

UNIT 2

DEFINITIONS

Definition

- Definitions are statements used to convey information about the meaning of words. Being accurate about the meaning of things is very essential in critical thinking.
- Examples of definition: *A cat is a large, long-necked ungulate mammal. A sister is a female sibling. A declarative sentence is statement that conveys a true or false information.*

The parts of a definition

- Every definition has two parts: the definiendum and the definiens.
- The **definiendum** is the word or phrase to be defined.
- The **definiens** is the rest of the sentence, which does the defining. So, in the definition *A cat is a large, long-necked ungulate mammal*, the **definiendum** is A cat and the **definiens** is is a large, long-necked ungulate mammal.
- The definiendum is analogous to the subject whilst the definiens is analogous to the predicate in English grammar.

CONNOTATION AND DENOTATION

- In conveying the *meaning of a word*, there are **two** ways that we can do that. We can either convey the meaning of a word by **CONNOTATION** or **DENOTATION**.
- **CONNOTATION:-** This is when the meaning of a word gives a *description* of the *features* or *attributes* or *properties* of a range of objects in the world to which the word may be applied. It is also called the intensional definition of a word.
- **Examples. (*head, mobile phone*,)**
 - 1.**Head** is the upper part of a human body or an animal's body that contains the brain and the face.

Continuation

- 2. Mobile phone** is an electronic device for receiving and making calls.
- ***NB. This is what it means to define a word by CONNOTATION.***
 - **DENOTATION:-** This refers to ***the collection*** of all the **things in the world that are correctly picked out by a word's connotation.** It refers to the definition that ***coveys the meaning of a word by giving examples. It is also called extensional definition.***

Continuation

- **Examples:**
- The meaning of **mobile phone** for example are *Samsung phone, Nokia lumia phone, Motorola phone, LG Phone.*
- The meaning of **even number** for example are *2, 4, 6, 8, 10, 12, .*
- **NB. This is what it means to define a word by DENOTATION.**

Continuation

- However the **relationship** that exist between the connotation and the denotation is that, ***given the connotation of word, we can identify or determine it's denotation.***
- **For instance;**
If the word 'Head' is defined as "***the upper part of the human body or an animal's body that contains the brain and the face***", then its denotations will be **the head of every human being on earth as well as that of an animal**

Continuation

- But the same word ‘**Head**’ can also be defined as referring to “***someone who is in charge of an operation or institution.***” In this instance the denotations will be ***all persons that are in charge of specific operations or particular institutions.***
- Thus depending on the **connotation of a word** will we be able to determine a **the denotations**.
- ***NB. IF a word has several connotations, each connotation will have their respective denotations.***

TYPES OF DEFINITION

- When we talk about the “**types of definition**” we mean the *different sources of and methods for creating or deriving definitions or meaning of words*. In this course we will be discussing **only six different types of definition**.
- **The Six Types Are As Follows.**
 1. *LEXICAL DEFINITION*
 2. *OSTENSIVE DEFINITION*
 3. *OPERATIONAL DEFINITION*
 4. *THEORETICAL DEFINITION*
 5. *STIPULATIVE DEFINITION*
 6. *REAL DEFINITION*

Lexical Definition

- **LEXICAL DEFINITION** is also called ***dictionary definition***. It refers to definition of words that are taken from the dictionary. Dictionary definitions mostly the conventional meaning of words. Dictionary definitions convey the ***connotation of words***.
- **The following two examples are taking from the dictionary.**
 1. Student is a learner enrolled in an educational institution
 2. Musician is someone who conducts or composes music as a profession.
 3. A “lizard” means any of numerous small scaly reptiles typically having a moderately elongated body, a tapering tail, and two pairs of legs held outward from the body, comprising mostly terrestrial and burrowing species.

Ostensive Definition

- Ostensive definition is a non-verbal extensional/denotational definition in which the meaning of a word is given not by using other words to define the word but by pointing to the actual object in real life situation. **Thus ostensive definition is when you give an example or point to an object to convey the meaning of a word.**
- Most colour words such as yellow, red, green, blue and so on, are defined ostensively.
- Also, words that denote different style of dance, for instances Adowa, Agbaza, Azonto and so on, are defined using ostensive definitions. We define words of this nature by directing or pointing to the object or by demonstrating the meaning of the words using gestures.

Operational Definition

- **Operational definition** is when a series of step by step procedure is required to be followed in order to arrive at the meaning of a word. ***Following the instructions in the definition will let you understand what the word means.***

Example:

1. *To understand what an even number is, do the following. Take any number between 1 and 10, divide that number by two. Then check to see for a remainder . If there is no remainder then that number is an even number.*
2. A solution is an “acid” if and only if litmus paper turns red when dipped into it.

Stipulative Definition

- We use this kind of definition when we assign a meaning to a word either for the first time or for a specific project. This may involve creating a new word or assigning a new meaning to an old word. Sometimes, stipulative definitions are usually deployed to replace a more complex expression.
- For instance, instead of uttering a complex expression such as *power fluctuation*, Ghanaians have resolved to name the phenomenon dumsor which is much simpler to mention. Some social media expressions such as: *sex and chatting*, *friend and enemy*, *phone and snubbing* have been given new simple names such as *sexting*, *frenemy* and *phubbing* respectively.

Theoretical definition

- A theoretical definition is one that originated from the specific discipline involved in researching about the definiendum. It is a definition of a term that appears to formulate a theoretically adequate or scientifically useful description of the objects to which the term applies. When we confront a theoretical definition, we could guess which discipline it originated from.

Example

1. 'Siesmograph' means an instrument used to detect and record seismic waves.
2. 'Acceleration' means the rate of change of velocity over time.
3. 'Water' is H₂O. ***To understand this definition you must have been thought chemistry or be a chemist.***
4. 'Even number' is any number that is divisible by two without remainder. ***To understand this definition you must have been thought mathematics or be a mathematician.***

Real Definitions.

- A **real definition** is a definition that provides ***the core meaning or the essential meaning of a word***. That is to say a definition of what a word appropriately stands for.
- Such a definition provides all the features and only those features that appropriately belong to a word.
- **Example:**
 1. **Even number** is any number that is divisible by two without a remainder.

Continuation

- **Real definition** is also called ***well-defined definition, ideal definition, and eliminative definition.***
- When a term is well defined, it means that the ***definition makes it completely clear all the things or objects in the world that are correctly called or picked out by the word***

Continuation

- For any eliminative definition, the *definiendum* **could be eliminated and replaced by the definiens in every context where the word which is being defined is used.** This is because the definition provides the **necessary** and **sufficient conditions** for using the word correctly.
- **Illustration:**
- **Lets consider the definition of an even number as an eliminative definition.**
- *Even number is any whole number that is divisible by two without a remainder.*

Continuation

- **Definiendum** – even number
- **Definiens** – any whole number divisible by two without a remainder.

Now lets consider the statement “**all multiples of two are even numbers**” for the illustration.

1. All multiples of two are **even numbers**.

Results are 2, 4, 6, 8, 10,.....

2. All multiples of two are **whole numbers divisible by two without any remainders**.

Results are 2, 4, 6, 8, 10,.....

Continuation

- *We can see from the above illustration that when the **definiendum** was replaced with the **definiens**, the same meaning was obtained from the statement. The truth of the statement “**all multiples of two are even numbers**” remains the same.*
- **This is what it means to say a definition is eliminative.**
- ***NB achieving the essential meaning of words enables us to avoid vagueness and ambiguity in the construction of the meanings of words.***

**Well-defined term versus open
textured word.**

Well-defined term versus open textured word.

- A term or word is said to be a **well-defined term** if we can successfully achieve its *essential definition*. That is if we can provide a *definition that makes it completely clear devoid of vagueness and ambiguity which objects or individuals or properties are correctly called by that word*.
- Examples of terms whose definitions are well- defined are **terms from the field of mathematics and pure science**. Words like *even number, Set, Square, Triangle* etc are all well defined terms. **Their definitions are ideal or real or essential definitions.**

Continuation

- The definition of an **even number** says that for any number to be called an even number then that number must be divisible by two without a remainder. So with this definition one would be able to perform the necessary operation to determine which numbers are even and which are not.
- The same goes for **triangle, circle, a set, and all the other terms in mathematics.**
- **NB. WELL-DEFINED TERMS HAVE ONLY ONE MEANING.**

Continuation

- However, a term is said to be an **open class concept** when it is difficult for the *core meaning or the essential meaning* to be achieved. *Thus in an attempt to derive the essential meaning or real meaning we end up with many interpretations for such a word.*
- **Open class concept** are concepts that are open to several interpretations. *They are also called essentially contestable concepts or open textured words.*
- Subject areas like *Psychology and History and Economics* contain many key terms that are open class concepts(that is, cannot be well defined).

Continuation

- **Examples of open class concepts are;**
- *Family , justice, intelligence, equality, democratic process, life, love, wisdom, modernity, fidelity etc.* **THESE WORDS HAVE A LOT OF DIFFERENT INTERPRETATIONS BY DIFFERENT PEOPLE.**

PROBLEMS OF DEFINITION

Problems with Definitions

- Definitions could fail in several ways to provide us with the required meanings of their definiendums. Let us see the several ways in which definitions could fail to do this.
- Too Broad
- Too Narrow
- Vague
- Obscure

Too Broad

- A definition is too broad if the definiens includes or applies to objects outside the extension of the definiendum. In other words, if the items denoted in the definiens go beyond what is needed to define the definiendum accurately, then the definition is too broad.

Examples

- A bird is an animal that has wings.
- A human being is an animal that has two legs.

In the first example, one realizes that certain animals (such as insects and bats) also have wings yet they are not birds. In the second example, one realizes that there are animals (such as monkeys and birds) that have two legs but are not humans. This is an indication that the definiens of the two definitions denotes more entities than is required to define the definiendum.

Too Narrow

- A definition is too narrow if the definiens fails to capture the full range of items needed to define the definiendum. In this case, one realizes that the definiens lists fewer items than is denoted by the definiendum.

Example

- A bird is a feathered animal that can fly.
- Philosophy is the study of the works of David Hume.

In the first definition, there are birds that do not fly. For example ostriches and peacocks are birds but they do not fly. In the second example, there are so many other works by other philosophers that are regarded as philosophical.

Vague Definitions

- A definition is vague if there is no way of telling what class of things the definiens refers.
Examples of vague definitions are given below:

Example

- Democracy is a kind of government where there is freedom for all.
- This definition does not clarify who “all” refers (human being, other mammals, reptiles, rodents, birds, fish, and so on).

Obscure definitions

- A definition is obscure if the definiens conveys a meaning that is elusive as a result of defective or inappropriate language. Usually, a definition tends to be obscure if the definiens contains words that do not help us to understand the definiendum.
- **Example**
- Desire means the actual essence of man, insofar as it is conceived, as determined to a particular activity by some given modification of itself
- The above definition is obscure because the meaning of some of the terms in the definiens is obscure. Ordinarily, *desire means a strong feeling of wanting to have something or wishing for something to happen.*

Circular definitions

- A definition is circular if the definiendum appears in the definiens or if the definiendum is cited as part of the definiens. Examples include:

Example

- Metaphysics is the systematic study of metaphysical issues.
- A pentagon is a plane figure having the shape of a pentagon

Sometimes definitions that are circular do not repeat the definiendum but may tell us that a definiendum does not mean an opposite term. This is still circularity: we may call it polar circularity.

Examples

- Mendacity means lack of veracity.
- Veracity means "absence of prevarication"

The *lack of veracity* is the same as *mendacity*. In a similar vein, *veracity* is the same as *absence of prevarication*

End of Lecture

- Thanks for coming