

# **Social science concepts: a user's guide**

Errata

Version 1.0

Gary Goertz  
Dept. of Political Science  
University of Arizona  
Tucson, AZ 85721  
email: [ggoertz@u.arizona.edu](mailto:ggoertz@u.arizona.edu)

June 16, 2008

This document provides a list of *substantive* errata for the book. This typically means an error or problem of some importance to the substance of the discussion.

### **Erratum (1)**

In the discussion of figure 2.2 says that one should use the “square root” to model the adjective “very” and that one should use the “square” to model the adjective “somewhat.” These should be flipped: one should use the square for “very” and the square root for “somewhat.” Figure 2.2 shows this correctly.

### **Erratum (2)**

Following a discussion with David Collier I think the whole section in chapter, pp. 80–83, dealing with Collier and Levitsky should be rewritten. The text below then replaces that section. Note also that the caption of figure 3.1 should read “Ladder of generality versus diminished subtypes” as in the original figure in Collier and Levitsky.

### **Concepts/–adjectives**

Collier and Levitsky specifically deal with what happens when you “subtract” an attribute from a concept, i.e., concepts/–adjectives, as well as adding one. Of particular importance is their concept of a “diminished subtype.” It is worth citing them at length:

An alternative strategy of conceptual innovation, that of creating “diminished” subtypes, can contribute both to achieving differentiation and to avoiding conceptual stretching. It is a strategy widely used in the literature on recent democratization. Two points are crucial for understanding diminished subtypes. First, in contrast to the classical subtypes discussed above, diminished subtypes are not full instances of the root [basic level] definition of “democracy” employed by the author who presents the subtype. For example, “limited-suffrage democracy” and “tutelary democracy” are understood as less than complete instances of democracy because they lack one or more of its defining attributes. Consequently, in using these subtypes the analyst makes a more modest claim about the extent of democratization and is therefore less vulnerable to conceptual stretching.

The second point concerns differentiation. Because diminished subtypes represent an incomplete form of democracy, they might be seen as having fewer defining attributes, with the consequence that they would be higher on the ladder of generality and would therefore provide less, rather than more, differentiation. However, the distinctive feature of diminished subtypes is that they generally identify specific attributes of democracy that are missing, thereby establishing the diminished character of the subtype, at the same time that they identify other attributes of democracy that are present. Because they specify missing attributes,

they also increase differentiation, and the diminished subtype in fact refers to a different set of cases than does the root definition of democracy. (Collier and Levitsky 1997: 437-8)

The key thing that Collier and Levitsky stress is that with a diminished subtype certain attributes of democracy are missing, for example, the government does not respect civil liberties, making it an illiberal state. The difference between concepts+/adjectives and concepts/-adjectives appears to be that the concept+/adjectives concept adds new characteristics or dimensions while the concept/-adjective concept changes the value from 1 to zero on an existing dimension. To formulize slightly let's assume the concept of democracy has three defining attributes or dimensions,  $X_1$ ,  $X_2$ , and  $X_3$ , and for simplicity that these are necessary and sufficient condition for country to be considered a democracy (this is not essential as I discuss below). Concepts+/adjectives or what Collier and Levitsky call the "classical subtype" means adding a new dimension  $X_4$  to the concept via the adjective, as in the example of parliamentary democracy.

To be considered a democracy or a parliamentary democracy means that  $X_1 = 1$ ,  $X_2 = 1$ ,  $X_3 = 1$ , and  $X_4 = 1$  (assuming still the necessary and sufficient condition concept structure). The diminished subtype or concepts/-adjectives means in contrast  $X_1=1$ ,  $X_2=1$ ,  $X_3=0$ . The diminished subtype is thus missing a core attribute of democracy: the subtraction is not of dimensions themselves but the changing of values on existing dimensions to zero.

Within my framework, then, to change a value on an existing dimension from one to zero is to move left along the authoritarianism-democracy continuum. Figure 3.2 represents how things look from the perspective of my concept framework. As we change attributes from one to zero - create diminished subtypes - we have regimes that are less and less democratic. Movement is horizontal from democracy to authoritarianism.

It is worth noting that this view of diminished subtypes works from the authoritarian end of the spectrum as well. One can start with cases where  $X_1=0$ ,  $X_2=0$ ,  $X_3=0$ , i.e., a perfectly authoritarian regime, and have a diminished subtype where  $X_1=0$ ,  $X_2=0$ ,  $X_3=1$ , for example, a liberal authoritarian state, perhaps an authoritarian state that respects civil liberties but has no elections.

So what does all this mean for the topic of this chapter, intension versus extension? The answer is "it depends." In this formulation intension—extension question becomes: is the extension greater (or less) in the diminished subtype  $X_1 = 1$ ,  $X_2 = 1$ ,  $X_3 = 0$  than the full concept  $X_1 = 1$ ,  $X_2 = 1$ ,  $X_3 = 1$ ? The answer is that the extension can go up or can go down; it all depends on the relative number of cases of  $X_3 = 1$  versus  $X_3 = 0$  (I encourage the reader to do a few Venn diagrams to convince herself).

Hence Collier and Levitsky were correct to emphasize that the diminished subtype is really a different kind of concept construction. Even assuming the classic,

necessary and sufficient condition structure, there is no guaranteed relationship between concept intension and extension for the diminished subtype. In contrast the extension-intension relationship does hold with classical adjectives and within Sartori's framework. As such Sartori's concerns about conceptual stretching cannot be directly applied to diminished subtypes.

I have suggested that concepts+/adjectives involves adding a new attribute to an existing set, while concepts/-adjectives involves changing the value on an already existing dimension. Collier and his colleagues have made a major contribution to clearing up significant confusions on this key point of concept building. They have made it clear that when one sees a concept with adjective in the literature one cannot assume the classical subsetting operation whereby the adjective adds a new dimension to the concept. Often the scholar is focusing on a configuration of the concept with *zero on some existing attribute*.