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Possin, Kevin, "Commentary on “A Three-Dimensional Analysis of Definition with Bearing on Key Concepts” by Robert Ennis” (2016). *OSSA Conference Archive*. 26.

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Commentary on “A Three-Dimensional Analysis of Definition with Bearing on Key Concepts” by Robert Ennis: On Defining Critical Thinking

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1. Introduction

Robert Ennis does a service by reminding us of the importance of definitions and, specifically, the importance of defining ‘critical thinking.’ But in the process, he seems to lose sight of the fundamental kind of definition, viz., what Copi (1998) calls “theoretical definitions,” and of a criterion for a good definition. Ennis’s discussion seems to meander a bit because of this. Let me first review some of the kinds of definition in light of this and make my critical comments about Ennis’s discussion in light of that.

2. Definitions

I take it that the primary function of language is to represent and communicate. So the primary function of definitions is to do likewise, in the form of *theoretical* definitions, in which the definiens takes the form of an answer to a “What is...?” question, as when Socrates asked, in the *Theaetetus*, “What is knowledge?”. The definiens constitutes the essential properties of the definiendum—its nature—its necessary and sufficient conditions—what makes it what it is. The definiens is the core recipe for the definiendum. One need not be a Platonist about all this, however. For example, *homo sapiens* have certain characteristics, as detailed by Linnaean Taxonomy, but that is not to say that that set of characteristics was waiting in the heavens for us to instantiate.

Sometimes theoretical definitions are the result of conceptual analysis, done from the armchair, and sometimes one must get up out of the armchair and do some lab work—expertise is required. It is by virtue of people’s differing degrees of expertise that we often get a difference between a theoretical definition and a *reportive* definition, the latter being merely a description of what laypeople commonly mean by the definiendum, which is often recorded in a dictionary of common usage (albeit, there is often some lag time between these two, hence those who also distinguish *lexical* definitions, as a separate kind).

While the *goal* of a theoretical definition is to detail the nature or necessary and sufficient conditions of the definiendum, often this is an *ideal* that is in principle impossible to achieve. This was Wittgenstein’s point in the *Investigations* (1953, §§66-7)—very few concepts lend themselves to an analysis consisting of necessary and sufficient conditions. Most concepts, and the terms representing them, are *vague*, e.g., “bald” and “game.” For baldness, there is no magic

number one hair less than which makes one bald; likewise for “heap,” there is no magic grain of sand the addition of which makes a heap. And for games, there are only family resemblances among them—groupings or “clusters” of features that are shared by some but not all—features that, if shared by *all*, no longer do any real work in distinguishing games from other kinds of activities. This is simply what it *is* to be vague, which, ironically, implies that ‘vague’ is one of the few *non-vague* terms, since the necessary and sufficient condition for vagueness is the *lack* of necessary and sufficient conditions.

Just because a concept or term is vague, however, does *not* entail that it is *subjective* and up for grabs as to how it is to be used—just the contrary. Clear-cut cases of vague concepts are just that—clear cut. Michael Jordon is clearly bald, the crew from ZZ Top is clearly not, and I am a fuzzy case—in principle indeterminate—at least for a while yet.

But upon learning that most of our concepts and corresponding definitions are vague, too many people have misunderstood this to mean that those concepts and definitions are *subjective*, thereby adopting the Humpty-Dumpty view that words mean *whatever* users intend them to mean (Carroll, 1871). This gives rise to the *abuse* of *stipulative* definitions. Instances of this that are of special interest to us are the arbitrary ways ‘critical thinking’ has been defined, e.g., so absurdly broadly that any thought or any thought about a thought (i.e., metacognition) constitutes CT. With this view comes the complete lack of recognition of expertise in CT, since, as with all subjective matters, all opinions are equal—e.g., there is no expert on whether or not strawberries taste good. This explains why the director of my university’s general-education program said to me, “Who died and made *you* king of critical thinking?” as I proposed criteria for courses offered in the program’s CT category. My university, then, naturally went on to maintain that *all* its courses are CT courses “by definition.”

In a sense, every term introduced into the language is given an initial stipulative definition. That’s fine. But once a term takes on a shared use, *redefining* it so as to stipulate a different meaning is highly suspicious, unless one provides ample reason for the redefinition and informs fellow language users of the change—for example, when a specific dollar amount (*within* the fuzzy area) is stipulated as the “poverty line,” so as to be able to implement a social welfare policy (what some would call giving a “precising” definition or an “operational” definition of ‘poverty’).

A special case of the abuse of stipulative definitions is when people use *persuasive* definitions to support their conclusions. Persuasive definitions are produced by *adding* values to the definiens that are *not* necessary conditions or *omitting* values that *are* necessary conditions, thus enabling one to derive one’s normative conclusion “by definition.” For example, it’s easy to conclude that abortion is unethical if you define it as the *murder* of an innocent unborn person.

A good definition, besides doing its best to be neither too broad nor too narrow, should facilitate one’s understanding of the definiendum. This *educational* criterion prohibits the likes of circular definitions, e.g., defining ‘bachelor’ as one who instantiates bachelorhood. It also requires that one use more elementary concepts in the definiens than in the definiendum, thus obliging us to tailor definitions as best we can to the background knowledge of our audience—to put things into “small words.” For example, Ennis’s definition of ‘argument,’ as “an attempt to justify a position,” might fail in this regard: People probably have a better initial understanding of what an argument is than what it is to “justify” a position.

And with that, I guess I have finished my preparatory remarks on definitions and have begun my critique of Ennis’s discussion.

3. Critique re. definitions

Regarding his various “forms” of definitions, I really don’t see much need for most of them:

Off hand, I can’t think of a single theoretical definition that’s *not* “classificational.” And they don’t seem to be restricted to *nouns*, e.g., to argue is to offer reasons to believe that a statement is true.

“Equivalent-expression” definitions often fail the educational criterion, as with Ennis’s example of defining “bias” in terms of “prejudice.” They also permit mere co-extension to pass for definition, as with defining *homo sapien* as the only mammal with a normal body temperature of 98.6 degrees Fahrenheit—even though the latter is a reliable indicator of the former (assuming that it’s true, and I think it is), it is a deplorable definition.

“Range” definitions just acknowledge those many times when theoretical definitions cannot in principle achieve their ideal of providing necessary and sufficient conditions. This is more the rule than the exception: e.g., even with bachelor, defined as an adult unmarried male—the vagueness of adulthood makes the definiens vague.

The nature of a “positional” definition is unclear to me: At times, it appears no different from a theoretical definition that one uses to simply draw a conclusion, as with Ennis’s example of inferring that Pluto is not a planet, in light of the International Astronomical Union’s 2006 definition. Ennis’s other example, of defining marriage as between a man and a woman, is accounted for as a stipulative definition, without the need for positing another kind of definition.

“Operational” definitions seem to be a distinct kind; however, Ennis seems to equivocate in his analysis of them: between 1) their originally proposed function of *reducing* a theoretical object, event, or state of affairs to a set of measureable inputs and outputs and 2) a criterial (*non*-definitional) function of using that set of measureable inputs and outputs as merely *indicating* a theoretical object, event, or state of affairs.

4. Critique re. definitions of CT

I think I’m in general agreement with Ennis’s notion of CT, which he calls “mainstream” and which he claims is described in various ways by his 14 examples of definitions of CT. I am uncertain, however, whether it is so mainstream now or whether it has been relegated to the backwaters. There are so many advocates of the minimalist subjectivist view of CT and the rhetorical view of CT that we might well be in the minority.

That is why it is so important to make one of the necessary conditions of CT quite explicit in one’s definition, viz., the use of *reasons as evidence* to support one’s beliefs, values, and actions. It is this that distinguishes CT from mere *metacognition*, which is mere value-clarification and mere self-reflection on one’s beliefs and intentions. And that is why it is also so important to make *another* necessary condition of CT quite explicit in one’s definition, viz., *the goal of truth and avoidance of error* in the formation of arguments, beliefs, values, and action plans based on one’s reasons. It is this goal that keeps CT distinct from *rhetoric*, which has the goal of merely persuading others into accepting conclusions and adopting beliefs, values, or actions plans for *whatever* reasons. [Note that most of the exemplary definitions Ennis quotes are somewhat ambiguous in this latter respect.]

By the way: Those advocating the minimalist subjectivist view of CT are often quick to counter that they are fine with CT’s truth-conducive goal, because *what, after all, is truth other*

than mere opinion? It's all a matter of taste, individual or collective! When shown how self-contradictory that position is, they proudly quote Whitman (1855/2009): "Do I contradict myself? Very well then I contradict myself, (I am large, I contain multitudes)." To avoid getting sucked into their infinite loop of ignorance at this point, it's best to just walk away instead of explaining how this *too* is self-refuting.

Primarily though, I have some qualms about the concept-conception distinction that Ennis thinks is so helpful in understanding definitions.

Concepts, as mental representations, can be quite coarse-grained, as with a small child's ability to identify the shape \triangle (which *we* call 'triangle') and distinguish it from other shapes. But concepts can be very fine-grained—as fine-grained as the propositional attitudes in which they serve as representational content. For example, one can believe that \triangle is a *trilateral* closed figure without being able to believe that \triangle is a *triangular* closed figure, for lack of the component concept "angle." The intensionality of propositional attitudes surpasses not only co-extension but also logical equivalence. One option *might* be to say that these are different "conceptions" of the single concept we call 'triangle.' I will argue that this is not a viable option with the concept of CT, however.

Differences in concepts of CT can be quite embedded and hidden from view in one's definition. Take for example my definition, which Ennis has mentioned: "The practice of identifying, having, and giving good reasons for one's beliefs, values, and actions, given one's goals of truth and avoidance of error." Because this definition is only a one-liner, it naturally violates the educational criterion of a good definition until I explain what constitutes "good" reasons: Good reasons are analyzed in terms of *cogency*, which is analyzed by means of three conditions—the *acceptability* of premises, their *relevance* in their support of the conclusion, and their *sufficient* support so as to make their conclusion at least probably true. And these conditions are analyzed even further to better guarantee that they are understandable to the audience. For example, the acceptability condition requires that one have more reason to believe the premises are true than not to believe them. Now, what about the person who thinks that the only way to meet the sufficiency condition is by means of *deductive entailment*? Do they have a different *concept* of cogency and, in turn, of CT than I do? I'm inclined to say, yes; and I think Ennis would agree. What about the person who thinks that the only way of achieving acceptable premises is by means of the foundationalist theory of justification, while I advocate more of a coherentist view? Do *we* have different *concepts* of cogency and, in turn, CT? I'm still inclined to say, yes; but I think Ennis would say that this is a mere difference in *conceptions*. Differences in the *constituents* of cogency make for different *concepts*. Note, however, that those differences *need not make a difference* in our acquisition and exercise of CT skills in most situations (for example, when we still agree that cogent arguments must have acceptable premises). Differences certainly *would* make a difference, however, in the case of someone who thinks that *only* deductive arguments are cogent—for *them*, there would be no cogent scientific reasoning, which is contrary to the goal of CT, since so many of our beliefs, values, and actions are based on scientific reasoning.

I question the usefulness of Rawls's distinction between the *concept* of justice and its various *conceptions*. What he seems to call the concept of justice, as "the ethical distribution of burdens and benefits" or "treating cases that are alike in all relevant respects alike and treating cases that differ in relevant respects differently," is empty until one specifies what *ethical* is and what the *relevant respects* are. The theories of justice created by making those specifications are

not just “conceptions,” they are different *concepts* proposed as attempts to capture the *nature* of justice.

This saves us from questions about when a difference in definitions is enough to qualify as a difference in *concepts* as opposed to a mere difference in *conceptions*. Is the minimalist subjectivist (espousing the metacognition account of CT as mere thinking about one’s thinking) offering a different *conception* or have they crossed some penumbra to offer instead a different *concept*? By offering a *procedural* theory of justice, instead of an end-state theory, has Rawls offered a different *concept* of justice instead of a different *conception*? By offering *procedural* and *consensus* views of objectivity and truth, instead of views with *realist* commitments, have the pragmatist and the relativist, respectively, offered different *concepts* or merely different *conceptions*? I can’t see any non-arbitrary way of deciding. Luckily, I don’t have to, since *concepts* and *conceptions* seem to be one and the same thing.

The concept-conception distinction is especially misleading in the case of defining CT. This is because CT, just as “game,” is not a natural kind that stands still so as to lend itself to analysis. As we analyze the nature of games, by looking and seeing, as Wittgenstein would say, we find only multifarious features, coming and going, among what we deem to be games, creating only family resemblances among them. This is because what it is to play a game is an evolving *construct*, to which all of us are making installments and altering them as we go. This is illustrated with the help of Bernard Suits’s (1967) gallant attempt to refute Wittgenstein by defining playing a game as: “to engage in activity directed toward bringing about a specific state of affairs, using only means permitted by specific rules, where the means permitted by the rules are more limited in scope than they would be in the absence of the rules, and where the sole reason for accepting such limitations is to make possible such activity.” Even this definition has become too narrow, because it requires that playing a game is an *activity*, which would fail to account for “staring someone down,” which is considered a game by many. A group of people might also compete for who outlives the rest, under the rule that members can’t kill each other off. This too is construable as a game—it has a “winning” end state—but outliving is *not* an activity, it’s a process or state that one suffers.

This is why Ennis’s analogy to his house, of which there may be numerous more or less accurate descriptions, is quite misleading. We each have our own house that we have constructed to more or less fulfill our goals of providing shelter and privacy. If we have *other* goals, we might well construct very different structures. This is what seems to explain our different concepts (and corresponding definitions) of CT, and *whether they are even concepts or definitions of CT at all*, which hinge on whether one’s goal is the truth-conducive formation of beliefs, values, and action plans by means of reasons, as opposed to the goal of mere self-reflection with no normative assessment or the goal of the formation of beliefs, values, and action plans *in others*, again, with no normative assessment. The minimalist subjectivist’s concept, for example, as mere metacognition, is not even close to being CT. It is like a game with no rules, and that’s no game at all.

To complicate things even more, Ennis seems to equivocate on the notion of “conception.” For most of his discussion, the components of what he calls one’s conception of CT are construed as *essential* components. But he also has another sense of conception, as “a proposed plan for achieving the instantiation of the concept to at least some extent,” i.e., “specific things to teach” for enhancing students’ CT skills. For example, understanding formal and informal fallacies in natural language greatly facilitates—but they are *not* necessary conditions for—one’s

ability to correctly assess the cogency of arguments. I'm fine with such curricular suggestions; I would simply urge Ennis to find a different term than 'conceptions' of CT for them.

So concepts such as CT are quite fine-grained and individualistic, but that doesn't make them solipsistic: Think of two people each having their concept "game" consisting of the same cluster of properties *except* that one requires that a game be an *activity* and the other does not. They could very well spend decades agreeing on everything regarding games, until the case of staring someone down crops up—"while it might be competitive, it's not a game" says the one. The difference finally made a difference, *but hardly*.

What matters for us is that our definitions (and concepts) of CT help direct the enhancement of our cognitive skills and those of our students, so as to become more truth-conducive in our judgments, decisions, and actions. Definitions of CT with no hope of doing this, such as those focusing on mere metacognition or mere persuasion, are clearly outliers and do a disservice to everyone.

References

- Carroll, L. (1871). *Through the looking glass*. Retrieved May 9, 2016 from <https://birrell.org/andrew/alice/IGlass.pdf>
- Copi, I., & Cohen, C. (1998). *Introduction to logic* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- Whitman, W. (2009). Song of myself. In *Leaves of grass: The original 1885 edition* (pp. 1-64). Nashville, TN: American Renaissance. (Original work published 1855)
- Wittgenstein, L. (1953). *Philosophical investigations* (3rd ed.). New York, NY: Macmillan Company.
- Suits, B. (1967). What is a game? *Philosophy of Science*, 34(2), 148-56.