ON FREGE’S “ON SENSE AND REFERENCE”

Four important (and plausible) semantic principles:

TRUTH: If a declarative sentence \( s \) is true in a language \( l \), then \( s \) is meaningful-in-\( l \)
(e.g., compare the sentences it is more difficult to climb K2 than Mt. Everest with climb more Mt. Everest difficult than it to is K2).

MEANING: If declarative sentence \( s \) is meaningful in a language \( l \), then each constituent expression of \( s \) is meaningful-in-\( l \).
(e.g., compare the sentences it is more difficult to climb K2 than Mt. Everest with the sentence gogglism more Mt. Everest dittka than it arg ips K2).

COMPOSITIONALITY: The meaning of a declarative sentence \( s \) is determined by the meanings and arrangements of the constituent parts of \( s \).
(e.g., compare the sentences it is more difficult to climb K2 than Mt. Everest with it is more difficult to climb Mt. Everest than K2).

SUBSTITUTIVITY: For any declarative sentence \( s \) in a language \( l \), if \( s \) contains an expression \( e \) and there is an expression \( e^* \) such that \( e \) and \( e^* \) are synonymous-in-\( l \), then we can replace \( e \) with \( e^* \) and the semantic content of \( s \) will remain unchanged.
(e.g., compare the sentences it is more difficult to climb K2 than Mt. Everest with it is more difficult to climb K2 than Chomolungma).

Recall that we distinguished the following important categories of language (among others): singular terms and declarative sentences. Again, we defined them as follows:

- Singular term =def. an expression that stands for a distinct object.
- Declarative sentence =def. an expression in a particular language that functions to express a proposition (and derivatively has a truth-value)

Regarding singular terms, we said that there are four important kinds:

- Ordinary proper names (e.g., Edmund Hillary, Mt. Everest, New Zealand, etc.)
- Definite descriptions (e.g., the first human to stand on top of Mt. Everest, the tallest point on Earth, the country where Peter Jackson filmed The Lord of the Rings, etc.)
- Singular indexical pronouns (e.g., I, you, now, here, etc.)
- Demonstratives
  - Simple (e.g., this, that)
  - Complex (e.g., that mountain climber, this frozen waterfall, etc.)

(Note well: when Frege uses the expression proper name in ‘On Sense and Nominatum’ he means singular term, not ordinary proper name. What is more, in this essay, he does not discuss pronouns or demonstratives.)

Our Questions:

Q1: What is the semantic content of each of the sub-sentential components, e.g., singular terms?
Q2: What contribution does each of the sub-sentential components, e.g., singular terms, make to the semantic content of a proposition?
As we've seen, a popular answer is the naïve theory of semantic content (also known as Millianism, the ‘Fido’-Fido Theory, the Name Theory and the Referential Theory (as Lycan calls it in our textbook):

**NT:** The semantic content of a linguistic expression ‘e’ is e.

According to NT, the meaning of an expression is its reference, that is, whatever object it stands for.

**Frege’s solution to Frege’s Puzzle (about informational identity statements)**

1. **Frege’s *Begriffschrift* (1879) solution:**
   - This is a *metalinguistic* solution: it tells us the sentence ‘a = b’ means the names ‘a’ and ‘b’ designate the same object, i.e., they co-refer.
   - Problems (that Frege points out in "On Sense and Nominatum"):  
     - ‘a = b’ is not about names.
     - Problems with nick-naming.

2. **Frege’s “On Sense and Nominatum” (1892) solution:**
   - The terms ‘a’ and ‘b’ each have a sense and a referent;
   - Although the referents of ‘a’ and ‘b’ are the same, the senses of ‘a’ and ‘b’ are different.
   - This explains how ‘a = a’ and ‘a = b’ can differ in cognitive significance (or meaning) even when ‘a = b’ is true.

*From this we get Frege's theory of sense and reference for singular terms*

1. Each meaningful expression has a determinate sense (German sinn) and can have (at most) a single referent (German bedeutung).

2. The referent of a singular term is the “definite object” that it stands for

3. The sense of a singular term contains what Frege calls “a mode of presentation.” (*Note well:* by ‘sense’ Frege does not mean one’s personal conception (German vorstellung), often translated as ‘idea’).
   - Frege is committed to anti-psychologism about senses.
   - He believes that they exist in what he calls “the third realm,” that is, in a non-spatial, non-temporal state of being.
   - The telescope analogy.

4. What Frege’s views on the sense-reference meaning distinction suggest:
   - Someone who understands a singular term t knows the sense of t
   - Two singular terms t and t* are synonyms in a language l iff the sense of t-in-l = the sense of t*-in-l.
   - A singular term t is ambiguous in a language l iff there is more than one sense that is associated with t-in-l.