

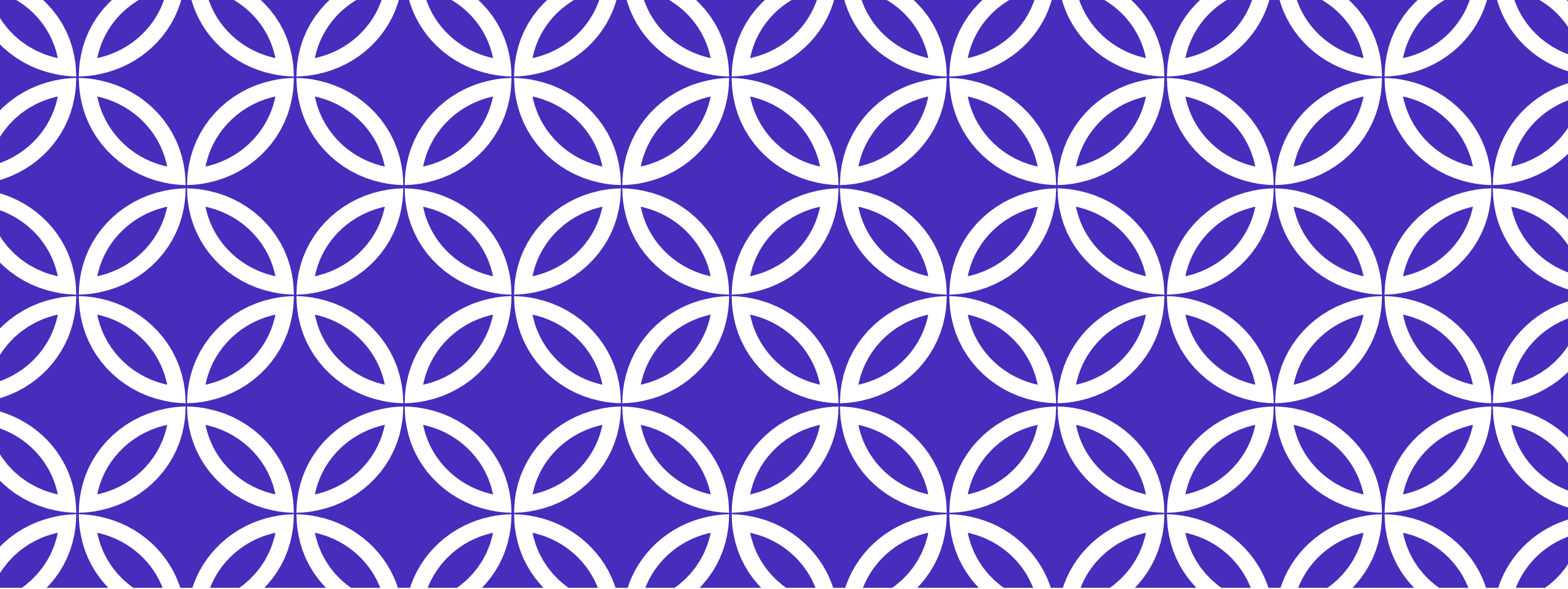
LING 105 — LESSONS 16

valency (AKA valence)

OBJECTIVES FOR TUESDAY

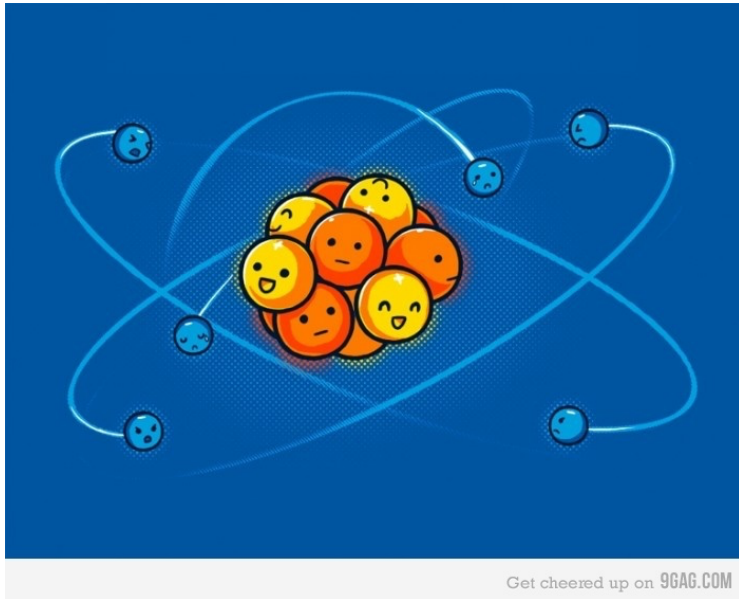
- What is **verbal valency**
- **semantic role** vs. **syntactic function**
- Valency-changing **derivations** (increasing vs. decreasing valency)
- Valency in **transposition**

But first: **ANY QUESTIONS ABOUT THE HOMEWORK?**



INTRODUCING VALENCY |

A CONCEPT FROM CHEMISTRY...



the **valence** or **valency** of an element is a measure of its **combining power with other atoms** when it forms chemical compounds or molecules.

= **How many univalent atoms it can bind**



Cation
cat·i·on

Pronunciation: [kat-ahy-uh n, -on]
-noun, Chemistry
1. An ion with a paws-itive charge.
2. The cutest ion ever.

CORE VS. NON-CORE ARGUMENTS

1. **core-arguments** are the ones assigned (=governed) by the verb
2. **non-core arguments** are the rest

1. Luigi **was reading** a book with Mario in the castle
2. Mario **jumped** over the fence and **squished** a goomba
3. Mario **played** with Yoshi for a few hours



Valency has to do with **CORE ARGUMENTS**

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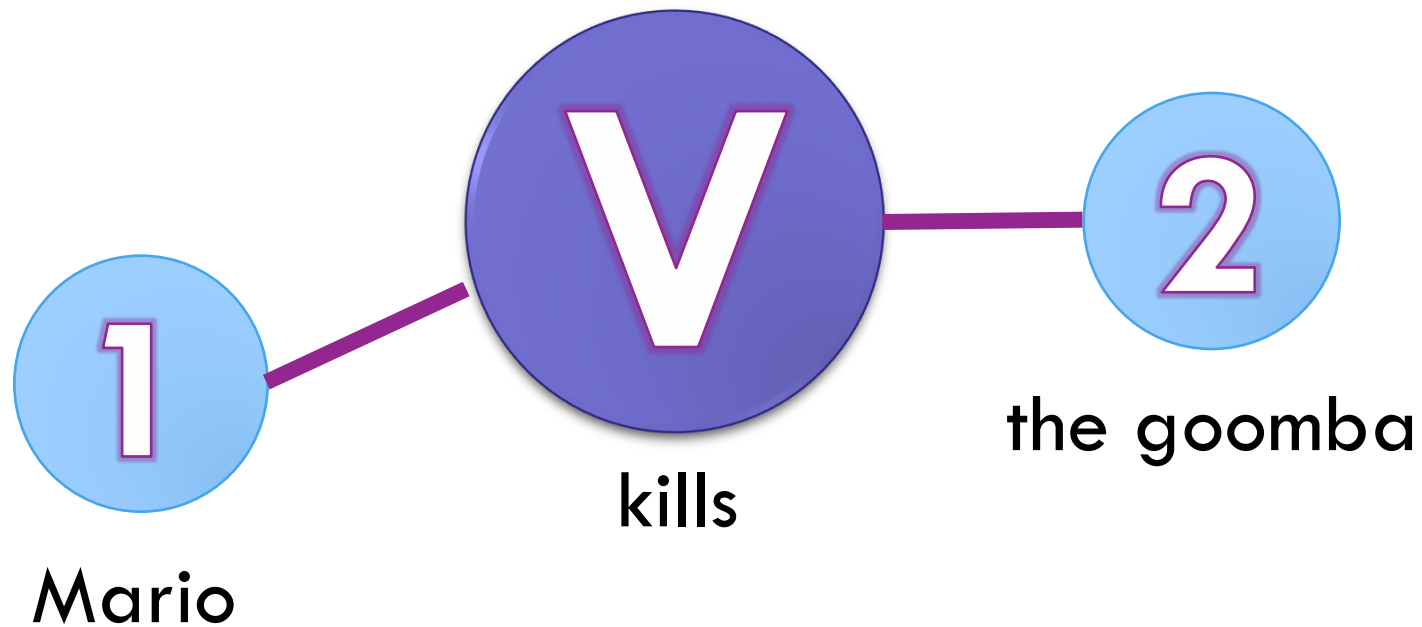
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Valency has to do with **CORE ARGUMENTS**

VERBS AS ATOMS

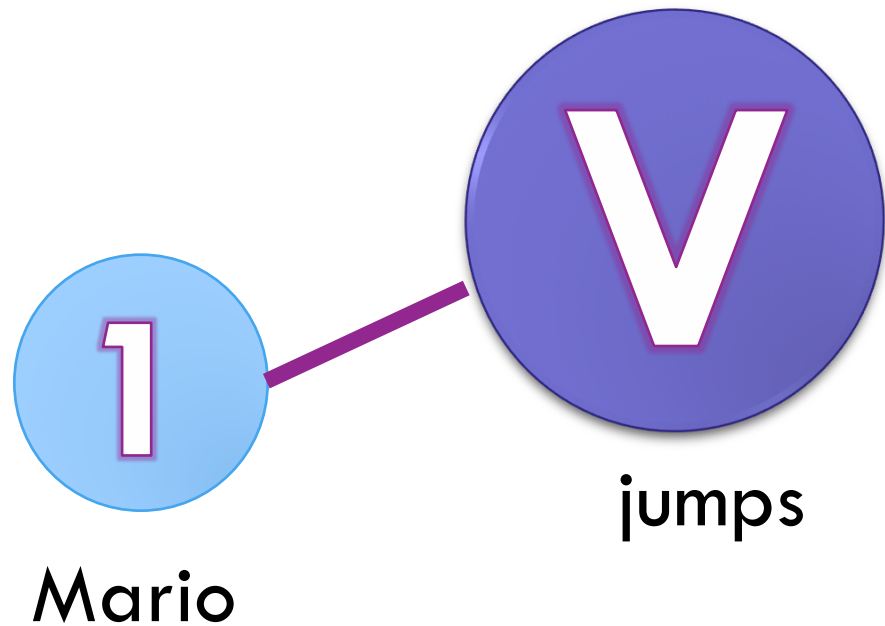
Each verb has the capacity fo **BIND**
some **CORE ARGUMENTS**



Transitive verbs can
bind 2 core arguments



VERBS AS ATOMS



Intransitive verbs can bind 1 core argument

Each verb has the capacity fo BIND some CORE ARGUMENTS

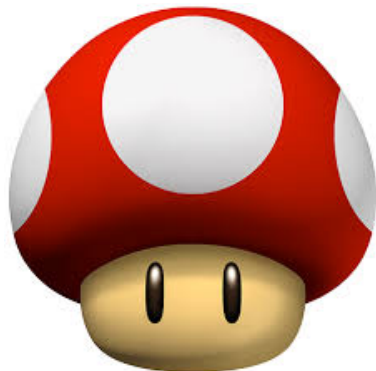


VALENCY-CHANGING PROCESSES CHANGE THE NUMBER OF CORE ARGUMENTS VERBS CAN BIND

INCREASE VALENCY

starting from either an intransitive verb or a transitive verb → transitive verb

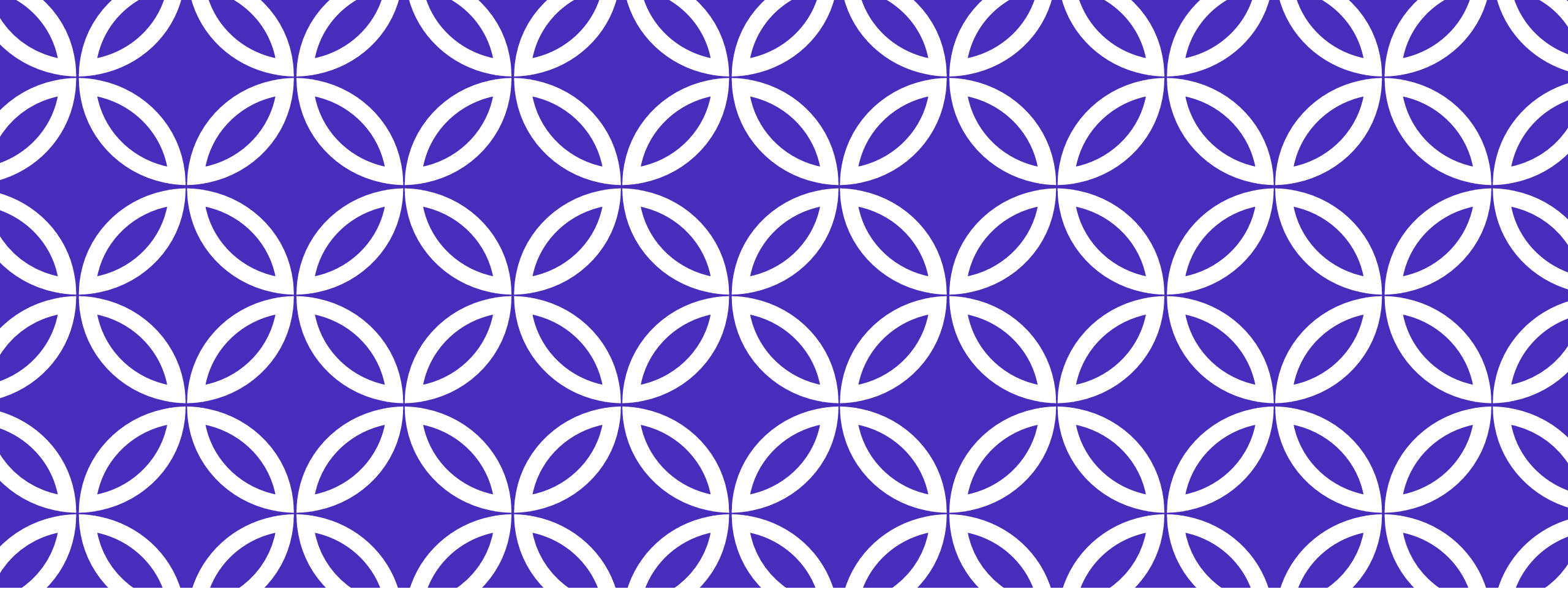
1. causative
2. applicatives



DECREASE VALENCY

starting from a transitive verb → intransitive verb

1. passive
2. antipassive
3. anticausative
4. reflexive (these are still sort of transitive...)



SEMANTIC ROLES, SYNTACTIC FUNCTIONS

IT'S IMPORTANT TO DISTINGUISH **SEMANTIC ROLE** AND **SYNTACTIC FUNCTION**

Here are 3 transitive sentences in English:

1. Mario kills the goomba
2. Mario sees Yoshi
3. Apples attract Yoshi



In terms of syntax, they all contain a **subject and an object.**

Labels for syntactic functions change in different linguistic theories. We have seen before the more fine-grained labels **Agent, Subject, and Object.** Your textbook uses just **Subject and Object.**

In terms of semantics, however, the role of each core argument is **different**

IT'S IMPORTANT TO DISTINGUISH **SEMANTIC** **ROLE** AND **SYNTACTIC FUNCTION**

SEMANTIC ROLES

Agent-theme

Mario kills the goomba

Experiencer-Stimulus

Mario sees Yoshi

Stimulus-Experiencer

Apples attract Yoshi



Many semantic roles
map onto few
syntactic functions.

SYNTACTIC FUNCTION

Subject - Object

**VALENCY-CHANGING
DERIVATIONS** can impact
both of these levels

REMEMBER NOMINATIVE-ACCUSATIVE VS. ERGATIVE-ABSOLUTIVE?

Latin

1. **catul-us** Mari-um percut-it

‘the cat hits Mario’

2. **catul-us** curr-it

‘the cat is running’

this is a nominative-
accusative language

Bandjalang (New South Wales)

1. mali-ju **bajgal-u** mala ja:jam-ø buma-ni

‘the man hits the child’

2. mala **bajgal-ø** gaware:-la

‘the man is running’

this is an ergative-
absolute language

AGENTS, SUBJECTS, AND OBJECTS

**Agents of
transitive verbs**

A

**Subjects of
intransitive verbs**

S

**Objects of transitive
verbs**

O



full control over the action,
high agentivity, high animacy

no control over the action,
low agentivity, low animacy

AGENTS, SUBJECTS, AND OBJECTS

NOMINATIVE

**Agents of
transitive verbs**

A

**Subjects of
intransitive verbs**

S

ACCUSATIVE

**Objects of transitive
verbs**

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full control over the action,
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AGENTS, SUBJECTS AND OBJECTS

ERGATIVE

Agents of
transitive verbs

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ABSOLUTIVE

Subjects of
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Objects of transitive
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full control over the action,
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no control over the action,
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IT'S IMPORTANT TO DISTINGUISH **SEMANTIC ROLE** AND **SYNTACTIC FUNCTION**

SEMANTIC ROLES

Agent-theme

Mario kills the goomba

Experiencer-Stimulus

Mario sees Yoshi

Stimulus-Experiencer

Apples attract Yoshi



SYNTACTIC FUNCTION

Agent- Subject - Object

note that AGENT can be both a semantic role AND a syntactic function!

IN OTHER WORDS..

You can change the way an event is expressed (syntactic valence), but leave all semantic roles intact:

1. Mario_A squished the goomba_O
2. The goomba_S was squished by Mario (=PASSIVE)

Or you can change the event altogether, by changing the semantic roles (semantic valence):

1. Mario_S flew
2. The player_A caused Mario_S to fly (=CAUSATIVE)



THERE ARE MANY WAYS TO MANIPULATE THE VALENCY OF A VERB – ONLY SOME OF THESE ARE MORPHOLOGICAL!

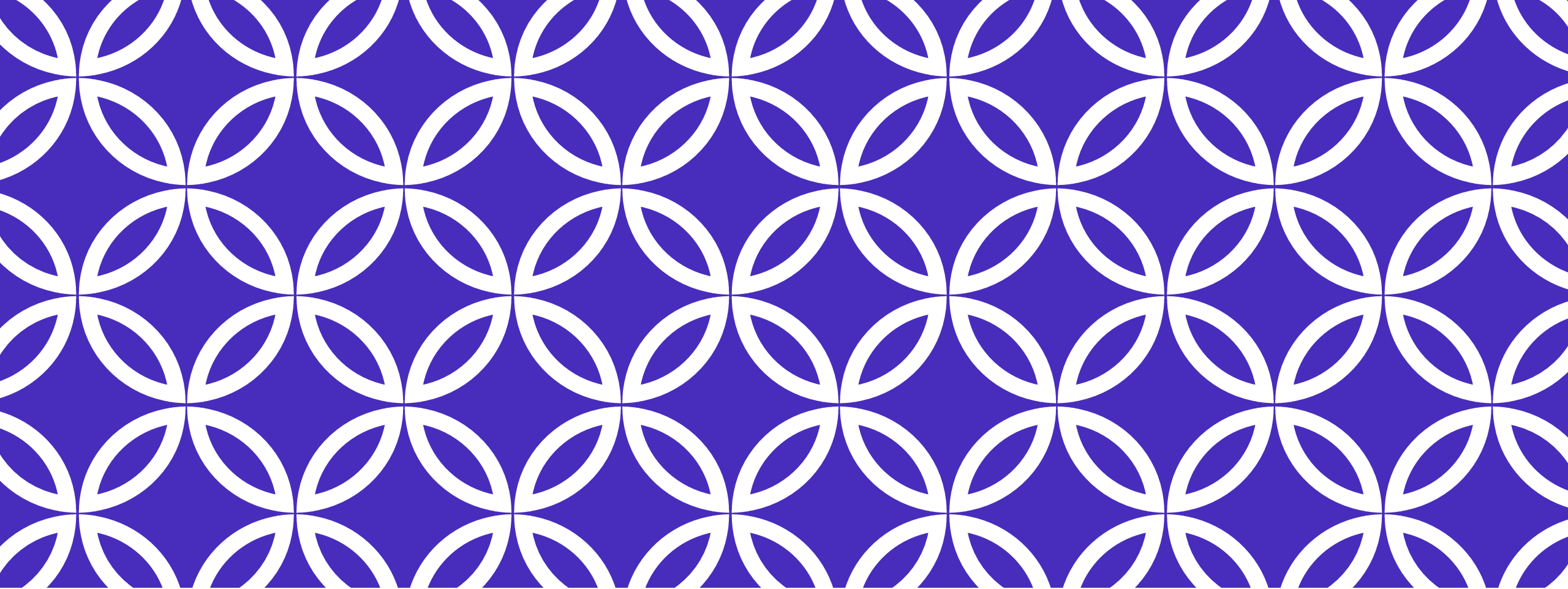
1. **syntactic construction:** *the goomba was killed by Mario*
2. **morphological process:** *drink vs. drench (lit. cause to drink)*
(productive in Old English)
3. **lexical suppletion:** *die vs. kill (cause to die)*

Since this is a morphology class, we'll mostly talk about (2) – for which we don't have many examples in English...



INTERMISSION





INCREASING VALENCY |

ADDING AN AGENT: CAUSATIVES

causatives
are event-
changing!

CAUSATIVES add a core-argument with the semantic role CAUSER and the syntactic function AGENT.

1. Typically, a **causative operation** takes an intransitive verb and turns it into a transitive verb:
2. $You_S \text{ sleep} \rightarrow \underline{I}_A \text{ cause } him_O \text{ to sleep}$
3. It is sometimes possible to make a causative to a verb that's already transitive:
4. $You_A \text{ eat cookies}_O \rightarrow \underline{I}_A \text{ cause } him_O \text{ to eat cookies}_O$

cf. the K'iche'
example on your
handout

cf. the Japanese
example on your
handout



ADDING AN OBJECT: APPLICATIVES

applicatives can be either event-changing or just function-changing.

APPLICATIVES add a core argument with semantic role **THEME** and the syntactic function **OBJECT**

An applicative can take an intransitive verb and turn it into a transitive verb by **promoting a non-core argument to OBJECT function**.

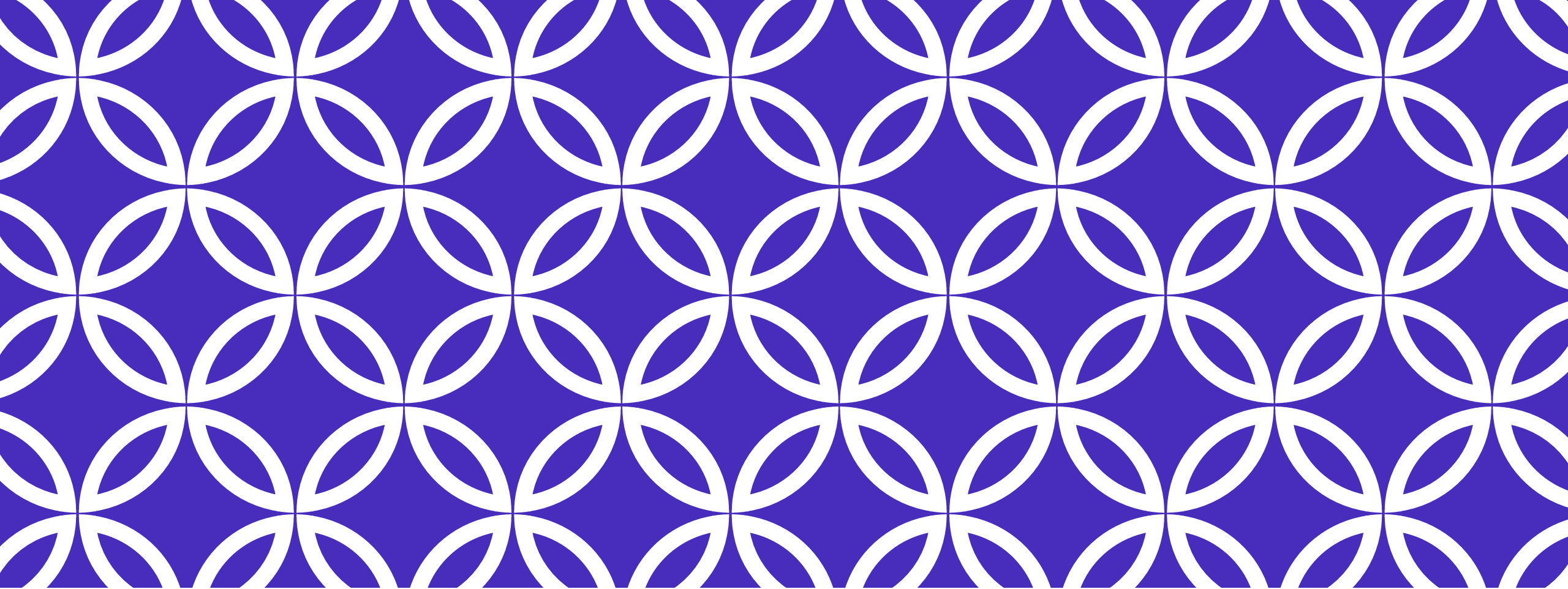
- a. **INTRANSITIVE:** I_S arrived at my village →
- b. **TRANSITIVE:** I_A arrived-at my village_O

Or it can take a transitive verb and **promote a non-core argument to OBJECT function** (thus demoting the original OBJECT to non-core function).

- a. **TRANSITIVE:** I_A provide cookies_O for you →
- b. **STILL TRANSITIVE:** I_A provide you_O with cookies

cf. Greenlandic, Wolof, and Indonesian on your handout





REDUCING VALENCY



passives are
function-changing

DEMOTING THE AGENT: **PASSIVES**

PASSIVES demote the core-argument with syntactic function AGENT to a non-core argument. The core-argument with syntactic function OBJECT is promoted to SUBJECT.

Passives take transitive verbs and make them into intransitive verbs:

1. **TRANSITIVE:** Mario_A kills the goomba_O →
2. **INTRANSITIVE:** the goomba_S was killed (by Mario)

cf. Greenlandic Eskimo
on your handout

The **old agent can still be expressed** by a non-core argument.

anti-causatives are
event-changing.

REMOVING THE AGENT: ANTI-CAUSATIVES

ANTI-CAUSATIVES entirely remove the core-argument with syntactic role AGENT from the event. The core-argument with syntactic role OBJECT is promoted to SUBJECT.

1. **TRANSITIVE:** Vera closed the door →
2. **INTRANSITIVE:** The door closed ~~*(by Vera)~~

cf. Russian on your
handout

The **old agent CANNOT be expressed** by a non-core argument.

anti-passives are
function-changing.

DEMOTING THE OBJECT: ANTI-PASSIVES

ANTI-PASSIVES demote the core-argument with semantic role
THEME to a non-core argument.

1. **TRANSITIVE:** Mario_A kills the goomba →
2. **INTRANSITIVE:** Mario_S kills (with respect to the goomba)

cf. Greenlandic Eskimo
on your handout

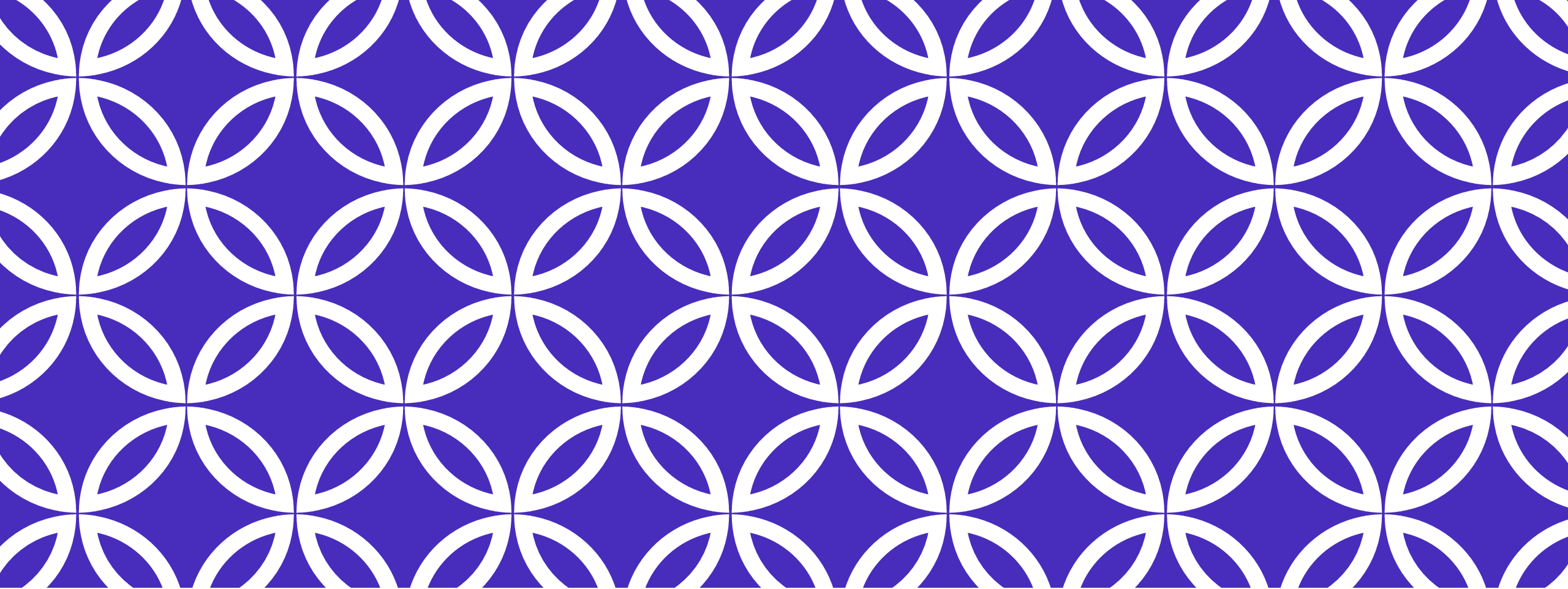
The **old object can still be expressed** by a non-core argument.

SUBTRACTING A CORE ARGUMENT: REFLEXIVES

REFLEXIVES indicate that the **AGENT** and the **OBJECT** coincide

1. **TRANSITIVE:** Mario_A sees the goomba_O →
 2. **LESS TRANSITIVE:** Mario_A sees himself_O
- A and O have the same referent!
 - Does this count as binding **one or two core arguments?**
 - Some languages like to mark this on the verb as a **valency-reducing operation.**

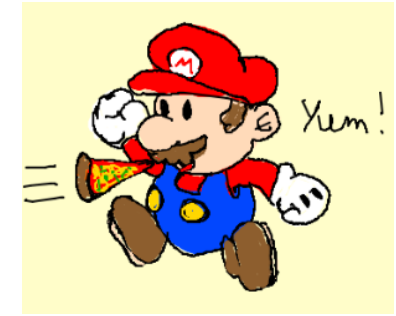




VALENCY IN TRANSPOSITION



TRANSPOSITION = LEXICAL-CATEGORY-CHANGING DERIVATION



If you derive a NOUN or and ADJECTIVE from a VERB sometimes they will inherit some of the arguments of the verb!

(this will vary in different languages)

1. Mario **loves_v** pizza → Mario's **love_N** of pizza (ACTION/EVENT NOUN)
2. Mario **loves_v** pizza → Mario is a **lover_N** of pizza (AGENT NOUN)
3. Mario **loves_v** pizza → ? the pizza is **lovable_{Adj.}** to Mario (DEVERBAL ADJECTIVE)

Which of the above inherits argument structure from the verb?

THANK YOU GUYS! AND HAPPY THANKSGIVING!

