

# Allegorical Iconography of Alchemical Furnaces in 16-17th Century Manuscripts

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## Introduction

Many illustrated European alchemical treatises contain images of furnaces. Starting from the 16th century they are often depicted allegorically. The ovens grow to unreasonable sizes, turn into Gothic churches, trees or even dragons. The tradition of such images goes back to the allegories found in miscellanies on the siege of castles, engineering and production of weapons. These allegorical motifs had got into the alchemical context and had both mnemonic and aesthetic meaning. In my poster I consider three different types of allegorical imagery of *athanors*.



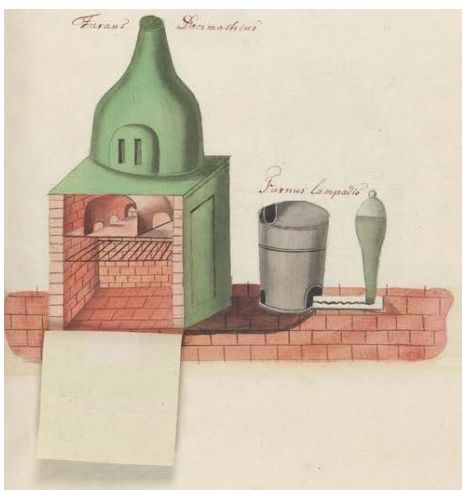
## Real furnaces



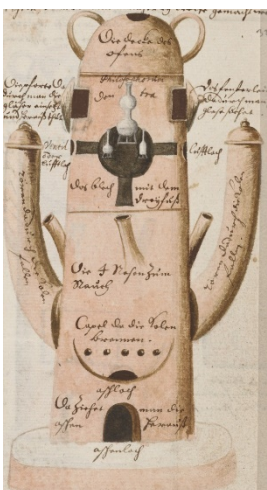
For distillation



For opus magnum



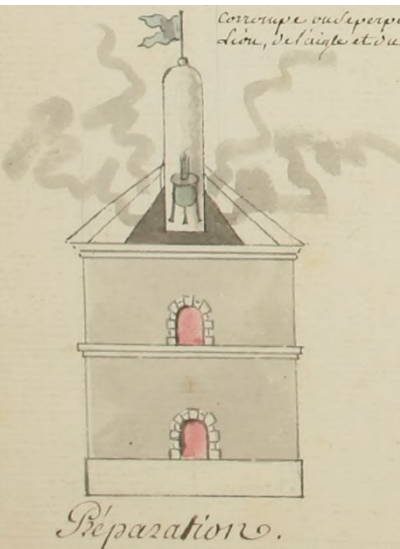
Realistic



Fantasy

We know what real alchemical furnaces looked like because nowadays some of them are held in the museums. We also have thousands of miniatures showing quite realistic ovens, used for the purpose of *chrysopoeia* or making iatrochemical medicines. But in 16-17th centuries some images of *athanors* got more decorative look or even fantasy shape.

## Type 1: furnace as building



House



Gothic church



Castle

A common allegory shows alchemical stove as building. It could be a house, a castle or a Gothic church with specific decorations. This comparison arose because oven structure is similar to building. Both were made of stone and both were constructed to keep something warm. According to alchemists, a furnace was a home, a fortress or a sanctuary for a vessel with the future philosopher's stone inside. Castle or church shape underlines noble or divine nature of alchemical furnace, which not only produces gold, but also purifies microcosm, as God does.

## Type 2: furnace as tree



Tree of Eden



Throne of Nature



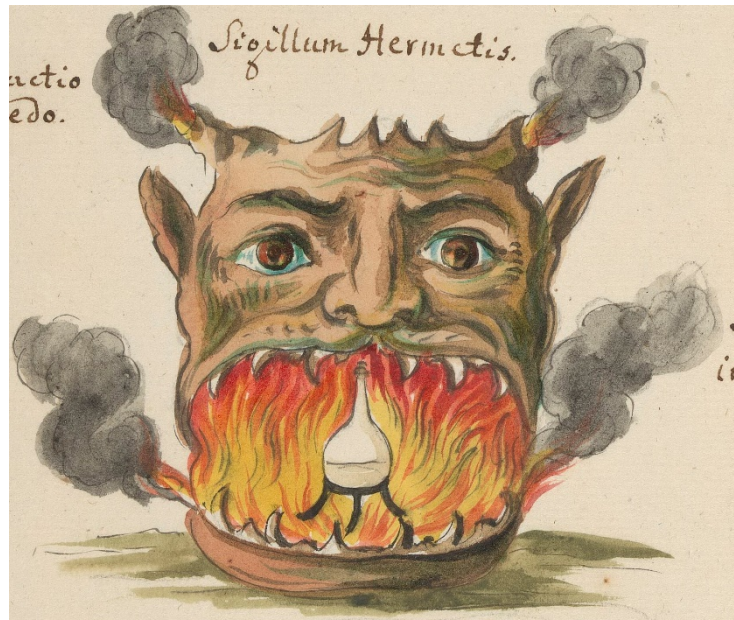
Tree as product

Some alchemical texts describe a tree, usually symbolizing the source of *prima materia* or the result of *opus magnum*. Its leaves or branches could represent four elements, seven planets, twelve operations or output of gold or silver. In New Testament context, the tree appears as a unifying symbol of Adam, Eve, and the Serpent, who personify alchemical silver, gold, and mercury respectively. In some illustrations the tree becomes an *athanor*, in which an angel with devil's feet blows fire with a pair of bellows.

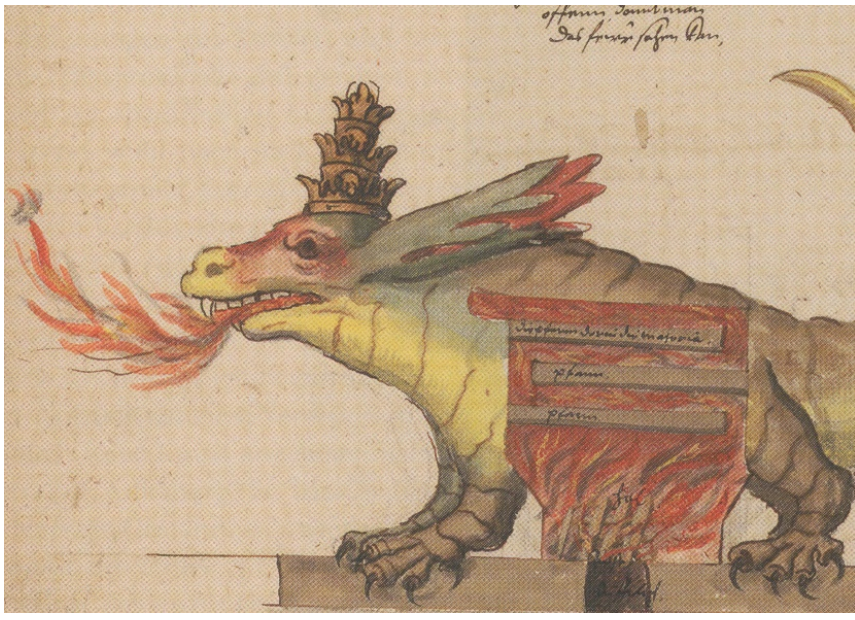
## Type 3: furnace as character



Demon



Hellmouth



Dragon as parody on Pope

Furnace was a device for keeping constant temperature of the fire for a long time: all this could not but cause associations with hell. That is the reason why some alchemical allegories show the jaws of hell as *athanor*, or a demon with an oven in his belly. In other cases, the stove turns into a dragon, another demonic creature. A papal tiara on its head marks hybridisation of this alchemical motif with Lutheran one.

## Conclusions

- Athanors got allegorical representations as well as vials, alembics and other utensils.
- Allegorical imagery could be derived from manuals on military technology as *Bellifortis*.
- In most cases alchemical ovens were depicted as buildings due to their similar form.
- Furnaces were often symbolized by characters connected with fire: demons or dragons.
- Tree was another symbol for oven because it grows the fruits like athanor nurtures the stone.
- These types connected alchemy with something significant: technology, religion or mythology.

## List of illustrations

1. Oven of Maurice of Hesse-Kassel. Germany, 1601. Kassel, Museumslandschaft, Astronomisch-Physikalisches Kabinett.
2. Alchemical Furnace, Nuremberg or Augsburg, c. 1575. Dresden, Kunstgewerbemuseum. Inv. no. 40919.
3. Alchemical miscellany. 1782. London, Wellcome Institute. Ms. 879, fol. 3r.
4. Alchemical notebook. Germany, c. 1620. New Haven, Beinecke Library. Mellon Ms. 50, fol. 30v.
5. F. de La Rose-croix. France, c. 1700. Los Angeles, Getty Institute. Manly Palmer Hall Ms. 24, fol. 18v.
6. Alchemical miscellany. Germany, c. 1585-1600. Kassel, Universitätsbibliothek. 4<sup>o</sup> Ms. chem. 72, fol. 294r.
7. Book of Lambspring. Germany (?), 17<sup>th</sup> c. Admont, Benediktinerstift. Cod. 829, fol. 9v.
8. Heinrich Khunrath, Lux in tenebris. Germany, 1614. København, Det Kongelige Bibliotek. Ms. 1765, fol. 134v.
9. Jean Peréal, La complainte de Nature à l'Alchimiste errant. France, 1516. Paris, Musée Marmottan Monet.
10. Speculum Veritatis. c. 17<sup>th</sup> c. Vaticano, Biblioteca Apostolica. Ms. Lat. 7286.
11. Sabaoth Manuscript, Czechia, 17<sup>th</sup> c. Mnichovo Hradiště, Zámecká knihovna.
12. Thesaurus thesaurorum. Italy (?), c. 1725. London, Wellcome Institute. Ms. 4775, S. 74.
13. Balthasar Hacker. Entwurf eines Probiereofens. Wittenberg, 1578. Dresden, Das Sächsische Hauptstaatsarchiv, 10024.
14. Roberto Vallurio, De re militari. Verona, 1472. Firenze, Biblioteca Medicea Laurenziana. Inc. 2.10.