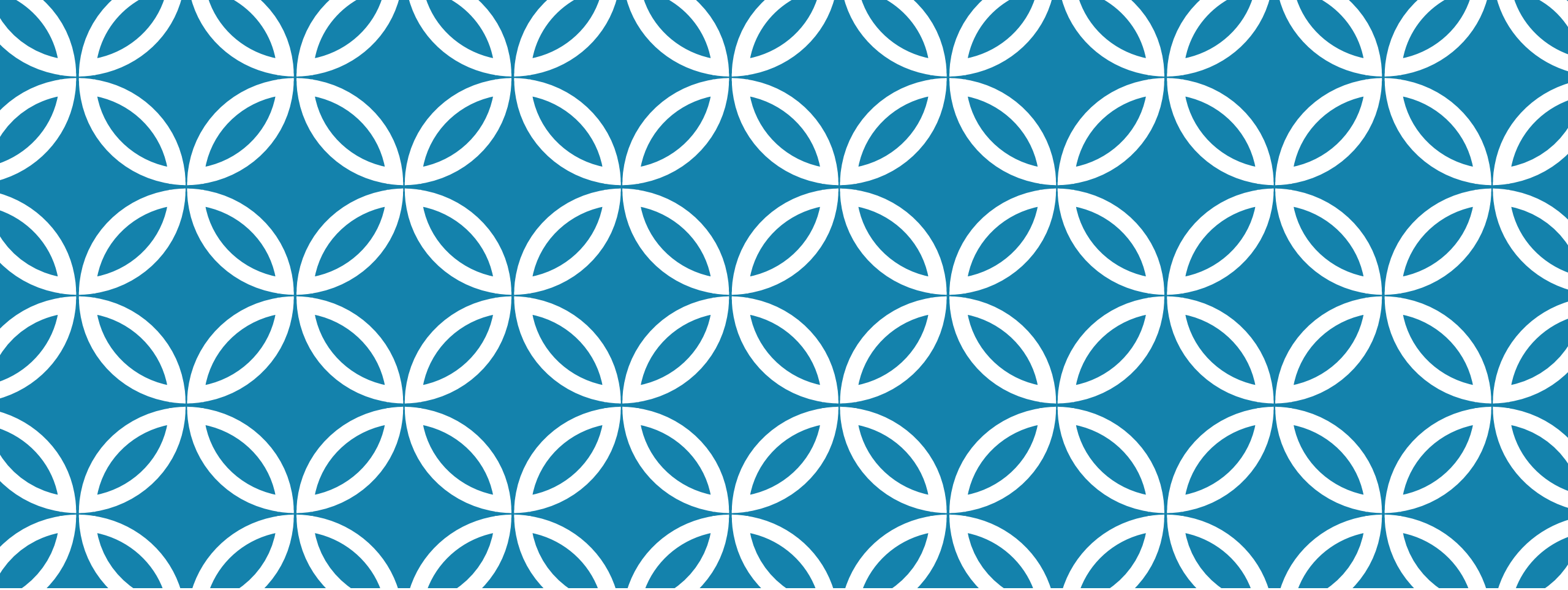
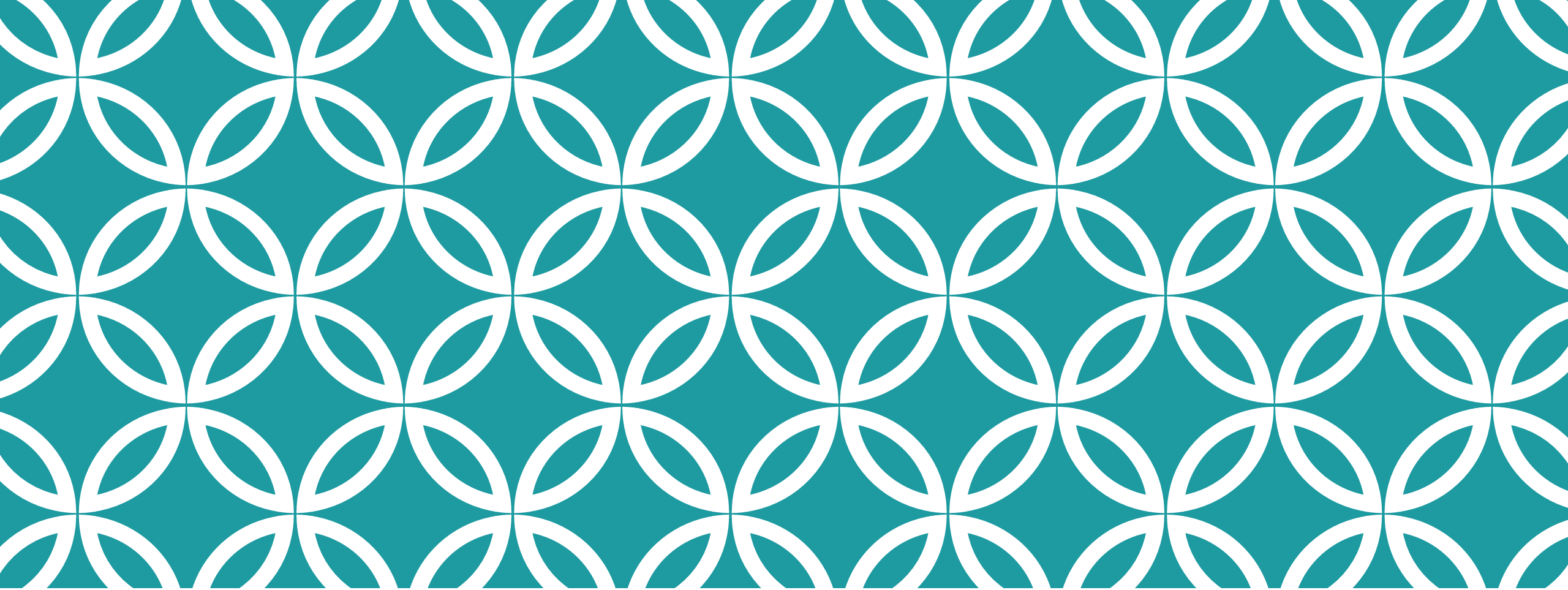


LING 105 – LESSON 2

Introducing allomorphy

OBJECTIVES FOR TODAY

- finish up some definitions
- introduce the concept of allomorphy
- practice with Nida's second principle
- distinguish between different kinds of allomorphy



WHAT IS A WORD, EXACTLY?

BACK TO THE LATIN WORD FOR 'MARIO' AGAIN

These are all the forms of the word that we have observed:

1. Mari-**us**
2. Mari-**um**
3. Mari-**i**
4. Mari-**o**

note that these are inflectional suffixes!

- We need a way to refer to the 'word for Mario' **in general** (i.e. in abstract)
- a way to refer to **individual forms** of the word (like *Marius* vs. *Marium*)
- and a way to refer to **the set of inflectional forms** that the word can take (e.g. 1-4)

SOME NEW TERMINOLOGY

LEXEME

WORD-FORM

PARADIGM

- the ‘word for Mario’ **in general** (i.e. in abstract) = MARIO
- **individual forms** of ~~the word~~ lexeme (like *Marius* vs. *Marium*)
- **the set of inflectional forms** that ~~the word~~ lexeme can take (*Marius, Marium, Mario, Marii* etc.)

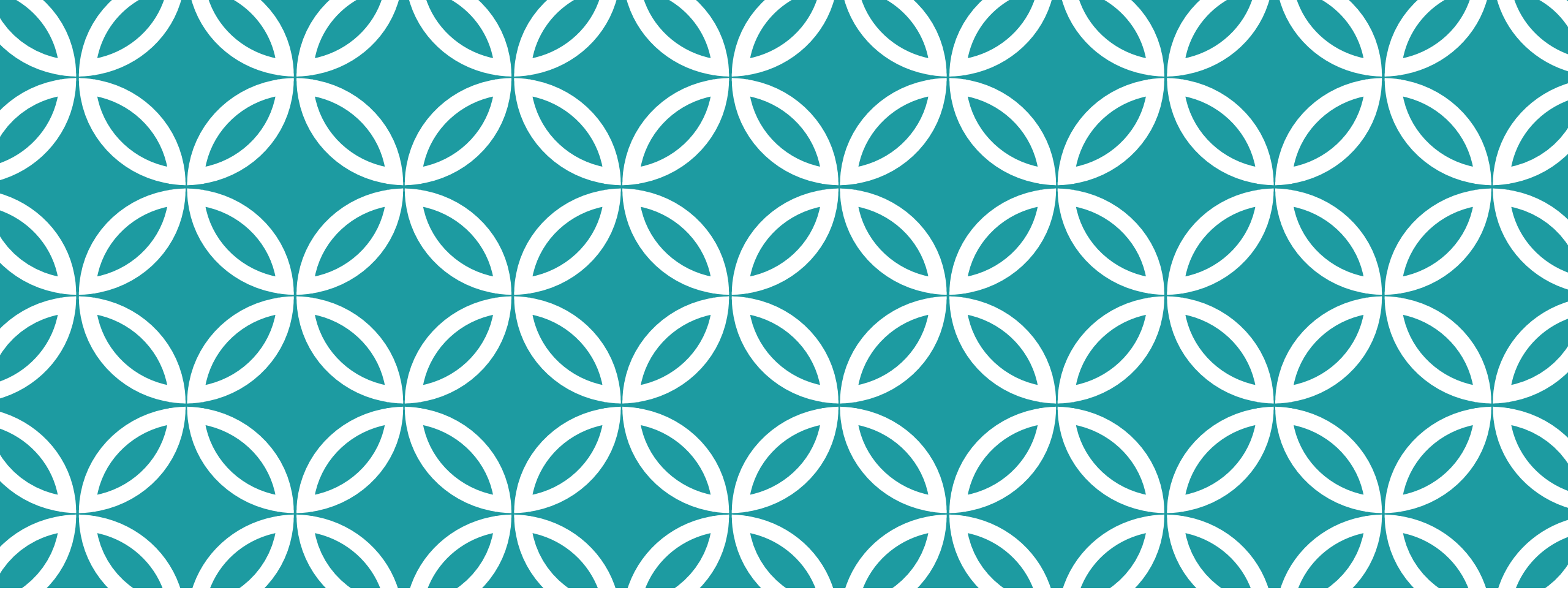
PARADIGMS VS. WORD FAMILIES

Paradigms are sets of WORD-FORMS of the same lexeme, which are related by **inflection**

1. Paradigm of CAR: *car, cars*
2. Paradigm of MARIUS: *Marius, Marium, Marii, Mario* (etc.)
3. Paradigm of SLIP: *slip, slips, slipped*

Word families are sets of LEXEMES which are related to each other by **derivation**

1. Word-family of READ: READ, READABLE, READER, UNREADABLE, E-READER, etc.
2. Word-family of LOGIC: LOGIC, LOGICIAN, ILLOGICAL etc.



SOME MORPHOLOGICAL TYPOLOGY

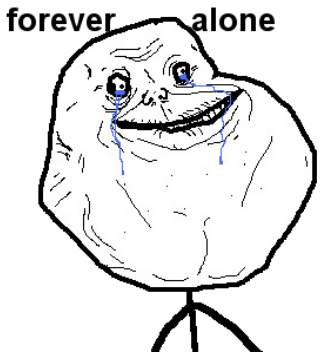
DO ALL LANGUAGES HAVE THE SAME "AMOUNT" OF MORPHOLOGY?

- Not really!
- Some languages have, on average, a lot more **morphemes-per-word** than others!
- Languages with very few morphemes per word are called **analytic**
- Languages with very many morphemes per word are called **synthetic**

Language	Ratio of morphemes per word
West Greenlandic	3.72
Sanskrit	2.59
Swahili	2.55
Old English	**2.12**
Lezgian	1.93
German	1.92
Modern English	**1.68**
Vietnamese	1.06

ANALYTIC VS. SYNTHETIC LANGUAGES

ISOLATING **ANALYTIC** **SYNTHETIC** **POLYSYNTHETIC**



each word has only 1 morpheme

each word has A LOT of morphemes

a kind of analytic languages

ISOLATING LANGUAGES

each word is a single morpheme!

Hiri Motu (Papua New Guinea)

Lauegu	sinana dekenai	gwarume	ta	ia	hoia		Koki
my		mother	fish		one	she	bought
	Koki		at				

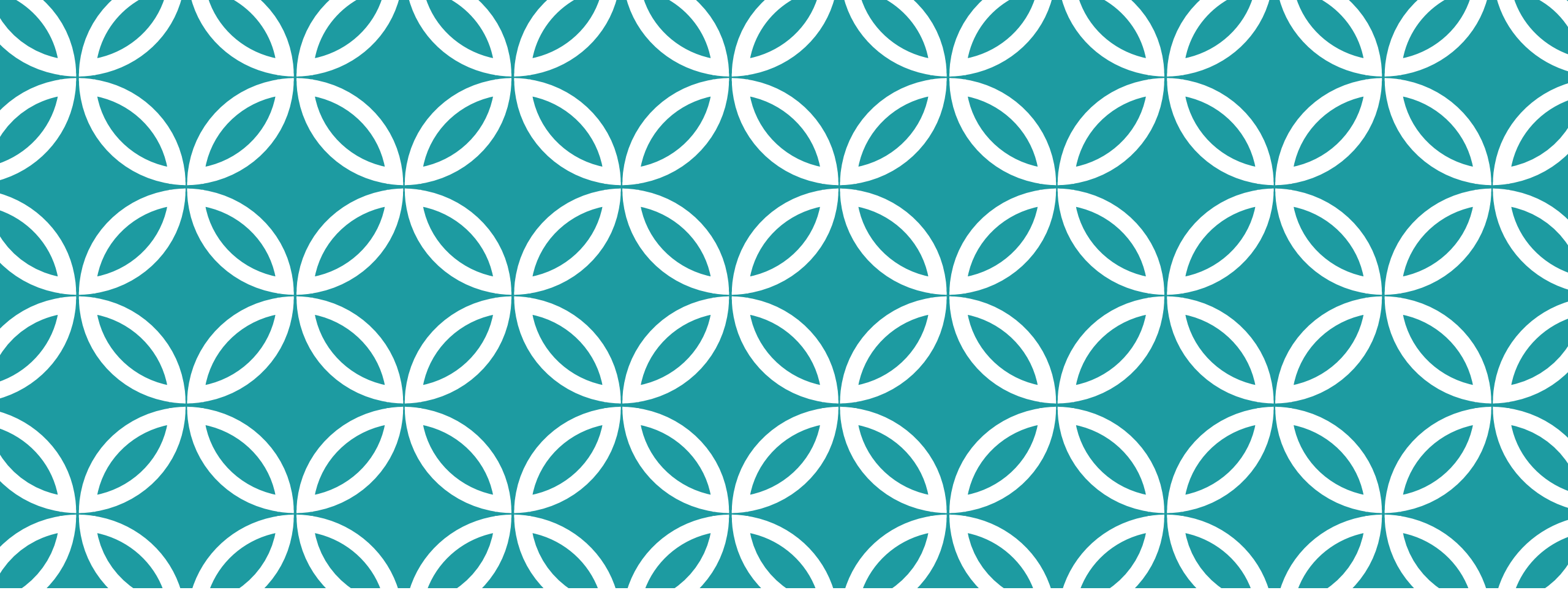
'My mother bought a fish at Koki'

a kind of synthetic languages

POLYSYNTHETIC LANGUAGES

words are very long, with ton of morphemes, and they can basically express **an entire clause/sentence**!

Yimas (Papua New Guinea)
na-ŋa-mpa-na-ŋkan-mpan-ra-amtra
PL-give-now-IMPERATIVE-few-them-CLASS-food
'you few give them food now!'



INTRODUCING ALLOMORPHY

HOW DO YOU KNOW THAT SUPERMAN AND CLARK KENT ARE THE SAME PERSON?

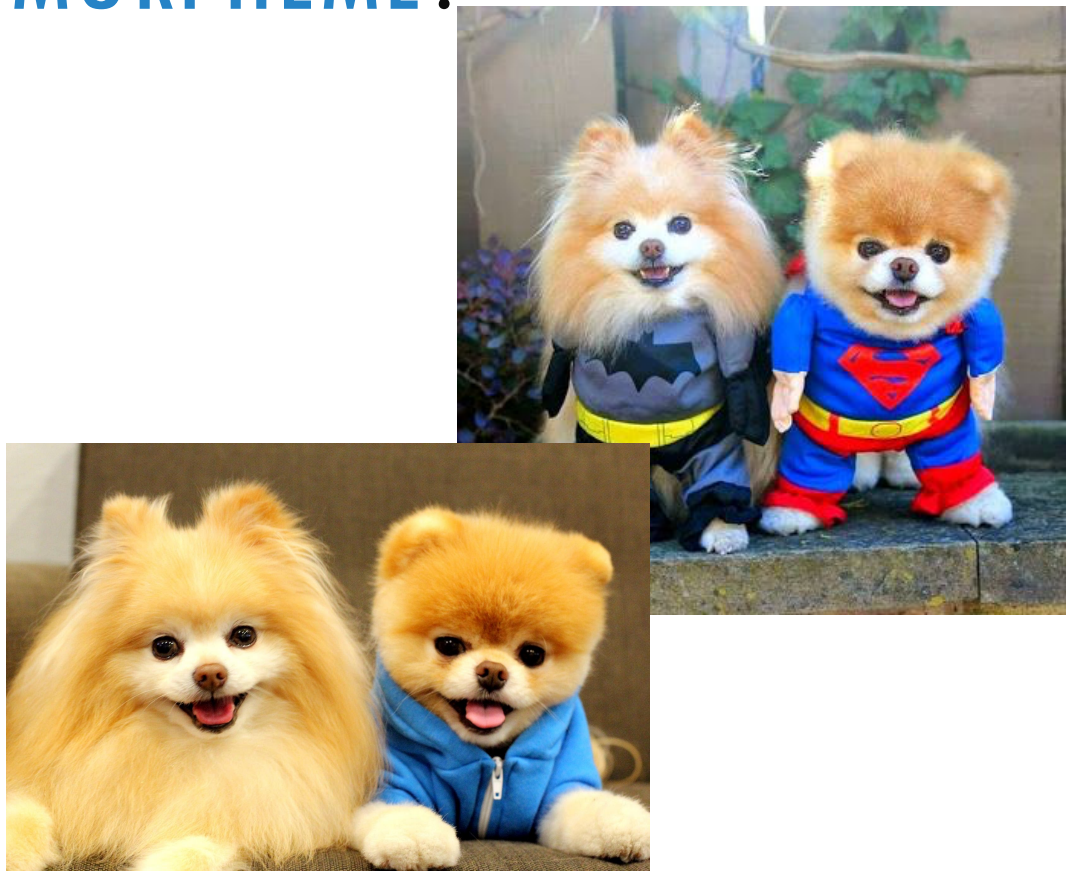
1. they kind of look alike
2. they are never at the same place at the same time

Nr. 2 is called **COMPLEMENTARY DISTRIBUTION!**
it's a very important criterion in phonological and morphological analysis


YOU HAD ME AT
COMPLEMENTARY
DISTRIBUTION
quickmeme.com

HOW DO YOU KNOW THAT TWO DIFFERENT SEQUENCES OF SEGMENTS ARE THE SAME MORPHEME?

1. They kind of look alike
2. They are never at the same place at the same time = **They are in complementary distribution**



REMEMBER NIDA'S FIRST PRINCIPLE?

In 1949, The linguist Eugene A. Nida proposed **6 principles** to carry out morphological analysis (=find morphemes).

1. "Forms which have a common semantic distinctiveness (=MEANING) and an identical phonemic form (=FORM) in all their occurrences constitute a single morpheme."

= look for **identical sequences** of phonemes that seem to have **identical meaning** across your data-set

DO THESE WORDS CONTAIN THE SAME MORPHEME?

1. insecure
2. inedible
3. incoherent
4. impossible

1. [ɪn]-secure
2. [ɪn]-edible
3. [ɪŋ]-coherent
4. [ɪm]-possible

[ɪn], [ɪŋ], and [ɪm] are **ALLOMORPHS** of the same morpheme!

- Their phonetic shape **is not identical, but pretty similar.**
- Their meaning is the same
- Are they in **complementary distribution?**

NIDA'S SECOND PRINCIPLE

2. "Forms which have a common semantic distinctiveness (=MEANING) but which differ in phonemic form (=FORM) may constitute a morpheme **provided the distribution of the formal differences is phonologically definable.**"

= look for **ALMOST identical sequences** of phonemes that seem to have **identical meaning** across your data-set (and that are in **complementary distribution**)

IS THE DISTRIBUTION OF THE ALLOMORPHS PHONOLOGICALLY DEFINABLE?

1. [ɪn]-secure
2. [ɪn]-edible
3. [ɪŋ]-coherent
4. [ɪm]-possible

which of the allomorphs [ɪn], [ɪŋ], and [ɪm] is the basic (underlying) form of the suffix?

1. Can you describe in what **phonological contexts** the different allomorphs occur?
2. Can you write a **phonological rule** that derives all the allomorphs from a single underlying form?
3. Is this a **general phonological rule** of English?

HOW DO I DECIDE WHICH ALLOMORPH IS THE UNDERLYING ONE?

PRACTICE!

Do these contain the same morpheme? Does the morpheme show any allomorphy?

1. kingdom
2. boredom
3. thiefdom
4. freedom
5. stardom

1. kingdom [dəm]
2. boredom [rəm]
3. thiefdom [dəm]
4. freedom [rəm]
5. stardom [dəm]

1. Can you describe in what **phonological contexts** the different allomorphs occur?
2. Can you write a **phonological rule** that derives all the allomorphs from a single underlying form?
3. Is this a **general phonological rule** of English?

INTERMISSION

OH-TOTORO

ALLOMORPHY IN SANSKRIT

1. devā janān rakṣanti
2. āryo duḥkhāt putraṃ rakṣati
3. sūryaḥ svargasya devaḥ
4. devāḥ pāpāt tāpasān muñcanti
5. sūryaḥ svarge calati
6. tāpaso gṛhe sīdati
7. svargo devānāṃ mārgaḥ
8. janaḥ pure devān paśyati
9. kṛṣṇaḥ svargaṃ paśyati
10. āryo mārgād gacchati
11. ratho grāmaṃ calati

1. The gods protect the people
2. The lord protects the son against misfortune
3. The sun is the god of the sky
4. The gods liberate the hermits from evil
5. The sun moves in the sky
6. The hermit is in the house
7. The sky is the way of the gods
8. The man sees the gods in the city
9. Krishna sees the sky
10. The lord runs off the road
11. The chariot moves towards the village

Translate into English:

1. tāpasaḥ puraṃ purād gacchati
2. sūryo devānāṃ rathe sīdati
3. devāḥ pāpān paśyanti, purān gacchanti, pure tāpasān pāpād rakṣanti

Translate into Sanskrit:

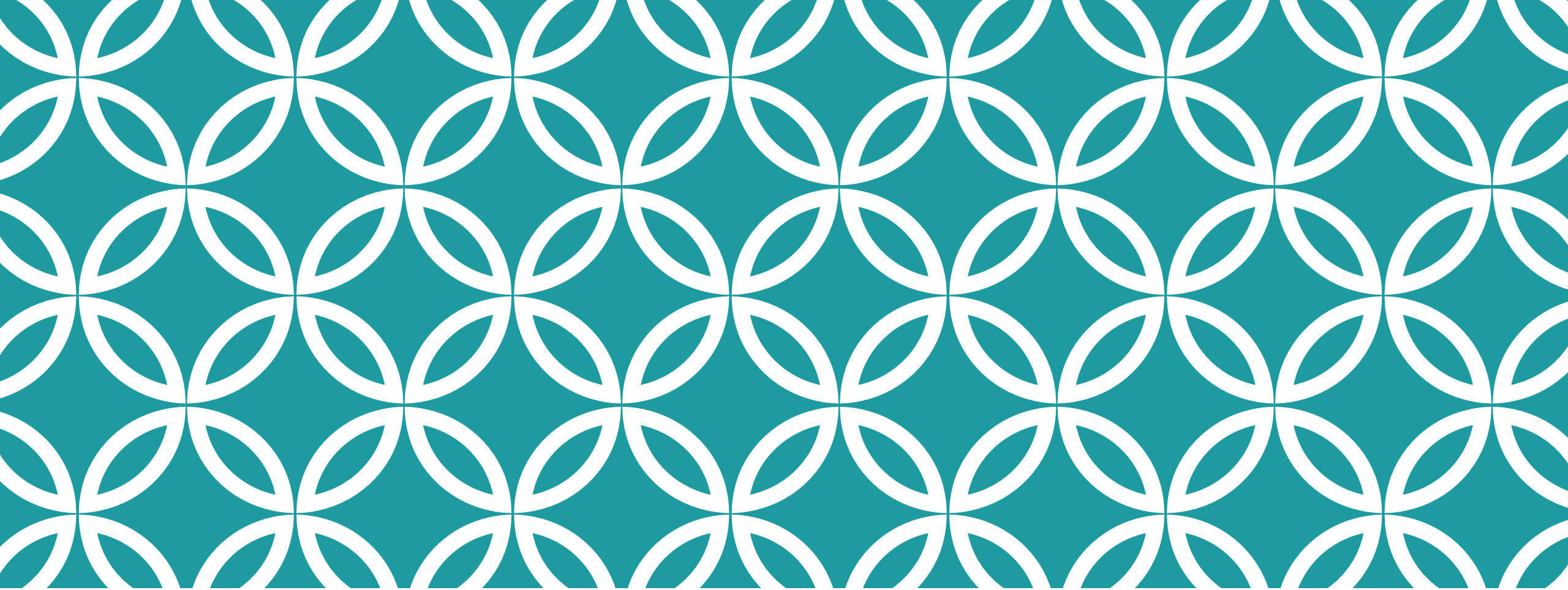
1. Krishna walks on the road of the gods
2. Yama protects the sky against the chariot of man
3. Indra's heaven is the heaven of heavens
4. The son of the lord frees the village from the hermit

Problem by Alexander Lubotsky, Leiden University

TO SOLVE A COMPLICATED MORPHOLOGY PROBLEM - YOU ARE GOING TO NEED A TABLE

Morpheme	Meaning	Type	Allomorphs	Distribution
{o} or {SUBJECT} or {NOMINATIVE}	Subject	Bound suffix on noun		

You can use this to figure out **case morphemes** in Sanskrit



TYPES OF ALLOMORPHY

SOME ENGLISH PLURALS

Do you observe any allomorphy in the root/stem?

1. leaf vs. leaves [vz]
2. knife vs. knives [vz]
3. wife vs. wives [vz]
4. bath vs. baths [ðz]
5. path vs. paths [ðz]

1. What are the **allomorphs**?
2. Can you describe in what **phonological contexts** the different allomorphs occur?
3. Can you write a **phonological rule** that derives all the allomorphs from an underlying form?
4. Is this a **general phonological rule** of English?
    1. what about gif vs. gifs
    2. and moth vs. moths

This allomoprhy is not due to a phonological rule.

It's due to a **morphophonological** rule!

PHONOLOGICAL ALLOMORPHY VS. MORPHOPHONOLOGICAL ALLOMORPHY

Phonological allomorphy

(king**dom** vs. free**dom**)

1. is entirely predictable
2. it results from applying the **general, productive phonological rules** of the language

Morphophonological allomorphy

(lea**f** vs. lea**v**es)

1. it may not be predictable
2. it results from applying **morphophonological rules that are specific** to that morphological environment (e.g. that specific affix/root/stem)

PRACTICE: WHICH KIND OF ALLOMORPHY?

German

1. [ta:k] ‘day’ vs. [ta:gə] ‘days’
2. [mo:nt] ‘moon’ vs. [mo:ndə] ‘moons’
3. [lo:s] ‘lot’ vs. [lo:zə] ‘lots’

1. What are the **allomorphs**?
2. Can you describe in what **phonological contexts** the different allomorphs occur?
3. Can you write a **phonological rule** that derives all the allomorphs from an underlying form?
4. Is this a **general phonological rule** of the language?

PRACTICE: WHICH KIND OF ALLOMORPHY?

Korean (see handout)

1. what are the allomorphs for the Korean object morpheme?
2. what are the allomorphs for the Korean topic morpheme?

1. What are the **allomorphs**?
2. Can you describe in what **phonological contexts** the different allomorphs occur?
3. Can you write a **phonological rule** that derives all the allomorphs from an underlying form?
4. Is this a **general phonological rule** of the language?