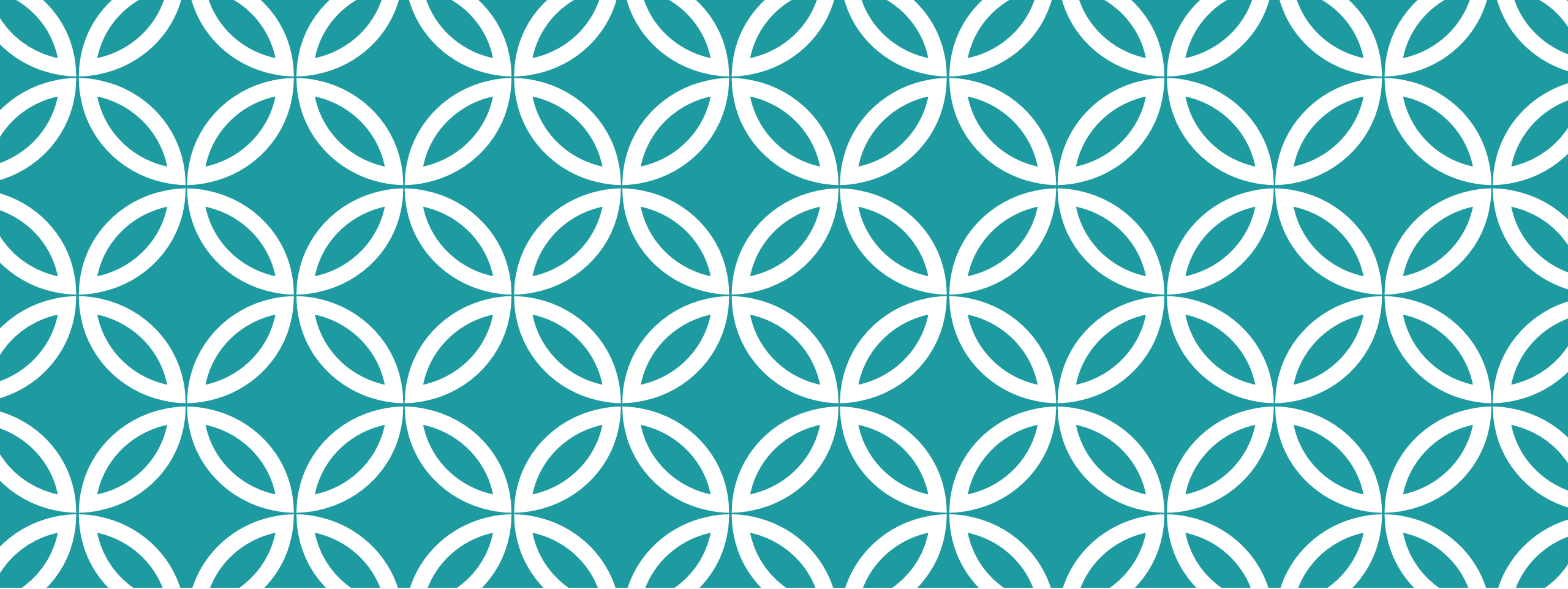


LING 105 — LESSON 3

moar allomorphy

OBJECTIVES FOR TODAY

- distinguish between different **types of allomorphy** and different **conditionings** for allomorphy
- Nida's 3^o principle
- talk about METHOD: how you solve a morphology problem



TYPES OF ALLOMORPHY



PRACTICE!



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

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

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

1. The [r] allophone is found after vowels and [r]; the [d] allomorph is found elsewhere =
COMPLEMENTARY DISTRIBUTION
2. the [d]/[r] alternation is due to a general rule of Tapping in English, which takes /d/ and turns it into [r] following a [-consonantal] segment and preceding an unstressed vowel.
= PHONOLOGICAL 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 allomorphy is not due to a phonological rule.
It's due to a **morphophonological rule!**

PHONOLOGICAL ALLOMORPHY VS. MORPHOPHONOLOGICAL ALLOMORPHY

Phonological allomorphy

(kingdom vs. freedom)

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

Morphophonological allomorphy

(leaf vs. leaves)

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 OR morphological category)

WHERE DOES MORPHOPHONOLOGICAL ALLOMORPHY COME FROM?

- Often, morphophonological rules **used to be phonological rules**, which have since disappeared from the language.
- Traces of these “**zombie**” **phonological rules** are preserved in a few **high-frequency** lexical items.

- Old English had a voicing rule whereby voiceless fricatives became voiced before /z/
- This rule generated the allomorphy in *leaf* [lif]/*leaves* [livz]
- And then it disappeared from the language!
- English now has the opposite rule! /z/ will devoice following a voiceless fricative – as in *gif* [dʒɪf] / *gifts* [dʒɪfts]



PRACTICE: WHICH KIND OF ALLOMORPHY?

English (regular) plurals
-you gather the data!-

1. cat
2. dog
3. banana
4. bird
5. case
6. laser
7. golf
8. lash
9. boss

1. What are the **allomorphs**?
2. Can you describe in what **phonological contexts** the different allomorphs occur?
3. Can you write **phonological rules** that derive 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?

OTHER KINDS OF ALLOMORPHY

- Both **phonological** and **morphophonological** allomorphy have '-phonological' in their name because the change/alternation **can be described phonologically**
- = There is **a small(ish) phonological difference** between the allomorphs, which can be described by means of rules
- This is not always the case

PRACTICE: WHICH KIND OF ALLOMORPHY?

Korean (see handout)

1. what are the allomorphs for the Korean subject morpheme?

This is a case of
**SUPPLETIVE
ALLOMORPHY!**

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 a single underlying form?~~
- ~~4. Is this a **general phonological rule** of the language?~~

SUPPLETION!

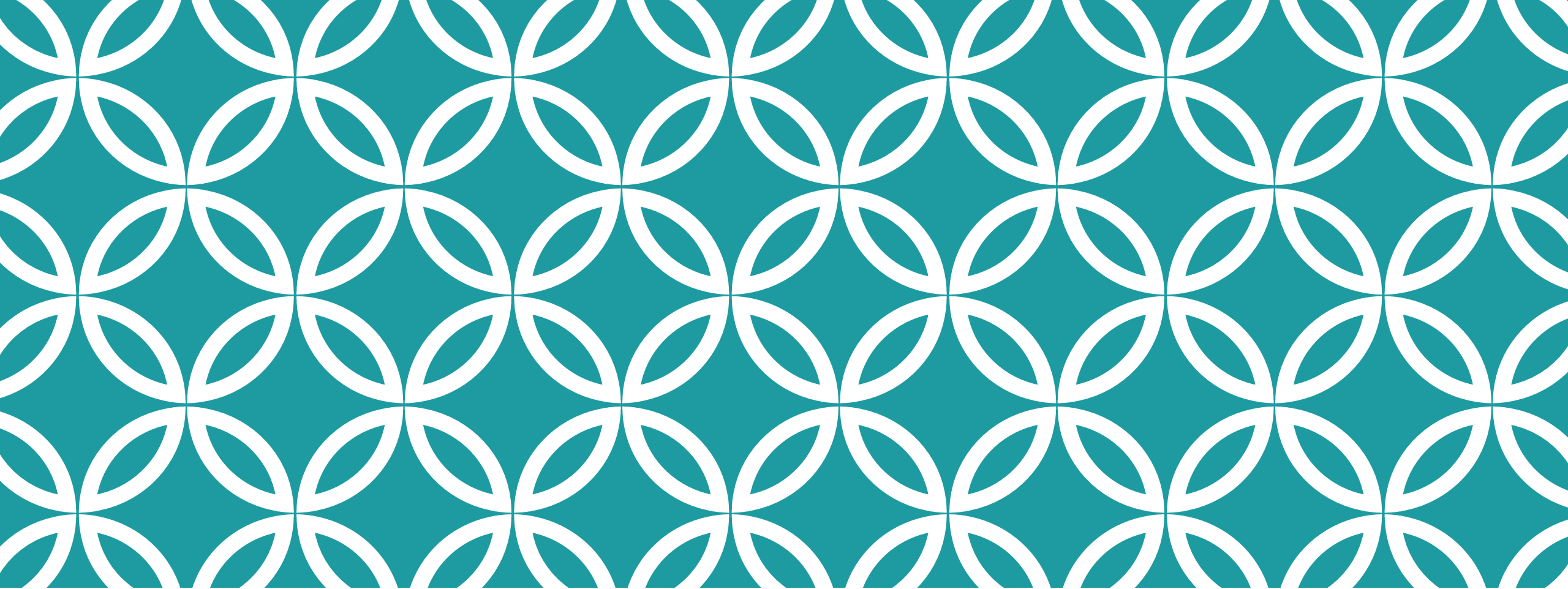


Suppletion, from Old French, from medieval Latin *suppletio(n-)*, from *supplere* ‘**fill up, make full**’, later ‘**make up for**’

NIDA'S THIRD PRINCIPLE

3. “Forms which have a common semantic distinctiveness (=MEANING) but which differ in phonemic form (=FORM) in such a way that their distribution cannot be phonologically derived constitute a morpheme **if the forms are in complementary distribution.**”

= look for **sequences of phonemes** that seem to have **identical meaning** across your data-set and that are in **complementary distribution**, even if they don't look very similar to each other.



**TWO TYPES OF SUPPLETIVE
ALLOMORPHY** |

HOW DIFFERENT FROM EACH OTHER ARE THE ALLOMORPHS?

Still pretty similar

Engl. *buy* vs. *bought*

Engl. *teach* vs. *taught*

This is called WEAK
SUPPLETIVE
ALLOMORPHY

Totally different!

Engl. *go* vs. *went*

Engl. *is* vs. *are*

This is called STRONG
SUPPLETIVE
ALLOMORPHY

WHICH KIND OF ALLOMORPHY DO YOU SEE?

Italian

- | | | |
|-------------------------|---------------------------|---------------------------------|
| 1. vado 'I go' | 1. tengo 'I keep' | 1. spengo 'I turn off' |
| 2. vai 'you go' | 2. tieni 'you keep' | 2. spegni 'you turn off' |
| 3. va 's/he goes' | 3. tiene 's/he keeps' | 3. spegne 's/he turns off' |
| 4. andiamo 'we go' | 4. teniamo 'we keep' | 4. spegniamo 'we turn off' |
| 5. andate 'you guys go' | 5. tenete 'you guys keep' | 5. spegnete 'you guys turn off' |
| 6. vanno 'they go' | 6. tengono 'they keep' | 6. spengono 'they turn off' |

The most extreme forms of allomorphy are more common in **high-frequency lexical items!**

Can you guess why?

IF ~~IT LOOKS LIKE A DUCK AND~~ IT WALKS LIKE A DUCK AND IF IT IS IN COMPLEMENTARY DISTRIBUTION WITH A DUCK...



YOUR
MORPHEME



(MORPHO)PHON
OLOGICAL
ALLOMORPHY



WEAK
SUPPLETIVE
ALLOMORPHY



STRONG
SUPPLETIVE
ALLOMORPHY



ANOTHER WAY TO PUT IT...



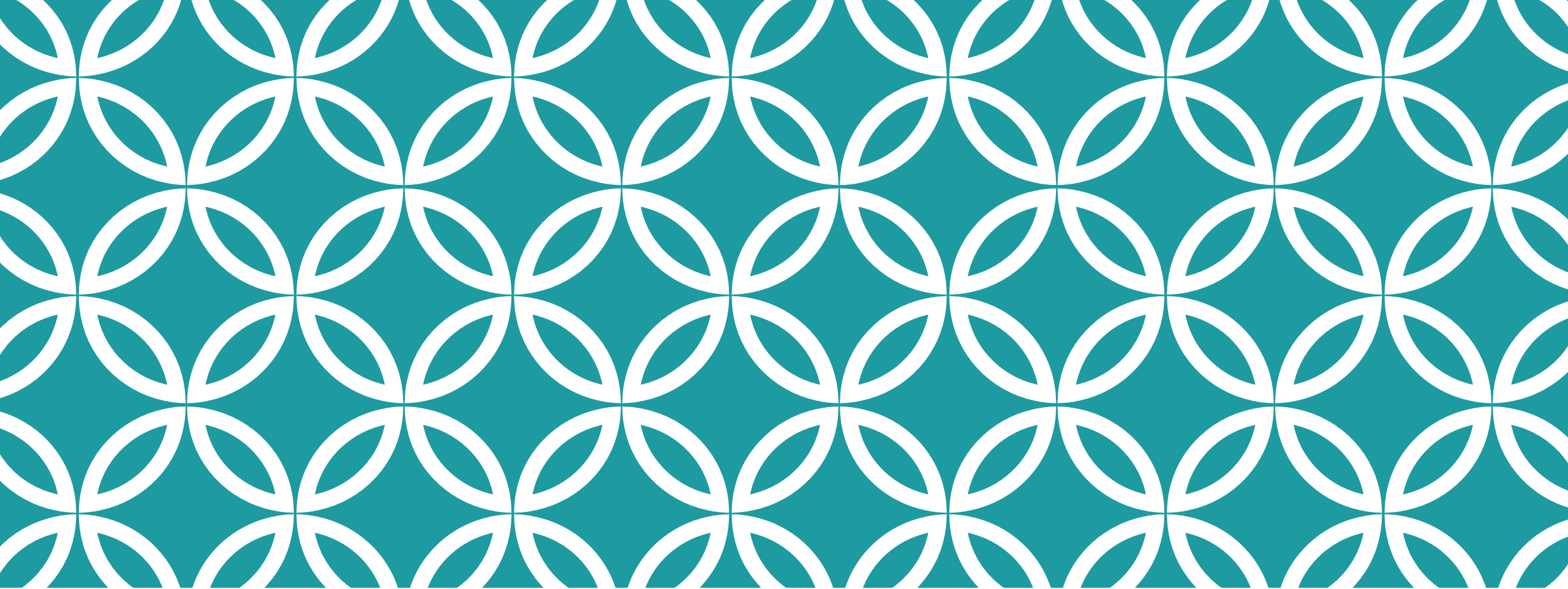
During the day



During the night

INTERMISSION





TRIGGERS FOR ALLOMORPHY

also known as conditioning

SOMETIMES, SUPPLETION IS NOT TRIGGERED BY PHONOLOGICAL CONTEXT, BUT BY MORPHOLOGICAL CONTEXT

Think of all the word-forms of BE in English

1. I am
2. you/we/they are
3. she is

1. I was
2. you/we/they were
3. she was

1. to be
2. I have been
3. being

Historically speaking, the paradigm of BE in English is a mash-up of **three different verbs!**

INTRODUCING MORE NOTATION!

Phonological conditioning

$$A \sim B$$

The complementary distribution of the allomorphs can be stated in PHONOLOGICAL TERMS:

- e.g. allomorph A is found before vowels and allomorph B is found before consonants

Morphological conditioning

$$A \infty B$$

The complementary distribution of the allomorphs can only be stated in MORPHOLOGICAL TERMS:

- e.g. allomorph A is found in the present and allomorph B is found in the future.

INTRODUCING MORE NOTATION!

Phonological conditioning

[z] ~ [s] ~ [əz]

The complementary distribution of the allomorphs can be stated in PHONOLOGICAL TERMS:

- [s] is found after voiceless segments, [əz] after stridents, and [z] elsewhere.

Morphological conditioning

[go] ∞ [went]

The complementary distribution of the allomorphs can only be stated in MORPHOLOGICAL TERMS:

- e.g. [go] is found in the present and [went] is found in the simple past.

Note that this is DIFFERENT FROM THE TYPE OF ALLOMORPHY!

HOW WOULD YOU NOTATE THIS ALLOMORPHY?

Italian

- | | | |
|-------------------------|---------------------------|---------------------------------|
| 1. vado 'I go' | 1. tengo 'I keep' | 1. spengo 'I turn off' |
| 2. vai 'you go' | 2. tieni 'you keep' | 2. speggni 'you turn off' |
| 3. va 's/he goes' | 3. tiene 's/he keeps' | 3. spegne 's/he turns off' |
| 4. andiamo 'we go' | 4. teniamo 'we keep' | 4. spegniamo 'we turn off' |
| 5. andate 'you guys go' | 5. tenete 'you guys keep' | 5. spegnete 'you guys turn off' |
| 6. vanno 'they go' | 6. tengono 'they keep' | 6. spengono 'they turn off' |

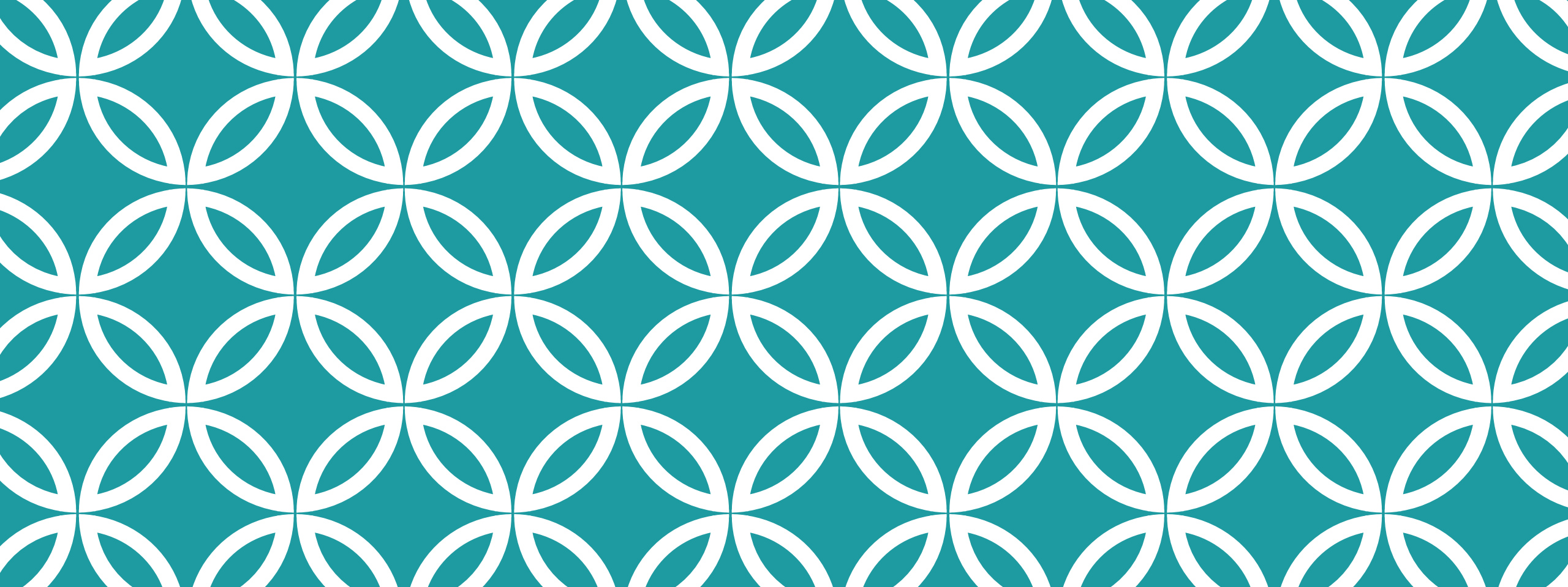
SUMMING UP

What **TYPE** of allomorphy it is? = How much do the allomorphs look like each other?

1. (morpho)phonological allomorphy
2. suppletive allomorphy

What is the **CONDITIONING** of the allomorphy? = How can you describe the complementary distribution?

1. in phonological terms
2. in morphological terms



**THE MOST ELUSIVE ALLOMORPHS OF
THEM ALL...**

INTRODUCING ZEROES

Let's go back to the English plurals

1. cat
2. dog
3. banana
4. sheep
5. deer

How do you segment the last two?

Hi, I'm an invisible zero morpheme!

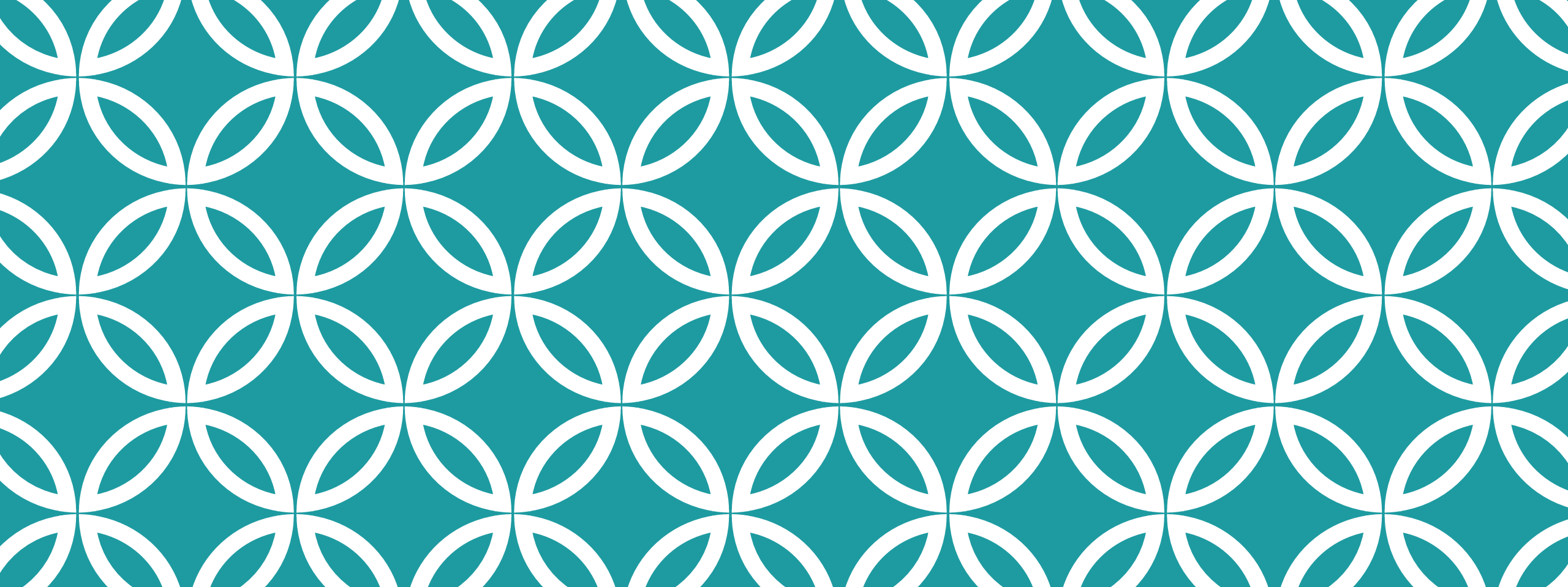


We identify zero-morphemes where **we structurally expect a morpheme and we don't see any** - but we still observe a change in meaning

PRACTICE- FIND THE ZERO!

Russian, paradigm for straná (f.) 'country'

	<u>Singular</u>	<u>Plural</u>
Nominative	<i>straná</i>	<i>stráni</i>
Genitive	<i>straní</i>	<i>stran</i>
Dative	<i>stran'é</i>	<i>stránam</i>
Accusative	<i>stranú</i>	<i>stráni</i>
Instrumental	<i>stran'é</i>	<i>stránami</i>



HOW TO SOLVE A MORPHOLOGY PROBLEM — PART 1. DESCRIPTION

(we'll do explanation in a couple
of weeks)

STEP 1. FINDING THE EASY MORPHEMES

START FROM THE EASY ONES

1. look for **POSSIBLE MATCHES** between form and meaning (“everytime I see this sequence, there seems to be this kind of meaning” OR “everytime there is this meaning, I see this kind of sequence”). **START SMALL!**
2. make a **GUESS** based a few data points (“maybe this sequence means X”)
3. **TEST** your hypothesis (“is this true in the rest of the dataset?”)
4. **REVISE**, retry, repeat (“maybe not – maybe this other sequence means X instead”)
5. **KEEP NOTE** of your findings = use the table!
6. develop a **SENSE FOR WHAT THE LANGUAGE IS LIKE** (“this language seems to have a lot of prefixes”; “inflectional morphemes seem to follow the base” “roots tend to have three segments and end in consonants”)

STEP 2. ARE THERE ANY ALLOMORPHS?

THEN LOOK FOR LOOK-ALIKES

1. hey, I found that sequence A means X. **But sequence B seems to mean X AS WELL.**
2. ok, list the **ENVIRONMENTS** in which A and B can occur.
 1. These can be **PHONOLOGICAL** environments (e.g. A appears before consonants, and B before vowels) → this may be *phonologically conditioned allomorphy*
 2. or **MORPHOLOGICAL** environments (e.g. A appears in the past tense, and B in the present, A appears in the 1^o and 2^o person, B in the 3^o) → this may be *morphologically conditioned allomorphy*
3. are A and B in **COMPLEMENTARY DISTRIBUTION**? → if YES, you may have an allomorph on your hands!

(if NO, try again! This cannot be an allomorph)

STEP 3. WHAT KIND OF ALLOMORPHY IS THIS?

HOW MUCH DO THEY LOOK ALIKE?

1. does sequence A look a lot like sequence B? → if YES, this may be a case of (MORPHO)PHONOLOGICAL allomorphy
 1. you may be able to WRITE A RULE to describe the change (this is part of the EXPLANATION part)
2. → if NOT, this is a kind of SUPPLETIVE allomorphy.

THANK YOU GUYS! SEE YOU NEXT WEEK!

