Bizarre Plants: Dragon blood plants

Dragon blood plant Draceana draco (Canarian Islands) dragonier

The dragon who guarded the garden of the Hesperides. Draco was venerated plant of the guanches- extinct natives of the Canarian Islands.

The aromatic & red colored resin is obtained from different species : *Croton*, *Dracaea*, *Calamus rotang*. & was used in ancient times as varnish, medicine, incense, and dye. In modern times it is used as varnish for violins, in photoengraving, as an incense resin, and as a body oil.

Draceana sanderiana | Resin called Dragon blood | Draceana draco (Canaria)

Buddha’s Hand *Citrus medica*

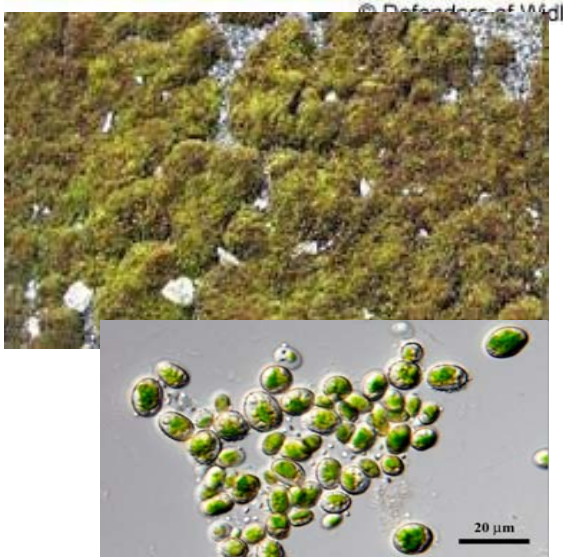
Buddha’s hand is a citrus fruit popular in China and Japan for its strong fragrance. It fails as a fruit since it’s pretty much all zest and no pulp, but it has other uses,

Buddha's hand, ***Citrus medica*** **var. *sarcodactylis*** (also known as **fingered citron**), is a fragrant citron variety in the Rutaeceae whose fruit is segmented into finger-like sections. The origin of Buddha's hand plant is traced back to Northeastern India.

Compass plants

Prickly lettuce *Lactuca seriola* is a compass plant. If you look at it fron the east or west it looks broad but when viewed form the North it look like flattened by a car.

Another compass plant is ***Silphium laciniatum*** (**Compass Flower**, or **Rosinweed**)- a sunflower native to the Prairies of Dakota. Like lactuca it aligns leaves in N-to-S direction.



The rule that moss is growing on the northern side of trees is false for more than one reason. Moss prefers shade and th shade is from all sides ina dense forest. Second, what is growing on the northern side of tress is the ***green algae Pleurococcus***. It cannot deal with direct sunlight and prefers N.

Bizarre Plants: the largest & weirdly shaped seed

Maldives or Seychelle Islands : source of unusual seed **coco-de-mer** seeds first mistaken as eggs of griffins (Georg Eberhard Rumpf 1682 named it Cocus maldivicus): most important aphrodisiac & antidote like the benzoar (ideal goblet material). Rudolf II German Emperor (1650) payed 4000 florins = 5000 gold thalers (dollars) for a seed

1742 French landed from Mauritius, 1768 that the islands interior was explored & confirmed as the source of coco-de-mer, the Seychelles' nut **Lodoicea palms** (daughter of Troy's Priam

difficult to germinate; first Kew RoyalGarden plants were pre-germinated in Seychelles & then grown in 1854 , hurrah ==> a yellow horizontal shoot projects parallel to soil surface for 3 m before horizontal shoot develops & root grows. Horizontal shoot rots away & seedling cannot be traced back to seed. Jelly-like endosperm of nuts is a delicacy for the rich.

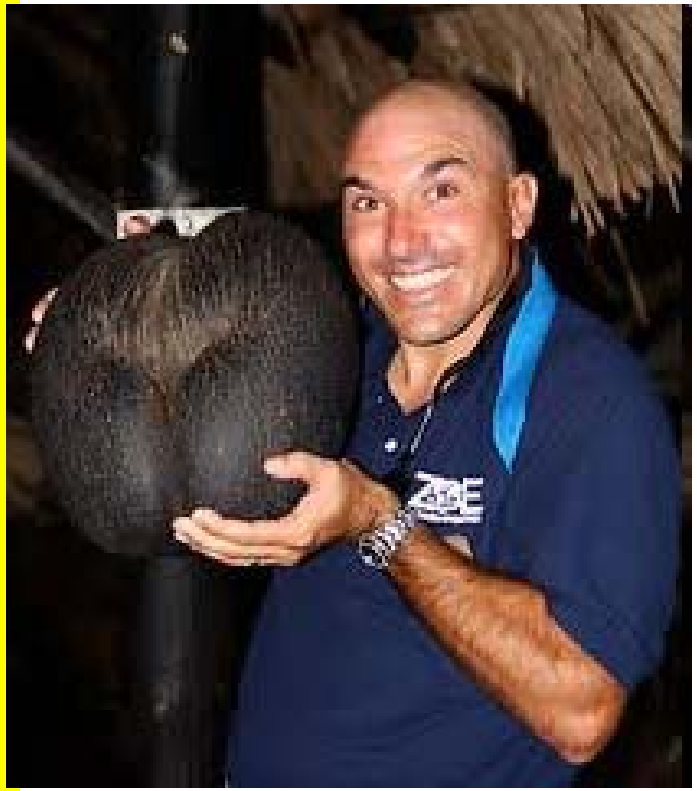
"Surely, Sir, it is Priam's daughter"

Bizarre Plants: the largest & weirdly shaped seed

Maldives or Seychelle Islands : source of unusual seed **coco-de-mer** first mistaken as eggs of griffins (Georg **Eberhard Rumpf 1682 named it Cocus maldivicus**): most important **aphrodisiac & antidote like the benzoar** (ideal goblet material). Rudolf II German Emperor (1650) payed 4000 florins = 5000 gold thalers (dollars) for a seed

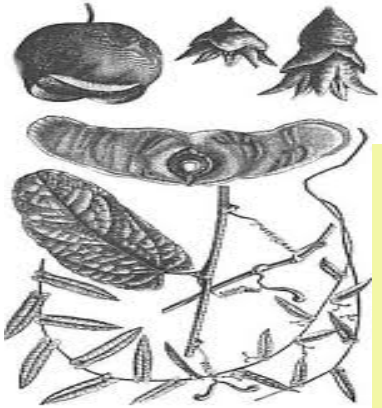
1742 French landed from Mauritius, 1768 that the islands interior was explored & confirmed as the source of coco-de-mer, the Seychelles' nut **Lodoicea palms** (daughter of Troy's Priam

difficult to germinate; first Kew RoyalGarden plants were pre-germinated in Seychelles & then grown in 1854 , hurrah ==> a yellow horizontal shoot projects parallel to soil surface for 3 m before horizontal shoot develops & root grows. Horizontal shoot rots away & seedling cannot be traced back to seed. Jelly-like endosperm of nuts is a delicacy for the rich.



"Surely, Sir, it is Priam's daughter"

The flying Zanonia fruit served as a template for the first non-stalling airplane trianer (STOL)



Zanonia macrocarpa (Syn. *Macrozanonia macrocarpa* (Blume) Cogn., *Alsomitra macrocarpa* M.Roem.) alias Javan cucmber is a vine in the cuccurbitaceae. The fruit - a maple-like samara - has thin dry wings with 13 cm wing span and can fly with only a slight turn distances of up to 50 m. The plant was first described under the name *Zanonia macrocarpa* in 1825 by Carl Ludwig Blume

This principle was used to build a monoplane in 1903 in cooperation of botanists with the Austrian airplane pioneer **Ignaz Etrich** (designing strategy called biomimetics) ands in 1912 the motorized glider "Taube" which had a stall speed of less than 10 mph (idiots could fly this one). Unfortunately this design was not fit for tight turns – the developing strategy of fighter planes

← **The "Taube" of the famous Lieutenant Plüschow** was the only plane of the Imperial Navy in Tsingtao, in 1914 a German colony in China. Before Tsingtao was overwhelmed by superior numbers of Japanese & British ships & troops he flew his badly damaged plane **for 250 miles into China** & continued on foot

The Devil’s Claw

The horrifying seed pods are designed to latch on to the feet of passing animals, which will then transport them to another location before crushing them underfoot and releasing the seeds.

Harpagophytum procumbens, also **Devil's Claw**, is in sesame family, native to South Africa. The plant's large tuberous roots contain steroid & are used to reduce pain and fever, and to stimulate digestion. Europeans used it to treat arthritis.

http://aayuni.tumblr.com/post/4832997867/9-creepy-plants-that-shouldnt-exist

Chinese Fleece Flower *Fallopia ssp.*

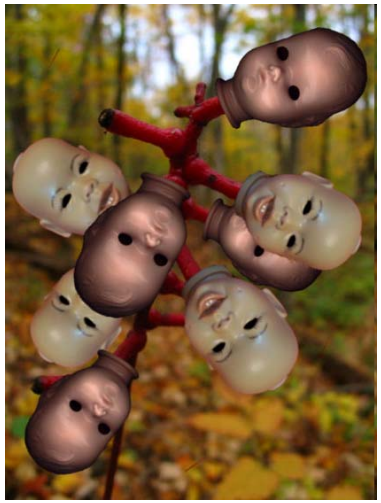
The Chinese Fleece flower is in the genus Fallopia in the family Polygoniaeceae, a relative of the infamous Japanese Knotweed Fallopia japonica. The Chinese use this plant in their traditional medicine for kidney health, strong bones and hair restoration, and as a mild laxative, and it's.. Hey, wait a second…

" I tell you, …
it is a sign, yeah, ah …
it's an omen!" The end of the world is close, oh Rose

Okay, weird. It's a root that looks like a little dude. But that's a rare, onetime fluke, right? It's not like that's what this species *typically looks like* or anything?? Roots making a perfect couple made headlines in 2006 …. ➔

Doll's Eyes *Actaea pachypodia*

Actaea pachypoda (**Doll's-eyes**, **White Baneberry**) is a herbaceous perennial plant in the family Ranunculaceae, native to eastern North America. The berries contain cardiogenic toxins which can have an immediate sedative effect on human cardiac muscle tissue, and are the most poisonous part of the plant. Ingestion of the berries can lead to cardiac arrest and death.



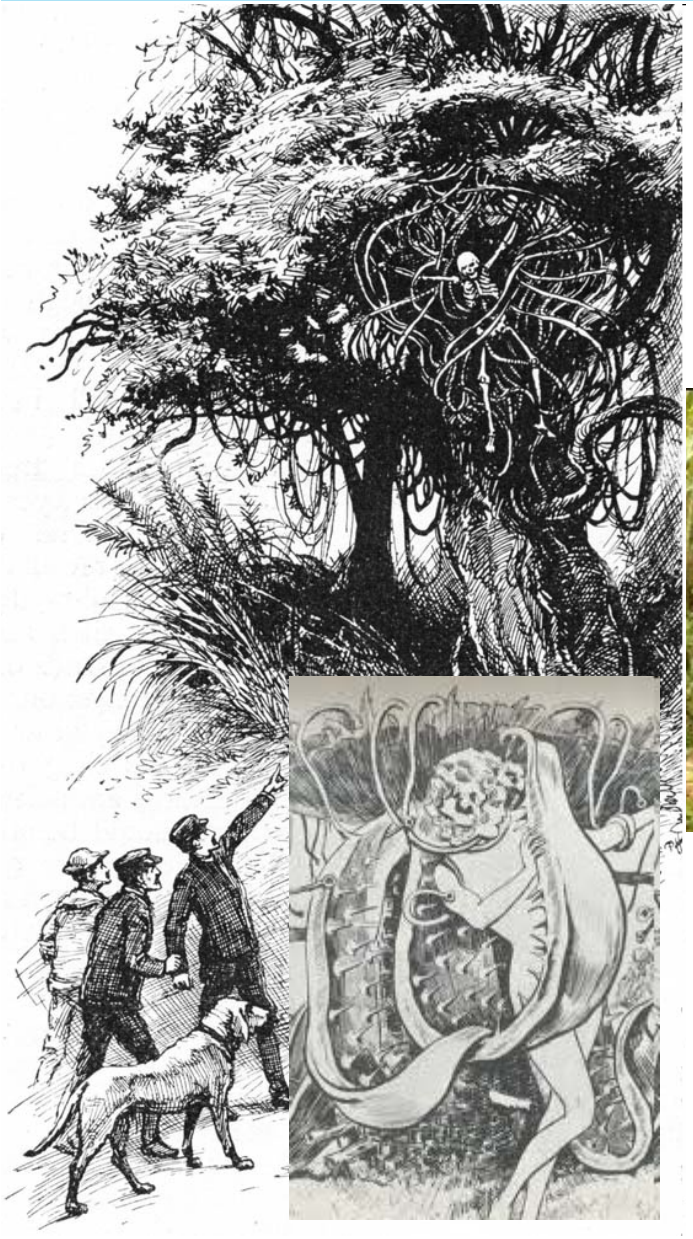
The Doll's eye plant, also known by the equally unsettling name "white baneberry." Just in case you were actually thinking of eating this thing, those eyeballs are highly poisonous.

Chinese Black Bat Flower Tacca chantrieri

Bats are freakin’ scary. For the same reason, nature has decided to use that same mold to make plants that can induce spontaneous bowel movements, with the addition of some tentacles just to be sure, black bat flowers.

The **Black bat flower**, *Tacca chantrieri*, is in the yam family Dioscoreaceae. & unusual in that it has black flowers. These flowers are bat-shaped, are up to 12 inches across, and have long 'whiskers' that can grow up to 28 inches. Tacca chantrierei grow wild in the tropical forest in Yunnan Province, China,

Terrible or horrible Plants

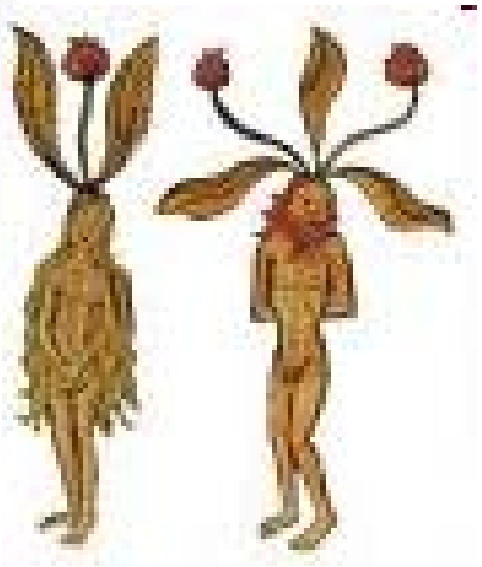


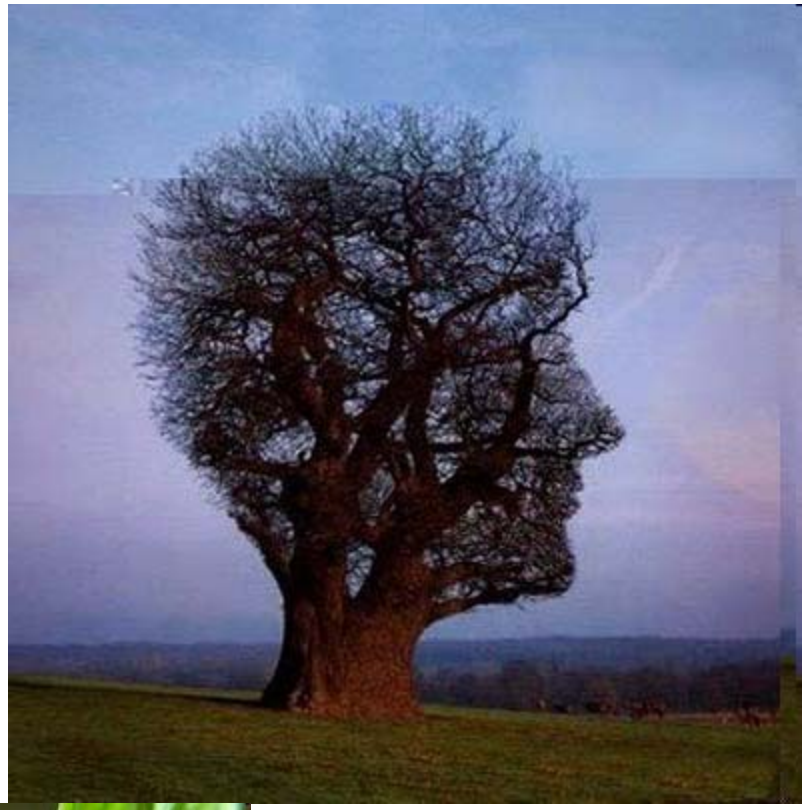
While many stories about man-eating or man-killing plants belong in the roam of **fairy tales and fantasy, that is unfortunately not always the case.**

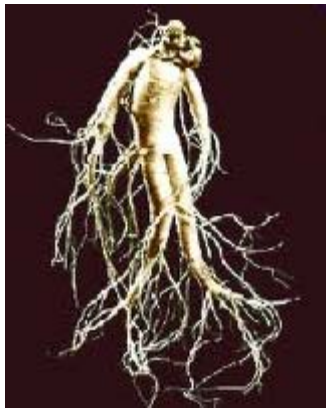
BBC 2006:
A new species of giant carnivorous plant has been discovered in the highlands of the central Philippines. The pitcher plant is among the largest of all pitchers and is so big that it can catch rats as well as insects in its leafy trap.

http://aayuni.tumblr.com/post/4832997867/9-creepy-plants-that-shouldnt-exist

Plants mimicking other life forms





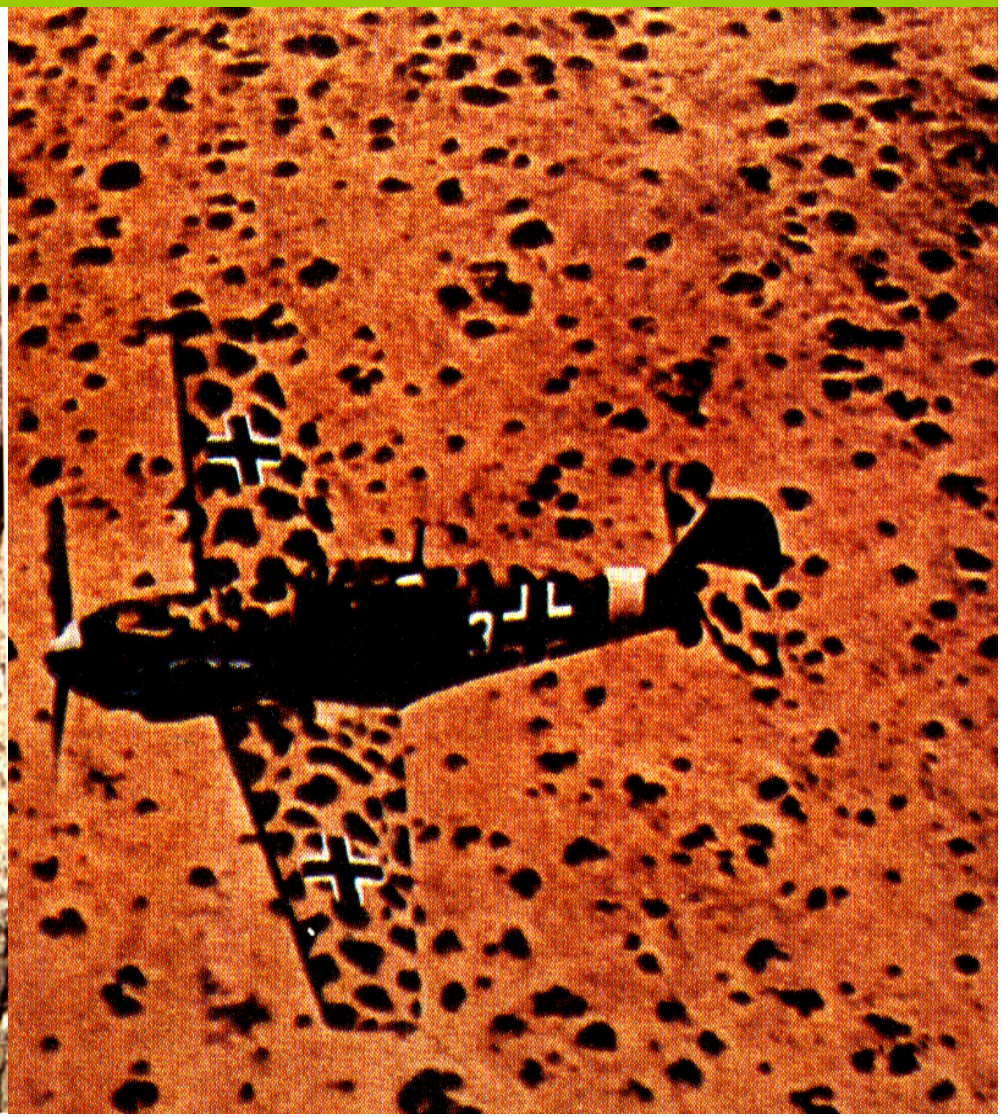


http://aayuni.tumblr.com/post/4832997867/9-creepy-plants-that-shouldnt-exist

Camouflage and Mimicry

nature-made

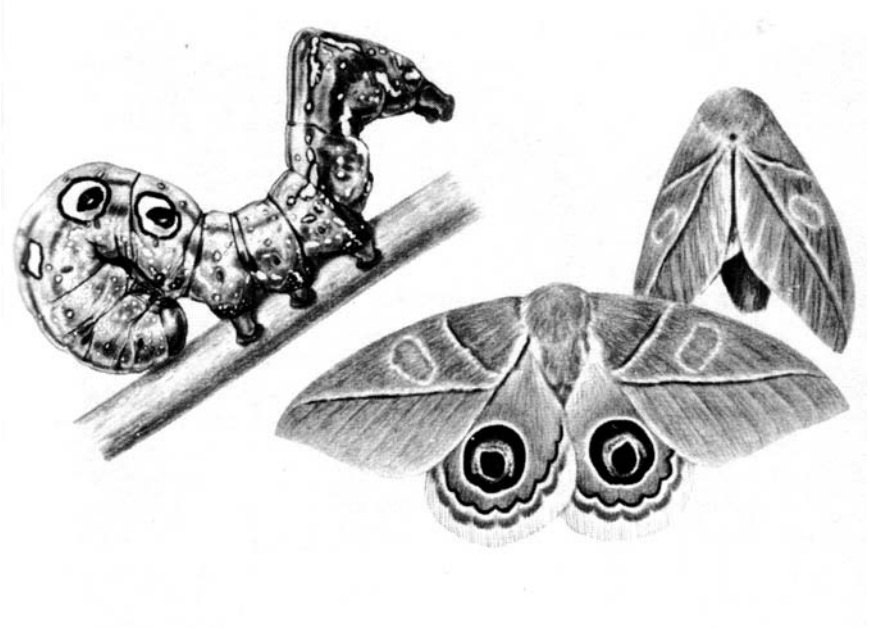
man-made



Mimicry

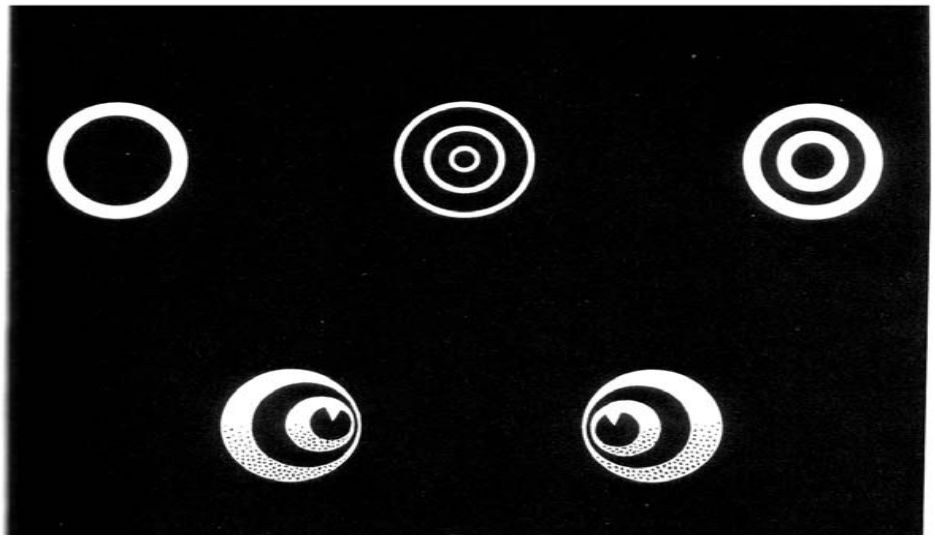
Mimicry provides great examples for similar appearances in genetically different, i.e. **phylogenetically unrelated species, i.e. for convergent evolution**. ***Muellerian mimicry*** explains the evolutionary advantage to look like a poisonous species or another thing dangerous to the predator.

Sudden display of eyespots is a common feature of both butterflies and caterpillars



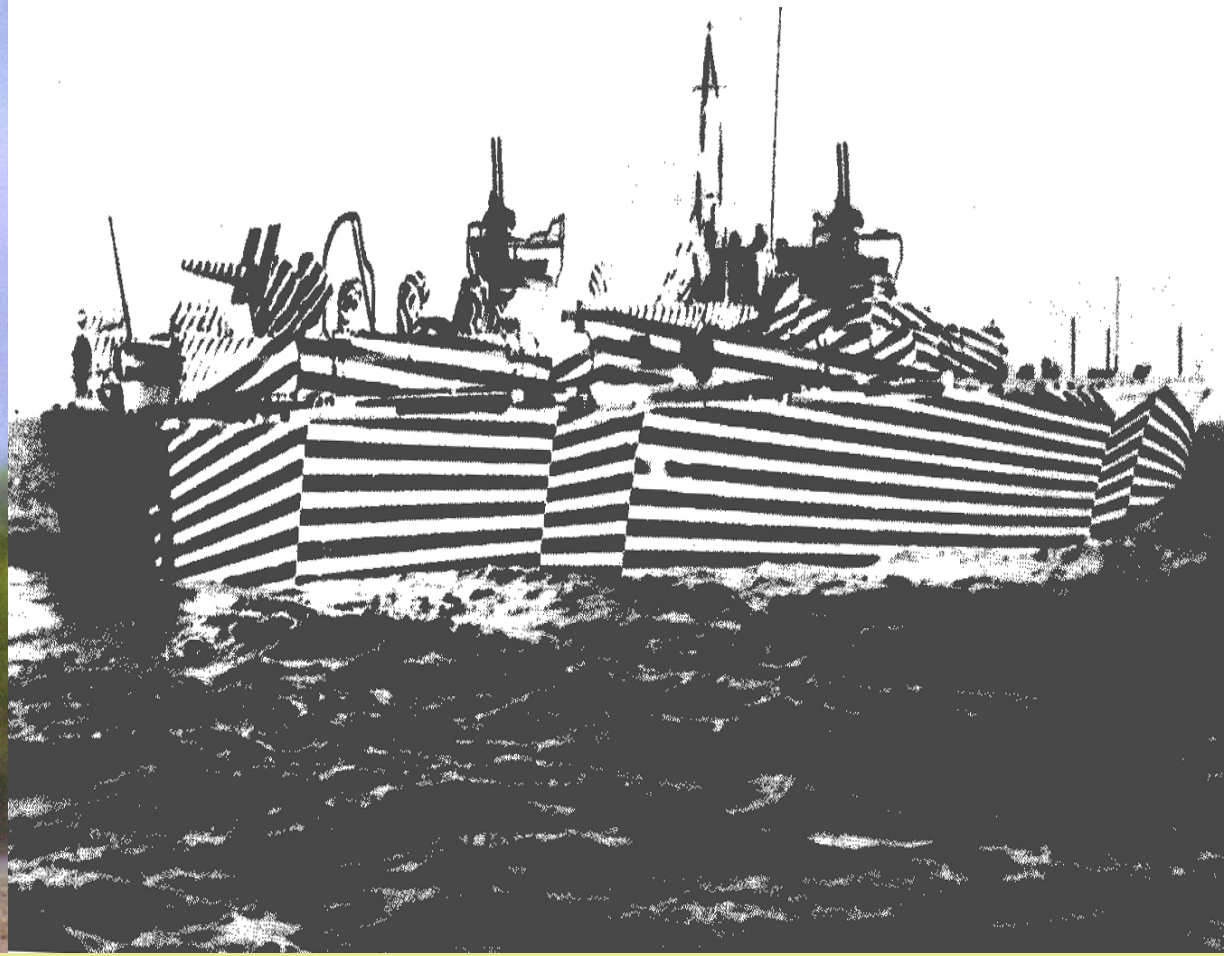
Blest (1957) used yello-hammer birds to test eyespot patterns for the effectiveness by placing them next to mealworms.

Strongest repellant was pair of eccentric rings resembling stare of vertebrate threat



Wolfgang Wickler (1974) Mimicry in Plants and Animals. McGraw-Hill, N.Y.

Camouflage: confusing directionality



Optical illusions: flaws in image processing mislead about body size, shape & its anticipated direction!

Camouflage: faking identities

flipping caterpillar