

In arguing for his more complex model, Spiro makes three things clear. First, functional requirements (z) are necessary, but not sufficient, conditions for the maintenance of a social system. Secondly, structural units (y) may satisfy different functional requirements, and different structural units may satisfy the same functional requirements; in other words, structural units have functional equivalents. Thirdly, within a system it is a joint set of units which is the sufficient condition for satisfying the functional requirement of a system. In conclusion, Spiro is aware that our knowledge of the functional requirements of a social system will not allow us to predict which social units will satisfy the requirements.⁸

It is important to notice that in the above description the explanation is more complex. Instead of y representing a particular unity (see premise #2 of the simplified model), y represents a set or class of units. As we shall see in a moment, this revision of the model is necessary in order to avoid a conclusion which is invalid.

To complete the description of our model, it is important to point out that a functional explanation must specify the relations between y , z , and x . It does this by stating that the relations are either necessary or sufficient or both necessary and sufficient conditions.

Since the criticism of functional explanations will depend on these logical relations, it is best to describe them before entering into an analysis of the model. To focus on these relations, let us simplify the model and assume that z , the functional requirement, is social maintenance. Let us also assume that y , the explanandum (what we want to explain), is a religious ritual, a particular social unit. We may then write out the following table of necessary and sufficient conditions.

1. Necessary conditions.

- a. The absence of social maintenance (z) entails the absence of the ritual (y).
- b. The absence of the ritual does not entail the absence of social maintenance.
- c. The presence of social maintenance does not entail the presence of the ritual, and
- d. The presence of the ritual entails the presence of social maintenance. Social maintenance (z) is then a necessary, but not a sufficient, condition for the presence of the ritual (y).

2. Sufficient conditions.

- a. The absence of social maintenance does not entail the absence of ritual.
- b. The absence of the ritual entails the absence of social maintenance.
- c. The presence of social maintenance entails the presence of the ritual.
- d. The presence of the ritual does not entail the presence of social maintenance. The presence of social maintenance (z), then, is a sufficient condition for the presence of ritual (y).

3. Necessary and sufficient conditions.

- a. The presence of social maintenance entails the presence of the ritual.
- b. The presence of the ritual entails the presence of social maintenance.
- c. The absence of social maintenance entails the absence of the ritual, and
- d. The absence of the ritual entails the absence of social maintenance.

With the above table in hand, we can move to an analysis of the logic of functional explanations. The model I shall use for this analysis is taken from Hempel's now classic essay on the logic of functionalism.⁹ I have modified it only slightly, using Spiro's symbols to bring out how religion is explained functionally. I remain convinced that functional theories of religion as presently used in the human sciences can be reduced to this analysis.

Since this assertion has been misunderstood by some of my colleagues, I believe a brief clarification is necessary before the analysis is presented. The first problem arises because of my use of Hempel. Since Hempel is usually identified as a logical positivist, I must also be a logical positivist when I use his analysis of functionalist explanations. This is not bothersome because the accusation is similar to phenomenologists calling scholars they disagree with reductionists.

What is bothersome is a second accusation; that since Hempel's nomological-deductive model for scientific explanations has been devastated along with the logical positivist notions of observational/theoretical language and their relation to correspondence rules, I am using a model that is out of date and irrelevant.¹⁰ Let me just say that I am fully aware of the withering attack on logical