For some time the author of this article has felt that a need existed for a review and assessment of a contemporary trend in Soviet behavioral research which can be labeled, with due qualifications and apologies, by the term "ethology." Unfortunately, a critical review of Soviet behavioral research is a difficult undertaking for an outsider. Command of the Russian language alone does not guarantee easy access, physical or intellectual, to all the relevant material. Delays or failures in obtaining original publications are frequently coupled with equally frustrating difficulties in trying to grasp the relevance of extra-scientific considerations with which the available material abounds. It is not easy to understand whether necessity or the mental makeup of the believer forces so many otherwise first-rate Soviet investigators to genufect to the views of Marx, Engels, Lenin, or Pavlov. Nor can it be readily understood how true scientific creativity, with which Soviet physiology and psychology also abound, coexists, sometimes within the same individual, with a bewildering array of ideological sophistry. But the fact remains that there is a solid body of important ethology-related work in the U.S.S.R., and that, in spite of the difficulties inherent in crossing linguistic and ideological boundaries, it is possible and worthwhile to review this work.

The central paradigms and major research thrust of both Western ethology

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and the related Russian field of “ecological physiology” (ekologiskaia fisio-
logia) are provided by the theory of evolution. There is a uniformly central
concern in both with the phylogenetic origin and evolutionary continuity in
behavior. The examination of Soviet evolutionary thinking, therefore, opens
the door for evaluation of ethology-related Russian conceptualizations and
research. 1) The aim of this paper is to provide a brief examination of this
type and to evaluate: (i) the specific philosophical and ideological factors
that guide Soviet conceptualizations and research on problems of behavioral
evolution; (ii) the relationships and conceptual disagreements between
Soviet ecological physiology and Western ethology; and, (iii) the specific
Soviet researches most closely related to Western ethology.

1. DIALECTICAL MATERIALISM AND THE STUDY OF
BEHAVIORAL EVOLUTION

The theory of evolution is avowedly at the core of Soviet behavioral
research, especially in the field of “ecological physiology.” Бирюков (1963,
p. 359) states that, “Soviet investigators are in possession of such advantages
as the objective method of experimentation worked out by Павлов, the
application of Marxist philosophy, and the theory of evolution.” It is no
accident that he mentions these three factors in a single breath, for they are
indistinguishably intertwined in the official Soviet philosophy of the be-
havioral sciences.

The Soviet physiologist and behavioral scientist is not burdened, or at least
not to the same degree as his Western colleague, by the antecedent-causative
versus evolutionary-functional dichotomy in questions posed for biological
explanation. Nor does the nature-nurture issue pose comparable difficulty
for him. All these can be explained by heavy reliance on the following four
Marxist propositions. 2) (1) that motion is the mode of existence of matter;
(2) that the motion of matter provides the key to understanding the historical

1) A central position of evolutionary thinking may also be in agreement with a modern
collection of John Stuart Mill’s original definition of “ethology” as expressed in the
following quotation from him: “A science is thus formed, for which I propose
to give the name Ethology, or the Science of Character, from character a word more nearly
corresponding to the term character, as I use it, than any other word in the same
language. The name is perhaps etymologically applicable to the entire science for our
mental and moral nature; but if, as is usual and convenient, we employ the name
Psychology for the science of the elementary laws of mind, Ethology will serve for the
ulterior science which determines the kinds of character produced in conformity to those
general laws, by any set of circumstances, physical and moral”. (John Stuart Mill,
A System of Logic, 1843.)

2) The best exposition of these is to be found in the essays Ludwig Feurbach and