



Figure 1. Ancient Egyptian glass vessel dating between 1450–1350 B.C.E.

What's in a word?

Glass by any other name

By Mario Affatigato

The material now known as “glass” has gone by numerous names over the centuries. Tracing the etymological origins of these names provides insight into the characteristics that various civilizations and people saw and valued in the material.

In the sense of meaning the material glass, it is used (perhaps for the first literary time in this clear sense) in Plato’s “Timaeus,”⁵ where he writes

“...so long as the water occupies the interspaces of earth which are forcibly contracted, the portions of water which approach from without find no entrance, but flow round the whole mass and leave it undissolved. But when portions of fire enter into the interspaces of the water, they produce the same effects on water as water does on earth; consequently, they are the sole causes why the compound substance is dissolved and flows. And of these substances those which contain less water than earth form the whole kind known as ‘glass’...”

In Roman sources, glass was originally transliterated from the Greek as *hyalus* or *crystallus*. Both these words convey a sense of material transparency or translucence. By the time of Lucretius (1st century B.C.E.), the word *vitrum* came into use, and it is employed in this sense in his book “De Rerum Natura” (On the Nature of Things).

Vitrum was possibly developed from the root of *videre*, “to see,” generating the word *vid-trum*, meaning “something that lets you see through, a transparent thing.”⁶ Other scholars point to the word as coming from the Proto-Indo-European root *wódr*, meaning water. By the time Pliny the Elder wrote about grapes that had been left on the vine until they acquired a glassy transparency, the word *vitrum* was already in common use, and thin, glassblown items were well known. Interestingly, the Hungarian word for glass, *üveg*, derives from the Old Iranian root **āpakā*, also meaning water.

The geographical extent of the Roman Empire and the advent of Latin as the lingua franca for much of Western Europe led to the dominance of the word *vitrum* for glass. Thus, in our modern European languages, we use *vetro* (Italian), *vidrio* (Spanish), *vidro* (Portuguese), *verre* (French), and even *gwydr* (Welsh).

It is also important to note that *vitreus*—meaning “like glass”—was interpreted by the Romans not as “transparent like glass” but instead as “shining, bright, and sparkling like glass.” The reader may recall that ancient glasses often were made from impure sources and were not always truly transparent. Metaphorical expressions like *vitreos talos*—“glass ankles”—and *vitrea Circe*—indicating, perhaps, “fragile Circe”—were already in use.⁶

It seems appropriate during this International Year of Glass to ruminate about the multiple names given to this wondrous material over the centuries and around the world.

The etymological origins of these names are not only interesting but also provide insight into the characteristics that various civilizations and people saw and valued in the material.

Some of the most ancient civilizations—Egyptian, Mesopotamian—did not have a name for the material (yet). In ancient Egypt, the hieroglyph for glass meant “the stone that flows,” and this same description was used by the ancient people of Mesopotamia.¹ This definition led to confusion as molten metals also flow, and people began to believe glass always contained (or was!) metal.

The ancient Greeks started by using more generic terms like *kyanos* (lapis lazuli and other minerals), *lithos chyte* (molten stone, likely taken from the Egyptian term), and *krystallos* (rock crystal, but its original meaning was ice). Herodotus mentions earrings made of “melted stone,” which is accepted as a possible mention of glass, but this reference remains uncertain.

Eventually, the Greeks settled on the word *ύαλος*,² pronounced *hualos*. Some scholars speculate that there is a connection to the Proto-Germanic *glasam* (note the similar pronunciation).³ But most often, the noun is associated with the word *heyin* “to rain” (from “ύω” which means “to rain”).⁴ In any case, the word originally described glass but also any kind of crystalline stone.



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Figure 2. Ancient Roman blown glass, found in Spain. Dated between 350–400 C.E.

A different ancient pathway to naming glass comes from the Russian and Slavic languages. Here the root is from the Proto-Slavic *stǫklo*, which in turn comes from the Proto Indo-European, *(s)teyg*, meaning to be sharp or to sting. From this root we get *stekló*, the Russian word for glass. And we also get *sticla* (Romanian), *szkło* (Polish), *stikls* (Latvian), *stiklo* (Lithuanian and Bulgarian), *stiklo* (Bulgarian), and *sklo* (Ukrainian).

Another beautiful word for glass comes from the Arabic *zujaj*. Its root is *ز ج ج* (z-j-j), which in one of its forms means “to make come out narrow and long, to glaze, to glass.” This meaning is particularly beautiful as the ancient Egyptians and Greeks also spoke of the flowing nature of glass.

In Pliny the Elder’s original version of the discovery of glass (“*Historia Naturalis*”),⁷ written during Roman times, he describes a famous legend on the discovery of glass:

“The story is, that a ship, laden with nitre, being moored upon this spot, the merchants, while preparing their repast upon the sea-shore, finding no stones at hand for supporting their cauldrons, employed for the purpose some lumps of nitre which they had taken from the vessel. Upon its being subjected to the action of the fire, in combination with the sand of the sea-shore, they beheld transparent streams flowing forth of a liquid hitherto unknown: this, it is said, was the origin of glass.”

Pliny was well aware of the mythological aspect of this story, and of the fact that the Egyptians had older glass. His “*Historia Naturalis*” shows he was well versed in contemporary techniques for glassmaking,⁸ and was able, for instance, to dispute the story of “unbreakable glass,” describing it as being “...told with more frequency than truth.”⁶

What about the English name “glass”? Its origin is ancient, and the word can be traced from the Middle English *glæs*,⁹ meaning glass and glass vessel (a common polysemy), itself from the older Proto-Germanic *glasam*, and tracing all the way back to the Proto Indo-European root **ghel*, meaning “to shine.”

Interestingly, this root also shows up—with evolutions carried out in time—in words like amber (*glær* in Old English), gold and gild. The word origin is now reflected in many modern Northern European languages: *glas* (German, Dutch, Swedish, Danish); *klaasist* (Estonian); and *glass* (Norwegian, English).

Not all ancient or modern civilizations needed a word for the material. Asian civilizations had enough alternatives (like jade and rock crystal) to inhibit the development of a glass industry, and valuable native products that could be traded for glass when needed. Thus, the name for glass often came from transliteration as the material was brought into the country.

The Japanese word, *garasu*, for example, is imported and a transliteration of the Dutch word *glas*. In China, the word *boli* 玻璃 comes from the Prakrit (India) and means “crystal” or “quartz.” As happened in Greece and elsewhere, the modern meaning has shifted to refer specifically to glass. In Hindi and Nepalese, the word *काच* (*kanch*) is used, and it derives from the Sanskrit *kācā*, also meaning glass. The existence of this old term might be due to the constant and very old relationship with the various Persian empires and their famous areas of glass production.

In summary, the words used to name the material we call glass today have a long and important history that addresses the wonderful—and still important—qualities of the material. Transparency, shine, brightness, the ability to flow like a liquid, even brittleness. Our love affair with glass and its properties has a long history indeed.



Credit: Brooklyn Museum (CC BY 3.0)

Figure 3. Arab glass lamp from the 13th–14th century.

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