

Cryptography and the Baroque

Description

I'm on the hunt for references to cryptography by recent philosophers. In his book *The Fold: Leibniz and the Baroque*, the philosopher Gilles Deleuze states.

A "cryptography" is needed which would both enumerate nature and decipher the soul, see into the coils of matter and read in the folds of the soul (228).

Deleuze elaborates on the metaphor of the fold to explain the art and architecture of the Baroque period. The Baroque was also the time of the early rationalist philosopher Gottfried Leibniz (1646-1716).

Folds appear in fabrics. What is the fabric in this case? It's a kind of surface, boundary or border between two places or conditions. Put simply, the fabric to which Deleuze refers is the boundary within the Platonic universe between the world of ideas and the material world. You could say, between the macrocosm and the microcosm; the heavenly and the earthly; souls and materials. For Plato that would be a boundary between the real but invisible and immutable world of ideals, of which the material earthly world is a pale shadow.

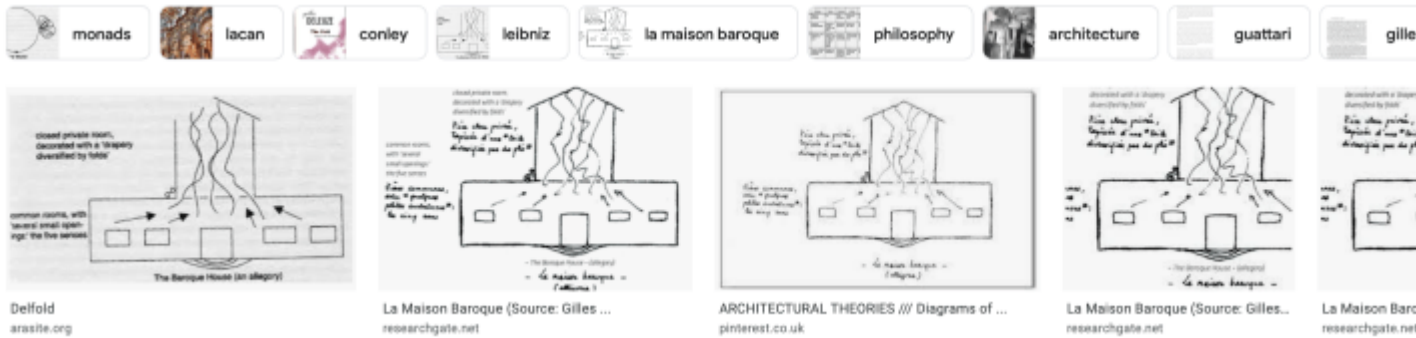


I took this picture in December 2019 at St Peter's Cathedral in Trier, Germany. The cathedral is mostly Romanesque, but this is a view into the Baroque chapel for the relic of the Seamless Robe of Jesus behind the main altar. Along with other architectural neophytes I used to think of Baroque architecture as over-ornamented, merely a conspicuous display of wealth.

But as illustrated in Trier chapel, Baroque surfaces do fold, and they afford glimpses between realms. Here's Deleuze's account of the Baroque fold.

It is certain that there is communication between the two levels (which is why content rises up into the soul). There are souls below — animal, open to sensation — or even bottom levels in souls, and the coils of matter surround them, envelop them. When we discover that souls can have no windows to the outside, we will need, at least at first, to think of this in reference to the souls above, the rational souls, which have risen to the other level (—elevation—). It is the upper level which has no window: a darkened compartment or study, furnished only with a stretched cloth — diversified by folds, — like the bottom layer of skin exposed. These folds, ropes, or springs set up on the opaque cloth represent innate knowledge, but an innate knowledge which passes into action when called upon by matter. For the latter unleashes the —vibrations or oscillations— at the lower extremity of the ropes by means of —small openings— which do exist on the lower level. • (228)

He supports this description with a crudely drawn cross section through an allegorical building he calls The Baroque House. There's clearly an upper and lower storey, and the folding elements —spiral— into the upper reaches.



This is an inverted [crypt](#) — there are no windows in the upper storey. In this book, Deleuze references Leibniz’s concept of the “windowless” • *monad*, the indivisible unit of perception, or the “mind-like simple substances endowed with perception and appetite” • according to the [Stanford Encyclopedia of Philosophy](#).

Of more interest to me though, Leibniz was a distinguished mathematician (and designer of a cryptographic machine), responsible in part for the invention of calculus, which deals in rates of change, i.e. the slopes of mathematical curves, as well as areas under curves. I’ve not found any specific connections between elliptic curves and Leibniz and , nor between elliptic curves and Deleuze. But the elliptic-curve Diffie-Hellman (ECDH), mainstay of contemporary digital cryptography, is a folded line. See post on [Elliptic Key Encryption](#).

Bibliography

- Deleuze, Gilles. 1991. The Fold. *Yale French Studies* 80, 227-247.
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- Lambert, Gregg. 2002. *The Non-Philosophy of Gilles Deleuze*. New York, NY: Continuum
- Rescher, Nicholas. 2014. Leibniz’s Machina Deciphatoria: A Seventeenth-Century Proto-Enigma. *Cryptologia*, (38) 2, 103-115.

Notes

- The banner image is a crumpled rug processed through a standard Photoshop filter.
- The Baroque House image is from a Google image search: “baroque house deleuze fold.”
- Leibniz designed a cryptographic machine: *Machina Deciphatoria*.

Category

1. Architecture

Tags

1. cryptography
2. Deleuze

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