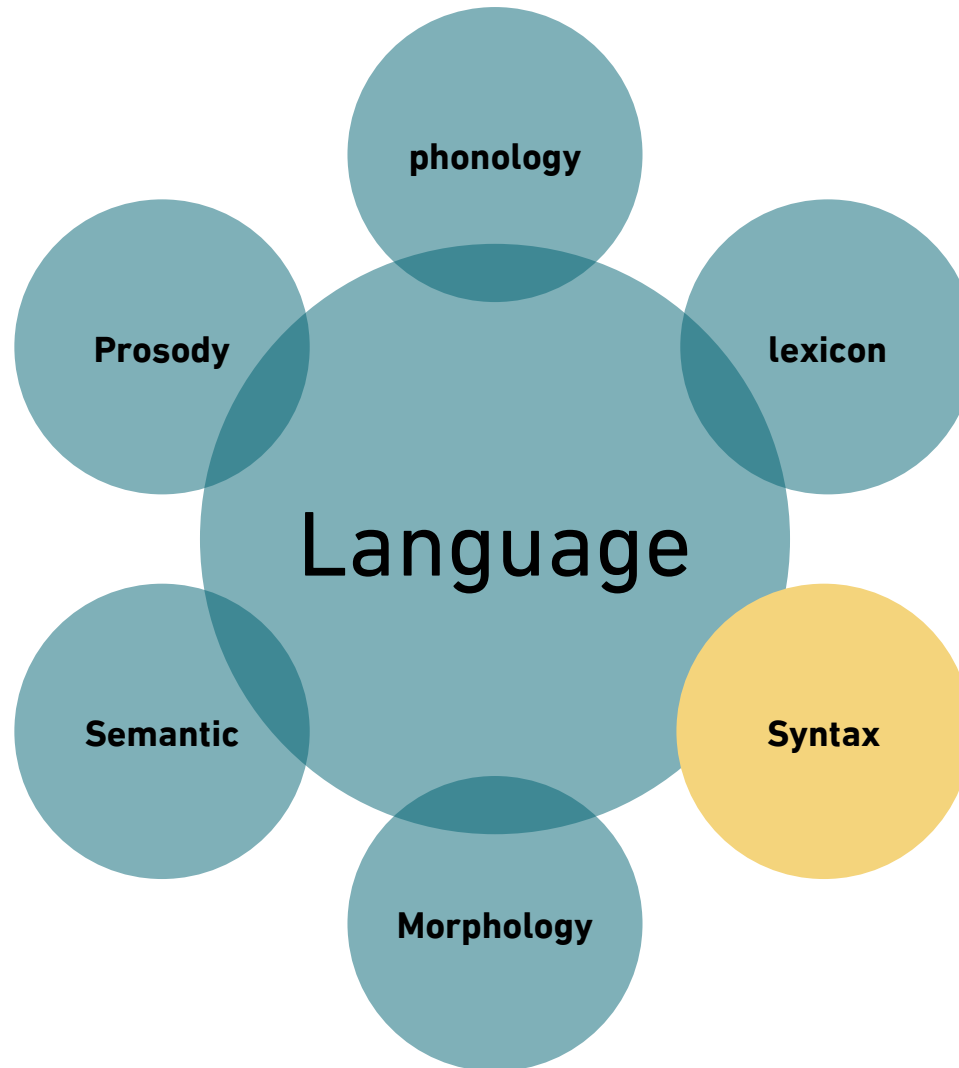
# The structure and components of languages



# The structure and components of languages



# The structure and components of languages



# The structure and components of languages



Rami left the house

خرج رامي من البيت



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# The structure and components of languages

رامي X



Rami left the house

خرج رامي من البيت

Ind2 خرج Ind1 بيت رامي



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# The structure and components of languages



Rami left the house

خرج رامي من البيت

Main Objective



Ind2 Ind2 Ind1  
خرج بيت رامي

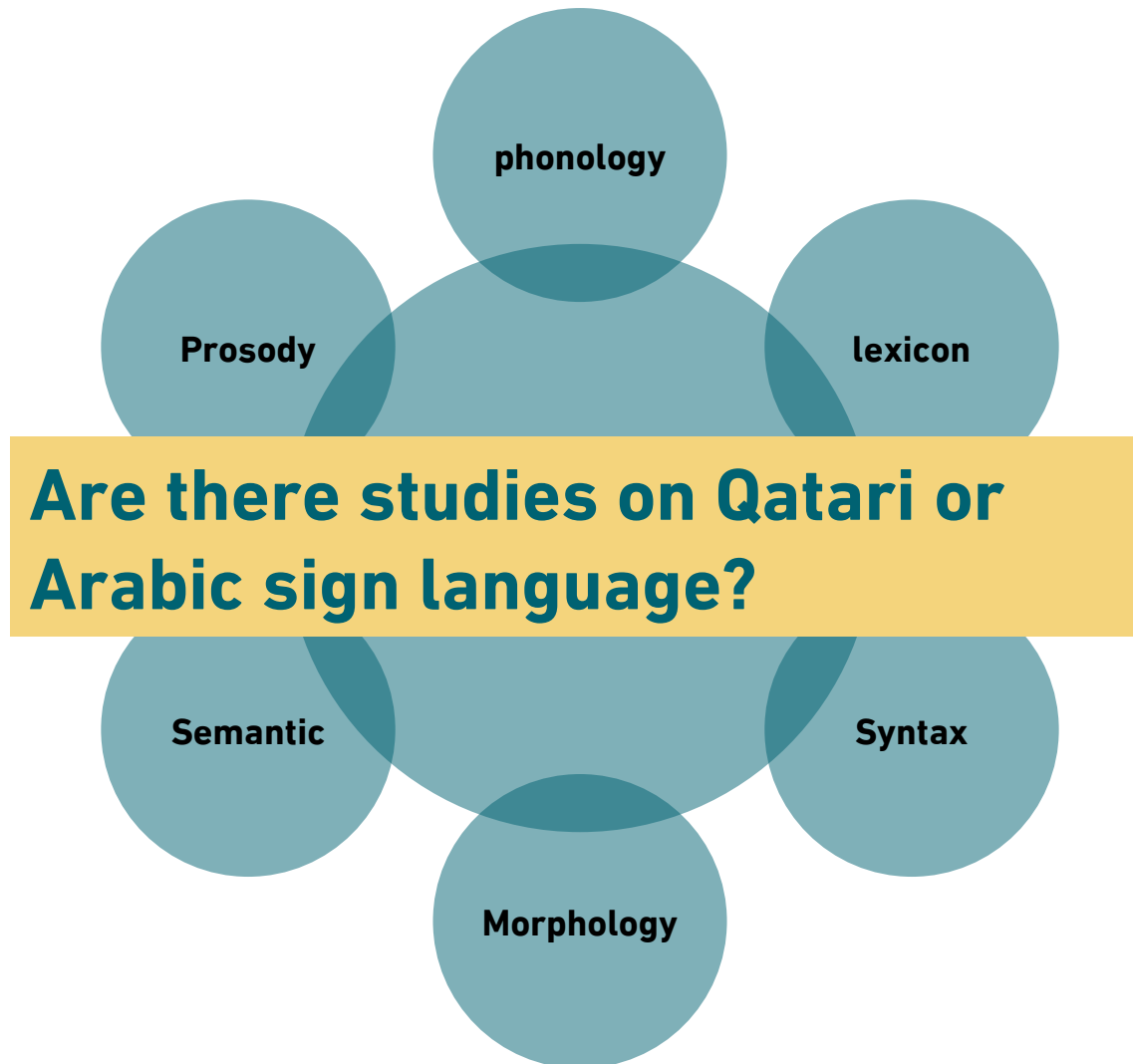


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# The structure and components of languages



# The structure and components of languages



# Conclusion

# Thank You



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