Still Life as a Model of Spacetime

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2012
Time and transience

Joris van Son, “Still Life of fruit”, 1663.

- Still Life as a genre in art history: especially XVII and XX century, same time when science developed new notions of space and time

- First theme: philosophical representation of time as transience
Time as a collection of instants


- *impossible* floral compositions (flowers from different seasons): representation of time as a collection of different instants
• Capturing a single instant in time: frozen time

Ori Gersht, “Exploding Floral Composition, N.4”. 
• Transience represented through the presence of perishable (seafood, oysters, flowers, fruit): instant without duration

Cornelis de Heem, “Still Life with oysters, lemons and grapes”, circa 1660.
A modern take on the same theme:

Linear time as a process

Pieter Claesz, “Tabletop Still Life”, 1625.

- Time in the process of becoming: time as transformation

- half eaten mince pie, a half peeled and sliced lemon, a partly sliced loaf of bread, a half empty glass
The flow of time

• music


• tempus fugit; Vanitas
• Time and music in cubism


- Music no longer purely temporal: also embodiment of movement, as a change of observer viewpoint through time and space.
Juan Gris “Still life with Guitar”, 1920.
Decay and thermodynamic time

• time as consumption and decay, and irreversibility of the arrow of time (entropy)

• Vanitas: reminder of death and transient nature of life (skull: ultimate pointer to the irreversibility of the time arrow)

Pieter Claesz, “Still Life with skull and writing quill”, 1628.
Cézanne, “Still Life with skull”.

Picasso, “Still Life”, 1945
Algorithmic time: sea shells

- Pattern of growth, information (opposite of entropy)

Adriaen Coorte, “Still Life with seashell”, 1698.
Max Ernst, “Sea Shell”. 
Flow of time as flow of knowledge

- books as the symbol of permanence, memory, and knowledge transmission

• Collections of books, partly opened, in the process of being read, accompanied by writing instruments: process of transformation, creation and transmission of knowledge

Unknown Dutch Master, “Still Life with Books”.
From space and time to spacetime

- End of XIX century: curved spaces (Riemannian manifolds), non-Euclidean geometries
- End of XIX century/early XX century: Poincaré and Einstein, relativity, spacetime

Boccioni, “Development of a bottle in space”, 1912

- Early XX century: Futurism, dynamical properties of space
• XVII century Dutch still life paintings: spatial relations between displayed objects, absolute background frame (tabletop, walls)
• XVI and XVII century: space and measurement, Cartesian coordinates, instruments of geodesy

Hans Holbein, “The Ambassadors” (detail), 1533.
• XX century still life paintings: displayed objects define space itself (sketched backgrounds, light/shade, closed/open, relational/absolute)

Guttuso, “Still Life with cans”
• depiction of space is goal: objects are unrecognizable volume-shapes whose purpose is the creation of space

Picasso, “Still Life”, 1947
• new still life objects: machines (dynamical, space *in* the machine and time set *by* the machine, *ballet mécanique*)

Fernand Léger “Still Life in the Machine”, 1918
• Space without time, pure existence, indefinite space, *apeiron*, volume and depth reduced, diffused light, ochre tints, stillness

Morandi, “Still Life”, 1929-1930
Cézanne’s curved space

- no absolute coordinate system, but created by relations between objects: their volumes and their masses (no longer a background but a volume that curves and bends in the presence of other masses, like the fabric of spacetime)

Cézanne, “Rideau Pichet”.

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Matisse’s emergent flat space

- space not a primary concept but emerging from other data: flat compositions of color and their relation

Matisse, “Still Life with fruit”. 
Matisse, “Still Life with blue tablecloth”, 1909

Matisse, “Blue Still Life”, 1907
Cubist spacetimes

- simultaneity of different observers, shapes broken and superimposed in different simultaneous perspectives (historically no direct relation to Einstein, but influence of Poincaré)

Picasso, “Still Life with bottle of rum”, 1911
Dadaism: spacetime as information blueprint

- Still Life becomes *conceptualized* and abstract, informational, removed from everyday role

Man Ray, “Still Life”, 1933
• abstract shapes floating suspended inside a frame, thickness, volumes, shadows, curve and flat, relational positions shapes

Morandi, “Still Life”, 1918
De Chirico’s “Metaphysics”: theoretical spacetimes

- space representation, instruments of mathematical measurement, tilted tabletop, perspective fugue, Dutch and Cézanne type elements (self-referential), second level of conceptualization: representation or representation

De Chirico, “Still Life”
Cornell’s cosmic dioramas

- space in cosmic sense, astronomical distance

Joseph Cornell, “Assemblage”
Joseph Cornell, “Eclipsing Binargy Box”, 1972

- What next? What pictorial Still Life language for spacetime contemporary physics and mathematics? (extra dimensions, spin foams, vacuum bubbles, information, etc.)

A challenge for artists...