# BODIES ON SOCIAL PHENOMENA: IMPLEMENTATION OF CYANOTYPE PHOTOGRAM-BASED CREATION AND OIL PAINT

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#### **ABSTRACT**

The goal of this research is to create an artwork by combining two genres of art, specifically photography and painting. The primary foundation of this composition is Cyanotype, or photograms on Cyanotype media, a 19th-century photographic process. Exploration and experimentation on the technique and concept of the piece are the primary methods used in this creation. The end result is a collaborative work using Cyanotype and painting technique to enhance the character and concept of the piece. This type of collaborative creativity is still uncommon, and it is critical to adopt it as a new way of working. Cyanotype is an old photography method that is still used today. These conditions encourage exploration. The combination of cyanotype and painting techniques allows the development of more unique and valuable works. The body in social phenomena is the focus of this collaborative effort. The findings of this study support Langer's idea that art is an expressive form formed by perception through the senses or imagination and conveyed from human feelings. Physical feelings, pain, comfort, and joy are all examples of this type of expression. The human body is essential because it is a key player in managing nature on earth. The combination of cyanotype and manual painting processes has distinct features, notably expressive, spontaneous, and dynamic which illustrates the sadness and fear.

Keywords: photography, cyanotype, painting

#### **ABSTRAK**

Penelitian terapan ini merupakan upaya penciptaan karya melalui kombinasi dua bidang seni, yaitu seni fotografi dan seni lukis. Pondasi dasar penciptaan ini adalah teknik fotografi abad ke-19 yaitu Cyanotype, tepatnya fotogram di atas media Cyanotype. Metode utama dalam penciptaan ini adalah eksplorasi dan eksperimentasi terhadap teknik dan tema karya. Hasil awal berupa cetakan Cyanotype dikombinasikan dengan torehan cat lukis untuk memperkuat karakter dan tema karya. Penciptaan kolaboratif semacam ini masih sangat jarang dilakukan dan penting untuk menjadi cara baru dalam berkarya. Cyanotype sendiri adalah teknik fotografi tua yang dibuat secara 'handmade'. Kondisi tersebut membuka ruang eksperimentasi. Pengombinasian Cyanotype dan teknik lukis membuka peluang terwujudnya karya yang unik dan bernilai lebih. Tema yang diangkat dalam karya kolaboratif ini adalah tubuh dalam fenomena sosial. Hasil penelitian ini sesuai dengan teori Langer, bahwa karya seni merupakan bentuk ekspresif yang diciptakan menurut persepsi melalui indera atau imajinasi yang diekspresikan dari perasaan manusia. Bentuk ekspresi ini adalah segala sesuatu yang dapat dirasakan, sensasi fisik, rasa sakit, kenyamanan, dan kegembiraan. Tubuh manusia digambarkan sebagai objek utama karena manusia merupakan pemain kunci dalam mengelola alam di bumi ini. Perpaduan proses Cyanotype dan seni lukis memiliki ciri yang berbeda, terutama ekspresif, spontan, dan dinamis yang menggambarkan kesedihan dan ketakutan.

Kata Kunci: fotografi, cyanotype, seni lukis, tubuh

## **INTRODUCTION**

The discovery of photography in the early 19th century marked the beginning of people's fantasy of objective portrayal of reality (Karpov & Kryuchkov, 2015). Photographers convey information in the form of messages, anxiety, propaganda, and others through his photo work (Faturahman, 2022). Collaborative art production is more important now, when disruption is opening up new possibilities and even driving artists to create unique works using a multidisciplinary approach. In order to provide new experiences to the art community, this study is aimed to investigate and experiment with Cyanotype, 19th-century photography techniques, combined with painting techniques.

Cyanotype is one of the oldest photographic processes. In 1842, Sir John Herschel invented Cyanotype photography, which consists of a light-sensitive liquid flicked on a medium that generates a blue tint when exposed to ultraviolet light. His scientific background as an astronomer and a physicist encouraged him to made experiments which resulted in many findings in the field of photography, including cyanotype, fixer, and a pioneer of the term "photography" to the public in 1839. In contrast to the findings of Daguerre and Talbot, the Cyanotype process does not use silver as its main material, hence Cyanotype is categorized in the non-silver printing category. Photos produced with the Cyanotype process are blue images, so they are often also referred to as blueprints, which are the result of mixing two metal chemical solvent, namely Potassium Ferricyanide and Ferric Ammonium Citrate.

Due to the blue tone of the photo, the Cyanotype was not very popular among photographers at that time, because it was considered unsuitable for displaying photographs with the theme of architecture, landscapes, and portraits. Cyanotype was more often used to reproduce agricultural specimens, for the purpose of proofing photographs and for duplicating technical drawings of architects at that time. Today, alternative photographers frequently utilize Cyanotype to create photograms or photography without a camera (recording the shape of objects by shining objects on Cyanotype media). Unfortunately, Cyanotype photograms are usually shown without any combination with other media.

Despite these drawbacks, this process has its own advantages, namely the ease and simplicity of the process, that in several countries having many old print communities, Cyanotype workshops are often held for amateur photographers and even children. The workshop was held because with Cyanotype we will understand better about the negative-positive principle and comprehend the basic principle of light sensitivity in photography. Beyond that, cyanotype can be applied to many types of paper so that it becomes an interesting method.

According to the found research sources, there are similarities of artworks amongst artists from Turkey, the United States, and Indonesia, with this study. The first study entitled *Fauxssilles for the Future: Cyanotype Expressions on Plastic Waste* by Naz Onen (Turkey), was published in the journal SEQUITUR Volume 6. No. 1, 2019 (Önen, 2019). The project was about the plastic litter in the sea. The plastic was then photographed on a cyanotype. The objects taken in this series were chosen based on the 2017 Ocean Conservancy report, which details the items most frequently found by the sea. The things

featured in this series were chosen based on a 2017 Ocean Conservancy research on the items most regularly found near the water. According to Onen, there will be more plastic in the oceans than fish by 2050.



Figure 1. The work of Naz Onen, Fauxssilles 10, Cyanotype Print on Canson Montval 300gr paper, 25x35cm. (Source: journal SEQUITUR).

In Beyond the Blue: Cyanotype's Qualities of Light, Time, and Space, Alexus Jungles (United States) wrote his experiment with Cyanotype on various media and the way it was displayed (Jungles, 2019). His artwork entitled Bullets: Experimentation shows the experimental results of cyanotype printing on canvas, in which he inserted bullet casings on top of the cyanotype print media and applied copper-colored oil paint on the print to depict the bullets.



Figure 2. Alexus Jungles Bullets: Experimentation, 2018 Cyanotype and Oil on Canvas 4"x9 ½" (Source: journal SEQUITUR)

Cyanotype practice and experimentation are largely carried out in Indonesia by students from Department of Photography of Indonesia Institute of the Arts Yogyakarta and the art community. Darmawan and Wikayanto mentioned that the growth of the 'back to basics' movement in the fabrication of cyanotypes and other types of photo prints using past technology can be related to the phenomenon of desire for the past that occurs in the analog camera community (Darmawan & Wikayanto, 2018). Works by students of the Department of Photography, FSMR ISI Yogyakarta, which were displayed in Alternative Photographic Week #2 (APHIC WEEK #2) in 2022, are among those that can be used as study material in this research (Yogyakarta, 2022). The Existence by Ramadhan Dwi Pradana (Cyanotype on Linen Paper) and Mantera Mata by Galih Rayhan Fadillah (Cyanotype on Watercolor Paper & Screen) are two works that can be used as illustrations.



Figure 3. The Existence by Ramadhan Dwi Pradana (Source: catalogue of Alternative Photographic Week#2)



Figure 4. Mantera Mata by Galih Rayhan Fadillah (Source: catalogue of Alternative Photographic Week #2)

In 2019, Irwandi also created Cyanotype works combined with painting paints at the International Exhibition Abad Fotografi #4: Momentum at the Jogja Gallery (Kuncorojati, 2019). Irwandi's work, *Our Final Pose*, is a human photogram on cyanotype media with the addition of red paint as an accent.



Figure 5. Our Final Pose by Irwandi (Source: <a href="https://gudeg.net/read/14046/our-final-pose-karya-dengan-teknik-abad-xix-di-pameran-abad-fotografi-iv.html">https://gudeg.net/read/14046/our-final-pose-karya-dengan-teknik-abad-xix-di-pameran-abad-fotografi-iv.html</a>)



Figure 6. Production documentation of Our Final Pose (Source: Researcher's documentation)

According to the existing references, it can be observed that cyanotype as a medium can be developed through medium exploration and experimentation, as well as its display. Cyanotype can be used as a means of pure art pursuing aspects of form through its characteristics, and on the other hand, it can be a medium for expressing artistic and conceptual ideas.

The key question in this research is how to open exploratory and experimental possibilities in cyanotype works by involving painting massively. *Our Final Pose* is used as the starting point in this research. Some of the criteria that will be used in this study are as follows:

- 1. Cyanotype photograms are the main work.
- 2. Human body gestures that indicate a social condition are recorded on cyanotype.
- 3. The recording results are done by applying the principles of painting to build an atmosphere and theme.

The main theme is the human body and its social life. The human body is essential because it is a key player in managing nature on earth. The combination of cyanotype and manual painting processes has distinct features, notably expressive, spontaneous, and dynamic which illustrate sadness and fear. This research encourages new methods to create innovative visual artworks with strong themes that are produced by utilizing the characteristics of the art media used. The contribution of the studies is providing scientific writing of the art practice process combining the cyanotype and painting practice.

This research is strongly important because the production process was very unique where the human body was recorded on a large paper. Before carrying out the process of irradiating the sun with human objects on it, initially, the paper was smeared with Cyanotype liquid and then dried out. After the image of the human body has been recorded, the next step is to respond to the work by adding oil and acrylic paints.

The objective of this research is to produce an exclusive artwork with a unique level of distinctiveness of photographic work, in which the photographic work combines with painting works. It can be said that this method is rarely used by artist. The reason is not yet certain, but it can be assumed that it happened because of an understanding to maintain the 'purity' of photography in cyanotype works. Based on these conditions, the idea emerged to combine cyanotype with painting in order to break the existing cyanotype standard for the creation of innovative experimental works. It is expected that this combination will bring cyanotype works become more 'meaningful' than just the light recording. The reason why it is crucial to be carried out is as follows:

- 1) Cyanotype photograms have expressive visual characteristics and can be explored further;
- 2) The addition of painting techniques will enrich the work visually, especially by adding objects related to the theme.

On the one hand, the work area of photography is as a visual art which is related to beauty, evoking feelings, and involving creativity. On the other hand, photography is a process of reduplication, instantaneous reproduction using a machine. This dualism is always confusing in the realm of photography (Susanto, 2017). Through its evolution, photography has evolved into an art form that not only preserves truth in images (visuals), but also poetic values and even image language (Setiyanto et al., 2022). Painters must master the fundamental elements of art, which include line, shape, value, texture, and color. These are the essential materials that artists use to create artistic creations. Artists might use specific characteristics of a medium or a variety of other media in the same work to create a unique visual taste. In order to obtain analysis in the creation of artwork, visual art aesthetic is used as theoretical approaches. Susanne K. Langer in Problems of Art mentioned that a work of art is an expressive form that is created by perception through the senses or imagination and expressed in human emotions. This kind of expression encompasses all that may be felt, including physical sensations, agony, comfort, and joy (Langer, 1957). Painters must comprehend the fundamental elements of art, which include line, shape, value, texture, and color. These are the essential materials that artists employ to create artistic creations. Expression is the artistic representation of the artist's thoughts, emotions, or concepts. A work of art's emotional or intellectual message is its substance or meaning, which comprises assertions, emotions, or moods generated by the artist and understood by the viewer (Ocvirk et al., 2013). The artwork will be an experimental work that comments on the global phenomenon related to the social circumstances after the global pandemic.

## **METHODS**

The creation method used was practice-based research which is carried out by exploring and experimenting with the material and medium. In *The Art of Thoughts*, Graham Wallas describes the steps of creative production as preparation, incubation, illumination and verification (Wallas, 2015).

The first stage was preparation, which involves collecting all references, materials, and resources. The tools and materials used in this research are as follows: Arches paper, 200ml Potassium Ferrycianide, 200ml Ammonium Citrate, Canson paper, Paint brush, Acrylic paint, Oil paint and Thinner.

The second stage was incubation, which includes examining the problem and contemplating it in order to generate an idea. It is the phase when artist's feeling and emotion focuses on the specific problems.

The third stage was illumination, which consists of exposing ideas and intellectual production; and the conceptualization of the final idea. Artist works to overcome the problems, methods, and process stages.

Finally, the fourth stage was the verification and production stage where creativity starts with a combination of photography and painting to produce unique work. Furthermore, body gestures were captured on cyanotype film. The following step is the printing process and then the retouching of the artwork. Improvisation is carried out as part of exploration and experimentation to get the best results. it is the depiction of a human condition in the midst of social phenomena in a symbolic way. In a journal article, Rusli points out that the use of symbols in works requires exploration and experimentation (Rusli, 2018).

## RESULT AND DISCUSSION

This work describes the social reality that has occurred over the last 5 years since the outbreak of the Covid-19 pandemic. Furthermore, the interaction between humans and the environment is a source of concern as the level of natural disasters and environmental crises rises. In this scenario, the visual form of the human body is chosen as the main protagonist, who is shown in melancholy gestures and movements. The figures in the work use figurative forms with dominant contrasting colors of red and orange. Those colors represent the disaster, danger, and death.

The research process began with making chemical Cyanotype using laboratory equipment in a dark room. The chemical Cyanotype was initially in the form of crystals or granules, as much as 200 ml of Potassium Ferricyanide and 200 ml of Ammonium Citrate then mixed each

chemical with water and warmed with laboratory equipment.

The next process was to leave the two liquids for one night before the basting process and stored them in a place that was not exposed to direct sunlight or UV rays with the intention that the color of the Cyanotype liquid works optimally and produces a deep blue color. After letting it sit for one night, the chemical was ready to be used by applying it to the paper using a brush in a dark room. Researchers used several different types of paper, including Canson and Arches paper. The research process includes the process of smearing, drying after the paper was smeared with Cyanotype for approximately 12 hours, making objects on paper, washing, and also painting with acrylic paint. During the process of smearing and drying the paper should not be exposed to UV light, so the researchers stored it in a dark room. The important steps in detail are as follows.

# Cyanotype Emulsion (Sensitizing) Application

The *sensitizing* process can be done in various ways. The most common way to do this is with the use of a brush and sponge. While other alternatives are using cotton, cloth, and water spray. The thing that needs to be considered in basting is the puddle of emulsion that may form due to an excess amount of emulsion. The formation of emulsion puddles will result in the loss of the printout.

# **Drying Process**

Emulsion drying can be done with a fan, a heated drying box or a hair dryer. Choosing a dryer/heater can save time and does not affect the printout.

## Radiation

As described earlier, irradiation for printing can utilize Ultra Violet light sources such as UV lamps or the sun. In this study, the

light source used was 40 Watt UV lamps of 8 units with a distance of 40 cm from the print. The test print results showed that the Cyanotype irradiation required 40 minutes. Meanwhile, if the irradiation is done with the sun's light source (in hot light conditions), the time needed from 15-20 minutes.

# **Rinsing Process**

After the paper has been sufficiently radiated, the irradiation reaction on the paper will look like a solarization effect. If it doesn't look like that, then the irradiation still needs to be continued. The next step is rinsing the mold under running water. This process will release the emulsion which is exposed to light according to the amount of light hitting it so that a photographic image is formed according to the film. Rinsing was carried out for 2-5 minutes or until the yellow stain on the image was completely removed.

There are two techniques used by researchers in this study. The first technique is to smear the entire paper with Cyanotype liquid, dry it and then make objects on the paper directly in the sun. The second technique is to draw the pattern of the object, apply Cyanotype liquid, dry and wash.

## The First Technique

The first technique is smearing Cyanotype liquid on all parts of the paper, and then drying the smeared paper by leaving it in a dark room for approximately 12 hours until the paper is completely dry. The next process is the irradiation of the object for 15 minutes outdoor so that the object is recorded properly. The part that has been smeared with Cyanotype will be in dark blue. The part that sticks to the paper will produce sharp object recordings, for example on hair and elbows. Parts that are not recorded properly can be retouched manually with a brush.



Figure 9. Tracing the model's body after drying in the sun (Source: Researcher's documentation)

The third process is re-drying the paper in order to optimize the irradiation for the parts that are repaired using Cyanotype liquid.



Figure 10. The work is dried in the sun (Source: Researcher's documentation)

The next step is to rinse the paper with water until the Cyanotype liquid remaining on the paper is fully removed; this can be seen with yellow hue on areas of the paper fading completely. The Cyanotype-smeared area will be dark blue, while the area covered by the model's body will be plain white. Following the washing procedure, the paper is dried in the sun.



Figure 11. Rinsing the paper (Source: Researcher's documentation)

The next process is to paint and retouch the artwork by adding some objects and backgrounds with acrylic paints and oil paints. Oil paints are paints which use drying oil as medium; for example linseed oil, poppy oil and walnut oil. It shows the versatility of the medium, its rich, dense colors, its wide range from light to dark, and its ability to achieve fine details and subtle blends of tones (Chilvers, 1990). The use of oil paint is considered as the right medium because of the characteristics of oil paint that can create smooth color mixing or expressive color mixing. Oil paints can also produce a rough brush strokes effect which creates its own effect, while acrylic paints can produce smooth objects and backgrounds.





Figure 12. Paint some objects and backgrounds (Source: Researcher's documentation)

## The Second Technique

The second technique is started by making shapes on paper with a pencil then the object is smeared with Cyanotype using a brush.



Figure 13. Tracing the object (Source: Researcher's documentation)

After drying the paper, rinse it with water until all of the Cyanotype liquid remaining on the paper has been removed. The following step is the same as before: retouching the artwork by adding objects and backgrounds with acrylic and oil paints.





Figure 16. Painting some objects and backgrounds (Source: Researcher's documentation)

Body as a Social Phenomenon used acrylic, oil and Cyanotype on paper as the main materials. Body gestures become a sign for the human condition in social conditions. In this work, the body is recorded photographically and retouched

with a painting technique as an affirmation of the human condition in the social conditions it faces. This work highlights the human response to a series of events that occur around him. This piece depicts irony and self-criticism for humans as the creatures that create change, progress, and development in terms of technology, knowledge, and culture. The effects of this changing era have resulted in great losses for other creatures, such as plants and animals, which have lost their habitat. Endemic flora and fauna will become extinct leaving only humans in nature, causing an imbalance in the ecosystem.

Explorations carried out on the Cyanotype printing technique in this study show that there are still many possibilities that can be done to get works that are unique, expressive and have character. Apart from adding paint and pictures through painting techniques, experimentation can also be carried out on the printed media used and the addition of other elements besides acrylic paint.

Exploring ideas that are more conceptually pre-executed in the creation of works is very important to be able to produce works that have unique themes. In addition, the identification of printed characters and colors produced from the chemicals used in this printing technique can still be explored further because these materials actually have a different reaction to paper containing different ingredients. Through further exploration, the creation methods that need to be applied in the process of creating works will develop.

#### **CONCLUSION**

It can be concluded that this research provides an experience as well as a space to explore aesthetic element and also explore the techniques of making old print photography. Through this research, a new method is produced for making innovative visual artworks that have a strong theme. The result of this study is relevant with the theory by Langer, that a work of art is an expressive form created according to perception through the senses or imagination, which is expressed from human feelings. This form of expression is everything that can be felt, physical sensations, pain, comfort, joy, and so on.

The visual form of the human body is chosen as the main protagonist, who is shown in melancholy gestures and movements. The figures in the work use figurative forms with dominant contrasting colors of red and orange. It is seen that all of the works visualize the wide-eyed, open arms and hysterical facial expressions which represent disaster, danger, and death. The combination of cyanotype and oil paint etching through painting techniques increasingly shows artistic expression through meaningful forms. The creation of works that involve the touch of the hand gives an authentic impression of an artist's expression or idea.

This research has succeeded in producing experimental work with the theme of the human body and its social phenomena. Body movements represent the human situation in certain social environmental conditions, whereas painting figures and objects will represent the human condition in the social conditions encountered (e.g. depressed, injured, restlessness, and others). In this case, students can use the discovery of a production process or model for creating practical works of art or applied art.

Nonetheless, this research has a great potential. Further development can be based on facts or findings about the restrictions or weaknesses identified throughout this phase. The researcher suggests that other researchers conduct similar things in order to enhance the number of references before executing or creating works. Aside from that, understanding the phenomena that will be conveyed and related with things that will or may be recorded on Cyanotype medium can help to develop the investigation of themes that will be illustrated in artworks.

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