

ORDER & CHAOS

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How sculptors and 3D artists use structure, repetition, destruction and movement

- **Order** can mean systems, grids, repetition, balance and control.
- **Chaos** can mean instability, randomness, accumulation, destruction and change.
- Many artists deliberately move between the two.



Ai Wei Wei response to the Ukraine-Russia War

Richard Serra

Weight, balance, geometry and controlled space

- Serra is known for monumental steel sculptures that change how people move through space.
- Large curved or tilted forms create a strong sense of physical order and balance.
- The work can also make viewers feel unstable, trapped or disorientated.
- ORDER: geometry + weight + repetition. CHAOS: uncertainty of scale and movement through space.
- *Can you trace the main shapes/ form of this work?*
- *What do you think the affect of the structures on you walking through it?*



Use photographs of Serra's large steel sculptures; ask students to trace the main shapes.

Chiharu Shiota

Networks, repetition and visual overload

- Shiota creates installations using huge networks of thread, often filling an entire room.
- Each strand is individually placed, so the apparent chaos is actually carefully constructed.
- Objects such as keys, boats, suitcases and furniture can become trapped inside the network.
- ORDER becomes CHAOS through accumulation: one line is simple; thousands become overwhelming.



Look closely: repeated lines create a system, but the whole installation can feel chaotic.

Gordon Matta-Clark

Construct → deconstruct → reveal

- Matta-Clark worked directly on buildings, cutting through walls, floors and roofs.
- His 'building cuts' familiar **architectural** structures.
- The cuts created new viewpoints, unexpected shapes and unstable-looking spaces.
- His work is useful for understanding how **DECONSTRUCTION** can challenge ORDER.



Conical Intersect (1975): a building was cut open before demolition.

Tadashi Kawamata

Building systems that look unstable

- Kawamata often constructs temporary architectural structures from repeated materials such as wood.
- Boards, platforms and towers are organised into simple systems.
- As the structure grows, it can appear **precarious**, **improvised** or chaotic.
- Repetition creates ORDER while uneven placement creates CHAOS.

What do you feel about this piece?



Repeated components + irregular construction = controlled instability

Jean Tinguely

Machines designed to fail

- Tinguely built kinetic sculptures from motors, wheels, scrap materials and **mechanical** parts.
- The machines use **systems** and mechanisms, but their movement can seem unpredictable and ridiculous.
- In *Homage to New York* (1960), the machine was designed to construct and destroy itself.
- This creates a powerful ORDER → CHAOS cycle.



Homage to New York: a machine that moved towards self-destruction.

Rebecca Horn

Machines, movement and tension

- Horn combines **sculpture**, movement and mechanical systems.
- Her **kinetic** works often repeat actions such as opening, closing, turning or touching.
- The machine follows a rule, but the repeated action can become strange or unsettling.
- This is useful for exploring the difference between a **predictable** system and an unpredictable experience.



A simple repeated action can become strange when it continues beyond its expected purpose.

Cornelia Parker

Destruction reorganised into order

- Parker often transforms familiar objects by crushing, cutting, exploding or **suspending** them.
- The original object is destroyed, but the **fragments** are carefully arranged into a new **composition**.
- Her work shows that destruction does not have to remain **chaotic**.
- CHAOS can become ORDER through selection, **repetition**, spacing and presentation.



Think: Can broken objects become more organised after they have been destroyed?

Theo Jansen

Engineering, repetition and artificial life

- Jansen creates large kinetic 'Strandbeest' from lightweight tubes and mechanical components.
- Their repeated structures create a clear system based on movement and engineering.
- Wind and environmental conditions introduce unpredictability.
- The result sits between MACHINE ORDER and ORGANIC CHAOS.



A system of repeated parts becomes something that appears to walk and behave like a creature.

From artist research to your own 3D work

A practical way to investigate Order & Chaos

- **START WITH ORDER:** build a simple repeated structure, grid, mechanism or modular form.
- **INTRODUCE CHANGE:** remove pieces, tilt elements, vary scale, overlap parts or add movement.
- **PUSH TOWARDS CHAOS:** increase repetition, distortion, imbalance, randomness or destruction.
- **DOCUMENT THE PROCESS:** photograph the stages from ORDER → TRANSFORMATION → CHAOS.
- **FINAL QUESTION:** Which stage communicates the strongest idea, and why?



Possible outcomes: sculpture • model • installation • animation • game environment