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# Upcycle: As A New Preference in the Art of Climate Change

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#### ABSTRACT

The most common inspiration used in the art of climate change is global warming. Indeed, the greenhouse effect that leads to a global temperature rise is the cause of global warming. This effect occurs due to increasing levels of carbon released into the air. Upon this, an artist needs to reduce carbon emissions for the sake of a better environment. One of the effective ways is by using the principles of environmentally friendly (low-carbon emissions) artwork. The way that can be chosen is upcycling in the making of an artwork. Upcycled is the upgraded version of Recycling. Upcycle will help reduce carbon emissions by utilizing old goods as materials to create an artwork. Upcycle does not use new materials, and it uses the method of material processing with a short phase compared to recycling. The contemporary art of climate change raises many issues on global warming as its inspiration. Therefore, it should pay attention to the material used in the making of environmentally friendly artwork. This paper will discuss the upcycle as a preference to produce that artwork. Practice-based research methods and literature studies are used in this study. This research will also discuss creative strategies in upcycling deadstock to become part of climate change contemporary artwork. The preliminary result from this study is that the upcycle will be optimal when combined with the principle of zero-waste.

*Keywords:* upcycle, low carbon emission, fashion, climate change

#### Upcycle: Preferensi Baru dalam Seni Perubahan Iklim ABSTRAK

Inspirasi yang paling banyak digunakan pada seni perubahan iklim adalah pemanasan global. Sesungguhnya, efek rumah kaca adalah penyebab utama adanya peningkatan suhu secara global sehingga terjadi pemanasan global. Efek ini terjadi disebabkan oleh peningkatan jumlah karbon yang dilepaskan ke udara. Karena itu, seniman perlu berpartisipasi mengurangi jumlah gas buang karbon demi lingkungan yang lebih baik. Satu cara efektif yang dapat dilakukan adalah menggunakan prinsip karya seni ramah lingkungan yang tingkat gas buang karbonnya rendah. Cara yang dapat dipilih adalah melakukan upcycle dalam pembuatan karya seni. Upcylce ini adalah peningkatan versi dari Recycle. Upcycle akan membantu mengurangi gas buang karbon dengan memanfaatkan barang-barang lama sebagai bahan baku pada proses pembuatan karya seni. Upcycle tidak menggunakan material baru dan memiliki proses pengolahan material yang lebih pendek jika dibandingkan dengan metode recycle. Seni kontemporer terkait perubahan iklim mengangkat banyak isu mengenai pemanasan global. Karena itu, seni ini perlu memperhatikan bahan baku yang digunakan untuk memperoleh karya seni yang ramah lingkungan. Makalah ini akan membahas upcycle sebagai preferensi untuk menghasilkan karya seni tersebut. Metode penelitian berbasis praktik dan studi literatur digunakan dalam penelitian ini. Penelitian ini juga akan membahas strategi kreatif dalam melakukan upcycling bahan baku deadstock karya seni kontemporer perubahan iklim. Kesimpulan awal dari penelitian ini, penggunaan upcycle akan lebih optimal jika dipadukan dengan prinsip zero-waste.

Kata kunci: upcycle, emisi carbon rendah, fesyen, perubahan iklim

#### INTRODUCTION

There are many artworks made all over the world. Art has already had a long history in the world. Nonetheless, Susanne (Darabas, 2014) stated that "Over thousands of years, the relationship between man and nature has changed," should be considered a thought in creating an artwork. She informed that in the early 20th century, many artists started making environmental art because of climatic and atmospheric conditions. According to Sam Bower, there are some types of environmental art, i.e. land art, earthworks, earth art, art in nature, ecological art, environmentally themed gallery or museum work, and crossover from other fields. All of the types have the purpose of increasing the right impacts on the environment and human life. However, many of the existing artworks only focus on inspiration and communicate about global warming.

Curtis, Reid, and Ballard explain using art as a way to communicate scientific information because art helps people understand complex scientific information. Their research propounded that art conveys information more interestingly and easily to remember. Furthermore, art promotes new ways of looking at issues. Art is also able to evoke emotions and create memorable moments and a celebratory atmosphere at the convention. However, there are some questions about art:

What is the role of art and artist in responding to climate change? How can art communicate scientific information? Can art help people to perceive the effects of climate change and to comprehend its underlying physical processes? Is art an effective means of motivating political action or changing individual conduct? How should nature be imagined in a period when the global environment is undergoing a profound transformation as a consequence of human actions? (Stephens, et al., 2013).

The answer to this question, the artist should pay attention to the material used in work. It is conveyed by Sam Bower (2011) that "environmental art often takes into consideration this larger context, the origin of the material used, and the ecological impact of the ways an artwork was constructed and disseminated, as well as long-term effects on non-human life and systems." Anik Kohli, Myriam Steinemann, Nickolai Denisov, and Simone Droz in Nexus Brief, Nr.5, July 2018, bring up that climate change could bring fragility and conflict in the world. They put forward that there are relationships between the environment, climate change, fragility, and conflict. Therefore, climate change is not a trivial matter, and an artist should take part in this circumstance. An artist can create inspiring upcycle works that remind a broad audience of a better environment.

## **MATERIALS AND METHOD**

Study literature and practice-based research method were used in this paper. The purpose of using this method is to get a review of some data from different works of literature. The type of literature study used is a semi-systematic review. Hannah Snyder (2019) said that this type of literature review "provides guidelines for conducting a meta-narrative review." This type of review is suitable for use in elaborating various sources of review data to support this research.

Meanwhile, as proposed by Linda Candy and Ernest Edmonds (2018), practice-based research produces creative work through research practice. Practice and research work together involving new media art and emphasizing the exploration of the creative process in finding suitable upcycle ways to produce artwork. A google form questionnaire is used to get any confirmation input about the finding from other artists as a creator and from ordinary people as a spectator.

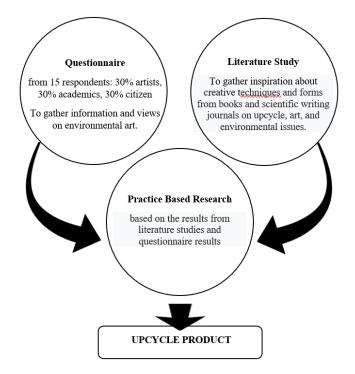


Figure 1. Model of Practice-based Research Source: Centaury's Documentation, 2020

These methods are appropriate for finding environmentally friendly artwork on the upcycle.

#### RESULTS

Environmentally friendly art is environmental art, but it still needs to focus on lowcarbon emissions. Environmental art is more aiming at communicating ideas about current environmental conditions. Therefore, the upcycle is carried out more on the media to communicate environmentally friendly art. Upcycle is environmentally friendly because it is processed from existing materials. It makes more use of materials that are no longer used (low carbon emissions), such as dead-stock clothing, which is discussed in this paper.

Some strategies can be used in upcycling a dead stock based on the literature, i.e.:

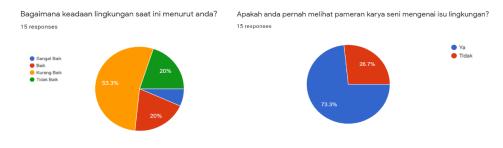
No	Literature			Denter
	Author	Title	Year	Review
1.	Hana Hanifah	Konsep Upcycle sebagai Alternatif Solusi Pemanfaatan Limbah Kebaya Lama	2018	Kebaya with a modern design as a result of a combination of two old kebaya.
2.	Dwiyanti Yusnindya Putri and Ratna Suhartini	Upcycle Busana Casual sebagai Pemanfaatan Pakaian Bekas	2018	Three ways of upcycle: merging, changing models and adding accessories/details.
3.	Etsuko Yamada and Kanji Okamoto	Wrapping with Fabric Your Complete Guide to Furoshiki-The Japanese Art of Wrapping	2014	Contains inspiration for various carrying containers
4.	Nawwar Shukriah Ali, Nuur Farhana Khairuddin, and Shahriman Zainal Abidin	Upcycling: Re-Use and Recreate Functional Interior Space Using Waste Materials	2013	Upcycling of interior products with new functions.
5.	Pixeladies	Furoshiki Fabric Wraps: Simple, Reusable, Beautiful	2012	Contains how to sew the edges of the fabric, to decorate the wrapping.
6.	Katie Ebben	Fabric Scrapping	2008	Fabric scarp using fabric remnants with many different technique.

# **Table 1. Literature Review about Strategies of Upcycling**Source: Centaury, 2020

7.	Susan Breier	It's a Wrap: Sewing Fabric Purses, Baskets, and Bowls	2006	The technique of processing fabrics into fabric strips, which are then used to wrap clothesline and shape them into functional objects in the form of various containers.
8.	Kumiko Sudo	Flower Origami: Fabric Flower from Simple Shapes	2004	The technique of processing cloth by folding (origami).
9.	Kumiko Sudo	<i>Omiyage: Handmade Gifts from Fabrics in the Japanese Tradition</i>	2000	Many creative ideation made from fabric.

There are many inspiration came from a literature study. These include inspiration about technique (wrapping and scrapping), function, and form. The results from this study become the basis for developing experimentation doing upcycle practices.

The questionnaire provides a glimpse of the public's view about how the circumstance of the environment and environmental art.



Apakah anda menjadi makin tersadar akan kondisi lingkungan saat ini, setelah menyaksikan pameran seni lingkungan tersebut?

15 responses

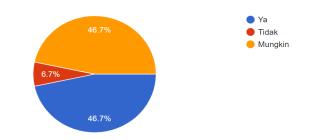
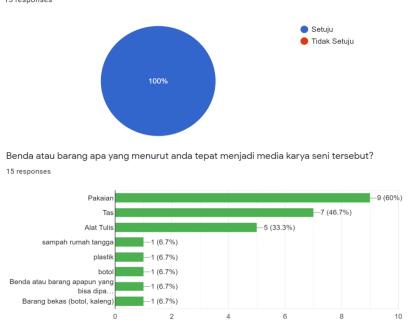


Figure 2. Public's View about Environment and Environmental Art Source: Centaury's Documentation, 2020



Bagaimana jika seni tersebut hadir pada benda-benda yang dapat anda gunakan sehari-hari? 15 responses

Figure 3. Public's View about Media for Applying Art Source: Centaury's Documentation, 2020

The conclusion from the questionnaire is 100% respondents agree to apply the art on to functional objects. Therefore, these objects (wearable product and bag) would be the media for applying art. It is chosen with the interest of elongating the life cycle of the art and broadening the scope of the spectator. All the results of this upcycling practice-based research would be used as art media.

The results from practices that can be used for applying the art as a media visual communication made from upcycling dead-stock material, i.e.:

• Tote Bag



Figure 4. Upcycled Tote Bag Source: Centaury's Documentation, 2020

• Coaster

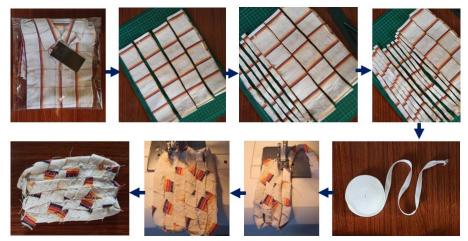


Figure 5. Upcycled Coaster with Wrapping Source: Centaury's Documentation, 2020

• Coat



Figure 6. Upcycled Coat from Shirt Source: Centaury's Documentation, 2020

• Pouch



Figure 7. Upcycled Pouch from Denim Source: Centaury's Documentation, 2020

Mask

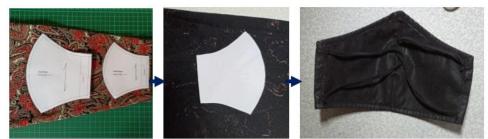


Figure 8. Upcycled Mask From Sleeve Source: Centaury's Documentation, 2020

Andy Goldsworthy's sculptures is used for giving ilustration in apply art to the media, such as:



Figure 9. Ephemeral Sculptures Source: Andy Goldsworthy, 2014



Figure 10. Ilustration Applied Art in The Upcycled Media Source: Centaury's Documentation, 2020

### DISCUSSION

Edwin Datschefski (founder of bio thinking international) in Martin Hill (earth to earth) 2007, said that:

Every day each of us changes the world. We change it primarily through the side effects of the physical transformation of materials that make up the products, energy, and food we consume. Unfortunately, this change is almost always detrimental, as even products that seem beautiful on the outside have a hidden ugliness behind them and ugliness caused by the exploitation of workers, releases of pollution, and destruction of habitats.

Kate Fletcher (2014), "The total amount of clothing and textile waste arising per year in the UK is approximately 2.35 million tonnes. This is equivalent to nearly 40 kg per person per year, a figure that includes waste from industry and domestic sources." She also said that when it goes to landfill, it could produce methane gases and its mean pollutions. Because of that, this paper chooses to use deadstock from the fashion industry to be upcycled to become the media for art. This is the effort of reducing the carbon footprint in the arts.

EPA in the Subramanian Senthilkannan Muthu (2016) (carbon footprint handbook) explained that "C footprint is the total amount of GHGs that emitted into the atmosphere each year by a person, family, building, organization, or company. This includes GHG emissions from the fuel that an individual burns directly, such as by heating a home or riding in a car. It also includes GHGs that come from producing the goods or services that the individual uses, including emissions from power plants that make electricity and factories that make products and landfills where trash is disposed of."

Vandana Gupta, Madhvi Arora, Jasmine Minhas (2020) clarify it with their statement that:

"Just like the actual footprint, the carbon footprint is the mark you leave upon the environment, not with your shoes but with your every action which releases harmful gases like CO2 which are pumped down by burning oil and natural gases. The more fuel one uses, the bigger will be the footprint".

They also informed that in the production of 1 kg fabric its means 23 kg greenhouse gases, 2.000 litters of water, and 4 kWh of energy. Hence, it is clear that the upcycling movement is required to reduce the carbon footprint. Stuart Sim, in "Reducing Our Carbon Footprint: Altering Lifestyles" states that, "there has been no lack of suggestions as to how we might alter our lifestyle to affect the reduction in our carbon footprint that would secure our future". As artists, what we can simply do is change our artistic style by paying more attention to the materials used as art media. Kate Fletcher said, "repair and reconditioning of textiles and garments also saves resources compared with manufacturing new items."

Esther Sanye-Mengual, Raul Garcia Lozano, Ramon Ferreny, Jordi Oliver Sola, Carles M. Gasol, and Joan Rieradevall (2014) argued that "There are some the eco-design methodologies that can be adopted such as reduces resource consumption (i.e., energy, materials, water), redesign of an existing product, optimize the lifespan of the product, or avoiding end-of-life treatments with higher impacts".

Abrahams, Guy, Bronwyn Johnson, and Kelly Gelatlly (Art+Climate=Change) 2016 John Wiseman told that:

"One question frequently asked at many ART+CLIMATE= CHANGE exhibitions, debates and round tables was: 'OK—impressive work and interesting ideas—but, beyond the narrow circle of people who visit art galleries, what, if anything, will this art really change?"

If the artwork is only exhibited in a gallery or museum, only a few people will witness it. However, Kelly Gelatlly adds that "Above all, ART + CLIMATE = CHANGE demonstrates a sense of hope and faith in the experience of art to communicate meaningfully, and a belief. that art, and exhibitions, can function as powerful catalysts of change". For art to become an agent of change, it only needs to be added with media to help disseminate the artwork for more people to see. One of the art themes that can be raised to help improve the environment, apart from global warming, is the theme of an invitation to remember the importance of planting trees. This is by the opinion of Daniel Bodansky (2010) in the art and craft of international environmental law:

"global warming is caused by emissions of carbon dioxide and other greenhouse gases, which trap heat in the atmosphere. Thus, many proposals to address climate change focus on cutting emissions. But emissions do not directly cause global warming; they do so only to the extent that they accumulate in the atmosphere, causing concentrations of greenhouse gases to increase. So another possible response would be to remove carbon dioxide from the atmosphere, for example, by planting trees or increasing the activities of other so-called carbon sinks."

#### CONCLUSION

In conclusion, all the discussions in this paper discuss using environmentally friendly materials to become functional works of art. Works of art are not only objects of an exhibition but can be used and seen by more people. Thus, works of art can have a broader impact on many people. Lanni Lantto (2014) put forward that, "Everything you own can be redesigned. All you need are the skills to see old materials in a new light." One of the skills that can be developed is upcycling, as discussed in this paper, namely, upcycle using dead stocks. Upcycle used existing

materials to become a source of art. Natural themes that persuade people to do green can be chosen.

"Let us learn from nature," this is in line with what was said by Erica Palmcrants Aziz and Susanne Hovenas (2014) that said, "In Nature, nothing is wasted, and Nature only uses the energy it needs". William McDonough and Michael Braungart (2014) suggest a need to leave as little carbon footprint as possible in our lives. One thing that we can do is based on Alison Gwilt and Timo Rissanen (Shaping Sustainable Fashion) 2011, "Materials are routinely selected for aesthetic and functional reasons, but a fashion designer can choose to work with recovered materials, which positively contributes to the management of textile waste." Here, borrowing the perspective of a fashion designer, as an artist, of course, we can adapt this way of thinking in working with recovered materials.

Hopefully, we can become artists like John Marchello, who say that his goal is "As an artist, I have two goals: one to inspire people to live an environmentally friendly lifestyle and two, to reveal the hidden beauty that can be found in places that are often overlooked." As an artist who certainly has high creativity, it is only natural to see the potential behind all kinds of materials to make creative works of art. Therefore, we can do upcycle in the making of art from upcycling material that already exists. Also, we need to ensure that all the material being used (zero-wasted) will maximize the reduction of carbon footprints.

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