When I was asked to give a talk on Carnap's late and still unpublished philosophy of induction I immediately realized that I would be unable to do this without suggesting a drastic reinterpretation of Carnap's program. I can only hope to make this reinterpretation comprehensible by trying to give a systematic sketch of my own position on the so-called problem of induction and to describe the role of Carnap's theory within the conceptual framework.

In principle I can make my point in a few words though it will take some time to explicate it. The point is simply this:

I do not believe in the problem of induction.

The title 'the problem of induction' is to include all kinds of endeavor to formulate rules either for finding yet-undiscovered laws or for justifying proposed hypothetical laws.

The list of possible candidates for such rules is nondenumerably infinite. As we cannot ask an infinite number of questions we are forced to formulate the problem in an abstract way which points to a common feature of all possible candidates. The rules we are looking for must be correct. This means that they have to be truth-preserving. But as distinguished from rules of deduction the content of the conclusion must not be part of the content of the premises, in other words: the rules have to be amplifying. So we get the following version of the problem of induction which is already implicit in the work of Hume:

(J) Are there inferences which are truth-preserving as well as amplifying?

The answer to this question is: 'No, of course not.' Therefore if by the problem of induction we understand the question (J) then it has a trivial negative solution. As this answer is ridiculously obvious, it seems to me preferable to say that in the field of theorizing such a thing as the problem of induction does not exist at all.

This sounds as if I were a Humean. But in that case I would presumably stress that I do not believe in a positive solution of the problem of induction. This formulation would seem to me completely misleading for it would give
the impression of a skeptical position which urges us to resign. But far from recommending resignation I think there are very important problems which must take the place of the problem of induction and which therefore I suggest to call successor problems of the problem of induction.

I will try to relate these successor problems to Carnap's theory of inductive reasoning. This theory was under heavy attack from various sides. The strongest arguments have been brought forward by W. Salmon. Salmon also gave an interesting criticism of Popper whom many people still regard as Carnap's intellectual antipode. A brief examination of one of Salmon's arguments will help to clarify the problems which are at stake. While in my opinion Salmon's criticism of Carnap's original theory is basically correct it seems to me that his critical remarks on Popper are based on a misunderstanding.

Therefore I will begin my talk about Carnap with a defense of Popper. Salmon points out that within Popper's theory of testing the key concept is the concept of corroboration. In view of the fact that this concept provides 'a method for selecting among unfalsified hypotheses', Salmon (1967a, p. 26) comes to the conclusion that Popper's theory is not properly characterized as 'deductivism'. For 'Popper's theory furnishes a method for selecting hypotheses whose content exceeds that of relevant available basic statements'. 'Corroboration', Salmon says, 'is a non-demonstrative form of inference'. This is a misinterpretation of Popper which paradoxically is partly due to his granting the Popperians too much. Actually, with one single exception, neither Popper nor his students ever told us what they mean by 'corroboration'. The exception mentioned is the second paragraph of Popper (1959, p. 267). The following definition gives a detailed account of Popper's remark (with some slight changes in terminology): 'Corr(B; T) (B corroborates T) if

1. \( T \) is a theory
2. \( B \) is the class of accepted observational sentences
3. the class \( T \cup B \) is logically consistent
4. there exist two disjoint classes \( R \) and \( E \) such that
   a. \( R \cup E = B \)
   b. \( T \cup R \vdash E \)
   c. \( E \) is not empty and contains only such elements which are sincere attempts to refute \( T \).^1

Within the present context we may refrain from entering into a discussion of the vague phrase 'sincere attempt to refute' ('ernstzunehmender Widerlegungsversuch').^2 Then we can easily discover the root of Salmon's error. He erroneously believes that exclusively deductive logic is used only insofar as