R2: Daniel Doh on Concepts and Typologies

Interview on Youtube: https://www.youtube.com/watch?v=f2Eh0chWdPM

My name is Daniel Doh, a research fellow with the Centre for Social Policy Studies, at the University of Ghana. I want to talk concepts and concept formation. Generally, when we conduct research, one of the things we seek to do is communicate to an audience. And what is the essence of communication if it is not understood? It therefore means that whenever we communicate knowledge through research to an audience, there is a need for us to ensure that, whoever reads a piece of research, understands everything they are reading. And one of the ways of which we can achieve this is through concept formation.

What are concepts? How useful is concept for research?

Of course, concepts are generally the words, names, ideas, symbols we use in our everyday research. There are several concepts that we use, especially in social science research, biomedical research that do not really make meaning to so many people and leave a lot of room for controversies. So there is a need for us to properly clear these controversies around the concepts, the words we use, the terms we use, the names we use, the labels we use.

Every concept, be it a name, be is a label, be it an idea has a structure and has a composition. Normally every concept operates at its basic level. And then beyond the basic level, it is dimension and after its dimension is its attributes. Now at the basic level is where we get ideas, we get names and we get terminologies that we seek to explain. They are normally the key idea that is driving our research. And these are normally found in the questions we ask, in the hypothesis we form. And it can be, a concept based on our outcome variable or our causal variable or factor, if you want to name it that way.

So once we pull out these concepts, we need to clarify the concepts. For two reasons. One, so that we can be able to communicate effectively with the concept. Two, so that we can be able to clearly mark out the key dimensions and the indicators of these concepts, for the purposes of measurement. Let’s take for example, a very basic concept in medical research. Let’s say body mass. Body mass, theoretically, we all understand, but it can mean different things to different people depending on the way we conceptualise it. So if we assume that body mass is the key concept, then theoretically the dimensions of body mass are generally the issue of weight and the issue of height.

But how can we operationalise this in our research? What does body mass mean to us when we conduct our research? How can we measure this body mass? So if we assume that, yes, the dimensions are weight and height, now: how do we measure weight and height? That brings us to the indicator level. But this is an extremely simple concept. There are more complex concepts that we use every day.
The point is, whichever concept we use as researchers, there is a need for us to make the understanding quite clear for everybody who has access to that piece of information to understand especially within the medical research field. A lot of concepts a lot of terminologies are used and these are very difficult to really understand by many audiences. Thus, we need to step back a little bit as researchers and take a critical look at these concepts.

First of all, the question we need to ask is: How is the theoretical explanation of this concept in terms of its basic usage as we know it? And then two, is to ask ourselves: How do we define this concept based on the level of information available to us? Which aspect of the concept is relevant for us for this theory? How do we measure the aspect we have talked about? So, clearly we can see that we cannot make meaning of things ourselves, if we do not invest some time in understanding them, let alone making those meanings known to other people.

So, whether you are a social science researcher or you are a medical science researcher, you cannot do away with the value of concepts. These are the tools for communication. These are the building blocks for the theories that we come up with. These are the indicators, these are the things that show us what to go and measure. And so the value of concepts in research cannot be over-emphasised.

The time has come. Unfortunately over years, many people use words and concepts loosely, without paying attention to how they are used in context to theory and context to empirical evidence.

The time has come for all of us, as researchers, to pay more critical attention to how we use words, concepts, labels, ideas in our research so people can understand us.