

There remains the third phase of empirical method, and its aim is the understanding of concrete situations. It might appear to be superfluous. Once one knows all the laws, one has only to combine them in proper fashion to reach the understanding of any concrete situation. Now this contention is true if it merely claims that knowledge of all the laws enables one in principle to understand any concrete situation. But possibility in principle is one thing, and achievement in actual fact is another. To such achievement there are insuperable obstacles, and a consideration of them will reveal the significance and necessity of the third phase.

First, one cannot combine the laws relevant to a given situation without exact knowledge of the situation. But one cannot transfer concrete situations into a laboratory and set about the relevant measurements and determinations that there are possible. Concrete situations remain where they are.

Secondly, even with ideal laboratory conditions one deals not with concrete but with typical situations. One measures, but one does it over and over, and the final result is correct up to a limited number of decimals and it is reached by selecting the probable mean of the actual measurements. One experiments, and the experiment yields its results; one does it again, and the results are the same, approximately. One experiments under controlled conditions, but the control is the fruit of knowledge and skill, and knowledge and skill are variables subject to some tests that, however, are not exhaustive. One experiments, and the results have to be interpreted; but the interpretation is not in terms of the precise materials and instruments used; it is in terms of theoretically specified materials and ideally, even schematically, constructed instruments.

Thirdly, let us waive all this, and suppose that the concrete situation is fully determinate for us. Still the understanding of the situation is a matter of relating it by the proper combination of laws to other situations. But the other situations are plainly indeterminate; through adjacent situations they extend through the whole of space; through prior situations they reach backward indefinitely in time; through future situations they extend indefinitely into the future. No doubt, all these other situations could be determined exactly, if a given situation were fully determinate and we knew all the laws. But how are we to determine whether or not we know all the laws, in particular, the laws relevant to related situations? Are we to presume that the laws between concrete situations are just combinations of laws determined by considering specific change as specific? Are there not laws peculiar to the concrete and overlooked as long as investigation concentrates on the laws of specific change?

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