Edmond Saurin

1904-1977

Received 20 February 1979

HENRI FONTAINE

Born November 25, 1904 in Castellane in the Basses Alpes, Edmond Saurin was a provincial and remained true all his life to his native Provence. He went to secondary school in Aix-en-Provence. Shortly after arriving at this school, he visited the town's natural history museum and was very impressed by all that he saw; in his enthusiasm he decided to become a naturalist. That visit remained for him a major moment of his life—he would mention it to his children with emotion.

THE FIRST WORK, IN FRANCE (1920-1927)

Provence is rich from the archaeological point of view. Moreover, C. Cotte, a friend of the Saurin family, was an archaeologist, better known for his archaeology than for his profession as a notary. Though he used only his spare time for research, Cotte became very well known and was one of the promoters of the regional archaeological journal *Rhodania*.

The young Saurin followed his friend passionately and helped Cotte in his research. Soon he became a collaborator and ultimately undertook his own research; he published his first scientific note at the age of 17. A shy person, Saurin had to ask permission of owners to excavate on their land. Because he seemed too young, he was received with suspicion, and this he held as a bitter memory of his work. (Sometimes, however, he was lucky. On one occasion the Baron of Saint Marc helped him in his study of the "dolmen of Saint Marc," situated near Aix-en-Provence.) At 24 years of age, when he left for Indochina, he had already published 11 articles in *Rhodania*.

Geology had not been among Saurin's studies. Cotte, a realistic man, counseled his young friend to turn to this science, which was extremely compatible with archaeology

Author's address: 128 Rue du Bac, 75341 Paris 07, France. This memorial was translated by Wilhelm G. Solheim II.

and would be more promising than that discipline when the time came to find a job. Moreover, at that time, the teaching of archaeology was poorly organized. Accordingly, when Saurin went to the University of Lyon, he studied geology.

When his studies were completed, his professor of geology, Charles Deperet, told Saurin that the Geological Service of Indochina needed a young geologist and that he was prepared to recommend him to this institute. Thus, a chance suggestion sent Saurin to Indochina, a choice that fit him so perfectly that it would be difficult to imagine his life in any other country in the world.

At this point, Saurin's work in Provence rapidly came to an end; his two last articles were published in 1931. His interest in his native province continued, but he undertook no further scientific research there. When he returned from his mission in Indochina, he enjoyed peace in the calm atmosphere of Provence's magnificent scenery and clear light. His attraction for the provincial countryside had influenced him toward painting; without the influence of C. Cotte, in fact, he might have become a painter. Saurin completed several compositions of the countryside around Aix-en-Provence that showed much talent.

The papers of Edmond Saurin having to do with France will be cited here separately from his publications treating Cambodia, Laos, and Vietnam.

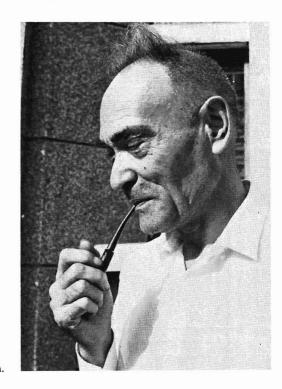
WORK IN CAMBODIA, LAOS, AND VIETNAM (1928-1964)

After 1926, the Geological Service of Indochina was left shorthanded with the departure of Henri Mansuy and Madeleine Colani. Reorganized with the task of making a geological map of a scale of 1:500,000, the Service was in urgent need of young geologists to realize these objectives and hired J. Gubler, H. Hoffet, and Saurin, the last of whom arrived in Hanoi on January 1, 1928.

Wasting no time, Saurin began his research on the geology of Yunnan and the south of Indochina. Yunnan attracted him, but the Chinese authorities refused to give him a continuing visa. He was then charged with the study of southeastern Indochina. The results of his first research were brought together to make up his doctoral thesis, which he defended in Paris (the Sorbonne) in 1935.

The Geological Service, which wished to complete a geological map of Indochina as quickly as possible, instructed its geologists not to waste time on the detailed study of palaeontology and particularly not on prehistoric research. This rule was difficult to apply strongly, however, for Mansuy and Colani had already established a firm tradition in this line of study. In 1933, an opportunity was given to Edmond Saurin to return to prehistory. The military, in the course of constructing a post at Na Mou in northern Laos, had found some prehistoric objects and had sent them to the Geological Service. In 1934, Edmond Saurin described this late neolithic material (axes, adzes, and ring discs).

At the second Congress of Prehistorians of the Far East, held at Manila in 1935, Edmond Saurin presented the results of his work on the Quaternary of southeastern Indochina. Not having found palaeontological locations such as those with mammalian fauna discovered in Indonesia, he divided the Quaternary into three separate periods based on geomorphological criteria. The first two periods, the epochs of warping and of fracturing, corresponded to the Pleistocene and included several levels of erosion and terracing. Volcanic activity, begun at the end of the Tertiary, continued and lasted up to our times. The third period, equivalent to the Holocene, is marked by marine terraces of 2 and 4 m and also by the filling in of the Mekong Delta.



M. Saurin a short time before his death.



M. Saurin in 1929.

In 1936, Fromaget and Saurin made a preliminary study of prehistoric layers in the region of the Phu Loi mountains, northeast of Luang Prabang. For the first time in Laos, not only were bronze and polished stone industries recognized but palaeolithic levels with fossil animals were reported as well; Fromaget and Saurin presented evidence for a Hoabinhian industry and described several human skulls.

Interested in physical anthropology, Edmond Saurin continued for some years the study of fossil skulls unearthed in Indochina and, for comparison, made measurements on diverse populations: Katang, Thai, and Kha Mu. At the same time, he enlarged his field of study to legends and local customs. The results of his work were published separately or in the descriptions of prehistoric sites.

From 1938 to 1945, some sites of the Hoabinhian and of the late Neolithic were discovered in the districts of Qui-Chau and of Thuong-Xuan in the north of central Vietnam. A pleistocene fauna was announced at Houei-Hoc in northern Laos. The neolithic layers were situated at Ban Mong.

Then the brutal political events of 1945 befell Indochina, which had not suffered much from World War II. Assassinations, famine, and multiple epidemics were the horrors that surrounded Edmond Saurin and his family. Scientific research lost all significance, and even became impossible; it was swept aside by problems of survival. Saurin, however, along with his wife and two daughters, survived the torment without major catastrophe—with the exception of psychological shock. For four years, Saurin published nothing, even in geology.

While Indochina was embroiled in guerrilla warfare, some villages and certain regions remained quiet. Some projects were still undertaken, and the Geological Service had a role to play. Its chief, Jacques Fromaget, had grown old and Edmond Saurin, because of his competence and his reputation, was called to replace him. Saurin recruited a new geologist, who remained only a short time in Indochina; the situation became more and more unstable and interest in geology little by little was lost during the military difficulties. Saurin did not abandon his work; at the end of 1949, he began again to publish scientific papers every year.

The evolution of the three countries of Indochina toward independence was accomplished through slow administrative changes that accordingly affected the Geological Service. After the agreements of 1948 and 1949, the Service was attached to a four-part organization that was in turn attached to Cambodia, France, Laos, and Vietnam. In 1953, this organization collapsed and the various national geological services were created.

Vietnam founded a national service under the name "Direction des Études du Sous-Sol" and gave to Edmond Saurin the task of organizing it. It was impossible to attract French geologists. The diploma students of the University of Hanoi were still few in number; one of these was hired. In 1954, the fall of Dien Bien Phu and the partitioning of Vietnam brought about new transformations. The government at that time ordered that the Études du Sous-Sol be evacuated to Saigon. This order was executed in part only, for time was short and some palaeontological pieces belonging to the museum could not be moved by the badly prepared transport.

After a stay in France in 1955–1956, Saurin returned to Vietnam as a professor of the Faculty of Science of Saigon and as an advisor to the Direction des Études du Sous-Sol. The rector of the university imposed on him a severe schedule and practically required him to limit his activities to the Department of Geology of the Faculty of Science, the department which he founded and which he headed until 1965.

At the end of 1951, Saurin resumed his research in prehistory. He described a mold for a bronze axe found in a rock crevice, without accompanying artifacts, in the neighborhood of Nhommalat in Laos. In the same area, in a cave tested by a 2 m deep trench, he found a "short axe" in the bottom of the excavation, evidence of ancient occupation. Artifacts recovered above this level, which appeared to be late Neolithic, included some bones, mollusc shells, turtle shell, potsherds, grinders, polishing stones, red ochre, quartz fragments, and the principal characteristic of the layer, objects of chert (polished shouldered axes, rough-hewn [taillé] axes, cores, flakes, points, scrapers, and undefined flakes).

In 1957, Saurin showed that the prehistoric population of the Bay of Along were Hoabinhian by his description of a rhyolite industry found in the mud at low tide near Giap-Khau, covered with mangroves. Most of the artifacts were recovered from the intertidal zone and appeared slightly rolled.

After several trips and the collection of abundant material to ensure the strength of his conclusions, Saurin announced the discovery of an old Palaeolithic in eastern Cambodia, with simple forms made by flaking, especially on one face like the ancient industries known in the other countries of Southeast Asia, and on the other hand with marked affinities to the Oldowan and the Salétien of Africa.

In 1960, while ground was being broken in a rubber plantation, some potsherds and various stone artifacts were saved from a prehistoric site which would much later be called Hang Gon 1. These first finds were presented to Saurin, who immediately undertook some research which excited the employees of the plantation. Other sites were discovered, corresponding to the Palaeolithic, the Bronze Age, and the Iron Age (the Sa-huynh Culture).

At the same time, I found the site of Dau Giay and brought Saurin there, who extended his research to this new locality on the Xuan Loc plateau. The fertile red basaltic soil of the plateau had supported man for a very long time; an immense field of study was opened in this region. Suddenly, sickness halted Saurin's labors.

In the course of two visits to Con Son (Poulo Condore) in 1962 and 1963, Saurin collected from the surface of a sand dune, near the town of Con Son, some potsherds associated with rare fired clay beads, stone and bronze artifacts, and iron slag.

Work in France (1965-1977)

After his sickness, which made him tire easily and imposed on him an artificial removal of feces and urine, Edmond Saurin courageously returned to his research. He attempted to show that he did not suffer; in spite of his smile, however, he was not able to continually control his problems and his weakness.

In 1966, he published the description of the materials from the rockshelter of Tam Pong in Laos, material which had been collected in the course of his excavations made with J. Fromaget; the war had stopped the completion of this work.

He also returned to the descriptions of the important materials collected on the Xuan Loc plateau. In particular, he wrote about the palaeolithic artifacts of Nhan Gia (or Hang Gon 6) and of Dau Giay. He presented a study of the field of jars of Hang Gon.

At the request of several journals, Saurin wrote summaries on the prehistory of Cambodia, Laos, and Vietnam, working until April 1977. An intestinal occlusion then required surgery, but the tissues, which had been heavily radiated in 1965 and 1966 to stop a cancer, were again infected. Two other operations were necessary and these considerably

reduced the strength of Saurin, who died on November 29, 1977, having maintained his full clarity of mind until the last month before his death.

Friendly, smiling easily, Edmond Saurin has left an excellent legacy to Vietnam. Listening to others and talking little of himself demonstrated an extraordinary strength of character. After 1965, he was greatly handicapped but would make a visit or consult a book in the library without hesitation. In 1971, after several years of suffering, he cited this passage from a letter received from Louis Malleret: "Le Dieu compatissant de l'Évangile, que j'ai retrouvé dans la souffrance morale et physique, m'a jusqu'ici toujours accompagné et soutenu." Tragically, this phrase had profound meaning for him.

Edmond Saurin had been a geologist and a prehistorian; he was also interested in contemporary molluse shells. A shrewd numismatist as well, he had brought together an important collection of pieces of ancient money. His work in geology was obviously the most important; he had articles in 130 publications and in the 1:500,000 scale geological maps covering southeastern Indochina. In conchology, he described marine and land shells of the Paracel Islands as well as the land shells of several localities in Cambodia and Laos; the small gastropods of the Vietnam seashore were his speciality.

Edmond Saurin was a conscientious and even enthusiastic civil servant. Beneath the appearance of an absent-minded professor, he was actually a practical person who was wary of theoreticians. In a constructive way, he appreciated the results obtained and he had a questioning spirit for the overall ideal plan.

ARCHAEOLOGICAL PUBLICATIONS OF EDMOND SAURIN Part I: France

- 1921 Une statuette-momie provençale. Rhodania, Compte Rendu du 3ème Congrès, Besançon: 71-74.
- 1922 (With C. Cotte) Emploi de l'huile de cade par les Gaulois pour la conservation des têtes coupées. Rhodania, Compte Rendu du 4ème Congrès, Nîmes, no. 729.
- 1924a Les tufs de Vauvenargues au point de vue préhistorique. *Rhodania*, Compte Rendu du 6ème Congrès, Avignon:58-61.
- 1924b Fouilles de tombes romaines à Berre (Bouches du Rhône). Rhodania, Compte Rendu 6ème Congrès, Avignon:48-58.
- 1926a Inscriptions aux nymphes trouvées à Aix-en-Provence. Rhodania, Compte Rendu du 8ème Congrès, Chambéry:110-113.
- 1926b La grotte du barrage près d'Aix-en-Provence, habitat de l'âge du Bronze. Rhodania, Compte Rendu du 8ème Congrès, Chambéry:113-115.
- 1927a Blessure du péroné dans une tombe du Moyen Age. Rhodania, Compte Rendu du 9ème Congrès, Aubenas:170.
- 1927b (With J. Muller) Trouvaille d'un couteau tranchet en bronze près Vauvenargues (Bouches du Rhône). Rhodania, Compte Rendu du 9ème Congrès, Aubenas:170-172.
- 1927c Inscriptions inédites de Castellane (Basses Alpes). Rhodania, Compte Rendu du 9ème Congrès, Aubenas:179-182.
- 1927d Hache et broyon en pierre polie des environs d'Aix-en-Provence. Rhodania, Compte Rendu du 9ème Congrès, Aubenas:182-187.

- 1928 Notes sommaires sur quelques nouvelles stations préhistoriques de Provence. *Rhodania*, Compte Rendu du 10ème Congrès, Lons-le-Saunier:159-167.
- 1931a La Baume Convers. Rhodania, Compte Rendu du 13ème Congrès, Vienne:244-248.
- 1931b Le dolmen de Saint-Marc près d'Aix-en-Provence (Bouches du Rhône). Congrès Préhistorique de France, 10ème session, Nîmes, pp. 389-396.
- 1971 (With G. Delibrias) Age du dolmen de Saint-Marc, Près Aix (Bouches du Rhône). l'Anthropologie 77(1-2):133-134.

Part II: Cambodia, Laos, and Vietnam

- 1935a Station néolithique à Na-Mou (Province de Luang-Prabang, Haut Laos). Congrès Préhistorique de France, 11ème session, Perigueux, 1934, pp. 3-11. Le Mans: Imprimerie Monnoyer.
- 1935b Le cadre géologique de la préhistoire dans l'Indochine du Sud-Est. 2ème Congrès des Préhistoriens d'Extrême-Orient, Manille, 1935. JEAS 1(3):32-38.
- 1936a Mesolithique et Néolithique dans le Haut Laos. Congrès Préhistorique de France, 12ème session, Toulouse, pp. 816-823. Toulouse.
- 1936b (With J. Fromaget) Note préliminaire sur les formations cénozoïques et plus récentes dans la Chaîne Annamitique septentrionale et le Haut Laos (Stratigraphie, Préhistoire, Anthropologie). BSGI 22(3).
- 1938 (With P. Huard) État actuel de la craniologie Indochinoise. (Craniométrie préhistorique et actuelle; céphalométrie du vivant). BSGI 25(1).
- 1939a Crânes préhistoriques inédits de Lang Cuom. Travaux de l'Institut Anatomique 5:59-75.
- 1939b Observations anthropologiques et ethnographiques dans quelques villages Katangs (Province de Saravane). Travaux de l'Institut Anatomique 6:21-58.
- 1939c Étude en lames minces de poteries préhistoriques indochinoises. Compte Rendu des Séances du Conseil Rech. Scient. Indoch., années 1938-1939, pp. 47-50.
- 1940a Stations préhistoriques de Qui Chau et de Thuong Xuan (Nord Annam). Proc. Third Congr. Prehist. Far East, pp. 71-90.
- 1940b Henri Mansuy (1857-1937): Obituary notice and list of publications. Proc. Third Congr. Prehist. Far East, pp. 313-317.
- 1942 Nouveau gisement de Quaternaire Inférieur à Orang-Outang, Houei Hoc, Haut Laos. Compte Rendu Séances Conseil Rech. Scient. Indoch., année 1942, 1er semestre, pp. 153-155.
- 1944a Gisements néolithiques des environs de Ban Mong, province du Nghê An. Bull., Inst. Indoch. Étude de l'Homme 6:269-272.
- 1944b Madeleine Colani (1866 1943). Bull. Inst. Indoch. Étude de l'Homme 6:17-25.
- 1944c Quelques mensurations céphaliques de Tays du Qui Chau, Nord Annam. Bull. Inst. Indoch. Étude de l'Homme 6:249-255.
- 1951a Sur un moule de hache trouvé à Nhommalat, Laos. BEFEO 45:71-74.
- 1951b Géologie et préhistoire (in 50 ans d'orientalisme). BSEI 26(4):525-539.

- 1952 Station néolithique avec outillage en silex à Nhommalat, Cammon, Laos. BEFEO 46:297-302.
- 1953a Station préhistorique à ciel ouvert dans le massif du Pah Xieng Tong (Laos). In Anthropology at the
- [1968] Eighth Pacific Science Congress, edited by Wilhelm G. Solheim II. APAS 2:87-96.
- 1953b Quelques mensurations anthropologiques de Kha Mu dans la Province de Luang Probang (Haut
- [1968] Laos). In Anthropology at the Eighth Pacific Science Congress, edited by Wilhelm G. Solheim II. APAS 2:219-226.
- 1953c La géologie du Quaternaire et les industries préhistoriques en Indochine. In Anthropology at the Eighth Pacific Science Congress, edited by Wilhelm G. Solheim II. APAS 2:63-84.
- 1956 Outillage Hoabinhien à Giap Khau, Port Courbet (Nord Viêt-Nam). BEFEO 48(2):581-592.
- 1963a Premiers éléments sur la présence de galets aménagés et de vieux Paléolithique au Cambodge. Compte Rendu Soc. Géol. Fr.:259-260.
- 1963b Station préhistorique à Hang Gon près Xuan Loc (Sud Viêt-Nam). BEFEO 51(2):433-452.
- 1963 La station préhistorique de Hang Gon près Xuan Loc (Viêt-Nam). AP 6:163-167.
- 1964 Nouveaux vestiges préhistoriques à Con Son (Poulo Condore). BSEI 39(1):5-13.
- 1966a Le Paléolithique du Cambodge Oriental. AP 9:96-110.
- 1966b Le mobilier préhistorique de l'abri-sous-roche de Tam Pong (Haut Laos). BSEI 41(2):105-118.
- 1966c Un site archéologique à Dau Giay (Province de Long Khanh, Sud Viêt-Nam). Bull. Inst. Rech. Arch. 4:90-98. [Vietnamese translation, pp. 102-104]
- 1968 Nouvelles observations préhistoriques à l'Est de Saigon. BSEI 43(1):1-17.
- 1971a Le Paléolithique des environs de Xuan Loc. BSEI 46(1):49-71.
- 1971b Louis Malleret (1901-1970). BSEI 46(1):6-20.
- 1971c Les recherches préhistoriques au Cambodge, Laos et Viêt-Nam (1877-1966). AP 12:27-41.
- 1973 Le champ de jarres de Hang Gon près Xuan Loc (Sud Viêt-Nam). BEFEO 60:329-357.
- 1974 (With J. P. Carbonnel) Évolution préhistorique de la péninsule indochinoise d'après les données récentes. *Paléorient* 2:133-165.
- 1978 Palaeolithic and Hoabinhian in Indochina. Asia Antiqua: 45-50.