Rudolph Carnap, Otto Neurath, and Moritz Schlick are three logical positivists who each present a view regarding the nature of knowledge. Carnap believes that all knowledge is founded on “protocol sentences,” one’s direct, unverifiable relation to the world. Neurath rejects that protocol sentences are privileged, and claims they do not provide a sufficient starting point for knowledge. Schlick, on the other hand, holds a view similar to Carnap’s, but claims that “observation sentences” are the self-verifying experiences that are a sufficient basis for knowledge.

In order to develop his idea of protocol sentences, Carnap first establishes a “criteria of application,” or rather, conditions that have to be met when it is appropriate to apply a word. This criterion consists of four different approaches, which include: deducibility, verifiability, truth conditions, and meaningfulness. Because single words cannot be found to be meaningful on their own, Carnap introduces the idea of “elementary sentences,” sentences that are the most basic form a word can be used in. It is these elementary sentences, not words, which are to be evaluated using the given criteria.

Although the four criteria all appear to be different, they are actually very much equivalent to each in that they are used to determine the meaningfulness of a word. For example, using the elementary sentence, “X is a cat,” one is able to deduce that there is a perception of meowing, four legs, feline, etc. Conversely, one can perceive meowing, four legs, and the concept of feline, and deduce from those perceptions that “X is a cat.” The criterion of truth conditions works in a similar way. In order to know the truth conditions of “X is a cat,” one must have sense perceptions of what it means to be a cat, for example, four legs, meowing, feline, etc. In order to verify these sense perceptions, one must have certain experiences. In order to determine what “X is a cat” means, one must have certain experiences that deduce, verify and provide truth value to such a claim.
It is through these four philosophical processes that the criteria of application helps to distinguish “pseudo-statements” from meaningful ones. Meaningless or “pseudo” sentences, according to Carnap, can occur in any of these three ways: 1) if a sentence contains a meaningless word, 2) if a sentence contains an unacceptable combination of words, or 3) if a sentence contains words that are of different categories. By use of logical analysis, Carnap is able to explicate the meaning of words and distinguish the meaningful from the meaningless. Meaningless words are those not verified by experience, and meaningful words are those that are. Because the very nature of metaphysics is to give an account for what the world is like without using sensory experience, Carnap sees it to be a meaningless practice, and thus he feels it can be eliminated through logical analysis. The goal of philosophy is no longer used as developing a theory of the world, but rather its purpose is to clarify and eliminate meaningless words from pseudo statements.

Protocol sentences, according to Carnap, are one’s direct relation to the world. They are what link a term to one’s immediate sensory conditions. Protocol sentences are not subject to the criteria of application because they are not the types of things that can be verified, they are of a privileged nature, above critical scrutiny. The arrival at a protocol sentence occurs when the deducibility of elementary sentences ends. When the concept of “four legs” is being experienced at “6pm”, there is nothing more that can be deduced, and therefore, “I perceived four legs at 6pm” becomes a protocol sentence.

Neurath objects Carnap’s view of protocol sentences on two main grounds. First, that protocol sentences can be contradictory, and second, that the translation of an experience to a linguistic protocol sentence can be inaccurate. He argues that no sentences are beyond critical scrutiny, and that every sentence requires interpretation and verification. Because of this disagreement that all knowledge follows from the same basic set of claims, Neurath proposed an anti-foundationalist theory, contrary to Carnap’s foundationalist theory. He asserted that since every sentence is merely an empirical hypothesis, there is no way of taking conclusively established pure protocol sentences as the starting point of
knowledge. The only reason one has for accepting a sentence as true is its relationship to other sentences. This idea is referred to as “anti-foundationalism” because there is no foundation on which it rests, meaning there is no sense experience that ties these sentences to the world. Foundationalism, on the other hand, is best represented by Carnap’s view of protocol sentences. Because the protocol sentences rely on direct experience, they are used as the foundation for all other knowledge.

Schlick’s view regarding the nature of knowledge is in contrast to Neurath’s view, and more similar to Carnap’s. Being a foundationalist, Schlick disagrees with Neurath’s correspondence theory on the grounds that, if one’s only guide to truth is coherence, then one might also be justified in accepting fairy tales. He argues that even if one were to have a multitude of sentences that cohere with one another, one could have several of these different sets and thus be left with the dilemma of deciding what set to accept as truth. These incompatible theories and multiple versions of truth are why Schlick argues that a foundation of knowledge is necessary.

Schlick developed a foundation called “observation sentences,” which are confirmations of the immediately experienced. They that do not possess a time, because as soon as they occur, they are gone into the past leaving them subject to memory only. Once an experience is only accessible via memory, the certainty of the experience begins to diminish. These observation sentences are therefore privileged, self-verifying, not subject to verification, and what ties one’s knowledge to reality.

Given Schlick’s many parallels to Carnap’s foundationalism, it is unlikely that Neurath would be persuaded by any of Schlick’s discussion. Schlick strongly believed that observation sentences are self-verifying confirmations. Neurath, on the other hand, would contend that even at the very moment of an instantaneous confirmation, there are mediations of other sentences occurring. For example, an observation sentence such as “I see a cat right now” would be mediated by a theory of a “cat,” and a theory of space and time in order to understand what the terms “right now” imply. It is because of these conflicting views that Neurath is anywhere but close to being persuaded by Schlick.