function can, however, be utilized (*16*); and when the position of negative scatterers is known, but the distribution of other nuclei is not yet established, a set of Fourier coefficients for the negative scatterers alone can be computed, and these can be subtracted from the corresponding coefficients for the complete crystal. Relations arising from nonnegativity can then be applied.

Conclusions

Neutron diffraction has been regarded by some workers as a supplement to x-ray methods, to be used chiefly for structure refinement or location of light x-ray scatterers among heavy scatterers. There are cases, however, where neutron methods should provide more direct approaches to an unknown structure from the outset. Although it has been stated that Fourier methods will not be possible with neutron data, it is demonstrated both experimentally and theoretically that this is not true in cases where such methods will really be advantageous—i.e., for structures where the atoms are for the most part not in special positions.

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Hugo Iltis: 1882–1952

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Hugo Iltis, professor of biology at Mary Washington College of the University of Virginia, died at Fredericksburg, Virginia, on June 22, 1952. In the United States he was best known as the biographer of Mendel and the organizer of the Mendel Museum. In his native city of Brünn, Czechoslovakia, where he was born in 1882, he was known also as the professor of biology of the Deutsche Gymnasium (1905–38), *Privatdocent* of botany and genetics in the Deutsche Technische-Hochschule, and the founder and director of the Masaryk People's University (1921–38). To the German National Socialists and racists generally he was known as the declared enemy of the pseudo science on which Hitler's state was founded. His great energy and intensity of purpose enabled him to carry on simultaneously his activities as scientist, biographer, educator, organizer, and writer for the public. In fact, it was the mutual interdependence among these aspects of his life and character, a kind of synergistic interaction, which enabled a man who was not robust, and who was often in frail health, to accomplish so much in the two decades between the founding of the Czechoslovak state by Masaryk and its destruction by Hitler.

It was in this period that he published his *Gregor Johann Mendel: Leben, Werk und Wirkung* (Berlin: J. Springer [1924]; English ed., London: Allen & Unwin; New York: Norton [1932].) The first half of this work was a careful, appreciative account of Mendel's life based on the few original documents available, some of which Iltis himself rescued from oblivion at the Altbrünner Königinkloster. This is still the definitive biography of Mendel. The second half, an account of the development of Mendelism after the rediscovery of the principles in 1900, was of less permanent value and was not included in the English translation.

In the same year (1924) Iltis published his account of the founding of, and his program for, the Volkshochschule, an evening school for adult education that was unique for its time and place. He edited, from 1927 to 1938, the quarterly journal of this school, which bore the same title as Iltis' own bookplate, *Licht ins Volk.* One of the 1931 issues was a *Festschrift* celebrating the opening by this people's university of its own house, an effort for which Iltis had provided the moving spirit and raised most of the funds. The democratic purposes of this venture in popular education were explicit in its curriculum and activities; they were the outward manifestations of Iltis' own deeply felt political beliefs, as expressed in two pamphlets published in 1926: *Kampf um den Darwinismus* and *Naturwissenschaft und Sozialismus.* The second of these began: "The building-up of scientific knowledge is the essential foundation for the

development of the socialist society of the future." Iltis' devotion to the ideals of social democracy was based on his recognition of human need rather than upon doctrine. He would have found himself in close agreement with such founders of American democracy as Thomas Jefferson.

It was to be expected that Iltis, interested in science as a basis for democracy, and in genetics in particular, would oppose with all his strength the prostitution of science, and especially of genetics, by the German racists. He devoted most of the period from 1930 to 1938 to lecturing and writing on the race theories. He wrote three books, *Volkstümliche Rassenkunde* (1930), *Race in Science and Politics* (in Czech, 1935), and *Der Mythus von Blut und Rasse* (1935), containing Iltis' own introductory article, *"Der Rassismus im Mantel der Wissenschaft,"* and two other articles by him under pseudonyms. At this time, when the power of the Nazis was rising and spreading, Iltis made no attempt to conceal his views and stood in the forefront of the intellectual opposition. Since he was himself of German descent, of a family long resident in Brünn, where his father had been the town physician, he knew that he would earn the hatred of the Nazis, not only as a moral and intellectual enemy, but as a "racial traitor" as well. It was of course these activities that forced him to leave the town and the work he loved so well just before Hitler's troops arrived in 1939. At the age of 57 he began a new life in the United States.

After coming to this country his chief activities were in teaching at Mary Washington College, and especially in installing and building up the Mendel Museum there. The museum, an extension of one he had organized in Brünn, was based on some Mendeliana that Iltis had brought with him, with later additions illustrating some of the developments of modern genetics. In this, as in all his work, he was fortunate in having the collaboration of his wife, Anne Liebscher Iltis, who was first his student at the Volkshochschule in Brünn and later worked with him in building up the Mendel Museum, with which she now continues her connection.

Iltis' primary training was in botany, first in Brünn, later at Zürich as assistant to Dodel-Port, and then at Prague, where he took his doctorate under Molisch in 1903. His publications include, in addition to those on botanical subjects, others on natural history. He was the editor of *Flora Photographica* (Leipzig: Weigel), of which two volumes were published before the publishing house went out of business in 1933, and of *Studia Mendeliana* (Brünn, 1923).

In reviewing the life of a colleague and friend, one sees the essence of the scientific calling itself. On the table lie all the tangible remains of fifty years of hard and devoted work—the books, the bound volumes of scientific papers, the pamphlets, the unfinished manuscript of the book in progress. It is to this end that all must come. But one cannot judge the grist by the number of pages or the space occupied, because it is part of a larger whole that is maintained not merely by addition of facts and theories, but by the acquisition of a spirit in which courage, integrity, and devotion, like those of Hugo Iltis, are essential ingredients.

News and Notes

Harvey H. Bundy has been elected chairman of the Carnegie Endowment for International Peace to replace **John Foster Dulles.** Mr. Bundy has been a trustee since 1948 and vice-chairman since 1951. He was a special assistant Secretary of War from 1941 to 1945.

Kenneth E. Caster, University of Cincinnati geologist and paleontologist, has been elected a member of the Swedish and Norwegian geological societies. He is also a member of the French society and of the Brazilian Academy of Science. Dr. Caster is president of the Paleontological Research Institute.

Edward Sumner Elliott will become assistant plant pathologist at West Virginia University on Mar. 1. Dr. Elliott has been serving in a civilian capacity with the Army Chemical Corps at Camp Detrick.

Richard A. Kern, professor of medicine and head of the department at Temple University School of Medicine and head of the Medical Service at the University Hospital, has been named chairman of the Panel on Shipboard and Submarine Medicine of the RDB Committee on Medical Sciences.

Thomas B. Magath, chairman of the sections of Clinical Pathology and Biochemistry at the Mayo Clinic, has been made an honorary member of the medical faculty of the University of Chile, in recognition of his contributions to the field of parasitology.

John R. Richards has been named director of the Office of Research Service at New York University. The new office will coordinate, guide, develop, and promote research. Dr. Richards went to NYU from Washington, where he has been a special assistant for education to the Secretary of the Army.

Charles H. Riesz has been appointed to the staff of Armour Research Foundation of Illinois Institute of Technology to head project research in the area of catalysis, with particular reference to industrial applications.