

= Green =

Green is the color between blue and yellow on the spectrum of visible light . It is evoked by light with a predominant wavelength of roughly 495 ? 570 nm . In the subtractive color system , used in painting and color printing , it is created by a combination of yellow and blue , or yellow and cyan ; in the RGB color model , used on television and computer screens , it is one of the additive primary colors , along with red and blue , which are mixed in different combinations to create all other colors .

The modern English word green comes from the Middle English and Anglo @-@ Saxon word grene , from the same Germanic root as the words " grass " and " grow " . It is the color of living grass and leaves and as a result is the color most associated with springtime , growth and nature . By far the largest contributor to green in nature is chlorophyll , the chemical by which plants photosynthesize and convert sunlight into chemical energy . Many creatures have adapted to their green environments by taking on a green hue themselves as camouflage . Several minerals have a green color , including the emerald , which is colored green by its chromium content .

In surveys made in Europe and the United States , green is the color most commonly associated with nature , life , health , youth , spring , hope and envy . In Europe and the U.S. green is sometimes associated with death (green has several seemingly contrary associations) , sickness , or the devil , but in China its associations are very positive , as the symbol of fertility and happiness . In the Middle Ages and Renaissance , when the color of clothing showed the owner 's social status , green was worn by merchants , bankers and the gentry , while red was the color of the nobility . The Mona Lisa by Leonardo da Vinci wears green , showing she is not from a noble family ; the benches in the British House of Commons are green , while those in the House of Lords are red . Green is also the traditional color of safety and permission ; a green light means go ahead , a green card permits permanent residence in the United States . It is the most important color in Islam . It was the color of the banner of Muhammad , and is found in the flags of nearly all Islamic countries , and represents the lush vegetation of Paradise . It is also often associated with the culture of Gaelic Ireland , and is a color of the flag of Ireland . Because of its association with nature , it is the color of the environmental movement . Political groups advocating environmental protection and social justice describe themselves as part of the Green movement , some naming themselves Green parties . This has led to similar campaigns in advertising , as companies have sold green , or environmentally friendly , products .

= = Etymology and linguistic definitions = =

The word green comes from the Middle English and Old English word grene , which , like the German word grün , has the same root as the words grass and grow . It is from a Common Germanic * gronja- , which is also reflected in Old Norse grænn , Old High German gruoni (but unattested in East Germanic) , ultimately from a PIE root * ghre- " to grow " , and root @-@ cognate with grass and to grow . The first recorded use of the word as a color term in Old English dates to ca . AD 700 .

Latin with viridis also has a genuine and widely used term for " green " . Related to virere " to grow " and ver " spring " , it gave rise to words in several Romance languages , French vert , Italian verde (and English vert , verdure etc .) . Likewise the Slavic languages with zelen? . Ancient Greek also had a term for yellowish , pale green ? ?????? , chloros (cf. the color of chlorine) , cognate with ??????? " verdant " and ????? " the green of new growth " .

Thus , the languages mentioned above (Germanic , Romance , Slavic , Greek) have old terms for " green " which are derived from words for fresh , sprouting vegetation . However , comparative linguistics makes clear that these terms were coined independently , over the past few millennia , and there is no identifiable single Proto @-@ Indo @-@ European or word for " green " . For example , the Slavic zelen? is cognate with Sanskrit hari " yellow , ochre , golden " . The Turkic languages also have ja??l " green " or " yellowish green " , compared to a Mongolian word for " meadow " .

== Languages where green and blue are one color ==

In some languages , including old Chinese , Thai , old Japanese , and Vietnamese , the same word can mean either blue or green . The Chinese character 青 (pronounced qíng in Mandarin , ao in Japanese , and thanh in Sino-Vietnamese) has a meaning that covers both blue and green ; blue and green are traditionally considered shades of " 青 " . In more contemporary terms , they are 蓝 (lán , in Mandarin) and 绿 (lǜ , in Mandarin) respectively . Japanese also has two terms that refer specifically to the color green , 青 (midori , which is derived from the classical Japanese descriptive verb midoru " to be in leaf , to flourish " in reference to trees) and 緑 (kuroi , which is derived from the English word " green ") . However , in Japan , although the traffic lights have the same colors that other countries have , the green light is described using the same word as for blue , " ao " , because green is considered a shade of ao ; similarly , green variants of certain fruits and vegetables such as green apples , green shiso (as opposed to red apples and red shiso) will be described with the word " ao " . Vietnamese uses a single word for both blue and green , xanh , with variants such as xanh da trời (azure , lit . " sky blue ") , lam (blue) , and lục (green ; also xanh lá cây , lit . " leaf green ") .

" Green " in modern European languages corresponds to about 520 ? 570 nm , but many historical and non-European languages make other choices , e.g. using a term for the range of ca . 450 ? 530 nm (" blue / green ") and another for ca . 530 ? 590 nm (" green / yellow ") . In the comparative study of color terms in the world 's languages , green is only found as a separate category in languages with the fully developed range of six colors (white , black , red , green , yellow , and blue) , or more rarely in systems with five colors (white , red , yellow , green , and black / blue) . (See distinction of green from blue) These languages have introduced supplementary vocabulary to denote " green " , but these terms are recognizable as recent adoptions that are not in origin color terms (much like the English adjective orange being in origin not a color term but the name of a fruit) . Thus , the Thai word เขียว , besides meaning " green " , also means " rank " and " smelly " and holds other unpleasant associations .

The Celtic languages had a term for " blue / green / grey " , Proto-Celtic * glasto- , which gave rise to Old Irish glas " green , grey " and to Welsh glas " blue " . This word is cognate with the Ancient Greek γλαυκός " bluish green " , contrasting with χλωρός " yellowish green " discussed above .

In modern Japanese , the term for green is 緑 , while the old term for " blue / green " , 青 (ao) now means " blue " . But in certain contexts , green is still conventionally referred to as 青 , as in blue traffic light (青信号 , ao shingō) and blue leaves (青葉 , aoba) , reflecting the absence of blue-green distinction in old Japanese (more accurately , the traditional Japanese color terminology grouped some shades of green with blue , and others with yellow tones) .

The Persian language is traditionally lacking a black / blue / green distinction . The Persian word سبز sabz can mean " green " , " black " , or " dark " . Thus , Persian erotic poetry , dark-skinned women are addressed as sabz-e-eh , as in phrases like سبزه سبزه سبزه sabz-e-eh gandom-e-gun (literally " dark wheat colored ") or سبزه سبزه sabz-e-eh malih (" a dark beauty ") . Similarly , in Sudanese Arabic , dark-skinned people are described as akhṣar , the term which in Standard Arabic stands unambiguously for " green " .

== In nature and culture ==

== In science ==

== Color vision and colorimetry ==

In optics , the perception of green is evoked by light having a spectrum dominated by energy with a

wavelength of roughly 495 ? 570 nm . The sensitivity of the dark @-@ adapted human eye is greatest at about 507 nm , a blue @-@ green color , while the light @-@ adapted eye is most sensitive about 555 nm , a yellow @-@ green ; these are the peak locations of the rod and cone (scotopic and photopic , respectively) luminosity functions .

The perception of greenness (in opposition to redness forming one of the opponent mechanisms in human color vision) is evoked by light which triggers the medium @-@ wavelength M cone cells in the eye more than the long @-@ wavelength L cones . Light which triggers this greenness response more than the yellowness or blueness of the other color opponent mechanism is called green . A green light source typically has a spectral power distribution dominated by energy with a wavelength of roughly 487 ? 570 nm .

Human eyes have color receptors known as cone cells , of which there are three types . In some cases , one is missing or faulty , which can cause color blindness , including the common inability to distinguish red and yellow from green , known as deuteranopia or red ? green color blindness . Green is restful to the eye . Studies show that a green environment can reduce fatigue .

In the subtractive color system , used in painting and color printing , green is created by a combination of yellow and blue , or yellow and cyan ; in the RGB color model , used on television and computer screens , it is one of the additive primary colors , along with red and blue , which are mixed in different combinations to create all other colors . On the HSV color wheel , also known as the RGB color wheel , the complement of green is magenta ; that is , a color corresponding to an equal mixture of red and blue light (one of the purples) . On a traditional color wheel , based on subtractive color , the complementary color to green is considered to be red .

In additive color devices such as computer displays and televisions , one of the primary light sources is typically a narrow @-@ spectrum yellowish @-@ green of dominant wavelength ~ 550 nm ; this " green " primary is combined with an orangish @-@ red " red " primary and a purplish @-@ blue " blue " primary to produce any color in between ? the RGB color model . A unique green (green appearing neither yellowish nor bluish) is produced on such a device by mixing light from the green primary with some light from the blue primary .

= = = Lasers = = =

Lasers emitting in the green part of the spectrum are widely available to the general public in a wide range of output powers . Green laser pointers outputting at 532 nm (563 @. @ 5 THz) are relatively inexpensive compared to other wavelengths of the same power , and are very popular due to their good beam quality and very high apparent brightness . The most common green lasers use diode pumped solid state (DPSS) technology to create the green light . An infrared laser diode at 808 nm is used to pump a crystal of neodymium @-@ doped yttrium vanadium oxide (Nd : YVO4) or neodymium @-@ doped yttrium aluminium garnet (Nd : YAG) and induces it to emit 281 @. @ 76 THz (1064 nm) . This deeper infrared light is then passed through another crystal containing potassium , titanium and phosphorus (KTP) , whose non @-@ linear properties generate light at a frequency that is twice that of the incident beam (563 @. @ 5 THz) ; in this case corresponding to the wavelength of 532 nm (" green ") . Other green wavelengths are also available using DPSS technology ranging from 501 nm to 543 nm . Green wavelengths are also available from gas lasers , including the helium ? neon laser (543 nm) , the Argon @-@ ion laser (514 nm) and the Krypton @-@ ion laser (521 nm and 531 nm) , as well as liquid dye lasers . Green lasers have a wide variety of applications , including pointing , illumination , surgery , laser light shows , spectroscopy , interferometry , fluorescence , holography , machine vision , non @-@ lethal weapons and bird control .

As of mid @-@ 2011 , direct green laser diodes at 510 nm and 500 nm have become generally available , although the price remains relatively prohibitive for widespread public use . The efficiency of these lasers (peak 3 %) compared to that of DPSS green lasers (peak 35 %) may also be limiting adoption of the diodes to niche uses .

= = = Pigments , food coloring and fireworks = = =

Many minerals provide pigments which have been used in green paints and dyes over the centuries . Pigments , in this case , are minerals which reflect the color green , rather than emitting it through luminescent or phosphorescent qualities . The large number of green pigments makes it impossible to mention them all . Among the more notable green minerals , however is the emerald , which is colored green by trace amounts of chromium and sometimes vanadium . Chromium (III) oxide (Cr_2O_3) , is called chrome green , also called viridian or institutional green when used as a pigment . For many years , the source of amazonite 's color was a mystery . Widely thought to have been due to copper because copper compounds often have blue and green colors , the blue @-@ green color is likely to be derived from small quantities of lead and water in the feldspar . Copper is the source of the green color in malachite pigments , chemically known as basic copper (II) carbonate .

Verdigris is made by placing a plate or blade of copper , brass or bronze , slightly warmed , into a vat of fermenting wine , leaving it there for several weeks , and then scraping off and drying the green powder that forms on the metal . The process of making verdigris was described in ancient times by Pliny . It was used by the Romans in the murals of Pompeii , and in Celtic medieval manuscripts as early as the 5th century AD . It produced a blue @-@ green which no other pigment could imitate , but it had drawbacks ; it was unstable , it could not resist dampness , it did not mix well with other colors , it could ruin other colors with which it came into contact . , and it was toxic . Leonardo da Vinci , in his treatise on painting , warned artists not to use it . It was widely used in miniature paintings in Europe and Persia in the 16th and 17th centuries . Its use largely ended in the late 19th century , when it was replaced by the safer and more stable chrome green . Viridian , also called chrome green , is a pigment made with chromium oxide dihydrate , was patented in 1859 . It became popular with painters , since , unlike other synthetic greens , it was stable and not toxic . Vincent van Gogh used it , along with Prussian blue , to create a dark blue sky with a greenish tint in his painting Cafe terrace at night .

Green earth is a natural pigment used since the time of the Roman Empire . It is composed of clay colored by iron oxide , magnesium , aluminum silicate , or potassium . Large deposits were found in the South of France near Nice , and in Italy around Verona , on Cyprus , and in Bohemia . The clay was crushed , washed to remove impurities , then powdered . It was sometimes called Green of Verona .

Mixtures of oxidized cobalt and zinc were also used to create green paints as early as the 18th century .

Cobalt green , sometimes known as Rinman 's green or Zinc Green , is a translucent green pigment made by heating a mixture of cobalt (II) oxide and zinc oxide . Sven Rinman , a Swedish chemist , discovered this compound in 1780 . Green chrome oxide was a new synthetic green created by a chemist named Pannetier in Paris in about 1835 . Emerald green was a synthetic deep green made in the 19th century by hydrating chrome oxide . It was also known as Guignet Green .

There is no natural source for green food colorings which has been approved by the US Food and Drug Administration . Chlorophyll , the E numbers E140 and E141 , is the most common green chemical found in nature , and only allowed in certain medicines and cosmetic materials . Quinoline Yellow (E104) is a commonly used coloring in the United Kingdom but is banned in Australia , Japan , Norway and the United States . Green S (E142) is prohibited in many countries , for it is known to cause hyperactivity , asthma , urticaria , and insomnia .

To create green sparks , fireworks use barium salts , such as barium chlorate , barium nitrate crystals , or barium chloride , also used for green fireplace logs . Copper salts typically burn blue , but cupric chloride (also known as " campfire blue ") can also produce green flames . Green pyrotechnic flares can use a mix ratio 75 : 25 of boron and potassium nitrate . Smoke can be turned green by a mixture : solvent yellow 33 , solvent green 3 , lactose , magnesium carbonate plus sodium carbonate added to potassium chlorate .

== = Biology == =

Green is common in nature , as many plants are green because of a complex chemical known as

chlorophyll , which is involved in photosynthesis . Chlorophyll absorbs the long wavelengths of light (red) and short wavelengths of light (blue) much more efficiently than the wavelengths that appear green to the human eye , so light reflected by plants is enriched in green . Chlorophyll absorbs green light poorly because it first arose in organisms living in oceans where purple halobacteria were already exploiting photosynthesis . Their purple color arose because they extracted energy in the green portion of the spectrum using bacteriorhodopsin . The new organisms that then later came to dominate the extraction of light were selected to exploit those portions of the spectrum not used by the halobacteria .

Animals typically use the color green as camouflage , blending in with the chlorophyll green of the surrounding environment . Green animals include , especially , amphibians , reptiles , and some fish , birds and insects . Most fish , reptiles , amphibians , and birds appear green because of a reflection of blue light coming through an over @-@ layer of yellow pigment . Perception of color can also be affected by the surrounding environment . For example , broadleaf forests typically have a yellow @-@ green light about them as the trees filter the light . Turacoverdin is one chemical which can cause a green hue in birds , especially . Invertebrates such as insects or mollusks often display green colors because of porphyrin pigments , sometimes caused by diet . This can causes their feces to look green as well . Other chemicals which generally contribute to greenness among organisms are flavins (lychochromes) and hemanovadin . Humans have imitated this by wearing green clothing as a camouflage in military and other fields . Substances that may impart a greenish hue to one 's skin include biliverdin , the green pigment in bile , and ceruloplasmin , a protein that carries copper ions in chelation .

The green huntsman spider is green due to the presence of bilin pigments in the spider 's hemolymph (circulatory system fluids) and tissue fluids . It hunts insects in green vegetation , where it is well camouflaged .

= = = Green eyes = = =

There is no green pigment in green eyes ; like the color of blue eyes , it is an optical illusion ; its appearance is caused by the combination of an amber or light brown pigmentation of the stroma , given by a low or moderate concentration of melanin , with the blue tone imparted by the Rayleigh scattering of the reflected light . Green eyes are most common in Northern and Central Europe . They can also be found in Southern Europe , West Asia , Central Asia , and South Asia . In Iceland , 89 % of women and 87 % of men have either blue or green eye color . A study of Icelandic and Dutch adults found green eyes to be much more prevalent in women than in men . Among European Americans , green eyes are most common among those of recent Celtic and Germanic ancestry , about 16 % .

= = In history and art = =

= = = Prehistoric history = = =

Neolithic cave paintings do not have traces of green pigments , but neolithic peoples in northern Europe did make a green dye for clothing , made from the leaves of the birch tree. it was of very poor quality , more brown than green . Ceramics from ancient Mesopotamia show people wearing vivid green costumes , but it is not known how the colors were produced .

= = = Ancient history = = =

In Ancient Egypt green was the symbol of regeneration and rebirth , and of the crops made possible by the annual flooding of the Nile . For painting on the walls of tombs or on papyrus , Egyptian artists used finely @-@ ground malachite , mined in the west Sinai and the eastern desert- A paintbox with malachite pigment was found inside the tomb of King Tutankhamun . They also used

less expensive green earth pigment , or mixed yellow ochre and blue azurite . To dye fabrics green , they first colored them yellow with dye made from saffron and then soaked them in blue dye from the roots of the woad plant .

For the ancient Egyptians , green had very positive associations . The hieroglyph for green represented a growing papyrus sprout , showing the close connection between green , vegetation , vigor and growth . In wall paintings , the ruler of the underworld , Osiris , was typically portrayed with a green face , because green was the symbol of good health and rebirth . Palettes of green facial makeup , made with malachite , were found in tombs . It was worn by both the living and dead , particularly around the eyes , to protect them from evil . Tombs also often contained small green amulets in the shape of scarab beetles made of malachite , which would protect and give vigor to the deceased . It also symbolized the sea , which was called the " Very Green . "

In Ancient Greece , green and blue were sometimes considered the same color , and the same word sometimes described the color of the sea and the color of trees . The philosopher Democritus described two different greens ; cloron , or pale green , and prasinon , or leek green . Aristotle considered that green was located midway between black , symbolizing the earth , and white , symbolizing water . However , green was not counted among of the four classic colors of Greek painting ; red , yellow , black and white , and is rarely found in Greek art .

The Romans had a greater appreciation for the color green ; it was the color of Venus , the goddess of gardens , vegetables and vineyards. The Romans made a fine green earth pigment , which was widely used in the wall paintings of Pompeii , Herculaneum , Lyon , Vaison @-@ la @-@ Romaine , and other Roman cities . They also used the pigment verdigris , made by soaking copper plates in fermenting wine . By the Second Century AD , the Romans were using green in paintings , mosaics and glass , and there were ten different words in Latin for varieties of green .

= = = Postclassical history = = =

In the Middle Ages and Renaissance , the color of clothing showed a person 's social rank and profession . Red could only be worn by the nobility , brown and gray by peasants , and green by merchants , bankers and the gentry and their families . The Mona Lisa wears green in her portrait , as does the bride in the Arnolfini portrait by Jan van Eyck .

Unfortunately for those who wanted or were required to wear green , there were no good vegetal green dyes which resisted washing and sunlight . Green dyes were made out of the fern , plantain , buckthorn berries , the juice of nettles and of leeks , the digitalis plant , the broom plant , the leaves of the fraxinus , or ash tree , and the bark of the alder tree , but they rapidly faded or changed color . Only in the 16th century was a good green dye produced , by first dyeing the cloth blue with woad , and then yellow with reseda luteola , also known as yellow @-@ weed .

The pigments available to painters were more varied ; monks in monasteries used use of verdigris , made by soaking copper in fermenting wine , to color medieval manuscripts . They also used finely @-@ ground malachite , which made a luminous green . They used green earth colors for backgrounds .

During the early Renaissance , painters such as Duccio di Buoninsegna learned to paint faces first with a green undercoat , then with pink , which gave the faces a more realistic hue . Over the centuries the pink has faded , making some of the faces look green .

= = = Modern history = = =

= = = In the 18th and 19th century = = =

The 18th and 19th century brought the discovery and production of synthetic green pigments and dyes , which rapidly replaced the earlier mineral and vegetable pigments and dyes . These new dyes were more stable and brilliant than the vegetable dyes , but some contained high levels of arsenic , and were eventually banned .

In the 18th and 19th century , green was associated with the romantic movement in literature and art . The French philosopher Jean @-@ Jacques Rousseau celebrated the virtues of nature , The German poet and philosopher Goethe declared that green was the most restful color , suitable for decorating bedrooms . Painters such as John Constable and Jean @-@ Baptiste @-@ Camille Corot depicted the lush green of rural landscapes and forests . Green was contrasted to the smoky grays and blacks of the Industrial Revolution .

The second half of the 19th century saw the use of green in art to create specific emotions , not just to imitate nature . One of the first to make color the central element of his picture was the American artist James McNeil Whistler , who created a series of paintings called " symphonies " or " noctures " of color , including " Symphony in gray and green ; The Ocean " between 1866 and 1872 .

The late nineteenth century also brought the systematic study of color theory , and particularly the study of how complementary colors such as red and green reinforced each other when they were placed next to each other . These studies were avidly followed by artists such as Vincent van Gogh . Describing his painting , The Night Cafe , to his brother Theo in 1888 , Van Gogh wrote : " I sought to express with red and green the terrible human passions . The hall is blood red and pale yellow , with a green billiard table in the center , and four lamps of lemon yellow , with rays of orange and green . Everywhere it is a battle and antithesis of the most different reds and greens . "

= = = In the 20th and 21st century = = =

In the 1980s green became a political symbol , the color of the Green Party in Germany and in many other European countries . It symbolized the environmental movement , and also a new politics of the left which rejected traditional socialism and communism . (See Politics section below .)

= = Symbolism and associations = =

= = = Safety and permission = = =

Green can communicate safety to proceed , as in traffic lights . Green and red were standardized as the colors of international railroad signals in the 19th century . The first traffic light , using green and red gas lamps , was erected in 1868 in front of the Houses of Parliament in London . It exploded the following year , injuring the policeman who operated it . In 1912 , the first modern electric traffic lights were put up in Salt Lake City , Utah . Red was chosen largely because of its high visibility , and its association with danger , while green was chosen largely because it could not be mistaken for red . Today green lights universally signal that a system is turned on and working as it should . In many video games , green signifies both health and completed objectives , opposite red .

= = = Nature , vivacity , and life = = =

Green is the color most commonly associated in Europe and the U.S. with nature , vivacity and life . It is the color of many environmental organizations , such as Greenpeace , and of the Green Parties in Europe . Many cities have designated a garden or park as a green space , and use green trash bins and containers . A green cross is commonly used to designate pharmacies in Europe .

In China , green is associated with the east , with sunrise , and with life and growth . In Thailand , the color green is consider auspicious for those born on a Wednesday day (light green for those born at night) .

= = = Springtime , freshness , and hope = = =

Green is the color most commonly associated in the U.S. and Europe with springtime , freshness , and hope . Green is often used to symbolize rebirth and renewal and immortality . In Ancient Egypt ;

the god Osiris , king of the underworld , was depicted as green @-@ skinned . Green as the color of hope is connected with the color of springtime ; hope represents the faith that things will improve after a period of difficulty , like the renewal of flowers and plants after the winter season .

= = = Youth and inexperience = = =

Green the color most commonly associated in Europe and the U.S. with youth . It also often is used to describe anyone young , inexperienced , probably by the analogy to immature and unripe fruit . Examples include green cheese , a term for a fresh , unaged cheese , and greenhorn , an inexperienced person .

= = = Calm , tolerance , and the agreeable = = =

Surveys also show that green is the color most associated with the calm , the agreeable , and tolerance . Red is associated with heat , blue with cold , and green with an agreeable temperature . Red is associated with dry , blue with wet , and green , in the middle , with dampness . Red is the most active color , blue the most passive ; green , in the middle , is the color of neutrality and calm , sometimes used in architecture and design for these reasons . Blue and green together symbolize harmony and balance .

= = = Jealousy and envy = = =

Green is often associated with jealousy and envy . The expression " green @-@ eyed monster " was first used by William Shakespeare in Othello : " it is the green @-@ eyed monster which doth mock the meat it feeds on . " Shakespeare also used it in the Merchant of Venice , speaking of " green @-@ eyed jealousy . "

= = = Love and sexuality = = =

Green today is not commonly associated in Europe and the United States with love and sexuality , but in stories of the medieval period it sometimes represented love and the base , natural desires of man . It was the color of the serpent in the Garden of Eden who caused the downfall of Adam and Eve . However , for the troubadours , green was the color of growing love , and light green clothing was reserved for young women who were not yet married .

In Persian and Sudanese poetry , dark @-@ skinned women , called " green " women , were considered erotic . The Chinese term for cuckold is " to wear a green hat . " This was because in ancient China , prostitutes were called " the family of the green lantern " and a prostitute 's family would wear a green headscarf .

In Victorian England , the color green was associated with homosexuality .

= = = Dragons , fairies , monsters , and devils = = =

In legends , folk tales and films , fairies , dragons , monsters , and the devil are often shown as green .

In the Middle Ages , the devil was usually shown as either red , black or green . Dragons were usually green , because they had the heads , claws and tails of reptiles .

Modern Chinese dragons are also often green , but unlike European dragons , they are benevolent ; Chinese dragons traditionally symbolize potent and auspicious powers , particularly control over water , rainfall , hurricane , and floods . The dragon is also a symbol of power , strength , and good luck . The Emperor of China usually used the dragon as a symbol of his imperial power and strength . The dragon dance is a popular feature of Chinese festivals .

In Irish folklore and English folklore , the color was sometimes was associated with witchcraft , and with faeries and spirits . The type of Irish fairy known as a leprechaun is commonly portrayed

wearing a green suit , though before the 20th century he was usually described as wearing a red suit .

= = Theater = =

In the theater and in films , green was often connected with horror or ghost stories , and with corpses . The earliest films of Frankenstein were in black and white , but in the poster for the 1935 version *The Bride of Frankenstein* , the monster had a green face . Actor Bela Lugosi wore green @-@ hued makeup for the role of Dracula in the 1927 ? 1928 Broadway stage production .

= = = Poison and sickness = = =

Like other common colors , green has several completely opposite associations . While it is the color most associated by Europeans and Americans with good health , it is also the color most often associated with toxicity and poison . There was a solid foundation for this association ; in the nineteenth century several popular paints and pigments , notably verdigris , vert de Schweinfurt and vert de Paris , were highly toxic , containing copper or arsenic . The intoxicating drink absinthe was known as " the green fairy " .

A green tinge in the skin is sometimes associated with nausea and sickness . The expression ' green at the gills ' means appearing sick . The color , when combined with gold , is sometimes seen as representing the fading of youth . In some Far East cultures the color green is used as a symbol of sickness and / or nausea .

= = = Social status , prosperity and the dollar = = =

Green in Europe and the United States is sometimes associated with status and prosperity . From the Middle Ages to the 19th century it was often worn by bankers , merchants country gentlemen and others who were wealthy but not members of the nobility . The benches in the House of Commons of the United Kingdom , where the landed gentry sat , are colored green .

In the United States green was connected with the dollar bill . Since 1861 , the reverse side of the dollar bill has been green . Green was originally chosen because it deterred counterfeiters , who tried to use early camera equipment to duplicate banknotes . Also , since the banknotes were thin , the green on the back did not show through and muddle the pictures on the front of the banknote . Green continues to be used because the public now associates it with a strong and stable currency .

One of the more notable uses of this meaning is found in *The Wonderful Wizard of Oz* . In this story is the Emerald City , where everyone wears tinted glasses which make everything look green . According to the populist interpretation of the story , the city ' s color is used by the author , L. Frank Baum , to illustrate the financial system of America in his day , as he lived in a time when America was debating the use of paper money versus gold .

= = On flags = =

The flag of Italy (1797) was modeled after the French tricolor . It was originally the flag of the Cisalpine Republic , whose capital was Milan ; red and white were the colors of Milan , and green was the color of the military uniforms of the army of the Cisalpine Republic . Other versions say it is the color of the Italian landscape , or symbolizes hope .

The flag of Brazil has a green field adapted from the flag of the Empire of Brazil . The green represented the royal family .

The flag of India was inspired by an earlier flag of the independence movement of Gandhi , which had a red band for Hinduism and a green band representing Islam , the second largest religion in India .

The flag of Pakistan symbolizes Pakistan 's commitment to Islam and equal rights of religious

minorities where the larger portion (3 : 2 ratio) of flag is dark green representing Muslim majority (98 % of total population) while a white vertical bar (3 : 1 ratio) at the mast representing equal rights for religious minorities and minority religions in country . The crescent and star symbolizes progress and bright future respectively .

The Flag of Bangladesh has a green field based on a similar flag used during the Bangladesh Liberation War of 1971 . It consists of a red disc on top of a green field . The red disc represents the sun rising over Bengal , and also the blood of those who died for the independence of Bangladesh . The green field stands for the lushness of the land of Bangladesh .

Green is one of the three colors (along with red and black , or red and gold) of Pan @-@ Africanism . Several African countries thus use the color on their flags , including Nigeria , South Africa , Ghana , Senegal , Mali , Ethiopia , Togo , Guinea , Benin , and Zimbabwe . The Pan @-@ African colors are borrowed from the Ethiopian flag , one of the oldest independent African countries . Green on some African flags represents the natural richness of Africa .

Many flags of the Islamic world are green , as the color is considered sacred in Islam (see below) . The flag of Hamas , as well as the flag of Iran , is green , symbolizing their Islamist ideology . The 1977 flag of Libya consisted of a simple green field with no other characteristics . It was the only national flag in the world with just one color and no design , insignia , or other details . Some countries used green in their flags to represent their country 's lush vegetation , as in the flag of Jamaica , and hope in the future , as in the flags of Portugal and Nigeria . The green cedar of Lebanon tree on the Flag of Lebanon officially represents steadiness and tolerance .

Green is a symbol of Ireland , which is often referred to as the " Emerald Isle " . The color is particularly identified with the republican and nationalist traditions in modern times . It is used this way on the flag of the Republic of Ireland , in balance with white and the Protestant orange . Green is a strong trend in the Irish holiday St. Patrick 's Day .

= = In politics = =

The first recorded green party was a political faction in Constantinople during the 6th century Byzantine Empire. which took its name from a popular chariot racing team . They were bitter opponents of the blue faction , which supported Emperor Justinian I and which had its own chariot racing team . In 532 AD rioting between the factions began after one race , which led to the massacre of green supporters and the destruction of much of the center of Constantinople . (See Nika Riots) .

Green was the traditional color of Irish nationalism , beginning in the 17th century . The green harp flag , with a traditional gaelic harp , became the symbol of the movement . It was the banner of the Society of United Irishmen , which organized the Irish Rebellion of 1798 , calling for Irish independence . The uprising was suppressed with great bloodshed by the British army . When Ireland achieved independence in 1922 , green was incorporated into the national flag .

In the 1970s green became the color of the third biggest Swiss Federal Council political party , the Swiss People 's Party SVP . The ideology is Swiss nationalism , national conservatism , right @-@ wing populism , economic liberalism , agrarianism , isolationism , euroscepticism . The SVP was founded on September 22 , 1971 and has 90 @,@ 000 members .

In the 1980s green became the color of a number of new European political parties organized around an agenda of environmentalism . Green was chosen for its association with nature , health , and growth . The largest green party in Europe is Alliance ' 90 / The Greens (German : Bündnis 90 / Die Grünen) in Germany , which was formed in 1993 from the merger of the German Green Party , founded in West Germany in 1980 , and Alliance 90 , founded during the Revolution of 1989 ? 1990 in East Germany . In the 2009 federal elections , the party won 10 @.@ 7 % of the votes and 68 out of 622 seats in the Bundestag .

Green parties in Europe have programs based on ecology , grassroots democracy , nonviolence , and social justice . Green parties are found in over one hundred countries , and most are members of the Global Green Network .

Greenpeace is a non @-@ governmental environmental organization which emerged from the anti

@-@ nuclear and peace movements in the 1970s . Its ship , the Rainbow Warrior , frequently tried to interfere with nuclear tests and whaling operations . The movement now has branches in forty countries . The Australian Greens party was founded in 1992 . At the 2010 federal election , the party received 13 percent of the vote (more than 1 @.@ 6 million votes) in the Senate , a first for any Australian minor party .

Green is the color associated with Puerto Rico 's Independence Party , the smallest of Puerto Rico 's three major political parties and which advocates for Puerto Rican independence from the United States .

= = In religion = =

Green is the traditional color of Islam . According to tradition , the robe and banner of Muhammad were green. and according to the Koran (XVIII , 31 and LXXVI , 21) , those fortunate enough to live in paradise wear green silk robes . Muhammad is quoted in a hadith as saying that " water , greenery , and a beautiful face " were three universally good things .

Al @-@ Khidr (" The Green One ") , was an important Qur 'anic figure who was said to have met and traveled with Moses . He was given that name because of his role as a diplomat and negotiator . Green was also considered to be the median color between light and obscurity .

Roman Catholic and more traditional Protestant clergy wear green vestments at liturgical celebrations during Ordinary Time . In the Eastern Catholic Church , green is the color of Pentecost . Green is one of the Christmas colors as well , possibly dating back to pre @-@ Christian times , when evergreens were worshiped for their ability to maintain their color through the winter season . Romans used green holly and evergreen as decorations for their winter solstice celebration called Saturnalia , which eventually evolved into a Christmas celebration . In Ireland and Scotland especially , green is used to represent Catholics , while orange is used to represent Protestantism . This is shown on the national flag of Ireland .

= = In gambling and sports = =

Gambling tables in a casino are traditionally green . The tradition is said to have started in gambling rooms in Venice in the 16th century .

Billiards tables are traditionally covered with green woolen cloth . The first indoor tables , dating to the 15th century , were colored green after the grass courts used for the similar lawn games of the period .

Green was the traditional color worn by hunters in the 19th century , particularly the shade called hunter green . In the 20th century most hunters began wearing the color olive drab , a shade of green , instead of hunter green .

Green is a common color for sports teams . Well @-@ known teams include A.S. Saint @-@ Étienne of France , known as Les Verts (The Greens) . The Mexico national football team has a green uniform .

British racing green was the international motor racing color of Britain from the early 1900s until the 1960s , when it was replaced by the colors of the sponsoring automobile companies .

A green belt in karate , taekwondo and judo symbolizes a level of proficiency in the sport .

= = Idioms and expressions = =

Having a green thumb . To be passionate about or talented at gardening . The expression was popularized beginning in 1925 by a BBC gardening program .

Greenhorn . Someone who is inexperienced .

Green @-@ eyed monster . Refers to jealousy . (See section above on jealousy and envy) .

Greenmail . A term used in finance and corporate takeovers . It refers to the practice of a company paying a high price to buy back shares of its own stock to prevent an unfriendly takeover by another company or businessman . It originated in the 1980s on Wall Street , and originates from the green

of dollars .

Green room . A room at a theater where actors rest when not onstage , or a room at a television studio where guests wait before going on @-@ camera . It originated in the late 17th century from a room of that color at the Theatre Royal , Drury Lane in London .

Greenwashing . Environmental activists sometimes use this term to describe the advertising of a company which promotes its positive environmental practices to cover up its environmental destruction .

Green around the gills . A description of a person who looks physically ill .

Going green . An expression commonly used to refer to preserving the natural environment , and participating in activities such as recycling materials .