

Chapter 6

Good Artists Copy, Great Artists Steal:¹ Creativity and Originality in a New Media Landscape

Skillful Daedalus is the most famous craftsman of the ancient world: artist, architect, inventor, he excelled in all areas of human creativity. Throughout Greece, people claimed to own works by him, wanting a stake in a reputation that connected his work to divine inspiration.² The sculptures he made were so lifelike that they had to be tied down, lest they run away.³ He is best known to us for his work at the court of king Minos of Crete, where he built many wonderful things, including a dancing floor for princess Ariadne and a labyrinth to imprison the Minotaur.⁴ Daedalus had also lent a hand in creating the legendary monster in the first place. There are different versions of this myth, but in all of them, Minos refuses to sacrifice a magnificent bull that had been destined for the god Poseidon, exchanging it instead

¹This is a famous quote that circulates in many versions and attributions, some apocryphal. Please see Garson O'Toole's article about it in *Quote Investigator* if you are curious as to its origins. <https://quoteinvestigator.com/2013/03/06/artists-steal/>.

²Pausanias, 2-4-5 (Pausanias, 1918). From the Perseus library online version: <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0160%3Abook%3D2%3Achapter%3D4%3Asection%3D5>.

³At least according to Socrates, quoted in a Plato dialogue: Meno (97d) (Plato, 1967). I used the Perseus library edition, which is the translation by W.R.M. Lamb. The translator explains that according to an old legend, Daedalus had 'contrived a wonderful mechanism in his statues by which they could move'. So it is not entirely clear if the wonder is mechanical or supernatural, but in any case, his fame was unsurpassed. Available at <http://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0059.tlg024.perseus-engl:97d> (Accessed on December 2022).

⁴The dancing floor and the labyrinth are mysteriously connected. Some authors suspect that it might be the same thing. The labyrinth has sometimes been depicted as an open ceiling maze and other times as an underground building. Ariadne's knowledge of its intricate design, that allowed her to help Theseus and the other Athenian youths escape, might have come from the design of her own dance floor (Ghiselin, 1972).

Sameness and Repetition in Contemporary Media Culture, 141–167



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for a lesser specimen and keeping the superior one for himself. In revenge, the angered Poseidon instills in Minos' wife, Queen Pasiphaë, a violent lust for the animal. Her unnatural desires are fulfilled with the help of Daedalus, who makes a wooden hollow cow inside which the queen can hide in. The bull mistakes the cow for a real one and mounts her, mating with the queen instead. Nine months later, Pasiphaë gives birth to a monster, half-bull, half-human, and the shame and blasphemy of the King are open for the world to see. The monster needs to be locked away, so Daedalus builds the labyrinth to serve as both a prison and a ritual execution place. Every year, Athens sends a tribute for having lost a war against Crete: seven young men and seven young women, who are forced into the labyrinth to be devoured by the Minotaur. After this, the chronology and causality is not clear in the sources, but Daedalus and his son Icarus are also imprisoned, maybe in the labyrinth, but certainly on the island. Perhaps the king has found out about his building the wooden cow, perhaps it is for some other offence. All hope seems lost until Daedalus has the genius idea of making wings out of bird feathers so he and his son can fly away. Sadly, the young man fails to heed his father's warnings about not flying too high nor too low. Icarus gets too close to the sun and the wax that binds the feathers in his wings together melts, so he plunges to his death in the sea below. There are many pictorial depictions of the death of Icarus, as a favourite cautionary tale about the folly of youth, hubris, filial disobedience or the danger of abandoning the golden mean. For me, the story of Daedalus is of great interest here because it contains the seeds for a discussion of repetitive forms of creativity in contemporary media.

The first of these forms is *mimesis*, a Greek word for imitation or representation. It has been used to refer to 'how written and visual arts mimicked or imitated the world' and is the basis of aesthetic theory from Plato to the eighteenth century.⁵ Painting imitated reality through its use of form and colour, sculpture through three-dimensional representations, poetry through descriptions in words and so on. A mimetic understanding of art judges the quality of each work by how faithfully they depict nature. Artworks are then copies of a truth that is somewhere else, but which they ideally want to mirror. In the myth of Daedalus, the sculptures are so lifelike that they come alive, the cow is so close to nature that the bull is deceived. Daedalus manages to get almost as close to truth as the gods themselves; maybe this is a cause of offence.

While *mimesis* is focused on results, on the products of artistic invention, the Latin word *imitatio* rather underlines the creative process. *Mimesis* refers to the imitation of nature, but *imitatio* is about other artists or authors. *Imitatio* is more than just copying. 'An imitator was expected to emulate many models, join imitated material seamlessly to his own, reshape and vary it for its new context, and improve upon it'.⁶ The theory of *imitatio* develops in connection with the teaching of the art of rhetoric, set down by Dionysius of Halicarnassus in his famous treaty *On Mimesis*. The idea is that by imitating others, you will get an

⁵Fronza (2012, p. 3416).

⁶Fronza (2012, p. 3416).

understanding of how a genre works (be it poetry, funerary speeches or historical accounts) and later be able to develop your own style within that genre. Daedalus needs to get off the island, so he thinks systematically about routes of escape: “‘He may thwart our escape by land or sea” he said “but the sky is surely open to us: we will go that way: Minos rules everything but he does not rule the heavens.” So saying, he applied his thought to new invention and altered the natural order of things’.⁷ By observing how birds fly, he was able to understand the ‘system’ and emulate it using other materials (wood, feathers, beeswax, the human body).

This myth also touches upon the third form of repetitive creativity I want to engage with in this chapter: *combinational creativity*. Daedalus alters ‘the natural order of things’ by combining unexpected elements and producing a new order, something never seen before: a flying human! He might have been inspired by the methods of his nephew Talos. Back when Daedalus was living in Athens, his sister sent him her clever son, Talos, as an apprentice. Daedalus realised that the boy was indeed so sharp that he already rivalled his own inventiveness. Ovid tells how the child ‘studying the spine of a fish, took it as a model, and cut continuous teeth out of sharp metal, inventing the use of the saw’. Daedalus gets so jealous that he kills Talos,⁸ which is the reason he has to run away from Athens.⁹ Talos’ method combines concepts from two separate domains (zoology, carpentry) to produce a new concept. Things are recycled, reused, remixed, either by serendipity or by systematic probing.

Perhaps ‘repetitive creativity’ sounds like an oxymoron to you, even after I’ve set out all three forms. Before examining the first of them, I need to deal with a monster that has stalked me since starting to write this book. I hope that this chapter ends with my slaying it, but for now, let us know our enemy: the hydra of originality, with its many heads wriggling their way into all sorts of contemporary discourse.

Even though both *mimesis* and *imitatio* lived through the antique period and the Middle Ages, and for many centuries the domains of the arts and crafts were not separated, something happened that made our culture wary of repetitive strategies. The idea of originality being the most valuable quality in art and the true measure of creativity arises during the Romantic period, first in relation to poetry and then extended to the other arts. The real poet/artist is the original genius who has ‘the talent for producing works that are independent of the ideas and expressions of others’.¹⁰ This presupposes a totally unique work, created in a cultural vacuum without relation to tradition or contemporaries, an absurdity that has been contested by many critics, but that nonetheless lives on in the way

⁷Ovid, 2000. Book VIII: pp. 183–235.

⁸According to Ovid, he hurled him from a citadel, but Minerva took pity on him and transformed him into a partridge, half-way. The whole story is in Ovid, 2000. Book VIII: pp. 236–259.

⁹A crime the gods will make him pay for much later, with the life of his son Icarus.

¹⁰Millen (2010, p. 92).

we value art even now.¹¹ Jessica Millen argues that the cause for the birth of this particular conception of originality is related to the social context in which the romantic movement emerged. Both the German and the English poets were reacting to budding processes of industrialisation and mass production, fearful of the rise of mass culture and wanting to state that art could not be made by a machine, worried about what they saw as a generalised identity crisis of the soul and spirituality. Their defence was to propose that creativity comes from an unconscious force, close to the supernatural ‘which results in a work free of any borrowed elements’.¹² Genius is born, not made, the special sensibility of a genius cannot be learnt; only they can bring art into existence channelling the forces of the universe.

This new image of the potent genius interrupts a long tradition of overlap between artists and artisans and creates an elitist club, which regular people cannot enter. It also paves the way for discourses of excess where real artists are larger than life and deserve to be idolised. Despite the recent upsurge of ideas around innovation that re-conceptualise creativity and apply it to domains other than art (design, business, science), and despite the critical revision of the cult of the male genius, creativity is still very much associated with originality in everyday language and in the media.¹³ As Philip Prager has noted, ‘Classical, romantic, and psychoanalytic notions pervade the discourse on creativity even in the twenty-first century and ignore the scientific research that has been conducted in the last forty years. Cognitive scientists typically define creativity as a combinatorial process in which ideas or objects from seemingly incongruous domains merge to produce surprising new meanings’.¹⁴

The many-headed monster, which movements like Dada, Fluxus, OULIPO, pop art and many others have tried to slay time and time again, has been reenergised with the appearance of digital art, which has roots in these avant-garde art movements, as well as in the field of engineering, and which uses a different rhetoric of invention.¹⁵ All forms of digital art are based on repetition, it being a basic principle behind algorithmic machines. In previous chapters we have encountered some of them, like computer games or interactive fiction, but there are many more: robotic art, digital poetry, data visualisations, sound art, net art. All have been questioned for not conforming to our idea of uniqueness and creativity: is this art? Is it really original? Can a machine be part of the artistic process? Walter Benjamin has also been invoked in relation to the products that

¹¹An example of this criticism is the work of Bloom, already discussed in chapter 1. His *The Anxiety of Influence* (1997) shows how poets lean on each other’s work, even as they try to escape from it. Even the highest valued geniuses of our literary pantheon are part of a complex system of textual influences.

¹²Millen (2010, p. 96).

¹³See, for example, Felluga (2005) and Casteras (2012).

¹⁴Prager (2013, p. 240).

¹⁵Paul (2003).

emerge from these processes: the never-ending copies, as we saw in Chapter 5.¹⁶ Digital art seems to be the realm of fakes and false mirrors.

The most recent example of the power that the concept of creativity attached to genius and originality still exerts over us, is the current cultural ruckus about Artificial Intelligence.¹⁷ In the words of Lev Manovich ‘For some, art, aesthetics, and creativity are the pinnacle of human abilities and therefore represent a final bulwark against the seemingly unstoppable advances of AI. In other words, this complex field becomes the ultimate testing ground for AI’s possibilities and limitations’.¹⁸ Our aesthetic ideals have been disrupted by the release of OpenAI products that seem to be able to make just that: art. Many people are playing with the different modules, testing how good ChatGPT is at developing arguments or telling stories, or DALL-E 2 at composing pictures from textual prompts, among others. OpenAI even states on DALL-E 2 start page: ‘DALL-E 2 can create *original*, realistic images and art from a text description. It can *combine* concepts, attributes, and styles’, my emphasis to illustrate how provocative this might sound to many, the affirmation that DALL-Es productions are original work even though it is based on recombinations. As Manovich and Arielli suggest ‘The encounter between AI and aesthetics is crucial because aesthetics is considered a quintessentially human domain’.¹⁹ If artificial intelligence (AI) ‘just’ mimics the examples it has been fed and generates variants according to patterns, how can we call its productions ‘new’? Is creativity reserved only to humans? The hydra is breathing down my neck. For now, let us leave her there, as I tackle the three kinds of repetitive creativity one by one: *mimesis*, *imitatio* and *combinational*.

Mimesis

Traditional *mimesis* is about the imitation of nature by art through processes of representation. At first glance, it looks like this repetitive format could be the least productive of the three in relation to contemporary media forms. Nearly every text about digital media and aesthetics written in the 1990s and early 2000s distances itself from mere representation, be it pictorial or textual, in one way or another. Mimesis is the dominion of the static, that which is only to be looked at and interpreted but cannot be changed. Digital art is by contrast interactive, it is not only to be looked at, but manipulated, constituted by the subjects’ interaction. This makes the new form of art fundamentally different.²⁰ *Interactivity* is the key concept of what we could call the first wave of new media theory. The discussions have an optimistic vibe. There is a sense of possibility in the new media forms that give rise to a different kind of user experience beyond the interpretative.

¹⁶Wands (2007).

¹⁷At least at the time of writing, December 2022.

¹⁸Manovich and Arielli (2021, p. 7).

¹⁹Ibid.

²⁰See, for instance, Aarseth (1997), Murray (1997), Manovich (2002), Kampmann Walther (2003), and Qvortrup (2004).

Another idea also gets traction here, connecting interactivity to the main principle behind mimesis, that of the imitation of nature. *Simulation* describes the algorithmic mechanisms that make computer representations more ‘real’ than pictures could ever hope to be, a bit like Daedalus’ enchained statues. This is not Baudrillard’s fruitless surface simulation, but the creation of a functioning artefact that can mimic how real objects work. According to Gonzalo Frasca, ‘to simulate is to model a (source) system through a different system which maintains (for somebody) some of the behaviors of the original system (. . .). Simulation does not simply retain the – generally audiovisual – characteristics of the object but it also includes a model of its behaviors. This model reacts to certain stimuli (input data, pushing buttons, joystick movements), according to a set of conditions (. . .). A photograph of a plane will tell us information about its shape and color, but it will not fly or crash when manipulated. A flight simulator or a simple toy plane are not only signs, but machines that generate signs according to rules that model some of the behaviors of a real plane’.²¹

While a lot of interactive art is abstract, conceptual or non-figurative, and thus is often seen as the opposite of mimesis, simulation depends on representation for the user to figure out the rules of the interaction.²² In the flight simulator example, the interface visually mimics the image of a flight’s real cockpit, adding interactivity to the working of the levers and buttons, the steering of the plane and the navigation computer. The principle of simulation allows designers to build virtual worlds that can be inhabited and interacted with, in computer games or virtual reality. In fact, the early theorists of virtual reality are attuned to theories of mimesis. Oliver Grau proposes that VR fits into the long history of illusion mechanisms, like Roman frescos, *tromp l’oeil* or the panorama, so that it really is a sort of upgraded mimesis, where classic illusion is augmented with participation as well as the suspension of the separation between subject and object. We become part of the artwork.

While some VR is abstract or creates fantasy worlds, a lot of its applications are about recreating some aspect of the real world. You just need to browse experiences in Steam VR or Oculus to get an idea. There are a lot of educational, informational experiences where we can travel to remote places (including space) or recreate historical events, and of course many, many games.

Bolter, Engberg and Macintyre have proposed the term ‘reality media’ to refer to both augmented and virtual reality (along with television and film) as these media ‘place themselves figuratively or physically between us and our perception of the everyday world, and, in this sense, they redefine or construct reality itself’.²³ While all media represent aspects of reality, they argue that some of them are of a ‘second order’, that is, they represent reality symbolically, depending on interpretation, like literature or a photograph. However, reality media are expansive, and surround us, immersing us through several senses, like film, television and

²¹Frasca (2013, p. 223).

²²For a review of the many genres of interactive art, see Paul (2003).

²³Bolter et al. (2021, p. 6).

now VR and AR. Reality media do not aspire to be a transparent representation of the real, instead they work by comparison to other media, so when we are immersed in VR, we appreciate the three-dimensional experience by considering how different it is from watching television, for instance.²⁴ In fact, every time a new medium enters the media ecology, its proponents enthusiastically hope that ‘it will allow them to experience events and people just as they would experience them without any media at all. The irony is that this claim to reality usually depends on earlier media forms (...). Photography reconfigured elements of landscape and portrait painting; film reconfigured techniques of stage drama; television borrowed from conventions of vaudeville, stage drama, and film. Throughout the history of media, the context has been one of rivalry to create an “immediate” or “authentic” or “compelling” experience’.²⁵ This is the core of Bolter and Grusin’s concept of *remediation*, or ‘the representation of one medium in another’.²⁶ The content of media is always other media, so no medium is isolated but is instead always part of a complex system where reality seems to be the least of our worries. They lean on Derrida for a dynamic account of mimesis, where what is compared is not the objects, but the experience of the subjects.²⁷ Because true media transparency is impossible, and reality cannot ever be reached, the best we can hope for is for media to provide us with a similar, immediate (and therefore authentic) emotional response.²⁸

While this last affirmation might have been taken to the extreme for rhetoric effect, there is no doubt that the McLuhanesque idea of media reflecting other media is extremely compelling. And it is of course the shape of modern mimesis. I can illustrate this with two snapshots that have to do with AI, machine learning and the question of what is real.

Snapshot 1. Deepfakes

You have probably heard about *deepfakes*; the false representation of a person made to look like someone else, mostly on video although it can also occur through audio or pictures. Deepfake technology uses AI (machine learning) to imitate the original person’s appearance and mannerisms, usually by modifying another person’s performance (for instance, by layering the face image on a famous actor on top of an impersonator). Deepfakes can be playful, like the parodies where Jim Carrey stars in *The Shining*.²⁹ These are usually clearly marked as parodies, for successful decoding requires that we are aware of the two identities at the same time, the real and the fake. To appreciate craftsmanship, we need to know it is a copy, otherwise we cannot ‘get the joke’. It is part of the charm that we realise that the @unreal_keanu TikTok account is not run by

²⁴Ibid., p. 14.

²⁵Bolter and Gromala (2003, p. 86).

²⁶Bolter and Grusin (2000, p. 45).

²⁷Ibid., p. 53.

²⁸Ibid.

²⁹See https://www.youtube.com/watch?v=HG_NZpkttXE.

Keanu Reeves, but entirely made of deepfakes. The account has millions of followers, some confused about the identity of its AI protagonist, whom we, for instance, can see cleaning the house with funny movements. Most followers enjoy the silly content because it fits with the image they have of the actor, or, as one user writes 'I choose to believe in him because he gives me hope'.³⁰ Unreal_Keanu has become *someone* in his own right, a repetition of Keanu Reeves but not him, artificial but still real.

Deepfakes can also be very harmful. A sadly common and malicious use has been the layering of women's faces onto the bodies of porn actresses. This can be done to take revenge, to blackmail or to humiliate the victims, celebrities or not, and has its own name: deepfake porn, and a myriad of apps and extensions like *DeepNude*, where anyone can upload a picture of a woman to 'undress' her convincingly. Other problematic uses of deepfakes include manipulating the appearance of politicians to say things that are harmful to themselves or their government. A famous example of this is the series of videos edited to make American Democrat Speaker of the House Nancy Pelosi appear drunk or speech impaired, or the video where Ukrainian President Volodymyr Zelensky orders his troops to surrender to the Russians at the beginning of the war in 2022. Their images, facial expressions and voices are repeated so convincingly that it appears that they said things which they never said. These twisted examples are so chilling because they are nearly indistinguishable from the real thing, which we would do well to remember is already mediated. That is, deepfakes remediate real video genres (porn movies, political speeches, etc.). Few of us have seen Nancy Pelosi or Volodymyr Zelensky in the flesh; all our 'interaction' with them has occurred through mass distribution of images (either recorded video or live television). Despite Baudrillard's efforts and the many years existence of Photoshop, we have taken for granted that images show reality. The introduction of deepfakes disturbs our faith in images in an unprecedented way, and it seems likely that new certification systems will be necessary, just like digital signatures, to give a mediated seal of authenticity.

On the other hand, if we embrace the idea of remediated people, deepfake technology can be used for wonderful things like bringing someone back from the dead. This has already been tried in the film industry, to complete films where the death of an actor had left some scenes unfinished. I want to mention the touching project *Dalí Lives!* that can be experienced at The Dalí Museum in Florida, where the painter talks to museum guests from displays scattered through the museum. There are 125 videos with can be combined in many possible ways as the AI reacts to visitor responses, or comments upon the weather and the actual date. AI Dalí moves and talks like the famous painter and is surprisingly present and interesting to talk to. We can even take selfies with him. We know he is not real, but it does not matter.

Snapshot 2: AI-generated portraits (Fig. 1). Maybe it is hard to agree on what reality is, but one thing we tend to be sure about, Descartes notwithstanding, is our

³⁰In <https://dailyhive.com/vancouver/keanu-reeves-parody-tiktok>.

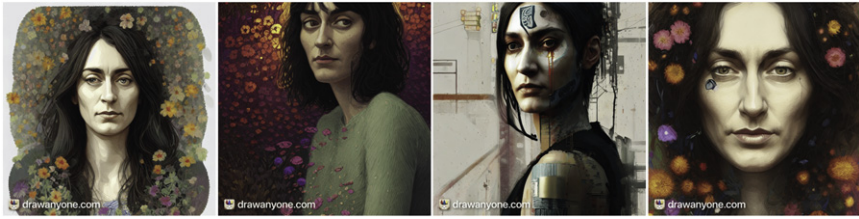


Fig. 1. Four Versions of me, Generated by *Drawanyone*.

own existence. Drawanyone is an AI-powered image generator using text prompts.³¹ Its website says ‘AI-generated portraits, any way you want’. You just have to upload 5–10 pictures of yourself (or another person), wait for the AI to process them and then write prompts that will generate something like ‘portrait of a silver haired woman with ethereal lighting and flowers all around’ or ‘portrait of a digitally painted woman in a cyberpunk city’. I, together with many people, have been trying this, first with the designated prompts, then creating my own. Our social media has been flooded with people sharing their portraits. The fact that a lot of us were using the same initial prompts makes for strange family resemblances, where suddenly all my friends could be members of the same renaissance court. I observed that the most repeated adjective applied to the generated pictures was ‘uncanny’, which apart from its regular meaning as unsettling or difficult to explain, is also a Freudian term referring to the dread we feel when our childhood fears seem real. I find it fascinating that people could agree on using this term. To me, there was nothing unsettling or mysterious about the images, even if I do not know exactly how the AI works. I had submitted five of my pictures, the programme had calculated a sort of average visual identity from them, and then pitched that against several visual genres. Some I liked, some I did not. Some were more recognisable than others, but that is largely due to the styles that the AI tried to conform to. For instance, everybody’s faces are elongated and pale and our noses straightened when we ask to be drawn in Botticelli style.

I believe that the feeling of uncanniness is due to an implicit expectation that the AI acts like a mirror, so the slight modifications disturb us. But why is this? If we expected a deepfake effect, it is true that the AI’s fantasy portraits seem slightly off. But why would we? We are after all used to the artificiality of selfies, where filters and camera angles repair our imperfections and smooth our lines. We also know that the AI is not a mirror, that it does not know how we *really* look. We just submitted five pictures where our image was already mediated, and had perhaps been retouched. Furthermore, Drawanyone promises to generate portraits, not mirror images. A portrait always contains an interpretation, no matter how realistic the style. Maybe our assumptions about the portrait as genre

³¹In the last few months, DALL-E, Midjourney and Stable Diffusion have been made available to the public, as well as a lot of applications and programmes that build upon them.

are still very much attached to an old concept of mimesis. Pope Innocent X might have preferred to be painted by Diego Velázquez rather than by Lucian Freud; and so do we all, apparently. Drawanyone can do both, and of course there are decidedly uncanny prompts, with many people versioning themselves as vampires, zombies or gothic heroes. I argue that the uneasiness appears because people are chasing their dreams (and not their nightmares as Freud would have it). Browsing Drawanyone's gallery, I find an endless flow of images with the words 'handsome, beautiful, good looking' added to whatever prompt. No matter what appearance and genre, every picture wants to be more beautiful than the source images. This is who we secretly wish we are; no, this is who we really are. What is unsettling is not so much the result, which we covet, but the vulnerability of sharing it on social media, as we suddenly reveal to the world what the improved version of ourselves should look like.

Perhaps what is needed for us to be able to deal with this new mimesis (*deepfakes*, AI-generated images) is algorithmic literacy. As Erik Salvaggio has put it 'Every AI generated image is an infographic about the dataset. AI images are data patterns inscribed into pictures, and they tell us stories about that dataset and the human decisions behind it'. The images reveal the biases, blind spots and quirks of the algorithm, as well as the intentions of the person writing the prompt. AI-generated images are never just one flat thing, never transparent images of reality (what is?) but incorporate an interpretive layer that brings them back to Bolter and Grusin's 'second order' media. We just need some new interpretive strategies to be able to deal with an increasingly complex picture with more participating agents.

Imitatio

Imitation is mimicking. When Alec Baldwin impersonated Trump in *Saturday Night Live*, he was imitating. When we use the Latin word *imitatio*, we are also talking about mimicking, but in this case an organised method with a distinct goal. *Imitatio* is a learning technique developed in ancient rhetoric when neophytes were exposed to the best examples of a particular genre, such as political speeches, and were then encouraged to imitate their form and content.³² *Imitatio* is also known in relation to more artistic endeavours like poetry and the visual arts, as it also fits with the master-apprentice framework. Donatello was an apprentice at Lorenzo Ghiberti's workshop, Raphael at Pietro Peruginos'. Their tasks included finishing something that their master had started, following their style exactly so the clients would be satisfied with the authenticity of the work. Through copying for years, they honed their own skills and went on to be great masters themselves, with their own style.

In the learning context of the rhetoric class, *imitatio*'s focus is not on the product but on the dynamic creative process.³³ Indeed, producing exact copies of

³²Frona (2012).

³³Pechat (2001).

one particular text is not the objective; it might even be frowned upon. Rather, exposure to different authors and styles fosters a meta-critical awareness of genre and style so that the neophyte can eventually go from imitatio to *superatio* (leaving the beginner stage behind). Imitatio thus evolves from a ‘superficial, rule-based imitation’, which is appropriate in the training period, into a ‘natural sort of imitation predicated on long experience and thorough analysis’ that is typical of mature artistry.³⁴

Imitatio is performative, and even in antiquity it made sense in a community of practice where being recognised as an imitator was a sign of belonging to the same genre or school of thought as the master, and a way to ‘acquire by reflection some of his prestige – and covert use to create an élite community of those readers cultured enough to recognize it’.³⁵

Imitatio resonates strongly with the many imitative genres flourishing in social media. In this section, I will be considering *YouTube* and *TikTok* to illustrate different sides of imitatio. Both platforms, appealing to different age groups, are populated by autodidacts, in the process of *becoming* YouTubers or TikTokers. Users learn from each other how videos are made, edited and cut, and submit themselves to copying the existing genres that get traction, like renaissance apprentices in a master’s workshop. An aspiring YouTuber might try their hand at making unboxing videos,³⁶ ‘my followers ask me’ videos, reaction videos,³⁷ or response videos.³⁸ The aspiring TikToker might aspire to go viral with a great dance choreography or a well-timed comic reaction video. These genres have become cultural templates to be imitated and the most famous stars, the masters to be followed.

Snapshot 1: Historical Costuming on YouTube

YouTube is illustrative of the idea of learning by doing. Christine Wolf has examined the culture of DIY (do it yourself) on *YouTube*: ‘DIY projects may span a broad range of topics and include things like home life (such as home repair, decoration, cooking, and gardening), crafting (such as knitting, sewing and scrapbooking), personal fashion and style (such as jewelry, make-up, and hair techniques), making and tinkering with computers, and so on. The common thread is that individuals “do-it-yourself,” meaning amateur, untrained individuals learn how to do specialized, expert tasks’.³⁹ These videos are not only used as instruction manuals to be followed to the letter but also serve as a means of identity work, as people dream themselves able to do different things, regardless of their getting round to doing them or not. By watching what others do, we

³⁴Gazda (2002, pp. 158–159). This paragraph is based on the review of imitatio literature that I wrote for Tosca and Ejsing-Duun (2017).

³⁵Conte and Glenn (2015).

³⁶Nicoll and Nansen (2018).

³⁷Kim (2015).

³⁸Lewis et al. (2021).

³⁹Wolf (2016).



Fig. 2. Lively Exchange for 'How to Make Your Own Hooks and Eyes'.⁴²

imagine alternative ways of living, things we also would like to do. By following in their steps, *imitatio*, we learn the basic elements of a craft or process, aiming for an ideal *superatio* moment where we obtain a deeper understanding of the genre at hand and are able to formulate our own principles and juggle with the different ways of doing things. Then, perhaps, we are ready to make our own videos to share; ones worthy of being imitated.

There are many creative domains represented on *YouTube* to illustrate what David Gauntlet has called 'everyday creativity', or the joyful impulse to engage in crafting.⁴⁰ For some time I have been following a loose collection of channels and crafters that have to do with historical costuming; the craft of sewing historical costumes. All the YouTubers I follow are women, although there is also the odd man participating in the network. Most of the people in this community have a few thousand followers, but some of the stars have many more, like Bernadette Banner with 149 million or Karolina Żebrowska with 127 million followers.

⁴⁰Gauntlet (2013, p. 17).

The first time I encountered a video in this genre was a few years ago, trying to find a pattern or instructions of some kind to make a medieval-looking cape for one of my children, who is very fond of LARPing (Live Action Roleplaying). There are many step-by-step videos, where the creators walk you through the steps of drawing the pattern, buying the fabric, cutting, sewing, fitting, often with links to places to get the material or download specific instructions. An example video could be 'How to sew an easy medieval kirtle' by Elin Abrahamsson, who has a really accessible style and is very clear in her instructions, so that even someone as bad at sewing as me can follow them.⁴¹ Her videos are full of enthusiastic comments, questions and praise from others in the community, where she and others get into conversations as to how to improve designs.

People in this community are helpful, generous and, above all, enthusiastic (Fig. 2). We all become apprentices in the digital workshop, trying to imitate each other and sharing our successes or questions: 'Everyday creativity refers to a process which brings together at least one active human mind, and the material or digital world, in the activity of making something which is novel in that context, and is a process which evokes a feeling of joy'.⁴³

The historical costuming community is imitative in other ways. Most often, there are no templates and patterns to recreate old clothing, so they must do the research themselves, trying to reverse engineer from other sources, like paintings or books, and then filling in the gaps with their own solutions. Bernadette Banner excels at this kind of detective work and her framework is useful to explain this kind of creativity, since making is connecting in several ways.⁴⁴ To make something new, you put things together (here ideas, materials, desires); then you connect with other people who also make things (supported by YouTube and other online platforms like blogs) and then you share stuff in the world and also connect to it (physically).

This last part extends the life of the recreated dresses, which some of these crafters integrate in their daily life. There is, for instance, people like Madison Lynn, who wears historical costumes to work for 1 week, and teaches and goes to meetings dressed up as a seventeenth-century gentlewoman,⁴⁵ or Abby Cox, who has worn eighteenth-century clothes for 5 years, in her attempt to understand the historical period and her relationship to clothing and her own body.⁴⁶ There are even creators who have developed entertainment-oriented genres, like Karolina Żebrowska's idea of doing 'speedruns' getting dressed in old clothing quickly. Her video of 1778 dress speed run has 231.000 views,⁴⁷ but her record of 3:41 minutes

⁴¹<https://www.youtube.com/watch?v=fRvzUQ8v9Ss>

⁴²<https://www.youtube.com/watch?v=iHP4CbLhjf0>

⁴³Gauntlett (2013, p. 76).

⁴⁴<https://www.youtube.com/watch?v=327azBjatjg>

⁴⁵<https://www.youtube.com/watch?v=TTXpMUutfWI>

⁴⁶<https://www.youtube.com/watch?v=DyWnm0Blmh4>

⁴⁷<https://www.youtube.com/watch?v=UpbiPXoSQ3E>

has now been beaten by another crafter, Ash L G who could do the same in 3:22 minutes.⁴⁸

Crafting historical clothes, like in most other DIY communities, turns out not to be only about the products, the results or even becoming a master crafter, although there is undoubtedly pride in that. YouTube offers a framework for participation in a community, and *imitatio* is the path to proficiency, belonging and ultimately joy.

Snapshot 2: Life Hacks

I am a notoriously impractical person who is not very good at the old art of ‘keeping house’, so I am fascinated by the many tricks, shortcuts and ingenious use of everyday objects that go under the name of ‘life hacks’. My *TikTok* feed is also attuned to this, for I must have liked enough life hacks that they keep on coming. Only this week I have learnt all these fantastic things:

- How to wriggle a chicken wing so as to remove the bone and eat all the meat
- How you can turn a pizza box into a half pizza box to keep your leftovers
- How to fix ripped tights with hairspray
- How to grow endless basil
- How to clean the shower floor with vinegar
- How to wrap up oddly shaped gifts

If you are not impressed by the selection, go ahead and search ‘*TikTok* life hacks’ plus the topic of your choice; maybe you are interested in cars, travelling, gardens, carpentry. . . there are entire repositories of short-edited pearls of wisdom about any of these. Life hacks are often simple solutions that offer sustainable alternatives to the excessively commercialised ways of solving problems in our everyday life. I want to know these things to make my life easier and less wasteful. They satisfy an aspirational impulse to become better, not just to solve a specific problem. I cannot help but fantasise that once I can do all these things, no domestic problem will ever seem overwhelming again. Life hacks are uploaded to be imitated, there is an inherent normativity in teaching other people better ways. But not all life hacks are about solving problems. A lot of them want to educate you in the way you present yourself in the world. If you search for ‘life hack fashion’ or ‘life hack makeup’, you will see how these videos are often set up as dichotomies with a screen split in two. The ‘what not to do’ part to the left is marked with a red X, and ‘what to do instead’ part to the right is marked with a green V. On the left, a girl might be wearing a pair of trousers with a blouse hanging over, while on the right, the blouse will be elegantly pinned inside the trousers. This might seem harmless enough, a concrete style tip following the fashion of the day. However, the constant bombardment with this kind of

⁴⁸<https://www.youtube.com/watch?v=yTsdN9Vpopg&list=PL-KvVPxvMrSXF8MVI8xDgHLeg7tE8GPWp>

content, with only one acceptable way of wearing wide trousers, long earrings or smokey eyes, makes for a narrow life path where many things are 'wrong'.

Life hacks, with their rigid ways, could be seen to be part of a tradition of 'self-help' literature, starting with the religious manuals, and continuing with the Renaissance books of conduct (for example, *The Art of Wordly Wisdom* by Baltasar Gracian, who offers advice in terms of virtues and behaviour, but advises on what will attract the interest of other people and make you popular).⁴⁹

Consider his advice number iii 'Keep Matters for a Time in Suspense'⁵⁰: 'It is both useless and insipid to play with the cards on the table. If you do not declare yourself immediately, you arouse expectation, especially when the importance of your position makes you the object of general attention. Mix a little mystery with everything, and the very mystery arouses veneration. And when you explain, be not too explicit, just as you do not expose your inmost thoughts in ordinary intercourse'.

Now consider this *TikTok* video I picked at random by searching for 'life hack dating'. TikToker Dave Perrotta (who has 177,000 followers and helps 'busy guys meet and date high quality women') is on a balcony looking at the camera with fancy glasses on as he gives the following advice about texting a girl after a first date⁵¹:

This is actually something I see a lot of guys screw up. (...) You think the date was awesome so you text her afterwards and say: "hey, I had so much fun, I can't wait to see you again". That's like one error I see you guys make. The other error is they automatically try to start planning the next date in the first text message. (...) The problem with this is it exposes all of your intentions right out of the gate. She already knows, hey, this guy likes me. Hey, he wants to see me again. ... What's much better is to let it breathe. You want her to sit there for a day or two thinking: does this guy like me? Does he want to see me again? You can text her and say "hey. Last night was fun. We gotta go easier on the tequila next time". Now the power of a message like this is it's subtle, you know. You are implying that there might be a next time, but you're not like trying to set it up specifically right then and there. There's still like some mystery to it.

Baltasar Gracian would be proud, and to be honest, keeping the suspense is one of the oldest tricks in the book. However, its new packaging, as a 1-minute part of a never-ending reel, algorithmically optimised to conform to the whims of any single user, means that the average youth looking at *TikTok* will be digesting 60 of these absolute truths per hour. I have not yet seen any wide-ranging study of

⁴⁹Kempis' *Imitation of Christ* comes to mind.

⁵⁰Text freely available at: <https://www.sacred-texts.com/eso/aww/aww10.htm>.

⁵¹https://www.tiktok.com/@daveperrotta/video/7059131499181968686?is_from_webapp=1&item_id=7059131499181968686



Fig. 3. A *TikTok* Duet Dance Challenge, Reimagined by DALL-E and me.

the platform that explains how this mode of consumption translates into imitative activities in people's life.⁵²

Snapshot 3: Duets

The last snapshot is very brief, and not really about *imitatio*, but about playful imitation, also as a way to connect to the next section. Imitation is one of the earliest forms of play, and it is recognised that it helps children learn behaviour patterns.⁵³ There is pleasure in being able to mimic the actions of another person, and in the case of infants and young children, a sense of discovery as they learn new ways of using their bodies or their voices.

TikTok has become the place to go for a lot of imitative play thanks mainly to the duet feature, implemented initially to support practices of lip syncing and dancing (Fig. 3). At first the imitation could only be silent, but later it became possible to add audio to respond to other videos, and now it is possible to string together chains of duets.⁵⁴

⁵²Maybe it does not. But it would be a very interesting study.

⁵³Piaget (1962).

⁵⁴Kaye (2022, p. 62).

TikTok is in many ways a performance enabling platform, where people can engage in singing, dancing and music playing, alone and together. It is the perfect platform for all the playful people who like to perform, act silly, dress up and sing at family birthdays; a platform for clowns, show-offs and would-be divas. I mean this in the most positive of ways, as the joy of performing, sharing and just playing, becomes possible again, even for adults.

Bondy Kaye proposes that we can understand these processes through the concept of distributed creativity ‘defined as groups of individuals who join together to produce a new creative output that ranges from the relatively predictable and constraints to relatively unpredictable and constrained’.⁵⁵ But why is it such fun to imitate each other on *TikTok*? I suggest that the platform becomes a playground where we can unfold one of the most human of needs: that of play. Philip Prager argues that ‘improvising – that is, exploring ideas, objects, materials, and people without considering sense, purpose or function – is one of the key features of play. Play, in turn, is not the evolutionary recipe for only the success of our mammalian class and human species but also for the origin of creative innovation – the recipe for our social cohesion, our mental facility and our physical health’.⁵⁶ No wonder that the world fell in love with *TikTok* in the middle of the COVID-19 lockdown.⁵⁷

Combinational Creativity

The concept of combinational creativity originates from the work of Margaret Boden who in her books *The Creative Mind: Myths and Mechanisms* and *Creativity and Art* lays the foundation of a processual theory of creativity based on cognitive science.⁵⁸ Her theory bridges the gap between artistic and cultural understandings of creativity and creative algorithmic formats that were nascent when she wrote the second book.

She defines creativity as ‘the ability to come up with ideas or artefacts that are *new, surprising, and valuable*’.⁵⁹ In her view, any aspect of life – science, art and architecture – can all be creative. Creativity is not a special faculty, but an aspect of human intelligence in general. The Romantic view of creativity as reserved for a spiritual elite has had ‘horrendous educational implications’. From her perspective, anybody can come up with ideas that are new to them (psychological, or P-creativity), even though only a few come up with ideas that are new for the whole of humanity (historical or H-creativity).

⁵⁵Kaye (2022, p. 66).

⁵⁶Prager (2013, p. 241).

⁵⁷Only in 2021, 626 million people downloaded TikTok, which made it the most downloaded app worldwide. Source: Statista: <https://www.statista.com/statistics/1285960/top-downloaded-mobile-apps-worldwide/>.

⁵⁸Boden (2004) and Boden (2012).

⁵⁹Ibid., p. 29.

Boden defines three forms of creativity:

- a. Combinational: about ‘making unfamiliar combinations of familiar ideas’, like in poetic imagery, collage and analogies.⁶⁰ It ‘requires a rich store of knowledge in the persons mind, and many different ways of moving around within it’.⁶¹
- b. Exploratory: refers to conceptual spaces that are ‘structured styles of thought’, like styles of sculpture, fashions and recipes, which we can explore, systematically wondering about which things are also possible and experimenting consciously.⁶² Innovation in this area is equivalent to adding a new trick to our repertoire, something that already fits the existing thinking style.
- c. Transformational: realises the limitations of an existing mental map and makes an effort to change it. It is the most extreme form of innovation, for it introduces ‘impossible ideas’, things that were before inconceivable in that mental space.⁶³

Even though the second and third type are related to repetition in relation to cognitive domains, patterns and known genres, they are meta-abilities that require a trained human mind, so I will focus on the first one here, for it is accessible to both untrained humans and machines. In combinational creativity, a pool of elements can be combined in different ways in order to produce a new result. Anybody can make a collage or compose a poem. Anybody can combine film stills and a sentence from a politician and make a meme. Anybody can use an image-generating AI. That we can combine these things does not necessarily mean that the result is something which everybody will appreciate, but it is likely that we will appreciate being able to do it.

Snapshot 1: Remix

The concept of *remix* has been the kind of combinational creativity that has attracted attention in digital media theory since the beginning of the 2000s, mostly in relation to music and some of the spectacular lawsuits that punished the re-use of fragments and melodies, and which kickstarted a social movement against the rigidity of current copyright laws.⁶⁴ A famous remix could be *The Grey Album*, which musician Danger Mouse released in 2004 and that mixes rapper Jay-Z’s

⁶⁰Ibid., p. 31.

⁶¹Ibid.

⁶²Ibid., p. 32.

⁶³Ibid., p. 33.

⁶⁴This movement can be said to crystallise with the publication of the documentary *A Remix Manifesto*, written and produced by Brett Gaylor. The four main points of the manifesto read as follows:

1. Culture always builds on the past.
2. The past always tries to control the future.
3. Our future is becoming less free.
4. To build free societies you must limit the control of the past

The documentary can be found at <https://topdocumentaryfilms.com/rip-remix-manifesto/>.

The Black Album with samples from the Beatles' *The White Album*, starting a bit controversy where EMI records tried to stop its distribution.

Stefan Sonvilla-Weiss distinguishes between remix and mashup. For him, 'collage, montage, sampling or remix practices all use one or many materials, media either from other sources, art pieces (visual arts, music, video, literature etc.) or one's own artworks through alteration, re-combination, manipulation, copying etc. to create a whole new piece. In doing so, the sources of origin may still be identifiable yet not perceived as the original version'. On the other hand, a mashup 'puts together different information, media, or objects without changing their original source of information, i.e. the original format remains the same and can be retraced as the original form and content, although recombined in different new designs and contexts'.⁶⁵

In a remix, things melt into each other and become an integrated whole; in the mashup, the different layers can always be separated. In general, Sonvilla-Weiss' and others' approach to the remix/mashup is mostly preoccupied with establishing how remixes generate *new art* in relation to an *original* source.⁶⁶ Eduardo Navas proposes, for instance, that there are three kinds of remix: extended (adds material), selective (adds and subtracts, that is, edits) and reflexive (challenges the original).⁶⁷ These definitions are relevant when remixes are a way for artists to produce new content for which they want to get paid. The remixes of our social media era, however, are not made by professionals or intended for artistic consumption, but have become a mundane occurrence, mass-produced by anybody in the form of memes, graphic or video. We do not care about a relation to an original because there is no expectation of originality. The modern remix is commentary, parody, meta. Everything is cut up, dismantled and remediated.

A good example of the mediated layers of the new remix is the music video 'Billie Jean but every lyric is an AI generated image', where the authors just entered the lyrics of the Michael Jackson song into Midjourney and produced a collection of strange and wonderful imagery.⁶⁸ At the beginning, the music generates only colourful images of instrument play, then we encounter the woman 'like a beauty queen from a movie scene'. The next sentence, 'I am the one' shows an isolated figure that seems strangely lonely, 'who will dance' shows a disco dancefloor, 'on the floor' becomes a sort of circus-like empty scene, 'in the round' shows eerie couples dancing beside a creepy house. Jackson's exclamations ('heeeeeeeheeee') generate only monsters.⁶⁹ And on it goes until the final screen 'Billie Jean is not my lover' where the AI has produced a likeness of Michael Jackson. This remix blends modalities and has no other purpose

⁶⁵Sonvilla-Weiss (2010, p. 9).

⁶⁶Like Navas (2007).

⁶⁷Ibid.

⁶⁸<https://www.youtube.com/watch?v58MIJ2USBiCc>. The authors are JG Vision Media, who in their channel declare that they cannot 'monetise' these creations because they are using copyrighted music. Their YouTube channel contains other videos of this kind.

⁶⁹Maybe the AI was influenced by the Ayuoki game. This was a horror game parodying Michael Jackson, where the player has to escape from a mansion while being chased by the Ayuoki monster, who makes 'hee hee' noises when he approaches the player.

than playfulness, although of course the production company gets a lot of views and increased recognition. Our joy as spectators is at evaluating how the AI ‘interprets’ the lyrics of the song, rejoicing at some clever combinations and recoiling at the creepiness of others. But actually, despite its multiple forms, this work is not illustrative of another important feature of the modern remix: its social nature and its openness to anybody.

We saw above how *TikTok* duets were an example of playful imitation practices. Many of the *TikTok* dances and challenges can also said to be remixes. In fact, the platform is made to support active remix creation, as has been argued by Diana and David Zulli, who read *TikTok* as a memetic platform, because ‘imitation and replication – the driving forces of mimesis – are latent in *TikTok*’s platform design’.⁷⁰ They review the imitative affordances of the platform, where two of these features are specially supportive of remix practices:

sound icon, it appears when you are watching a video and can be clicked so you are taken to a page storing every video made with that sound, so you get an idea of the range of ‘versions’ already existing. You can also click on ‘use this sound’ to make your own video and join the collective remix repository.
video effects (like green screen, sparkle, hair tint. . .) *TikTok* does not present effects in well-organised menus, but they appear as vague headings where the only possible strategy for users is to explore what other users have done with the effect before them. Copying is, therefore, encouraged, and the creation of new remixes and relations between items.

One of these remixes could be the famous ‘Wellerman trend’, which united people all over the world in remixing the old sea shanty put forward by Scottish musician Nathan Evans. His recording was viewed more than 4 million times on *TikTok*, and then hundreds of people started duetting, adding harmonies, different vocal parts, instruments dances and more until it became one of the most remixed pieces of all time.

There once was a ship that put to sea
 The name of the ship was the Billy of Tea
 The winds blew up, her bow dipped down
 Oh blow, my bully boys, blow (huh)
 Soon may the Wellerman come
 To bring us sugar and tea and rum
 One day, when the tonguing is done
 We’ll take our leave and go

⁷⁰See Zulli and Zulli (2022). The citations do not have page numbers because they are not indicated in the online version.

The Wellerman explosion happened in the middle of the COVID-19 pandemic, which might partly explain the enthusiasm people had for collaborating in this manner. It was a beautiful new incarnation of the original purpose of a shanty: to coordinate the sailors' movements onboard a ship when working together. Many other trends have spread through *TikTok*, both before and after, like the Yeehaw Challenge,⁷¹ the Towel Challenge,⁷² the Savage dance⁷³ or the SexyBack dance.⁷⁴ *TikTok* is an open playground for all.

Zulli and Zulli also noted that 'it appeared to be particularly advantageous for users to merely remix popular videos rather than create their own, as evident by the saturation of similar videos on *TikTok*'. This seems to be the most successful 'entry strategy' to the platform from a producing point of view, and is also what most users try first. Of course, there is great value in launching some original content that could start a series of remixes, pushing our videos to top popularity; however, most participation occurs in the form of responding to what someone else has created, so much so that Zulli and Zulli talk about 'imitation publics' as key to understanding interaction in the platform.

Snapshot 2: Generative Art

Margaret Boden defines generative art as: 'the artwork is generated, at least in part, by some process that is not under the artist's direct control'.⁷⁵ Or, as Lioret and Berger note, where 'algorithms generate results after their calculation'.⁷⁶ This is not so high-tech as it sounds, and it could conceivably also happen in an analog format. Lioret and Berger's example are the tiles of The Alhambra in Granada, which follow an automation principle based on the establishment of pattern rules, and a repetitive execution that relates these old crafts with the avant-garde of the twentieth century (Fig. 4).

Lioret and Berger are inspired by artist Jérôme Saint-Clair's definition of generative art, which is made in the form of an algorithm⁷⁷:

START

Define a set of items (ie: shapes, colours, people, sound, ...).

Define space(s) (ie: screen, wall, scene, ...).

⁷¹People in regular clothes start hearing the 'Old Town Road' by Lil Nas X and drink from a juice, which turns them into a cowboy.

⁷²In this challenge, two people holding towels intertwine them in strange ways trapping their bodies and then they have to come out without letting the towels go.

⁷³A dance choreography for Megan Thee Stallion's song Savage.

⁷⁴People danced a specific choreography for the song SexyBack by Justin Timberlake, but there were also many doing alternative dances with objects and animals.

⁷⁵Boden (2012, p. 138).

⁷⁶Lioret and Berger (2012, p. 17) My translation.

⁷⁷bid., p. 120.

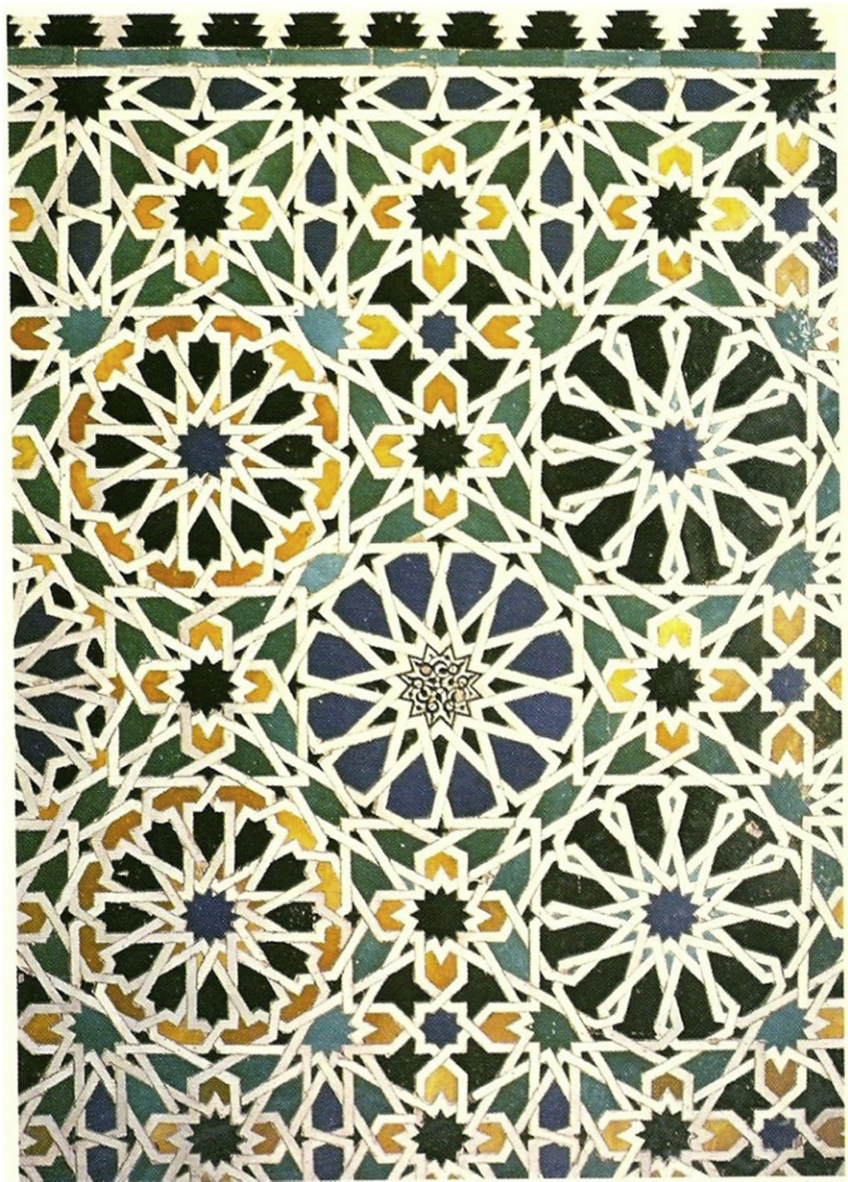


Fig. 4. *Alhambra tiles.*⁷⁸

⁷⁸Picture by Nathan Hugues Hamilton, Creative Commons, downloaded from Flickr.

Define a set of organisation/transformation rules for those items within the (these) space(s).

STOP

In generative art, the artist has no direct control of the product resulting from the execution of the algorithm, even though they have defined the interaction rules and the set of elements which the programme can draw from. The result can be unexpected, indeed it is part of the charm of generative art to inspire surprise even in its creators. A semi-autonomous system can provide the element of randomness that is necessary to take us out of our usual mental structures and augment creative output.⁷⁹

Generative art has been around for a long time, also in textual form. Roberto Simanowski finds one of the oldest computer generators as far back as 1952, where Christopher Strachey invented 'The Love letter Generator',⁸⁰ a programme which automatically produced love letters from fixed words and patterns, but there have also been analog predecessors, like the Eureka Latin Verse Machine⁸¹ or even using *volvelles* as platform, like Ramón Llull's *Ars Magna*.⁸² However, the name is nearly universally associated with the production of abstract graphic patterns, as, for instance, in the volume *Generative Design*, whose introduction celebrates that 'new and fascinating visual worlds are emerging where the coincidental is shaped to help correlations become visible'.⁸³

This last sentence could be applied to any of the new AI image generators already mentioned in this chapter, which I would argue are the latest forms of generative art and probably the first to attract so many people to interact with them. In the case of DALL-E or Midjourney, the algorithm is the textual prompt formulated by the users, while the correlations are executed by the machine combining a pool of millions of graphic assets over which users do not have any control. The scope of this database is so phenomenal that nobody can exactly predict what gets mixed and spouted out, and the machine can learn. The conscious operations of combinational creativity happen for the involved humans at the level of reverse engineering the images. We start with an idea of what we want in our minds, like I did above when I asked DALL-E to generate images of a *TikTok* duet dance (Fig. 3), and then we write all the keywords we can think of that could produce just that: 'a photorealistic picture of *TikTok* dance duet challenge people in three screens doing the same dance different colours detailed photography happiness living room'. I am clearly not very good at prompting; there is something off about the faces and bodies of the dancers, something slightly inhuman.

⁷⁹Prager (2014, p. 41).

⁸⁰Simanowski (2011, p. 94).

⁸¹<https://poetrybynumbers.exeter.ac.uk/about/>

⁸²Gravelle et al. (2012).

⁸³Bohnacker et al. (2012).

Creating good prompts is indeed not easy. Usually, the production of a satisfactory image requires several attempts, with us second-guessing which and how many adjectives we need to include to create something that fits the imagined style and mood, while still maintaining a clear view of the desired object. There are prompt guides, and marketplaces where people trade with prompts, so anybody can buy one to make better art, or sell another when they make a good discovery themselves.⁸⁴ Despite the hypothetical total openness of this process, where the prompt square pulsates as white and empty as any new Word document, it turns out that a lot of people are generating more or less the same kind of pictures. Artist Kirsten Zirngibl has generated an explorable map of KREA AI's Stable Diffusion Search Engine and found out that the most frequent categories had to do with attractive females, celebrities and pop culture as well as fantastic environments.⁸⁵ It has to be mentioned that the existing engines do not allow the production of nudity or pornographic material because if they did I am guessing that the balance would look different.

This is no doubt combinational creativity, even if we are not doing the combinations directly ourselves. But then, who is the author of the produced images? The idea of authorship and intentionality has been crucial to our understanding of creativity. I can illustrate this problem with the first public controversy about generated art winning a prize.

Fantasy game maker Jason Allen submitted a picture called 'Théâtre D'opéra Spatial' to the Colorado State Fair's fine arts competition in 2022 and won in the category of 'digitally manipulated photography'.⁸⁶ The picture is a detailed portrait of three sumptuously clad figures looking out through a round window at a mysterious sun-washed world from within a great hall of alien architecture. It is beautiful and otherworldly. There is just one problem: Jason Allen did not make this picture, Midjourney did.

The *Washington Post* describes how Allen 'started with a simple mental image – a woman in a Victorian frilly dress, wearing a space helmet' – and kept fine-tuning the prompts, 'using tests to really make an epic scene'. Allen spent 80 hours making more than 900 iterations of the work, adding words like 'opulent' and 'lavish' to finetune its tone and feel. He has declined to share the full series of words he used to create his art, saying this is his artistic product, and that he intends to publish it later. This is important, as I hinted above, it is not easy to formulate a good prompt, less still when you have a very clear aesthetic expression in mind. Nine hundred iterations sound like quite a lot of work to me,

⁸⁴Like <https://dallery.gallery/the-dalle-2-prompt-book/> or <https://promptbase.com>.

⁸⁵It can be accessed live here: https://atlas.nomic.ai/map/809ef16a-5b2d-4291-b772-a913f4c8ee61/9ed7d171-650b-4526-85bf-3592ee51ea31?fbclid=IwAR1XaSRpAEC27PFO557CdML7Bkxg_4v12sru4EFYKcZ1GZ9-bpWBVzRapZs.

⁸⁶According to the article by Drew Harwell, 'He used AI art from Midjourney to win a fine-arts prize. Did he cheat?', published in *The Washington Post*. (2022, September 2). Available at: <https://www.washingtonpost.com/technology/2022/09/02/midjourney-artificial-intelligence-state-fair-colorado/>.

considering that the category Allen was participating in was ‘digitally manipulated photography’.

The story reminds me of the old Chinese tale of the king who asked the painter to draw him a rooster. The king waited for a whole year without hearing back from the painter, so he went to his atelier and angrily demanded that the painter did what he had commanded. The painter then took the brush and produced a perfect rooster in a few seconds. ‘How could you keep me waiting for so long when you can draw the rooster so quickly and perfectly?’, said the king. The painter then showed him a room with hundreds upon hundreds of discarded attempts to draw the rooster. It had taken him one entire year to learn to draw the perfect rooster.⁸⁷

But Allen’s picture is not the rooster, at least not according to how many people see it. After he won the competition, online outrage ensued, followed by a heated discussion between those who dismiss such practices as cheating, and those who argue that Midjourney is just another tool that Allen demonstrated he can use. Allen’s own argument is that artists learn their craft also by copying other styles and artists, but this also has been pointed out as part of the problem: no artist has given their permission for their productions to be used to train the image generator software. Truth be told, there are so many million images that a single author’s production in or out of the dataset might not make a huge difference. What is crucial in this discussion is the complete absence of the romantic author from this scene. Authorship becomes distributed across four kinds of agency:

- (1) the authors of the image dataset which the AI was trained on
- (2) the human user who enters a self-made prompt
- (3) the developers of the AI system
- (4) the AI that generates the final product

The first one is not always obvious, even though a lot of the generated art prompts I find in the online galleries specifically mention the names of famous painters and photographers. The second one carries arguably more intentionality than any of the other three, so maybe Allen is right in his argument, but it can also be further distributed if the user is borrowing a prompt from someone else, or slightly modifying it. The third is a sort of meta-authorship, since the designers make the system, but have no control over the products that the system generates. The fourth agent is not human, and we cannot really know how it operates, since the workings of the algorithm remain opaque. In principle, it can incorporate biases and constraints we are not aware of, such as not allowing nudity or being more nuanced in its treatment of white people. None of the three agents fully controls the others, and the resulting combination is always at some level a surprise for the human user. Maybe that is what explains the enthusiasm around the new image generators, as we are attracted to the kind of uncertainty that imbues tinkering with these platforms with a touch of revelation. The creative

⁸⁷Compiled in Chang (1969).

combination becomes more a matter of alchemy than chemistry, more magic than cold reason.

Coda

This chapter has considered three kinds of repetitive creativity that all contribute to slaying the hydra of romantic originality, the monster that has hunted me since the first page of this book. I hope it has become clear that creativity and repetition are not polar opposites, but friendly companions. That creativity is open to anybody, that it can be aided and even generated by machines, and that the concept of absolute originality does not make sense in a hypermediated world. Perhaps the question is then if there is another understanding of originality that could be more productive in relation to our current media culture – something to be covered in the next chapter. To conclude, what affordances do the three kinds of creativity make possible? The myth of Daedalus allowed us to connect them to antiquity and different forms of invention, but they now all have new formats. The addition of computers as creative agents of their own complicates the picture in interesting ways.

The old tradition of mimetic art is disrupted by the intervention of algorithmic generated pictures. The new *mimesis* invites us to reconsider our understanding of how reality and media are connected to each other. Deepfakes make us reconsider the credibility we have bestowed upon older media like television and film. AI-generated pictures are not seamless windows into reality, but neither were all the other pictures that came before. They can perhaps be an instrument of self-introspection, as they confront us with alternative versions of ourselves and the world, making desire visible.

Imitatio shows a pathway to creative craftsmanship. Social media enable the thriving of creative communities, like the ones we find on *YouTube*, but also incorporate easy-to-follow, imitative paths in their design. *TikTok's* interface offers users a non-intimidating way 'to replicate popular formats for themselves' in what they call a process of circumscribed creativity.⁸⁸ Producing mimetic content becomes a mundane practice, where the joy of performing is shared among many strangers. *Imitatio* understood as aspiration to a better life also opens the door to a proliferation of normative advice videos that see reality in black and white terms. Here, repeating means conforming to a norm and avoiding social ostracism.

The theories behind combinational creativity help us understand how remix and generative art are derivative creativity formats that have changed radically in the last 20 years. Difficult questions about authorship and the nature of originality come into the spotlight. Combining existing content is the lowest threshold to participation in a platformised creative ecology where everything can be connected. These formats, supported by algorithmic generation of images and recommendation systems in entertainment reels, provide entertainment and joy to

⁸⁸Kaye et al. (2020, p. 246).

an entire generation of creators. Perhaps, like David Gauntlett suggests ‘because modern life is often tiring and complicated, we are often likely to welcome the blessed relief of the “sit back and be told” elements which don’t require us to *do* very much. The “making and doing” culture does require a bit more effort – but it comes with rich rewards’.⁸⁹

All in all, the three repetitive creativity formats can help us to see new connections in the way that the machines (interfaces, AIs) filter, shape and display the content we are engaging with. As Victoria Vesna suggests, writing about database aesthetics: ‘Databases and archives serve as ready-made commentaries on our contemporary social and political lives’ these works can ‘raise the awareness of a wider audience about the importance of considering how our social data are being organised, categorised, stored and retrieved’.⁹⁰ We recognise the agency of the machines and wonder about our role in the complicated equation. I argue that engaging with these forms of creativity can make us more data literate.

⁸⁹Gauntlett (2013, p. 245).

⁹⁰Vesna (2007, p. xi and p. xiv).