

“A Science of Human Nature” by John Stuart Mill



John Stuart Mill, Thoemmes

About the author... John Stuart Mill (1806-1873) was entirely home-schooled by his father and was subjected to a remarkable education. His autobiography is recommended reading in large part because it shows the dangers of an intensely intellectual education which neglects the emotional aspects of life. His father secured for him a position in the East India Company which provided him the opportunity for continuing the utilitarian tradition begun by Jeremy Bentham. He spent his life advancing a logical and scientific approach to social and political problems. His *Utilitarianism* is generally considered the foundational statement on the nature of happiness for the individual and society. Partly as a result of reading Alexis de Tocqueville's *Democracy in America* and partly from his discussions with Harriet Taylor, Mill feared the conformist attitude of the middle working class threatened individual freedoms and authored *On Liberty* which remains a classic statement today. In his *The Subjection of Women*, Mill argues for equality of freedom of the sexes in spite of the 19th century's widespread bias that women were of a different nature than men.

About the work... In our selection from *A System of Logic*,¹ his first significant book, Mill argues that a science of human nature is no different from any other kind of exact science. In astronomy, the movement of the planets can be predicted with certainty because the laws of motions and the antecedent circumstances can be, he thinks, known with certainty. The rise and fall of the tides, on the other hand, can only be imprecisely known because local antecedent conditions cannot be known or measured exactly. The study of human nature is similar to tidology because of the complexity of the factors in human action. Nevertheless, Mill argues that, in principle, both tidology and human nature can become exact sciences.

From the reading...

“Any facts are fitted, in themselves, to be a subject of science, which follow one another according to constant laws; although those laws may not have been discovered, nor even be discoverable by our existing resources...”

Ideas of Interest from *A System of Logic*

1. According to Mill, what is the difference between astronomy and tidology? Does Mill think tidology will ever be an exact science?
2. Do you think Mill believes *any* inexact science is *only* inexact because of the complexity of causes as applied in specific instances?
3. When Mill writes, “Now if these minor causes are not so constantly accessible, or not accessible at all to accurate observation, the principal mass of the effect may still, as before, be accounted for, and even predicted...” is he arguing for the validity of a science based on probability theory?

1. John Stuart Mill. *A System of Logic: Ratiocinative and Inductive*. New York: Longmans, Green, and Co., 1893, Bk. VI, Ch. IV.

4. According to Mill, what is the ideal goal of a science (*i.e.*, its perfection)?
5. Does Mill think that the study of the ideas, feelings, and acts of human beings can, in principle, achieve the exactitude of a perfect science? If so, would such a science preclude the possibility of the freedom of the will?
6. If human actions cannot be accurately predicted in specific instances because of the inexhaustible number of prior conditions, then would deterministic conditions still obviate the possibility of free choice? Explain your answer.

The Reading Selection from *A System of Logic*

[Human Nature as a Subject of Science]

It is a common notion, or at least it is implied in many common modes of speech, that the thoughts, feelings, and actions of sentient beings are not a subject of science, in the same strict sense in which this is true of the objects of outward nature. This notion seems to involve some confusion of ideas, which it is necessary to begin by clearing up.

Any facts are fitted, in themselves, to be a subject of science, which follow one another according to constant laws; although those laws may not have been discovered, nor even be discoverable by our existing resources. . . .

It may happen that the greater causes, those on which the principal part of the phenomena depends, are within the reach of observation and measurement; so that if no other causes intervened, a complete explanation could be given not only of the phenomenon in general, but of all the variations and modifications which it admits of. But inasmuch as other, perhaps many other causes, separately insignificant in their effects, co-operate or conflict in many or in all cases with those greater causes, the effect, accordingly, presents more or less of aberration from what would be produced by the greater causes alone. Now if these minor causes are not so constantly accessible, or not accessible at all to accurate observation, the principal mass of the effect may still, as before, be accounted for, and even predicted; but there will be variations and modifications which we shall not be competent

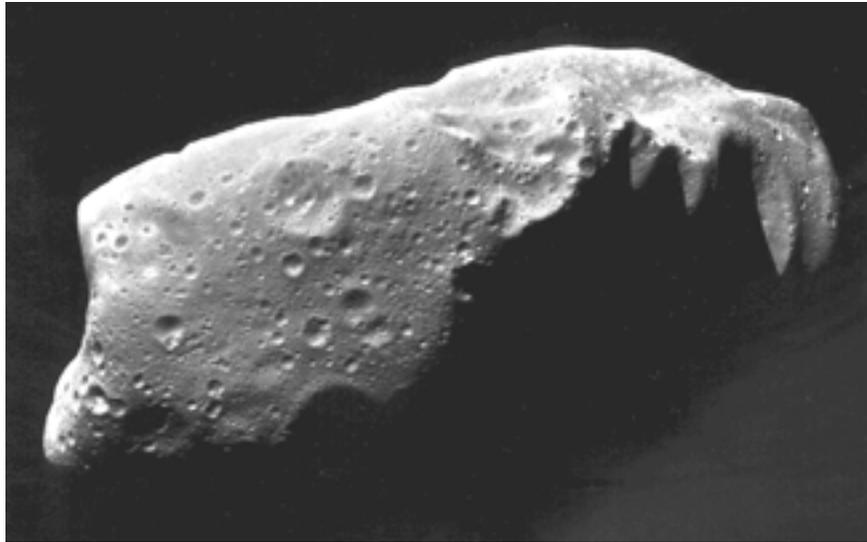
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to explain thoroughly, and our predictions will not be fulfilled accurately, but only approximately.

[The Theory of the Tides]

It is thus with the theory of the tides...

[The] circumstances of a local or causal nature, such as the configuration of the bottom of the ocean, the degree of confinement from shores, the direction of the wind, &c., influence in many or in all places the height and time of the tide; and a portion of these circumstances being either not accurately knowable, not precisely measurable, or not capable of being certainly foreseen, the tide in known places commonly varies from the calculated result of general principles by some difference that we cannot explain, and in unknown ones may vary from it by a difference that we are not able to foresee or conjecture...



The Asteroid Ida, NASA

Astronomy was once a science, without being an exact science. It could not become exact until not only the general course of the planetary motions, but the perturbations also, were accounted for, and referred to their causes. It has become an exact science, because its phenomena have been

brought under laws comprehending the whole of the causes by which the phenomena are influenced. . .

Tidology, therefore, is not yet an exact science; not from any inherent incapacity of being so, but from the difficulty of ascertaining with complete precision the real derivative uniformities. . . .

[Aspects of a Science of Human Nature]

The science of human nature is of this description. It falls far short of the standard of exactness now realized in Astronomy; but there is no reason that it should not be as much a science of Tidology is, or as Astronomy was when its calculations had only mastered the main phenomena, but not the perturbations.

The phenomena with which this science is conversant being the thoughts, feelings, and actions of human beings, it would have attained the ideal perfection of a science if it enabled us to foretell how an individual would think, feel, or act through life, with the same certainty with which astronomy enables us to predict the places and the occultations of the heavenly bodies. It needs scarcely be stated that nothing approaching to this can be done. The actions of individuals could not be predicted with scientific accuracy, were it only because we cannot foresee the whole of the circumstances in which those individuals will be placed. But further, even in any given combination of (preset) circumstances, no assertion, which is both precise and universally true, can be made respecting the manner in which human beings will think, feel, or act. This is not, however, because every person's modes of thinking, feeling, and acting do not depend on causes; nor can we doubt that if, in the case of any individual, our data could be complete, we even now know enough of the ultimate laws by which mental phenomena are determined to enable us in many cases to predict, with tolerable certainty, what, in the greater number of supposable combinations of circumstances his conduct or sentiments would be. But the impressions and actions of human beings are not solely the result of their present circumstances, but the joint result of those circumstances and of the characters of the individuals; and the agencies which determine human character are so numerous and diversified, (nothing which has happened to the person throughout life being without its portion of influence,) that in the aggregate they are never in any two cases exactly similar. Hence, even if our science of human nature were theoretically perfect, that is if we could calculate any character as we can calculate the orbit of any planet,

from given data; still, as the data are never all given, nor ever precisely alike in different cases, we could neither make positive predictions, nor lay down universal propositions.

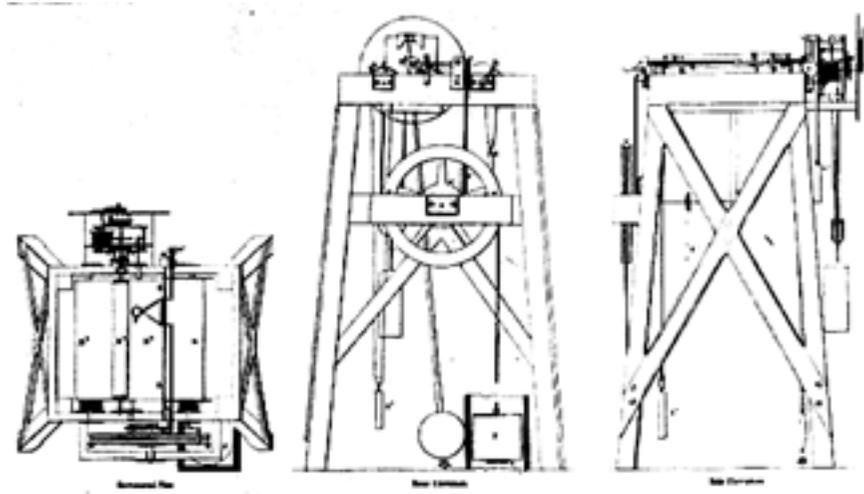
From the reading...

“... we even now know enough of the ultimate laws by which mental phenomena are determined to enable us in many cases to predict, with tolerable certainty...”

Inasmuch, however, as many of those effects which it is of most importance to render amenable to human foresight and control are determined like the tides, in an incomparably greater degree by general causes... it is evidently possible, with regard to all such effects, to make predictions which will *almost* always be verified, and general proposition which are almost always true. And whenever it is sufficient to know how the great majority of the human race, or of some nation or class of persons, will think, act, feel, and act, these propositions are equivalent to universal ones. For the purposes of political and social science this *is* sufficient. [A]n approximate generalisation is, in social inquiries, for most practical purposes equivalent to an exact one; that which is only probable when asserted of individual human beings indiscriminately selected, being certain when affirmed of the character and collective conduct of masses. . . .

[The Science of Human Nature]

The science of Human Nature may be said to exist in proportion as the approximate truths which compose a practical knowledge of mankind can be exhibited as corollaries from the universal laws of human nature on which they rest, whereby the proper limits of those approximate truths would be shown, and we should be enabled to deduce others for any new state of circumstances, in anticipation of specific experience.



Saxon Self-Registering Tide Gauge (horizontal, rear, and side elevation views), NOAA, Historic C&GS Collection

Related Ideas

John Stuart Mill Links (<http://www.jsmill.com/>). *J. S. Mill*. Extensive links to online versions of Mill’s writings, articles, and letters.

Mill, John Stuart (http://www.1911encyclopedia.org/M/MI/MILL_JOHN_\STUART.htm). *The 1911 Edition Encyclopædia*. The “John Stuart Mill” entry in the classic 1911 *Encyclopædia Britannica*.

John Stuart Mill (<http://plato.stanford.edu/entries/mill/>). *Stanford Encyclopedia of Philosophy*. A thoroughly reliable guide to Mill’s works by Fred Wilson.

From the reading...

“Even if our science of human nature were theoretically perfect, . . . we could neither make positive predictions, nor lay down universal propositions.”

Topics Worth Investigating

1. If psychology were to be an exact, or to use Mill’s phrase, “ a perfect” science, then specific human acts could be accurately predicted. Would a prediction be accurate if the person about to act becomes aware of the prediction prior to the act itself? Does the fact that a prediction can be known in advance disprove the possibility of predicting accurately or is that fact just one more antecedent condition? Thoroughly explain your view.
2. Is it merely a coincidence that Mill’s phrase, repeated several times in this chapter, concerning the aspects of the science of human nature as applying to “the thoughts, feelings, and actions” correspond to three of the four psychological types analyzed by C. G. Jung: the thinking, feeling, and sensation types (the fourth, the intuitive type, is omitted)?
3. Do you think that a probabilistic science such as meteorology would qualify on Mill’s outlook as an exact science? See his thoughts on this question in his *A System of Logic: Ratiocinative and Inductive*, Book. VI, Chapter IV.

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