

Dedication



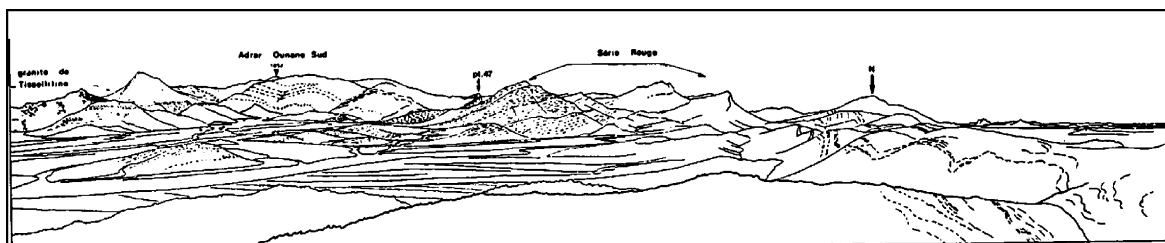
Louis Latouche (1941–2003)

Louis Latouche was born in 1941. Very early, when he was still a teenager, he was attracted by Geology. For instance, when he was 15–16 years old, he participated, during his summer holidays, to the mineralogical inventory of Morvan, Rouergue and Lozère mines. After brilliant university studies in Paris and Orsay, he joined the laboratory of F. Ellenberger, under whose direction he realized his DEA (diplôme d'études approfondies) on the mechanism of appearance of the schistosity under the Corbières thrust. This first research immediately showed the high observation and drawing aptitudes of Louis, which will be his signature. For his “third cycle” thesis, F. Ellenberger directed him in 1966 towards the axial zone of the Montagne Noire, in southern France, on the envelop made by the “Schistes X” and the Cambrian. There also, observations and drawings were his main assets. This is a period when the interpretation of structural features such as mineral lineation and foliation in highly metamorphic terrains were still in infancy. Louis Latouche was at the time convinced that the classical interpretations cannot be applied in his terrain and he made detailed and faithful descriptions of the structures rather than unconstrained interpretations.

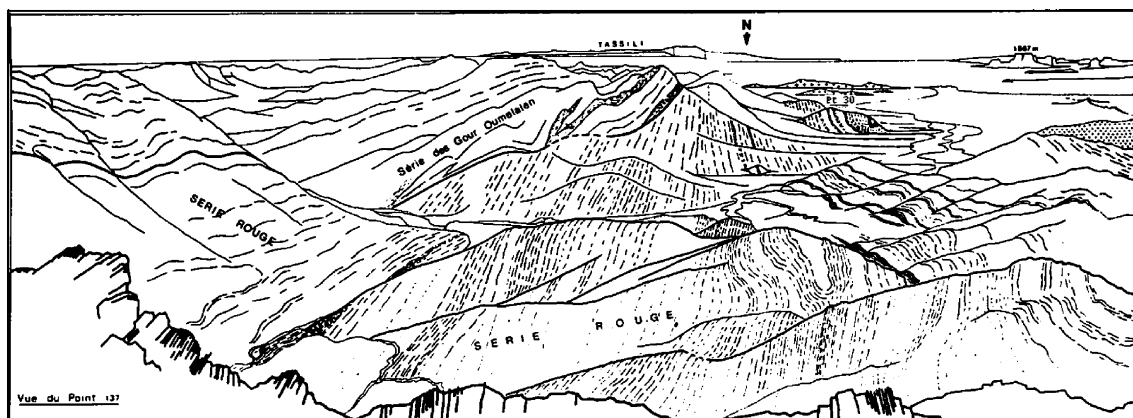
In 1967, he participated, with others from the Ellenberger laboratory, to an excursion in Scotland conducted by John Ramsay. There and with this renowned structural geologist, he was convinced that a detailed structural interpretation can lead to a regional tectonics interpretation and that such an approach is of great interest. From this time, the association of detailed observations, their graphical representations and their global interpretation was the scientific approach of

Louis. In his “3^{ième} cycle” thesis that he will finish in 1968, he discussed very appropriately what, in the observed structure, belongs to the original stratigraphy and to the superposed deformations, a fashioned theme at this epoch. This gave him an excellent reputation as a structural geologist and Louis Latouche is recruited by the CNRS in 1968.

Louis Latouche began his Saharan career in 1968 at the CRZA (Centre de Recherches des Zones Arides), an institution dependent of the CNRS (Centre National de la Recherche Scientifique), and was given the task, within the framework of a “Thèse d'Etat”, to study the north-eastern part of Hoggar. He focussed on the Gour Oumelalen area, near Erg Tihodaïne, nearly unknown at the time. He spent several months each winter for several years, in close contact with Algerian universities and with the Algerian Sonarem (Société Nationale de la Recherche Minière), generating a highly detailed litho-structural map at the scale of 1:68,000 for a surface of 5000 km². Currently, this is still one of the best geological maps in Hoggar. The structural features of the Gour Oumelalen area are complex and can be considered as a summary of the geology of Central Hoggar: presence of Archaean material (Red Gneiss complex), early Palaeoproterozoic metasediments (Gour Oumelalen series), granulitic metamorphism with charnockitic rocks at 1.9 Ga, thrust slices of oceanic Neoproterozoic material (Toukmatine nappe), Pan-African mega-shear zones with greenschist facies metamorphism associated with granitoids batholiths (Ounane pluton) and finally high-level plutons (Tisselliline pluton). Louis Latouche has been able to decipher this complex situation through



Le massif de l'Ounane: vue du Sud-Est (point 330)



La série rouge au nord du Massif de l'Ounane. Ses relations avec la série de Gour Oumelalen.
 - Contact anormal tardif à l'ouest
 - Au point 30, quartzites et leptynites de base de la Série des Gour Oumelalen sur les gneiss ocellés

Latouche, 1978 (Thèse d'Etat, Fig. 4)

his long and strenuous fieldwork, nicely illustrated by hand drawings, including detailed local maps, cross-sections or panorama.

However, as a good-natured and skilful person, he generated an important cooperation with analytical laboratories such as those of P. Vidal, M. Javoy or C. Dupuy. In addition to his geological mapping and detailed structural work, his thesis included geochronology, petrology, including pressure–temperature determinations, geochemistry, stable isotopes and the study of fluid phases. The work of Louis Latouche is a demonstration that the boundary often put between field and laboratory geologists is artificial. He finished his thesis in 1976 and its high quality renders it still now an inescapable document when working in Hoggar. The three papers in which Louis Latouche is co-author in this Special Issue can be considered as on the scientific line of his thesis.

In 1972, when the CRZA was suppressed, he preferred staying in Paris rather than going to the CGG (Centre Géologique et Géophysique, the successor of CRZA in Earth Sciences) in Montpellier. He went to the Muséum National d'Histoire Naturelle in the Laboratory of Mineralogy of Prof. J. Fabriès, formerly professor in Algiers, where he stayed till the end of his too short life.

The eighties marked the end in France of a structure focussed on Sahara, the CGG enlarging its scope before its programmed suppression. Although keeping his mind turned to Hoggar, L. Latouche studied other areas in France (e.g. Vosges mountains) or in Africa, such as Cameroon where the contact between the Pan-African belt and the granulitic Congo craton was a major field of interest, always in cooperation with Cameroonian geologists.

In the nineties, the arrival of Russell Black in the Museum, formerly Deputy Director of CGG and having made his entire career in Africa, including the SW (Adrar des Iforas, Mali) and the SE (Aïr, Niger) Tuareg shield, brought Louis back to the Tuareg shield in a great enthusiasm. In association with J.M. Bertrand, R. Caby and J.P. Liégeois, they were at the origin of the present concept of a terrane structure for the Tuareg shield. Louis did for this Geology paper (Black et al., 1994) a great job by checking all the BRMA (Bureau de Recherches Minières de l'Algérie) unpublished reports written in the fifties, to provide a reliable terrane map. His widespread knowledge of the Hoggar geology and geologists was a prerequisite for that review.

During these last years, he was very happy to see the emerging Algerian geologists in Hoggar and he had a lot of projects to realize before retirement. A serious illness,

begun in August 2000, just after the 18th Colloquium on African Geology held in Graz (Austria), has stopped him and all Tuareg shield geologists were very sad. Louis was not only an excellent structuralist and petrologist, he was a very friendly and helpful person, who was able, with few words, to motivate his colleagues and was at the origin of several new and long-lasting ideas.

Louis, although heavily ill, has followed closely the elaboration of this Hoggar Special Issue and was delighted with its content. It is an enormous pleasure to dedicate this Hoggar Special Issue to Louis Latouche.

So long Louis!

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