Minouche Knoepffler-Péguy (1934-2018), the 'Dame de Banyuls' (the Lady of Banyuls)

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Michèle Knoepffler-Péguy, whom everyone called 'Minouche', was born on 12th January 1934 at Tunis, Tunisia (Fig. 1). Her father, Georges Péguy, was an army officer (commanding a battalion of colonial infantry). Her mother, born Suzanne Berthier, was a 'housewife' (as they were termed in those days). Minouche spent her childhood in Tunis, she studied there and get her Baccalauréat (1951), then the SPCN (first vear undergraduate course, in France and in Tunisia during the French colonial period; 1952). She continued her scholar training at the university in Paris (Université Pierre et Marie Curie), and was awarded the Licence-ès-Sciences (equivalent of BSc) in 1958. From 1958 to 1968, she was Assistante (junior lecturer) in plant biology at the Faculté des Sciences d'Orsay, near Paris; from 1968, she was *Assistante* in marine plant biology working at the Laboratoire Arago, Banyuls-sur-Mer (in French Catalonia); the Laboratoire Arago is one of the three



Fig. 1. Michèle Péguy ('Minouche'). This painting shows her at the age of 19, in a ball dress, in Tunis (Tunisia). Portrait painted by Geneviève Gavrel (1909-1999).

marine sciences research stations attached to the *Université Pierre et Marie Curie*. From 1974 to 2001 (when she retired), Minouche was *Maître-Assistante* (Lecturer), then *Maître de Conférences* (Senior Lecturer)

Minouche wanted to do a doctorate in zoology; but when she went to see the professor who might have given her a project in this field, she went the wrong door: she knocked at the office of Jean Feldmann. Jean Feldmann was at the time one of the best known phycologists in Europe. His charisma was such that she left his office with a doctoral research subject focusing on the Ectocarpaceae, a 'diabolical' group of brown algae (Phaeophyceae), today placed within the kingdom of the Stramenopiles (Boudouresque, 2015). The Ectocarpaceae constitute a 'diabolical' taxon because of the unbelievable complexity of their biological cycles, where almost ten generations may succeed each other, their morphological plasticity according to environmental factors and the rarity of characters that allow proper

diagnosis between the species; at the time of Minouche's doctoral thesis, genetic tools did not yet exist; today, these tools are used, but it is not certain that they have succeeded in 'de-diabolising' the taxonomy of the Ectocarpaceae. Minouche's doctoral research was carried out at Banyuls-sur-Mer (French Catalonia). Her thesis entitled 'Recherches sur le polymorphisme en culture de quelques Ectocarpacées (Feldmannia et Acinetospora)' was defended in 1974 in Paris, before an examining committee consisting of Jean Feldmann, Marius Chadefaud, Francis Magne, René Nozeran and Pierre Drach; she was awarded her doctorate with the distinction 'très honorable avec félicitations du jury', the highest distinction awarded by French universities.

Minouche's research was at first focused on the Ectocarpaceae (the subject of her doctoral thesis). Subsequently, she also took an interest in the *Cystoseira*. The Banyuls-sur-Mer region, at that time, was a hotspot of diversity for this genus of brown algae (Feldmann, 1938); since then, many species of *Cystoseira* have been considered as locally extinct in French Catalonia (Thibaut *et al.*, 2005). Finally, Minouche worked on biological invasions (*Sargassum muticum* and *Undaria pinnatifida*). She described one species: *Pedobesia solieri* Feldmann ex Abélard & Knoepffler. She also proposed two new combinations: *Feldmannia caespitula* (J. Ag.) Knoepffler-Péguy (now: *Feldmannia paradoxa* (Montagne) Hamel var. *donatiae* (Ercegović) Antolić & Span) and *Feldmannia caespitula* var. *lebelii* (Areschoug ex P. Crouan & H. Crouan) Knoepffler-Péguy (now: *Feldmannia lebelii* (Areschoug ex P. Crouan & H. Crouan) Hamel). The four most often cited of Minouche's publications are: Boudouresque *et al.* (1992; 77 citations), Boudouresque *et al.* (1985; 69 citations), Boudouresque *et al.* (1984; 41 citations) and Knoepffler-Péguy *et al.* (1985; 41 citations).

Minouche loved teaching. While very young, she taught as an assistant for laboratory practical work in Tunis (Tunisia), then in Paris (France); she was also a peripatetic teacher (maîtresse auxiliaire) in French secondary schools, replacing teachers who were on sick leave or maternity leave. The rest of her university career [Assistante (Junior Lecturer), then Maître-Assistante (Lecturer) and finally Maître de Conférences (Senior Lecturer)] has already been outlined. The course in marine phycology and ecology (hereafter 'phycology course') at Banyuls-sur-Mer constituted the great adventure of her professional life. This course was set up in 1950 by Prof. Jean Feldmann; René Delépine was the organiser, and Minouche was associated with it from 1968. In 1972, when René Delépine was transferred (at his request) to Villefranche-sur-Mer (another of the *Université* Pierre et Marie Curie marine sciences research stations), Minouche took the lead of the phycology course. This course played a major role in the development of Mediterranean phycology. At first, it was opened to students from the *Université Pierre et Marie Curie* (Paris); but it soon took on an international dimension; it began by accepting students from other French universities, then from other universities in European and Mediterranean countries; finally, it became officially a European course (with the European Union label Erasmus, then Socrates) (Figs 2, 3). The teaching staff, in particular Francesco Cinelli (Italy), Andrea Cossu (Sardinia), Hans Frei (Germany), Vittorio Gazale (Sardinia), Amelia Gómez, María Antonia Ribera, Conxi Rodríguez-Prieto (Catalonia), Marie-Claude Noailles (Paris) and myself, came from all over Europe. The Banyuls course was attended by hundreds of students, young researchers and teachers; it would be hard to find a country in Europe or around the Mediterranean where there was not at least one person who had attended the Banyuls-sur-Mer course. Overall, in Western Europe and the Mediterranean basin, large numbers of people who are now researchers, teachers or managers have taken this course; they did not all become phycologists, however they all have rich memories of the course. Minouche made this course into not only a learning experience in phycology

and marine ecology, but also an experience that was fun, inclusive and a hotspot of cultural exchange. The highpoint of the course, which was held over three weeks in July and August, was the 'international meal'; in her large house in the Rue Barra, she and her husband and children welcomed not only the lecturers and students from the course, but also the researchers from the Laboratoire Arago. Each group of course students prepared a dish from their country: the Spanish paella stood beside the Corsican lonzu. the Moroccan tajines, the Greek moussaka and the Venitian linguini alle vongole. Minouche presided like a queen in the centre of the apartment, surrounded by students and colleagues; she was happy when she saw people being happy.

Minouche's successors, after her retirement in 2001, were not able or willing to carry on with the Banvulssur-Mer phycology course; perhaps they possessed neither her general competence in taxonomy, nor her charisma that enabled her to mobilise the Mediterranean phycologists. And perhaps this course was too much of an overlap with the one held at Roscoff (another marine sciences research station run by the Université Pierre et *Marie Curie*). Perhaps finally, in the age of the all-powerful DNA sequencing (a precious tool, powerful and of proven



Fig. 2. Michèle Knoepffler-Péguy ('Minouche'), giving a class to students on the phycology course, in the practicals lab at the Laboratoire Arago, July 1990.

Photo © Charles-François Boudouresque.



Fig. 3. Michèle Knoepffler-Péguy ('Minouche') (right), in the practicals lab at the Laboratoire Arago, with phycology course students, Delphine Willsie (left) and X (back view), July 1981. Photo © Charles-François Boudouresque.

value), this course had lost its *raison d'être*. Paradoxically, as Boero noted (2016a, 2016b), the famous Rio summit in 1992, and the Convention on Biological Diversity, have not led to a surge in taxonomy, but rather to its decline, in terms of posts and budgets. The result is a disaster (for the sciences of the environment) (Hutchings, 2018). But there is always room for a swing in the other direction, a return of the pendulum; now it is coming from the USA, where the disaster has been fully perceived (Boero, 2016a, 2016b; Thibaut *et al.*, 2018).

On the occasion of the 14th International Seaweed Symposium, at Brest and Saint-Malo (France), Minouche organised (with Marie-Claude Noailles and the author of the present obituary) the pre-symposium excursion to the Western Mediterranean, at Banyuls-sur-Mer, from 10th to 15th August 1992.

In 1967, Michèle Peguy married Louis-Philippe Knoepffler (1926-1984), a herpetologist of international repute, *Directeur de Recherches* at the CNRS (*Centre National de la Recherche Scientifique*), a major French scientific research organisation. They had five children: Frédérique (nicknamed 'Frika'; 1965), Ragnar (1967), Harald (1971), Herrade (1974) and Sieghilde (1976). Minouche died on Friday 14 September 2018, at the age of 84.

For her collaborators who were with her on the Banyuls course, Minouche was sometimes difficult to live with. She was to all appearances the soul of disorder; she made everything complicated, to the point that we nicknamed her 'Why make things simple when you can make them complicated?'. Her office accommodated a mountain of documents, from floor to ceiling, where you could hardly move and where a cat would have had trouble finding her kittens; and she could never find anything. But thanks to her charisma, she always got what she wanted: in Brussels and in Strasbourg (the European capitals), in Paris and at Banyuls, many people detested the confusion of her projects, her apparent or real disorganisation; and yet, her projects were accepted in the end. Minouche did not speak English, or if she did it was a kind of unbelievable pidgin English, a mixture of French words pronounced in a more or less English way and English words pronounced in a French way; and yet, many of her audience had a good laugh but understood her. I admit that I, who put some effort into speaking a rather more academic form of English, and despite that I am often misunderstood, I was a little vexed and jealous of her because of this.

Minouche was a practising Catholic, who would not miss the Sunday mass for anything in the world; she professed in particular a deep devotion to Mary, mother of Jesus. At the same time, Minouche was extraordinarily tolerant and respectful of other cults and religions and of non-believers. The way she managed the phycology course, a real melting pot of all the Mediterranean cultures, testifies to this. Minouche also loved cats; they ruled as true masters in her house; in French, besides, 'minouche' is a name often given to female cats. Finally, she had a special relationship with frogs, which she collected representations of, following in the footsteps of her husband Louis-Philippe. According to her daughter Frika, she owned more than 700 of them.

Michèle Knoepffler-Péguy was certainly not among the most prestigious of 20th century phycologists and ecologists. This was in any case never her ambition. She described few species, she did not revolutionise our vision of the world of algae and she was not a precursor of the ecosystem-based approach (Personnic *et al.*, 2014; Boudouresque *et al.*, 2017; Thibaut *et al.*, 2017). Her legacy resides rather in the Banyuls phycology course, which laid new foundations in Europe, and which will perhaps prove to be the foundation of a renewal of taxonomy (Boero, 2016b; Boudouresque *et al.*, 2017; Hutchings, 2018; Thibaut *et al.*, 2018). This would indeed be a fine homage to Minouche.

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