

Developing understanding

I'm not sure how best to go about sharpening up this understanding. I suspect that different methods work for different people. Also, I am usually reluctant to offer advice; I suspect that it is seldom welcomed and almost never acted on. But as the term *first principles* has confused a number of people in the past I am going to make a few suggestions. You are at liberty to accept or ignore them, as you please. Here are some approaches which seem to work for me.

- I try to work from the understanding I already have. I think first, then read later. I use other people's ideas only to challenge and sharpen up the conclusions I have already reached. When I am trying to think my way through some issue I deliberately avoid reading anything directly relevant until I have substantial ideas of my own.

This has the fringe benefit that I then have a better idea what to read. I find I can read with more understanding and recall because I already have a framework of my own against which to evaluate what I read. I can be more evaluative of what I read because I already have an understanding of the material.

- I try to remain critical of my own ideas. I keep asking myself "Why do I think that is true?", and "Under what conditions is that not true?". *In my reading and work I try to keep especially open to contrary evidence.* (I've been told that Charles Darwin used to carry around a notebook to write down evidence contrary to his theories, on the grounds that he would otherwise forget it. A salutary approach.)

When I find contrary evidence or ideas, I look for ways of rephrasing the issue so that I keep the best of my own ideas, but integrate with them whatever I find most useful about other ideas. I try to keep asking myself "Which of these ideas don't work?", or "In what situations can't these ideas be applied?".

- I look for apparent contradictions and paradoxes, because these are indicators that understanding is inadequate. When I find them, I try to postpone taking a position on them until I have come to some sort of understanding of how each of them could have arisen. Then I look for a resolution.
- I look for opportunities to apply the ideas. Conversely, I look for ideas implied by the practices that I and others use in their interventions and everyday behaviour. (Bandler and Grinder developed NLP by observing talented therapists at work. NLP therefore consists of the theories implied by the behaviour of such people as Fritz Perls, Virginia Satir and Milton Erikson.)
- I try to express ideas in several different ways, using different words, and using diagrams and examples. This helps me guard against being misled by verbal formulas which have little real meaning.

- When people disagree with my ideas, I try not to react by justifying my ideas. (I don't always succeed.) I try to find some way of stating the issue that makes both our views correct. When this is not possible, I try to be open-minded about their ideas, which may turn out to be more useful than mine. At the same time, I don't abandon an idea just because someone (or even everyone) disagrees with it.
- I try to remember that all theories are simplifications, and therefore for some purposes over-simplifications. A good theory is a useful simplification. This means that a theory which is good for one purpose may be quite inappropriate for another. Therefore I pursue information and evidence which tells me something about the "boundary of application" of a theory or model.
- Above all, I try never to treat an idea as if it were incapable of refinement. I accept it as the best current approximation that I know, while I keep working away at it looking for improvements. I am not upset by loose ends: they are the starting point for further improvements. I strongly suspect that a theory with no loose ends has lost contact with reality.

The important part of all this, I suspect, is to remember that theories are not reality.

And while we're at it, a word about theory (and ideas and concepts and principles)...

The nature of theory

In *Zen and the art of motorcycle maintenance* Pirsig uses a motor-cycle engine as a symbol for reality. At one point, he says that if he sufficiently understands how the engine works, he can dissect out a cross-section which reveals the part of the workings to others. But, he also points out, in doing so he denies the viewer the infinite number of other cross-sections that are possible. If I understand him (he writes at many different levels) he is using each cross-section as representing a theory. Each is valid. Each best reveals something different about the complete engine. (And notice that, to reveal the dynamics, it must be a working cross-section.)

In the words of the general semanticists like Korzybsky and later Hayakawa (and more recently the writings of NLP practitioners), the map is not the territory. For map, read theory; for territory, reality. Different maps, each appropriate, serve different purposes for the same territory. No map is complete. And since territories often change, maps are frequently out of date.

Assessment

I find it hard to gauge understanding. There is no real way I can get into your head. If you're at all typical in this respect, what you succeed in communicating may be a poor reflection of your real understanding. But there are some things that seem to indicate,

even if roughly, the depth of understanding. Here are some questions I ask myself when I mark assignments...

- *Has she said it in English rather than jargon?* Then it's more likely to have arisen from real thought about the issue, rather than just be taken over from someone else.
- *Has she gone beyond surface explanations?*—for example, rather than settle for the first explanation that comes to mind, has she considered plausible alternatives and the evidence for and against them?
- *Does she understand it well enough to move easily between idea and example, between theory and practice?* Does she seem aware of the practical implications of her ideas? Can she draw theoretical generalisations from her experience?
- *Are her ideas intuitively satisfying?* Do they accord to some extent with the views of other writers who have tried to explain the same reality from similar evidence? Where they differ, does she recognise the difference, and can she account for it? (Different theories which address the same reality can be expected to have a lot in common, particularly when we dig beneath the surface labels to the guts of what they are saying).
- *Can she tell the difference between a conceptual issue and an empirical issue?* A conceptual issue is one which will yield to careful thought; an empirical issue requires research evidence for resolution. Most complex issues are both conceptual and empirical.
- *Can she tell whether or not a writer agrees with her?* In other words, can she see beyond the words that she and others use to the reality they depict? And can she recognise the use of the same words by different writers to conceal essentially different concepts: can she see beyond the labels?
- *Has she reached the point when she can recognise a non-issue, a false paradox, an apparent but not real conflict?* Does she recognise those paradoxes and contradictions that indicate an unresolved issue?
- *Does she understand it well enough to have selected the right parts of the right literature?* Many just search out literature merely by the labels it uses or by the disciplinary background of its authors.
- *Is she aware of the loose ends that will enable her to go further in her understanding?* Can she identify the most promising avenues of future enquiry?

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