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- Handcrafting

Question: When does art cease to be art in the context of generative art, also considering the contrast of making and manufacturing?

I will be exploring three keywords that encapsulate areas of research that I would like to pursue for my independent enquiry. I will begin to explore these concepts in the context of surface pattern design, specifically a maker pathway. I aim to investigate concepts I already have an interest in to discover avenues I can develop through conceptual thinking and practice to advance my direction as a maker. The keywords I will be investigating are *generative art*, *autonomy in art*, and *handcrafting*. When comparing the keywords, I will explore links that could synthesise a new avenue of thinking or research. I will explore different definitions for each of the keywords and gain insight on how they are used in an art and design context as well as interpreted in general. Generative art is relevant to my practice as I have been teaching myself how to create different forms of generative programmed art and would like to understand the boundaries of what constitutes generative art. Autonomy in art has relevance because of the importance I believe autonomy has on the way I create. As a surface pattern designer, Handcrafting is a huge part of the subject, especially as a maker. I would like to explore these ideas in relation to each other as well as to my practice.

Generative art requires rules that *'must provide or imply a specific process that can lead to the desired outcome.'* (Boden and Edmonds, 2009). Generative art has also been described as *'art made using a predetermined system that often includes an element of chance.'* (Generative art – Art Term | Tate, n.d.). These definitions imply that there are differing opinions about generative art and what it means exactly, however, the main principles stay the same, the art is generally generated in some part by a process out of the direct control of the artist. The predetermined system mentioned by the Tate is describing the rules

mentioned by Boden and Edmonds. The Tate mentions the element of chance, throughout my reading on the subject, artists have used chance in their ideas of generative art, and others use solely algorithmic orders to define and implement the rules. Chance has been incorporated in different ways, for example, the user interactive work that depends on the behaviour of an audience, such as Olafur Eliasson's work. His work often involves the shadows and reflections of the viewer to focus on the user experience as the art.

However, both definitions agree that the 'computer' must control a component of the decision making for it to be considered the artistic expression of the human artist rather than the work of the computer. When thinking about generative art in relation to what I have researched about thoughts around craft, the balance between the utilisation of computers or machines and human intervention is complex and disputed.

I have noticed that there are differing opinions on whether generative art must be created using a computer. Some definitions explicitly mention computers whereas others are vaguer and describe the decision making or chance element of generative art. As computers essentially just follow rules given by humans, very simple versions can be replicated without what we would think of as a computer, whilst still implementing computation to create the artwork.

This quote explains the other argument about generative art, 'Computers can create subtle, nuanced, original artwork, be it from imaginative interpretations of human instructions or from emergent combinations of mathematical sequences. But the question is: Will we accept them as such? Or will the computer artist always remain an imitator and/or an enabler of the *real*, human artist?' (New atlas, 2015). The main complications with

generative art seem to be specifying the author of the art created when different systems are utilised.

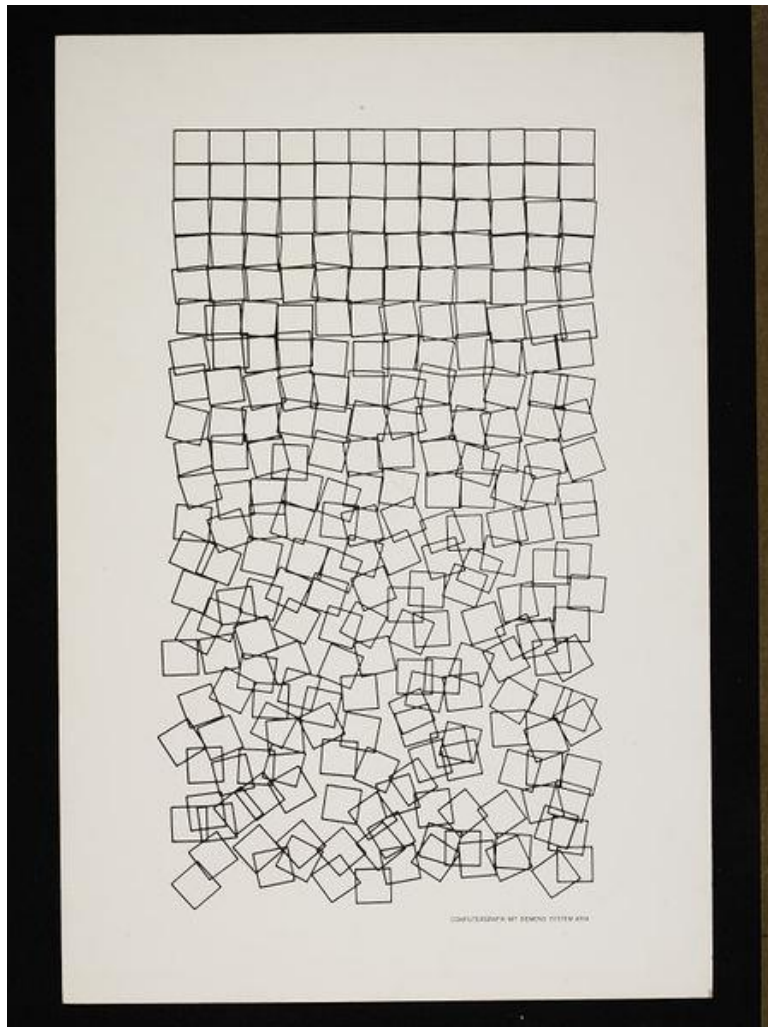


Figure 1 Nees, G 1968-1970

In their paper 'what is generative art', Boden and Edmonds clarify the definitions of words people have been using to describe generative art as many terms are used synonymously and inconsistently. It is generally agreed that there is a diversity in the context that generative art is used. *'They include music, sonics, the visual arts, video art, multimedia installations, virtual reality, kinetic sculpture, robotics, performance art, and*

*text.'* (Boden and Edmonds, 2009).

Georg Nees is considered one of the founders of computer art, using the programming language ALGOL to create aesthetic images. (Schotter | Nees, Georg | V&A Search the Collections, n.d.) George Nees included randomness, or chance, in his work. For example, in his work Schotter (Nees, 1968-1970), Nees uses randomness to model chaos; this is implemented by increasing the random offset of each row of squares until the squares seem

to have no order. (Krawczyk, 2002) By looking at Nees' work and exploring how it was created, I am able to visualise how the rules that make the art generative are applied in this case.

Using a single iteration of randomness alone can create predetermined imagery in some cases.

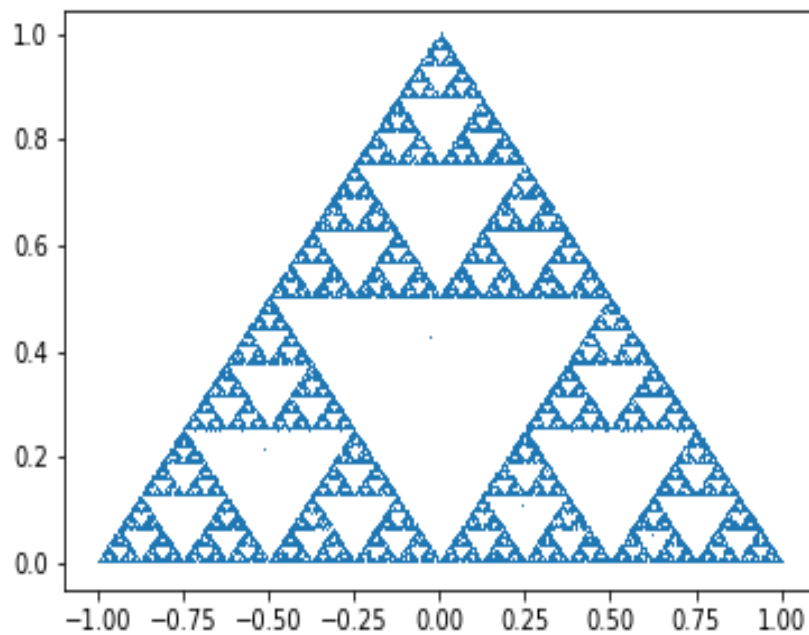


Figure 2 Gould Sierpinski's triangle

For example, starting with three given points. By using randomness in the form of a die or a random number generator, capped at 3, you can start from one point, get a random number and go halfway between the point you started and the point you want to move towards. If you keep

repeating this, you will eventually create this pattern. This is called the Sierpinski triangle, it is self-similar, or a fractal.

In contrast with generative art, autonomous art is about the complete lack of rules. When looking at autonomy outside of art, it is defined as *'the ability to make your own decisions without being controlled by anyone else'* (autonomy, n.d.) When this definition is applied to an artistic format, it would be more apt to define it as the ability to make decisions without

being controlled by your conscious self. The decision making seems to be more of a natural reflex than a rational decision. By removing rationale, the artist can tap into what could be argued as a truer self.

Although not a perfect definition, this description by Siraganian fits well with how autonomy in art can be viewed. *'the necessary involvement of the spectator in the production of the art object's meaning.'* (Siraganian, 2015) When considering the spectator as an integral part of the art itself, I would like to explore Duchamp's ready-mades and the act of putting something in a gallery space. *'both the artist and the viewer are necessary for the completion of a work of art.'* (MoMA | Participation and Audience Involvement, n.d.)

Autonomy has been utilized by Sigmund Freud as a process to reveal the subconscious in patients (MoMA | Tapping the Subconscious: Automatism and Dreams, n.d.), the result, in this case, is also interpreted. In the case of autonomous art, this reflection could lead to some insight that was not realised at the time of creation. This could be interpreted either by the artist, trying to gain insight from a past self or a viewer of autonomous art in a gallery setting; The interpreter could also be someone trying to gain insight from the autonomous art, for example, psychoanalysts. This can, however, cause problems with autonomous art if the artist is consciously thinking about the fact someone is going to try to interpret the art after it has been made.

This leads to one of the interesting concepts about autonomy, As the autonomous art must be interpreted as well as created, there will be a second expression of the subconscious in the subjective gaze of the interpreter. The use of Klecksography (making images using inkblots) in psychology uses the interpretation of what the viewer sees in the ambiguous shapes of the inkblots to attempt to discover something about the way they process

information and their inner thoughts. The ambiguity of the inkblot is important as it is the projection cast by the viewer that is then analysed and interpreted. (McLeod, 2019) The reliability of these kinds of tests has been disputed because of the subjective nature of interpreting the interpretations of the viewer.

When thinking about the application of autonomy concerning my discipline, I am led to doodling. Doodling is not something that is generally talked about or appreciated in a contextual art context or gallery space. Doodles or scribbles are often created when the mind is preoccupied with something else. In this way, they are some of the most autonomous forms of art as it could give an idea of internal processes as well as reoccurring themes and ideas. By being preoccupied, the doodler is less likely to put up barriers as it would not be expected that someone attempts to gain insight on them through interpreting the doodles. The doodles can also be easily influenced by whatever it is your mind is preoccupied with, in which case most likely would not be as useful for interpretation to find a 'truer self'.

An example of doodles that have been discussed and viewed in a professional manner, I am reminded of Da Vinci's and his sketchbooks with anatomical drawings, mathematical diagrams and doodles. What could be dismissed as unimportant doodles can be looked at under an academic context or in the gallery to gain more insight.

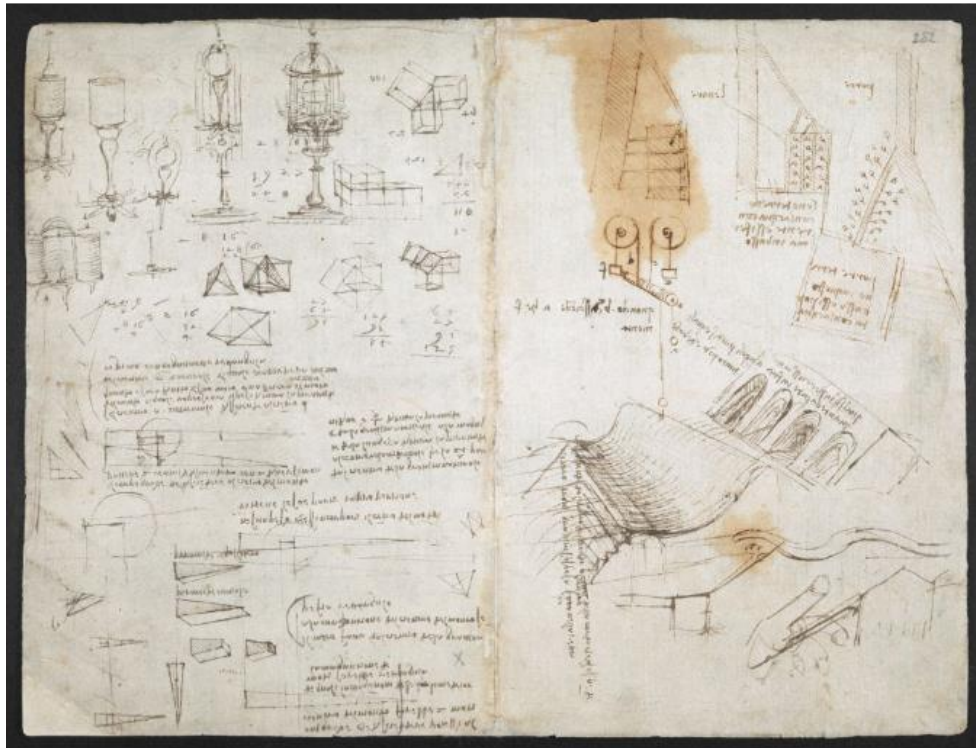


Figure 3(Da Vinci, n.d.)

By looking at Leonardo da Vinci's notebooks, we are allowed more information than finished paintings alone. Being able to see the free

exploration in the sketchbook, we can comprehend the weaving of different topics and ideas. His doodles have been interpreted as him exploring the fundamental laws and theories of physics, despite being dismissed initially. This is an example of how the change in perspective in what you are looking at can change what you see.

Thinking about the rejection of doodles and 'lesser art forms', this moves me to think of crafting, something that has been historically rejected from the fine art world. *'We use "arts" to refer, for example, to the products and practices of painting, sculpture, and printmaking and "crafts" to those of ceramics, weaving, and wood- and metalwork.'*

(Markowitz, 1994). Markowitz notes upon the difference in perception between art and craft, *'art has a positive connotation that "craft" lacks'* More likely to be viewed in the context of use, crafts have not had the attention of gallery art.

'Influenced by the Bauhaus and handicraft movements, some believe the crafts should provide well made aesthetically pleasing utilitarian objects for everyday use; self expression must not eclipse function.' (Markowitz, 1994) Bauhaus encourages the embrace of art, craft and industrialism. By mass producing and designing things, they believed that form follows function. Although Bauhaus wanted to make functional objects, there was also a strong emphasis on principle theories in art. Another Bauhaus belief was to unite the artist and the craftsman, allowing productivity to be the focus. (Lekach, 2016) *'Proponents of the Bauhaus's archetypal vocabulary—clean geometries, mono-material construction, mass replicability—may be surprised to learn that the school's early years were characterized by a naturalistic expressionism, individual creativity, and handicraft.'* (Blander, 2019).

Through combining the arts and crafts in this way, the exploration of materials comes



Figure 4(stolzl and Breuer, 2019)

naturally as well as designing with those materials in mind. Prototyping became a large part of the Bauhaus by the end.

Handcraft or handicraft is referred to as a 'manual skill' or 'an occupation requiring skill with the hands.'

(Definition of HANDICRAFT, 2020). This refers specifically to using your hands to make something, which is ambiguous in the context of what could be considered using your hands to create something as it leads to questions about utilising tools and machinery and the boundaries of what constitutes a skill. Another definition is very similar. *'Handcrafts are activities such as embroidery and pottery which involve making things with your hands in a skilful way.'* (Handicraft definition and meaning | Collins English Dictionary, 2020) Both definitions so far talk of skill, which implies that as well as being made with the hand, the

overall asset is the maker themselves. I find similarities between this and the ideas around generative art, the 'computer' must have a substantial part in the decision making, crafting seems to require human interaction at every step. In both cases how you got there is integral in how and the context in which the piece is viewed. By requiring skill to be a handcraft, it seemingly rules out the use of mechanical tools to help as the skill is referred to as manual. *'A skilled activity in which something is made in a traditional way with the hands rather than being produced by machines in a factory, or an object made by such an activity'* Cambridge. This definition reinforces the ideas of traditional making and personal creation over the production line.

*'Craft is a form of making which generally produces an object that has a function: such as something you can wear, or eat or drink from'* (Craft – Art Term | Tate, 2020) We can see an elaboration on the term when used in an art context, by noting that crafted items generally have a function, they take away some the ambiguity of the other definitions.

This, again, relates to Bauhaus as they used textiles and other traditionally crafted items in their art, combining the functionality of crafted items and purely aesthetic aspect of visual art. The main divergence from craft is the way the pieces were produced, as they were designed to be manufactured on a large scale. *'the boundaries between art and craft became blurred, particularly at the Bauhaus, as artists started to experiment with craft practices in their art.'* (Craft – Art Term | Tate, 2020)

When thinking about craft, I think about the resurgence in recent years in craft movements and the move back to hand making over mass produced items. *'Today, craft appears to be experiencing a renaissance with the cultural scenes of Do-it-Yourself, the new amateurism*

*and the crafter and maker movement. To look from here at the modern craft that the Bauhaus produced may also contribute to a fuller understanding of craft in the twenty-first century.'* (Craft becomes Modern: The Bauhaus in the Making, 2020)

Whilst researching these areas, one of the main points of interest I have had is the disagreement of what the parameters of making art are in all of the contexts. Different artists having different values and working in different ways creates an importance on different aspects of the art making. A designer's work is generally considered to be all before manufacturing the products whereas someone who traditionally handmakes an item is going to focus more on the actual making process than the actual designing. It has been interesting to look at the trends moving between handmaking and manufacturing, especially in relation to Bauhaus. When thinking about these differences in terms of computer generative art, it becomes clear that the same kind of discontinuities in thought are going to arise. Because some people rely more on the computer making decisions and others rely more on telling the computer exactly what to do, people disagree what constitutes computer generated art. If the computer is making most of the choices, is the art produced really the work of the person who programmed the computer? If the computer was merely told what to do, was the art computer generated at all? This also leads me to question if art made by computers ever be considered the work of the computers? I would like to explore the disconnect between handmaking and manufacturing.

This leads me to the research questions I would like to explore further and answer in my independent inquiry.

When does art cease to be art in the context of utilising computers to generate art and the contrast of making and manufacturing?

Compare the similarities and differences in opinions of what constitutes as art and artist in the context of manufacturing, handcrafting and generative art.

Explore the differences in the way iteration is applied in traditional craft and generative art.

Can the artist ever be the computer or process used to create the art?

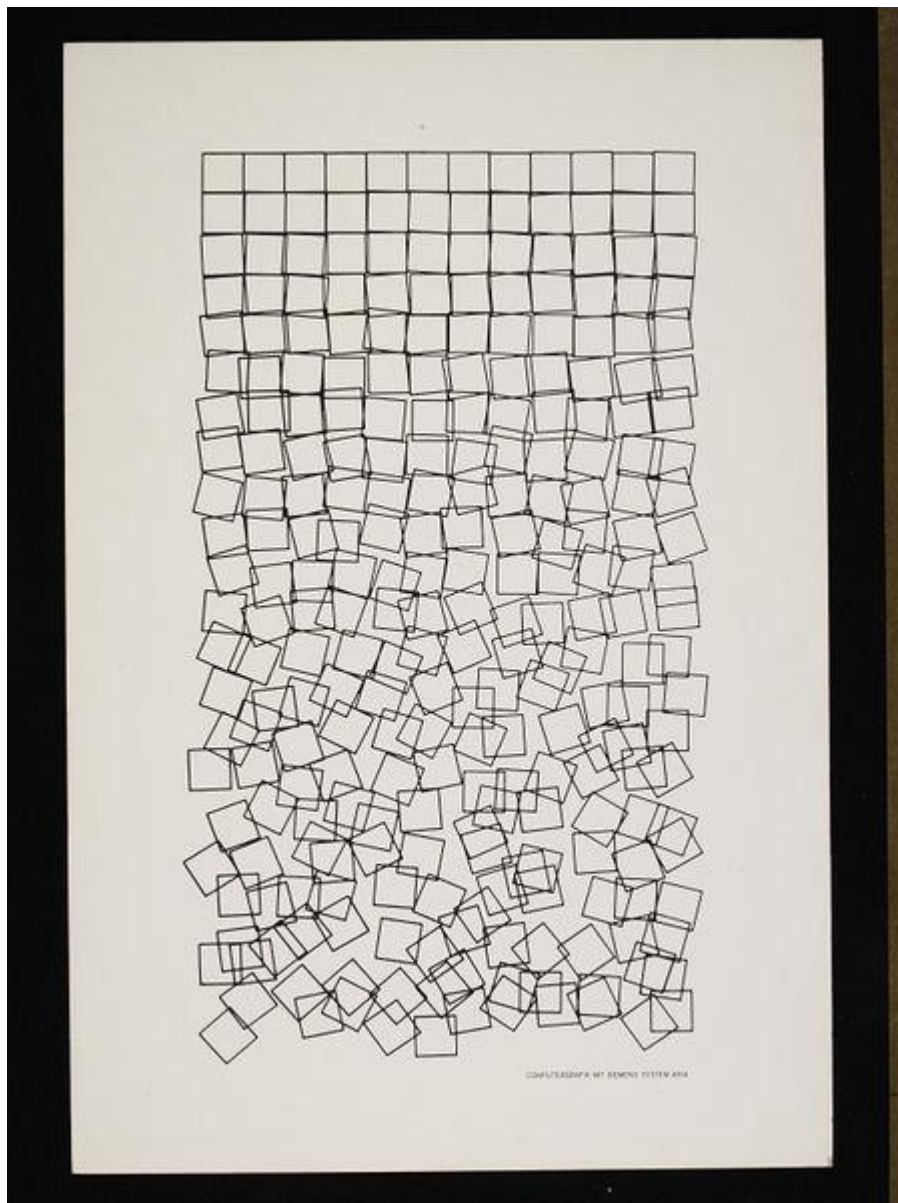
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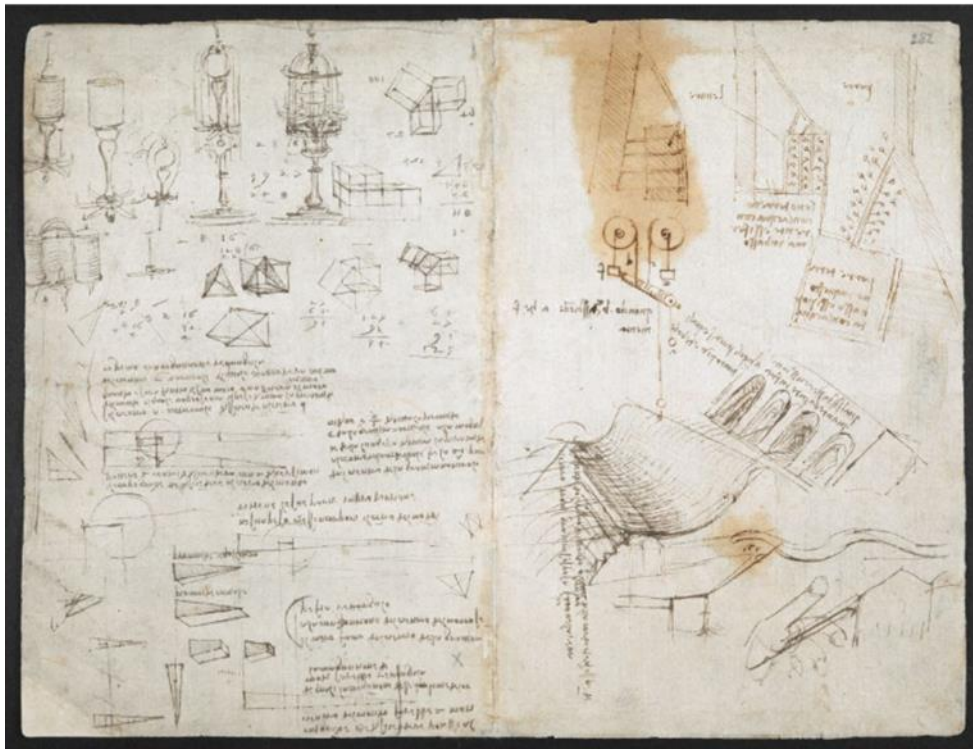
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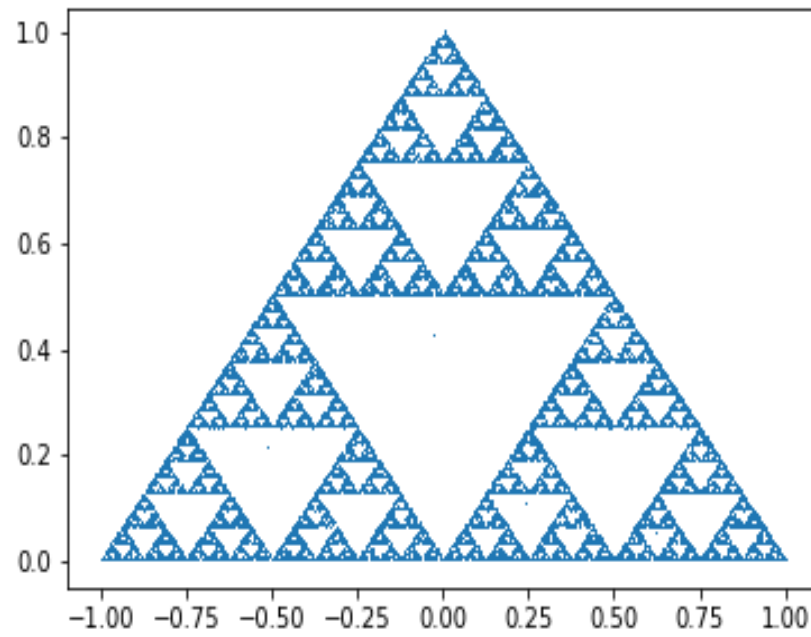
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