

ASTRONOMICAL SCRAPBOOK

THE FAUTH MOON ATLAS

NEARLY a quarter century after his death, the large moon atlas by Philipp Fauth (1867-1941) has finally been published.* This has caused a revival of interest in the German selenographer, hitherto little known in this country.

books to the moon's surface, *Unser Mond*.

Nevertheless, this same man was also widely known for his crank cosmogonical theories and for vitriolic polemical writings. Fortunately, he managed to keep his telescopic work largely separate from his fantasies, and *Unser Mond* is practical-

ly free of them. He had the kind of complex personality that contemporaries found hard to appraise justly; no wonder that most articles about him are either tar and feathers or whitewash.

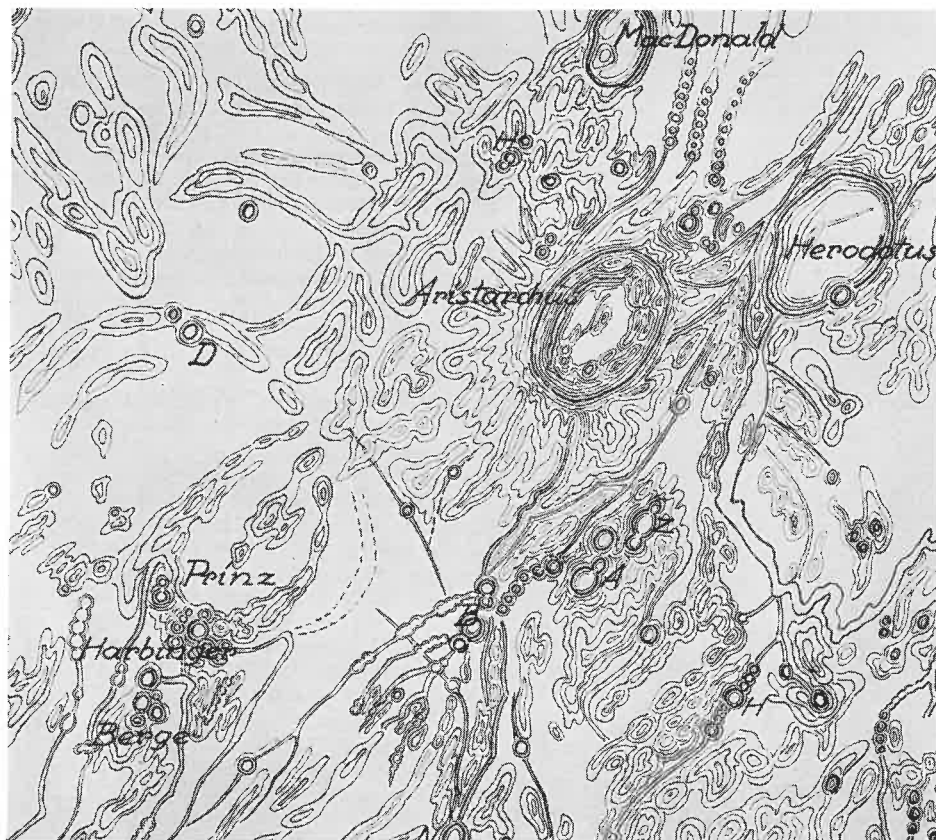
A variety of circumstances have combined to give Fauth a diminished reputation that has reflected undeservedly on his own lunar work. They include his conflict with organized astronomy, and the failure of his writings to reach English-speaking astronomers.

The key to the whole story is the isolation in which Fauth worked, leading to an extreme independence of outlook. By vocation a schoolteacher, he remained an amateur astronomer all his life, never taking part in the collective life at a professional observatory. Because Germany, unlike France or England, had no national amateur organization, he had little opportunity for cooperative observing and exchanging ideas with his fellows. Also, back in the early 1890's lunar studies were at a low ebb following the deaths of J. F. J. Schmidt and W. R. Birt, and young Fauth realized his superiority to most of his competitors.

It is easy to see how this lone wolf would get into irresolvable disagreements with professional astronomers. Particularly in the case of the Prague selenographer Ladislav Weinek (1848-1918), Fauth was so abusive in print that a rift widened

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Below: In 1932 Fauth published this chart of the same region, a handsome example of the hachure technique he later abandoned for contours. At the right, Schröter's Valley is seen to connect through a narrow gorge with the interior of Herodotus.



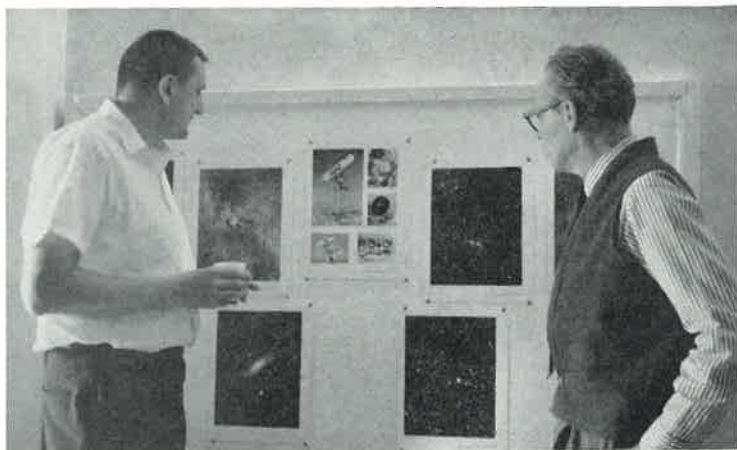
Above: About one-tenth the area of Sheet 18 in the new Fauth moon atlas (slightly reduced), showing the crater Aristarchus and the Harbinger Mountains. The name *MacDonalda*, on the crater officially known as Herodotus A, honors Thomas Logie MacDonald, one of the greatest but least known of 20th-century British selenographers.



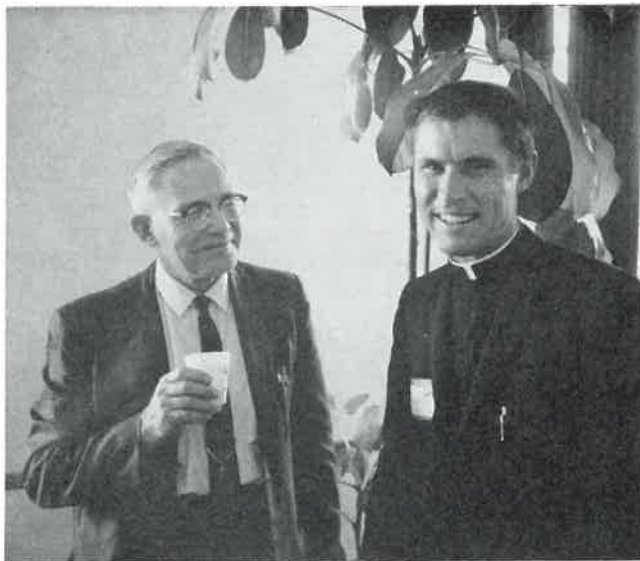
You can get surprisingly contradictory opinions about Fauth when you talk with people familiar with his story. Some call him a very great man, but there are many older European astronomers to whom his name is anathema. The recent popular articles about Fauth hardly touch on the problem of his psychology. A second question, of the scientific value of his atlas today, should be discussed separately.

Fauth was perhaps the most capable and versatile of all active visual observers of the moon between about 1890 and 1940. He combined descriptive selenography with cartography, measurements of craters, and statistical studies. In 1936 he published the best of all observing guide-

* Philipp Fauth, *Mondatlas*, Bremen, 1964. Available at DM 64.00 (about \$16.00) from Olbers-Gesellschaft, Werderstrasse 73, 28 Bremen, West Germany.



At left above, Joseph Kawalczyk talks about amateur astrophotography with Raymond G. Coutchie, in front of the latter's exhibit. Pictured at the right are Blair medalist Clyde W. Tombaugh and Rev. Ronald Royer, a past president of the WAA.



Flagstaff, Arizona, station of the U. S. Naval Observatory.

At the closing banquet, Mr. Norton was master of ceremonies. Even fate worked to make the evening enjoyable—a Criterion Manufacturing Co. door prize was won by Mrs. Thomas Cave!

Probably many amateurs attended this meeting principally to see Clyde W. Tombaugh receive this year's G. Bruce Blair

award. Famed for his discovery of Pluto, he has been a longtime friend to many in the audience. In his acknowledgment, Dr. Tombaugh recalled many of the human elements that went into the detection of planet X (see *SKY AND TELESCOPE*, March, 1960, page 264).

Does our solar system contain a planet remoter than Pluto? In Dr. Tombaugh's opinion it is doubtful that another exists.

He and others have painstakingly scanned a major portion of the sky to the 16th and 17th magnitude in a fruitless search for such an object.

Next year's president of the WAA is Hollis DeVines of the San Mateo Astronomical Society. Walter Krumm (San Jose Amateur Astronomers) is vice-president, and Mrs. George Carroll (Stony Ridge Observatory) is secretary.

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between him and the academic world. Next came Fauth's advocacy of Hörbiger's grotesque glacial cosmogony, on which he published a 790-page book in 1913. For many years he was involved in this strange movement, which carried on guerilla warfare against official astronomy in Germany. (Someone could write a fascinating study of how the social tensions in Fauth's Germany found one outlet in pseudoscience.) These affairs all did lasting harm to his scientific reputation.

Fauth's serious selenographic work made surprisingly little impact on amateur astronomy in Great Britain and the United States. One reason seems to have been personal misunderstandings between him and some prominent members of the British Astronomical Association's lunar section. Characteristically, Fauth republished a set of British drawings as samples of "degenerate selenography." Another reason why his name remains relatively unfamiliar has been the extreme rarity of Fauth's *Unser Mond* outside of Germany; an English translation of this excellent book would be very useful today.

When the German amateur died on January 4, 1941, he left unfinished a major undertaking, his lunar atlas on 22 sheets, to a scale of 1:1,000,000. The basis of this project was the large collection of detail drawings he had made since 1911 with an excellent 15½-inch apochromatic refractor, first at Landstuhl in the Rhineland, later at Grünwald in Bavaria. These charts have now been completed by the author's son, Hermann Fauth, and published in an

edition of 500 copies by the Olbers-Gesellschaft of Bremen.

Physically, the atlas consists of a cardboard carton about 18 by 11 by 1 inches, containing 22 loose sheets that each unfold to about 33 by 32 inches. In the carton are also a 38-page explanatory booklet in German and a copy of Fauth's very useful 1:4,000,000 map of 1936, originally published with *Unser Mond*.

Unlike early Fauth maps, where vertical relief is indicated by hachures, the large atlas uses contour lines to represent craters, mountains, ridges, and other elevations and depressions. Not based on actual measurements of lunar topography, these contours are fictions intended to suggest Fauth's visual impressions. There is no coordinate grid of any kind, but the accompanying 1:4,000,000 chart does have a Xi and Eta grid from which approximate coordinates can be read.

Names of features are printed in red. An inspection of Sheet 1 shows two misspellings (Lalander for Lalande, Uckert for Ukert). Sometimes names proposed by H. P. Wilkins are given instead of the IAU names, such as Gant instead of Archimedes A on Sheet 4. Some confusion results from frequent departures from the handy IAU rule for craterlets with compound designations like Mösting B, whereby the letter B is placed on the side of the craterlet facing Mösting itself.

In appraising the atlas, it must be remembered that there is no such thing as an all-purpose moon map, satisfying simultaneously our needs for: 1, rendition of minute details; 2, accurate positional and height data; 3, indication of how features change in appearance during a luna-

tion as solar illumination varies; 4, stratigraphic relationships; and 5, a standard of nomenclature. (This list could be extended.) Most of these purposes are best met by the U. S. Air Force Lunar Astronautic Charts and by the series of photographic atlases issued by G. P. Kuiper and his associates.

The particular merit of Fauth's atlas at present is its richness in fine detail, for his 15½-inch telescope under favorable conditions had better resolving power than the best earth-based lunar photography today. Therefore, the lunar student with some topographic problem—the pattern of Triesnecker rilles, or the ridge system near Linné—will find Fauth's atlas a valuable reference when used in combination with other sources.

Such applications raise the question of homogeneity, since some of the relief was drawn by Philipp Fauth, some by his son. There is a characteristic difference between their styles, pointed out to me by Ernst E. Both of Kellogg Observatory. The father drew with a surer stroke, whereas the son sometimes inserted ambiguous patterns and even drew intersecting contour lines.

But there is another reason for owning Fauth's *Mondatlas*. As Dr. Both expresses it in his excellent *History of Lunar Studies*: "Fauth was the last of the great visual observers, and the very high standards he set for himself were never approached by his contemporaries. And, it seems unlikely that they will ever be approached by any individual. Like Schmidt he came close in reaching the classic balance which Mädler had attained."

JOSEPH ASHBROOK