

# Some Unrelated Thoughts About Aesthetics & Quantum Physics

<http://tph.tuwien.ac.at/~svozil/publ/2010-mursat-pres.pdf>

<http://arxiv.org/abs/physics/0505088>

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Part I:

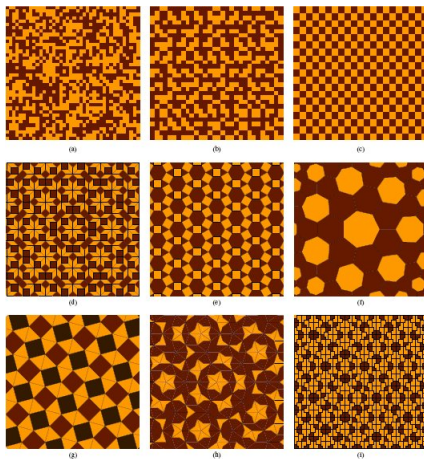
## Three principles of aesthetic complexity



# Three principles of aesthetic complexity

- ▶ A necessary condition for an artistic form or design to appear appealing is its complexity to lie within a bracket between monotony and chaos.
  - ▶ Too condensed encoding makes a decryption of a work of art impossible and is perceived as chaotic by the untrained mind, whereas
  - ▶ too regular structures are perceived as monotonous, too orderly and not very stimulating
- ▶ Due to human predisposition, this bracket is invariably based on natural forms; with rather limited plasticity.
- ▶ Aesthetic complexity trends are dominated by the available resources, and thus also by cost and scarcity.

# First law of aesthetic complexity

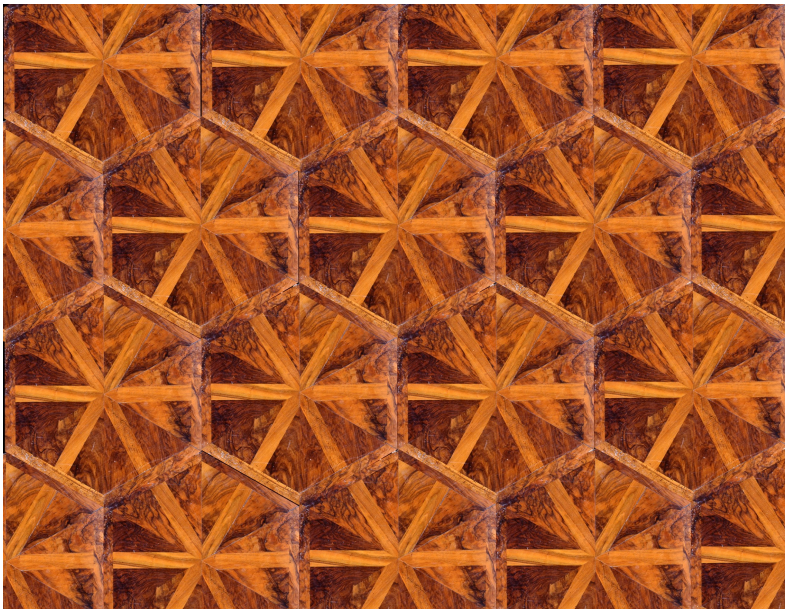


Too low-complex patterns appear monotonous and dull; too high-complex patterns appear irritating and chaotic.

## Second law of aesthetic complexity



"Nature Beauty:" Autumn foliage near Baden, Lower Austria, Oct. 15, 2000

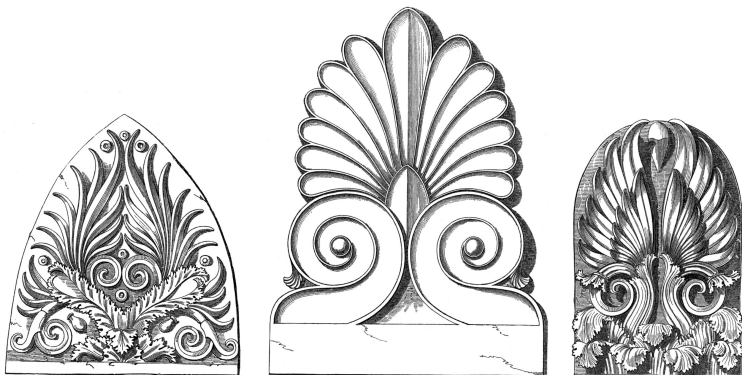


"Art Beauty:" Parquet flooring in the gallery rooms of the Garden Palais Liechtenstein, late 18th century, Vienna, Austria



"Art Beauty:" Santino Bussi (1664-1736) Stucco detail in the Sala Terrena of the Garden Palais

Liechtenstein, after 1700, Vienna, Austria



"Art Beauty:" Greek ornament from left to right: upper part of a stele, termination of the marble tiles of the Pantheon; the upper part of a stele; by Lewis Vulliamy and reprinted by Owen Jones, Grammar of Ornament





Jan Van Huysum, Flowers

## Third law of aesthetic complexity

- ▶ “Why build one pretty house if you can have two ugly ones for the same price?” (Loos’ principle, 1908)
- ▶ After two years it became clear to both of us [[Schönberg and Cage]] that I [[Cage]] had no feeling for harmony. For Schoenberg, harmony was not just coloristic: it was structural. It was the means one used to distinguish one part of a composition from another. Therefore he said I’d never be able to write music. “Why not?” “You’ll come to a wall and won’t be able to get through.” “Then I’ll spend my life knocking my head against that wall.” (John Milton Cage, An Autobiographical Statement, 1989)  
<http://www.newalbion.com/artists/cagej/autobiog.html>

Part II:

## The Conundrum of Quantum Jellification



## The Conundrum of Quantum Jellification

*The idea that [the alternate measurement outcomes] be not alternatives but all really happening simultaneously seems lunatic to [the quantum theorist], just impossible. He thinks that if the laws of nature took this form for, let me say, a quarter of an hour, we should find our surroundings rapidly turning into a quagmire, a sort of a featureless jelly or plasma, all contours becoming blurred, we ourselves probably becoming jelly fish. It is strange that he should believe this. For I understand he grants that unobserved nature does behave this way – namely according to the wave equation. . . . according to the quantum theorist, nature is prevented from rapid jellification only by our perceiving or observing it.*

Schrödinger, E. (1995). The Interpretation of Quantum Mechanics. Dublin seminars (1949-1955) and other unpublished essays. Woodbridge, Connecticut: Ox Bow Press, pp. 19–20.

Thank you for your attention!

