

**Palabras clave:** Euler; ciencia y conocimiento; forma y función; crecimiento y desarrollo; cambio y movimiento; optimización y versatilidad; Newton; Cálculo Infinitesimal y Cálculo de Variaciones.

## ABSTRACT

1. Proteus, the changing-shape of being, like water and also like the mind of G. Topology deals with the properties of objects which remain immutable, despite stretchings and bendings, objects which do not vary in size or shape. Through an inner monologue, the character walks among objects and concepts associated with this branch of Mathematics.

2. The Cyclops, the one-eyed giant, can only see one side of things, from one perspective. In his cave –the narrowing of views– he tried to kill Ulysses. A dialogue is established between two opposed criteria in the teaching of Maths: one specialized, the other integrating other areas of knowledge, and also between two attitudes about the teaching profession. Different mathematic concepts appear throughout the dialogue, such as, irrational number, complex number, differential equation as well as references to the history of Algebra.

3. The mermaids –the waitresses– remind us of music and the sea. Both referents are used to expose, in an objective narration, mathematic concepts related to waves and geometric growth. As a result, the exponential function and the number  $e$  appear, present in many parts of Mathematics.

4. Ionian and Cronos: being and becoming. In subjective narration, the character thinks about the change, the movement and Maths, sciences of structures, which is a way to look at the world, both the inner and outer world of our minds, in particular, the infinitesimal calculus, which states the demand of finding a way to “negotiate” with the infinite. Thanks to Newton and Leibniz, the infinitesimal calculus has become a scientific collective language, a science which tries to understand reality as well as act efficiently on it.

**Keywords:** Euler; science and knowledge; form and function; growth and evolution; change and movement; optimum and versatile; Newton; infinitesimal calculus and variations calculus.