

Passing to the Functionalists Instead of Passing Them By

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Abstract: The paper by Cramer and colleagues illustrates how a network approach can model personality systems without positing causal latent factors such as the Big Five. We applaud this effort but argue that nodes should be distinguished on more than quantitative grounds (e.g. displayed centrality or connectivity). To realistically model the affects, cognitions and behaviours that constitute real personalities, organizing constructs such as needs and comparators seems necessary. Incorporating them requires greater consideration of functionalist personality theories that link together environmental features and adaptive behaviour in meaningful and stable ways. Copyright © 2012 John Wiley & Sons, Ltd.

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Cramer and colleagues have produced a thought-provoking paper that delineates a novel way of conceptualizing personality as a network of behaviours and motivations. They contrast their view with a latent factor approach that assumes constructs derived from factor analysis (e.g. the Big Five) as causal entities, exemplified by a quote from McCrae and Costa that extraversion causes party going (p. 3). Although this conception of the causal power of traits may be consistent with a small number of personality theorists, it is doubtful whether such a radical psychometric view has ever dominated mainstream thinking in personality psychology. Historically, personality questionnaires have gravitated to generating multi-item scales with fairly heterogeneous content to predict variation in a dimension of interest, which is a perfectly reasonable approach to developing scales for purposes such as job selection (e.g. Hogan, Hogan, & Roberts, 1996). However, we agree that this predictive correlation (extraversion predicts party going) may have been conveniently replaced with ‘causation’ in the heads of some personality psychologists. The approach of Cramer et al. is refreshing by stimulating a badly needed and long-overdue discussion of the proper role of latent factors in personality psychology.

CAN WE SIMPLY REPLACE ‘FACTORS’ WITH ‘ITEMS’?

Although we believe that personality psychology should move beyond latent factors, what is less satisfying is their proposed solution. Cramer and colleagues speak vaguely of ‘cognitive, affective, and behavioral components (i.e., items)’ (p. 12). Each component is said to be ‘not *exchangeable* with other components. . . [and] has unique causes and effects on other components’ (p. 3). However, this notion of exchangeability

is essentially quantitative, based on parameters such as the centrality of a node and the number and strength of ingoing and outgoing connections to other nodes. Although they describe the broader class of *personality components* of consisting of *affective*, *cognitive* and *behavioral components*, these narrower classes of personality components receive no special treatment in their model. Rather, somewhat like the dust-bowl empiricist approaches taken by Meehl (1945) and others, all items are basically considered ‘grist for the mill’ of predicting activity of other nodes or the network as a whole.

The simplicity of this approach is in some ways elegant. However, the apparent requirement of a subset of the items being ‘attractors’ for the system to maintain equilibrium seems to implicitly acknowledge that certain subclasses of items are required to control homeostatic patterns within the system. Indeed, *several* narrower items classes are likely to be needed to make a network system approximate the various properties of real personalities. Our argument is that these various subtypes of personality components that would be needed are already well described by *functional frameworks* to behaviour, which assume that a person’s behaviour is driven in large part by desires to reach certain end states—whether these are hedonic (e.g. achieving satisfaction and avoiding pain), developmental (e.g. graduating from university) or fitness-related (e.g. selecting a mate). As noted by Wood and Hensler (2011), there is a wide array of existing functionalist frameworks in subdisciplines of the behavioural sciences (e.g. Almlund, Duckwork, Heckman, & Kautz, 2010; Carver & Scheier, 1998; Fleeson & Jolley, 2006; Mischel & Shoda, 2005; Pinker, 1997) that converge on a small number of fairly similar classes of personality components to explain the causes and regularities of a person’s behaviour. For instance, the negative feedback loops that are necessary to maintain homeostasis—a concept that the authors identify as central to their approach (p. 4)—likely requires at least three distinct types of units: (i) ‘comparator’ mechanisms (Carver & Scheier, 1998), which in turn monitor the

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discrepancy or similarity between (ii) evaluations of the individual's current state (similar to items like 'I feel alone') and (iii) descriptions of desired states, which are often linked to goals or motives (e.g. 'I like being with people'; Denissen & Penke, 2008). All of these types of personality components show stable variation across individuals; for instance, stable variation in the reward value of social situations is very likely a key personality component that determines whether a person's behaviour (and their total network of other personality components) will look like that of an 'extravert' versus an 'introvert'. When confronting an incongruent situation (e.g. a person who finds social situations rewarding but who is currently alone), individuals can undertake behaviours to re-establish the equilibrium or eliminate the relevant discrepancy (e.g. by calling a friend or going out to a bar; Denissen & Penke, 2012). Such principles ultimately give behavioural patterns an underlying meaning and a functional logic that is missing from the authors' purely stochastic models of node activation.

Of course, functionalist accounts are not incompatible with the proposed network approach. It is probably no coincidence that Cramer and colleagues heavily hinge on

motivational constructs such as liking and enjoying at the very beginning (title) and end (last sentence) of their paper. Yet to become fully compatible with functional models, the network approach should more formally describe additional subtypes of nodes that can, among other things, accommodate comparisons of actual situational states from desired states of the type that we have described. We applaud the authors for their self-described 'first pass' at describing how complex regularities in a person's behaviour can originate from very specific personality components rather than from broad latent factors such as those described by the Big Five. However, we believe that the ball now should be passed to the playing field already fairly delineated by many functionalist models of personality. This would allow elaborating a model that captures the actions shown by real personality systems without the use of latent factors such as the Big Five, but it will require a better delineation of the types of personality components needed to attain these complex network properties. Once deeper connections are made between the empirically minded psychometricians and the theoretically minded functionalists, a mutually enriching team play is likely to ensue.