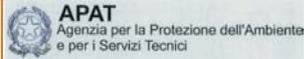


# The Messina Straits and the Colapesce's legend



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## INTRODUCTION

The Greek *Mythos* and the Latin *fabula* were often aimed at telling of true things, of historical events (Reina, 1658). Therefore, scientists have turned to the study of historical sources, as well as myths and legends, aiming at identifying and interpreting any possible reference to natural phenomena. As a matter of fact, it is well proven that natural phenomena have strongly influenced the Greek-Roman and later Christian cults, as well as popular legends (e.g., Piccardi, 2002). In this line, this study examines the Colapesce's legend, widely diffused in the Messina Straits' area since around the XII century, trying to interpret it in the frame of the complex geologic structure where it has evolved.

In fact, very likely, the variety of versions of the Colapesce's legend is suggestive of different somehow extraordinary natural phenomena truly observed by local inhabitants along the Messina Straits.

Although a comprehensive tectonic model of the Messina Straits is still waited for, there is clear geologic, seismologic and geodetic evidence of a considerable present-day tectonic activity with both vertical and horizontal significant strain. Moreover, the area is comprised between two active volcanic centres: Aeolian islands and Etna.



Reproduction of a cartoon used by Sicilian wandering storytellers to describe the legend of Colapesce (Quilici, 1979).

## THE COLAPESCE'S LEGEND

There are many literary versions of the Colapesce's legend, based on popular stories orally handed down through the centuries. The most ancient historical sources quoting this legend date back to the XII century (Mapes, *De Nigis Curialium*, 1188-1193).

Colapesce was the nickname of a boy who lived along the Messina Straits' coasts. Cola, a *Nicholas* diminutive, was born in a crowded fisherman family of the Faro's Village near Cape Peloro. Since his childhood, the mysterious sea depths attracted him intensely.

The most important ancient source, the Urania (Pontano, reprint 1833), tells that Colapesce was a kind, scaled and horrible creature dwelling in the sea without being a fish. Feared by the sea monsters and the very Scylla (the monster of Homer's *Odyssey*), he died in the eddies where he had descended to recover a cup thrown into the sea by King Frederick. It was probably Frederick II of Swabia, being 1223 mentioned as the year of the event (Pitrè, 1904).

Moreover, Pontano tells of the furious fight between the young fisherman and Charybdis (another monster of Homer's *Odyssey*). During the battle the sea vibrated and boiled, the Etna Volcano quaked, many cities were shaken and the whole Sicily rocked (Croce, 1948).

Another version reports that he, diving near the Faro's Village, observed in the Straits the terrible presence of mountains, caverns, fire and horrible monsters, reporting the fact that Sicily was based on three columns of which one was already broken and a second one was going to break. According to the legend, when the second column yields, Messina will be destroyed.



Contemporary picture of the effects of the 1783 earthquake in the Messina Straits (Historical Archive of Messina, unknown author, 1784 ?).

## THE MESSINA STRAITS: SOME ASPECTS OF THE GEOSTRUCTURAL FEATURES

A disastrous earthquake on December 28, 1908 ( $M_s = 7.1 - 7.5$ ; Boschi *et al.*, 1992) killed about 80,000 people in the Messina Straits partly due to a sudden tsunami. The proposed bridge to link Calabria and Sicily has recently prompted a wide set of new detailed studies, which will likely provide an exhaustive knowledge in the near future.

The Straits is part of a wider geologic structure, the *Scillo-Calabrian rift zone*, extending from the northern Calabria-Peloritani Arc to SE of eastern Sicily (Monaco *et al.*, 1997; Stewart *et al.*, 1997). Situated between two volcanic areas, the Etna Volcano and the Aeolian Islands Arc, it is characterized by a very active tectonics.

The present-day setting of the Straits is the result of ongoing both horizontal and vertical differential motions between Sicily and Calabria. The recorded values in southern Calabria and in western and southern Sicily indicate a reciprocal velocity equal to approximately 10 mm/a, as resulting from recent GPS surveys. The geologic and archaeological values, instead, have allowed evaluating a differential uplift rate of approximately 1.5 mm/a in the Scilla's Calabrian coast in the last 2500/3500 years, and of approximately 0.4 mm/a in the Ganzirri's Messinese coast in the last 4000/5000 years. Along the Sicilian oriental coast the values are between 0.4 and 2 mm/a (Antonoli *et al.*, 2002).

In the Straits area a high concentration of earthquakes has been recorded, many of them characterized by  $I \geq VIII$  MCS and Magnitude  $> 5.5$ .



The Scillo-Calabrian rift zone and major earthquakes ( $M \geq 6.0$ ) since year 1000 (from Monaco and Tortorici, 1995).

Table I - Strongest earthquakes (both local and distant epicentres) that have affected, since the year 1000, the Messina Straits area (AA, VV., 1999; Boschi *et al.*, 1995; Caputo and Failla, 2000; Tinti and Maramai, 1996).

Year	estimated MCS Intensity	estimated Richter Magnitude	associated Tsunamis
1125	VIII-IX	6.8	
1169	X	6.6	Yes
1509	VIII-IX	6.4	
1638	XI	7.6-7.1	Yes
1659	X	6.5-6.6	Yes
1693	XI	7.1-7.4	Yes
1783	IX-XI	6.8-7.1	Yes
1905	X	6.9-7.0	Yes
1907	VIII-IX	5.8-5.9	Yes
1908	XI	7.1-7.5	Yes

## CONCLUSIONS

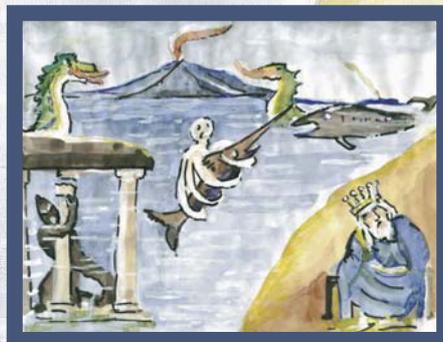
Colapesce is the Straits' angel, the defender of Messina and Sicily, the describer of the sea marvels, but perhaps he also causes the phenomena that take place in it (Pitrè, 1904). In the vicissitudes narrated in the various versions of the Colapesce's legend, it seems rather straightforward to read of the occurrence of different natural phenomena, so widely manifest to local inhabitants to remain recorded in the folk memory for at least eight centuries, if we refer to the most ancient versions documented in historical sources. It is worth noting that the natural phenomena likely at the origin of this legend have clearly occurred in the area. In other words, the legend was not imported from elsewhere, as sometimes observed in other myths and legends.

So, what are the most catastrophic events known for the area before 1908? On February 4, 1169, a disastrous earthquake took place ( $M_m = 6.6$  and  $I = X$  MCS Scale; AA, VV., 1999) that caused the reconstruction of the whole Messina City's fortification (*castrum*). The earthquake, with epicenter near Lentini (SR), caused a *tsunami* that interested the oriental Sicily coast, from Syracuse to Messina. Approximately 15,000 victims have been estimated, of whom ca. 5,000 died because of a tsunami. In Messina the sea waters invaded part of the town and the lighthouse was submerged for approximately 5 m. The earthquake was concomitant with an eruption of the Etna volcano (Boschi *et al.*, 1995).

Besides tsunamis and seismic waves, in the Messina Straits *exhalation of gas* (manifestation of endogenous nature, usually named as *gaseous bubbles in the sea*) has been seldom observed, and *strandings of fauna* living at great depths, still waiting for a satisfactory explanation (Berdar and Riccobono, 1986).

So far, it is hard to say what Colapesce (i.e., fishermen or vedettes) has really observed, or better, to what events his adventures have to be referred.

The Messina Straits is situated in a very active tectonic area, included between two volcanic systems, the Aeolian Islands and Etna. If we can indeed believe to his legend, what does really Colapesce observe when he reports to have seen the fire in the sea? Is he reporting a local event or, more likely but not certain, something observed in one of the volcanic areas nearby? Useful or not to the scientific analysis, the Colapesce's legend remains a fascinating example of popular understanding and reporting of a still mysterious mixture of natural events occurred since the Middle Age.



Reproduction of a cartoon used by Sicilian wandering storytellers to describe the legend of Colapesce (Quilici, 1979). Stromboli might be the volcano in the background. The king is probably Frederick II of Swabia. Colapesce embraces one of the three columns under Sicily, likely broken because of earthquakes (?).