Record in the Commens Bibliography. Retrieved from http://www.commens.org/bibliography/journal\_article/moktefi-amirouche-2015-eulers-circle-symbol-or-icon, 10.03.2025.

**Type:** Article in Journal **Author:** Moktefi, Amirouche

**Title:** Is Euler's circle a symbol or an icon?

**Year:** 2015

Journal: Sign Systems Studies

Volume: 43 Issue: 4

**Pages:** 597-615

**Keywords:** Euler's Diagrams

**Abstract:** The most familiar scheme of diagrams used in logic is known as Euler's circles.

It is named after the mathematician Leonhard Euler who popularized it in his Letters to a German Princess (1768). The idea is to use spaces to represent classes of individuals. Charles S. Peirce, who made significant contributions to the theory of diagrams, praised Euler's circles for their 'beauty' which springs from their true iconicity. More than a century later, it is not rare to meet with such diagrams in semiotic literature. They are often offered as instances of icons and are said to represent logic relations as they naturally are. This paper discusses the iconicity of Euler's circles in three phases: first, Euler's circles are shown to be icons because their relations imitate the relations of the classes. Then, Euler's circles themselves, independently of their relations to one another, are shown to be icons of classes. Finally, Euler's circles are shown to be iconic in the highest degree because they have the relations that they are said to represent. The paper concludes with a note on the so-called naturalness

of Euler's circles.

**ISSN:** 14064243

**DOI:** 10.12697/SSS.2015.43.4.14

Language: English