

A note on "theory"

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A "theory" is defined by the *Concise Oxford Dictionary* as a "supposition or system of ideas explaining something, esp. one based on general principles independent of the particular thing to be explained." This clearly hinges on the meaning of "explain" - which is defined as "make intelligible".

According to Russell (1961, p. 52), the word theory is derived from an Orphic word which can be translated as "passionate sympathetic contemplation"; at first sight this is very different from the modern meaning but in fact it fits well with the ethos of, for example, the research method of participant observation.

Theory is often contrasted with "facts" and what happens "in practice". A fact is "a thing that is known to have occurred, to exist or be true", and "in practice" means "when actually applied, in reality". A theory is thus a system of ideas which *explains* something, or makes it *intelligible*, whereas facts and practice are simply the reality of what happens. (However, the physicist, Sir Arthur Eddington, dismisses the common assumption that facts are more certain than theory in physical science: "You should never believe any experiment [fact] until it is confirmed by theory" - quoted in *The Guardian*, January 7, 1993).

To give a concrete example, it might be a fact that a firm's sales have increased by a particular amount. A theory to explain this might be the assertion that the increase in sales is the result of improved quality in the products sold. The system of ideas which forms this theory is the fact that quality levels have improved, and the assertion that, in these circumstances, improved quality is likely to lead to increased sales. The theory is useful because it gives us a means of predicting when sales are likely to rise and so of increasing sales in new situations. A list of facts and of what happens in practice may be interesting; however to predict and control in new situations, theory is needed. This reason for going beyond facts and a simple description of practice, to theory, seems, to me, unanswerable.

According to Quinn, Mintzberg and James (1988) "theories are useful because they shortcut the need to store masses of data ... it is easier to remember a simple framework ... than to remember every detail you ever observed" (p. xviii). However, this misses the most important function of theory which is to help cope with *new* situations which you have not yet observed.

However, even apart from this reason for using theory as a means of going beyond the given facts, theory is necessary for defining the "facts". The above example depends on a way of measuring quality. This can be done in various ways - by reported defect rates, by customer satisfaction, or by some other means. Obviously, we need a system of ideas defining quality before we can even claim to detect an increase. The required theory might be formal academic theory, or it might be provided by "common sense". But in either case it is still a theory. The same is true of many other "facts": profitability can only be defined by reference to theories of accounting, facts about organisational structures can only be defined by reference to the appropriate theories. Even a simple questionnaire designed to elicit an attitude or an opinion depends on the theory that people give true (or valid or meaningful) answers to such questions. (This is often a rather dubious theory.) In all these cases the facts are defined by the underlying theory. The facts cannot even exist without the theory, and

different theories are likely to give rise to different facts. Whether this applies to all facts, or just some facts, is an issue which need not concern us here. The important thing is that it applies to many facts of interest to management researchers.

This means that the use of theory is inevitable and it is clearly important to use the best theory for the purpose in hand.

Types and levels of theory

Part of the difficulty in discussing theory is that the single term encompasses a very broad range. Examples of theories are the simple assertion that an improvement in quality led to an increase in sales (see above), theories about how quality can be measured and monitored, mathematically based theories such as the model for calculating the economic order quantity, the theory that specifying objectives clearly increases the chances of a project succeeding, the theory that there are particular categories of organisation, and, on a much more ambitious scale, the theory of total quality management (Oakland 1989). These are all theories in the sense above. They are all useful for defining the facts and for providing explanations about, for example, what to do in given situations.

Theories may differ in their source: some come from academic publications, while others may be derived from common sense. They differ in their level of generality. They differ in the sense in which they “explain” things: sometimes the explanation leads to a prediction (following the TQM way will lead to improvements in quality which will lead to increases in sales); sometimes it merely categorises the possibilities - which is an essential prerequisite for understanding and managing a situation. Theories may be stated in formal mathematical terms or in informal terms, which allow or even encourage differing interpretations. Theories differ in many other ways. But they are all theories.

The problem for the researcher is that of choosing, creating, or adapting, the best theory for the purpose in hand. It is important to investigate all the possibilities and make the selection carefully.

Theories may be wrong or inadequate

Scientists tend to think of the current theory as the “truth”. However, even the history of physical science indicates that this is likely to be a very limited perspective: there are many old “truths” - the earth being the centre of the universe, atoms being unsplitable, matter indestructible - which have been replaced by contradictory new “truths”. In management, few, if any, theories command respect from everyone. Theories of management are much more obviously fallible and for this reason should not be taken too seriously.

Conclusions

What is the relationship between theory and management research? I think that the discussion above demonstrates that:

- 1 Theories are necessary as a background for a research project to define the concepts and terms in which the research is phrased. Denying this does not make it less true; it just means that the implicit theories underlying the research will be unacknowledged, uncriticised, and, very likely, quite unsuitable for the job.
- 2 The only useful aim for research is to make a contribution to theory, since a simple list of facts or practices is of little use. The following seem to me to be the possible types of contribution:

- (a) Demonstrating that an existing theory applies to a particular situation and showing how it can be used in this situation: for example an application of TQM theory X to Organisation Y.
- (b) Modifying, elaborating or extending an existing theory: for example demonstrating that TQM theory X, when applied to organisations of type Y, needs modifying in a particular way.
- (c) Creating a new theory.
- (d) Demonstrating that an existing theory is wrong or useless.

(The reader should bear in mind that the theory presented here, about the role of theory in management research, is as fallible as any other theory and should be not accepted uncritically. It represents my analysis; others may disagree.)

References

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