

# Algorithmic Art Praxis

Cheat Sheet

ALAP Category	Icon	Description	Sample Artworks
Translate		Represents positional changes of the elements relative to each other or the canvas.	
Rotate		Represents orientational changes of the elements relative to each other or the canvas.	
Scale		Represents dimensional changes of the elements relative to each other or the canvas.	
Symmetry		Represents mirrored elements in vertical, horizontal, or custom axis relative to each other or to a point on the canvas.	
Repetition		Represents occurrences of a single or group of elements with or without formalistic modifications on the canvas.	
Traces		Represents occurrences of graphical elements (lines, curves) along with or without a continuous path. The opacity of the repeating pattern may vary on the canvas.	
Tiles		Represents a grid-based distribution of elements on the canvas. Individual graphical objects in the grid do not have to be continuous, mixed, or same with each other.	
Tessellation		Represents a continuous distribution of the elements on the canvas. Each tile must have a relational and formal connection in order to create unique patterns. In short, every Tessellation involves Tiling, but not every Tiling can be considered a Tessellation.	
Randomness		Represents the graphical elements as if they were randomly positioned, scaled, or colored on the canvas. The random behavior may be observed as displacement of points on lines or curves.	
Displacement		Represents the positional change of the contour points of graphical elements on the canvas. For example, a straight line consisting of four points can be transformed into a zig-zag shape by moving the points in different directions.	
Typography		Represents the use of typographic elements on the canvas.	
Layers		Represents stacked or redrawn graphical elements on to each other using different colors.	
Image Processing		Represents the recreation of a preloaded image in different styles on the canvas.	
Oscillation (OSC)		Represents occurrence of sinusoidal abstract forms and wave-like shapes on the canvas.	
Packing		Represents fitting the objects into a limited space (a.k.a space-filling or packing algorithm). The rule is that objects must not interfere with each other.	
Recursion		Represents a process that repeats itself to create patterns and shapes, which can continue indefinitely or become highly intricate. For example, a tree starts with a trunk, then splits into two main branches. Each branch further splits into two smaller branches, and so on...	
Agent-based		Represents the creation of a graphical composition showcases continuous formalistic features. For example, drawing a sketch without holding up the pencil.	
Collage		Represents the traditional style collage in art. Images can be cropped manually and then transferred to the computer, and using programming practices, they can be positioned on the canvas.	