Dialogue Concerning the Two Chief Approaches to a Science of Life: Word Pictures and Correlations Versus Working Models (see <u>www.livingcontrolsystems.com</u>) lays out a fascinating, behind-the-scenes historical look at why a highly regarded academic psychologist, Phil Runkel, came to abandon mainstream psychology principles and to adopt Perceptual Control Theory originated by Bill Powers.

PCT asserts that we humans, indeed all organisms, function as control systems intent on making our perceptions of the current state of variables we want to control match our intended state for these variables.

PCT disrupts, to say the least, the conventional handling of cause and effect relationships for living organisms. Instead of a linear, or open loop, causality view fixated on external events "causing" behavior (stimulus-response), the far more fruitful perspective of PCT leads to a circular view of causality. That is, actions and effects are intimately connected and flow together continuously in a closed loop.

With PCT, one understands how, through negative feedback control, an organism produces the same result in an unpredictable and changing world. The "I get it" insight is that people do not respond to stimuli, they act to oppose disturbances to their controlled variables.

Powers' theory is that the brain and nervous system act in concert as a hierarchy of individual control-system levels to enable highly efficient and coordinated actions. It provides a deeper understanding of everyday activities such as walking down the stairs without stumbling or driving a car. It is useful for resolving conflicts between individuals by "going up a level" in analyzing the assumptions that drive the selection of lower-level variables to control and the intended state of these variables.

PCT has fundamentally improved how I think about human behavior in general, and about research in psychology and economics in particular. PCT should eventually have a huge impact on the social sciences. PCT has not yet had a major impact on economics although William D. Williams published an insightful PCT-based analysis of the socalled Giffen good, i.e., consumers buy more of this good as its price rises.

In my own work, I am currently using PCT principles to investigate my investment process for buying and selling stocks. A deeper understanding of the process for forming an "investment thesis" for a stock and the interpretation of subsequent company news announcements is fundamentally a control process and a lot more complex than I originally thought.

Bartley J. Madden

Author of Wealth Creation: A Systems Mindset for Building and Investing in Businesses for the Long Term