As the world has this year been celebrating the 500th anniversary of the birth of Copernicus, 1473-1543, it is perhaps in order to reflect on the psychological meaning of his work.

**Freud's Interpretation**

Copernicus appears in the psychological literature to our knowledge only through Freud who designated him together with Darwin and himself as one of the three great scientific humiliators of mankind. Freud's well-known passage is:

Humanity has in the course of time had to endure from the hands of science two great humiliations of its naive self-love. The first was when it realized that our earth was not the centre of the universe, but only a tiny speck in a world-system of a magnitude hardly conceivable; this is associated... with the name of Copernicus... The second was when biological research robbed man of his peculiar privilege of having been specially created, and relegated him to a descent from the animal world, implying an ineradicable animal nature in him: this transvaluation has been accomplished in our own time upon the instigation of Charles Darwin, Wallace, and their predecessors... But man's craving for grandiosity is now suffering the third and most bitter humiliation from present-day psychological research which is endeavoring to prove to the 'ego'... he is not even master in his own house, but that he must remain content with the veriest scraps of information about what is going on unconsciously in his own mind (3, p. 252).

In this passage the founder of a psychotherapeutic system sees scientific progress in terms of humiliation of humanity and takes pride in including himself among the three great humiliators. This is strange, because to humiliate a person is pathogenic, while to dignify him is therapeutic. Indeed, to feel oneself "not even master in his own house," is a very general characteristic of mental disturbance, while the mentally healthy feel quite in control of themselves and their situation. The former is an attitude of defeatism which, however, absolves

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2The German original is *Krankung* in the sense of *Demütigung* which is best translated as "humiliation." In the published translations this is rendered as "outrage" or "blow" which we have replaced with "humiliation."
one from responsibility and permits one to blame others for one’s own shortcomings. It is more likely to be found among the disadvantaged and mental patients than among normal groups, as the research on external versus internal control of reinforcement by Julius Rotter, reviewed by Lefcourt (4), has shown.

Aside from this, Strupp's statement is widely shared that the therapist is "guided by a belief in Man's innate strength to master his own fate, provided the obstacles are not insuperable" (8, p. 119).

DEMONSTRATIVE VERSUS DIALECTICAL TRADITION

Freud's antitherapeutic statement is consistent with his philosophy of science, his metapsychology, which was causalistic, deterministic, mechanistic, and reductionistic, rendering man an object of forces beyond his control, a pessimistic and indeed humiliating view of man. It has recently been severely criticized in a posthumous paper by G. S. Klein (5) who, like Strupp incidentally, otherwise accepts a great deal of Freud.

The Freudian dilemma is that Freud recognized only the epistemology of the natural sciences, saw himself primarily as a natural scientist, and was only reluctantly a therapist. But this approach is not adequate at the level of human personality—from the scientific as well as the therapeutic viewpoint. Mental events cannot be reduced to physiological and ultimately to chemical and physical events. They are of a different nature, requiring a second approach, the "dialectical tradition" of the humanistic or social sciences as Rychlak (6) has argued, in addition to the "demonstrative tradition" of the natural sciences. The dialectical tradition recognizes that man gives meanings to objective events by placing them into a conceptual coherence, and meanings are best clarified in terms of their opposites. Although Freud in fact worked within the dialectical tradition, he would have strongly denied doing so (7, pp. 208-209). Instead of recognizing the integral relationship of opposites he postulated discrete objective oppositional forces.

The dialectical tradition of the humanistic sciences was, however, explicitly accepted by Alfred Adler without his abandoning the demonstrative tradition where called for. He stressed goals and purposes rather than efficient causes from the past, and human creativity and freedom of choice as against "hard" determinism. His description of the mental well-being of man included: "He is and wants to be the master of his fate with an effective regard for the welfare of others" (1, p. 156, italics added).
Bronowski’s Humanistic Interpretation

Bronowski, in his lecture read at the International Symposium of the Smithsonian Institution in observance of the 500th anniversary of the birth of Copernicus, interprets his psychological meaning quite differently from Freud. We learn that Copernicus was a humanist and in the spirit of his time, a neo-Platonist. In this perspective his discovery was and is to be considered an extension of the power of man over nature by understanding her laws. Bronowski contends: “Although Copernicus is usually accused of removing Man from the center of the universe, in fact he moved him into the heavens. His system abolished the distinction between the terrestrial sphere and the crystal spheres beyond the moon, and made the heavens earthy” (2, p. 28).

After the death of Copernicus his world system became a religious issue. Far from detracting from man, his system was judged to detract from the authority of the Church. He had demonstrated that man had the intellectual power to restructure his understanding of the world through scientific methods of his creation and thereby to arrive at more adequate solutions of problems than he had previously attained. “Copernicus was a humanist pioneer” (2, p. 29).

This presentation of Copernicus as a humanist is psychologically more plausible and socially more useful than one as a humiliator of mankind. It also does away with a reification of science and opposing it to man. Yet, depending on our purposes, we are free to accept the less constructive interpretation—this freedom itself being evidence that the realm of the mind is the realm of the dialectical tradition.

Such bi-polar interpretation as above is also possible regarding the work of Darwin. It can be understood to imply “an ineradicable animal nature in man.” But, since in fact evolution is forward oriented, it can more profitably be construed to point to still undeveloped potentialittes in man for societal evolution.3

Conclusion

This brief discussion on the occasion of the Copernicus year was meant to show that man does indeed not only live in a world of demonstrable facts, many of his own discovery or creation, but also one

3Dr. Bronowski who kindly read this paper, commented on this point: “I would add that I think that Darwin and Wallace (particularly the latter) saw their theory of evolution in the same light, not as a Demütigung but as an elevation of the status of all life” (personal communication, June 28, 1973).
of dialectical interpretation of the meaning of these facts. This is part of man’s freedom, his self-determination. These interpretations may detract from man or they may add to his sense of dignity and worth. Since interpretations involving man tend to become self-fulfilling prophecies they entail the greatest responsibility.

References

2. Bronowski, J. Copernicus as a humanist. Lecture delivered to the Symposium of the Nature of Scientific Discovery at the Smithsonian Institution, April 24, 1973, as printed in the program.
3. Freud, S. A general introduction to psychoanalysis (1917). Transl. by Joan Riviere. Garden City, N. Y.: Garden City Publ., 1943.—We did not use the Standard Edition because it deviated too far from the original in parts of the passage quoted in this paper.