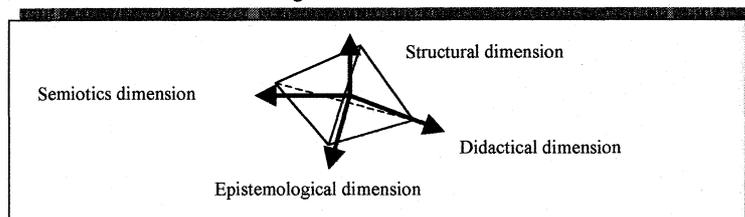


## HOW TO READ A MATHEMATICAL TEXTBOOK

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During the development of a Mathematics lesson, specially in those which geometry is the main topic, pupils bring interest in some subjects. When this situation happens, teachers take decisions about how to explain some contents. These decisions grow up during the class and need solutions, which have been generated at the same place. When this appears, the textbook shows as an instructional resources, which suggests to the teacher different ways of class engineering. What pupils learn about geometry is conditioned by the contents of the lesson which appear in the textbook because itself brings us the most important geometrical acknowledgement to be studied during the school class. Although, teachers and pupils find a lot of different activities in the textbooks. Due to this, we propose an "Analysis Form of Textbooks". This form is based on four dimensions or categories showed in this tetrahedral:



These categories bring information about:

The way by which the author of the textbook presents his production to the pupils (structural dimension); What is mathematics and which is its epistemological frame (epistemological dimension); The author's thinking about mathematics and its didactics (didactical dimension); The mathematics' concepts and its relations which a semiotic frame (semiotic dimension).

### References:

VILLELLA, J (2001). *Libros de texto y docentes de geometría*. Universidad de Huelva.

VILLELLA, J (2001) *Uno, dos, tres... geometría otra vez*. Buenos Aires. Aique

VILLELLA, J (1998) *Piedra libre para la matemática*. Buenos Aires. Aique.