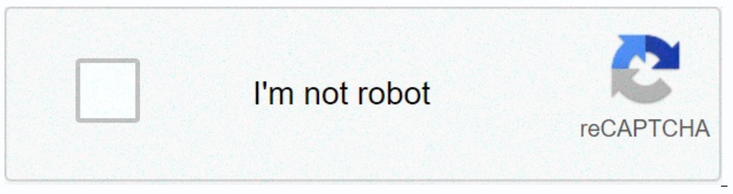

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Melanin what makes black people black pdf

Human skin color A woman with dark skin dark skin is a type of human skin color that are rich in melanin pigments, especially eumelanin. [1] [2] [3] People with very dark skin are often referred to as black people,[4] although this use may be ambiguous in some countries where it is also used to refer specifically to different ethnic groups or populations. [5] [6] [7] [8] Dark skin evolution is believed to have begun approximately 1.2 million years ago,[9] in early open-skin dhominid species after moving from the equatorial rainforest to sunny saunas. In the heat of the saunas, better cooling mechanisms were needed, which were achieved through the loss of body hair and the development of more effective sweating. The loss of body hair led to the development of dark skin pigmentation, which acted as a natural selection mechanism against folic acid depletion and, to a lesser extent, DNA damage. The main factor that contributed to the evolution of dark skin pigmentation was the breakdown of folic acid in response to ultraviolet radiation; the relationship between the breakdown of folic acid induced by ultraviolet radiation and the reduced capacity as a failure of normal embryogenesis and spermatogenesis led to the selection of dark skin pigmentation. By the time modern Homo sapiens evolved, all humans had dark skin. [3] [10] [11] [12] [13] [14] [15] People with dark skin pigmentation have melanin-rich skin (especially eumelanin) and have several melanosomes that provide superior protection against the harmful effects of ultraviolet radiation. This helps the body maintain its folic acid reserves and protects against DNA damage. [3] [16] Dark-skinned people living in high latitudes with light sunlight are at increased risk – especially in winter – of vitamin D deficiency. As a consequence of vitamin D deficiency, they are at a higher risk of developing rickets, numerous types of cancer, and possibly cardiovascular disease and low immune system activity. [3] [17] However, some recent studies have questioned whether thresholds indicating vitamin D deficiency in people with light skin are relevant for people with dark skin, as they have found that, on average, dark-skinned people have a higher bone density and a lower risk of fractures than people with dark skin , with the same levels of vitamin D. This is possibly attributed to the lower presence of vitamin D binding agents (and therefore its higher bioavailability) in dark-skined. [18] [19] The overall distribution of generally dark-skinpopulations is strongly correlated with the high levels of ultraviolet radiation in the regions inhabited by them. These populations, with the exception of indigenous Tasmanians, live almost exclusively near the equator, in tropical areas with bright sunlight: Australia, Melanesia, New Guinea, South Asia and Africa. Studies on these populations dark skin is a retention of the pre-existing state of high uvr adaptation of modern humans before migration from outside Africa and not a subsequent evolutionary adaptation. [20] [21] Due to mass migration and increased mobility of people between geographic regions in the recent past, dark-skined populations are found worldwide today. [3] [22] [23] Evolution Due to natural selection, people who lived in areas of intense sunlight developed a dark skin color to protect against ultraviolet (UV) light, mainly to protect their body from folic acid depletion. Evolutionary pigmentation of the skin was caused by ultraviolet radiation from the sun. As hominids gradually lost their fur between 1.2 and 4 million years ago to allow for better cooling through sweating, their bare and slightly pigmented skin was exposed to sunlight. In the tropics, natural selection has favoured dark-skin-colored human populations as high levels of skin pigmentation protected against the harmful effects of sunlight. The reflection of the skin of indigenous peoples (the amount of sunlight reflected by the skin) and the actual UV radiation in a given geographical area is highly correlated, which supports this idea. Genetic evidence also supports this concept, demonstrating that about 1.2 million years ago there was a strong evolutionary pressure that acted on the development of dark skin pigmentation in the early members of the genus Homo. [24] The effect of sunlight on folic acid levels was crucial in the development of dark skin. [3] The Savanes of East Africa, where most of the hominid evolution of dark skin may have occurred The first primate ancestors of modern humans most likely had light skin, like the closest modern relative — the chimpanzee. [26] About 7 million years ago, descendants of humans and chimpanzees deviated, and between 4.5 and 2 million years ago, people from the early period moved from rainforests to East Africa saunas. [22] [27] They not only had to cope with more intense sunlight, but they had to develop a better cooling system. It was harder to get food in hot savanes and as mammals brains are prone to overheating-5 or 6 °C temperature increase can lead to heatstroke-so there was a need for the development of better thermal regulation. The solution was sweating and loss of body hair. [22] Sweat dissipates heat by evaporation. The first humans, like chimpanzees now, had few sweat glands, and most were located in the palms of the hand and in the soles of the feet. Sometimes people with multiple glands were born These people could seek food and hunt for longer periods before being forced to return to nuances. The more they could look, the more and healthier the offspring they could produce, and the greater the chances of transmitting their genes to the abundant sweat glands. With less hair, sweat could evaporate more easily and cool people's bodies faster. a few years later, the first humans had weak body hair and more than 2 million sweat glands in their body. [22] [28] [29] Hairless skin, however, is particularly vulnerable to being damaged by ultraviolet light and this has proven to be a problem for people living in areas with intense UV radiation, and the evolutionary result has been the development of dark skin as protection. Scientists have long assumed that humans evolved melanin to absorb or spread harmful solar radiation. Some researchers have assumed that melanin protects against skin cancer. While high UV radiation can cause skin cancer, the development of cancer usually occurs after childbearing age. Because natural selection favours people with reproductively successful traits, skin cancer has had little effect on the evolution of dark skin. Previous hypotheses have suggested that sunburnt nipples have prevented breastfeeding, but a light tan is enough to protect mothers from this problem. [22] [30] [31] [32] A 1978 study examined the effect of sunlight on folic acid levels – a vitamin B complex. Low levels of folic acid are correlated with neural tube defects, such as anencephaly and spina bifida. UV rays can remove folic acid, which is important for the development of healthy fetuses. In these abnormalities children are born with an incomplete brain or spinal cord. Nina Jablonski, professor of anthropology and expert in the evolution of human skin staining,[33] found several cases in which mothers' visits to tanning studios were linked to neural tube defects at the beginning of pregnancy. She also found that folate was crucial for sperm development; some male contraception drugs are based on inhibition of folic acid. Folate was found to have been the driving force behind the evolution of dark skin. [3] [20] While humans were dispersing from equatorial Africa to low uvr areas and higher altitudes somewhere between 120,000 and 65,000 years ago, dark skin was a disadvantage. [34] [35] Populations with mild skin pigmentation evolved into climates with sunlight. Mild skin pigmentation protects against vitamin D deficiency. It is known that dark-skinned people who have moved to limited sunlight climates can develop conditions related to vitamin D, such as rickets, and various forms of cancer. [3] [36] Previous hypotheses The main hypotheses that have been presented throughout history to explain Dark skin coloration refers to increased mortality due to skin cancer, increased attitude as a result of protection against sunburn and increased benefits due to the antibacterial properties of eumelanin. [3] Pigmented skin, rich in eumelanin, protects against DNA damage caused by sunlight. [37] This is associated with lower rates of skin cancer among dark-skin populations. [38] [39] [40] [41] [42] [42] The presence of feomelanin in mild skin increases oxidative stress in melanocytes, and this combined with the limited ability of fehomelanin to absorb UVR contributes to higher rates of skin cancer among people with open skin. [43] The harmful effect of UVR on DNA structure and increased risk of skin cancer is widely recognized. [24] [44] [45] [46] [47] [47] However, these cancers usually affect people at the end or after their reproductive career and could not have been the evolutionary reason behind the development of dark skin pigmentation. [24] [31] Of all major types of skin cancer, only malignant melanoma has a major effect in a person's reproductive age. Melanoma mortality rates were very low (less than 5 in 100,000) before the mid-20th century. It has been argued that low melanoma mortality rates during reproductive age may not be the main reason behind the development of dark skin pigmentation. [32] Studies have found that serious sunburn could not affect sweat gland function and thermoregulation. There are no data or studies that claim that sunburn can cause such serious damage that it can affect reproductive success. [3] Another group of hypotheses claimed that dark skin pigmentation developed as antibacterial protection against tropical infectious diseases and parasites. Although it is true that eumelanin has antibacterial properties, its importance is secondary to physical adsorption (physisorption) to protect against UVR-induced damage. This hypothesis is not consistent with the evidence that most of the evolution of hominids took place in the environments of the savane and not in the rainforests. [48] People living in warm and sunny environments have darker skin than people living in wet and cloudy environments. [35] The antimicrobial hypothesis also does not explain why some populations (such as Inuit or Tibetans) living far from the tropics and exposed to high UVRs have darker skin pigmentation than surrounding populations. [3] Biochemistry and genetics Dark-skind people have large amounts of melanin found in their skin. Melanin is derived from amino acid tyrosine. Eumelanin is the dominant form of melanin found in human skin. Eumelanin protects tissues and DNA from radiation damage to UV light. Melanin is produced in specialized cells called melanocytes, which are found at the lowest level of the epidermis. [49] Melanin is produced inside small membrane packs called melanosomes. People with natural dark skin have melanosomes that are crowded, large and full of eumelanin. [50] [51] A four-fold difference in dark skin provides seven to eight times protection against DNA damage,[51] but even the darkest skin color cannot protect against all DNA damage. [3] Dark skin provides excellent UVR protection due to its content of eumelanin, eumelanin, of large melanosomes, and because eumelanin can be mobilized more quickly and brought to the surface of the skin from the depths of the epidermis. [3] For the same region of the body, people with light and dark skin have a similar number of melanocytes (there are considerable variations between different regions of the body), but pigment-containing organelles, called melanosomes, are larger and more

numerous in people with dark skin. Keratocytes in dark skin cocultivated with melanocytes give rise to a melanosome distribution pattern characteristic of dark skin. [52] [53] Melanosomes are not aggregated in pigmented skin in the dark compared to slightly pigmented skin. Thanks to the highly melanized melanosomes of dark pigmented skin, it can absorb more energy from UVRs and thus provide better protection against sunburn and UV rays of absorption and dispersion. [24] Dark pigmented skin protects against direct and indirect DNA damage. Photodegration occurs when melanin absorbs photons. Recent research suggests that the photoprotective effect of dark skin is increased by the fact that melanin can capture free radicals, such as hydrogen peroxide, which are created by the interaction of UVR and skin layers. [24] Highly pigmented melanocytes have a greater ability to divide after ultraviolet irradiation, suggesting that they receive less damage to their DNA. [24] Despite this, medium-wave ultraviolet radiation (UVB) harms the immune system even for people with darker skin due to its effect on Langerhans cells. [24] The corneal layer of people with dark or heavily tanned skin is more condensed and contains more cornified cell layers than in lightly pigmented humans. These dark skin qualities improve the skin barrier protection function. [24] Although pigmented skin in the dark absorbs about 30 to 40% more sunlight than lightly pigmented skin, dark skin does not increase the body's internal heat intake under intense solar radiation conditions. Solar radiation heats the surface of the body and not the interior. In addition, this amount of heat is negligible compared to the heat produced when muscles are actively used during exercise. Regardless of skin color, people have excellent ability to dissipate heat through sweating. [35] Half of the solar radiation that reaches the Earth's surface is in the form of infrared light and is similarly absorbed, regardless of skin coloration. [24] In people with dark skin, tanning occurs with the dramatic mobilisation of melanin up into the epidermis continues with the increase in melanin production. This explains that dark-skined people become visibly darker after one or two weeks of sun exposure, and then lose their color after months of staying out of the sun. People with dark pigment tend to show fewer signs of aging in their skin than slightly pigmented because their skin protects them from most photoaging. [35] Skin color is a polygenic trait, which means that several different genes are involved in determining a specific phenotype. Many genes work together in complex, additive and non-additive combinations to determine an individual's skin color. Skin color variations are normally distributed from light to dark, so it is common for polygenic features. [54] [55] Data collected from studies on the MC1R gene have shown that there is a lack of diversity in African dark-skinned samples in the gene allecompared to non-African populations. This is remarkable given that the number of polymorphisms for almost all genes in the human genetic background is higher in African samples than in any other geographical region. So while the MC1Rf gene does not contribute significantly to the variation in skin color around the world, the allall found in high levels in African populations probably protects against UV radiation and was probably important in the evolution of dark skin. [56] [57] Skin colour appears to vary mainly due to variations in a number of high-effect genes, as well as other low-effect genes (TYR, TYRP1, OCA2, SLC45A2, SLC24A5, MC1R, KITLG and SLC24A4). This does not take into account the effects of the epistle, which would likely increase the number of related genes. [58] Variations in the SLC24A5 gene account for 20-25% of the variation between dark-skinand populations and light in Africa,[59] and appear to have occurred as recently as in the last 10,000 years. [60] Polymorphism Ala111Thr or rs1426654 in the SLC24A5 gene coding region reaches fixation in Europe and is also common among populations in North Africa, the Horn of Africa, West Asia, Central Asia and South Asia. [61] [62] [63] Health Implications Skin Pigmentation is an evolutionary adaptation at different UVR levels around the world. As a consequence, there are many health implications that are the product of the population movements of people's skin pigmentation certain environments with different levels of UVR. [3] Modern humans are often ignorant of their evolutionary history at their own peril. [3] Cultural practices that increase problems of conditions among dark-skinned populations are traditional clothing and diet low in vitamin D. [64] The advantages of dark skin pigmentation in light environments, dark pigmented people living in environments with high sunlight are to the advantage of the large amounts of melanin produced in their skin. Dark pigmentation protects against DNA damage and absorbs the correct amounts of UV radiation needed by the body, as well as protects against folic acid depletion. is a water-soluble complex with vitamin B, which occurs naturally in green vegetables, leafy, whole grains, and citrus fruits. Women need folic acid to maintain healthy eggs, to properly implant eggs, and to placenta after fertilization. Folate is necessary for normal sperm production in men. In addition, folate is essential for fetal growth, organ development, and neural tube development. Folate decomposes into high-intensity UVRs. [35] Women with dark skin suffer the lowest level of neural tube defects. [35] [65] Folate plays an important role in DNA production and gene expression. It is essential for maintaining the appropriate levels of amino acids that make up proteins. Folate is used in the formation of myelin, the tea that covers nerve cells and makes it possible to quickly send electrical signals. Folate also plays an important role in the development of many neurotransmitters, for example, serotonin that regulates appetite, sleep, and mood. Serum folate is broken down by UV radiation or alcohol consumption. [35] Because the skin is protected from melanin, pigmented people have a lower chance of developing skin cancer and conditions related to folic acid deficiency, such as neural tube defects. [3] The disadvantages of dark skin pigmentation in mild rickets environments is a condition associated with dark skin. People with dark skin living in low-light environments have been recorded to be very sensitive to vitamin D deficiency due to reduced vitamin D synthesis. A person with dark skin requires about six times more UVB than lightly pigmented people. This is not a problem near the equator; however, it may be a problem at higher latitudes. [35] For people with dark skin in low UVR climates, it can take about two hours to produce the same amount of vitamin D as people with light skin produce in 15 minutes. People with dark skin who have a high body mass index and have not taken vitamin D supplements have been associated with vitamin D deficiency. [66] [67] Vitamin D plays an important role in regulating the human immune system, and chronic vitamin D deficiencies can make people sensitive to certain types of cancer and many types of infectious diseases. [35] [68] [69] Vitamin D deficiency increases the risk of developing tuberculosis five times and also contributes to the development of breast, prostate and colorectal cancer. [70] The most common disease that follows vitamin D deficiency is rickets, softening bones in children that can lead to fractures and deformity. Rahitism is caused by the reduced synthesis of vitamin D, which causes an absence of vitamin D, which then causes dietary calcium not to be absorbed properly. This disease in the past has been common among Americans with dark from the southern part of the United States, which migrated northin low sunlight environments. The popularity of sugary drinks and the decrease in time spent outside have contributed to a significant increase in developing rickets. Female pelvis deformities related to severe rickets affect normal birth, leading to higher mortality of the child, mother or both. Both. D deficiency is most common in regions with low sunlight, especially in winter. [71] Chronic deficiencies in vitamin D can also be related to the breast, prostate, colon, ovarian, and possibly other cancers. [22] [72] [73] [74] The relationship between cardiovascular disease and vitamin D deficiency also suggests a link between heart muscle health and smooth heart disease. [75] [76] Low vitamin D levels were also linked to impaired immune system and brain functions. [3] [77] [78] In addition, recent studies have linked vitamin D deficiency to autoimmune diseases, hypertension, multiple sclerosis, diabetes and the incidence of memory loss. Outside the UVR tropics must penetrate through a thicker layer of atmosphere, leading to most of the UVB intermediate wavelength reflected or destroyed along the way; for this reason there is less potential for vitamin D biosynthesis in regions far from the equator. A higher amount of vitamin D for people with dark skin living in regions with low levels of sunlight are advised by physicians to follow a vitamin D-rich diet or take vitamin D supplements,[22][79][80][81][82][83] although there is recent evidence that people with dark skin are able to process vitamin D more effectively than people with lighter skin , so they may have a lower threshold of sufficiency. [19] Geographical Distribution There is a correlation between the geographical distribution of UV radiation (UVR) and the distribution of skin pigmentation worldwide. Areas with larger amounts of UVRs have darker skin populations, generally located closer to the equator. Areas that are further away from the equator and generally closer to the poles have a lower concentration of UVRs and contain populations with lighter skin. This is the result of human evolution that has contributed to the variable content of melanin in the skin to adapt to certain environments. A higher percentage of dark-skined people are found in the southern hemisphere because the distribution of latitudinal land mass is disproportionate. [24] The current distribution of skin color variation does not fully reflect the correlation between intense UVR and dark skin pigmentation due to mass migration and the movement of peoples across continents in the recent past. [24] Dark-skin populations living in Africa, Australia, Melanesia, Papua New Guinea and South Asia live in some of the areas with the highest UV radiation in the world and have developed very dark skin pigmentation as protection against harmful sunlight. [22] [24] Evolution has limited people with darker skin to tropical latitudes, especially in non-drilled regions, where radiation from the sun are usually the most intense. Different dark-skinpopulations are not necessarily genetically related. [84] Prior to modern mass migration, it was claimed that the majority of people with dark pigment lived at more than 20° Equator. [85] The natives of Buka and Bougainville in northern Solomon Islands in Melanesia, and the Chopi people of Mozambique in the southeastern coast of Africa have darker skin than other surrounding populations. (Native people in Bougainville, Papua New Guinea, have some of the darkest skin pigmentation in the world.) Although these people are widely separated, they share similar physical environments. In both regions, they face a very high uvr exposure from the cloudless sky near the equator, which is reflected from water or sand. The water reflects, depending on the color, about 10 to 30% of the UVR that falls on it. [35] [86] People in these populations spend long hours fishing at sea. Since it is impossible to wear extensive clothing in a watery environment, culture and technology do little to buffer uvr exposure. The skin takes a huge amount of ultraviolet radiation. These populations are probably near or dark that human skin can achieve. [35] More recent research has found that human populations over the past 50,000 years have changed from dark skin to light skin and vice versa. Just 100-200 generations ago, the ancestors of most people living today probably also lived in a different place and had a different skin color. According to Nina Jablonski, modern dark pigment populations in South India and Sri Lanka are an example of this, after their ancestors migrated from areas much further north. Scientists initially believed that such pigmentation changes occurred relatively slowly. However, researchers have since observed that changes in skin coloring can happen in as little as 100 generations (~2500 years) with no necessary intermarriage. The speed of change is also affected by clothing, which tends to slow it down. [87] Australia A dark-skined Aboriginal Australian. Aborigines in Australia, like all humans, are descendants of African migrants, and their ancestors could have been among the first major groups to leave Africa some 50,000 years ago. Despite early migrations, genetic evidence has shown that the indigenous peoples of Australia are genetically very different from dark-skind populations in Africa and that they are more closely related to Eurasian populations. [88] The term black was originally applied as a reference to the pigmentation of the skin of Aboriginal people in Australia; today was embraced by Aboriginal activists as a term for common culture and identity, regardless of skin color. [89] [90] Melanesia Dark-skinted blond boy from Vanuatu, Melanesia Melanesia, a subregion in Oceania, whose name means black islands, have several islands that inhabited by people with dark skin pigmentation. The Melanesia Islands are located immediately north and northeast of Australia, as well as the east coast of Papua New Guinea. [91] West West Melanesia from New Guinea through the Solomon Islands were first colonized by humans about 40,000 to 29,000 years ago. [92] [93] In the world, blonde hair is extremely rare outside Europe and South-West Asia, especially among dark-skined populations. However, Melanesians are one of the dark-skinted human populations known to have natural blonde hair. [94] Buka boys from New Guinea buka from Bougainville Island, Papua New Guinea. The people of Bougainville have some of the darkest skin tones among people. New Guinean indigenous Papuans have dark skin pigmentation and have lived on the island for at least 40,000 years. Due to their similar phenotype and the location of New Guinea being on the migration route taken by indigenous Australians, it was generally thought that Papuans and Aboriginal Australians shared a common origin. However, a 1999 study failed to find clear indications of a single common genetic origin between the two populations, suggesting multiple waves of migration into Sahul with distinct ancestors. [96] Sub-Saharan Africa Women of South Sudan Sub-Saharan Africa is the region of Africa south of the Sahara, where a large number of dark-skined populations live. [97] [98] Dark-skind groups on the continent have the same receptor protein as Homo ergaster and Homo erectus. [99] According to scientific studies, African populations also have the greatest diversity of skin colours. [100] There are high levels of skin color variation between different populations in sub-Saharan Africa. These differences depend in part on the overall distance from the equator, illustrating the complex interactions of evolutionary forces that contributed to the geographical distribution of skin color at any time. [35] Due to frequently different progeny among dark-skin populations, the presence of dark skin is generally not a reliable genetic marker, including among groups in Africa. For example, Wilson et al. (2001) found that most of their Ethiopian samples showed closer genetic affinities with darker-skinned Armenians than dark-skinned haunted populations. [101] Mohammad (2006) also noted that their Somali samples were genetically more similar to Arab populations than to other African populations. [102] Fisherman from South Asia in Chennai, Tamil Nadu in southern India. South Asia has some of the greatest diversity of skin colors outside Africa. The skin color among Southern Indians is, on average, darker than Northern Indians. This is mainly due to weather conditions in South Asia - higher UV indices are in the south. Several genetic studies of South Asian populations in different regions have found a weak negative correlation between social status and skin darkness, represented by the melanin index. A study of caste populations in the Gangetic Plain found an association between the proportion of dark skin ranking in the caste hierarchy. The Dalites had, on average, the darkest skin. [104] A pan-Indian study of North Indian telugu and castelor found a similar correlation between skin color and caste association, related to the absence of rs1426654-A variant of the SLC245-A gene, but are also related to mutations that describe these variants. [105] Americas A Dark-skind Wayuu couple from Colombia. Many other indigenous peoples in tropical or subtropical areas of the Americas have dark skin. Relatively dark skin remains among the Inuit and other Arctic populations. A combination of high-protein diets and summer snow reflection have been speculated as favoring pigmented skin retention. [3] [100] [25] The first European colonial descriptions of North American populations include terms such as brown, tawny or olive, although some populations have also been described as light-skinned. [106] Most indigenous peoples in North America rank similarly to African and Oceanian populations in the presence of Ala111. [107] South American natives and MesoAmericans are also usually considered dark-skined, ranking similarly with African and ocean populations in the presence of Ala111. [107] High levels of ultraviolet radiation occur throughout the Andes region of Peru, Bolivia, Chile and Argentina. [108] Genetic testing shows significant Austronesian influence,[109] theorizing that the Amazonian Indians and Austronesians had moved away from the common ancestor. Scientists have tested ancient and current genome analysis of 49 central and South American Americans up to 11,000 years old in Belize, Brazil, Peru and the South Cone (Chile and Argentina). [110] Mother and daughter indigenous to the Urus Islands, Peru. An indigenous man from Peru. An indigenous man from Bolivia. Native fisherman of Lake Titicaca. Culture Main article: Discrimination based on skin color Preference or disadvantage for darker skin varied by geographic area and time. Today, darker skin is seen as fashionable and as a sign of well-being in some societies. This has led to the development of the tanning industry in several countries. However, in some countries, dark skin is not seen as highly desirable or indicative of the upper class, especially among women. [24] See also black people Brown (racial classification) Albinism Light skin References ^ dark-skinned Princeton University naturally has dark skin ^ Dark-skinned. thefreedictionary.com. 24 January 2017. a person or breed with dark skin ^ a b c d e f g h i j k l m n o p q r Muehlenbein, Michael (2010). Human evolutionary biology. Cambridge University Press. pp. 192–213. ^ Oxford. April 2010. Oxford University Press. belonging to or designating any human group with dark black skin (accessed on 6 August 2012). ^ Dictionary.com: black 3.a a member of any different dark-skined peoples 21.aespecially dark-skined peoples of Africa, Oceania or Australia. ^ Global Census. American Anthropological Association. Archived from the original on September 14, 2018. December 10, 2012. ^ Oxford Dictionaries. April 2010. Oxford University Press. of African or Black Australian Aboriginal origin (accessed 6 August 2012). ^ James, Mackers (November 8, 1828). Proclamation. Classified advertising. Treasury. 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