Lexicon

- **Lexicon, lexis, vocabulary, dictionary**

- These red terms are synonymous in lexicology and they all refer to total stock of words in a language.

- The term lexicon is known in English from the early 17th century, when it referred to a book containing a selection of a language’s words and meanings, arranged in alphabetical order. The term itself comes from Greek *lexis*-word. It is still used today in this wordbook meaning, but it also has an abstract sense, especially within linguistics, referring to the total stock of meaningful units in a language – not only the words and idioms, but also the parts of words which express meaning, such as prefixes and suffixes.
Lexicon

- We have to define lexical unit as a separate form, distinguished from word.
- Examples: *It was fibrillating.*
- *It was raining cats and dogs.* (idiom)
- *Come in.* (multi-word verb)
- If we looked in an English dictionary, we would seek forms *fibrillate, rain* or *cat, dog,* and *come.*
- The term which has been introduced to handle all these cases is *lexeme* (or lexical item).
- A lexeme is a unit of lexical meaning, which exists regardless of any inflectional endings it may have or the number of words it may contain.
- Thus, *fibrillates, rain cats and dogs, come in* are all lexemes, as are *elephant, jog, cholesterol, happiness, put up with, face the music,* and hundreds of thousands of other meaningful items in English. The headwords in a dictionary are all lexemes.
Lexicon

- Why do we speak about the structure of the lexicon?
- Linguists have shown that lexicon is not merely a list of words, although, historically speaking, it is an accumulation of words. The lexicon is not simply an inventory of unconnected, isolated elements, but it definitely has a structure.
- There are various types of relations and connections between the elements, and we may establish regularities and recognize clear patterns.
How large is the lexicon?

- The two biggest dictionaries suggest around half a million lexemes (Webster’s Third International and the Oxford English Dictionary). The true figure is undoubtedly a great deal higher.
- Although its alphabetical order is efficient and its sense-by-sense entry structure is sensible and succinct, conventional dictionary does not represent the structure of the lexicon.
- When we speak about the structure of the lexicon, we are referring to the networks of meaning relationships which bind lexemes together - what is known as its semantic structure.
- No lexeme exists in splendid isolation. As soon as we think of one, e.g. Uncle, a series of others come to mind. Some of these lexemes help to define uncle (brother, father, mother), others relate to it closely in meaning (aunt, cousin, nephew, niece), others have a looser semantic connection (relatives, family, visit, outing), and there may be figurative or literary uses (Uncle Sam).
The Structure of the Lexicon

- If we mentally probe all aspects of the semantic network which surrounds *uncle*, we shall soon build up a large number of connections. But if we look at a dictionary entry for *uncle*, we shall see very few of our intuitions represented there.
- When we study semantic structure, we are trying to expound all the relationships of meaning that relate lexemes to each other. However, because of the size and complexity of the English lexicon, very little of this structure has been described.
Sense relations

- We have a sense relation when we feel that lexemes relate to each other in meaning.

- If we pick any two lexemes at random from a dictionary, it is unlikely that they will bear any meaningful relationship to each other. For example, there is nothing which obviously relates obedient and rainbow.

- But we would feel otherwise if we picked out wide and narrow, or trumpet and saxophone.

- So, what are the chief types of sense relations?
Synonymy

- Synonyms are lexemes which have the same meaning. This definition is not so straightforward as we might think, because, why should any language have more lexemes for exactly the same meaning?

- In fact there are no lexemes that have EXACTLY the same meaning. It is usually possible to find some nuance which separates them, or a context in which one of the lexemes can appear but the other cannot.
Synonymy

- A) There may be a dialect difference: e.g. Autumn and fall are synonymous, but the former is BE and the latter is AE.
- B) There may be a stylistic difference: insane and loony are synonymous, but the former is formal and the latter is informal.
- C) There may be a collocational difference: rancid and rotten are synonymous, but the former is used only for butter and bacon.
- D) There may be a difference of emotional feeling, or connotation: youth and youngster are synonymous, but youths are less pleasant than youngsters.

These are not the only ways in which synonyms can be differentiated, but these examples are enough to make the basic point. We have to point out that there may be no such things as a pair of perfect synonyms, lexemes which could substitute for each other in all possible locations.
Antonymy

- Antonyms are lexemes which are opposite in meaning – again a definition which sounds straightforward, until we begin to think about what is meant by opposite. Unlike synonymy, antonymy very definitely exists, and it exists in several forms:

- A) There are opposites such as large/small, happy/sad, wet/dry. These are adjectives which are capable of comparison; they do not refer to absolute qualities. We can say that something is very wet or quite dry. Opposites of this kind are called *gradable antonyms*.

- B) There are opposites such as single/married, first/last, alive/dead. These are not gradable opposites: there is no scale of *aliveness* or *firstness*. In such cases, if one of the pair of lexemes applies, the other does not. To be alive is not to be dead; and to be dead is not to be alive. The items complement each other in their meaning, and are thus known as *complementary antonyms*. 
Antonymy

- C) There are antonyms such as over/under, buy/sell, wife/husband. These antonyms are mutually dependent on each other. There cannot be a wife without a husband. We cannot buy something without something being sold. This type of oppositeness, where one item presupposes the other, is called converseness.

- The lexemes are converse terms.
- All these lexemes have a common feature: they can all be used in the question-answer exchange ‘What is the opposite of X? Y.’
- In this respect, they are different from the vast majority of lexemes in the language, which have no opposites at all. It simply does not make sense to ask ‘What is the opposite of rainbow, or sandwich?’
Hyponymy

• Hyponymy is less familiar term to most people than either synonymy or antonymy, but it refers to a much more important sense relation. It describes what happens when we say *Something is a kind of something*, e.g. Eagle is a kind of bird, or *eagle is a bird*.

• The relationship between the lexemes can best be shown in the form of a tree diagram, where the more general term is placed at the top, and the more specific terms are placed underneath.
Hyponymy

- bird
  - blackbird
  - eagle
  - hawk
  - owl
  - parrot
    - bald eagle
    - golden eagle
    - snowy owl
    - spotted owl
Hyponymy

- The included items are the *hyponyms*. The lexeme at the top is the *superordinate* term, or *hypernym*.

- Hyponymy is particularly important to linguists because it is the core relationship within a dictionary. The most illuminating way of defining a lexeme is to provide a hypernym along with various distinguishing features — an approach to definition whose history can be traced back to Aristotle.

- E.g. A *majorette* is a ‘girl (hypernym) who twirls a baton and accompanies a marching band’. It is usually possible to trace a hierarchical path through a dictionary, following the hypernyms as they become increasingly abstract, until we arrive at such general notions that clear sense-relations between the lexemes no longer exist. At any point along this path, a lexeme can be seen to have a hyponymic relationship with everything above it, though we usually take seriously only those involving successive levels.
Meronymy

- Just as the concern of scientists to classify natural phenomena is reflected in the semantic relation of hyponymy, so too their concern to analyse phenomena into their parts is reflected in the semantic relation of meronymy. The ‘part of’ relation can similarly be represented by a hierarchy of superordinate and subordinate terms, e.g.
Meronymy

- vehicle
  - wheel
    - tyre
  - brakes
  - engine
  - door
  - steering wheel
    - fuel pump
    - cylinder
    - valve
    - tube
Meronymy

- Reading from the bottom, valve, cylinder, and fuel pump are parts (meronyms) of engine; engine, wheel, brakes, door, steering wheel are parts (meronyms) of vehicle.

- The superordinate term is not merely a more general way of talking about its meronyms, as in the hyponymy relation, though there is a sense in which the use of superordinate terms includes reference to the meronyms.

- Such part/whole relations exist between many words in the vocabulary. Most human artefacts are made up of parts, which we usually want to label with their own terms. A knife consists of a blade and a handle.

- Most obviously, the meronym relation applies to entities that have concrete reference. But we also divide more abstract entities into their parts, e.g.
The terms *day* and *night* occur twice in this hierarchy because *day* refers both to the period of twenty-four hours and to that period which enjoys daylight; *night* is in contrast with this second meaning of *day* and also refers to the darkest part of it.