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Art, AI, strategies of biomimicry: mimiphenia, the ambivalent mimicry

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ABSTRACT

This paper examines interactions between animal and human patterns of biomimetics to state that 'all art is biomimicry' on the basis of information exchanges. Similarities between biomimicry, Art, and AI are methodologically apparent; advances in AI self-coding computation might be reconsidered alongside artistic interpretations of evolutionary patterns in animals. Purposefully misleading signals, blended with more accurate or comprehensible ones, intertwine the web of mimetics. In these treacherous artistic, adaptive, or coding processes, conjecture states emerge, questioning the precision of signal conception. 'Apophenia' is defined as the tendency to perceive a connection or meaningful pattern between unrelated or random things (such as objects or ideas), while 'pareidolia' as the "tendency to perceive a specific, often meaningful image in a random or ambiguous visual pattern" (https://www.merriam-webster.com/). 'Mimiphenia' is a neologism we propose as a paraphrase of apophenia and pareidolia, terms related to perception. This 'apparent-ambiguous' mimicry imposes on viewers and predators a half-aware state, an artistic dilemma. By observing this phenomenon in Ophrys orchids, we propose new hypothetical bee-resembling patterns by applying Turing's morphogenetic formula to a parent orchid using AI. The resulting patterns closely resemble those evolutionarily occurring in nature.

Mimicry as weakness

In an unexpected analysis for his era, the artist Alfred Jarry refers to butterflies resembling dead leaves, considering their technique to be undoubtedly intentional: "This imitation is older than human, while the animal acknowledges its weakness: therefore, if, in order to become indistinguishable from the environment in which it wants to go on living, for 'living' is meaningless without continuity— the animal apes its surroundings, it is because it admits to being weaker than they are: it respects the power of what is - or what it considers to be - invulnerable, since it knows they will live longer than itself". Accordingly, he certifies that genetic information has been acquired through a complex process, incomparable to human experience: "and, if not as the result of a decision based on the experience of its own ephemeral existence, then surely through the genuine scientific knowledge acquired during the myriads of centuries of which it is the end product, this knowledge being much older and farther advanced than that exercised by man…" (Jarry *et al*., 1965). This pending hypothesis about animal consciousness introduces a research area where the concept of information may be the critical point.

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As it was previously alleged (Melanitis, 2017), it is unclear in the modern evolutionary composition of the synthetic model whether genes or organisms evolve and whether the individual - a person or a butterfly, for example- is the real subject of change rather than the genetic material it bears. Mimesis is defined within the realm of bio-informational exchanges. In fact, all biomimicry may be appraised under the consensus of bio-information. Mimetic patterns behave quite unusually, and their study is complex. Within any formal framework, backslid patterns appear: animal mimicry seems to have self-regulation mechanisms or some sort of conscience (Declaration on Animal Consciousness, 2024) or even an intellect about tasks that proved false or inapplicable.

For Jarry, previously for Homer, nature is assumed to be executing a multimodal concept, a plan in itself. As a conceptual framework, nature has timelessly been a point of significant misunderstanding and controversy in its definition (Vasdekis, retrieved 2024). (Etymology: φύω, φύομαι > from: φῠ+σις > φῠ+τις, with the palatalization of -τ- before -ι-). Nevertheless, in Homer the term appears only once (Melanitis, 2020, 2023, 2024): "ὣς ἄρα φωνήσας πόρε φάρμακον ἀργεϊφόντης ἐκ γαίης ἐρύσας, καί μοι φύσιν αὐτοῦ ἔδειξε" (Odyssey, 10.302-3), referring to the inherent way of growth of a particular plant species. In our case, the term 'physin' means the informational imprint that provides this certain plant form (Ibid). In other much earlier uses, it had a meaning related to the natural development of plants, animals, and other characteristics of the world, given that they tend to develop without external influences. Here the issue of endogenous cognition arises. The word μῆτις, attributed as 'multifaceted cognition' (Homeric: wisdom, counsel), from μέω (measure/μετρώ), (Detienne and Vernant, 1993), implies an intercommunication potential between any information concerning the stimulus and nature since any data can be transformed into a shape. Important is the ability of this noetic potential to implement what we may inscribe as 'chrono-accesses'. Chrono-accesses (Greek: χρονικές προσπελάσεις) are not the same as 'time accesses'. In any case, we are referring to information processes. Chronos specifically emphasizes the structured, measurable aspect of time (Moutsopoulos, 2007). Time is decisive: absolute time management means the supreme management of available information, while zero management means its ultimate diffusion into the environment. It is not surprising that the very lexicographic interpretation of μῆτις mentions a meaning of it as 'information': "It is said about the talent or art of a poet, information, advice, plan, assignment, endeavour, weaving trickery (μῆτιν ὑφαίνειν)" (Liddell Scott, retrieved 2024).

In addition, Homer's 'μῆτιν ὑφαίνειν' (Homer, Iliad H 324, Od D 678) denotes the intellectual interweaving of information to achieve a more complex goal, just as in a cloth a weave constructs new information by producing forms from simpler structures.

Measuring may lead to perplexity. Perplexed informational patterns are 'bewildered' concepts, 'interwoven' clusters of code. Biocode in 'animal-to-plant' biomimicry interactions is exactly 'co-woven' in this way. However, it is not entirely clear whether the stimulus precedes genetic adaptation, as some genomic studies on certain 'orchid to bee' symbiosis data suggest: "the generation of genomic diversity, as genomic potential in the form of genome duplication, hybridisation or TE (a transposable element or jumping gene) activity, often precedes adaptive radiation". Noetic or bio-informational perplexity is not the only 'undesirable' effect of evolutionary radiation (Russo *et al*., 2023).

Adaptive radiation needs a more extensive analysis. In our discourse as introduced during the Colloquium Arts Meet Sciences, (Melanitis 2024), we have observed inadvertent phenomena, manifesting in humorous effects (Melanitis, 2023-24): caterpillars mimicking snakes might look comical (Figure 1). Also through multi-task mimetics [for example an owl butterfly mimicking owls (Figures 3-5) and simultaneously a snake head (Figures 3 a,b)] we examined the raising questions in complex strategies of disappearing or 'playing dead' (Melanitis, 2020) as presented in Figure 2. Human art, biomimicry itself, represents such a series of complex mimetic adjustments based on initial patterns. 'Adaptive radiation' is a biological term, meaning a divergence out from a central point, particularly "evolution from an ancestral animal or plant group into a variety of new forms" (see bio-divergence; Futuyma, 2005), ideally suited to artistic reformations (Figures 6 a-e). The Apollo Belvedere torso (Figure 6a), one of the most influential artworks in the history of sculpture, has 'suffered' innumerable replications, or arguably even a replica itself: "with reference to 'The Antique', Michelangelo is known to have studied inter alia the Belvedere Torso, probably a copy of an older statue, around early second century BC, housed in the Vatican Museums" (Pearce, 2018). This influence is evident in works as the 'Day' on the tomb of Lorenzo de' Medici at the Medici Chapel in San Lorenzo, Florence (Figure 6e). Similarly, the Farnese Hercules, a copy of the Athenian sculptor Glycon, was sculpted in Rome after the bronze original by Lysippus (Figure 6d). Undoubtedly, the marble copy, even in its over-excessive musculature and criticism, surpassed in fame and memes the lost bronze original. Goethe, in his 1786-1788 Italian journey, impressed by the recent substitution of missing legs, esteemed the oversized sculpture as "one of the most perfect works of antiquity" (Goethe, 1816).

The myology elaborated by Michelangelo should not be attributed purely to aesthetic, erotic, or artistic criteria; it also constitutes a 'projective depiction'**,** an overemphasis of his study of dissecting the human body. Methodologically, it aligns with the late and subsequently Roman tradition of an almost 'incorrect', distorted muscle-graphia (μυογραφία). In a series of influences, this paradigm is an artistic mutation meme of exaggeration. It actually projects information 'from and back' to the original models, which serve as a pattern.

Figure 1. Caterpillar's mockery as a snake. ©Science Photo Library / Rex Features.

Figure 2. Leaf litter frog *Ischnocnema aff. Henselii*, exhibiting playing possum (pretend to be dead). Image courtesy: Werther Pereira Ramalho. Source: https://www.nationalgeographic.com/animals/article/151019-playing-dead-frog-possum-toad-animals-behavior-science.


(a) (b) (c)

Figure 3. The butterfly Caligo displaying its wings in open position (a) compared to owls, upside down, and in an upright position, compared to owl heads (b,c). Image (a) courtesy by I. Melanitis, 2019.


(a) (b) (c)

Figure 4. Owl in the wild (a) compared to a Caligo butterflies breed in the lab of I. Melanitis (b,c). The open wings provide an imitation of an owl's head. Image courtesy: panel a by AlexanePhotography, standard licence, https://www.istockphoto.com/photo/owl-look-gm177797256-23765401; n panels b and c by I. Melanitis, 2019.

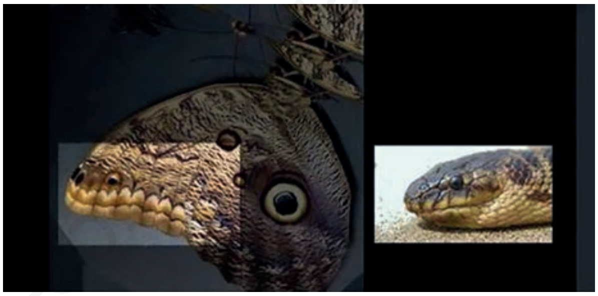

(a) (b)

Figure 5. The ability of Caligo butterflies to mimic the image of an owl and, as we found out, a snake (compare the detail of a to b) at the same time. The serpentine end of the wing also serves to intimidate predators. For snake formations identified by I. Melanitis in Caligo butterflies compared to snake heads, see Melanitis I. (2020). Image courtesy: panel a by I. Melanitis; panel b (*Hydrophis curtus*), by Chetan Rao, https://mangroves.maharashtra.gov.in


(a) (b) (c) (d) (e)

Figure 6. Myology mimetics in a series of sculptures. a) 'Belvedere Torso': Museo Pio-Clementino (Inv. 1192), Vatican Museums. b,c) Sculpture of 'Drunken Satyr or Faun', Roman, 58 cm L, 1st-2nd century AD, old private collection, Thomaston, USA, 1980, image copyright https://www.lot-art.com/. d) Cast copy of 'Hercules Farnese' in bronze, under supervision of I. Melanitis, Athens. Copyright by I. Melanitis. e) **'**Day': marble sculpture by Michelangelo, datable to 1526-31. Copyright by George M. Groutas https://www.flickr.com/photos/jorge-11/48169939966/.

Mimesis and bio-information

Informational patterns are replicated in biomimetics, resembling the initial stimulus. Etymologically, the word mimesis (μίμησις) is rooted in memory (μνήμη). It derives from the root mneme [μίμησις -μιμνήσκω (mimesis- mimnesko), with the elision of the 'n', as imitation takes place from memory (mneme)] (Vasdekis, retrieved 2024). Storing information requires discrete steps. A potential process involves: "reception, storage, memorization, and imitation". Obviously, sharing phenotypic information is not always accurate; mistakes, frauds, and complex strategies appear in nature. This multifaceted information, as it shares its attributes with diverse recipients, can be referred to as diversified homoinformation.

In a comparative study of mimetic representations of butterflies imitating owls (De Bona *et al*., 2015), the authors investigated to what extent an alternative image of the original (the prey being mimicked) can have a greater impact on predators. Basic mimicry, the copying of informational patterns with relative accuracy, seems to prevail: "We found that the mimetic eyes were equally effective as the true eyes of owls and more effective in eliciting a deterrent response from modified, less mimetic but equally influential eyes" (Figure 7). Biomimicry in the above experiment was also studied in relation to the degree of fidelity in copying the original pattern- specifically, whether the spot's position or the predator's eye mimicry constitutes the primary deterrent.

Imitation involves sharing information within nature, where organisms replicate existing messages from a communication system, simultaneously adding false information for recipients. Mimicry shares similarities, both in terms of ideas and evolution, with camouflage and 'perceptual deception'.

Organisms often fail to signal processing in their environment; sometimes misconceptions are lethal. In art, false decisions are crucial. Reshaping is the primary process of remodelling an initial stimulus; senses re-evaluate the inputs. Certain incomplete imitations may function as supplementary or derivative models of the original; however, an observational state provides them a secondary opportunity to exhibit greater ecological prominence than the original within ecosystems. Precisely due to their design flaws, these imitations become non-effective or lethal.

Alongside this reasoning, artworks are diachronically compared to real life, the subject of art. Apelles of Kos (Newman, 2005), having been informed about a painting competition involving bribed judges, attempted to confront nature by bringing live horses to judge the artwork. The horses remained calm upon seeing his competitor's painting but were startled by his work, deceived by the imitation. On another occasion, Zeuxis and Parrhasius 'challenged' the natural pattern with two works; in the first, Zeuxis painted grapes that live birds tried to peck at, considering them edible. Anticipating victory, he was subsequently taken aback. Parrhasius presented a painting depicting a small curtain. Zeuxis urged him to pull the curtain from his own work to reveal the painting, to realise that the curtain was painted and to admit defeat. In Parrhasius' second famous example, the painter imitated nature with such persuasiveness that it made it difficult to distinguish the painting from the natural pattern.

Informational transmission and flow are never exact or accurate. Deceptive communication also requires energy and, consequently, more information. Its pathways are, nevertheless, more rapid (Andrews, 2020). Deceptions may be classified. Roger Caillois mentions Giard's mimicry categories (Giard, 1872): '…offensive mimicry' designed to surprise the prey, 'defensive mimicry' designed either to escape the sight of the aggressor (mimicry of dissimulation) or to frighten it away by a deceptive appearance (mimicry of terrification). Additionally, 'direct mimicry' when it is in the immediate interests of the imitating animal to take on the disguise, 'indirect mimicry' when animals belonging to different species, following a common adaptation, a convergence, in some way show "professional resemblances " (Caillois and Shepley, 1984).

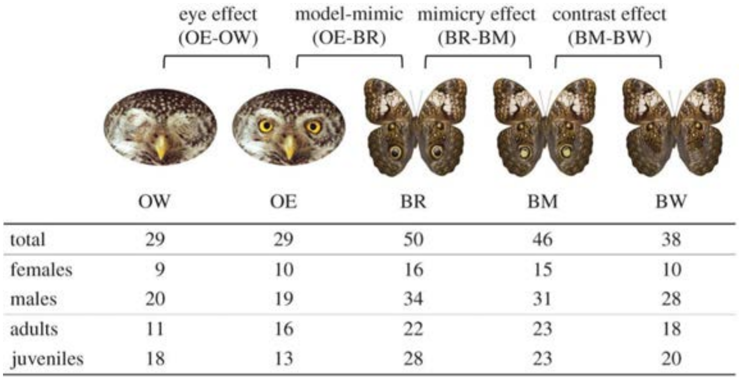
Code parallelisms: biomimetic to AI

We may study a model of AI code as if resembling a biomimetic code structure. Bram Wiggers and Harmen de Weerd formalised an algorithm relating the terms prey, predator, camouflage, and the involved patterns (Figure 8) (Wiggers and de Weerd, 2017, 2018).

If we transcribe the algorithm into an AI software (ChatGPT), we receive the transcribed code illustrated in Figure 9.

Key concepts created are: "Prey (with attributes camouflage and pattern), Predator (Predator class has a neural network function and methods to encounter and eat prey), self, camouflage, pattern, neural_network, eat, randomness".

We may define the correlations: The artist entraps the audi-



	OW	OE	BR	BM	BW
total	29	29	50	46	38
females	9	10	16	15	10
males	20	19	34	31	28
adults	11	16	22	23	18
juveniles	18	13	28	23	20

Figure 7. A comparative study of bio-patterns in terms of imitation fidelity, to investigate their influence on predators. Retrieved from De Bona S, et al. Proc Biol Sci 2015;282:20150202. with permission.

ence by delivering signals as a predator. 'Prey' corresponds to the 'receivers'. 'Camouflage' is one of the strategies, 'patterns' refer to the schematisations of the 'predator' common to 'prey', while 'neural network' represents the prey's mental range. 'Randomness' is a constant, by means of an evolutionary algorithm to ensure the indeterminacy of the process dynamics.

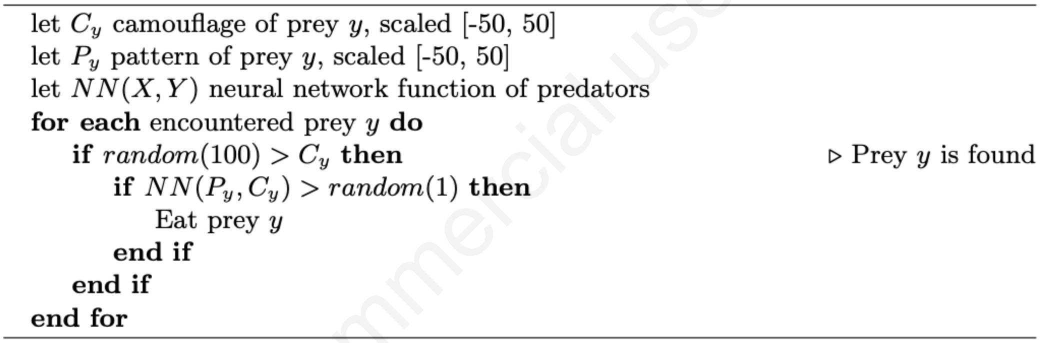
AI Crypsis / Mimicking an environmental image

An organism that tends to disappear into its surroundings has the ability to recognise patterns and mimic them. Similarly, a higher-order AI software may use the abstraction of form in order to conceal itself. Following, we may prompt for a code capable of blending images in the environment.

Prompt to ChatGPT: 'mimicking an image by hiding in the environment'. The computer responds with a deep learning model by applying a style transfer approach. The environmental background style is applied to the foreground (Figure 10).

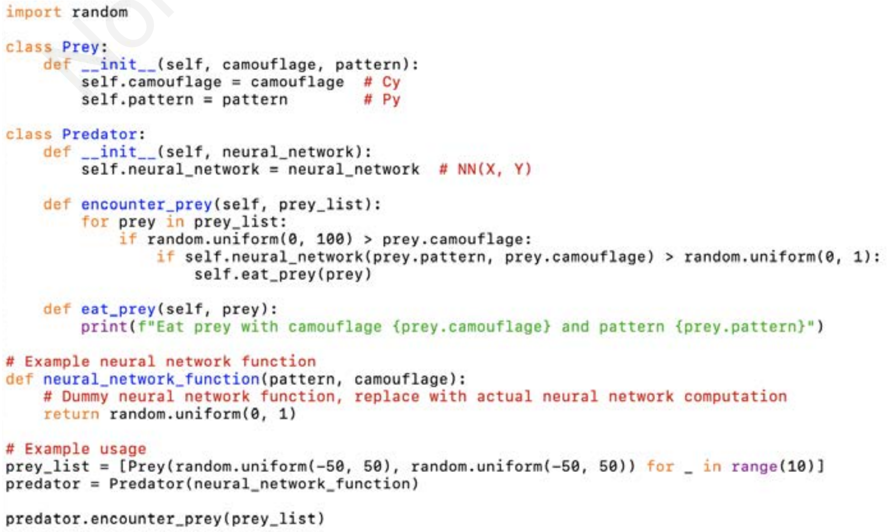
The procedure followed consists of five steps. Initially, 'loading and preprocessing Images': the 'load_image' function loads and preprocesses images for the model. It resizes the image and normalises it, preparing it for input into the neural network. Second, 'converting tensor to image': the 'convert_tensor' function converts a tensor back into an image format. This is useful for visualising or saving the output of the model. Third, 'style transfer network': the 'StyleTransferNet' class defines a neural network using the first few layers of a pre-trained model. This network is used to extract features necessary for style transfer, followed by the 'style transfer process': the 'style_transfer' function performs style transfer by minimising the content and style loss between the generated image and the reference images. The 'gram_matrix' function is used to compute the style loss by capturing the correlations between different features. Finally, 'running the script': the main part of the script loads the background and foreground images, performs the style transfer, and saves or displays the result.

Quite similarly, this is what we expect from an animal performing biomimicry patterns or an artist in the lab: methodology itself differentiates the scope. 'The majority of deep learning systems are artificial neural networks (ANNs, or just neural networks for short) with multiple stacked hidden layers' (Foster, 2019) as in Figure 11. Multiple stacked hidden layers are in an animal's cognition system analogous to some preliminary basic



```
let $C_y$ camouflage of prey $y$, scaled [-50, 50]
let $P_y$ pattern of prey $y$, scaled [-50, 50]
let $NN(X, Y)$ neural network function of predators
for each encountered prey $y$ do
    if $random(100) > C_y$ then                    ▷ Prey $y$ is found
        if $NN(P_y, C_y) > random(1)$ then
            Eat prey $y$
        end if
    end if
end for
```

Figure 8. Eating behaviour of predators, an algorithm by Wiggers and de Weerd. Image courtesy of the authors.



```
import random

class Prey:
    def __init__(self, camouflage, pattern):
        self.camouflage = camouflage  # Cy
        self.pattern = pattern        # Py

class Predator:
    def __init__(self, neural_network):
        self.neural_network = neural_network  # NN(X, Y)

    def encounter_prey(self, prey_list):
        for prey in prey_list:
            if random.uniform(0, 100) > prey.camouflage:
                if self.neural_network(prey.pattern, prey.camouflage) > random.uniform(0, 1):
                    self.eat_prey(prey)

    def eat_prey(self, prey):
        print(f"Eat prey with camouflage {prey.camouflage} and pattern {prey.pattern}")

# Example neural network function
def neural_network_function(pattern, camouflage):
    # Dummy neural network function, replace with actual neural network computation
    return random.uniform(0, 1)

# Example usage
prey_list = [Prey(random.uniform(-50, 50), random.uniform(-50, 50)) for _ in range(10)]
predator = Predator(neural_network_function)

predator.encounter_prey(prey_list)
```

Figure 9. Transcribed code from ChatGPT of the Wiggers and Harmen de Weerd algorithm. Image courtesy of ChatGPT / Melanitis, 2024.

```
>>> import torch
import torch.nn as nn
import torch.optim as optim
from torchvision import transforms, models
from PIL import Image
import cv2
import numpy as np

# Define function to load and preprocess images
def load_image(img_path, transform=None, max_size=400, shape=None):
    image = Image.open(img_path)
    if max_size:
        size = max(image.size)
        if size > max_size:
            size = max_size
        else:
            size = size
    if shape:
        size = shape
    if transform is None:
        transform = transforms.Compose([
            transforms.Resize((size, size)),
            transforms.ToTensor(),
            transforms.Normalize((0.485, 0.456, 0.406), (0.229, 0.224, 0.225))
        ])
    image = transform(image).unsqueeze(0)
    return image

# Define function to convert tensor to image
def im_convert(tensor):
    image = tensor.to("cpu").clone().detach()
    image = image.numpy().squeeze()
    image = image.transpose(1, 2, 0)
    image = image * np.array((0.229, 0.224, 0.225)) + np.array((0.485, 0.456, 0.406))
    image = image.clip(0, 1)
    return image

# Define the style transfer network
class StyleTransferNet(nn.Module):
    def __init__(self):
        super(StyleTransferNet, self).__init__()
        vgg = models.vgg19(pretrained=True).features
        self.features = nn.Sequential(*list(vgg.children())[:36])
        for param in self.features.parameters():
            param.requires_grad = False

    def forward(self, x):
        x = self.features(x)
        return x

# Define the function to perform style transfer
def style_transfer(content, style, alpha=1, beta=1e6, epochs=2000, lr=0.003):
    model = StyleTransferNet().to(device).eval()
    content_features = model(content)
    style_features = model(style)

    target = content.clone().requires_grad_(True).to(device)
    optimizer = optim.Adam([target], lr=lr)

    style_grams = {layer: gram_matrix(style_features[layer]) for layer
    in range(len(style_features))}

    for epoch in range(epochs):
        target_features = model(target)
        content_loss = torch.mean((target_features[1] - content_features[1]) ** 2)
        style_loss = 0
        for layer in range(len(target_features)):
            target_gram = gram_matrix(target_features[layer])
            style_gram = style_grams[layer]
            layer_loss = torch.mean((target_gram - style_gram) ** 2)
            style_loss += layer_loss / (target_features[layer].shape[1] *
        target_features[layer].shape[2] * target_features[layer].shape[3])

        total_loss = alpha * content_loss + beta * style_loss
        optimizer.zero_grad()
        total_loss.backward()
        optimizer.step()

    return target

# Define Gram matrix function
def gram_matrix(tensor):
    _, d, h, w = tensor.size()
    tensor = tensor.view(d, h * w)
    gram = torch.mm(tensor, tensor.t())
    return gram
```

```
    for epoch in range(epochs):
        target_features = model(target)
        content_loss = torch.mean((target_features[1] - content_features[1]) ** 2)
        style_loss = 0
        for layer in range(len(target_features)):
            target_gram = gram_matrix(target_features[layer])
            style_gram = style_grams[layer]
            layer_loss = torch.mean((target_gram - style_gram) ** 2)
            style_loss += layer_loss / (target_features[layer].shape[1] *
        target_features[layer].shape[2] * target_features[layer].shape[3])

        total_loss = alpha * content_loss + beta * style_loss
        optimizer.zero_grad()
        total_loss.backward()
        optimizer.step()

    return target

# Define Gram matrix function
def gram_matrix(tensor):
    _, d, h, w = tensor.size()
    tensor = tensor.view(d, h * w)
    gram = torch.mm(tensor, tensor.t())
    return gram
```

```
# Load the background and foreground images
background_img = 'background.jpg'
foreground_img = 'foreground.jpg'

device = torch.device("cuda" if torch.cuda.is_available() else "cpu")

background = load_image(background_img).to(device)
foreground = load_image(foreground_img, shape=background.shape[-2:]).to(device)

# Perform style transfer
result = style_transfer(foreground, background)

# Convert the result to an image
result_img = im_convert(result)

# Save and display the result
result_img = (result_img * 255).astype(np.uint8)
result_img = cv2.cvtColor(result_img, cv2.COLOR_RGB2BGR)
cv2.imwrite('camouflaged_image.jpg', result_img)
cv2.imshow('Camouflaged Image', result_img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

Figure 10. Code example of a ChatGPT prompt: 'Mimicking an image by hiding in the environment'. Image courtesy: ChatGPT/ Melanitis 2024

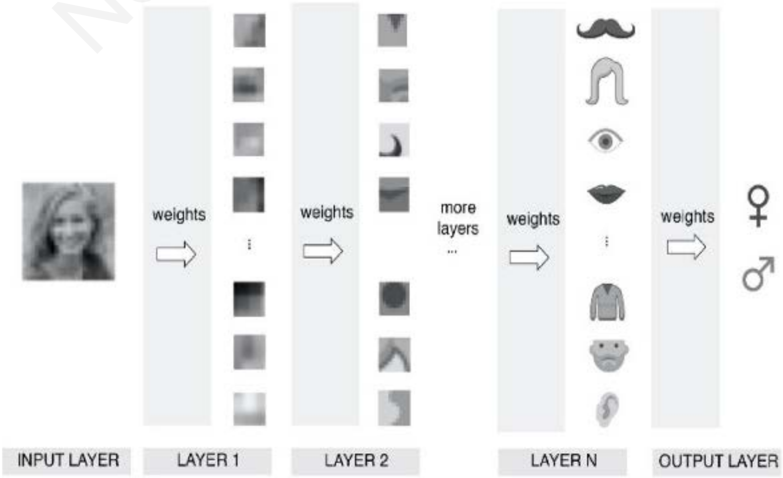


Figure 11. "Deep learning conceptual diagram" from 'Generative deep learning: teaching machines to paint, write, compose and play' by D, Foster. Sebastopol, O'Reilly Media, 2019. Deep Neural Networks, p. 33.


(a) (b

Figure 12. a) ‘Stingray Soros’, stingray portrait, oil painting on prepared wooden panel, 39.7 x 49 cm/frame 57 x 66 cm, 2019-2020. b) Detail of ‘Stingray Soros’. Image courtesy: I. Melanitis.


Figure 13. Detail of ‘Saturnia Pyri Hare’ (‘Saturnia pyri’, giant emperor moth), of ‘butterfly head’ and ‘wild plant’ feet. The unexpected coincidences for the revival of a dead hare through a sinusoidal curve. Oil painting on prepared wooden panel. Image courtesy: I. Melanitis.


Figure 14. ‘Saturnia Pyri Hare’ (‘Saturnia pyri’, giant emperor moth), of ‘butterfly head’ and ‘wild plant’ feet. The unexpected coincidences for the revival of a dead hare through a sinusoidal curve. Oil painting on prepared wooden panel, 120.5 x 51.3 cm, golden frame 134.3 x 65.2 cm, 2020-2022. Image courtesy: I. Melanitis.

recognition patterns. For example, if we see stripes, we initially associate them with zebras or tigers. If we perceive spots, leopards are most likely. Some painters are identified for their exceptional use of one colour, e.g., Klein’s ‘International Klein Blue’ (Haiml, 2007), the ‘Modigliani Ochre’ as established by Sennelier Oil Paints, *etc*. Painted by the signatory, Figures 12-14 present patterns of image superimpositions for a complex imagery (trompe-l’œil iconopiia), with a technique of transparent layers common to Van Eyck. In the multilayer technique, whether by hand or AI, the layers superimposed retain some clarity of the initial signal. Information connected to’ spatial information is a powerful tool for creating similarities and ‘equally perceived’ forms in nature, as the butterfly ‘Saturnia pyri’(Figure 15) appears to be a hare’s head in the painting (Figure 13).

If we prompt to ChatGPT: “Write Python code of an image, where its parts are replaced by other objects and still remain the same if viewed from a proper angle”, the steps the machine chooses are: Load the original image/ Load the object image / Create a mask and a transformed version of the object image / Find contours of the mask/ Prepare the output image/ Replace the parts of the original image with the object image / Replace the masked region with the object image/ Save the result image / Define the points of the region where the object will be placed.


Figure 15. ‘Saturnia pyri’ (peacock moth) in Paros, Greece. Compare with the hare head of Figure 13. Image courtesy: I. Melanitis, 2021.

Contouring

Contours are crucial; as in all primates, humans instantly recognize contours as important, essential information providers. The underprocess of contours concerning hiding and trickstering is common in animals, probably relied on statistical analysis and the reintegration of information: "...we report measurements of both absolute and Bayesian edge co-occurrence statistics in natural images, as well as human performance for detecting natural-shaped contours in complex backgrounds. We find that contour detection performance is quantitatively predicted by a local grouping rule derived directly from the co-occurrence statistics, in combination with a very simple integration rule (a transitivity rule) that links the locally grouped contour elements into longer contours…" (Geisler *et al*., 2001).

Artistic layers may be transparently overlapped or not. As we have argued (Melanitis, 2024), translucency appeared as the most important innovation of oil paint technique, even earlier (Theophilus Presbyter, 1979) than Van Eyck's heat-prepolymerised oils (Methods and Materials of Northern European Painting in the National Gallery, 1997). Multi-layering was not only meant to depict transparent or reflective surfaces but to blend the contours of objects more effectively than the tempera technique. Leonardo's (1452-1519) early painting known as Ginevra de' Benci (c.1474-1478) (Figure 16c), as Nuttall suggests (Nuttall, 2004), possibly mimics Petrus Christus's 'Portrait of a Young Girl' (c.1465-1470) (Figures 16a and 17a). This is more visible if we consider it as a reversed version of the prototype (Figure 16b). Leonardo's work handles contours with precision; the final lines are revaluations of the models' characteristics on the primal drawing and were drawn with dotted marks, the Greek technique of anthivolon, 'ανθίβολον' (Dionysios of Fourna, 1900), in Italian 'spolveri'. In the infrared reflectogram of this work (Figure 17b), clearly visible are: a/ 'pouncing' points, charcoal dust pricked into the drawing, leaving dotted marks] ; b/pentimenti ; c/preparatory lines with dark oil paint and d/finalised intense contours.

What is the significance of a notation indicating that a work, stylistically attributed as Netherlandish, mirrors its prototype? The act of mirroring encrypts the intention of the artist, his secret to be unveiled; it encapsulates a subtle thread of humour…

Why do model animals always attempt to distinguish themselves from mimic animals? (Holmgren and Enquist, 1999). Artists do the same, they pursue uniqueness…Why is peerlessness so important? Because it constitutes primary information. According to Wiggers and de Weerd, "by creating distance from the mimics, the predators experience less confusion between model and mimic animals", information of the model animals (or an artist) is clearly transmitted (Wiggers and de Weerd, 2017).

In later works, such as 'The Virgin and Child with Saint Anne' (c. 1501-1519) light dissolves, scattered on the perimeter of all forms. Lines gravitate toward an approximation of an idealised contour, thereby enabling the observer's eye to recompose the outline at their discretion. Nevertheless, the advanced technique of blending requires less skill in defining contours; however, it is more demanding in terms of colour transparency and, as a result, overall more complex.

Terms such as apophenia [the tendency to perceive a connection or meaningful pattern between unrelated or random things (objects or ideas)] and pareidolia (a type of apophenia, the tendency for perception to impose a meaningful interpretation on a nebulous stimulus, usually visual, so that one sees an object, pattern, or meaning where there is none) (Webster lexicon, 2024)], might be enhanced by our neologism, mimiphenia (apparent-ambiguous mimicry). A predator might be half-aware of the voluminous pattern, still remaining in a dilemma. This conjecture state, a thesis 'on the precipice of a decision or not', is an exquisitely artistic, diverting, distracting strategy…Plato analyses the difficulty (χαλεπότητος πρὸς τὸ τοῖς ὁρῶσιν δοκεῖν ἀποχρώντως μεμιμῆσθαι) (Plato, Critias 107c) of mimesis by the painters and consequently, the precision of the content if the representation has even "a small degree of likeness; inasmuch as we have no exact knowledge about such objects, we do not examine closely or criticise the paintings, but tolerate, in such cases, an inexact and deceptive sketch: ἅτε οὐδὲν εἰδότες ἀκριβὲς περὶ τῶν τοιούτων, οὔτε

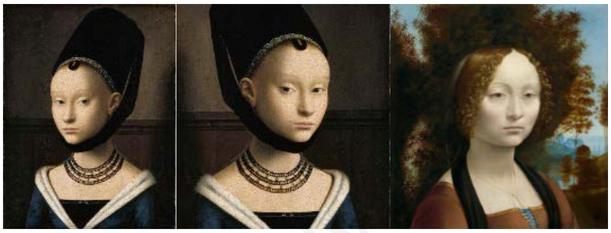

(a) (b) (c)

Figure 16. Painting mimics and mirrorings. a) Petrus Christus, 'Portrait of a Young Girl', c. 1465–70, 29 cm x 22.5 cm, Gemäldegalerie, Berlin (mirrored in panel b) compared to Ginevra de' Benci (c) as suggested by Paula Nuttall. Image credit: panel a by Wikimedia Commons. We may note that Ginevra is reversed, emphasising Leonardo's addiction in mirroring. Mirroring is also a mimicry pattern of less information expenditure. c) Leonardo da Vinci, 'Ginevra de' Benci' (c. 1474/1478), 38.1 x 37 cm.


(a) (b)

Figure 17. Leonardo da Vinci, 'Ginevra de' Benci'. a) Detail of Figure 16c. b) Infrared reflectogram of 'Ginevra de' Benci' by Leonardo da Vinci. Visible *pentimenti* over drawings, and corrections at the contours of the jaw and cheek with the hair ['pentimento' (Italian for 'repentance'; from the verb '*pentirsi'*, meaning 'to repent'; plural 'pentimenti') is "the presence or emergence of earlier images, forms, or strokes that have been changed and painted over". (Dictionary.com)]. Image source: https://commons.wikimedia.org/wiki/File:Infrared_reflectograms_of_the_Ginevra_de%27_Benci_by_Leonardo_da_Vinci.jpg

ἐξετάζομεν οὔτε ἐλέγχομεν τὰ γεγραμμένα, σκιαγραφίᾳ δὲ ἀσαφεῖ καὶ ἀπατηλῷ χρώμεθα περὶ αὐτά” (Ibid, 107d). The philosopher realises the importance of a subordinate form as an informational pattern that produces a controlled stimulus to the receiver: “we quickly perceive what is defective because of our constant familiar acquaintance with them, and become severe critics of him who fails to bring out to the full all the points of similarity” (Ibid, 107d). Mimiphenia is formed by mime+phenia, ‘phanein’ (from Greek ‘φαίνω’); meaning ‘to show’ or ‘to appear’ and mime, to imitate , etymologically derived from memory.

Allogeneic species utilise resembling forms to signify absence or manoeuvre. The sharable informational data between species alludes to the hypothesis that they probably ‘understand’ the wider script, the ‘play’, acting in an economy of information. Information belongs to nature; animals share a specific subset of it… Tactics of ambivalence are genetically inherited within members of species. To compare artistic, AI and biomimicry tactics, we might hypothesise the processes of trompe l’œil painting, AI coding mimetics, and biomimicry, as a homogenous area of reposting information.

‘AI coding mimetics’ suggests methods or techniques in AI development that are based on imitation or mimicry of certain processes, behaviours, and patterns. AI, we might predict, will potentially enter the mimiphenia phase: mimicking patterns that seem ambivalent to receivers, humans, producing confusion rather than gratifying the questioners… But humor occasionally emerges “acautiously”. Hume gives for every man, a different reason: “the different humors of particular men,” and “the particular manners and opinions of our age and country” (Hume and Lenz, 1980).

Interaction on this level might seem more interesting to humans. It represents the HAHA-to-AHA state (smirk-ridiculing laughter to surprise). Alfred Jarry also uses the tautological monosyllable “haha” in his pataphysical novel ‘Gestes et opinions du Docteur Faustroll’: “but more often he enunciated a tautological monosyllable: Na ha, he said in French; and he added nothing more”. Boxsel (Van Boxsel, 2014) clearly states this in demonstrating the AHA process: “the ah-ah bears witness to an artistic failure and at the same time causes frustration” (Ibid, p.62). HAHA and AHA are inseparable entities, mirroring states of perception.

Dali’s mystical manifesto contains a proposed methodology for young artists in the realm of an AI procedure: “Painter. some day to come. you will have succeeded. by your own ‘paranoiac-critical’ disciplines of an active and inquisitorial type, in seeing that which is ‘immaculately corpuscular’ which for me is the case at present, but for you might be an all too ineffable thing of its kind” (Dali, 1951). “Paranoiac-critical” methods are equal to a non-chaotic, complex, noetic, image (inter)weaving. Dali greatly admired Leonardo da Vinci, Michelangelo, and Raphael. Speaking on Velázquez, he “contributed a facsimile of a manuscript text devoted to Velázquez, printed on translucent paper laid down over a reproduction of Las Meninas” (Jeffett, 2007, 2016). Dali’s text began: “Velázquez, the greatest pictorial genius of all time” (Dali, 1960). William Jeffett insightfully remarks that Velásquez “rendered ephemeral immediacy as eternal” (Jeffett, 2007, 2016), referring actually to the mimicry effect of the painter depicting a realistic image from a distance (Figures 18 and 19), while in close inspection the brushstrokes appear ‘chaotic’ (Figure 20); Velázquez realised the importance of human ‘corrections’ in the perception of a painting from a distance. Note here that the creation of an oil painting happens with the artist in ‘close up’, seeing

Figure 18. D. Velázquez, ‘Las Meninas’. Image source: Google Earth Gigapixel Project.

Figure 19. Detail of D. Velázquez, ‘Las Meninas’ from a closer distance point. Image source: Google Earth Gigapixel Project.

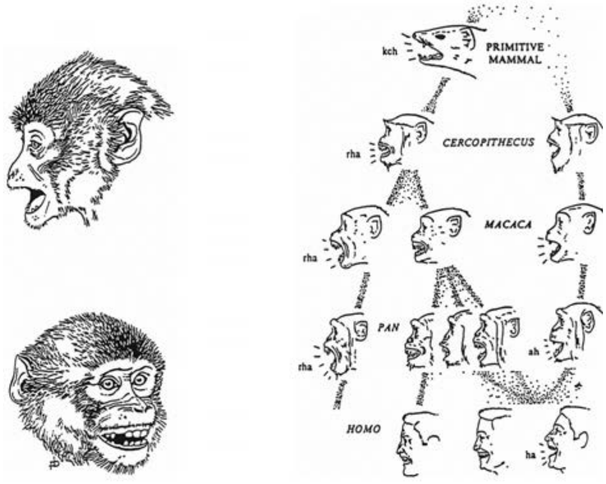
Figure 20. Detail of D. Velázquez, 'Las Meninas', close up. Image source: Google Earth Gigapixel Project.

what viewers also perceive in Figure 20. Inspection of the whole work means to step back (Figure 18).

We may here introduce a juxtaposition: The open-mouth gesture of fear, grin-bare teeth of rhesus macaque (Storey, 1996) against the 'monkey' Dracula Orchid (Figure 21), a neotropical epiphytic orchid of the Andes. The gesture is mimicked by the orchids, simultaneously resembling mushrooms to attract flies (Policha *et al*., 2019). As previously discussed, Jarry analysed cross-mimicry patterns; indicative is the metaphor of a dog faced bamboo who knew no human words but "ha ha"(Jarry *et al*., 1965*)*. Unresponsive laughter, probably the shortest communication distance between primates (Leavens, 2009), is also the case in 'smiling' monkey orchids; we may correlate images of laughter between animalia and plantae kingdoms to our discourse on bio-information exchanges.

A hypothesis might be like: an orchid exhibits a mushroom-like shape and attracts flies, such as in the case of 'Dracula simia' orchids; also possesses an additional disguise, resembling that of a monkey, presenting silent bared-teeth display (SBT) (Figures 22 a,b) (Clark *et al*., 2020). This may potentially deter other herbivorous animals from approaching it, particularly small animals that are naturally intimidated by monkeys; such a strategy represents a form of dual mimicry. Given the small size of these animals, the dimensions of the monkey might appear plausible to them. Nevertheless, the extent of specialisation in 'monkey mimicry' remains puzzling, particularly considering its seemingly unnecessary nature.

Figure 21. **'**Dracula orchids' mimic mushrooms in shape and attract flies. Why do they also mimic monkey faces? Is it as a strategy for repelling orchid (plant) eaters that avoid monkeys? Image source: superuniversodasplantas.com.br/en/



(a) (b)

Figure 22. a) Smiling monkey orchids, showing the silent bared-teeth display (SBT). Drawings by Priscilla Barrett. (Source: Hinde, 1987). Content downloaded from 130.208.143.250 on Sun, 24 Jul 2022 05:56:27 UT. b) The phylogenetic development of laughter. Drawings by Priscilla Barrett. (Source: Hinde, 1987). Content downloaded from 130.208.143.250 on Sun, 24 Jul 2022 05:56:27 UT.

The pollination of Dracula simia often involves attraction through odours that mimic substances found in animal faeces (Almeida, 2024). The attraction of flies to the monkey-like appearance of orchids might be due to the deceptive mechanism that makes the flies believe they are approaching faeces…Silent bared-teeth display (SBT) expressions might be analogous to the 'smiling' caterpillar (Figure 1). As Critchley points out, in many languages, smiling is a diminutive of laughter (Critchley, 2002) [rire-sourire French, das Lachen -das Lächeln], as in Greek, sub-laughter (χαμόγελο- υπομειδίαμα). Following this, he recalls Plessners' writings on "smiling as the mind's mime" (die /mimik dees Geistes) (Ibid), assuming a certain distance from one's immediate surroundings…Does a caterpillar differentiate this scenery space under a sort of conscience, an understanding of the mockery against its predator? This attitude is similar to using language hypocoristic[al]s (shorts, assumed names, or diminutives). In grammar, they represent the original meaning as small, either because it is indeed small or for the sake of endearment or even contempt. If I can't laugh, I may smile diminutively…

All art as biomimicry

Biomimetics, as a weaving interactive net among species, instigates unpredictable interactions interactions (Futuyma, 1998). A biome is an area classified according to the species that live in that location (National Geographic Society, 2024). Biomes are interconnected groups of informational patterns; predator-prey dynamics, competition, and symbiosis are patterns of ecological information that shape their structure. Within them, the rules are Batesian (an edible species resembles a distasteful or dangerous one) and Müllerian mimicry (two or more distasteful or dangerous species resemble one another) (Rubenstein *et al.*, 2019) . In general terms, the way bioinformation is perplexed within the genetic code, as for example in butterfly wing patterns, has two parts: "informational positioning" of the organising centres for pattern formation and, secondly, "signal production" for the final pigment dispersal (Nijhout, 1994).

Macrocosmically, an 'intention' paradigm of the mimicking pattern is appearing in aposematism (Greek, apo = away, sema = signal). By definition, it refers to "warning coloration, in which an organism's highly visible or vivid coloration signals to potential predators that it is distasteful or dangerous or, biological means by which a dangerous, or noxious organism advertises its dangerous nature to a potential predator" *(*Encyclopædia Britannica, 2024*)*. In bio-coding scales, intention seems impossible to justify. How do we define our phenotype through genes? Is there an 'intentional' coding of AI mimetics? May we encode AI by terms of "Offensive, Defensive, Direct or Indirect mimicry"? Does AI have an 'intention'? Apparently not, for the time.

Prompt to ChatGPT: "write AI code that is mimicking art by hiding forms in the environment". Consider: animals mimicking plants, plants mimicking animals, humans mimicking nature. Additionally, AI mimics animals, plants and humans, indirectly, through human data, AI mimics human art.

Response: Creating an AI system that mimics art by hiding forms in the environment can be approached using a style transfer method combined with object detection and blending techniques. In coding terms, it outlines a conceptual implementation using TensorFlow and Keras and use a pre-trained object detection model – like YOLO or SSD – and a pre-trained style transfer model (ChatGPT, 2024). The example will: 1. Detect objects in an image. 2. Apply style transfer to blend these objects with the background, making them less noticeable.

Explanation of the steps: 'Object Detection (detect_objects)': Uses YOLO to detect objects in the input image/ 'Style Transfer (apply_style_transfer)': Applies the style from style_image to each detected object/ 'Blending (blend_images)': Blends the stylised objects back into the original image to make them less noticeable/ 'Main Function (process_image)': Loads images, detects objects, applies style transfer, and saves the final output.

Which of the possible variations of information distribution through phenotype forms materialise in nature? Natural selection demonstrates that an environmental condition, previously nonexistent and unconceived, would be required for the emergence of a species like the 'reading animal-monk', an artistic hybrid (Figure 23).

Among the alternative variants that are morphoplastically acceptable, only a limited fraction manifests in nature. As we have previously seen, specific cells provide information about the formation of buds in butterflies; if they disappear for some reason in the process of copying the material, the eyes do not appear. Conversely, if these cells are relocated within the organism's structure, eyes will form in the new position. The sequential distribution of bioinformatics that represents the embryonic regions of organisms indicates that an organism can be decoded like a book, where each region functions as a chapter and each chapter contributes to the formation of a specific part of the animal's body. For example, since the Antennapedia gene controls leg formation, this results in the development of the second pair of legs as ectopic antennae. In a transgenic anatomy revealed through deliberate laboratory mutations, information often operates in organisms according to a specific order. We can characterise this phenomenon as 'structural information packages', which, when spatially redefined, produce unprecedented phenotypic manifestations of the living subject. Organisms can generally be conceptualised as composed of genetic information building blocks, interacting through energy exchanges to enhance the organism's adaptability. Although we anticipate that bioforms are being produced solely according to genetic information (meaning to directly follow a pattern indicated by genetic data), there is additional information that, as a skilled operator, an organism often overrides this phenotypic pattern and ensures advantages of concealment over generations, aiding in evading predators. Artistically, this is the case of cross-mimicking, as in the detail we have shown from "The Garden of Earthly Delights" (1490-1510) by Hieronymus Bosch (1450-1516). Ingeniously, this is emphasised by the refraction that splits the body of this hybrid creature in two distinguished parts (Figure 23).

Figure 23. Cross- mimicking. A monk with animal-like features is reading a book, or could it be an animal in disguise? In art, the genetic chain may lack direction in the evolutionary pathway. Detail from 'The Garden of Earthly Delights', by Hieronymus Bosch. Source: Google Earth Gigapixel Images.

Futuyma indeed discerns a correspondence between nature and planning, akin to what we seek in artistic drawing: "the design and function of a morphological structure often derive from their alignment with a plan that an engineer may use to achieve a specific goal, such as movement or heat dissipation" (Futuyma, 1998). Certainly, many structures are analogous in design to human implementations. The utility of models in evolutionary biology is closely tied to their functionality: models are devised to describe the types of characteristics that organisms may be expected to have, in order to achieve a specific function within a particular context (Ibid). As a gradual painting practice in the artist's workshop, the wing patterns of newly hatched grouse and ptarmigans are replaced within a few days by new plumage (Ibid) (Figure 24). Each phenotypic stage of feather development indicates the genetic limit reached within the dynamics of this particular pattern.

Bee audience bored? Complex artistic strategies of the *Ophrys heldreichii* orchids

Pollination by sexual deception of *Eucera berlandi* bees is studied in *Ophrys heldreichii* orchids, which resemble them visually. Orchids developed a strategy of misleading them with visual patterns and sex pheromones (Stejskal *et al*., 2015), which has been genetically verified (Schlüter and Schiestl, 2008). As research has revealed, "*Eucera berlandi* do not discriminate between flowers with or without a pattern on their labellum as long as the olfactory signal is present", which represents a multitasking trap by the plant for the insect. Additionally, "the variability of the signals given off by the flowers enables the deceived pollinator males to learn individual flower patterns" (Paulus, 2019), which motivates us to construct complex AI visual patterns based on the research of Hannes F. Paulus (Figure 25 a-c). We might hypothesise that informational fatigue occurs when the model pattern is not memorised.

How does an orchid respond to this informational failure? By alternating its patterns. Some orchids with visual differentiations survive to trick the suspicious bees; the insects are unaware of the new fraud (Paulus, 2007). Between orchids and bees, a visual and olfactory signal exchange redefines the aesthetic criteria, involving complex mimetics: it seems the "patterns from flowers of the same inflorescence (Figure 25b) appear more similar to each other than patterns from flowers of different plant individuals" (Figure 25c) (Paulus, 2007). A technique might change when fake information is revealed. Uniqueness is again appraised by the observers. Flowers with rare patterns would receive more visits, which probably leads to higher reproductive success.

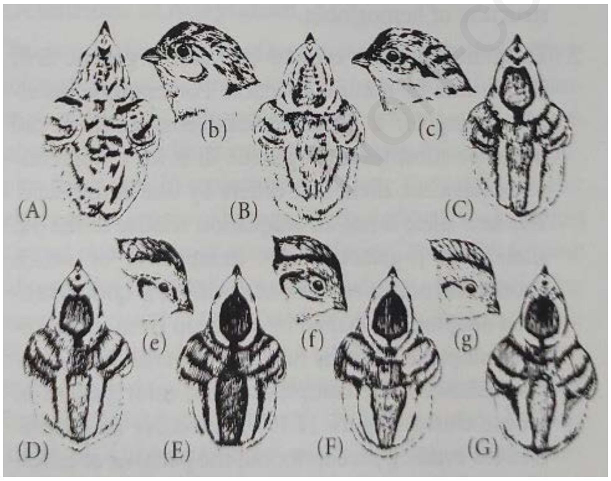


Figure 24. Like a stepwise painting practice in the artist's workshop, the 'plumage patterns of newly hatched grouse and ptarmigans are replaced within a few days by a juvenile plumage' (Futuyma DJ. Evolutionary Biology, 3rd ed, Sunderland, Sinauer Associates, 1998, p. 356). Image from 'Grouse of the World', PA Johnsgard, with permission of the University of Nebraska Press. Copyright 1983, the University of Nebraska Press.

Wild patterns may now enter the AI software. By uploading two patterns of Figure 25c in ChatGPT (Figure 26), we receive three coding phases: 'Extract the Patterns' (separate the two patterns from the image), 'Combine Alternating Segments' (decide on the granularity of alternation, e.g., line by line, segment by segment) and 'Merge' (create a new image where the chosen segments from each pattern alternate).

In Figures 27-30, we observe proposed new AI patterns on the natural orchid formations. These breeds are later compared to other natural ones (see later the six examples in Figure 31 and 32).

The overall process of pattern formation follows these steps: the procedure starts with two patterns of Figure 25c, merged by

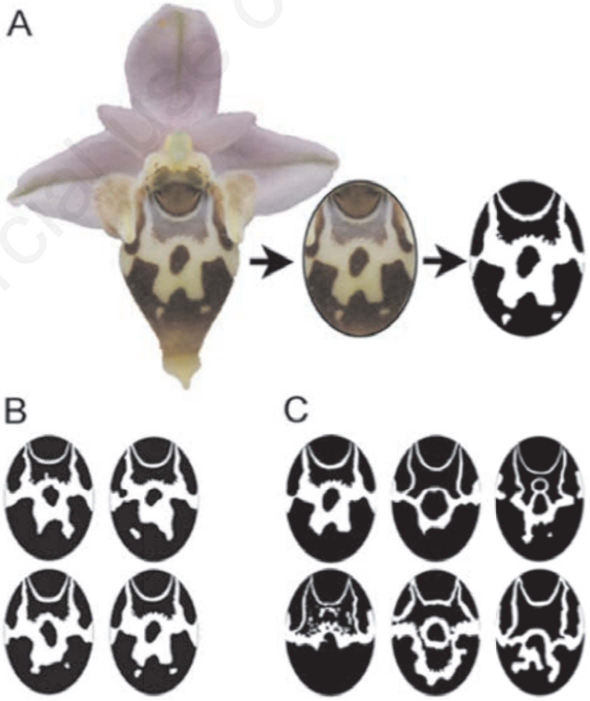


Figure 25. a-c) Labellum patterns of *Ophrys heldreichii* flowers. Retrieved from Stejska K, et al.,. PLoS One 2015;10.e0142971; with perission.

Figure 26. Two patterns of Figure 25c (left) are merged through ChatGPT to give a new one on the right.

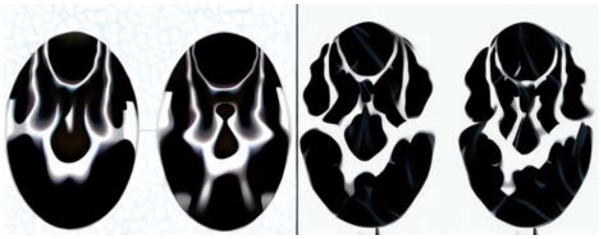


Figure 27. First step, pattern variations of Figure 26, made with 'DiffusionBee' AI software. Image courtesy: DiffusionBee / Melanitis 2024.

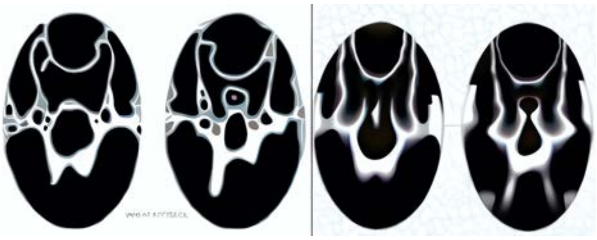


Figure 28. Second step, pattern variations of Figure 26, made with 'DiffusionBee' AI software . Image courtesy: DiffusionBee / Melanitis

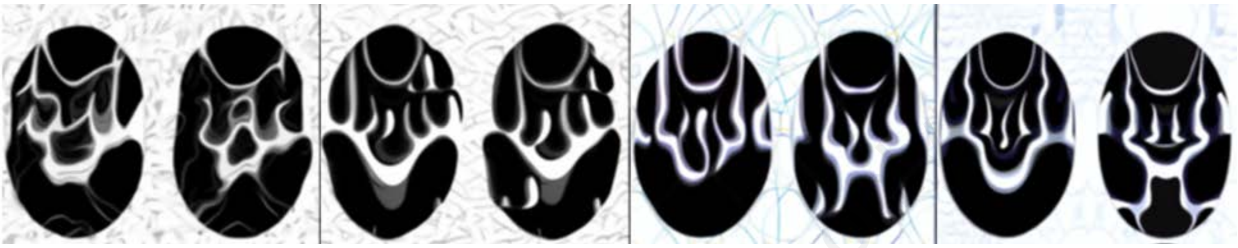


Figure 29. Third step, pattern variations of Figure 26, made with 'DiffusionBee' AI software. Image courtesy: DiffusionBee / Melanitis 2024.

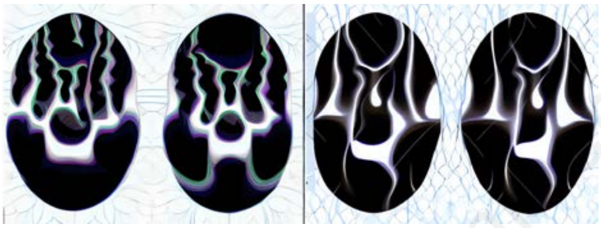
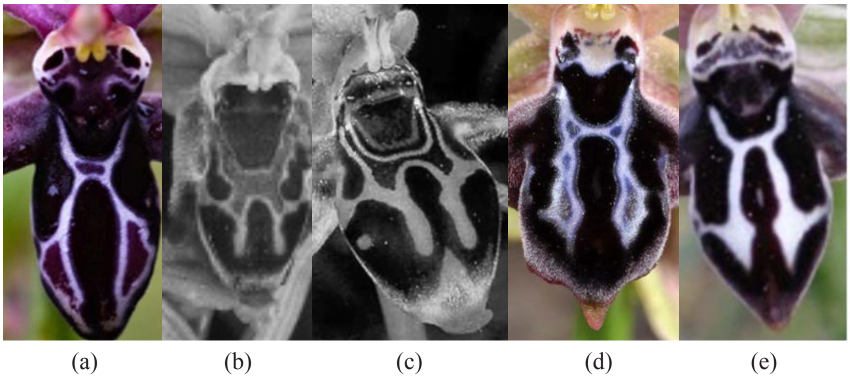


Figure 30. Fourth step, pattern variations of Figure 26, made with 'DiffusionBee' AI software. Image courtesy: DiffusionBee/ Melanitis 2024.

Figure 31. Gen-2 AI morphogenetic variation based on the Turing formula. Copyrights Melanitis / Gen-2. Compare with the wild orchid patterns of following figures.



(a) (b) (c) (d) (e)

Figure 32. Five wild orchids. a) *Ophrys cretica*, image credit: Nurelias /flickr. b) *Ophrys Scolopax*, image credit https://www.ophrys-genus.be/b8b.htm. c) Spider *Orchid Holoserica*, image credit: https://sciencephotogallery.com. d) *Ophrys cretica ariadnae Saxifraga*, image credit: Harry Jans, https://www.freenatureimages.eu. e) *Ophrys ariadne*. Image credit: Anne Horsfall (https://www.first-nature.com/flowers/ophrys-cretica.php).

Figure 33. a,b) Five orchid patterns. The initial (a) natural pattern of Figure 25a was inserted into Gen-2 AI, generating four variations to compare with an *Ophrys heldreichii* (b). Image courtesy: Gen-2 AI / Melanitis 2024. Orchid image on the right by: Intraspecific pattern variation of flowers of *Ophrys heldreichii* from Crete (Greece). Detail adapted from Paulus HF. J Comp Physiol A Neuroethol Sens Neural Behav Physiol 2019;205:285-300; with permission.

ChatGPT, which provided us the type illustrated in Figure 26. Through 'DiffusionBee' AI software, we may try more pattern variations. From the merged pattern of Figure 26, we get the patterns illustrated in Figures 27 and 28. We may explore patterns from the last two patterns of Figure 28 to produce a third and fourth variation, as shown in Figures 29 and 30. As we schematically utilised the Turing formula of morphogenesis (Turing, 1952) which describes how patterns in nature can arise naturally, the outcomes are comparable with the natural wild orchids. Similarities might be accidental; this is apparent in all orchid patterns of Figure 33 which were produced by Gen-2 AI, as a morphogenetic variation of Figure 25a. Still remains a future task, the exploration of the genetic basis of orchids, since their "colour biosynthesis is produced by an anthocyanidin pigment" (Schlüter and Schiestl, 2008).

A further attempt was made using Gen-2 AI software, prompting: 'Make more variations using the Turing morphogenesis algorithm' (07/08/24). The outcomes reveal patterns through four successive layers of abstraction (Figure 33a).

Epilogue

Suddenly, during an afternoon mountain walk, '*Heldreichii*' orchids 'appeared' on the side path at Paros island (Figure 34). The wild 'cobalt violet' orchids, *Heldreichii*, a joker orchids, the perfect mimicry flower-artists, the exact ones we have been dramatically studying... In nature, chance is entangled with 'expectation'.

Certain imperfect imitations can be considered supplementary or accessory to the original model, and when placed under observation, they gain a secondary opportunity to become more noticeable than the primary model. Precisely due to their design flaws, these imitations become non-influential or lethal. Predators will either ignore them or detect the deception and attack. It is unclear whether the distortion of this model can be more effective, as in the example of visual arts, where distortions intensify the stimulus. The relationship between the model and the copy is not unilateral: the information provided by the pattern to the predator is gradually linked with supplementary empirical information such as toxicity, the accumulation of similar imitations in the same area, the required time for intake, the ease of approaching the model, *etc*.

Sabine Hossenfelder identifies two criteria for obtaining consciousness: self-monitoring and a predictive model. Moreover, "a

Figure 34. Wild *Heldreichii* orchids. Paros Island, 2023. Image courtesy: I. Melanitis.

system isn't just conscious or not, it may be more or less conscious because it might be better or worse at self-monitoring and making predictions*"* (Hossenfelder, 2024). Animal consciousness is not a lost case as many researchers "emphasise the difficulty of linking aspects of consciousness to specific neural structures across the phyla because high-level cognitive abilities may have evolved independently along evolution" (Le Neindre *et al*., 2016). Between imitation and camouflage (concealment), the latter is often superior. When environmental information favours predators, imitation-being more difficult to implement- may not be necessary. Additionally, let us consider that in the case of pattern imitation, we have (erroneously) assumed that predators are familiar with only a single reference pattern (Wiggers and de Weerd, 2017). Although imperfect imitation is a deduction of an ideal pattern, it is inherently more unpredictable. An act perceived as a meme is, in itself, a meme. Viewers find more aesthetic appeal in imperfect paintings that showcase an artist's drawing pattern than in perfectionistic photographs.

Mimiphenia, regarded as an exquisite artform or mimicry strategy, encompasses all instances of imperfect imitations, whether deliberate or unintentional; the 'intentionally fake' memes are the most controversial. The predator incrementally acquires knowledge of the trickster's models, yet is often deceived due to the prey's awareness of this structure. As an agile artist, the 'pursued' is surpassing the trap's inconsistency *via* pentimenti, picturesque alterations…

Note: All image links accessed on 11th July 2024.

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