Psychologists use personality traits such as extroversion, neuroticism or anxiety as a means of characterizing typical patterns of thought, emotion and behavior that differ from one person to the next. From this perspective, the constituents of personality consist of a collection of relatively stable traits that are hard to change.

But the assumption that you can routinely measure these traits using questionnaires that identify typical behavior has come into question in the past two decades. It is not only that behavioral changes happen often but that they occur from day to day and hour to hour. Someone could be open and agreeable at noon but negative and rigid at two o’clock. Such oscillations in daily feelings and behavior—designated with the bland title of intraindividual variability, or IIV—are, in fact, so great that they rival or even exceed the differences in personality traits such as extroversion or conscientiousness that can be measured between one person and another.

The name for this new field appeared in 2004 when Peter C. M. Molenaar, an emeritus professor of human development and psychology at Pennsylvania State University, championed IIV in a manifesto entitled “Bringing the Person Back into Scientific Psychology, This Time Forever.” In it, he used a series of math and physics calculations to illustrate the degree of dynamic flux in personality while deriding standard methods of psychological testing.