

# Analysis of streams and patterns in behavior Symposium

John C. Fentress

*Department of Psychology, Dalhousie University, Halifax and Oregon, jcfenterprises@qwest.net*

When we look at behavior we face many challenges. The first is what we watch for, and thus what we record. The human eye, or ear, cannot help but miss much. Our perceptions are limited, and often driven by prejudices we do not perceive.

The question is then what do we do. Sometimes we have to develop technologies to aid us. At other times we simply need to do our best to think more clearly.

The participants in this symposium have each contributed importantly to our understandings of behavior, from complementary but individual perspectives.

The dual themes of this symposium are streams and patterns in behavior, across levels and perspectives of analysis. The term streams is simply a reflection of how ever else we think about behavior, behavior is a dynamic process. The term pattern refers to the fact that we break behavior into units, pieces. We apply nouns, and try to identify.

Patrick Bateson has led multiple aspects of understanding behavior, and will launch our symposium in his keynote address.

Wayne Aldridge and Kent Berridge have made important contributions to see how patterns of behavioral expression are brought into the realm of brain science. Ilan Golani and Yoav Benjamini have pioneered ways to link spatial aspects of behavior and their temporal properties together. Alan Kaluev

has expanded our perceptions to show ways we can link movement properties to deep issues such as emotionality. Magnus Magnusson has led the way in pursuing how we link temporal and sequential aspects of behavior together. M. Cabanac and A. J. Cabanac remind us that whatever the value in taking mechanical notes in animals we should not let ourselves ignore possibilities of higher order functions such as potential animal consciousness.

## **Symposium contents**

### **Stepping outside the traditional “science” box**

John C. Fentress

### **Measuring consciousness in animals**

M. Cabanac and A. J. Cabanac

### **Problems of behavior measurements**

Ilan Golani and Yoav Benjamini

### **Understanding brain affective states by measuring animal grooming patterning**

Allan V Kalueff and Justin L LaPorte

### **Observing versus seeing, perception versus detection, and data versus nature**

Magnus S. Magnusson

### **Brain systems for action sequences**

J.W. Aldridge and K.C. Berridge