Throughout the history of personality psychology, enthusiasm for the social and biological determinants of individuality has waxed and waned in opposition to each other. When emphasis on social factors was popular, interest in biological factors was minimal, and vice versa. Currently, however, there appears to be a 'coming together' of the social and biological views. As evidenced by this international workshop, there is now the beginning of dialog on how to best integrate the social and biological perspectives on human nature. I believe this attests to the maturation of our science, in that formerly divergent lines of explanation and understanding are now converging and integrating. Moreover, this also represents the next great challenge for the science of personality. That challenge concerns how to best integrate the social and biological approaches to personality. What will an integrated perspective look like? How will a common framework be built out of such seemingly opposed perspectives? What will be the key themes and constructs that bring together and bridge the social and biological foundations?

The paper by Hettema presents his vision of a common framework for integrating the social and biological views of individuality. Hettema's integrating themes are adaptation and regulation. The theoretical constructs that operationalize these themes are strategies and tactics. My commentary will be organized around these key themes and constructs. I will first elaborate on Hettema's ideas, emphasizing the originality and usefulness of these themes and constructs in conceptualizing personality. I will also attempt to expand on the topics of adaptation, regulation, strategies and tactics. And finally, drawing on what I find implicit in Hettema's views, I will suggest how the metaphor of ecology might be used as one guide to our thinking about the integration of social and biological perspectives on personality.

Overview

As an overview, let me mention that the starting point for Hettema is very different from that of more traditional personality theorists. Biologically-minded theorists have traditionally emphasized individual differences in reactivity to the environment. For example, individuals with strong nervous systems (Pavlov), or Extraverts (Eysenck), or Reducers (Petrie, Vando), or low reactivity persons (Strelau) generally show diminished responses to environmental stimulation. For Hettema, however, the emphasis is not on diminished reactivity per se, but rather on how
that diminished reactivity becomes reflected in attempts to control the environment. At first this distinction appears subtle. But it is an extremely important shift of emphasis, one that opens up a new perspective on individuality. For example, the diminished reactivity of the extravert is, for Hettema, part of a whole system of regulating forces that function together to achieve social and biological adaptation. Because of this difference in emphasis, Hettema does not present us with a static trait model of personality. Instead, Hettema provides us with a more systems-oriented view of individuality, proposing that personality is the product of interacting regulatory systems that exist to achieve adaptive control over the environment.

As a consequence of Hettema’s emphasis on adaptation and regulation, his perspective does not emphasize content-bound personality constructs like extraversion or neuroticism. Nor does his perspective deal with the traditional issues of content-bound personality psychology, such as consistency and stability. In fact, Hettema’s perspective shows little emphasis on the concept of individual differences. Instead, his point of view emphasizes more process-bound constructs like strategies and tactics for adaptation. Because of this, there is an emphasis on function rather than on content. That is, Hettema is more concerned with how persons in general function in their environments than with how they differ from one another. Clearly, people DO differ from one another in how they function, but the emphasis for Hettema is on the functional units and the mechanisms of adaptation. After we first understand these functional units (e.g., tactics and strategies) then we might seek to understand individual differences in how people function. We might also explore the connection between individual differences in strategies and tactics and the traditional trait or motivational dimensions of personality. But for Hettema, the guiding theme is that personality is first and foremost adaptation, not individual differences.

### Adaptation

The environment consistently challenges humans to adjust to changing demands. This theme of adaptation may be examined using different time frames. Over an extremely long time period, such adaptation to environmental demand is called evolution. Through the process of natural selection, evolution has shaped human morphology, physiology, and behavior to reflect adaptation to environmental pressures. Regardless of whether such pressures are operative today, it is obvious that certain acquired adaptive characteristics ARE present. Natural selection has, in some ways, prepared us for a world that is different from the one in which we currently live. Social learning and culture have altered or erased some previous environmental demands while introducing new demands for adaptation. Nevertheless, understanding the social and biological factors involved in long-term adaptations -- the domain of evolutionary psychology -- is an important part of Hettema’s overall perspective. Social and biological factors are thus integrated even in understanding long-term adaptation.

Employing a more moderate time frame -- the time frame of a single human life -- we see in Hettema’s work an emphasis on integrating the social and biological determinants of adaptation. During development people acquire values, they learn social roles, they develop scripts and plans for achieving goals. These and other social factors influence how people adapt to environmental demands. What one values, what social role one occupies, what culture one grew up in, etc., all influence how one thinks about, classifies, and reacts to environmental events. For example, if a person grew up in a culture that permitted or encouraged polygamy, then perhaps jealousy would be a less likely adaptation to sexual infidelity. Hettema points out