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David E. Leary

University of Richmond, dleary@richmond.edu

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THE FATE AND INFLUENCE OF JOHN STUART MILL'S PROPOSED SCIENCE OF ETHOLOGY

BY DAVID E. LEARY*

The years between 1840 and 1940 constituted an important period in the history of the human sciences. During this period, under the impulse of cataclysmic social events and the inspiration of rapid development in the physical and biological sciences, the previously existing "moral sciences" underwent radical development, and other new human sciences were proposed and formulated for the first time. In the early part of this crucial period in the history of the modern human sciences, few works were as important as John Stuart Mill's *System of Logic* (1843), which culminated in the well-known Book VI, entitled "On the Logic of the Moral Sciences."¹ This work attempted to bring rigorous thinking to the human sciences, especially as regards methods and standards of proof. It was both an indication of, and an influence upon, the developing self-consciousness with which nineteenth-century investigators sought to bring human affairs within the purview of strictly scientific procedures. Going through numerous editions—eight in Mill's own lifetime—the work was a best seller for the rest of the nineteenth century.

No matter what the impact of the work as a whole, however, and of Book VI in particular, its central proposal regarding the development of a science of human character seems to have been virtually ignored, and thus Mill's plea for a science of Ethology, as he called it, seems to have been one of the many nineteenth-century proposals which did not pass the test of history. This paper is an attempt to answer the question, whatever became of Mill's Ethology? This will not be an entirely antiquarian question if in answering it we can detect an important influence on the development of the human sciences. And indeed it is the thesis of this paper that we can locate such an influence.

* I would like to thank Professor George W. Stocking, Jr., for posing the initial question regarding the fate of J. S. Mill's Ethology and for commenting on various drafts of this paper. I am also grateful to Professor Robert J. Richards for commenting on one draft of this paper and to the University of New Hampshire for granting me a Summer Faculty Fellowship while I worked on this and other historical research. A version of this paper was presented at the Eleventh Annual Meeting of the International Society for the History of the Behavioral and Social Sciences (Cheiron), Akron, Ohio, 8-10 June 1979.

¹ John Stuart Mill, *A System of Logic: Ratiocinative and Inductive*, 2 vols., repr. of 8th rev. ed. (1872), in *Collected Works*, ed. J. M. Robson, 18 vols. to date (Toronto, 1963-), vols. VII-VIII (1973-74). In Mill's time the term "moral sciences" referred to all the sciences dealing with the mental, behavioral, and social aspects of human life.

I. Mill's Program and Its Initial Failure

In Chapter 5 of Book VI in his *Logic*, Mill argued that there was a great need for a “science of the formation of character.” This science, which he termed Ethology, would be the science of human nature which Psychology itself could not provide. According to his suggested division of labor, Psychology would be the science for discovering the universal laws of mind, whereas Ethology would be the science entrusted with the task of explaining particular individual minds, or characters, according to the general laws provided by Psychology. Ethology too would have its laws, but they would be derivative; that is, they would be deduced from the universal laws of Psychology.

In Mill's view, any individual character, or the collective character of any group of people, must be explained in terms of the application of universal laws to particular circumstances. The reason people differ is not that they operate according to different principles. The principles—for Mill, the laws of association—are the same for all; but differences arise from the circumstances in which people find themselves. Ethology is the science which seeks to explain the practical, or circumstantial, application of the general laws of mind. Being a true science, its laws are necessarily universal. But its applications to individual cases will never be exact for the simple reason that we can never fully determine all the factors which have entered into a given person's life history. The goal which Mill proposed, therefore, was that Ethology be developed to a point where the best possible predictions could be made regarding the “tendencies” which different characters would exhibit in certain circumstances. Only when this was done could the moral and social sciences be developed to any degree of theoretical and practical utility.

Mill's proposed science of Ethology was well known since his *Logic* was widely read for decades, but though the *Logic* went through a number of editions in which various parts were changed, the section on Ethology was never essentially modified or further developed. His own attempt to develop a science of Ethology was never made. As he wrote to Alexander Bain in late 1843, “I do not know when I shall be ripe for beginning ‘Ethology.’ The scheme has not assumed any definite shape with me yet.”² In fact, as Bain reports, Mill's scheme “never came to anything; and he seems shortly to have dropped thinking of it.”³ And with this failure to develop an Ethology, Mill had also to give up his hope of writing a work on Sociology because he was convinced that “there is no chance, for [a science of] Social Statics at least, until the laws of human character are better treated.”⁴ Since the development of Sociology had been a major goal of Mill's, we can only conclude that he met with insuperable difficulties in trying to develop his Ethology.

² John Stuart Mill, *The Early Letters of John Stuart Mill*, ed. Francis E. Mineka (1963), in *Collected Works*, VIII, 617.

³ Alexander Bain, *John Stuart Mill: A Criticism with Personal Recollections* (London, 1882), 78.

⁴ Mill, *Early Letters*, *op. cit.*, 613.

It is not too difficult to pinpoint some of the specific problems that Mill encountered. For one thing, the possibility of a deductive science of Ethology depended upon the prior existence of an apodictic, systematic Psychology. In his *Logic* Mill had been very confident about the existence of such a science. We may reasonably assume that Mill soon discovered how unreasonably sanguine that opinion was. Secondly, not only was Mill overly confident about the state of certainty which Psychology could offer, but beyond that he had in mind a grossly inadequate Psychology; his brand of associationism was in its last days. His own protégé, Alexander Bain, whom he soon acknowledged as his superior in psychological matters, was instrumental in bringing about the transformation of Psychology in Britain from an introspective to a biological science. Whereas Mill thought of psychological laws in terms of the interaction of ideas, Bain and the next generation became aware of the vast amount of recent research on the brain and nervous system and were beginning to realize the need to integrate this new knowledge into the science of Psychology. And with the advent of the age of Darwin, psychological thinking was increasingly done not only by employing biological metaphors but also by utilizing biological factors. These developments were in marked contrast to Mill's approach in the *Logic*, in which organismic factors played a very negligible role.⁵ Mill's psychology was excessively intellectualistic. He spoke of the laws of *mind*, whereas any viable science of character, as Gordon Allport has pointed out, must "account for the galaxy of human interests, motives, conflicts, and passions which are the essential forces in the formation of character."⁶

Finally, Mill's proposed methodology proved to be impracticable. A deductive science which also claimed to deal with the empirical events of everyday life was simply impossible. Even if an adequate Psychology had been in existence, it is difficult to imagine how one could simply deduce a science of human character. One's deductions would always have to be made with an eye on the type of human character to be explained. Mill himself recognized this fact and subsequently allowed for the necessity of arriving inductively at some kind of empirical propositions regarding the human character-types that were then to be explained deductively. Nevertheless his proposed methodology still depended too heavily upon deduction rather than upon empirical observation.

In summary, then, the development of a science of character demanded a more systematic, more biological, more emotionally oriented, and more em-

⁵ Mill's non-organismic approach is particularly noteworthy since he proposed his Ethology as an alternative to Phrenology, a discipline which admitted a biological assessment, and the possibility of an hereditarian explanation, of character. The fact that Mill, a political and social liberal committed to expeditious social change, favored an environmentalist explanation of character is not surprising, but it does place his thought squarely within a tradition which was losing strength in mid-nineteenth century Britain. The place of Phrenology was soon taken by more reputable and lasting biological sciences. See Robert M. Young, *Mind, Brain and Adaptation in the Nineteenth Century* (Oxford, 1970).

⁶ Gordon W. Allport, *Personality: A Psychological Interpretation* (New York, 1937), 87.

pirical psychology. In addition to these four weaknesses in Mill's program, there were two other reasons why his program got so little initial response. One was that the first attempt to implement this program was a dismal failure, even according to its author, Alexander Bain.⁷ This failure was even more notable because Bain had supplied the needs of Mill's program by developing a more systematic, biological, and empirical psychology which gave particular attention to non-intellectual and specifically emotional factors.⁸ Unfortunately, Bain, like Mill, presented his Ethology as an alternative to Phrenology. In 1843, when Mill first proposed Ethology, it was reasonable to criticize Phrenology which was still near the peak of its popularity. But by 1861, when Bain published *On the Study of Character, Including an Estimate of Phrenology*, Mill's derogatory opinion of Phrenology was widely accepted, and there was no longer any need to argue the case of Ethology in relation to the success or failure of Phrenology. Therefore, when Bain devoted over one half of his book to an extended and detailed attack on Phrenology, it did little to make his work appealing or relevant.

The final factor involved in the initial failure of Mill's Ethology was the turning of British social thought in the 1860s toward increasingly developmental concerns and away from the "Social Statics" which Mill had hoped to base upon his Ethology. Under the influence of evolutionism, ethnologists and anthropologists turned their attention to questions pertaining to the origins and historical development of different social groups. In addition, also influenced by the new mode of thought, they formulated their answers to these questions in terms of assumed differences in racial and physical factors rather than in terms of social learning, or character formation, which Mill espoused. Thus, Mill's program was not only impracticable as he designed it, and inadequate as Bain formulated it, it was also irrelevant to the concerns of the succeeding generation of social scientists.⁹

⁷ Bain admitted the failure of his *On the Study of Character, Including an Estimate of Phrenology* (London, 1861) in his *Autobiography* (London, 1904), 260.

⁸ Bain had developed his psychology in *The Senses and the Intellect* (London, 1855) and *The Emotions and the Will* (London, 1859).

⁹ The concerns of the post-Millian generation, as well as the correlative limitations of British social theory which constituted the general context of the initial failure of Mill's Ethology, have been investigated by J. W. Burrow, whose analysis develops the earlier insights of Noel Annan and, especially, Talcott Parsons. See J. W. Burrow, *Evolution and Society: A Study of Victorian Social Theory* (Cambridge, Eng., 1966); Noel Annan, *The Curious Strength of Positivism in English Political Thought* (London, 1959); and Talcott Parsons, *The Structure of Social Action* (New York, 1937), esp. Part I. Also relevant is Reba N. Soffer, *Ethics and Society in England: The Revolution in the Social Sciences, 1870-1914* (Berkeley, 1978). Leslie Stephen's treatment of Mill's thought in *The English Utilitarians* (3 vols. [London, 1900], III) is equally enlightening. Finally, when I speak about the influence of "evolutionism" on ethnology and anthropology it should be clear that this influence was exerted by Lamarckian and Spencerian thought as much as, and in many cases more than, Darwinian thought. Indeed, it was Lamarckian thought that helped mediate between the environmentally "social" and the genetically "racial," whereas Spencer influenced evolutionary social thought well before Darwin proposed his theory in 1859.

II. A. F. Shand's Revision and Development of Ethology

For thirty-five years after Bain's book there was much discussion about character and character formation in England, but the major part of this discussion was couched in moralistic, educational, and inspirational works on how to raise and train children. Although some of these works made reference to Mill's Ethology, none of them constituted a real attempt to develop Mill's program. Rather, these references were simply made in an attempt to gain respectability for the study of character at hand.¹⁰ In addition to these literary and educational treatises on character formation, an effort was made during this period to study character in a more scientific fashion. But again Mill's lead was not followed. Instead, it was Francis Galton who set the standard for the quantitatively-oriented anthropometric studies of these decades.¹¹

Such was not the case in France. There, where the works of Mill and Bain had been made known through the works of Hippolyte Taine and Théodule Ribot,¹² *l'éthologie* was pursued in more or less conscious imitation of Mill's original program. I say "more or less" because there was criticism as well as enthusiasm for the science of character in France. Furthermore, France's literary tradition of studying *le caractère*, represented by La Bruyère,¹³ had a definite influence on the French ethological movement. Nonetheless, especially in response to the work of Ribot, a number of French authors in the 1890s devoted themselves to the study of character. The works which resulted were conscious attempts to develop a science of character along the general lines suggested by Mill. The leaders of this "school," whose ethological works eventually blended into the tradition of French medico-developmental psychology, were Frédéric Paulhan, Alfred Fouillée, and Paulin Malapert.¹⁴

¹⁰ E.g., cf. Alexander Stewart, *Our Temperaments: Their Study and Their Teaching* (London, 1887), 12.

¹¹ E.g., cf. Francis Galton, [Address to the Anthropological Section of the British Association for the Advancement of Science], *Nature*, 2 (1877), 344-47; and L. S. Hearnshaw, *A Short History of British Psychology, 1840-1940* (New York, 1964), 56-66.

¹² Hippolyte A. Taine, *Histoire de la Littérature anglaise*, 4 vols. (Paris, 1863-64); and Théodule Ribot, *La Psychologie anglaise contemporaine* (Paris, 1870).

¹³ Jean de La Bruyère, *Les Caractères de Théophraste, Traduits du Grec: avec les Caractères ou les Mœurs de ce Siècle* (Paris, 1688), trans. Jean Stewart (Baltimore, 1970).

¹⁴ The relevant works of Théodule Ribot are "Les bases affectives de la personnalité," *Revue philosophique*, 18 (1884), 138-72; "Les bases intellectuelles de la personnalité," *ibid.*, 410-66; "Sur les diverses formes du caractère," *Revue philosophique*, 34 (1892), 480-500; and "Les caractères anormaux et morbides," *Année philosophique*, 2 (1895), 1-17. The works of the French school of ethologists include Bernard Pérez, *Le Caractère de l'Enfant à l'Homme* (Paris, 1892), Frédéric Paulhan, *Les Caractères* (Paris, 1893), Alfred Fouillée, *Le Tempérament et le Caractère* (Paris, 1895), Frédéric Queyrat, *Les Caractères et l'Éducation morale* (Paris, 1896), Albert Levy, *La Psychologie du Caractère* (Paris, 1896), Paulin Malapert, *Les Éléments du Caractère et leurs Lois de Combinaison* (Paris, 1897), and Paulin Malapert, *Le Caractère* (Paris, 1902).

For the purposes of this paper, the major importance of these French writers is that they provided the tangible historical link between John Stuart Mill's proposal of Ethology in 1843 and Alexander F. Shand's revision and development of Ethology at the turn of the century. For it was through his reading of these French authors in the mid-1890s that Shand, an English gentleman-scholar, was inspired to assume the challenge of fulfilling Mill's program. The first major result of this inspiration was a seminal article published in 1896 in the journal *Mind*. In this article, entitled "Character and the Emotions," Shand presented a programmatic statement of the basic premises of his new Ethology.¹⁵ This statement met with general approval, especially among Shand's friends, such as G. F. Stout, William McDougall, and Edward Westermarck. But Shand was such a perfectionist that he continued revising the details of his argument and did not publish his book on *The Foundations of Character* until 1914.¹⁶ Even then he fully intended to revise and expand this work, but the war years intervened and he never got around to it in subsequent years.

Shand made a number of changes in Mill's original program. Some of his changes were inspired by his reading of the French ethologists; for instance, Shand rejected excessive reliance on deduction and moved away from Mill's intellectualistic model of character. But so far as Shand was concerned the most important positive contribution of the French was the notion of organization or system, which he utilized in rethinking the basic psychological foundation of character. For although the work of the French ethologists had persuaded him of the necessity of an emotionalistic model of character, he became convinced that the psychology of his time, including that of the French, provided no adequate theory of emotion. To develop a more adequate basis for his Ethology, Shand used the concept of organization or system to help him distinguish between emotions and sentiments. According to this distinction, which he based on both observation and speculation, emotions are the basic human tendencies, considered separately. Sentiments, on the other hand, are complex, organized systems of these basic tendencies. These sentiments, Shand maintained, form over time, as the originally independent emotions become patterned through experience into the basic systems of behavioral and cognitive tendencies. These systems are the basis of character. Such is Shand's theory in a nutshell, although he worked it out in considerably greater detail.

Shand was aware that further research might necessitate a revision of his theory of the sentiments; and he knew that his book did not offer the final word on character. In fact, he conceived his work, as its title indicates, as merely a "foundation" for the science of Ethology: it was only intended, he said, to be "a map or plan . . . to guide us." Yet it turned out to be a very useful map. The theory of sentiments which he presented in his 1896 article drew immediate attention and was soon made widely known through its

¹⁵ A. F. Shand, "Character and the Emotions," *Mind*, 5 (1896), 203-26.

¹⁶ A. F. Shand, *The Foundations of Character: Being a Study of the Tendencies of the Emotions and Sentiments* (London, 1914).

adoption in G. F. Stout's popular textbook, *A Manual of Psychology*.¹⁷ Then in 1903, Stout invited Shand, as the leading expert on the subject, to contribute a chapter on the emotions to his *Groundwork of Psychology*.¹⁸ And in 1908, William McDougall placed Shand's theory of sentiment at the center of his own theory of character and social behavior in his immensely influential *Introduction to Social Psychology*.¹⁹ The publication of Shand's book in 1914 brought similar attention to his more fully developed theory of character. Then, as noted above, the war years interfered with normal activity. Although the demand was sufficient to warrant two later editions of the book, in 1920 and 1926, Shand never published his planned sequel. Yet G. F. Stout, writing in 1936, was still confident that Shand's general plan was "comprehensive, original, and capable of being worked out in detail." However, he had to report that unfortunately "successors have not hitherto been found to carry forward the investigation which he began." Stout suggested that the reason for this was undoubtedly that "the interest of psychologists had been diverted into other channels." But he was certain that when "they do take up Shand's problem they will find that his book fulfills the promise of its title and supplies foundations on which they can build."²⁰

III. Shand's Ethology and the Conceptual Foundations of Social Anthropology

Stout's final judgment seems overly optimistic today. Shand's work had already influenced psychologists and anthropologists before 1936, and it was never to do so again. But the nature of that previous influence was significant. As regards the psychological study of character, Shand affected the thinking of subsequent psychologists by his stress upon the emotive aspects of character. Allport, for instance, credits Shand with "his recognition of systematized emotional dispositions as the functional units of which the personality (or as he prefers to call it, the character) is composed."²¹ And as regards the anthropological study of social organization, Shand provided a theory of character which served as the psychological underpinning of the new social anthropology which arose in the third decade of the twentieth century. For in the 1920s, after sixty years of emphasis upon evolutionary and racial approaches to social arrangements, A. R. Radcliffe-Brown and Bronislaw Malinowski led a movement back toward a "Social Statics" which, as Mill had envisioned, was based upon the conception of character as a product of social learning and emotional ties rather than racial inheri-

¹⁷ G. F. Stout, *A Manual of Psychology*, 2nd rev. ed. (London, 1901), Bk. 4, ch. 9.

¹⁸ A. F. Shand, "The Sources of Tender Emotion," in G. F. Stout, *The Groundwork of Psychology* (London, 1903), ch. 16.

¹⁹ W. McDougall, *An Introduction to Social Psychology* (London, 1908), ch. 5.

²⁰ G. F. Stout, "Alexander Faulkner Shand (1858-1936)," *Proceedings of the British Academy*, 22 (1963), 403, 407. Stout's obituary (pp. 401-07) is the best extant biography of Shand.

²¹ Allport, *Personality*, *op. cit.*, 88-89.

tance and animal instinct. For both of them, Shand's ethological theory of character provided an important conceptual foundation.

In 1906, ten years after Shand's article on character, Radcliffe-Brown began his original field work in the Andaman Islands. He completed it in 1908, the year William McDougall, published his *Introduction to Social Psychology*, in which Shand's theory of sentiments played a central explanatory role. Radcliffe-Brown did not complete the writing and rewriting of his monograph on *The Andaman Islanders* until 1914 (the same year in which Shand's book appeared), and it was not published until 1922.²² Despite the delay, however, the central ideas in Radcliffe-Brown's book were still fresh and novel in the early 1920s. In fact, they signalled a new turn in British anthropological thought—away from the evolutionary and individual psychological approaches of Haddon and Rivers and toward a Durkheimian conception of society as an integrated system of institutions, customs, and beliefs.²³ Radcliffe-Brown did not seek to understand this social system in terms of its developmental history, nor simply in terms of its dependence upon the fulfillment of some supposedly innate individual needs. Rather, he sought to understand the significance of social institutions, customs, and beliefs by first determining their contemporary meaning to the people themselves and then by referring to their social effects. Finally, he attempted to understand the function of each institution, custom, and belief in relation to the entire system of institutions, customs, and beliefs. In working all this into a unified theory, Radcliffe-Brown relied heavily upon Shand's concept of character, or sentiment, as he found it expressed in McDougall's *Introduction to Social Psychology*.²⁴ Thus, according to Radcliffe-Brown, the characters of the Andamanese—i.e., their customs and beliefs—were based upon the formation of certain sentiments; and these sentiments in turn were formed through the experience of customs and beliefs in childhood. Hence, the maintenance of social order was dependent upon the learning of particular patterns of emotions constituting sentiments which in turn regulated the characteristic social behavior and beliefs of a given people. In this way, with Radcliffe-Brown's new approach to anthropology, Mill's hope of founding a science of "Social Statics" upon a science of human character, or Ethology, came to a belated fruition.²⁵

²² A. R. Radcliffe-Brown, *The Andaman Islanders* (Cambridge, Eng., 1922).

²³ For general background information regarding A. C. Haddon and W. H. R. Rivers, cf. T. K. Penniman, *A Hundred Years of Anthropology*, 3d rev. ed. (London, 1965). Regarding the Durkheimian conception of society, cf. Steven Lukes, *Émile Durkheim: His Life and Work* (New York, 1972). Since Durkheim was a very important influence on both Radcliffe-Brown and Malinowski, and since Durkheim also stressed both system and sentiment, it is pertinent to wonder about the possibility of an intellectual tie between Durkheim, the French ethologists, and Shand. However, I have not been able to establish any positive relationship.

²⁴ *Ibid.*, chs. 5 & 6.

²⁵ Incidentally, George Stocking has drawn my attention to the fact that, as a

At approximately the same time, Bronislaw Malinowski adopted Shand's concept of sentiment into his own developing system of thought. An admirer of both Shand and McDougall, Malinowski freely admitted his debt to Shand in his 1927 classic, *Sex and Repression in Savage Society*.²⁶ Although his relation to Shand was clear even before this time, *Sex and Repression* revealed the full extent of his allegiance. As with Radcliffe-Brown, the theory of the sentiments provided the basic foundation of Malinowski's understanding of culture and society. As he wrote, "Mr. Shand's theory of sentiments will always remain of paramount importance for the sociologist, since social bonds as well as cultural values are sentiments standardized under the influence of tradition and culture." Again, as with Radcliffe-Brown, there is the closed, reciprocal relation between sentiments and social arrangements. Sentiments are formed in certain social contexts; and certain social contexts are perpetuated by these related sentiments. The importance given to Shand's theory is indicated by the fact that Malinowski saw repressed sexual needs (à la psychoanalytic theory) as merely a special case subsumed under the rubric of sentiment. "We see, therefore," Malinowski concluded, "that the theory to which we must attach our results in order to put them on a sound theoretical basis is Shand's theory of the sentiments, and that instead of speaking of a 'nuclear complex' we should have to speak of the family sentiments, of kinship ties, typical of a given society."²⁷ This is how Malinowski explained the customs and beliefs of the Trobriand Islanders in 1927, near the beginning of a very productive career in anthropology.

In the years ahead, Malinowski, like Radcliffe-Brown, would change idioms to a certain extent. As Radcliffe-Brown gradually spoke more of "interest" and "value," so Malinowski came to speak of "needs" and "satisfaction" rather than "sentiment."²⁸ But the original conceptual framework is still clearly visible in their later works; and that framework, as we have seen, was at least partially the result of an intellectual tradition stretching from Mill and Bain, through the French ethologists, to Shand, through McDougall, to Radcliffe-Brown and Malinowski. And from the tutelage of Radcliffe-Brown and Malinowski came an entire generation of

student, Radcliffe-Brown would have read Mill's proposal of Ethology in the Moral Sciences Tripos at Cambridge University. Thus, in addition to his knowledge of Shand's version of Ethology, he would have had direct access to the original Millian program.

²⁶ B. Malinowski, *Sex and Repression in Savage Society* (London, 1927), 175-78, 240-42, 247-50, 259.

²⁷ *Ibid.*, 177.

²⁸ E.g., A. R. Radcliffe-Brown, "On Social Structure" (1940), in *Structure and Function in Primitive Society: Essays and Addresses* (New York, 1952), 188-204; and B. Malinowski, "A Scientific Theory of Culture" (1941), in *A Scientific Theory of Culture and Other Essays* (Chapel Hill, 1944), 1-144.

anthropologists who by 1940 had firmly established the vigorous new field of social anthropology.²⁹

University of New Hampshire.

²⁹ Perhaps not so coincidentally, one of the important members of this generation, Gregory Bateson, suggested the term "Ethology" for the study of that central aspect of culture which has to do with the "standardized system of organization of the instincts and emotions of the individuals" of that culture (*Naven* [1936], 2d ed. [Stanford, 1958], 118, italics omitted). Although he was not certain, Bateson believed that his use of the term resulted from a conversation with Radcliffe-Brown in Sydney in 1928 (personal communication, 5 September 1978). Other uses of the term were also espoused in the early twentieth century. Thomas P. Bailey, Jr., argued for a multi-factor model of human character based upon Mill's program; see his *Ethology: Standpoint, Method, Tentative Results* (Berkeley, 1899) and *Bibliographical References in Ethology* (Berkeley, 1899). In 1903 an Ethological Society was founded in London in order to promote the systematic study of human character. For over twenty-five years this society published *The Ethological Journal* which, despite the acknowledged inspiration of Mill, gave a heavy emphasis to phrenological studies and the goal of reinstating Gall's historical reputation and importance. From a totally different origin (namely, from the critical jargon for the mode of setting forth manners, customs, and mores in satirical comedy), William Graham Sumner borrowed the term "Ethology" for his study of folkways; see his *Folkways* (1906) (repr. New York, 1960), 47-49. Meanwhile the term was also being used by biologists at the turn of the century to cover what today falls under the heading of "ecology," and from 1907 to 1940 the *Zoological Record* contained a section on Ethology, defined as the study of the behavior of different classes of animals. Later in this century the work of Konrad Lorenz, Niko Tinbergen, and others has established the latter type of Ethology as a separate branch of the biological sciences. This science of species-specific, instinctual animal behavior is quite different from the more environmentally oriented study of human character proposed by Mill and extended by Shand and social anthropology. For an overview of this other tradition, see Julian Jaynes, "The Historical Origins of 'Ethology' and 'Comparative Psychology,'" *Animal Behaviour*, 71 (1969), 601-606, and W. H. Thorpe, *The Origins and Rise of Ethology* (London, 1979). So far as I can tell the two traditions have developed in isolation, but they may now be in the process of converging. Cf. Hilary Callan, *Ethology and Society: Towards an Anthropological View* (Oxford, 1970) and Edward O. Wilson, *Sociobiology: The New Synthesis* (Cambridge, Mass., 1975).