Care through colour in space

Lou Ricome

National School of Architecture of Lyon, France (ENSAL) Email: lou.ricome@lyon.archi.fr

The following communication presents the means by which a workshop with artist and architect Emmanuelle Moureaux in Japan led me to a research internship at the GERPHAU laboratories in Paris La Villette with Lyon's hospitals. My work with Moureaux and my interaction with her projects gave me insight into the ways that colour can transform and interact with space. My architectural studies have allowed me to realise that, despite the intangible effects of colour on built space, colour is not a used as a primary conceptual tool. My interest for colour and my architecture studies have led me to explore the potential of colour in a healthcare setting.

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Introduction

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In order to develop my research, I had the opportunity of working with the « Femme Mère Enfant » hospital¹ during a research internship. Through this experience, I decided to create and develop an interactive tool that would transform the well-established relationship between colour and space. Colour is not a used as a primary conceptual tool even though it creates intangible effects on built space. Therefore, the aim of this research was to understand the potential of colour on the built environment and, in particular, the way it interacts with patients and caregivers in a healthcare setting. Throughout this communication we will try to understand and analyse the effects colour in space has on healing and care.

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¹ The Woman Mother Child Hospital is entirely dedicated to the couple, the mother and the child. It is the only permanent reception centre for pediatric emergencies in the Lyon area (82,000 visits per year) and also has a gynaecological emergency service.

Discussion

My approach to this project was strongly influenced by the knowledge of colour in space I developed during my internship with Emmanuelle Moureaux in Tokyo. Her work as an architect is based on the notion of "shikiri"². She uses colour as a three dimensional element – as layers – in order to create spaces. For Moureaux, colour is not only used as a finishing touch applied to surfaces. Throughout this internship I came to realise how much her projects focus on the feelings and emotions created by colour: "I want the visitors to feel something, emotions through colour, I would say this is my main goal", "theses emotions can be different for everyone"³. Emmanuelle Moureaux pursues the creation of wonder, surprise, and bursts of colour in space. This will comes from her own amazement when she discovered the colours of Japan for the first time: the traditional blue tiles, the light panels in the streets, the traditional outfits and the temples.



Figure 1: Universe of words, exhibition, Chiyoda, Tokyo 2019.

During the creation process of the installation *Universe of Words* in which I participated, I came to realise that working with layers and overlays of porous materials (paper, thread...) can make the walls and ceilings of a space disappear and create a limitless universe of colours. Indeed, some ten years ago, Emmanuelle Moureaux also developed a "100 colours" guideline that allows her to follow a specific order of shades in her work. Each installation will use different quantities and proportions of theses 100 colours. Furthermore, the enormous quantity of hiraganas⁴ and lines in the installation managed to build a deconstructed space. In order to grasp the magnitude of the installation, one must note that *Universe of Words* took place over 200 square metre; it required the work of about three-hundred-and-fifty people and consisted of 140,000 hiraganas. I believe it is only when participating in the set-up of the installation that one can comprehend the immensity of work, effort, and organisation that such a project requires.

Surprising to me in this experience was that, despite having participated in the setting-up, when I entered the finished installation for the first time, I felt transported. It was as if there was a radiant force coming from inside the installation. I was overwhelmed and in awe by this world of colour. The

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² Inspired by traditional Japanese sliding screens. Emmanuelle Moureaux created the concept of "shikiri", which translates "to divide space with colours".

³ Translation of an interview I had with Emmanuelle Moureaux during my internship in Tokyo, 2019.

⁴ Characters of one of the Japanese alphabet.

organisation of *Universe of Words* permitted visitors access to smaller areas and corners, allowing them to live the submersion of colour on different scales. It is submersion in theses worlds that takes away the temporality and our knowledge of space. In such contexts, we are therefore forced to rely and focus on our feelings and emotions, or as Kandinsky would call it, "the material states of the soul" ⁵.

Throughout my research on the relationship between colour and space I had the opportunity to complete a research internship with Chantal Dugave, an artist-architect and teacher at the school of architecture in Lyon, as well as Laure Mayoud, a psychologist. Through this internship I wished to question the interactions between colour and the theory of care⁶. As Laure Mayoud works in partnership with Lyon's hospital, the project I developed focused on the children's department at the Femme Mère Enfant Hospital in Lyon. Moreover, her approach is to treat her patients with "cultural prescriptions". The intention of the project was to develop an interactive tool that could, in some way, generate care through the effects of colour. Throughout my research and related experiments, I leveraged my position as an architectural student in order to interact with the notion of space.

The particularity of care theories is that they allow social and political issues to be presented beyond the field of care and health. They also allow us to question the place and role of vulnerability and care in our own lives, and then to question its place in society. Apart from the home and, perhaps, healthcare spaces, we do not define the spaces that we occupy in everyday life as places where we can express our vulnerability. It is therefore interesting to question spaces and architecture in terms of how they can become conducive to this encounter. Consequently, this raises the question: what role does colour play in humans' awareness of our own vulnerability?

The ethic of care is an active process that can be broken down into four "analytically distinct but intimately related" phases: "caring about, taking care of, care giving and care receiving" In my internship experience, I did not position myself as a care giver but as an architecture student seeking to question how colour and space could "care about" the quality of the hospital environment. It was during my visits to the Femme Mère Enfant hospital that I became not only aware of some of the children's needs, but also those of their caregivers. Indeed, a child in hospital is alone, without their family, in a room that is not their own and that they cannot really make their own. They therefore express a lack of attachment, comfort, and familiarity in their environment, but also a lack of lightness, imagination, and playfulness. It is therefore important "to take care of" the quality of the architectural space in such medical settings.

In order to develop a "care-giving" approach, I took Emmanuelle Moureaux's work and process as a reference. Indeed, I wished to develop an object that could use layers in order to generate space through the intangible material of colour. Moreover, the work of the artist-architect gave me the keys to generate space from two-dimensional porous elements such as paper. Unfortunately, the last phase, "care receiving," did not take place because of the COVID-19 pandemic. The nature of this crisis made it impossible for me to bring the object to the hospital and to see its uses and effets on children. I therefore did not get any feedback from the patients and care-givers. However, working with Laure Mayoud, founder of the association L'invitation à la beauté (The Invitation to Beauty)¹⁰, I was able to test my proposal with members of the association.

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⁵ Kandinsky W (1988), Du spirituel dans l'art et dans la peinture en particulier, <translation by Ricome L>.

⁶ Girault E (2010), « Joan Tronto, Hervé Maury, Un monde vulnérable. Pour une politique du"care" ».

⁷ She uses poems, perfumes, paintings and music to cure her patients.

⁸ C Tronto J (2008), « Du care », Revue du MAUSS, 2008/2, n° 32, 243-265.

⁹ ihid

¹⁰ http://www.linvitationalabeaute.org/ – last accessed 3 December 2021.

At the beginning of this research internship I had the opportunity to meet with professionals (caregivers, doctors, artists, illustrators, authors, etc.) but also patients. A conversation with a children's illustrator and author made me realise the importance of interaction, appropriation, surprise, and amazement between object and child. One of the main objectives of the project was to stimulate the children's imagination. My first step in developing a prototype was to define its content and materials. Indeed, these two factors were critical to creating a world of colour and wonder. The content would need to stimulate the interest and action of its reader: games, cutouts, drawings, sticker, fill-in-the-blank texts, etc. were used to achieve this end. Textured sheets served as the medium through which colour was communicated. Maintaining children's interest, however, also necessitated the stimulation of the senses (touch, sight, etc.). Therefore, transparent, glitter, cardboard, mirror sheets could be implemented to play with readers' senses. Their use also offered the possibility of encounters or overlap between different materials and colours in order to create depth and perspective within the object. Transparent coloured papers were also used to give the possibility to project oneself – in a way not dissimilar to glasses – in space.

Finally, the colours used had to be bright and lively, as they are the ones that have the strongest surprise and amazement effect. Moreover, the fact that this project was set in the particular environment of a hospital set certain contraints. Indeed, it was more welcomed to work with colour that initiated active energy and good humour, rather than melancholy with bleak colours such as black. After having determined the stakeholders and relevant tools, I was able to define the format of this object. As the aim was to find a way to set space in motion through the use of coloured sheets, I chose to work on a *Leporello*. This object is a book that unfolds like and accordion due to the particular folding and gluing techniques. This format allowed me to work with a two-dimensional element that unfolds and opens us. It is not a fixed and passive object, its shape interacts and takes place in space. The *Leporello* also offers different readings through non-linear approaches. Moreover, I found interesting the way this object can become an immersive experience through its changes of scales.





Figure 2 (left): Organisation of the Leporello. Figure 3 (right): Working draft of the Leporello.

The format, the content and the materials allowed me to focus afterwards on the way I could create depth and space through this object. The layers of the *Leporello* could be played with by cutting out some parts of a page in order to overlay sheets and materials. I also had to spend time on the colour scheme to ensure positive interactions between the colours used, the space, and those interpreting the project. Similarly crucial was the need to account for potentially disparate readings of the installation.

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The choice and ordering of the colours also needed to stimulate the amazement and harmony that colour schemes have the potential to imbue in onlookers.

Through this approach I was therefore looking to create depth, width, and thickness in the interpretation and the movements created. The colour pattern and the colours themselves allowed me to open up vibrations and emotions in the "receiver". In order to develop this approach, we need to seize the ways that colours produce movements. First of all, the movements created are physical. From Wassily Kandinsky's approach, colour has a double effect. The first one is purely physical and short-term, an effect which Kandinsky compares to the touch of ice or fire, and which can generate ephemeral feelings of happiness. Then follows a second, deeper effect: deeper that brings out an emotion of the soul. This duality allows colour to have different time scale and to stimulate our bodies and mind in different ways. Kandinsky's other approach involves "letting the colour alone act on you" ¹¹. This means that even as a passive spectator we interact and live the effects of colour. In order to understand the place colour holds in space, we have to separate colour in two main contrasts. The first one is warmth/coldness which is perceived as horizontal movement, coming towards us for warmth and moving away for coldness. The second contrast can be generalised as the difference between black and white, therefore the tendency for a colour to be bright or dark.

The shades of one colour keep the same horizontal movement but the speed changes (from dynamic to static). A warm colour with a bright shade will see its effect increase with a dynamic movement, just like a cold dark colour will. However, a cold warm colour or a bright cold colour will tend to become motionless. Another type of movement that we have to take into account is the concentric or eccentric movement of a colour. This can be observed with the example of a yellow and blue circle. Indeed, the yellow circle overflows from its outline whereas the blue one withdraws in its centre and moves away from us. If we come back to the movement previously established, we can observe that the effect of the yellow circle increases when brightened and the effect of the blue once increases when darkened.

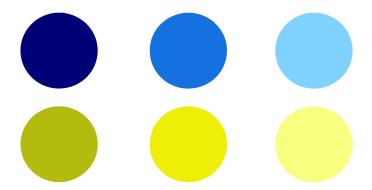


Figure 4: Light (right) and dark (left) effects on blue and yellow (center).

Moreover, from a scientific approach we know that colour does not stay the same over time. Many micro-transformations make it constantly evolve. These constant changes question the interactions of colours and their environment. They also unconsciously stimulate our vision/perception and attention because even though we have an impression of continuity: "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"¹². This quote from Olafur Eliasson, artist, make us question the rigidity of space when it encounters the element of colour. To be aware of this approach enables us to have an

¹¹ Kandinsky W (1988), Du spirituel dans l'art et dans la peinture en particulier, <translation by Ricome L>.

¹² Eliasson O (2006), « Some Ideas about Colour », Olafur Eliasson: Your Colour Memory, 77.

active relationship to a coloured environment: "Its instability, its evanescence and its mobile identity" 13. Olafur Eliasson even speaks of an "open-ended process, rather than a discrete or ponctuel act of looking"14 in our interaction with colour. These process allow Eliasson to work on projects that will generate movement and that cannot be observed from a distance or with a passive contemplation. Opening up uncertainties and instabilities through the use of colour stimulates a constant consciousness towards our bodies and minds. Eliasson's main goal is to give the visitors the opportunity to relearn to be opened and attentive to their bodies, with all its senses. He manages to do so by using colour in its unexpected and imbalanced capacities. An example of his approach is the installation Your Uncertain Shadow that aimed to activate the visitor's body by putting their physical movement at the center of the production: the body itself generates light and colour. This approach to colour, according to the philosophers James, Nietzsche, John Dewey and Henri Bergson, gives us the opportunity to "escape the numbing claims of habits and routine" 15. The imbalance or discontinuity of coloured experiences generate a disruption of habits¹⁶ through our bodies and senses. By these sensitive stimuli, we remain alive, anchored in our body, in our feelings, and in the lived moment. We are awakened against habit, boredom, and stability, which enriches our bodily experience and the way we take our place in the world.



Figure 5: Your Uncertain Shadow installation, Olafur Eliasson, 2015, London.

Second of all, movements generated by colours are also psychological. As we have started to understand that colour is one of the elements that stimulates the relationship with ourselves, our way of being, our imagination and our ability to open up to the world. By activating space, by creating movement and by generating emotions and sensations, colour activates the imagination that we develop for ourselves of our experiences. We can therefore perceive colour as an element allowing us to "explore the imagination as a living mediation structuring the experience of the world"¹⁷. This act of setting in motion, both physically and psychologically, allows us to anchor ourselves in space and in the exchanges that we encounter: "this trans-position of the subject can only be explained by the action of an

¹³ Crary J (2004) « Your Colour Memory: Illuminations of the Unforeseen », in *Olafur Eliasson: Minding the World*, Eliasson O and Ørskou G (eds.), Exhibition Catalogue, Aarhus: ARoS Aarhus Kunstmuseum, 220.

¹⁴ ibid, 221.

¹⁵ ibid, 223.

 $^{^{16}}$ Olafur Eliasson's description to the use and effect of colour on ourselves and our lives.

¹⁷ Crary J (2004) « Your Colour Memory: Illuminations of the Unforeseen », in *Olafur Eliasson: Minding the World*, Eliasson O and Ørskou G (eds.), Exhibition Catalogue, Aarhus: ARoS Aarhus Kunstmuseum, 223.

imagination creating the impression of living inside beings and things as if they lived in us"18. Therefore, colour stimulates the imagination through its sensory and emotional capacities. The sociologist, Phillipe Descola, emphasises this characteristic, explaining that "detached from feeling, colour has no existence"19.

Our relationship with colour is consequently rooted in the temporality of our self, our feelings, and our subjectivity. We are in perpetual evolution and transformation through the events of life, which implies the impossibility of repeating a sensitive phenomenon. The active nature of colour stimulates us and seeks to set our body and our imagination in motion within space. These movements and feelings allow us to "experience ourselves" by focusing our attention on our body and mind. According to Philipe Descola, experiencing ourselves is the very essence of life, since one lives the experience and existence of oneself without distance, without hindsight. It is precisely when we experience ourselves that we can gain awareness of our vitality, of our existence as unique living beings. Taking time to feel this phenomenon is part of our encounter with ourselves and therefore of the development of our personhood, of our identity, and of our wellbeing. According to Kandinsky, intangible elements open up the world to the unexpected, mysterious, and indescribable, allowing us to experience what he describes as "the essence of our invisible life" 20. These invisible phenomena stimulate what is strongest, deepest, and most indescribable in our experience of the world and of ourselves.

Conclusions

The hypothesis I developed through my research asks, therefore, not how colour can bring physical treatment or care to certain needs. Rather, I seek to question how colour can generate psychological well-being through the vitality it stimulates in the human experience of space. This movement that is induced by colour, both physically and psychologically, brings us knowledge and awareness of ourselves and the ways we feel. I therefore developed the Leporello with the idea that its uses and interactions with colour and space would generate psychological well-being for the patients of Lyon's hospital. Furthermore, we must keep in mind that this project is set in a very specific environment: the patients under observation cannot necessarily move out of their beds. I therefore chose to question and work on the ways that movement could be brought to the often-stagnate hospital rooms of these patients. This is how I believe the experience and use of the coloured Leporello could generate movement in the patients' limited spatiality. As was mentioned previously, I did not have the opportunity to test the Leporello in its intended environment as a result of the healthcare-related constraints imposed to the COVID-19 pandemic. However, during my time in the hospital and in my work with Laure Mayoud, I was able to grasp the profound impact artistic works can have. Her encounters and discussions with the patients made me realise how much a painting, a picture, or simply a colour has the ability to open up windows to the outside and imaginary world of the patient. By paying attention to these productions, patients are transported and are given the opportunity to escape from the difficult reality of the hospital. These observations allowed me to develop the hypothesis on which I based my research and allowed me to define the ways the Leporello would generate psychological well-being for the patients through the movements created by colours.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Tabet P (2013), Peindre la vie. Phénoménologie de l'invisible, In La Vie et les vivants: (Re-)lire Michel Henry.