## **Some Ideas About Colour**

'Some Ideas about Colour', Olafur Eliasson: Your Colour Memory (Glenside, 2006), pp. 75–83.

If I shine my lamp onto a white wall and then increase the brightness of the lamp, we will doubtlessly describe the effect as a change in the level of brightness – not as a change in the colour of the wall. Without thinking about it, we attribute the effect of this change to its cause through a kind of representational perception that filters and controls our ability to sense colour.

In my work Room for one colour, we actually see only one colour. The wavelengths of light from the lamps in the space are in the yellow area of the visible spectrum, resulting in all colours in this room being subsumed into the yellow domain. Like a black-and-white image with shades of grey in between, this yellow space organises a green sweater and purple shoes into the field of endless shades between yellow and black. As our brain has to handle or digest less visual information, because of the lack of other colours, we feel that we see details more easily than we usually do. This means that our eyes can detect more shades of grey in a black-and-white photograph than shades of colour in a colour image. We have, in other words, in this monochrome space, a sort of hyper-vision that gives us the feeling of having a particularly sharp ability to perceive the space and people around us. The impression of this 'extra' vision varies from person to person; some people have experienced that objects begin to look flat or two-dimensional, as if the rest of the people in the space were cardboard cut-outs. Others have suggested to me that the feeling of dimensionality has been emphasised, so that the depth and volume of the space and people are more clearly detected and felt. The experience of being in a monochrome space thus, of course, varies for each visitor, but the most obvious impact of the yellow light is that it makes us realise that perception is acquired: the representational filter, or the sudden feeling that our vision simply is not objective, is brought to our awareness, and, with that, our ability to see ourselves in a different light.

The experience of colour is closely related to the experience of light and is also a matter of cultivation. As much as perception is linked with memory and recognition, our relation to colour is closely formed by our cultural habitat. The Inuit, for instance, have one word for red, but thirty for various whites.

One could, generalising slightly, easily make a small thought experiment based on the whiteness of lime, a disinfectant that was formerly thrown into mass graves to prevent diseases from spreading. As early as the Renaissance, it functioned in the laboratories of alchemists as a bactericide. Hospitals used lime to whitewash and disinfect their walls, and soon the colour white became the equivalent of clean. Christianity quickly adopted the purifying status of white light, in Northern European Romanesque churches, for instance, and then later in Protestant churches, in whose architecture the colour white became more and more dominant from the sixteenth to the nineteenth centuries. By the time of industrialisation, when modernity also introduced its dogmas for a healthy, good life, the colour white was already deeply rooted in our culture as the only truly purifying colour. As the twentieth century developed, the modernists came to believe that an open and clean space was the best platform for the execution of artistic self-realisation, and white made its way into the art galleries and museums, becoming the dominant colour of the

institutional frame in which art was communicated – the so-called white cube. Imagine if lime by nature had been bright yellow; maybe the now well-known gallery formula would have been based on this colour – the yellow cube. Then our history would have been altogether different.

Even though one of the largest intercultural constructions is the agreement on what characterises each colour, there is still a diversity of individual opinions about the subject. Colour, in its abstraction, has an enormous psychological and associative potential, and even though it has been cultivated to the extreme, the amount of individuality in experiencing colours is equally extreme. This points to the fact that colour does not exist in itself but only when looked at. The unique fact that colour only materialises when light bounces off a surface onto our retinas shows us that the analysis of colours is, in fact, about the ability to analyse ourselves. That colour is a construction, dependent on the individual, also becomes clear when we look at colour constancy, which is another interesting aspect of our colour perception. Scientific research shows that our experience of the colours of specific objects is often constant despite significant changes in ambient light. This means that an object looks the same to us even though its surface colour may change considerably when it is, for instance, carried from one light setting into another or is placed next to a dark surface rather than a light one, and so on. In other words, for pragmatic reasons we perceive an object as the same over time, but actually a large number of micro-transformations occur that continually negotiate the object's relationship to its surroundings. This I find really interesting because it means that objects always shift or mutate over time, and, if we become aware of this constant movement, we may be able to understand the world as a much more open, negotiable space than we usually think it is.

Your colour memory investigates aspects of colour perception, one of which is afterimages and their temporal relationship with their sources. If we enter a room saturated in red light, our eyes, as a reaction, produce so much green - with a delay of approximately ten to fifteen seconds - that the red appears much less intense; it is almost erased. If the colour of the room were to change from red to colourless, a clear green afterimage would appear on our retina. In Your colour memory, the colour fades from one colour to the next in a sequence of thirty seconds. In that half minute, the single colour slowly appears, ripens, and subsequently fades into another colour. If the room is blue when you enter, after about ten seconds you will begin to produce an orange afterimage; if the installation fades from blue to yellow, the subsequent movement of afterimages in your eyes will be from orange to purple. The retinal fade-out occurs with a delay of about ten to fifteen seconds in relation to the actual change of colour in the room. There are, in other words, two colour curves at work: one pertaining to the work itself and one created belatedly in your eyes. One could argue that another curve finally appears, namely, the curve of colours perceived by the brain, which is an average of the two preceding curves. If we spend enough time in a blue space, our eyes will create enough orange afterimage colour for the space to gradually fade into white. If I were to enter the colour-saturated room some time after you, my experience

of the colour would differ substantially from yours, as you would already be enrolled in a sequence of wall colours and afterimages that determine your present experience. I, on the other hand, may not yet have produced afterimages that colour my perception to the same degree – so to speak. Our perception of the room, therefore, depends on the amount of time we spend immersed in the changing colours and on what use the room is to us.

I also have plans for another experiment with afterimages: at some point I want to produce a movie, where half of the film is projected from the movie projector onto the screen and the other half is projected by the eyes of the people looking at it. Or you could say seventy/thirty. The point is to create visual stimuli, with or without a narrative. It will be an almost constructive movie, where we add colours, images, shapes, patterns, and whatever else makes sense. Watching the film and having perhaps received a few instructions about the experiment beforehand, one can then create a complementary movie, or, even better, a sequential one, as time always carries some kind of narrative in it. I am in contact with some people who make films for Omnimax theatres, and of course the most exciting thing would be to make a movie that is completely hemispheric, so that the whole retinal field would be covered.

I am thinking about turning the viewers into projectors, or, in other words, turning the screen into the subject and the viewers into the objects, twisting the perspective around. I have noticed – and this is where it begins to get really interesting - that by looking in different directions you can play around with an afterimage. I may, for instance, show a yellow disc on the screen that remains bright for about twelve seconds. Maybe it fades slightly or increases in intensity, but only to the degree that people still manage to focus on it. There is a small amount of suspense. Will it explode? How yellow can it get? Something like this. Then it disappears, and afterwards there is nothing but ambient light and the purple afterimage of the yellow dot. The viewers will see this afterimage flying around for a while, and suddenly I may project another light image onto the screen - green, for example. Everyone will then focus on this new green dot, possibly moving into a different position, and, naturally, a red afterimage will follow. I can then potentially project an image of an afterimage, just to make things more complicated, next to the red dot, so that an artificial afterimage is also created. This experiment is not about making a traditional movie in any sense; in this respect it is not about narrative. For me it is a work of art regardless of what we call it. It is a little scientific movie about the afterimage phenomenon.

Another example involves the viewing of a white line that would then be followed by an afterimage. Even before the white line fades, we would have the afterimage floating around. I believe there must be different ways of getting people's attention; the viewers could be asked to place their afterimage line on something else while the original image is still on the screen. If you continue like this, carefully adjusting the sequences in time – line, afterimage of line, another line, afterimage of this, and so on – you can even build a house. Thus, by adding shapes on the screen and taking advantage of the temporal aspect that this involves, we could actually create some kind of space.

I am, of course, interested in the self-reflexive potential of the experiment, which for me is quite close to a scientific project. This potential – which also has social and political consequences – is the notion of relativity in seeing. The idea that things are not as they appear to be is a very healthy argument. The sort of loop between the retina, the brain, and the screen that my film experiment focuses on is also central to my artistic practice in general. In this context the screen is the cinema screen, but of course it also represents our surroundings. What interests me is limiting the number of disturbances to the loop, trying to keep to the basics, so that the viewers will be able to begin adding a narrative aspect to it themselves. The Omnimax screen, as well as all hemispheric projections, naturally has a history that we cannot avoid. We also cannot escape the possibility of people bringing distractions, such as popcorn, into the theatre; everything starts to smell, and people get sticky fingers. But still, I would like to avoid a narrative, as it takes away our attention from the experiment, an experiment in which the viewer becomes the experiment itself and also experiences being the experiment. It is like being operated on without anaesthesia.

Discussing the perception of colour also opens on to the wider field of seeing in general, which is likewise influenced by culture and cannot be generalised. Scientific experiments show that the orientation of the viewer within an image may vary according to geography and cultural upbringing: whereas the eyes of someone born and raised in Japan have a tendency to grasp immediately the totality of the image, spending the initial moments noting and decoding the background, Western eyes in general approach the main subject of the image directly, and it is only afterwards that contextualisation is made. Or, in other words, a Japanese person takes in the totality of a situation, whereas a Western viewer focuses on the main objects. These differences are, it is believed, grounded in the different patterns of society and culture. The deconstruction of a universal, generalised vision and colour scheme – which I am very interested in – may thus have far-reaching consequences, both for the ways in which we look at and orient ourselves in the world and for our understanding of identity as such.

So far I have discussed various examples and cases involving colour perception and time, but our sensory perception in general also has to be seen, or grasped, in relation to the experience of our surroundings. As an artist, I often work within museums, and this has brought about many general reflections about the way in which institutions are organised. What interests me, particularly in relation to the layout of institutions such as museums, and, of course, all the ideologies and power structures that are embedded in these institutions, are the ways in which the museum communicates with the visitor, as well as the museum's potential for communication as such. I always consider museums and other kinds of space from an experiential point of view, which means that the actual experience of art is central. This experience – which contains spatial, temporal, and emotional aspects – is first and foremost generated by the interaction that occurs between visitor and artwork. The institutional context in which the visitor and artwork are brought together is also essential,

and together these form a complex network of elements that constitute the dynamic relationship between visitor, artwork, and institution. What I look at is thus not only the experience of the artwork itself, or the artwork and institution as one, but also – and even more importantly – the ways in which the visitors may experience themselves experiencing the artwork. The audience should, in other words, be encouraged to see itself both from a third-person perspective – that is, from the outside – and from a first-person perspective.

I find it crucial that museums focus on the visitor experience, rather than only on the artworks, in order to unfold the socialising potential of the museum and to create an important relationship between museums and the society in which they take part. In this way they may avoid positioning themselves as autonomous institutions outside society. I prefer to regard the institution as a place where one steps even deeper into society - from which one can scrutinise society. One can perhaps say that it turns into a kind of hypersociety, with higher pressure and greater density, so to speak – a place where discussions become intensified and concentrated. This is possible because the potential of art as a participant in society is productive: a successful artwork breeds; it generates. The potential is not linear. Instead, I think that art may propagate itself into other connections in what may be called a *rhizomic* way. Art's potential is thus seated precisely in the fact that its experiential content can be actualised in contexts other than specifically artistic ones, and these contexts are always dependent on the viewer. In other words, the spreading effect, if we can talk about such a phenomenon, will always stand in relation to the singular viewer and depend on the specific dispositions that make her more or less receptive to a particular work.

The museum's potential as a space where the viewer may renegotiate her relationship to the artwork and her surroundings also raises certain ethical questions, such as the configuration of spaces and the way in which these are communicated, defined, or created by those participating in the situation. In other words, the physical presence, movement, and interaction of the visitors are ultimately what define the spatial potential of the museum. This mutability of space in part results from the ethical considerations that are inherent in any kind of participation. Here, I am also thinking of what one may call an ethics of communication. I believe that museums, in communicating art, have a responsibility to make the ideology and power structures that shape their visions obvious to the visitors. Museums have to avoid the danger of slipping into a superior position by patronising their guests - that is, setting up a sort of utopia for their audience – thus eliminating the complex potential of art itself. The question about ethical values therefore lies in the idea of freedom for the visitors to experience and, at the same time, be critical in their attitude towards the experience itself.

The broad spectrum of potential responses to art and its environment is therefore made apparent by the self-reflexive activities of the visitors and, ultimately, raises fundamental questions about the development of identity. My primary interest lies, of course, not in an emphasis on a specific identity, but rather in the conditions that allow for the formulation of an open understanding

of identity, and I think that museums have a responsibility to provide the stimulus for this type of development. The value system suggested by society at large unfortunately tends to favour an understanding of identity based on a very limited concept of what is good and bad, acceptable and unacceptable. Faced with the entertainment industry's commodification of the experience economy as well as its interest in excluding relativity through the suspension of time, we need to seriously consider the questions about self-reflection and identity raised above. I find that cultural institutions have the potential to add more complex views and values to society by allowing various configurations of identity. Thus, it is my belief that museums should strive to avoid what we might call a Disneyfication of how we experience art; that is, they should avoid supporting generalised ideas or experiences that do not leave room for individual evaluation, feelings, and thoughts. By allowing and generating a space for reflection, museums may, I hope, be able to defy the prevailing trend of selling 'universal' experiences. Instead of presenting a 'totalitarian' model of experiencing, they can create an environment that encourages variety and individuality in the experiences of their visitors. In other words, in preserving the freedom of each visitor to experience something that may differ from the experiences of others, art can continue to have a significant impact both on the individual and on society as a whole.