

## DEFINITIONS

**Definition** is a brief description of the meaning of some expression, that is used:

1. to settle the meaning of the expression; or
2. to clarify extension or intension of the expression; or
3. to introduce the new expression to the language.

### TYPES OF DEFINITIONS

#### **I. Regarding the kind of used signs:**

1. **ostensive (demonstrative)** – by pointing
2. **linguistic (verbal)** – expressed wholly in words

ATTENTION In what follows we will speak about linguistic definitions only; unless indicated otherwise.

#### **II. Regarding the structure:**

1. **equivalence** – of the structure:

##### DEFINIENDUM COPULA DEFINIENS

definiendum – defined term

definiens – defining expression

- a) **explicit** – defined expression stands alone (centimeter is one hundredth part of the meter)
- b) **contextual** – defined word stands in typical context (grandfather of x is a father of one of the parents of x;  $c = \log_b(a)$  iff  $b^c = a$ )

2. **nonequivalence**

for instance definition by postulates – by giving a set of true sentences in which defined word occurs

Example

$$(A1) 0 \leq P(p) \leq 1$$

$$(A2) P(t) = 1 \quad (\text{where } t - \text{tautology/law of logic})$$

$$(A3) P(p \vee q) = P(p) + P(q) \quad (\text{if } p \text{ and } q \text{ are disjoint: } p \wedge q \equiv \neg t)$$

#### **III. Regarding the role their play in language:**

1. **lexical** – reports the meaning the word already has (definitions from dictionaries or encyclopedias)
2. **stipulative** – assigns a meaning to a word (new or not) for the very first time (tigon, liger, net)
3. **precising** – clarifies intension or extension of a word (water as H<sub>2</sub>O)

#### IV. Regarding definitional techniques

1. **extensional (denotative) definitions:**
    - **ostensive** definition: by pointing (some or all) designata (referents)
    - **enumerative** definition: by listing (some or all) designata (referents) (Planet is an object such as: Mercury, Venus, Earth, Mars, Saturn or Jupiter.)
    - definition **by subclass**: by listing (some or all) subclasses of denotation (extension) of defined word (Fictional work is something like a poem, a play, a novel, or a short story)
  2. **intensional (connotative) definitions:**
    - **synonymous** definition: by giving the word of the same meaning as definiendum (Intentional means willful. Observe means see.)
    - **operational** definition: by describing procedures that determine whether or not a given word applies to a certain thing. (One substance is “harder than” another if and only if one scratches the other when the two are rubbed together.)
    - definition **by genus and difference**; special case of equivalence definition of a form:  
„A is B, that is C”
      - A – defined word; it’s extension; species
      - B – genus (*genus proximum*) – the smallest set containing A
      - C – specific difference (*differentia specifica*) – feature that distinguishes A from all B
- Examples:  
A square (A) is an equilateral (C) rectangle (**B**).  
A bachelor (A) is an unmarried (C) man (B).

#### CRITERIA FOR LEXICAL DEFINITIONS

##### 1. Should be adequate

Definition is adequate if extensions of definiendum and definiens are the same (definiendum is equivalent to definiens).

ERROR: **to broad**: there are some objects that belong to extension of definiens but don’t belong to extension of definiendum

Example: Bird is an animal that has wings (WRONG because of bat)

ERROR: **to narrow**: there are some objects that belong to extension of definiendum but don’t belong to extension of definiens

Example: Bird is an animal that can fly (WRONG because of penguin)

ERROR: **category mistake**: categories of definiendum and definiens are different hence their extensions are disjoint.

Example: Mathematics is when someone deals with numbers.

##### 2. Should avoid circularity (*idem per idem*)

ERROR **direct (intrinsic) circularity** – in one definition; definiendum appears in definiens

Example: Celestial bodies are stars, planets and some other celestial bodies.

ERROR **indirect circularity** – in a pair, or triple (...) of definitions; one term is defined by the other and this other is defined by the first one.

Example:

Science means the activity engaged in by scientists.

Scientist means anyone who engages in science.

### 3. Should not be obscure

Definition is **obscure** if receiver doesn't understand definiens (*ignotum per ignotum*).

Example:

Bunny means a mammalian of the family Leporidae of the order Lagomorpha whose young are born furless and blind. (wrong)

Bunny means a rabbit. (correct)

### 4. Should not be ambiguous

Definition is ambiguous if it has more than one meaning.

Example:

Triangle means a figure composed of three straight lines in which all the angles are equal to 180°. (wrong)

### 5. Should not be vague

Definition is vague if it lacks precision.

Example:

Democracy means a kind of government where the people are in control. (wrong)

### 6. Should not be metaphorical

Example:

Architecture means frozen music. (wrong)

Camel means a ship of the desert. (wrong)

### 7. Should avoid affective terminology

Example:

'Communism' means that 'brilliant' invention of Karl Marx and other foolish political visionaries in which the national wealth is supposed to be held in common by the people. (wrong)

### 8. Should convey the essential meaning of the defined word

Example:

Human means featherless biped. (wrong)

Human means rational animal. (correct)

### 9. Should not be negative when it can be affirmative

Example:

Concord means the absence of discord. (wrong)

Concord means harmony. (correct)

BUT

Darkness means the absence of light. (correct)

### 10. Should indicate the context to which the definiens pertains

Example:

Bishop:

(in church) a high rank priest;

(in chess) a piece that moves on diagonals.