Methods of Analysis
Conceptual Analysis

Stephen Petrina (2016)

"Many researchers have thought that the first part of their job—
analysis of the concepts that are going to be studied—
could be done, or could be done better, without any help from philosophers."— Scriven (1988, p. 132)

Conceptual analysis is often used interchangeably with philosophical analysis or philosophical method. The sources of this sense of philosophical method are Descartes' *Discourse on Method* and Kant's *Critique of Pure Reason*, and their subsequent descriptions of the methods therein. For Descartes, analysis is for purposes of discovery *and* explication, encompassing divisive or reductive operations as well as combinatory operations or those normally associated with synthesis. Conceptual analysis is *not* analytic philosophy, diagrammatic ontology, formal analysis, content analysis, cultural analysis, discourse analysis, linguistic analysis (e.g., structure of linguistic meaning), or text analysis, although it may draw from methodological practices within each of these. Conceptual analysis is a means of clarifying or explicating and giving definition, dimension, and meaning to ordinary and obscure expressions (i.e., cultural, natural, or spiritual things, image, text, sound, etc.).

To analyze is to explicate. The verb "to explicate" means either to explain empirically or to provide an analysis of a concept (Meyers, 1966, p. 392).

In everyday connotations, conceptual analysis refers to decomposing or breaking down a concept into component elements. Semantic factoring or decompositional analysis is a helpful technique but by no means exhausts the method of conceptual analysis. Nor, as Ryle (1949/1951) says, should conceptual analysis reduce to "logical geography," even though this was generally the way he described his method: "To determine the logical geography of concepts is to reveal the logic of the propositions in which they are wielded, that is to say, to show with what other propositions they are consistent and inconsistent, what propositions follow from them and from what propositions they follow" (p. 8). Henceforth, conceptual analysts commonly referred to their practices as a cartography of concepts or process of mapping semantic space (e.g., concept mapping, mind mapping, etc.). Analogous practices include dimensioning and framing.

Conceptual analysis is complementary to data analysis and more specifically a technique of data analysis associated with practices such as grounded theory (GT). Glaser's (2001) distinctions between GT and Qualitative Data Analysis (QDA) are distinctions between conceptualization and description. Here, conceptual analysis emphasizes the creation or discernment of new concepts, or conceptualization, over the adoption of existing concepts, or description. The former requires "conceptual saturation" (p. 32) while the latter is "mere" "conceptual description." "Mostly the concepts denote little or nothing, are stereotypical, impressionistic and imprecise and are used for conceptual description," Glaser asserts. "The concepts can have grab, but usually equal the vagary of average descriptions" (p. 29). However, the best conceptualizations are empirical *and* descriptive while the best descriptions are empirical *and* conceptual.

1. Two questions are herein begged: What is a concept? *and* What is analysis?
    a. Locke, *An Essay Concerning Human Understanding* (1690) II.1, II.2:
        i. Idea is the object of thinking… Whence has it [the mind] all the materials of reason and knowledge? To this I answer, in one word, from *experience*.
            1. Instead of concepts, Locke refers to ideas. But the point of function or operation is made: ideas or concepts play a role in or shape cognition and thought.
    b. Hughes (1907): By concept I understand a meaning marked off by a symbol, which has always a constant significance, though amid the varying contexts which the symbol at one time and another suggests it may be hard to say what is the meaning which it always has. If the meaning change[s] then we have a new concept, not a changed one; for the new may be compared with the old concept. (p. 623)
        i. A concrete concept, I understand, is a concept of a particular object. (p. 624)
    c. Spindler (1908, pp. 685, 686, 687): What is a concept? It is like asking what is consciousness, and is just about as easy to answer simply and clearly. We all have conceptual experiences, but to disentangle and label and describe them is difficult. We may define concept as a class notion, a general idea, an idea of the qualities of a class, or, as Sully does, as the representation in our minds answering to a general term, etc., but all these definitions, upon careful definition and repeated introspection of our own mental processes, prove incomplete and misleading unless qualified… Concepts, then, are not confined to any one class of mental images. Careful introspection of self, and observation and questioning of others, will convince us that there are as many different concepts of any one class or kind of objects as there are people.
        i. The general notion [i.e., concept] is always, in a real sense, a new and a momentary construction, in the mental terms most characteristic to the individual. It is, as James shows, always new and different. The general notion is always, in a real sense, a new and a momentary construction, in the mental terms most characteristic to the individual.
    d. Ward (1919, p. 270): discrete constructions, for that is what concepts are.
    e. In *Dilemmas*, Ryle (1954) asserts a pragmatic definition:
        i. concepts are not things, as words are, but rather the functionings of words, as keeping wicket is the functioning of the wicket-keeper…. the functioning of a word interlocks with the functioning of the other members of the team for which that word is playing. One word may have two or more functions; but one of its functions cannot change places with another. (p. 32)
    f. Ryle then proceeds to define analysis:
        i. What is often, though not very helpfully, described as ‘the analysis of concepts’, is rather an operation—if you like a ‘synoptic’ operation—of working out the parities and the disparities of reasoning between arguments hinging on the concepts of one conceptual apparatus and arguments hinging on those of another. The need to undertake such

operations first makes itself felt only when some dilemma shows its horns. (p. 129)

g. Kaplan (1964, pp. 46-47): Since Kant, we have come to recognize every concept as a rule of judging or acting, a prescription for organizing the materials of experience so as to be able to go on about our business. Everything depends, of course, on what our business is.... A concept as a rule of judging or acting is plainly subject to determination by the context in which the judgment is to be made or the action taken. Within the context, there is also a range of possibilities as to the specific function the concept is to perform-for instance, relating directly to the perceptual cues that call forth a certain response, or serving to select which among several subordinate rules of action is to be brought to bear (the descriptive concepts, "explanatory" ones, and others).
h. Klausmeier & Hooper (1974): ordered information about the properties of one or more things— objects, events, or processes— that enables any particular thing or class of things to be differentiated from and related to other things or classes of things. p. 18)
i. Barrow (1986): A concept is an idea or thought, more precisely the abstraction that represents or signifies the unifying principle of various distinct particulars. (p. 47)

2. What is conceptual analysis?
    a. Garyfallia (1980) reiterates Ryle and defines conceptual analysis as "a precise process of examining parts, operations of and the interrelated whole of a thing" (p. 33).
    b. Jackson (1998) defines the method in epistemological terms to make a point of ethics and metaphysics: "conceptual analysis is the very business of addressing when and whether a story told in one vocabulary is made true by one told in some allegedly more fundamental vocabulary." (p. 28)
    c. Frydrych (2017, p. 44): you decompose it [concept] into its constituent parts until you are left with more (if not irreducibly) basic concepts.
        i. (pp. 45-46): Conceptual analysis often proceeds by trying to distinguish what is necessary to a concept from that which is merely contingently associated with it…. it is not true that all philosophical analysis aims to focus on, let alone capture, a concept's necessary features. Sometimes, and particularly in legal philosophy, there is great value in examining the important yet conceptually contingent.
        ii. (p. 46): Whether for the sake of rendering a concept more perspicuous, or as part of an effort to advocate for its replacement with a more precise one, conceptual analyses often levy definitions. Not only are there different kinds of definition, but philosophers also claim to be able to define words, concepts, and things (Gupta, 2012). A *philosophical* or "*analytic*" definition aims to provide a set of necessary and sufficient conditions for a concept. These specify the concept's (as opposed to a word's) extension.

3. Kant's methods
    a. Kant, *Prolegomena* (1783/1912, AA IV, 276 note): The analytical method, so far as it is opposed to the synthetical, is very different from that which constitutes the

essence of analytical propositions [i.e., is very different from an aggregate of analytic propositions]: it signifies only that we start from what is sought, as if it were given, and ascend to the only conditions under which it is possible. In this method we often use nothing but synthetical propositions, as in mathematical analysis, and it were better to term it the regressive method, in contradistinction to the synthetic or progressive. (p. 27)

   b. A principal part of Logic too is distinguished by the name of Analytics, which here signifies the logic of truth in contrast to Dialectics, without considering whether the cognitions belonging to it are analytical or synthetical. (p. 27)

4. Conceptual analysis is commonly criticized for its limits, i.e., one who adopts this method cannot give anything more than a *conceptual* analysis of reality or texts.
   a. Common criticisms date back to 19th century practices of some of the Kantians, who developed
      i. a considerable acuteness, and a most astonishing facility in the finest conceptual analysis, —a facility which often, it must be admitted, leads to worthless artificialisms and mere verbal polemic. Naturally, this manner of philosophizing implies an excess of definitions, distinctions, and divisions, which are frequently arbitrary and not in accordance with general usage, but which, nevertheless, are to be received as the only ones which can give significance to the expressions in question. (Adickes, 1894, p. 47)
5. Conceptualization
   a. Nietzsche, *Will to Power*, (1885)
      i. What dawns on philosophers last of all: they must no longer accept concepts as a gift, nor merely purify and polish them, but first make and create them, present them and make them convincing. Hitherto one has generally trusted one's concepts as if they were a wonderful dowry from some sort of wonderland: but they are, after all, the inheritance from our most remote, most foolish as well as most intelligent ancestors. This piety toward what we find in us is perhaps part of the moral element in knowledge. What is needed above all is an absolute skepticism toward all inherited concepts. (sec. 409)
   b. Glaser (2001): Most generally descriptions run the world and conceptualization runs a distant second. Most description by average people is imprecise, vague, inarticulate, uninformed and filled with normative views and local idiom and analyses. Various professionals are trained in description: lawyers, doctors, journalists, law enforcement, and so forth. Social psychological researchers try for accurate description with methodological techniques. However well they succeed in accuracy, it is still description. QDA is a natural extension of people's propensity to describe. (p. 29)
6. Conception
   a. Bowen (1877, pp. 19-20): Conception is the act of grasping together two or more attributes into the unity of thought which we call a single concept.
   b. James (1890, p. 461): It [conception] properly denotes neither the mental state nor what the mental state signifies, but the relation between the two, namely, the *function* of the mental state in signifying just that particular thing. It is plain that

one and the same mental state can be the vehicle of many conceptions, can mean a particular thing, and a great deal more beside.

c. Preuss (1911, p. 210): [Conception refers to] both the act or process of forming an idea or notion of a thing, and the impregnation of an ovum.
d. Chisum, *Patents* (1990, s. 10.04): Conception is the mental formulation and disclosure by the inventor of a complete idea for a product or process. The idea must be of specific means, not just a desirable end or result, and must be sufficiently complete so as to enable anyone of ordinary skill in the art to reduce the concept to practice.
e. Nash & Rawicz, *Intellectual Property Rights* (2001, p. 32): the complete performance of the mental part of the inventive act... It is therefore the formation, in the mind of the inventor, of a definite and permanent idea of the complete and operative invention.

7. Procedure of conceptual analysis
    a. Garyfallia (1980): The major techniques used in this approach to concept analysis are [Wilson, 1963]:
        i. Description and analysis of model cases, or analysis of empirical events
        ii. that can be said by most observers to represent an instance or occurrence of the abstract concept;
        iii. Description and analysis of alternative cases that represent the occurrence of contrary, related and borderline concepts;
        iv. Review of existing literature to extract explicit or implicit meanings;
        v. Extraction of provisional criteria that may be used in naming the occurrence of the phenomenon;
        vi. Examination of such factors as social contexts, underlying anxieties, and application of varying means in different social situations.
            1. The techniques are not necessarily used in step-by-step fashion; rather, they tend to emerge simultaneously once the initial steps of analysis have been undertaken. Thus the analyst may propose model cases, define and illustrate these model cases using existing literature, and explore possible criteria in the same process. (p. 34)
    b. Ho (2013):
        i. Select a concept.
        ii. Determine the aims or purposes of analysis.
        iii. Identify all uses of the concept.
        iv. Determine the defining attributes
        v. Identify a model case.
        vi. Identify borderline, related, contrary, invented, and illegitimate cases.
        vii. Identify antecedents and consequences.
        viii. Define empirical referents.
    c. Petrina (2017):
        i. Dilemmatic Thesis: What is the dilemma or problem with current meanings of the concept?
        ii. Semantic Resolution: What are the various meanings (common, obscure, etc.) resolving in or through the concept over time? At what resolution?

iii. Dimensioning and Mapping: What are the various dimensions of the concept that give it definition? Semantic factoring?
iv. Referential Framing: How is the concept framed or referred for consumption, use, and travel through space and time? What grounds or abstracts the concept for everyday use and understanding?
v. Representational Provision: How to represent, think, or understand otherwise about this concept? Was a new concept provisionally discovered or developed?

1. **Constructs**
    a. **What is a construct?**
        i. Kaplan (1964, pp. 55-56): *Constructs* are terms which, though not observational either directly or indirectly, may be applied and even defined on the basis of the observables.... Constructs, indeed, might be regarded as notational terms of sufficient importance and familiarity to acquire substantive import. It is for this reason that they are sometimes called "auxiliary symbols" or "intervening variables".... Reichenbach uses the label "abstracta" for what I am calling constructs. They are definable at least in principle by observables, though in practice we may give them only partial and perhaps shifting anchorage in concreta.
2. **Concepts are Constructs and Constructs are Concepts**
    a. Machlup (1960, p. 577): construct is a concept designed for purposes of analytical reasoning that cannot be adequately defined or circumscribed in terms of observables or in terms of operations with recorded data derived from observation.
    b. Kerlinger (1973, pp. 31-32): A concept is a word that expresses an abstraction formed by generalization from particulars. A construct is a concept. It has the added meaning, however, of having been deliberately and consciously invented or adopted for a special scientific purpose.
    c. Keith & Ender (2004, p. 22): a concept is a construct created from human perceptions.