1. Frege distinguished two kinds of semantic property that an expression might have: *sense* and *reference*, or *Sinn* and *Bedeutung*.

2. The **reference** of a sentence is a truth value. The reference of a sub-sentential expression is what it contributes to the reference (i.e. truth value) of sentences in which it occurs.

3. The reference of a singular term is that to which it refers. Frege called these *objects*. The reference of a predicate is a function from objects to truth values. Frege called these *concepts* (not to be confused with the modern use of 'concept').

4. There is fundamental ontological difference between objects and concepts: objects are complete (saturated), concepts are incomplete (unsaturated).

5. This leads to a problem: is the reference of '… is gorgeous' a concept? It seems both yes and no.

6. The **sense** of an expression is a way of thinking of its reference. (This is how Gareth Evans suggests that we understand what a sense is).

7. The sense of a singular term is a way of thinking of the object that is its reference; the sense of a predicate is a way of thinking of the concept that is its reference; the sense of a sentence is a way of thinking of the truth value that is its reference. Frege called these *thoughts* (technical term).

8. Sense determines reference: it is not possible for two expressions to have the same sense but different reference. So it is not possible to think about two different references in the same way. (Is this a problem?)

9. But reference does not determine sense: it is possible for two expressions to have the same reference but different sense. 'Hesperus' and 'Phosphorus'.

10. It is possible for an expression to have sense but no reference. (Should he say this?)

11. To properly understand an expression (or a speaker's use of it), one must think of its reference, and think of it in the right way. Which way is the right way? Whichever way is the sense of the expression (or the sense with which it was used).

12. Two sentences have different senses just in case it is possible for someone to understand both sentences at a given time and take different attitudes toward them (belief, disbelief, neither).

13. What about indexicals ('I', 'here', 'now', 'today', 'yesterday', etc.)?

14. Since it is not possible to think about different things in the same way, different people express different thoughts with 'I am cold'.

15. What if I assert 'I am cold', and then you assert 'You are cold' (referring to me) – have you expressed the same thought as I have? That depends on how I was thinking of myself when I asserted 'I am cold'. There is a way of thinking of myself such that no one else can think of me in that way. But there are ways of thinking of myself such that others can think of me in that way too.

16. Similar comments for 'Today is cold' and 'Yesterday was cold' (asserted the following day) – it is possible for these to express the same thought.

17. Thoughts are neither 'things of the outer world' nor ideas – they belong to a third realm. Like ideas, they cannot be perceived; like things of the outer world, they are mind-independent. (Same for all senses?)

18. Thoughts are timelessly true. So the thought I express by 'It is cloudy' includes a time.

19. The apprehension of thoughts is mind-dependent. So too their judgment and assertion.

20. Thoughts act by being apprehended and taken to be true.

21. The sense of an expression is a function of the senses of its parts.

22. 'Horse' and 'steed' have the same sense – they do not express different ways of thinking about the one thing. Same with 'and' and 'but'. Adding 'still' does not affect the sense of a sentence, nor does adding focal stress or passivising.

23. When we make commands and issue requests we do not express a thought. When we make assertions and ask questions we do. It is possible to express the same thought in making an assertion and asking a question: 'It is cloudy', 'Is it cloudy?'. In the former, the expression of the thought is accompanied by an assertion; in the latter, it is accompanied by a request.