Rainer Guldin

Coloured technical images:

On the Role of Colour in Vilém Flusser's Work

> "But anyway, I wrote a draft in English expounding the idea
> and sent it to Disney in the United States […] I also sent an article to
> Germany suggesting the Green party change their name (because green
> after all is a boring and redundant colour) and become the party of the
> multi-coloured."

> Vilém Flusser in a video conference on May 7, 1988

Flusser's interdisciplinary philosophical approach juxtaposes different points of view and negates clear-cut borders by contaminating that which is thought to be separated. His philosophy seeks to create complex open-ended syntheses. In this theoretical context, colour plays a privileged role, both as a metaphor and as a subject. Colours do not stick to the forms into which one tries to imprison them. They overflow and blend into each other. In this essay, I want to explore four aspects in Flusser' work that are directly linked to colour: the connection of black and white, both in photography and discourses on 'racial' differences; the role of greyness and its relationship to colour luminosity in the description of culture and politics; the presence of colour in nature, landscape, and the animal world; and Flusser's use of colour in a redefinition of the notion of technical images in the context of the project of the *Casa da Cor*.

Black and white

> "There are no white and no black people, no pure
> cultures, and no pure disciplines. All systematic thinking is
> wrong, every system is a form of rape. Reality is confused,
> and that's why it's interesting."

> Vilém Flusser

Flusser discusses the relationship between black and white within two related contexts: the symbolic significance of blackness in the definition of so called 'racial differences' and the relationship of black and white photography to colour photography.[1] In the early 1970s, Flusser wrote an essay dealing with the notion of blackness from a cultural point of view. "O prêto è belo" (Black is

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[1] See also Andreas Müller-Pohle's contribution "Schwarzweiß als Code / Black-and-White as a Code" in this issue of *Flusser Studies*.

beautiful) was published on April 17, 1971, in the Suplemento Literário of "O estado de São Paulo" (Flusser 1971a) and republished in a German version with the title "Schwarz ist schön in Brasilien" (Black is beautiful in Brazil) in the "Frankfurter Allgemeine Zeitung" on December 31, 1971 (Flusser 1971b). In these texts, Flusser reflects on what he calls the demagogic nature of the catch-phrase 'Black is beautiful' emphasizing at the same time that under certain circumstances this no-tion can also be completely true. In Brazil, for instance, it is the beauty of blackness, and black people in the streets. The beauty of Brazilian culture is above all the beauty of black people. For centuries, black people lived under shameful conditions. Even if the African slaves arrived empty handed the culture that they brought with them had a deep impact in Brazilian everyday life visible in the carnival dances, the music, capoeira, the martial art of Brazilian street fighting, and even in simple everyday gestures. However, in this context 'black' actually means 'un-white' *(unweiß)* and 'white' 'un-black' *(unschwarz)* demonstrating the questionability of any simple clearcut racial termi-nology. Black and white tend to blend into each other. In this sense, there can be no 'Black is beautiful movement' in Brazil because from a Brazilian point of view they look un-black *(unschwarz)*, "that is, as an attempt to behave like white people (the same way feminist movements (*Frau-enbewegungen, das Weibliche*) repress the femininity of women emphasizing masculinity). In Brazil white people *(Weisse)* behave like black people *(Schwarze)*." (Flusser 1971b) This obviously does not mean that "the negro *(Neger)* in Brazil does not have legitimate objections against a social situation that oppresses him." African culture has been subsumed and absorbed within Brazilian culture creating a synthesis that has not been reached elsewhere and which might become a model for future mixed cultures. Flusser's provocative argumentation and his use of politically incorrect lan-guage (*Neger, Frauenbewegungen, das weibliche)* hits a wrong note within the context of present day political correctness. However, it expresses an idea that is worth considering more in detail. Flusser's intention is not to question the legitimacy of the black struggle for liberation but to ques-tion any clear-cut division between black and white, or between male and female for that matter. Pure races separated from each other do not exist and, one would have to add, this also holds true for gender divisions. This is also the argumentative basis of another essay "O negro será de cor?" (Will black be a colour?) that was published with a few slight changes and a less provocative and equivocal title as "Preto e branco" in the Brazilian journal *Iris* (Flusser 1982).

The text deals with black and white in connection with its cultural meaning and concomi-tant role in photography. Black and white are not colours because they are not part of the colour-spectrum of the rainbow. This is technically true but is not applied in all cases, especially when black and white are studied as cultural phenomena which is exactly what Flusser does in his essay. In this sense, Flusser is conflating here two very different points of view, which reproduce on a meta-level the idea of mixing colours and 'races'. Even if black and white are not colours, he

continues, we are fed up with the idea that black is beautiful and that the white man is condemned to carry the burden of black beauty (*está condenado a carregar o fardo da beleza do preto)*. Both ideas insist on purity, each from its own side of the cultural divide. Flusser reads Kipling's famous claim of the 'white man's burden' against the grain. At the end of the last chapter of *What If?*, "Black is Beautiful" he uses the same reference again but this time in a very different sense. I will come back to this shortly.

Despite theories that oppose black and white 'races' based on the wrongful assumption that one is only black *(puramente preta)* and the other only white *(puramente branca)* what we encounter in everyday life are only *pretos impuros* and *brancos impuros*. "Purity does not exist. What a pity that purity does not exist. What a pity that black, although it is beautiful, does not exist. What a pity that white although it is charged with a burden does not exist. What a pity that reality is dirty. […] Black and white do not exist. They are radical extrapolations of the rainbow. Border situations: total absence of light and total presence of light. […] Everything is a mixture, *mélange adultéré*, from which different limits like black and white, good and evil, can be extrapolated." (pages 1-2) And Flusser adds the clarifying sentence: Black people do not exist, but the slavery of Black people does.

The second part of the essay deals with the epistemological relevance of black and white photography. A black and white world does not exist, but black and white photography has opened a new perspective on the world. Black and white photography poses the problem of the abstractness of theory. Black and white pictures abstract black and white from the colours of the world. In this sense, they are a theoretical vision of the world. Colours exist out there in the world, but since black and white are not colours, nothing in the world is white or black. Black and white photography depicts a world in which everything is black and white, not the world as it is but the world as it would have to be. "Because they represent such a universe, black and white photographs are fascinating." (ibid.: 2) By deliberately abstracting colours from the world, black and white photography can be considered the first non-discursive theory, an imagistic theory *(teoria imaginística)* as Flusser calls it. Contrary to colour photography which attempts to approach the world, black and white photography chooses to distance itself from it, by deliberately choosing abstraction. In Flusser's thinking, taking a step back from the world *(einen Schritt zurück)* is the very essence of a life lived in freedom and the beginning of a creative relationship to the world. Many artistically inclined photographers prefer the beauty of black and white photography, that is, the beauty of reason the way it is experienced in the exact sciences, the "beauty of intention". Not the beauty of the world "but the beauty of the mind." (ibid.: 4)

The texts Flusser wrote over the years about the relationship of black and white and the metaphor of Blackness converge in "Black is Beautiful", the last scenario of *What If? Twenty-Two*

Scenarios in Search of Images (Fusser 2022). The nameless and unidentified speaker is planning to participate in the Troisième Congrès International de la Négritude in Dakar to present his theoretical reflections on colour. The choice of Dakar as the site of a congress on Négritude goes back to the text "Da Negritude" that Flusser published in September/October 1966 in *Cadernos Brasileiros* (Flusser 1966). The point of departure for this early text was the first international festival of black art (*artes negras*) organized in Dakar in April 1966. Flusser wrote another much shorter text in French with the same title that was published in *arTitudes* (Flusser 1977). This text has been translated into German and republished in *Brasilien oder die Suche nach dem neuen Menschen. Für eine Phänomenologie der Unterentwicklung* without any reference to the previous French publication (Flusser 1994a: 257-258). In these texts Flusser tells the riveting story of an unknown Afro-American woman who works as a cook in Bahia. The African organizers of the congress insist that the Brazilian government find her and take her to Dakar along with their delegation. Their arrival has attracted a huge crowd at the airport. The members of the Brazilian delegation are surprised that Brazil is so well known in Senegal. But then the door of the airplane toilet opens and an imposing figure struts down the aisle. It is the inconspicuous cook now wearing a white dress covered in gold and silver. As it turns out she is a high priestess of Umbanda and known in Africa as a star.

The nameless narrator of "Black is Beautiful" begins with an ambivalent gesture of distancing. The capital of Senegal is the wrong place because it is too close to the subject of the talk. Theory needs distancing. However, "here we are not able to take this step away from color. For us, color is exactly what we are up against. If we distance ourselves from it, we risk losing ourselves. […] only when people of color work out a theory of color does the problem of color truly gain a voice." (Flusser 2022: 74). The 'us' and the 'we' qualify the speaker as an Afro-American, that is, as 'black'. As such s/he is caught in an irresolvable contradiction. S/he does not want to take on racial stereotypes linked to colour but knows that only by accepting this situation s/he be will free to overcome it. A typically Flusserian quandary: All stereotyped and thus stigmatized social groups are prisoners of the collective image projected onto them by so called normal people. That holds also true for Jews. Instead of rejecting one's blackness, or one's Jewishness and sexual orientation, for that matter, one should use it as a starting point for a redefinition of one's identity and relationship to the world of 'normal' people. As in the story told in "Négritude" this implies a symbolic reversal that is already contained in the title. Black *is* beautiful.

The speaker begins with a short reflection on black and white as colours from an optical and physiological point of view and moves on to the cultural dimension of the colour. The optical point of view of colour becomes here the theoretical basis for a fundamental questioning of 'racial' prejudice, of the superiority of whiteness over blackness. Classifying people as white or black is theoretically wrong and creates "a dubious taxonomy" (ibid.: 74). "If the word 'color' means a

visible portion of the field of light oscillating, then *white* is not a color" (ibid.: 75) because it is the sum of all rays. The same holds true for 'black' because it is the absence of all rays. Surfaces reflecting all rays are white, and conversely, surfaces absorbing all rays are black. Colour results from the partial absorption of rays. In this sense, most people (57%) are neither white nor black but yellow. "Every phenomenological observation of all Black cultures proves the correctness of color theory. Such cultures are open to light, absorb it. […] We, the Black people, are the real children of light […] we swallow the light, save it within ourselves […]" (ibid.: 75). From this point of view, being black is no longer a stigma but the very sign of distinction. Ironically enough, in European culture light stands for truth, peace and redemption. In many African cultures, on the other hand, whiteness is associated with death. White humanity (36%) "shuts itself off to light, pushes away all light, and rejects all that is radiant. It is probably the cadaverous aspect of white people that is to blame for this rejection, which, in truth, results from the rejection of life." (ibid.: 75) Because of their openness to the world the small minority of black people (7% altogether), could initiate a radical change based on anthropophagy: they could help the rest of humanity become black. The "radiant blackness of the human elite is beautiful. I invite you to take on the burden of beauty (Black Man's burden)." (ibid.: 76).

At this point one might ask oneself if this conclusion, especially in view of the ironical twist given to Kipling's dictum in "O negro será de cor?", is to be taken at face value or if it contains an intentional satirical element aimed at discourses of purity. Is the 'black' speaker not committing the same mistake as 'white people' believing in their superiority? This in turn leads to the unanswered question of the fuzzy relationship between the narrator and the author, the Afro-American, and the Jew. Flusser deliberately left these questions unanswered.

Grey

> "Grey is the colour of theory […] Black and white
> photos show this. They are grey, images of theories."
>
> Vilém Flusser

Flusser deals with greyness and its relationship to other colours from different points of view. More than any other colour grey is the very embodiment of ambivalence. Grey is the colour of theory, of boredom and the drabness of dictatorships. At the end of "Ecologia multicolorida?"[2], Flusser defines colours as a weapon against the boredom and greyness *(cinza)* of the world. However, grey

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[2] All the texts mentioned or quoted here are available in this issue of *Flusser Studies*.

is also the color of the indeterminate no man's land in border areas where cultures and disciplines meet and merge. Grey represents fuzziness in all its nuances, it is the very embodiment of Flusser's notion of impurity, of a fundamentally confused reality. Interestingly enough, 'grey' in Portuguese is *cinzento*, *cinza*, from Latin *cinis*, *cinus*, 'dust, ashes' which already implies a very specific reading of the colour. On the other hand, English 'grey' from Middle English *grey* can be traced back to Proto-Indo-European *$\hat{g}^h$reh₁-, 'to green, to grow'.

David Batchelor (2014), and more recently Peter Sloterdijk (2022), have dealt in detail with the many ambivalences of greyness that also include its relationship to other colours. At the end of *The Luminous and the Grey*, Batchelor writes about the contrast between greyness and luminosity which is ultimately less clear than one might think, a grey zone of its own. "I had assumed at the outset that the luminous and the grey were opposed to one another and irreconcilable, but now I am not so sure" (Batchelor 2014: 90). Grey is generally viewed in negative terms. But as Batchelor points out: "Grey is the most tentative of colours and the least absolute of any: it is difficult to imagine a pure grey […]. Grey, then, is potentially as rich and as complex as other colours and, in its very own way unlike any other colour." (ibid.: 74) There are endless variations of grey, it can be "the most surprising of all colours precisely because no surprises at all are expected of it." (ibid.: 75)

Sloterdijk who most probably read Batchelor but does not mention him explicitly, examines the metaphorical range and the profound ambivalences of the colour grey. In view of Flusser's understanding of the colour grey, two aspects are of particular interest here: Sloterdijk's association of greyness and corridors in the work of Franz Kafka and the relationship between politics and greyness. Grey, argues Sloterdijk, is the colour of bureaucracy and coins the fitting neologism "ak-tengrau", the greyness of files (Sloterdijk 2022: 76). Corridors are the architectonical version of the principle of the grey zone (*Grauzone*). Kafka shows the "Korridorisierung der Existenz", the transformation of human existence in a corridor condition. In the absurd world of Kafka's characters, human existence consists in an endless walk through an impenetrable maze of corridors. What is left in the end is only the unwavering grey of corridors, "das unbeirrbare Grau der Gänge" (ibid.: 61). However, corridors are also passages between rooms. When you move through a corridor you have left a room behind you and are trying to reach another one. You are in between. This specific sense of greyness can also be found in Flusser's understanding of borders as *fuzzy sets*, indistinct places where, as pointed out before, different cultures and disciplines overlap and merge. Batchelor suggests a similar interpretation: "Grey is the colour of loss and the colour of losing. It is not the colour of death, perhaps, but of purgatory; grey is suspended: no longer white but not yet black; hardly alive but not yet dead."(Batchelor 2014: 64) Corridors have a purgatory character but they lead to heaven after the sinner has spent enough time in its mazes.

In the German Democratic Republic, so Sloterdijk, and under the rule of Leonid Ilyich Brezhnev who served as General Secretary of the Communist Party of the Soviet Union between 1964 and 1982 the revolutionary red of communism was transformed into an administrative grey. In a similar vein, Flusser discusses the relationship of politics and colour. "Imagens en cores" begins with a quote from Goethe's „Faust": „Grau, teurer Freund, ist alle Theorie". All theory is grey (*cinzenta*), says Metphistopheles to Faust and Flusser adds: „ E, com efeito as ideias vistas pelo olhar teorico são incolores (And indeed, seen from a theoretical point of view ideas are colourless)" (p. 1). As in black and white photography the theoretical gaze presents everything as colourless. However, grey can also be considered as a colour of its own.

In an early French text, "L'irruption du téchno-imaginaire" (The Irruption of the Technical Imaginary), which is part of a speech that Flusser gave on February 22, 1977, in a conference cycle at the École sociologique interrogative in Paris, colour is associated with a new culture arising after World War II. Before the war grey predominated. Everything was grey, but nowadays everything is colourful, from TV-sets and movies down to fingernails and drinks. Flusser speaks of a radical cultural revolution that he understands in terms of a change in code. In this early text, colour is already associated with the new world of technical images. I will come back to this point in the last section of this essay. The earlier alphabetic linear code is being substituted by coloured surfaces. We have moved from a historical to a post-historical world, from diachronic processual thinking to synchronic thinking. However, the wave of coloured images bearing down on us should not be consumed passively. We will have to learn how to manipulate these new techno-imaginary code to prevent the advent of a totalitarian society. This point of view was later given up in favour of a more utopian approach.[3]

In the first essay that Flusser wrote for the project of the House of Colour, "Reflexões sobre 'A Casa da Cor' à construir em S. Paulo", he defined as its main cultural aim the establishment of a space where an active experience with colours in the midst of a grey polluted environment (*em meio cinzento e poluido*) like the city of São Paulo would be possible. In the same essay, Flusser sketches a short history of the relationship between colour and society. The cultural role of colour has constantly shifted. Colourful periods were followed by relatively monochromatic periods, without a corresponding shift in the dominant political ideology. Monochromaticity and polychromatism cannot be associated with any corresponding political stance. Colourfulness does not always imply political liberalism or the absence of colour a conservative political agenda. The Greek *polis* was very colourful which seems to contradict the official ideology, especially the philosophy of Plato. The Middle Ages was an explosion of colours "in violent opposition to the dominant monastic and

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[3] See for instance V. Flusser „Post-moderne Farben" and „Farben verschlüsseln" in this issue of *Flusser Studies.*

scholastic ideology. And it was followed by the mono-chromatism of the reformation." (p. 2) Flusser speaks of the greyness (*o cinzento*) of the society of the industrial revolution. He ends his list of examples by comparing East and West Berlin. Whoever moves between the two zones must cross two areas of chromaticity (*duas zonas de cromaticidade*), on the one hand the rich colour palette of West Berlin and on the other the grey uniformity (*cinzento uniforme*) of East Berlin. A similar experience awaits travellers to communist China. "The recent infiltration of Western garments into the ocean of Maoist grey and blue uniforms must have be resented by the leaders, (and by the people themselves), as a threat to the spirit of cohesion and the revolutionary ardour of the masses." (ibid.: 3) Colour seems thus to work against militancy by its de-uniformizing effect (*fator des-militantizante, por des-uniformizante)*. In dictatorships colours are not only denied but also diluted. However, colourfulness does not automatically imply socio-political plurality or liberal thinking. This is very much in line with Sloterdijk's analysis. Commenting upon the tendency of contemporary society to associate colour with diversity he writes: "Die polychrome Idylle trügt; die zur Durchmischung einladende Liberalität der Moderne kann die erwünschte Regenbogengesellschaft nicht erzwingen. (The polychrome idyll is deceptive; the liberality of modernity, which invites a thorough mix, cannot impose the desired rainbow society)." (Sloterdijk 2022: 19) The sum of all the different colours produces "ein stumpfes bräunliches Grau. […] Dreckfarbigkeit bildet das unumgängliche Resultat der post-modernen Mixophilie. […] Grau ist der maßgebliche Farbwert der Gegenwart. (a dull brownish grey. [...] Dirty colours are the inevitable result of post-modern mixophilia. [...] Grey is the essential chrominance of the present)." (ibid.: 19) As Flusser puts it: the supposed "função des-uniformizante da côr se revela insustentàvel" (the apparent de-uniformizing function of colour proves unsustainable) (Flusser: Reflexões sobre 'A Casa da Cor' à construir em S. Paulo: 3). In fact, the highest concentration of cultural coloration can be found in Manhattan, but in this context, it produces the very opposite of plurality, that is, a uniformization of the second degree. One is surrounded by an excess of colours in which one risks drowning. This distractive excess stops one from truly understanding any information. In other words: "[…] aglomeração de cores uniformiza tanto quanto o cinza (color accumulation has the same uniformizing effect as grey)." (ibid.: 3) As in Sloterdijk's verdict, polychromatism is not automatically a liberating force but can also lead to an indistinct greyness, a monochromatism of the second degree.

In a speech delivered in São Paulo, at the first consultants' meeting of the *Casa da Cor* project (February 9, 1988), Flusser returns to the relationship of colour to politics. "The nineteenth century was a period of enlightenment and a victory for the natural sciences. Theoretically it was an era which should have exploded in colour. Mankind travelled to India, descended to the level of the molecule, and penetrated the heavens to explore the stars, and everything was full of colour ... Yet, there has never been a greyer period than the 19th century. Not only the colour of factories

or the colour of money […] even the capitalist, puritan and protestant mentality was in some way a grey mentality." [4] (p. 11-12) In the same speech, he posits periods of colour, periods of light and periods of darkness. The problem of colour must be thought in its relationship to the problem of light (that which kills obscurity) and darkness (that which devours the light). Black is beautiful because it devours us like a cannibal. "[…] it is beautiful because of this, and we, white people, naturally will be devoured by black people, because we 'reflect' everything (and black people absorb everything)." (ibid.: 10) As white and black are the two horizons of colour one could formulate a cultural theory of colour based on a principle of alternance. There would be black periods, periods of obscurantism (e.g., 1890-1945, according to Hannah Arendt) and periods of light (e.g., 18th century). The pendulum would swing back and forth between the Romantic and the Classic, between darkness and light and in between there would be colourful periods. However, this simple and beautiful model, concludes Flusser, does not work.

The ambivalences of grey show that there is no clear-cut relationship between single colours and their cultural and political meaning even if certain colours have been interpreted in this sense in the past. Colours remain ambivalent. Add to this that the opposition between greyness and colourfulness, between boredom and joy, dictatorship and liberalism is less cogent than one might think. From a certain point of view the two converge and polychromatism amounts to a greyness of the second degree.

A colour symphony

> "What [Walt Disney] will have to do is a kind of super-dimensional land art. […] It is no longer a question of covering rocks with paint, but of computing a complex game of living colours in living organisms."
>
> Vilém Flusser

Colours play an essential role in the world of the Vampyroteuthis Infernalis that lives in a colourful world at the bottom of the sea and communicates thanks to his chromatophores. His skin contains elastic pigment cells which allow him to change its color in a very short time. *Vampyroteuthis Infernalis* was first published in 1987 (Flusser and Bec 2012) shortly before Flusser's participation in the project of the *Casa da Cor*. The contents of the book, especially the role of colour, spilled over into the texts Flusser wrote in connection with the House of Colour, especially in his proposal of a Disney land like landscape of the future.

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[4] V. Flusser, "Mesa redonda" in this issue of *Flusser Studies*.

There are two English versions of "Disney Land colours", one originally written for the *Casa da Cor* with a short introductory paragraph that has been published in this issue of *Flusser Studies* and one that was published in *Artforum* in October 1988 (Flusser 1988b).[5] Other slightly different, but basically similar versions of this text are the Portuguese text "Ecologia multicolorida?" (Multicoloured Ecology?), also written for the *Casa da Cor*, and the German version "Bunte Tiere" (Colourful Animals). In "Ecologia multicolorida?" the reference to the House of Colour appears in the third paragraph. In the German version "Bunte Tiere" there is no reference to the São Paulo project anymore. A first version of the latter text was published by the editor Bollmann in *Nachgeschichten. Essays, Vorträge, Glossen* under the title „Blaue Hunde" (Blue Dogs) (Flusser 1990: 205-208) with a reference to the year 1988 and the first publication of the English version in *Artforum* (Flusser 1988b). The fact that there already existed a German version is not mentioned. A further version was published in 1995 under yet another title "Land-art in großem Stil" (Land Art in Big Style) that besides the essay "Bunte Tiere" also included "Vom Umfärben der Grünen" (On the Recolouring of the Green Party) (Flusser 1995: 197-203). In the first paragraph Flusser questions the use of the colour green by the German ecological party suggesting a hidden link to German Romanticism and the *Blut und Boden* mentality of the Nazis. In this apparent greenness Flusser detects a brownish undertone (*ein bräunlicher Unterton*). Contrary to what is commonly assumed, German trees and lawns are not naturally green at all (*die natürliche Farbe der deutschen Wiesen und Wälder*). At least since the discovery of chlorophyll and its role in the artificial production of the colour green one can no longer consider it a 'natural' colour. It has become an artificial colour (*eine künstliche Farbe geworden*). He suggests the party changes its name and adopts a multicoloured (*buntscheckig*) banner instead. As in his earlier criticism of 'black' and 'white' as notions of racial purity, Flusser questions the idea of pure natural greenness. What a pity that nature does not exist in an uncontaminated state. What a pity that nature and culture cannot be clearly separated but keep blending into each other. What a pity that everything is an adulterated mixture. I will come back to the problematic side of Flusser's understanding of the relationship between nature and culture at the end of this section.

The two collated texts published in *Nachgeschichten* were changed in various places, shortened and glued together. The first three paragraphs of "Bunte Tiere" were removed because they were already part of "Vom Umfärben der Grünen". The last four lines were omitted and the last section of "Bunte Tiere" was placed at the end of the two patched-up texts. The date at the end (1990) is misleading. New subtitles were introduced to suggest continuity. The hybrid text was

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[5] For a short discussion of "A color revolution?" the second text related to colour that Flusser also published in *Artforum* in December 1988, see R. Guldin, Colorarium: The Exchange of Letters between Vilém Flusser, Karl Gerstner, Philippe Henry and Gottfried Jäger in this issue of *Flusser Studies*.

declared a first publication which ironically it also was (Flusser 1995: 27). All references to their context of origin were deleted. The same editorial policy was applied to two other texts written by Flusser in the context of the House of Colour: "Farben statt Formen" and "Farben verschlüsseln".[6] This questionably editorial policy helped concealing the importance of the subject of colour in Flusser's work.

In "Disney Land colours", as already mentioned, Flusser refers to the colourful deep-sea world of the Vampyroteuthis. Farming, he pleads provocatively, should be transferred from peasants to artists. This, he argues, is not as surprising as it might seem at first sight. From the very beginning the human species actively changed its natural environment cutting down trees to open clearings in the woods. Flusser's new 'natural' Disney land is linked to a world where people thanks to machines are working less and less. In the future one "will see an enormous Disneyland where people made unemployed by automation try to amuse themselves, so that they might not die of boredom." (p. 1)[7] Walt Disney will become a molecular biologist that in turn has become an artist. "Genetic engineering is beginning to interfere in processes" of colour distribution. This "may help the human species to survive boredom, by filling a future Disneyland with multi-coloured fauna and flora. Do not say that this is fanciful thinking. Take a diving-bell and a torchlight instead, and dive into the deep of the ocean. What you will see there are fields, meadows, and forests of plant-like animals whose red, blue and yellow tentacles swing in the current. […] This is how North America and Western Europe may look in the future." (ibid. 1-2) Flusser suggests we take the colourful world at the bottom of the ocean as a model to make our environment more colourful. In the same way he used the Vampyroteuthis Infernalis as a model for the new world of computer technology, a flowing world without clearcut borders. Following Flusser's own argumentation one might ask oneself if this overabundance of colours will not ultimately lead to the indistinct greyness of a monochromatism of the second degree.

Flusser describes this brave new colourful world of the future as a kind of "superdimensional land art" and adds an example that he also uses in a letter to Karl Gerstner dated April 17, 1988. In a paragraph devoted to biological colours, Flusser speaks of feed-back processes between animals and plants that are coded by colour. A certain potato species lives a symbiotic relationship with a butterfly. Flusser calls the butterfly the potato's organ of reproduction, and the potato the digestive tract of the butterfly. Even though the colour of the potato-flower is due to chemical changes linked to chlorophyll it is the exact same colour of the butterfly-wing which depends on an optical effect. Flusser adds that it has become theoretically possible to manipulate the genetic information leading to the colour of the potato flower. In a comparable way, the genesis of leopard

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[6] See Guldin, Colorarium.
[7] I am quoting from the version published in this issue of *Flusser Studies*.

spots and zebra stripes can be simulated on computers. In the future, it will be possible to mix biological colours thanks to genetics and mathematics. One will be able to paint biologically, and the natural environment will become a work of art. "The future Disney will have to program such extremely complex ecological feedback. In fact, the future Disney will have to compose an enormous color symphony which will evolve spontaneously through endless variations […]. A gigantic living work of art with an as yet unimaginable wealth and beauty." Nature works like a molecular biologist that has become an artist using a computer. The main emphasis lies here on the creative freedom of a scientist turned artist projecting sense on an absurd world of greyness and boredom ultimately vowed to entropy. Flusser ends his essay with a criticism directed against the German environmentalist "who stubbornly continue to call themselves 'green'" and argue that such a new Disneyland would be completely artificial. But, as Flusser argues, this process of artificialization began much earlier, at the very beginning of human existence. In this sense, the new step towards a disneylandization of our environment is only a continuation of on already ongoing process. Flusser's dismisses the idea that nature is a 'natural' environment diametrically opposed to the artificiality of culture. This is a fundamentally Romantic vision that wants to preserve something that has repeatedly been changed in the past.

Flusser was not familiar with the notion of the Anthropocene which was developed in the 1970s and 1980s but reached a wider audience only much later. The Anthropocene designates the current geological age viewed as the period during which human activity has been the dominant influence on climate and the environment. Its advent coincides with the commencement of significant human impact on Earth's geology and ecosystems, including anthropogenic climate change and a redrawing of the relationship of humans to their environment that started with the global-scale industrial transformation during the Industrial Revolution. Flusser points to human-induced impacts on the planet such as the development of early farming and land clearance, but he does not take the problematic side of this process into consideration. His unilateral view focuses on the creative side of human intervention, without considering the systematic destruction and pollution of the natural environment. This one-sided approach can also be found in his discussion of the term ecology.

In a video conference he gave in Robion on May 7, 1988[8], that is, in the course of the project of the House of Colour, he discussed what he calls the "problem of ecology". Flusser's understanding of the term is purely relational and does not include, as one would expect, the environmental dimension. Seen from the ecological point of view, he argues, the world is a network of threads criss-crossing each other. At the points of intersection entities emerge and disappear.

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[8] See V. Flusser, Video palestra in this issue of *Flusser Studies*.

Flusser conceives of ecology as an intersubjective network in which information and communication are the essential aspect. Such a one-sided definition of the term erases some of its most essential aspects: the relationship of living things to their environment and the way humans adapt to it or start changing it according to their own necessities with all the deleterious consequences that ensue from this. Ecology is above all about sustainability and the creation of a balance between man and his environment. In Flusser's view mainly inspired by the 19th century, human history must be read as an attempt to make nature increasingly artificial, that is, more and more like a beautiful work of art. Nature and culture entertain a dialectical relationship, but culture prevails over nature, and the interests of humanity over those of all other living beings. Any interference in the ecological system – for instance the neolithic revolution – deeply affects culture itself *(rebate sobre o sistema social)*. Flusser focuses on the way culture is changed by its relationship to nature but does not consider the effects culture has on the natural environment. Nature can only be improved and embellished by human intervention. The surface of Europe has been humanized. "Despite what fashionable ecologists have claimed the result will not be desertification but, quite on the contrary, an exaggerated form of fertility (*fertilidade exagerata*)" (p. 4), as the kibbutz in Israel abundantly prove. The predictions of a future demographic explosion were completely wrong. It is only a matter of time until the new methods of cultivation and manipulation will turn the whole planet into a paradisiacal garden glowing in all the colours of the rainbow where Biblical rivers of wine and milk will flow. In Flusser's view, this transformation is intimately linked to colours. Mathematics, molecular biology, genetic information, the computerization of society and artistic endeavour will create a totally artificial world. "For example, purple meadows on which run phosphorescent hares illuminating the night." (ibid.: 7) Flusser's anti-environmentalist, over-optimistic bias is complemented by a vision of a bright colourful future thanks to computer technology which will ultimately succeed in automatically creating a better future for the planet and all its inhabitants. The French philosopher André Gorz who Flusser, living in France, probably knew formulated a similarly optimistic vision of a world where people were no longer forced to work.

The ambivalences of genetical engineering and AI had no place in Flusser's enthusiastic thinking of the late 1980s and early 1990s which was probably nurtured by his own unexpected success in these years, the euphoria resulting from the fall of the Berlin Wall in 1989 and the beginning of the internet. Would Flusser have changed his mind had he lived to see the global destruction the Anthropocene is causing? But then, how much of Flusser's writing on a phantastic colourful Disney land of the future is also a form of ironical provocation? And finally, did he actually write letters to the Disney company and the Green party in Germany?

Coloured synthetic images

> "It is no exaggeration to say that the
> coloured synthetic images are a symptom that
> points beyond the culture of the West."
>
> Vilém Flusser

Flusser discussed the House of Colour from two distinct but complementary and converging perspectives: the new house to be built and the necessity of a new colour code. This dual approach is also expressed in the two separate conferences he held in August 1988. In the first one, "In search of a colour code" (August 10, 1988), the main subject is the necessity of a new cultural theory of colour and in the second, "Why the House of Colour in São Paulo?" (August 11, 1988), Flusser deals with what he calls in a text dated February 9, 1988, "the communicological structure of our project" *(a estrutura comunicológica da nosse empresa).*[9] The changes that the communication revolution introduced in society at large and the way this also affected our understanding of what a house is, were recurrent themes in his work of the late 1980s (see Flusser 1994b and 1997). The avant-gardist House of Colour would have to take all these technological and social changes into consideration. It would have to be thought as part of a network, a relay through which information is flowing. In "Mesa redonda" (February 9, 1988), Flusser describes his conception of a new house in more detail.[10]

The same double line of argumentation can be found in "About a House of the Color" and "Reflexões em torno da Casa da Cor", two variants of the same text that were both written for the journal "Casa da Cor" which Philippe Henry planned to launch in the Fall of 1988.[11] The "problem of color", argues Flusser, has to be discussed in the context of a "calculating analysis" and as a sort of "computing synthesis." He mentions the evolutionary model of a ladder with five rungs from *Into the Universe of Technical Images* (Flusser 2011: 6-7) that was first published in 1985. In this new version written about three years later, colours and their relationship play a major role. "Five hundred years ago man stepped back from [linear writing] into analytical calculation, and the result was the zero-dimensional code of numbers […]."[12] The fourth step moves from texts into numbers and the fifth is about the transformation of "numbers into perceptible phenomena like colors. This poses the color problem in a surprisingly new way." Thanks to computers algorithms can be transcoded into different phenomena like shapes, volumes, and sounds, but also colours. Synthetic

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[9] V. Flusser, Casa da Cor (reflexões complementares) in this issue of *Flusser Studies.*
[10] See also V. Flusser, Mesa redonda in this issue of *Flusser Studies.*
[11] See Henry's letter dated November 23, 1988, in the letter exchange between Flusser and Henry in this issue of Flusser Studies.
[12] V. Flusser, About a House of the Color: 3.

digital images are not a translation of objects into images that signify the world out there, but a transcoding of numbers into images that signify "perceived colours." By transcoding thoughts from numbers into colours thinking can be made accessible to the senses. The main problem is the adequation of the colour code to the number code. In the past, traffic lights and labels on products, computed images, and satellite photos as well as coloured models in molecular biology have already made use of colour codes. Today "colours are being extracted from their previous codes to constitute new ones" (ibid.: 4), but this is only partially possible because colours maintain some parameters from previous codifications. These older meanings "infiltrate" the new codes. The main problem is the creation of a completely new denotative colour code based on an adequation of numbers and colours[13], which is complicated by the fact that the universe of colours and that of numbers have a different structure. The universe of numbers "irradiates from zero toward undefined horizons" and the universe of colours possesses "no centre but definite horizons."(ibid.: 4) The terms are thus "inverted". To describe the meeting of colours and numbers Flusser uses a colour metaphor that in its ambiguity contradicts the univocity he embraces in other texts: "[…] we have to project *a gray zone* in which science, politics and the arts overlap to permit a new color universe with an as yet unimaginable wealth, brilliance and *precision* is to emerge therefrom [emphasis mine]."(ibid.: 5)

This points to a central aspect in Flusser's notion of a cultural colour code: the difference between denotative and connotative codes. In a handwritten page (fig. 1) that Flusser attached to a letter he sent Karl Gerstner on March 4, 1988, the two codes are represented by parallel lines.[14] Flusser added the words "Universum (Bedeutung)", universe meaning, next to the denotative and "unregelmässig", irregular, next to the connotative code. Denotative codes are based on
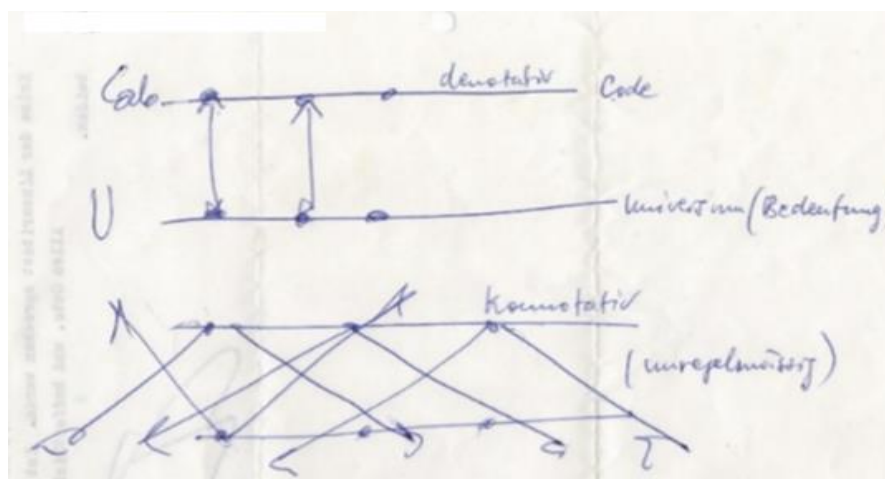

Fig. 1

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[13] This notion can be traced back to Gerstner's colour conception (Gerstner 1986). Compare also K. Gerstner, Vilém Flusser und die Farben: 3-4 in this issue of *Flusser Studies* and Guldin, Colorarium.
[14] See ibidiem.: 6.

unambiguous one-to-one correspondences whereas connotative codes allow for a plurality of possible correspondences.

In a letter dated May 25, 1988, Gerstner points to Flusser's theoretical hesitations concerning the difference between denotative and connotative codes by referring to a passage from an earlier letter dated April 17, 1988, in which Flusser ambiguously speaks of the search for a clear and distinct colour code that is *still connotative* ("nach einem klaren und distinkten, aber doch konnotativen Farbcode" (For a clear and distinctive, but nevertheless connotative color code) and to the text "Farben verschlüsseln", that Flusser sent Gerstner together with an earlier letter dated March 4, 1988, in which the new colour code to be developed is *unequivocally* defined as *denotative*. " […] I have understood [from your previous letter] that if the color code is to replace the alphanumeric code it has to be a denotative code […] and now you write in your last letter that it is a matter of working out a connotative one ...? By the way, in contrast to your penultimate letter, in which you made an un-ambiguous statement."[15] In his answer (June 6, 1988), Flusser does not react to Gerstner's comment. In a speech delivered at the second consultants' meeting of the *Casa da Cor* project (March 19, 1988)[16], Flusser suggests the development of a denotative colour code that allows for only one possible interpretation but is "at the same time, rich in meaning." (Henry 1991: 322) "Taken to its ultimate consequences", writes Henry, "we then have a new brain, a new being, a new world. Neurologists already suspect that language acquisition by children is more than just development; it is a selection of connections and a specialization of brain areas. The learning of a colour code, much richer and more complex, would imply new brain specialization as well as different synapses." (ibid.: 322)

Flusser's oscillation between a denotative and connotative colour code, between a grey meeting zone of the two universes of numbers and colours on the one hand, and a strictly mathematical understanding implemented by computer, on the other, are not to be seen as inconclusive hesitations but point to the very heart of Flusser's thinking which keeps evolving and turning back on itself, a thinking style that never comes to an end, even at the risk of self-contradiction. The wavering between a denotative and a connotative colour code is therefore not a mistake on Flusser's part but lies at the very centre of his unfinished open-ended cultural colour theory which aims for a synthesis of opposites: art and science, emotion and rationality, colours and numbers.

In the mid-1980s, Flusser formulated the notion of an all-encompassing convergence of cultural and technical codes (Guldin 2013). In *The Photograph as Post-Industrial Object: An Essay on the Ontological Standing of Photographs* published in *Leonardo* in 1986, that is, shortly before his

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[15] „Und zweitens, weil ich den Farbcode, soll er den alphanumerischen ablösen, als denotativen verstanden habe, clare et distincte ohnehin', und nun schreiben Sie in Ihrem letzten Brief, dass es darum geht, einen konnotativen auszuarbeiten …? Übrigens im Gegensatz zu Ihrem vorletzten Brief, in dem Sie sich ein-deutig festgelegt [haben]."
[16] "A cor no mundo pos-moderno" in this issue of *Flusser Studies*.

participation in the project of the House of Colour (1987-1989), Flusser sums up his vision. "Ever since the fifteenth century occidental civilization has suffered from the divorce into two cultures: science and its techniques – the 'true' and the 'good for something' – on the one hand; the arts – beauty – on the other. This is a pernicious distinction. Every scientific proposition and every technical gadget have an aesthetic quality, just as every work of art has an epistemological and political quality. More significantly, there is no basic distinction between scientific and artistic research: both are fictions in the quest of truth […]. Electromagnetized images do away with this divorce because they are the result of science and are at the service of the imagination. They are what Leonardo da Vinci used to call 'fantasia essata.' A synthetic image of a fractal equation is both a work of art and a model for knowledge. Thus, the new photo not only does away with the traditional classification of the various arts (it is painting, music, literature, dance, and theatre all rolled into one), but it also does away with the distinction between the 'two cultures' (it is both art and science). It renders possible a total art Wagner never dreamt of." (Flusser 1986: 331) In the context of the *Casa da Cor* in São Paulo he reformulated this idea adding colour.

In the future synthesis to be achieved, colours represent quality and the artistic emotional side (the heart), and numbers quantity and the scientific rational side (reason). This clashes with the choice of a denotative colour code, as colours contrary to numbers are associated with the idea of a plurality of meaning. In the end, Flusser opted for a denotative colour code and thus implicitly also for the pre-eminence of numbers over colours, contradicting, thus, in a way, his own notion of a synthesis of science and art. In "Codigo de cores" (March 3, 1988), he suggests a solution that seems to erase the earlier equilibrium between art and science in favour of a mathematical, computer implemented scientificity. Only a cultural theory of colour can ultimately answer the question of colour codification. Unfortunately, this theory does not exist yet. What can be used as a starting point, though, are the colorations of fractal equations on computer screens. "It is about matching colours to certain algorithms. [...] In the simulations of phenomena of molecular biology colours are being used to mean certain molecular groups, (enzymes in yellow, acids in blue, proteins in red). [...]. All of these are converging proposals for the establishment of a universally codified colour code." The future colour codes will not have to be deciphered any more, they won't need human sensibility or an interpretative effort. Since this new code will operate with colour hues and shades that the human eye cannot distinguish any more. Word-processors, computers and artificial intelligence will have do the job. "Now, my argument aims precisely at denotative codes, which dispense with interpretations, and which can be deciphered by human receptors or artificial intelligences always in the same way (*por receptores humanos ou par inteligências artificiais sempre de mesma forma*)." It is not quite clear what Flusser means with the expression "receptores humanos" but 'receptors' are generally encountered in medical language and molecular biology, that is, in a context that

transcends the human. One may ask oneself at this point what happened to Flusser's utopian vision of a final convergence of heart and reason, art and science. Has it been swallowed by computer technology? Flusser, who was probably well aware of all the problems his perspective involved, concludes with two open-ended questions in which the receptors of the apparatus retranslate the information so that humans can understand it. "How will such devices (*aparelhos*) transcode the colour code so that the human mind can capture it *(a mente humana possa capta-lo)*? What are the meta-colour codes that are the device's code? This show that we need theory *(necessitamos de teoria)*."

In the last essay he wrote in the context of the project of the House of Colour, "Imagens em cores", on which is based his speech of August 23, 1989,"Novas cores da natureza informatica" Flusser developed the notion of "imagens sintéticas coloridas", coloured synthetic images. The coloured lines, curves and surfaces emerging from computer screens are based on algorithms, combining numbers with colours, quantity with quality, and science with art. The essay which summaries the most important notions Flusser developed during the project of the House of Colour sets out with the distinction between form and colour. In the western tradition. ideas are colourless forms, that is, visually perceived contours. A green triangle consists of two sides (form and colour) which are separated in the act of perception. Thus, forms are abstractions from the unity of form and colour, eternal ideas opposed to the chaos of the world of appearances. "The aim of the theoretical gaze of philosophy and science is to clean the form of its *impurities* (the triangle from the *impurity* of the green colour) […]."(ibid.: 1) This leads to the pre-eminence of sight over all other senses. However, "we never perceive forms visually but always and only colours, and 'form' is the contrast between colours. (See Karl Gerstner, The Form of Colours)."(ibid.: 1) From this point of view, colour is the content of form. Form is quantity, and colour quality. Formalization and quantification are synonymous. "This quantifying notion is so pervasive that even colours, (which are the qualifying side of visual perception) are quantified as electro-magnetic vibrations formalized in numbers." (ibid.: 2) However, in the same way as colour and form are not separable, quantity cannot be separated from quality. We live in a world of mixing and impurity. Flusser opposes a soft culture of qualities (*cultura mole*) to a hard culture (*cultura dura*) of quantities. This distinction also underlies the European opposition of art and science, two other domains that cannot be separated from each other. "Scientific quantification invades artistic practice (see the perspective in the Renaissance, the multiple perspective in Cézanne, and Cubism, to mention only painting). And fictional qualification invades scientific practice (see hypotheses which are fictions, as much as Newton wants to deny it)." (ibid.: 2) This distinction between science and art is impossible, as it goes against our concrete being-in-the-world. The two domains do not simply overlap in in-between grey zones. They have the same origin. Flusser quotes Pascal's notion that the heart has reasons

that reason ignores, a passage he uses in other texts written in the context of the *Casa da Cor*.[17] In Flusser's view, the distinction between form and colour, eternal ideas and appearances, quantity and quality, science and art is thus also connected to the misleading opposition between reality and fiction, authenticity and artificiality. However, there are more and more signs showing that the West is overcoming this schizophrenia. The integrating phenomenological view that focuses on relationships instead of abstracting elements from their context is slowly but surely imposing itself. And colours play a major role in this ongoing process. "Our culture is spontaneously corroding the very ontological fundament on which it is based. And this corrosion manifests itself in an impressive way in the realm of colours." (ibid.: 3)

Colourful images represent present or past events, colourless ones, on the other hand, virtualities, yet to be realized, an idea that is linked to Flusser's understanding of black and white photography discussed earlier. Colourless images in science are, thus, more fictitious than coloured ones. The new synthetic images produced by algorithms on computer screens represent future possibilities. Fractal images in colour represent a quantitative view of reality that has been qualified, that is, the visually perceptible overcoming of the separation between science and art. To say that with "synthetic coloured images the theoretical vision is phenomenalized" means that "quantifying thought is qualified" (ibid.: 4) but also that the phenomenal vision of art is quantified. The hardest science (arithmetic calculus) becomes art, and the softest art (abstract painting) becomes exact science. Artists become scientists and scientists become artists. Coloured synthetic images point to something that lies beyond the culture of the West. As Flusser puts it at the end of the essay: When we look at them "we are taken with vertigo. It is the vertigo of those who abandon the protection of imposed order and project themselves in the adventure of freedom." What can be retained of Flussers theoretical hesitations and the unresolved inner contradictions of his thinking in his search of a culturally defined colour code is perhaps the most important aspect of his philosophy: its fundamentally dynamic open-ended nature.

In some respects, Flusser's theoretical positions are remarkable – especially his provoking view of Blackness and his interpretation of the cultural and political role of polychromaticity. However, in view of recent developments, his overoptimistic view of the unlimited possibilities of computer technology and genetics and their application in the transformation of our environment are questionable. Flusser's narrow notion of the ecological does not include the possibility of climate change and environmental damage. Nevertheless, when one considers the historical context in which these ideas were conceived and the intellectual tradition Flusser relies on, they can be better understood. Flusser's view of the relationship between nature and culture is inspired by positivism,

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[17] See "Postmoderne Farben" and "Casa da Cor, (reflexões complementares)" in this issue of *Flusser Studies*. See also Guldin, Colorarium.

Marxism and the natural sciences of the 19th century, in which man is still the unquestioned conqueror and invader, using and abusing his environment for his personal purposes. Add to this, that in Flusser's interpretation the subjugating and changing of the natural environment by rendering it more and more artificial is ultimately an expression of human freedom, an emancipation from the boredom and greyness of entropy, and a way of overcoming death through dialogical negentropy.

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