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K E Y N O T E   S P E E C H
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INTRODUCTION

Dicky Sofjan

In the not-so-distant past, much of the debate about reality is perceived through what we recognize as news on our television boxes, which reveal to us glimpses of what unfolds 'out there'. News of famines, crimes, disasters, and humanitarian assistance has made it to primetime news daily, causing much consternation and anxiety among those who consume them. Conflicts and wars among nations are subsequently followed with efforts in diplomacy and signing of political treatises to commit to cessation of hostilities and peaceful resolution. In other words, the media culture pretty much determines how we see, perceive, and experience the world.

With the rise of the internet, digital technology and social media, the way we perceive and experience the world has drastically been transformed. Through the introduction of augmented reality, design thinking, artificial intelligence, and machine learning systems, we are now accustomed to thinking ahead of our time. Through the utilization of such technologies, we are currently able to develop early warning systems and a variety of pre-emptive knowledge systems that could prevent and mitigate catastrophes and disasters, both natural and human induced, to save lives and the destruction of infrastructures and private properties.

With the ongoing Covid-19 pandemic—with already 1.5 million death tolls across the world—, we are witnessing firsthand the survival of the fittest at play and the real threat of extinction of the human species. Currently, social, and physical distancing has been imposed in virtually all countries around the globe, which has effectively impacted human life and living. Governments around the world are racing to find and deliver vaccines to their affected population. The effect of the current pandemic, however, goes far beyond public health, destroying lives, livelihoods, careers, businesses, and corporations. This has caused some to accuse a cabal of rich and influential world figures of attempting a global reset of the world.

No doubt, the Covid-19 has also generated other pandemics such as hunger and mass unemployment. This is not to mention the psychological stress, depression, and pessimism, which accompany these phenomena. Due to these stay-at-home orders, social restrictions, and the psychological effects thereof, the world has witnessed a spike in violence and domestic abuse against women and children. With such grave challenges facing the world, climate change and sustainability have taken a back seat, as most people have been focusing on how to survive the pandemic and still thrive in a virus-infested world.

In view of these current challenges, the creative use of various technological interfaces to replace face-to-face communication and social interaction has become imperative. Yet, such employment of technology further exposes the established and known fact that digital divide remains a problem for the bulk of the human population. This has generated numerous social injustices such as inaccessibility to the much-needed public information, education, social provision, work and pleasure and even entertainment.

Despite such trials and tribulations, the pandemic has revealed contradictions in the way humanity responds to it. On the one hand, those with feeble minds have resorted to racism, bigotry, and prejudicial attitudes, denouncing people, nations and governments

on the basis of their cultural, religious, political and national affiliations, despite the non-discriminatory nature of the Covid-19. Thus, time and again, humanity must rise to the occasion and struggle to overcome narrow political ideologies, negative religious sentiments, and constricted identities in the interest of human preservation.

On the other hand, acts of courage, sacrifice and heroism, as shown by our fallen doctors and medical practitioners, have instilled much optimism in humanity and the rise of benevolence and virtuous acts in society. Initiatives to spread medical aid, food donations and charity are found rampant across the world. Such generosity, magnanimity and unselfishness are indeed what the wounded world needs here and now. Therefore, the quest for the soul of humanity remains a never-ending journey, as we discover that dignity, as an inalienable right, is ever elusive.

Within this context, humanity must struggle to find its way to balance their lives on this planet and regain its wisdom—both ancient and modern— and utilize their collective intelligences and the technology at their disposal to safeguard the sustainability of the humankind.

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PLACE-BASED CITIZEN SCIENCE AS A HEARTWARE APPROACH FOR PARTICIPATORY WATERSHED MANAGEMENT

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Citizen Science refers to scientific work undertaken by members of the general public, often in collaboration with or under the direction of professional scientists and scientific institutions. Whilst Place-based Citizen Science (PBCS) is linked to the idea of the public participation in science. It places emphasis on a co-productive or participatory approach, the integration of local knowledge and values, and the application of reflexivity for tailoring environmental citizen science to place. The paper focuses on four substantives 'projects' in the preparatory stages of our PBCS programme. Using these examples, we set out an agenda for PBCS as it was applied to our programme for watershed conservation in Malaysia. The PBCS employed incorporated both 'wide' and 'sharp' dimensions of place. The 'sharp' dimension focuses on the role of local meanings, values and knowledge accessed through participatory methods. 'Wide' learning, in this case reflects on developments of citizen science in Asia taking lessons from a global knowledge exchange between Japan and Malaysia. We end with the argument that we need to open out a research agenda to address concerns that PBCS is situated at the weaker or softer version of citizen science, focusing instead on how place-based considerations may pragmatically improve the field's robustness in terms of knowledge and practice.

CULTURAL DIPLOMACY AND THE NEED OF AN INDEPENDENT MINISTRY OF CULTURE IN INDONESIA

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Dear friends and organizers,
I am delighted to be invited to the 11th International Graduate Students and Scholars' Conference in Indonesia (IGSSCI), Culture, Technology and Social Transformation in the Quest for Human Dignity.

My talk is about Cultural Diplomacy as the path towards human dignity. Based on my experience as the Indonesian Ambassador to Bulgaria, North-Macedonia and Albania from 2016-2020, I will also tell you about my personal experience in this field.

Human Dignity & Cultural Dignity

Dear ladies and Gentlemen, I have always been proud to call myself an Indonesian artist. Artists in different fields are inspired by the element of their culture and their human experience, that is why they are creative individuals. The Indonesian culture is not only a source of inspiration for artists, but it is one of the most profound cultural heritages in the human world. We have been fortunate to inherit our exceptional and rich cultural heritage in its most dignified form from our ancestors. From my point of view, human being is dignified by the soul of God, and human culture is also dignified as it is the result of generations of people's innovation, creation and discoveries in all fields.

My Artistic background

All along, my artistic exploration has mostly been inspired by our rich tradition and cultural heritage. Just to make you familiar with my artistic and cultural background, let me first share with you some of my life journey in art. My mother was from Solo and my father from Jogjakarta. From a young age, I have always wanted to be a professional artist. This was actually against my mom's doctrine who kept reminding me that artists would always stay hungry.

My childhood in a diplomatic family, living abroad in the neighboring countries of India and Myanmar, with rich Hindu and Buddhist cultural backgrounds have triggered and inspired me to see and appreciate my own rich cultural roots. Even though in the early days our heritage were influenced by Hinduism, Buddhism and Islamic religion, we managed to maintain our own strong Javanese culture and tradition. In my artistic life, I went through many stages creating from two dimensional (painting) to three dimensional (sculpture). When the space could no longer contain the ever-expanding artistic exploration and innovation, we reached out to create art installation utilizing the bigger space and multimedia.

Fortunately, I have succeeded to present my works in National and International stages. In 2013 together with 4 other Indonesian artist I was invited to participate in the Venice Biennale, entitled Sakti. I created An Art Installation piece, a Javanese Pendopo house with 9 life-size wooden Wayang Klitik Bedoyo dancers, entitled "Dancing the Wild

Seas". It speaks about the strong voice within ourselves we must listen, the feminine force that resonates Strength, Love & Compassion. Then in 2013, I was offered to be the Producer and Artistic Director of a Dance, Drama & Musical stage performance, entitled "Pulung Gelung Drupadi" involving 40 dancers, 40 gamelan musicians and a big production team.

My artistic life journey was not always a walk in the park. I also faced many challenges and obstacles, but with a strong determination, persistence and hard work, I made it happened. Even failure is a good lesson. They said when you stumble, that's where your treasure lies. I sometimes I fell rock bottom, only to find the jewel of love, compassion and forgiveness. I didn't realize that the rock bottom fall became the strong foundation for my next journey.

Diplomatic Mission

In 2015, President Joko Widodo appointed me as Indonesian Ambassador for Bulgaria, Albania, and North Macedonia. One week before I left Indonesia for my Ambassadorship at the end of February 2016, I presented my retrospective exhibition at the PPKH (Pusat Kebudayaan Kennedi Hardjosoemantri) at Gadjah Mada University, Jogjakarta. Entitled "Yang Terhormat Ibu", as a tribute to my mother, all mothers and our Mother Nature. The exhibition not only showcased my paintings and sculptures, but also a "Garba" dance performance. And the following night was a farewell wayang kulit performance by the late Dalang Ki Seno Nugroho and Dalang Sujiwo Tejo. That was my farewell exhibition in 2016 at Gadjah Mada University. Coming back after my mission, now I am sharing with you stories of my mission journey at this Gadjah Mada University's Webinar in 2021. This cannot be regarded as a mere coincidence.

Cultural Diplomacy

All Indonesian Ambassadors are expected to prioritize Economic Diplomacy. With my art and cultural background, I strongly believed that I could incorporate my background with my assignment. I felt strongly that Indonesia, with its rich cultural background and old civilization will be able to win the hearts of the host country and many international audiences. Culture will subsequently open doors to new relations in sectors of Trade, Tourism and Investment.

This is what I experienced during my 4 and half years of my ambassador tenure. Let me explain with more details. Two days after my arrival in Sofia, the then Minister of Education and Culture Anies Baswedan arrived and signed the MoU of Culture Cooperation with the Bulgarian Minister of Culture, Vezhdi Rashidov. It was like a sign for me to carry out a cultural mission for my culture-rich country. That was when I formulated my mission strategy as "Cultural Diplomacy".

The peaceful future for human society, could be wisely and elegantly be built on the foundation of culture. Especially when we have a humane, dignified and spiritual culture. Through cultures, we connect people to celebrate the "Unity of Humanity", as in Indonesian we say, "Unity in Diversity". Certainly, cultural approach in diplomacy is a refined procedure that brings confidence, respect, and trust between nations; it also guarantees Peace, creates Harmony and promote Tolerance.

Cultural diplomacy is not something new, it has always been there but as a mission strategy. It is a very known practice of countries and societies which were positioned on the crossroad between different cultures. People interact with each other based on their

cultures. Artists, traders, knowledge seekers, missionaries, political representatives and travelers who were interacting with other people in foreign lands, have been initiators of cultural diplomacy in the world.

Indonesia is a good example of cultural exchange. We became the biggest Muslim country, as the result of cultural exchange. In the modern world, as it was in the past, many countries even try to get influence among the world population, by promoting their movies, music, life styles, culinarians, and most importantly their philosophies and religious beliefs which indicates the power of cultural influence. Cultural diplomacy is a daily activity based on formal or informal interactions, especially in this globalized time.

Informal Ambassadors of Culture

In a diplomatic formal mission, implementing cultural diplomacy will enhance bilateral relations in different aspects. With the government support, this is an effective approach to learn about the other nation's historical, cultural and political background. This will then create a better understanding, which will result in better business and political negotiations. All this interaction also happens informally on daily bases. That's why in my book I wrote, "every Indonesians are informal ambassadors of Indonesia."

Artists are among these informal ambassadors, who go far beyond borders, times and places and they influence the heart and the soul of the people. Art as a universal language between people of different nations, is one of the main elements in cultural diplomacy. One of the best ways to create a trusted environment for interaction between people is to employ their arts. Fine Arts, dance, sculptures and music have a universal language of beauty. We have a very rich culture, and we should use it, for the betterment of Indonesia and resonate the name of our country in the world.

Practice of Cultural Diplomacy in Bulgaria

After only two weeks in Bulgaria, there was a visit from the National Gallery Sofia asking the Indonesian Embassy to participate in "Night of the Museum" program. I immediately accepted as the National Gallery /Museum is a prestigious venue. Fortunately, I did bring a large collection of my personal fine and antique collection of batiks, so I could instantly arrange a batik exhibition.

Since then, The Indonesian Embassy in Sofia has established good relations with the curators of The National Gallery. We have exhibited the best that Indonesia has to offer. I have always avoided using our embassy as a gallery. As it only caters to the diplomatic scene and our own citizens. While the National Gallery/Museum cater to a larger audience and are visited by many local and international tourists. Besides being a beautiful and historic place, it is also less costly. There is no rental fee, except for a meager logistic cost.

On those time the National Gallery/Museum had a section displaying Southeast Asian Art. There were artworks and artefacts from Myanmar, India, Thailand and other countries. Sadly, Indonesia was not represented. I would like to share that now the National Gallery Museum of Sofia has a permanent collection of Indonesian art. Ranging from old batik cloths, Wayang puppets, artifacts from Java, Kalimantan, Bali and Papua, and old jewelry from many parts of Indonesia. This permanent collection was officiated during the visit of our Minister of Foreign Affairs, Retno Marsudi, at the end of 2019.

During my 4.5-year term in Sofia, we held various promotions and exhibits entitled "Wonders of Indonesia" at various Museums in Sofia, that I explained the meanings behind them in my book.

Cultural Diplomacy and Global Peace

A major activity initiated by the Indonesian Embassy in Sofia based on Cultural Diplomacy is the Asian Festival. The festival was first held in 2017, it became a big yearly event at the start of the summer in Sofia. Participated by 15 various Asian countries, as a form of solidarity and togetherness of Asian countries in Sofia. We have succeeded in uniting countries like India and Pakistan, Iran and Saudi at least in a cultural occasion in Bulgaria. This event even brought North and South Korean Ambassadors together in a lunch meeting, before their leaders met at the border, witnessed by the Bulgarian President Rumen Radev.

Indeed, Cultural Diplomacy contributes greatly to global peace. By presenting art and culture of a nation, we can soften many political issues, misunderstandings, and animosities to avoid conflicts. Through cultural exchange, we can create a mutual understanding and trust between nations, and to promote bilateral relations in all aspects effectively. It would open doors to many opportunities and prospects in Trade, Tourism, and Investment as well.

Cultural Diplomacy & Economic Growth

Based on my own experience, a well-planned cultural approach in diplomacy is the most effective way to promote Indonesia to the world. Let me give you an example based on the numbers to tell you why I am emphasizing this much on cultural diplomacy:

From trade statistics, performance trend between Bulgaria and Indonesia, from 2015 to 2019 has been positively improved in terms of volume constantly. For example, in 2018, we achieved a 330% increase in trade volume compared to the last year 2017. Trade balance wise, in the first quarter of 2020 pandemic year (January-April), the figure has grown confidently more than 500% increase. These are the immediate short-term results of cultural diplomacy that comes in the forms of numbers and figures.

Time for The Indonesian Ministry of Culture

As we all know, the Indonesian culture is rich and diverse with many facets of colors like a rainbow, which pleases the eyes and all the senses. Our music lifts the soul to heavens. Our food is cultivated from fertile soil, nurtured through the divine offerings and blessings. Indonesian costumes consist of Kain & Kebaya which are an epitome of grace and elegance. Cultural heritage is a distinction that Indonesia can offer to people around the world. Therefore, Ambassadors, diplomats and our citizens overseas should embrace our cultural identity strongly and get engaged in it consciously as our culture is our national pride and dignity.

From this perspective, we need a base for a successful implementation of this approach in the 21st century and in this postmodern time. To be able to cherish and safeguard our culture in the country and present it effectively and methodologically based on a clear policy, it is the time for Indonesia to have a self-contained Ministry of Culture. An independent body that is responsible for cultural policy and take measures to protect our national heritage. The Indonesian Ministry of culture would optimize the cultural

activities of our KBRIs in collaboration with the Ministry of Foreign Affairs. After all culture is the core of the nation's character building.

Many countries such as France, England, Iran, Turkey, Spain, China and others have even their cultural centers, independently of their political missions, overseas. They know the importance of Cultural Diplomacy. Many countries have their Cultural Institutions under the Ministry of Culture working with their embassies to create cultural bridges. To establish connections between people and to lay strong foundations for bilateral relations. Expanding their influence among intellectuals, artist and finally spread their values to other countries.

This Ministry of Culture ideally should not be infused nor burdened by the grand mission of education. It should be a dignified body supported by intellectuals, stakeholders, political parties, and education institutions. A ministry solely focusing on putting resources actively to protect and preserve our culture.

Indonesia needs an independent Ministry of Culture, separated from the current one under the Ministry of Education, in order to build a strong character and well cultured nation. To focus on finding the truth of our forgotten history as well as preserving our rich cultural heritage.

The dignity of the Indonesian people in this age of transformation is very much interconnected with the preservation of our dignified culture. It promotes peace, harmony, and tolerance domestically as well as in the global scene. It serves as a filter towards extreme foreign culture, radicalism, and terrorism. Extremism advocates uniformity. Radicalism condemns diversity. Extremism and radicalism are powerful and dangerous instruments that destroy cultures. Preserving our rich cultural heritage and implementing it in our daily life are essential and will secure Indonesia's future as a diverse NKRI (The United Republic of Indonesia).

C o n c l u s i o n

Sustainable Result of Cultural Diplomacy

To conclude this part of my talk, culture is the core of our nation's character building. It is time for Indonesia to reinvigorate the 3rd Pancasila principle "Persatuan Indonesia". By having an independent Indonesian Ministry of Culture responsible for reuniting and strengthening the culture network.

We should realize that cultural activities bear fruits slowly but surely. This is the same with Cultural Diplomacy, which needs concentration, hard work, determination, and investment. It is indeed a full-time work and requires strong dedication. If we have a good strategy and act wisely, and if correctly implemented, Cultural Diplomacy will bring unimaginable results. The long-term achievement of Cultural Diplomacy, based on the established trust and harmony between people would be sustainable, and will last a lifetime.

As the cultural relation and interaction is important and its vital for Indonesia to claim its deserved place in the world, we need to organize all these activities, under the long-awaited Indonesian Ministry of Culture. Insha'Allah.

EPISTEMOLOGICAL MATRIX OF SCIENTIFIC CULTURE AND TECHNOLOGY IN ISLAM AND MEDIEVAL MUSLIM INDIA!

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Education has to be all encompassing and education among Muslims has had been very a great factor of transformation. Seen from the historical perspective the early period of Muslim educational circular included the mundane and natural sciences apart from the purely religious sciences. To start with, (1) by education we mean the development and training of ones' mind, character, skills etc. as by instruction, study or example (2) Instruction and training in an institution of learning. (3) The knowledge and skills resulting from such instruction and training. (4) Teaching as a system, science, or art. Though to Bertrand Russell advocating only the "utility is certainty" wrong if it is considered an ultimate philosophy. "But same can be said about an `ornamental' theory of education. But one of main purpose of education is to increase the number and variety of commodities produced, including medicine and hygienic, but it must inculcate "enthusiasm for literature, art and philosophy "also. Arnold's "humbleness of mind", and production of Aristotle's "magnanimous man" have remained two cardinal objectives of Muslim education during its golden period both in Baghdad and India. Moreover, the Islamic educational system from Baghdad to Spain remained universal in its scope.

In this paper we will attempt to discuss the scientific culture and technology in the context of Islam with reference to India.

THE INTERNET OF THINGS AND HUMAN COMMUNITY IN THE MIDST OF COVID-19

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Human beings in urban environments today are surrounded by up to 5000 trackable objects, and the number of online capable devices in existence vastly exceeds the population of the world. As these devices communicate with one another through the Internet of Things (IoT), huge advances in customer service and business management are made possible. And, in the context of COVID-19, IoT linked devices have been utilized to diagnose, monitor, and define recovery protocols. The effectiveness of the IoT in the context of the pandemic, however, raises serious ethical considerations about what the world ought to look like after COVID-19: (1) who is responsible for or who ought to have access to the personal and health data that has come to define our existence? (2) how do we ensure that we perceive and treat human beings with dignity that is irreducible to data points when it is so efficient and profitable to ignore this difficult question? and (3) can we emerge after COVID-19 as a truly human community, or will we settle for the ease and comforts of the Internet of Things? Despite the nostalgia for a return to a pre-pandemic normalcy, the new world into which we are hurtling is forever changed by COVID-19 and its therapies; precisely what that change looks like is still in our hands.

BEGINNING OF DATA-DRIVEN POLITICS IN INDONESIA

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A b s t r a c t

Our daily lives have been increasingly based on social relationships via the Internet rather than through direct face-to-face interaction. Even if we live in the same house or work in the same office, the communication through SNS with members of our family or colleagues at work can be more frequent. This is even more true at a time when the COVID19 has been widespread as it is today. As a result, it is becoming normal for us to perceive the social relations to be filtered through digital spaces. In this paper, I will try to shed light on this digitalized trend in politics and what it is becoming in Indonesia.

Politics in the Post-Truth Era

In 2016, the UK's exit decision from the European Union and the election of President Trump in the U.S. were political events of global significance that were symbolized as the arrival of post-truth era. It is no wonder, therefore, that Oxford dictionaries chose post-truth as its "word of the year" for 2016. Post-truth, according to the Oxford English Dictionary, is "an adjective relating to, or denoting, a situation in which appeals to emotions or personal beliefs are more influential in shaping public opinion than to objective facts". Looking at the political processes of Britain's withdrawal from the EU and Trump's election, messages that appeal to emotions, such as British nationalism and white-dominated American First ideology, played a more important role than objective facts. These messages were regarded as the major sources of the deepening conflicts of adherents, followers and supporters of different beliefs and candidates, and the political micro-targeting was utilized as a new political tool to deliver these messages to the voters.

Micro-targeting is a marketing strategy used by business sector to analyze each person's data, including gender, address, education, hobbies, and consumption patterns, to suggest the most appropriate products and services to that individual. Barack Obama introduced this strategy in politics during the 2008 US presidential election campaign and the term "political micro-targeting" became familiar thereafter.

The unexpected victory of Trump has since stirred controversy over political micro-targeting (Bodo, Herverger and de Vresse 2017). This was because of the political micro-targeting weirdly done by a political consultancy that the Trump team had contracted. Cambridge Analytica (CA), which specialized in data mining and analysis, is said to gather improperly the digital footprints of between 50 million and 87 million Facebook users and analyze their psychological attributes and then tailor campaign ads to their personalities to induce them to support Trump. Using the five-factor personality model (openness, conscientiousness, extraversion, agreeableness, and neuroticism) called OCEAN personality model, they allegedly quantify personality by scoring individual users' psychological attributes through their Facebook page likes, and then provided

campaign ads tailored to those personalities. Alexander Nix, the then CEO of CA boasted the algorithms of political micro-targeting as the winning factor of Trump. And the ex-CA staffs, Christopher Willey and Brittany Kaiser felt scared by the CA's operations and exposed the CA's legally dubious strategies and strengthened the views through the major newspapers such as Guardian and the New York Times that the CA's political micro-marketing tool was effective for the winning of Trump (Kaiser 2019; Wylie 2019).

In fact, however, Facebook asked Cambridge Analytica to delete the data in 2015, and Cambridge Analytica is said to have complied with the request and deleted the data, so it is not clear whether CA was able to use Facebook users' data to run such a campaign in the 2016 US presidential election. It is also highly questionable whether one can analyze the psychology of voters based on Facebook "likes" alone and use it for political micro-targeting (Sumpter 2019). Nevertheless, what is clear is that data-driven politics, using online data, digital footprints, AI and machine learning, has begun and will continue to grow in importance. It is also true to the politics in Indonesia.

Before the Start of Data-driven Politics in Indonesia

In the case of Indonesian elections, until the time of the 2009 presidential election, the most important election marketing was TV advertising (Okamoto 2010). For example, the winning candidates for the first direct presidential election in 2004, Susilo Bambang Yudhoyono and Jusuf Kalla (SBY-JK) used an advertising agency called Hotline for TV ads. The company strategically decided the content and timing of the TV ads. While running ads that appealed for support for SBY-JK regardless of social class, ethnicity, or religion, Hotline also created ads that appealed for support for SBY separately for fathers, housewives, and youth. Since fathers are expected to make decisions quickly, the agency ran ads for fathers early in the campaign, followed by ads for housewives. The ads for young people were run at the end of the campaign, as young people are more likely to change their voting behavior even just before the election day. The ads for housewives were run during early morning programs and entertainment programs, and the ads for young people were run during music and entertainment programs. These ads were the ads targeted for specific audience groups, but it was still far from the micro-targeting. Even in the 2009 presidential election, the main campaign tool was still the broadly targeting TV ads, but Yudhoyono commissioned a company to create his own website like Obama's website. This might be the first time for any candidate to start utilizing the cyber space for election campaign.

The impact of online politics became quite visible in the 2012 Jakarta gubernatorial election. At the request of Joko Widodo (Jokowi), the mayor of Solo City in Central Java, Kartika Djoemadi and others set up an online volunteer group called Jasmev (Jokowi Ahok social media Vounteers) and began to conduct an online campaign to support Jokowi and Basuki Tjahaja Purnama (Ahok), the candidates for the governor and vice governor of Jakarta. This was the first time that the cyberspace became the politically significant space for election campaign. The online spread of fake news and the utilization of both have also started.

The 2014 presidential election saw the further intensification of online campaigning, with the presence of Muslim cyber forces consisting of Islamic radicals and conservatives. Ahok, an ethnic Chinese Protestant became the Jakarta governor upon Jokowi's inauguration and ran as the incumbent in 2017. The election campaign was fiercely contested between staunch supporters of Ahok, who respected Indonesia's

diversity, and Islamic conservative forces, who strongly opposed the idea of a non-Muslim becoming the head of Indonesia's capital Jakarta, and the online society was also clearly bifurcated. As a result, there was a lot of discussion about how the online campaign was deeply dividing the supporters of different candidates and then the society itself in Indonesia as was happening in the US.

The 2019 presidential election also saw a fierce online campaign between the incumbent, Jokowi, and Prabowo, who enjoyed strong support from Islamic conservatives. This 2019 presidential election is very different from previous presidential elections in four ways. The first two have been happening since the 2017 Jakarta gubernatorial election, and the last two are new features seen in the 2019 presidential election. The first was the incessant and widespread use of disinformation, both online and offline. A second notable feature was the feverish online election campaigns of both the Jokowi–Ma'ruf Amin and Prabowo–Sandiaga Uno camps. Online influencers and buzzers [1] in both camps played significant roles in the election, each with distinct characteristics and patterns. The third feature of the 2019 election was the serious effort required on the part of both campaigns to discern the real facts and real voices of voters amid tremendous volumes of fake or dubious news and social media messages. Both sides used artificial intelligence (AI) to analyze big data amassed from online news and social media sites as well as offline data sets. The fourth feature is the start of micro-targeting politics, in which AI is used to analyze big- data on voters. In the following, I will briefly touch on the last two points that are critically important for the future of Indonesian politics.

Start of Data-driven Politics in the 2019 Presidential Election

The 2019 campaign marked the first serious introduction of big data into politics and the full-fledged politicization of IT specialists. Alumni of ITB, computer science graduates from other institutions and internet autodidacts joined both camps and became politicized. This section focuses on the Jokowi side because it was technologically more advanced than the Prabowo teams. The official team leaders of Jokowi's digital campaigns received data and analysis from several shadow teams (*tim bayangan*). For example, Arya Sinulingga in charge of PR and social media of the Jokowi team constantly used his smartphone to check for both positive and negative sentiments expressed towards Jokowi and Prabowo on social media, and when Jokowi's popularity decreased even slightly, he immediately instructed *tim bayangan* to determine the reasons for the decline and deal with them. *Tim bayangan* would then analyze big data from social media and provide information for a response.[2]

Andi Widjajanto, Jokowi's former cabinet secretary was the head of the pro-Jokowi volunteer organization known as Cakra 19. He boasted that the Jokowi campaign had four teams with machines capable of processing big data. The first was operated by Cloud Team (*Tim Awan*) under the direction of Andi himself; the second by the political consultancy Political Wave under the direction of Yose Rizal; the third by Corona Team under the direction of Hokky Situngkir; and the fourth directly operated by the official Jokowi–Ma'ruf campaign team and coordinated by Wahyu Sakti Trenggono. These teams utilized the machines to (1) collect and analyze comments and chats on social media and online news sites; (2) calculate the positive and negative sentiments towards each candidate; and (3) estimate the electability of the candidates.

On election day, algorithms programmed on each of the four machines drew on the collected data to predict the election results well ahead of the closure of balloting. Andi said that the predictions at 10:00–10:30 am were nearly identical to the final election results (Kumparan.com, 2019a; 2019b). That means that the Jokowi team was able to discern the approximate election results sooner than the quick counts done by pollsters. This marked a significant shift in the political importance of big data in Indonesia.

One *tim bayangan* also introduced the political micro-targeting tools. The team used AI to analyze big data and, for example, identify the merits, demerits and impact of visits to a particular village by either Jokowi or Uno Sandiaga (Prabowo's running mate). Based on a village index created from various village data, the team suggested the most appropriate campaign themes for a specific village before any visit by a Jokowi team. The team even suggested where to put up campaign posters, based on information from Google Maps [3]. The target of the political micro-targeting done by the team was at a village level, not at an individual level as Cambridge Analytica boasted that it targeted. But the information the team gathered included the digital footprints left by voters on Facebook, Instagram, and others and this can pave the way for a far more elaborated and detailed political micro-targeting soon.

Tentative Conclusion

It has already been more than 20 years since Indonesia democratized, and elections have been held for a president, for national and local MPs, and for governor, district head and mayor. The election business is the most booming in Southeast Asia. As a result, new election tools have been introduced relatively quickly; the 2019 presidential election has finally seen the start of the politics of big data, AI, and political micro-targeting. Given the high interest of Indonesian people in SNS, a digital company might easily gather personal digital footprints and there is a high possibility that these data can be politically manipulated or utilized at any time by the company or by a political agency that obtain these data from the company. In that sense, it is quite urgent for Indonesia to create a regulation to protect the online privacy and recognize the ownership of personal own data by us. If not, the Indonesian society could be more and more divided not only in the cyber space but in the real society, and that might lead to the severe and violent politicization of social cleavages of the multi-ethnic and religious Indonesia and to the democratic decay of Indonesia.

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[1]A buzzer is a social media account that creates issues that can go viral in the social media. It can be an anonymous account or that of an identifiable individual or group. The term is quite commonly used in Indonesia. A buzzer is different from an influencer. An influencer is usually an identifiable person with a lot of followers who can make an issue viral to influence the views of certain groups of people in cyberspace.

[2] Interview with Arya Sinulingga on 11 February 2019.

[3] Interview with Hokky Situngkir on 13 June 2019

TECHNOLOGY, TRANSFORMATION AND TECHNOCRACY AFTER COVID-19

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In 2010 the Rockefeller Foundation published a report on scenarios for the future of technology and society and suggested that the direction in which new technologies such as artificial intelligence, CCTV and the internet was one of reduced agency by citizens and increased top-down control of citizens and societies by governments and private corporations. Analogous claims are made about the 'Fourth Industrial Revolution', AI and the internet which will increasingly displace human beings in such labor-intensive activities as education, food production, healthcare, hospitality and transportation. To these ideas the World Economic Forum adds that after Covid-19 a 'new normal' social condition in which 'social distancing' and other 'public health' practices will be globally adopted, as part of a 'Great Reset' of human civilization which is needed both to adjust humanity to the new social condition of the Industrial Revolution, and to the growing threats to human and more than human life from environmental as well as health problems. These proposals do not emanate from democratic fora or from deliberation by citizens, but from private organizations which have colonized public space and deliberation on the future shape of human societies at a time when public meetings in many countries were banned. The trajectory of the proposed transformation is towards the replacement of democracy with technocracy or 'rule by experts' including even 'intelligent' machines. In this paper I consider the ethical and political implications of the proposed social transformations and suggest that there are more appropriately human- and earth-centered approaches to the problems these transformations are said to address.

ECOLOGICAL CRISIS AND THE POLITICS OF TRANSFORMATIVE KNOWLEDGE

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A b s t r a c t

Global ecological crisis has fostered the emergence of transformative knowledge projects, one of which is sustainability science. Examining the prospect of sustainability science as a counter-hegemonic project, this paper discusses critical junctures that involves intellectual hegemony as the formative elements of an alternative politics of knowledge production. Hegemonic knowledge relies on the supremacy of modern science in making sense how and why contemporary ecological crises are present as they are. Mainstream understanding also converges on the managerial dimensions of the knowledge order as the feature of the future humanity. Using Gramscian political ecology critics, this paper examines how the internal contradictions within the sustainability science literatures opens up the recognition of the limits of such approach by making knowledge production more inclusive and democratic. Three political aspects of knowledge production are being scrutinized. This includes accumulation (the redistributive aspects of knowledge production), domination (the power supremacy of particular knowledge over others), and resistance (the struggle to transform the mainstream and the dominant knowledge order into an alternative knowledge order). There is a need to further critical sustainability science project in order to address more explicitly the question of power imbalances in knowledge production on ecological crisis. The critical project is facing the complicit aspect of intellectual endeavors in sustaining the status quo associated with industrial way of knowing at the roots of ecological crisis. As an implication, there is a need to locate transformative knowledge at both material and ideological levels towards structural and systemic change.

K e y w o r d s : ecological crisis, politics of knowledge production, sustainability science, transformative knowledge, hegemony

I n t r o d u c t i o n

Unprecedented ecological crisis brings important questions on the political implications of hegemonic industrial knowledge production. Such questions have been responded by the emergence of sustainability science as transformative knowledge project. This knowledge project aspires a critical position on the limits of the hegemonic knowledge in addressing the very root causes of ecological problems. Within the realm of sustainability science, there is a potential to discuss further how transformative knowledge project may contribute to structural transformation that consider the limits of anthropocentric-industrial knowledge (Abson et al, 2017; Miller, 2013). Sustainability science has developed as a very important field of discipline that has unique approach in terms of how it engages various ways of knowing that includes natural science, humanities, and social science. While developing mostly in industrial countries in the

North, the massive diffusion of its scientific approach adopted by the government and non-government entities in the Global South presents an interesting topic to discuss in the academic debate. The notion of 'common future' as appeared in the Brundtland Report (Brundtland, 1987) deserves continuous reflection in the context of how this knowledge project transform our ideological position and shape our ecological consciousness as planetary citizens.

Global responses to ecological crisis are fragmented. Skeptic imaginaries presented the bleak picture of human civilization at the edge of catastrophes. The other imaginaries, meanwhile, see the world through the lens of scientific optimism, arguing humans are capable of resilient adaptability to even the most severe planetary dangers. Despite the skeptics and optimists' debate, ecological questions such as climate change, energy, food security, pandemics and diseases, deforestation, plastic pollution, are pertinent to the future wellbeing of all. The problems confronting us are unprecedented in terms of the scale and the scope of influence across nation-state boundaries (Barry and Eckersley, 2005; Foster, 1998). It also has deep implications to the interspecies and the intergenerational spheres of planetary living. How can current knowledge production practices in sustainability science help us to reflect upon and to drive our emancipation from ecological crisis in our engagement with scientific endeavor? Political response to ecological crisis ranges from moderate to radical and the future trajectory of scientific endeavor needs to negotiate with the political dimensions of knowledge production. Bringing the Gramscian political ecology critics, this paper discusses the critical attempts pursued by sustainability science in reorganizing knowledge production as a process that is ideologically contested. The deep connection between science and ideology is discussed here as an attempt to interrogate the de-politicization of science, which in many ways is still considered neutral from the possibility of power intervention.

I focus my analysis on how current sustainability science literatures engaged explicitly with political critique of knowledge production as intellectual hegemonic project. Sustainability science is mostly associated with the global agenda of sustainable development promoted by the United Nations and the other prominent international institutions, including international development aid organizations. It is therefore often termed interchangeably with science for sustainable development. Since the introduction of its formal definition in the Brundtland Report (1987) and its global reassertion at the United Nations Conference on Environment and Development (UNCED) in 1992, the term sustainability has developed as highly politicized intellectual agenda. The extent of knowledge production in the field has significantly enriched the global academic debate. A documentation of 20,000 papers authored by 37,000 authors in 174 countries and 2,200 cities emphasizes the focus of sustainability science on the management of human, social and ecological systems seen primarily from an engineering and policy perspective (Bettencourt and Kaur, 2011). I conducted literature research on selected international publications released between 1996 and 2020 that registered the keywords of sustainability, science, politics, ideology, transformation, and knowledge. I further examined how these literatures raised reflective discussions on the politicization of knowledge production within the sustainability science in the interplay of hegemonic-counter hegemonic intellectual forces.

Knowledge Production as Hegemonic Project

Antonio Gramsci's concept of hegemony is central in understanding how knowledge production operates in its historical-ideological context. In Gramscian terms,

knowledge has both coercive and consensual power dimensions. Knowledge production shapes the relations between the established knowers and those who are seeking to transform the existing epistemological power structure into an alternative knowledge order. As intellectual and moral leadership, hegemony encompasses an economic compromise in the fundamental relations of production, actualized, and made explicit at political and ideological level" (Im 1991, p. 125). In practice, this is concerned with not only criticizing the existing knowledge, but also to present an alternative that is structurally feasible.

In a hegemonic project, intellectuals are the social forces whose role in political struggle is crucial. As Gramsci (1971) proposed, there are two kinds of intellectuals. The first are "traditional" intellectuals whose position is representative to the established class relations and conceal an attachment to various historical class formations. The second are the "organic" intellectuals who belong to the ideological formation of the fundamental-social class. The capacity of knowing, for Gramsci, is theoretically entitled to each man, yet its political articulation is selective. The common depiction of intellectuals as equal to freedom of thought is subject to their limits under the influence of a particular cultural hegemony being served by the consequences of knowledge (Galan, 2011). The production of ecological crisis through scientific knowledge is an arena of political struggle, in which an emerging scientific agenda established common sense is being taken for granted. Adopting Ekers and Loftus (2012), the production of nature in the form of ecological crisis is also a form of appropriation of reality through scientific way of knowing. The emergence of counter-hegemonic scientific agenda, therefore, involves the construction of intellectual leadership that can engage with broad based social positions and offer an alternative mode of knowledge production.

Scientific knowledge is formative to the structure of power relations. Its production determines the distribution of access and control over material resources. It is also ideological in the sense that it has certain oriented towards maintaining or challenging the existing order in relation to present hegemonic power. Robert Cox provided two orientations of theories: *problem-solving* theories, which are oriented towards maintaining status quo, and *critical theories*, which aim at changing the status quo (Cox, 1981), which may apply also to how we evaluate the political implications of science. Every scientific project has transformative vision on what kind of society to construct in the future, a vision of ideology that guides its functions. Ronen Palan discussed the contrast between methodological individualism versus heterodoxy in categorizing social sciences. The former presumes the rationality of the subject and locate preferences and choice as central in explaining human condition. The latter assumes that human conditions are socially constructed and maintained by individual and collective actions (Palan, 2007). The making of hegemonic order in the form of common sense is a crucial political project of the socially conscious intellectuals. The coherent will of a class (Daldal, 2014) defines the binary relations between the ruler and the ruled, or to project in the context of this paper, between the knowers and the known, between the experts and non-experts, who are distanced by their intellectual functions in their political settings.

As part of the counter-hegemonic project, organic intellectuals engage in the war on position (Gramsci, 1971) in the development of new common sense. The strategies that organic intellectuals are pursuing an alternative scientific endeavor are seen from the viewpoint of building broad-based intellectual consensus rather than the employment of coercive political means. Argumentation and negotiation through intellectual debates with various layers in the society in order to build consent and acceptance are parts of these corresponding strategies. Ideological formation cements and unifies the hegemonic

relations at the economic level (Im 1991, p.131). The aspects of political resistance need to be examined in the explicit intellectual critics on the dominant knowledge formation that justify the status quo.

Problematizing Unsustainability: The Industrial Knowledge Production

Within its scientific-technocratic practices, parts of recent sustainability science literatures recognized the exclusionary problems of scientific authority and likewise, the presence of power struggle. Such exclusions are often concealed by the achievement of scientific progress, but this can no longer hold its legitimacy given the extent of the ecological contradictions facing industrial societies. The interplay of accumulation, domination and resistance are essential in the formation of knowledge on ecological crisis and its transformative consequences. Knowledge production is part of the larger political project in which power relations between the knower and the known is being reshaped through the struggle for intellectual hegemony. Sustainability literatures engage with the problems facing industrial knowledge production in three respects. The first one is related to the material and ideological dimensions of hegemonic knowledge. The second one is by questioning power imbalances in the structure of global knowledge production. The third one is concerned with the socio-cultural aspects of intellectual activities in the form of inclusions and exclusions.

Material and ideological bases of ecological crisis

The material bases of crisis are associated with the extractive nature of socio-economic structure driven by infinite economic growth, which often externalizes ecological consequences in the modern production system. Industrial knowledge is dependent upon growth-oriented modes of production that poses strong socio-economic implications. Any effort to change the reliance on growth is politically costly, as it will threaten the socio-economic stabilities associated with the established order. This has also made the coercive aspect of hegemonic knowledge discernible, for example through the reproduction of modeling that includes economic growth maximization goals (Islam, 2005). The concentration of wealth in the North has also been a political economic context in which the ecological crisis must be seen in terms of its redistributive consequences (MacNeil 1990). The association of sustainability with growth-oriented approaches mixed with technological advancement has continuously appeared in the sustainability science debate. Carter (2013) referred to the command-and-control aspects of traditional industrial knowledge that has gradually met with limitations in addressing the nature of environmental problems that requires more diverse engagement with knowledge producers.

Literatures also relate to the discussion on the ideological basis of capitalist mode of production through mentioning the role of free-market consumerism, which intertwines with the infinite accumulation (Walker 2017, p. 95). Understanding the context of crisis in which intellectual organics emerged and has been consolidating their scientific projects is an entry point in explaining the organization of knowledge within these particular social groups. An explicit engagement with critics to capitalism is quite limited in the sustainability science literatures. Critics to hegemonic knowledge pointed out the resilient aspects of ecological crisis supported by knowledge bloc that is complicit to power relations through what Gramsci defined as the ecclesiastics who held a monopoly in the superstructure field (Gramsci, 1971).

Knowledge accumulation and power imbalances

Sustainability science literatures recognized the persistent power disparity between the Global North and the Global South (Redclift 2011). In the Global North, the engagement of sustainability science with ecological modernization indicates the primacy of technological progress that facilitates the transition from business-as-usual scenario to a non-linear model that includes de-materialization and resource efficiency at various levels of industrial modes of production (Spaargaren and Mol, 1991; Jänicke, 1990; Hajer, 1994). The idea of sustainability, while technically promising in the North, is often perceived skeptically from the viewpoint of the Global South. This is amidst scientific claims that societies in the Global South is already and is projected to experience the most severe consequences if the linear economic growth logic is to be maintained.

Growth oriented development and massive resource extraction in the South involves the issue of poverty and lack of state capacity to provide basic services and other forms of policy intervention to cope with socio-economic vulnerabilities of the population. Sustainability scientists claimed to provide an explicit normativity in conducting their scientific program in various spatial contexts, although there needs to be more clarification on theories of justice (Ziegler and Ott, 2011). The challenge for sustainability science is to bridge the North-South inequality in their scientific agenda. Baptista highlighted how the emerging discourse on sustainability practices is problematic when there are political confrontations in the aspect of knowledge representation of the Global South. This is particularly when sustainability science project is perceived as an effort to universalize the experience of the Global North while failing to appreciate the socio-cultural dimensions of ecological crisis from the lens of the Global South (Baptista, 2014).

Political binaries and scientific authority

The deeper socially and culturally textured account of practical activity in the production of nature (Ekers and Loftus, 2012) brings three critical reflections. First, some parts of the literatures on sustainability science challenge the worldview of human domination over the earth. This is by criticizing how the industrial knowledge maintains the anthropocentric power pattern and nature exploitation through scientific-technological knowledge (Mick et al, 2020). Its epistemological approach often externalizes ecological crisis from human intervention, which otherwise act as intimate and intricate elements. The second aspect is the inside-outside border of scientific discipline. Sustainability science promotes trans-inter-multi-disciplinary approach to bridge societal practice with scientific practice in knowledge production as opposed to the mono-disciplinary approach, which is currently under criticism (Lang et al. 2012). Walker emphasized that sustainability science has systemic character that transcend the boundaries of conventional field of knowledge disciplines (Walker 2017, pp. 94-95). The third aspect is the theorists and practitioner's binary. The claims that sustainability engineering needs to be a neutral sphere from any ideological intervention can no longer hold its grips in a society where every day environmental challenges are so confronting and where political intervention is required. The need to engage with philosophy of science is acknowledge explicitly in the critical discussion on the future trajectory of sustainability science (Nagatsu et al., 2020). Science and policy-making processes in the field of sustainability have intimate connections as appeared in the adoption of problem-solving approaches by the political authorities.

Politicizing Transformative Knowledge
Epistemic dialogues

Previous studies have associated the term transformative knowledge with specific ways of knowing beyond the engineering endeavor. Spangenberg provided an overview on how the struggle for social hegemony involves various social groups in various countries with diverse degree of engagement when defining the concept of sustainability (Spangenberg, 2011). Riordan argued that there is a science of politics, and a science for politics, and there is a need to merge the two (Riordan, 2004, p. 234). It is not only a matter of individual judgment by the scientists, but is also to situate the epistemological process as a form of collective that will represent the very diverse realms of sustainability positions. Sustainability science is often dealing with science skeptics, whose positions are not necessarily accommodating to the scientific claims being made. Meanwhile, in order to be hegemonic, the capacity to situate scientific method as part of the wider social condition of knowledge production is very central.

The transformative aspects of sustainability science seem to converge on knowledge democratization project rather than an explicit political economic critique on industrial knowledge hegemony. This appears for example in the shifting approach to data collection. A recent study by Asokan et al (2019) used the term amalgamation of "old" and "new" approaches of data collection and interpretation in sustainability science literatures. Examining the methodology, epistemology, normativity, and ontology of data-intensive approach in sustainability science, they argue that quantitative measurements are very important in making generalization of problems in unsustainability. However, the study recognized that subjective aspects of data-intensive approach is concerned with the very diverse target audience, geographical areas, and issue focus associated with diverse sets of socio-technological values (for example limits to growth, triple bottom approach, transparency, accountability, and smart governance) (Asokan et al., 2019, p. 965).

The search of sustainable path deserves recognition of the very diverse avenues in which scientists are negotiating their scientific claims. The ability of a scientific project to form a broad-based intellectual alliance is central to ensure that the hegemonic project maintains its legitimacy. Clark et al elaborated the redistributive consequences of scientific agendas on the inclusion and exclusion of sustainability problems to address within their context of political hierarchy (Clark et al., 2016, p. 4573). Urmetzer et al, for example, explored the transition towards bioeconomy, in which the components of transformative knowledge include communication, participation, and decision-making skills (Urmetzer et al., 2020). Abson et al argued that due to the failures to address sustainability at its roots, there is a need to foster new approach that considers "the role of institutions, people's connections to nature and their influence on sustainability outcomes, and knowledge production and use in transformational processes" (Abson, 2017).

The 'divided' intellectuals.

The production of transformative knowledge is taking place in the arena of hybridity where intellectuals are subject to multiple identity formation. Here, we often see that the boundaries between the powerful and the powerless are becoming much more distorted. Ernst et al brings the case of dialogue on low-carbon society in Germany, arguing that the role of intellectuals as observers is no more adequate in developing a broad-based scientific leadership. They use the term 'epistemediator' to refer to

ambiguous space in which intellectuals are in the situation of divided identity when dealing with science-practice interface (Ernst et al 2017, p. 30). In a quite similar tone, Lélé and Norgaard argued that natural scientists are demanded to develop a value-neutral judgment on their efforts in defining sustainability and this is problematic. They questioned the separation of science, self and society in scientific thinking (Lélé and Norgaard 1996, p. 356). The fixation of science as an attribute of the privileged, furthermore, is being challenged by the broader pressure to respond to the very actual and real time human vulnerability. For Anderson, the open interpretation of sustainability in its cultural meaning has created both mobilization of knowledge as well as various signification processes. The aspiration of intellectuals to participate in defining what sustainability means and how it has relevance to the determination of their multiple social identities brings its own challenges to the evolving hegemonic subject being created by this alternative science project (Anderson, 2015).

Beyond 'core' and 'peripheral' science

Scientific determination, which separated 'the scientific world' with the 'non-scientific world', produces some limits. Situating the so-called indigenous knowledge and local values in the larger system of sustainability science, for example, is an issue that requires stronger philosophical approach. Indigenous knowledge is seen as way of knowing that remains part of the non-scientific realms. Hill et al (2020) used the term co-production between scientific and indigenous knowledge. This position still agrees with the very different intrinsic qualities of science and indigenous knowledge yet aims at offering a reconciliatory position by envisioning a more egalitarian standing between the two. The questions of knowledge representation are prominent with the possibility of power intervention in knowledge integration, knowledge legitimacy, knowledge authority, knowledge context, and knowledge generality (Abson 2017, p. 36). For Ziegler and Ott (2011), an inclusion of nonscientists in the process of knowledge production is an important scientific turn as they contribute specifically to non-substitute knowledge while restructuring the epistemological, political, and normative approaches of scientific agenda (Ziegler and Ott 2011, pp. 35-37). How to connect the whole parts of the knowledge puzzles requires the recognition of the plural epistemological positions. It also demands political deliberation to open for new possibilities of transcending the rigid boundaries of scientific enterprises. However, as Lang et al argued, when trans-disciplinary awareness is treated as remedial to problem-solving activity, it would neither contribute to the transformational agenda of sustainability science (Lang et al. 2012, p. 40). Márquez and Toledo's discussed the needs of sustainability science to engage in a critical revision of fundamental claims upon which the field was constructed (Márquez and Toledo, 2020). Beyond the democratization promises, a deeper structural transformation is worth pursuing if sustainability science is to be envisioned as counter-hegemonic political project.

C o n c l u s i o n

The ideological aspect of knowledge is not something that can always be concealed by the powerful, as the excess of power imbalances often emerge in various forms of social crisis that eroded political and social stability, as well as exacerbated their negative ecological repercussions. The movement towards transformative knowledge can be distorted by lack of self-questioning on the functioning ideology that drive scientific

assumptions. When deeply scrutinized, science is only one way of knowing, not the only way. The knowledge on ecological crisis that we produced came from a very diverse interpretation of human relations to nature. However, we often witnessed the enforcement of a universal adoption of scientific approach in various areas of knowledge production without opening the possibility of democratizing the intellectual debates. The ideological realm of knowledge in many ways is often kept implicit, and scientists are in the dangers of being complicit to the functioning of power relations. Making knowledge production inclusive does not necessarily lead to structural change and counter-hegemonic project when there is continuous moderation on industrial transformation. There is a need for deliberation to open the debate, to criticize the limits of the pre-existing knowledge order in conditioning the systemic and structural changes.

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IDENTITY NEGOTIATIONS IN BEUR CINEMA IN FRENCH MOVIE: THE CASE OF FILM FATIMA

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A b s t r a c t

This article aims to fill in the gaps in studies on French films with the theme of immigrants with the tendency to perceive immigrants as objects considered as a source of problems and resolve conflicts only through violence. This article specifically addresses the negotiation of the cultural identity of immigrants which is highlighted in French films under a new genre, *Beur* Cinema, notably in the film *Fatima* (2015). Film *Fatima* narrates the daily lives of a North African immigrant mother with two daughters through language barriers and limited access to have a decent life in France. In line with this, the questions posed are, firstly, how the negotiation of the identity of the diaspora is presented in the film, and secondly, how the barriers and solutions to immigrant problems are represented in the films. These two questions intend to explain the pattern of relations between the culture and the country of origin and the integration of immigrants represented in *Beur* cinema. The data for this study is taken from the film entitled *Fatima* by the director, Phillipe Faucon, a Franco-Algerian filmmaker born in Morocco. Film *Fatima* will be analyzed by its cinematographic signs using the theory of cinematographic semiotics. This study finds that what has been understood as the cause of the lack of integration of immigrants is mainly that the residence permit is not justified. This research finds that the challenges of immigrants are also represented by difficulties in adapting to language skills, daily life routine, raising children and even communicating with neighbors and the close community. Faced with all these obstacles, in the film *Fatima*, violence is not portrayed as a solution to their various problems.

K e y w o r d s : beur cinema, film, negotiation, identity, semiotics

I n t r o d u c t i o n

In recent years, Muslims—particularly those of Arabic heritage—have experienced significant racial prejudice within the French justice system. In France, the question of immigration in France is not merely one of economics or citizenship, but also politics; it has remained omnipresent in French political discourse ever since the Front National rose to prominence in 1972, using xenophobic and discriminatory discourses to explicitly challenge multiculturalism and reject immigration. The party argues that immigration, particularly from Muslim-majority countries, undermines French national identity, causes harm to the state, increases crime rates, and exacerbates insecurity and the risk of rebellion (Marthaler, 2008: 386).

France's experiences with xenophobia and racism have long been explored in the media, including in such cinematic works as Mathieu Kassovitz' independent drama film *La Haine* ('Hate', 1995) and the hit dramatic comedy *Les Intouchables* ('The Intouchables', 2011, remade by Escape Artists as *The Upside* in 2017. Of the numerous films that deal with immigration in France, of particular note is Philippe Faucon's *Fatima* (2015). Focusing on the life of its female protagonist, *Fatima* offers a fresh view of France's Arab immigrants and their culture, focusing on their everyday trials and avoiding the specter of violence that permeates media coverage.

Fatima tells the story of a woman, a middle-aged Algerian woman forced to live in a foreign land despite being unable to speak its national language. She has difficulty connecting with her daughters, who are growing within an environment and developing a worldview that she cannot understand, and experiences racial prejudice every day in the workplace.

Fatima is a free adaptation of Fatima Elayoubi's poetry collection *Prière à la Lune* ('A Prayer to the Moon', 2006). Its director, Philippe Faucon, had often dealt with issues of migration since beginning his career in 1984; three of his films, *La Trahison* ('Betrayal', 2005)*, Dans la vie* ('In Life', 2007), and *La disintegration* ('Disintegration', 2012), had followed the trials and tribulations of newly landed immigrants. *Fatima* received four nominations at the 41st César Awards, winning three: Best Film, Most Promising Actress, and Best Adaptation.

This article seeks to fill gaps in the literature on French cinema's treatment of immigration. Where previous investigations of this theme have tended to position immigrants as objects, individuals perceived as creating problems and as using violence to resolve problems, this article uses the example of *Fatima* to discuss French cinema's depiction of immigrants' experiences with cultural negotiation. To do so, it seeks to answer several questions. First, how does French cinema depict identity negotiation processes within the diaspora community? Second, what problems and solutions are represented in these films? Through these questions, this article seeks not only to explore the connection between immigrants' culture and their country of origin, but also to explore their integration into French society, as depicted in cinema.

In France, discourse on migration has been seemingly unending. Since the 1960s, filmmakers—particularly those from diaspora communities—have sought to explore and elucidate the experiences of these migrants. In this, they are part of a global trend that is also evident in the United Kingdom (African and Asian migrants), the United States (Iranian migrants, African Americans, and Asian Americans), and Canada (South Asian migrants) (Desai, 2004: 39; Higbee, 2014).

Generally, works of diaspora cinema tend to use imagery to explore questions of national and state identities. Using a postcolonial lens, these films are capable of deconstructing and challenging the hegemonic identities that subjugate migrants in their everyday lives (including those presented through film). They may thus be considered political projects, works that present the lived realities of migrant and border communities in the current postcolonial era, capable of indirectly challenging the inequality, injustice, and violence experienced by marginalized communities (Summermatter, 2012).

Owing to their significant numbers, immigrants in France may be identified as subjects with the same rights and ability to assert their interests in all aspects of everyday life. In the 1980s, a new cinematic genre emerged in France: 'beur cinema'. The word *beur,* a phonetic reversal of the word *arabe* ('Arab'), is commonly used to refer to the second- and third generation Maghrebis as well as the France-born children of migrant workers from North Africa (Hron, 2009: 88). Even earlier, in the 1960s, African migrants

in Lyon and Marseille had begun making documentaries that reflected their experiences (Bosséno, 2013: 51). The emergence of such films cannot be separated from the influence of contemporary politics and policies that proved detrimental to them.

In the 1980s, few starring roles in French cinema were offered to immigrants (Higbee, 2007). Consequently, many directors—both migrant and French—began producing their own films, highlighting their own perspectives of contemporary culture and politics. Such films include, for instance, Mahmoud Zemmouri's *Prends 10.000 balles et casse-toi* (Take these 10,000 Francs and Go!; 1981), which follows two young African immigrants who are forced to escort their parents to Algeria with nothing more than 10,000 francs; Mehdi Charef's *Le thé au harem d'Archimède* (Tea in the Harem of Archimedes; 1985), adapted from a novel, which explores a young immigrant's inner turmoil as he decides whether to remain in France or return to his homeland; and Jacques Champreux's *Bako, l'autre rive* (Bako, Another Coast; 1979), which follows the tragic travels of a young man from Mali.

Immigrants' involvement in French social life strongly informs their willingness to integrate themselves in French society, as seen in the film *Bako*. At the time, the word *bako* was used as a euphemism for French jobseekers without any formal documentation (i.e. *sans papier*). In the film, the main character was forced to leave Mali during a lengthy drought, when his homeland experienced increased famine and cases of kwashiorkor. He traveled to France illegally, traversing Senegal and Spain before crossing an icy river at the French border. He experienced great difficulty, and although he successfully reached France, he ultimately died of exhaustion on a doorstep. All three of the films depict migrants' difficulty living in their homelands and in France.

The cultural integration of immigrants is only possible when facilitated by the state through its policies. Important in this process is the classification of immigrants at a country's national borders over time. According to Laayouni (2012: 30), immigrants in France fall into three categories: immigrants, naturalized immigrants, and *beurs*. These categories are used to distinguish between immigrants' viewpoints, characteristics, and experiences, recognizing that these will differ between first generation immigrants and their descendants. Such differences are also evident in creative works, including films, novels, poems, and short stories. They are particularly prominent in, for example, Abdelkerim Bahloul's film *Le Thé à la menthe* ('Mint Tea', 1984), which follows a young Algerian man who travels to France in search of employment. However, this plan is ultimately unsuccessful, and his mother must thus come to bring him back to his homeland. This man is not depicted as experiencing an identity crisis or as seeking to integrate himself in French society; rather, he is only shown as trying to survive.

Methodology

This research emphasizes on the qualitative descriptive analysis and the result will be represented by description. This research is conducted in several steps, firstly, determining the film under the *Beur* Cinema category to be analyzed, a film entitled *Fatima*, and then observing what issues are represented in the film by conducting film reading several times. Film is treated as text, reading is conducted repeatedly, initially reading is for images (scenes, shoots), then it is continued with reading the contents of the dialogues. The second step, after making observations, is to classify the dialogue or text in the film to see which parts of the film represent the negotiation of cultural identity and the conflict resolution offered. The third step, determining the approach or method of

descriptive analysis process of filtered data based on the film semiotics theory. The next analysis is the discussion on the representation of the negotiation of cultural identities and solutions of conflicts offered. The dialogue and image analysis will discuss the linguistic dimension of filmic facts. This study will view films as text in relation to emphasizing the singularity and totality of their markings which is called the analysis of the film text and emphasizes the theoretical perspective in an effort to explain the mechanisms of meaning production known as cinema language analysis.

Result And Discussion

Immigrants and Diasporas on Film

Although France is home to many migrants from the country's former colonies, not all are perceived equally. Some are rarely presented as subjugated minorities, as in Jean-Marc Barr's *Lovers* (1999); Christian Vincent's *Sauve Moi* ('Save Me'; 2000), which depicts immigrants from southern Europe; Tony Gatlif's *Swing* (2002), which follows Italian migrants; and Phillipe Lioret's *Welcome* (2009), which focuses on West Asian migrants. High levels of inequality are evident in French cinema, most prominently among African, Antillian, Carribean, and Maghrebi (Algerian, Moroccan, and Tunisian) minorities. Opposition to such marginalization is, however, evident in beur cinema.

Two prominent categories are recognized in cinema: films that present a shared imagination and films that oppose the dominant ideology by depicting lived realities. In the first category is Jean-Pierre Jeunet's *Le Fabuleux destin d'Amélie Poulain* ('The Fabulous Destiny of Amélie Poulain'; 2001), which presents an idealized view of France as a land on comfort and simplicity. Conversely, Matthieu Kassovitz's *La Haine* (Hatred; 1995) depicts rebellion and thuggery among France's marginalized population (Mouflard, 2014: 12).

Migration cannot be separated from its historical and political aspects. Migrants, both forced and voluntary, must be able to adapt to and integrate into the systems in their host countries. Since 1948, the reunification of migrant families has been supported by the Universal Declaration of Human Rights. It has also been incorporated into French law through Decree No. 76-383 of April 29, 1976, and the state has sought to facilitate stateless migrants and their families. Problematically, however, France also passed a policy in 1974 that limits opportunities for unskilled immigrants.

In 1993, a left-wing party proposed policies intended to strengthen family reunification laws by imposing fines on undocumented families. The government also made efforts to control marriages between French nationals and migrants; to compel individuals who immigrated as children to leave France by a certain age; and to preclude foreign citizens from receiving social assistance if involved in any criminal cases. According to Bronfenbrenner (1998), employment-driven migration has effects at the macro and micro level, with implications for nationalism, law, and culture at the former level and implications for families, communities, schools, and everyday dynamics at the latter. Similarly, individuals' acceptance and integration into their host communities is often hindered, and thus they must create their own cultures. This has become particularly evident in France since the 1980s, when the government opened national borders in order to attract immigrants as a means of minimizing the economic consequences of an ongoing financial crisis.

According to Gallagher (2003: 34), the social and economic integration of migrants can be measured through five variables, first, the *Linguistic Integration*:

language used in everyday life; fluency in the national language; language used at home and within the family, second, the *Labor Market Integration*: level of education, labor force participation (men and women), unemployment, mobility, individual income, household income, third, the *Civic/Political Integration*: participation in political parties, associations, religious institutions, and communities, fourth, the *Educational Integration*: performance in school, choice of school, student–teacher relations and the last one, the *Residential Integration*: settlement patterns, mobility, asset ownership, market discrimination.

One major subject of debate has been the citizenship of immigrants. This is particularly problematic in France, where the prevalence of discourses that denigrate immigrants has hindered the acculturation process. From a political perspective, immigrants are indeed French citizens; however, from a social perspective, they continue to be seen as outsiders. To expedite integration, the French government has implemented an assimilation that has compelled immigrants to construct and reconstruct their cultural identity. This is particularly evident at the family level, where these identities are first created and practiced by families.

Immigrants in French Politics

Immigrants in France, unlike in other members of the European Union, have no political rights until they become naturalized. As such, foreign nationals are absent from such political movements as presidential elections. It should be noted that, between 1983 and 1986, President François Mitterrand of the Socialist Party sought to promote a new paradigm on immigrants' political rights. His government proposed employing a color-blind approach to public policy, in which all citizens received equal rights before the law. This proposal was intended to challenge the continued anti-immigrant rhetoric of the Front National, an extreme-right party that supported zero-immigration policies and that sought to block immigrants' access to citizenship (Joppke, 1998). Mitterrand ultimately decided to enfranchise immigrant populations in legislative elections, which he believed would strengthen the party's support and maintain its power. Nonetheless, in their search for power, politicians have continued to use such social issues as immigration, national identity, and terrorism as political tools.

In the two years preceding the 1995 French presidential election, the issue of immigration was seemingly pushed aside by both leftist and rightist parties, thereby reducing tension over this issue. However, immigration remained a hot-button issue in the 1990s (Bertrand, 2006). After a Spanish migrant youth was struck and killed by a police cruiser, immigrants in Vaulx-en-Velin came into open conflict with the local police; a similar conflict occurred in 1991 after an Arab youth was shot dead by a clerk. Periodic unrest continued until 1995, when fighting in southern Lyon resulted in the death of Khaled Kelkal, a member of the Armed Islamic Group of Algeria (Groupe Islamique Armé, GIA) who was suspected of being involved in attacks on the public transport systems in Paris and Lyon (Rossignol, 2016).

Into the 2000s, political unrest and anti-immigration rhetoric continued, exacerbated in part by the continued rise of Jean-Marie Le Pen and his Front National. Le Pen reached the second round of France's 2002 presidential election, drawing international attention. Ultimately, he lost to Jacques Chirac, a candidate backed by a coalition of rightist parties who received 82.2% of votes. As president, Chirac

implemented immigration policies designed to combat illegal immigration and to deport an estimated 25,000 migrants to their countries of origin (Marthaler, 2008: 389).

Around this time, France implemented several policies that significantly affected its Muslim population. In his capacity as Minister of Domestic Affairs, Nicolas Sarkozy—the leader of the center-right Union for a Popular Movement (Union pour un Mouvement Populaire, UMP)—established the French Council of the Muslim Faith (Conseil Français du Culte Musulman) to shape Muslims' religious activities and provide them with a vehicle for their aspirations. Not long afterwards, in 2004, Chirac prohibited the usage of religious symbols in schools, citing the constitutional principle of *laïcité* (the separation of Church and State). Within months, forty-seven students who refused to remove their hijabs had been expelled from school.

Such 'integration' programs were perceived as problematic by second-generation Arab immigrants, who refused them on principle. Unconvinced by the government's reason for forcing them to adapt themselves to their environment, second-generation Arab immigrants felt that they had been born in France and were equally part of its society. Likewise, they felt that, although equally protected by France's laws, discrimination was normalized to the extent that their opportunities to gain employment and establish social relations were limited. Ultimately, in October 2005, tensions reached a breaking point. Riots began after two youths in Clichy sous Bois died from electrocution while hiding from the French police in an electrical substation (Le Figaro, 2015). Over the course of three weeks, thousands of vehicles were destroyed, as were dozens of public facilities: schools, libraries, cinemas, and religious facilities (including three mosques and two temples).

Domestic and Community Conflict

Migrants receive important support from their family and community, which helps protect them from the difficulties of living in a new land. According to Wiese, Van Dijk, and Seddik (2009), children are particularly vulnerable to outside pressure, as they are expected to live within two cultures—each with its own standards for interpersonal relationships, language, emotional control, and etiquette—simultaneously. This has a significant psychological impact on children.

According to Aptekar and Stöcklin (1997), such cultural pressures subject children to significant stress. Where children are unable to cope with the heaven burden of their dual identity, they may experience Post-Traumatic Stress Syndrome (PTSD). Others may seek cultural avenues for coping with their anger, as exposure to different values enables them to obtain a more comprehensive understanding of their surroundings and their own situations. Finally, owing to their different cultures, children may be subjected to stigma in their interpersonal interactions.

However, it is not only children's psychology that is affected by their dual identities. Adults, too, are subjected to significant pressures, needing to work twice as hard to overcome the challenges of their new lives. Adults may lose their confidence, feel as though they are struggling alone, without any support systems or networks, and pass this anxiety on to other family members (particularly children).

In migrant families, linguistic difficulties are an unavoidable fact of life. According to research by Kirszbaum, Brinbaum, and Simon (2009: 21), some 20% of immigrants in France exclusively use their native tongue when speaking with their children; this is particularly common amongst migrants from Morocco and Turkey.

Conversely, 54% of immigrants from Sub-Saharan Africa exclusively use French when communicating with their children. Almost all individuals born to immigrant couples understand their parents' native tongue(s), at least to some extent. Conversely, individuals born of mixed French–immigrant marriages may not understand the language used by immigrant communities. In such families, French is the main language spoken at home, and as such migrant parents have difficulty teaching their native tongue to their children.

The Immigrant Family: A Crisis of Identity

In the first scene of *Fatima*, the director depicts everyday life of Muslim immigrants in France, particularly the effects of the prohibition against veiling in French universities. It depicts a middle-aged woman, draped in a hijab, who is helping her unveiled daughter and her daughter's two friends find an apartment. This scene directly depicts how failing to integrate into French society or to adhere to the prohibition against wearing religious symbols can cause conflict. Local residents are shown to be prejudiced against veiled migrants, and thus driven to reject migrants, as Fatima's daughter experiences when one landlord cancels her contract.

In *Fatima*, the plot is driven by everyday conflicts, wherein individuals assert themselves and their identities even as they seek to navigate a foreign culture. Fatima, the film's main character, can speak French (albeit only haltingly); however, she can only write in Arabic. It is narrated that Fatima is divorced from her husband, who initially migrated with her to France. Despite their divorce, they maintain an amicable relationship, and work together to raise their children.

Fatima, age 44, is a woman from North Africa who is raising her two daughters in Lyon, France. The eldest, Nesrine (age 18), is a first-year medical student, while the youngest, Souad, is a cosmopolitan girl of fifteen. Souad is embarrassed that her mother works as a housekeeper and refers to her derogatively as *une ânesse* ('a stupid beast'). For the love of her daughter, Fatima never returns her daughter's insults, but remains polite in her speech. Fatima continues to adhere to the Islamic values that she learned as a youth, and these values remain an important part of her identity (Holden, 2016). Nevertheless, she feels disappointed that Souad insists on mimicking her peers, becoming a delinquent who refuses to do her homework, fails to wear modest clothing, neglects her fasting during Ramadhan, and speaks harshly to her mother and to other adults (Chang, 2015).

Fatima's relationship with her eldest daughter, Nesrine, is quite different. Unlike her sister, Nesrine attempts to follow her mother's teaching. Citing her medical studies, she politely rejects the flirtations of a young man on a train. Indeed, believing that she must alleviate her mother's financial burdens, she dedicates herself to her studies. Nevertheless, these studies—as well as her social environment—subjects Nesrine to significant psychological pressure. She recognizes that her mother has paid for her studies by working as a housekeeper, and that many of their neighbors are jealous of Fatima's success raising her daughter (Turan, 2016). These neighbors claim that Nesrine is arrogant, unwilling to speak with her fellow immigrants (Chang, 2015), and so dedicated to her studies that she has ignored her community. Nesrine is even accused of exploiting her daughter, of enjoying the fruits of Fatima's labors (Hanafy, 2016), and—ironically— of prioritizing her own future over that of her family.

Fatima does not heed these accusations, instead feeling proud of her daughter's accomplishments. Fatima feels complete, as she conveys to Nesrine in the following scene:

Figure 1 Fatima'sream

00:06:32,327–00:06:44,959 (*Fatima,* 2016)

Fatima   : "*Moi, si ma fille réussi, mon bonheur, il est... comblé"*
Nesrine   : "*Complet."*
Fatima   : "*Quoi?"*
Nesrine   : "*Ton bonheur, il sera complet, pas comblé. C'est toi qui seras comblée."*
Fatima   : "If my daughter is a success, then my happiness is… content."
Nesrine   : "Complete."
Fatima   : "What?"
Nesrine   : "Your happiness, Mother, would be complete. Not content. You're the one who would be satisfied."

Linguistic Obstacles and Solutions

At home, Fatima speaks Arabic; her daughters reply in French (Ellison, 2015). Souad, her youngest, is presented as navigating between her mother's culture and the dominant culture of France. She considers the latter to be more interesting, and thus attempts to distance herself from her 'embarrassing' family. Mimicking her peers, she speaks aggressively and provocatively to her mother in French (Taubin, 2015), using her language as an anger-coping strategy; as mentioned previously, such strategies are commonly used by migrant children to alleviate the pressure they experience (Aptekar & Stöcklin, 1997). Souad's use of French, rather than her mother's native tongue, evidences her difficulty embodying the cultural values of her country of origin. She must use another language to express herself, to communicate her shame. Unlike Souad, however, Fatima does not feel embarrassed by her job; so long as she works diligently and remains honest, any employment—no matter how low—is honorable.

Fatima attempts to learn French, taking literacy classes and complementing them with home studies. However, distraught by her difficulties learning French, including the simple mistakes she makes every day, Fatima ultimately relies on her own native tongue to express herself, her views, and her feelings (Wilkinson, 2016). She seeks to maintain a loving relationship with her children but cannot readily communicate these feelings to them. Instead, she writes her thoughts in her journal and expresses her love for her daughters in her poetry. She writes in Arabic, using her words to challenge her continued othering in French society. At the same time, she attempts to creatively channel her anger and frustration, thereby gaining the power to challenge (rather than simply accept) her situation (Aguilar, 2016).

Before directing *Fatima*, Phillippe Faucon used his film *La Désintégration* ('Disintegration', 2011) to explore how migrants' failure to live comfortably in France leads to violence (Summermatter, 2012). This film was made before the Toulouse shootings of March 2012, before the *Charlie Hebdo* incident of January 7, 2015, and

before the Hyper Cacher attack of January 9, 2015. In an interview, Faucon explained that he had been inspired to make *La Désintégration* after recognizing that domestic conflicts had often been exacerbated by failed integration efforts (Donadio, 2016).

Dreaming in Isolation

In *Fatima*, Faucon depicts the protagonist's emotional struggles and conflicts. Fatima is portrayed by Soria Zeroual, an Algerian immigrant who arrived in France in 2002. She is not a professional actor but works for an agency that provides homecare services to refugees in Lyon (Aftab, 2015). This background was likely a major factor in her casting, as it enabled Soria to draw on her own background and everyday experiences as an immigrant. For her natural performance, Soria was nominated for Best Actress at the 41st César Awards (Sanchez, 2016).

Fatima depicts the loneliness experienced by immigrants, who seek to improve their livelihoods by working multiple jobs, often in silence. Fatima is depicted as a woman of few words when she is not with her daughters, and she is often seen alone. This underscores her isolation within society, the distance between Fatima and those around her (Hanafy, 2016). Language barriers and cultural gaps hinder her efforts to express herself or to assert her own identity, and she must thus keep to herself. Unlike other parents, she is unable to speak to teachers and discuss her daughters' school activities during parent–teacher conferences. She is a simple housekeeper, far different from the well-to-do parents of her daughters, and this embarrasses Souad (Wilkinson, 2016).

Fatima is ultimately only able to express her anxieties and her dreams in Arabic, using the language to write journal entries and poetry. At one point, she reads an entry to Nesrine:

Figure 2. Fatima's dream, 2
01:09:43,125 --> 01:10:13,541

La peur commence à reculer et je reprends confiance en moi.
Je suis seule avec ma responsabilité et mes filles.
Seule avec les âmes que j'ai fait naître pour qu'elles vivent leur enfance
et leur jeunesse.
Seule avec une génération bouillonnante d'énergie et d'intelligence, de vie et de
défi.
Seule avec mes filles, face à cette richesse, cette grande responsabilité.
C'est cela mon intifada.

My fear begins to ebb, and I begin to regain my confidence.
I am alone with my responsibilities and my daughters.
Alone with those souls I'd birthed, so they can enjoy their childhoods and their
youths.
Alone with a generation filled with energy and intelligence, life and defiance.
Alone with my daughters, facing this blessing, this great responsibility.
This is my intifada.

In this poem, Fatima depicts the ongoing struggle of two generations of Muslim immigrants in France. Fatima, the mother, the first-generation migrant, is a courageous woman who strives to improve her daughters' lives, and who is even willing to take menial jobs to realize this goal. Fatima's vision of the future—one in which she and her daughters are happy—is her intifada (Miller, 2017). She thus works diligently to earn enough money to pay for her daughters' education, to improve their lot in life.

Nevertheless, they are separated by a generational gap and a cultural gap, and this limits their ability to understand each other's way of thinking. This is particularly evident in Fatima's arguments with her daughter, Souad. Fatima rarely has the opportunity to express herself, to make her daughters understand her reasoning. As such, communication between them is lacking, and they have difficulty finding solutions to their problems. However, despite speaking French only haltingly, Fatima is fluent in spoken and written Arabic, and uses this language to express her personal thoughts and dreams; it is in this manner that audiences can gain a more intimate understanding of her character.

Over the course of their struggle, Fatima and her family are continuously belittled by their peers. Every mistake is highlighted. Particularly vulnerable to vicious rumors is Nesrine, a second-generation immigrant who must carry the burden of her family's hopes and dreams. She studies medicine diligently, striving continuously to improve herself and her knowledge, often with the support of her mother, her boyfriend, and her roommates. It appears that, despite her family's economic circumstances, she will realize her goal of becoming a doctor (Ellison, 2015). However, other members of the immigrant community do not support her; rather, they spread vicious rumors rather than support her, other communities do not support Nesrine; rather, they spread vicious rumors about her. Initially belittled for being the daughter of a housekeeper, as Nesrine becomes a university student and improves her social standing, she is branded as arrogant, as seeking only to achieve her own goals, and as exploiting the sacrifices of her mother (Wilkinson, 2016).

Fatima's loneliness is again presented at the end of the film, when she visits the university alone to read Nesrine's test results. There, where hours previously young men and women had jumped for joy and shed tears of sorrow, Fatima silently looked over her daughter's results and achievements (Hanafy, 2016). She sounds out the words announcing Nesrine's success, a validation of her years of struggle. Fatima receives the greatest gift a mother could ask for, and for the first time in the film a smile crosses her lips (Wilkinson, 2016).

Conclusion

It has long been argued that immigrants' failure to integrate into their new communities is driven primarily by issues of documentation and validation. This study, conversely, shows that immigrants are also hindered by their difficulty adapting to new languages, as well as differences in their everyday lives, teachings, and interactions with their neighbors and peers. The film presents immigrants as ordinary people, whose lives ebb and flow together those of their fellow French and global citizens.

By dealing with the everyday issues of immigrants, the film *Fatima* contributes significantly to French cinematic discourses. It does not simply depict the racism experienced by immigrants, but rather provides an intimate portrait of them and their struggles. It presents them not as an indefinite 'other', but rather as ordinary people who lead ordinary lives. This message resonated with audiences, as evidenced by the positive reviews and awards *Fatima* received. This film may be seen as promoting integration, as

cultivating an understanding of the difficult struggles experienced by immigrants as well as the achievements possible through perseverance. By learning about the culture of their host country, as well as by continuously learning about its society and culture, they can improve their lives in France, become French while still maintaining their original identities. *Fatima* shows that language barriers are not impenetrable walls, through which individuals cannot express their emotions or their beliefs. Rather, by continuously navigating between their diverse cultures, immigrants can transform themselves.

This article has focused on the film *Fatima*, which was produced and screened after a series of violent incidents captured the attention of the French people. Rather than emphasizing this violence, the film highlights the everyday struggles of a mother and her daughters, as well as the language barriers and access gaps that limit their ability to fully integrate into their host country. Importantly, it is but one of many films that present their own ideas and their views of reality. This article thus recommends further study into these films and their portrayal of first- and second-generation immigrants.

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CARBON DIOXIDE (CO2) EMISSIONS BASED ON ENERGY SECTOR DURING COVID-19 PANDEMIC IN INDONESIA

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Abstract

Due to the Covid-19 pandemic, all countries globally, including Indonesia, have implemented work from home (WFH) policy to slow down the cases. The WFH policy in Indonesia, which has been implemented since March 2020, brings great effects such as economic downfall, social insecurity, and limited mobility of people. The energy sector including fuel and electricity systems have been significantly affected by the Covid-19 pandemic with changes not only in the total levels of consumption but also the usage patterns. The limitation of people's mobility makes an impact on the CO_2 emissions in Indonesia. It is also involved with Indonesia's commitment to reduce carbon emissions in 2030. This study endeavors to analyze the CO_2 emissions based on the energy sector such as fuel, electricity, and liquified petroleum gas (LPG) consumption during Covid-19 pandemic. In this study, the CO_2 emissions were calculated using a formula based on the amount of fuel, electricity, and LPG consumption by society in October – November 2020. The results show that the CO_2 emissions of fuel consumption during WFH slightly decrease by 33%. On the other hand, there was little increase by 20% of the CO_2 emissions from electricity and LPG consumption in household sector. It indicates that the CO_2 emissions affected by the Covid-19 pandemic, and it involved with Indonesia's NDC with carbon emissions reduction target of 29% in 2030. The Covid-19 pandemic could be as a momentum for Indonesia to rebuild an inclusive, resilient and sustainable strategies. Implementation of green policies such as enhancing public transportation, vehicle usage efficiency, energy-saving electrical appliances, improve planting of trees are highly recommended to reduce the CO_2 emissions in Indonesia.

Keywords: CO_2 Emissions · Covid-19 Pandemic · Energy Sector · Work from Home

Introduction

Background

Global warming and climate change are problems facing humanity around the world. As a densely populated country spread across tropical island chains, Indonesia is considered very vulnerable to the impacts of climate change. CO_2 emissions into major anthropogenic greenhouse gases (GHGs) account for 76% of total anthropogenic GHG emissions caused mostly by fossil fuels and industrial processes (IPCC, 2015). In Indonesia, in the energy sector there was an increase in GHG emissions by 2.43% (2000-2015), this increase in emissions occurred due to an increase in energy consumption growth with an average of 2.35% per year (Ministry of Energy and Mineral Resources Indonesia, 2016). The transportation sector has a significant percentage after electricity and heat, which has contributed 7,7 million metric tons of CO_2 in producing fuel around 2015- 2016 worldwide (Akinyemi and Ramonu, 2019). Based on National Energy Report (2015), national oil consumption for transportation has always increased from 58 million tons of CO_2 in 2000 to 73 million tons in 2007. In 2000 the need for fuel for power generation increased from 124 million SBM to 231 million SBM in 2011, or an average increase per year of 6.5% (Ministry of Energy and Mineral Resources, 2013). It has been a severe challenge to Indonesia with its emerging markets and economics to meet carbon emission targets. Indonesia's national government has ratified Paris Agreement 2015 and committed to reducing greenhouse gas (GHG) emissions by 29% and 41% in business as the usual condition in 2030 and pledged in the Nationally Determined Contribution (NDC) (Apriandi et al., 2017). The contributions in efforts to reduce GHG emissions from forestry (17,2%), energy (11%), agriculture (0,32%), industry (0,10%), and waste (0,38%). Emissions from the energy sector are estimated to make up 58% of Indonesia's emissions in 2030, up from 34%, according to the country's NDC document.

The novel coronavirus has created a disaster at the beginning of 2020. Its impacts are not only in terms of human health but also in planetary health. Aspiring to slow down the spread of the highly contagious Covid-19 virus, governments around the world decided to impose several temporary restrictions such as contact restrictions and distance rules, temporary closure of trade and service companies, and travel restrictions within a country. Since February 2020, concern for the development of actions against Covid-19 has continued to grow in many countries. A research study by Loske (2020) has found that in Germany, freight volume for dry products has been increased in retail logistics depend on strength quantified through the total number of new infections per day. Besides, in the United Kingdom, the Covid-19 pandemic has a significant impact on all aspects, including public and private sector operators, and it requires a fundamental approach to long-term policy for transportation (Vickerman, 2021). In Indonesia, the pandemic has changed the social and economic structure of the people. The policy of work from home (WFH), which has been implemented since March 2020, brings economic downfall, social insecurity, limited of people mobility and unemployment. As many workers are practicing WFH, it is expected that there are changes in terms of CO_2 emissions. A report from the Pertamina oil company (2020), noted that in April 2020, the demand for oil for transportation falls 34,6 % compared to a similar variable in February-March 2020. The same fate goes to the demand for oil for industrial purposes, reduced to about 3.18 % in the same period. In contrast, citing katadata.co.id, electricity consumption in July 2020 is the highest since the beginning of the Covid-19 pandemic. The increase was 10% from 58.82 TWh to 64.74 TWh. Like electricity consumption, LPG consumption also increases during WFH. Citing CNBC Indonesia, since the

implementation of WFH policy on March 16, 2020, LPG consumption in the household sector has increased. Subsidies LPG increased by 0.7% from the normal daily consumption of 21.93 thousand metric tons to 22.10 thousand metric tons. Meanwhile, Non- Subsidies LPG increased by 5.4% from the normal daily consumption of 2.05 thousand metric tons to 2.16 metric tons.

Based on study of the Jung et al (2016), found that the outbreaks of a disease can have significant multi-dimensional effects such as economic and environmental consequences. The link between the effects of the pandemic and the economy may vary; the severe rate of infection of Covid-19 has placed 30% of the global population in lockdown, with a country-specific stay-at-home orders (Norouzi et.al, 2020). The impact of Covid-19 mitigation policies on people's movement has also been significant globally, including in Indonesia. In the short term, the energy and electricity systems have been affected by Covid-19 pandemic with changes in consumption and production. In the context of Indonesia, there is still a limited study that explores the amount of CO_2 emissions during the Covid-19 pandemic. With this background, this paper seeks to contribute to the understanding of the amount of CO_2 emissions in Indonesia based on the energy sector, such as fuel, electricity, and liquified petroleum gas (LPG) consumption during the Covid-19 pandemic. Additionally, this paper's novelty is to analyze the relationship between CO_2 emissions during Covid-19 pandemic with the NDC Indonesia carbon emissions reduction target in 2030. Overall, this paper contributes to supporting research about CO_2 emissions from the energy sector during Covid-19 pandemic.

Methodology

The research was conducted in June 2020 – December 2020. Data collection was carried out in October – November 2020 through a questionnaire using the google form that shared to the public by social media. The criteria for the respondents chosen were people who applied work from home, using private transportation, electricity and LPG household during the Covid-19 pandemic. This research used an exploratory and descriptive approach. It explored the oil, electricity, and LPG consumption by Indonesian households during work from home.

Data Collection Techniques

The following describes the data collection techniques:
The Data of Carbon Emissions

We collected primary and secondary data on carbon emissions. The primary data were collected by surveying respondents through online surveys. The survey was designed in early October and asked respondents to provide information on their activity before the Covid-19 outbreak and during WFH policy, including their ability and instances of working from home. The number of respondents involved in this research is approximately 300 people from different cities in Indonesia. We carefully choose the respondents from those who were practicing WFH. Respondents were then asked such as frequency of weekly travel activity, intensity of private vehicle usage, the total and the cost of oil consumption by different modes of transport (motorcycle and private car) before and during WFH. The number of respondents for vehicle usage was 230 people which was majority from Central Java and DKI Jakarta. The respondent's domicile from Java was higher than the total respondents from out of Java such as Sumatra, Kalimantan, Sulawesi, and Eastern Indonesia. The motorcycle usage was about 65%, the private car

usage was about 24%, and both usages was 11% from the total of respondents. Based on oil consumption surveys, the percentage of female respondent was about 56% and male was about 44%. In addition, the number of respondents for household use of electricity and LPG was 76 people. Respondents came from various regions in Indonesia, including 42 people from Sumatra (covering Aceh, Palembang, Bengkulu, Jambi and Riau), 30 people from Java (covering Jakarta, Tangerang, Bogor, Bekasi, Bandung, Semarang, Yogyakarta, Surabaya), 1 people from West Nusa Tenggara (NTB), and 2 people from South Sulawesi. Some of the components of the questions collected from respondents were self-identification, electricity and LPG consumption (including electrical equipment used, the amount and duration of use) and the amount of electricity tariffs before and during WFH, the use of energy-efficient electrical equipment and energy-saving behavior. It should be noted that the majority of questions in the survey were based on the behavior, condition, and attitudes of the individual respondents.

Data Analysis
a. Analysis of CO_2 Emissions Based on Fuel Consumption

In the sectoral approach, the calculation of emissions is based on activities such as energy production, manufacturing, transportation, households, and others. The calculated emission sources include emissions from fuel combustion in each sector and fugitive emissions. The sectoral approach is useful for mitigation policy. The fuel consumption data will be converted to emission factors. In this study, the CO_2 emissions were calculated using a formula based on the amount of fuel consumption by each type of vehicle. We used the IPCC Calculation on emission factor to calculate CO_2 emissions. Based on this concept, the emission factor of oil's type could be estimated, as in table.

1. The formula of CO_2 emissions:

$$CO_2 \text{ Emissions} = k=0nAi \times EF$$

Notes:

Ai: Energy consumption (liter)

EF: Emission Factors (Ton/Gj)

Source: (IPCC, 2006)

Table 1. Emission Factors Greenhouse Gases of Several Types of Fuel Products

Types of Fuel Products		Emission Factors		
		CO_2	CH_4	N_2O
		Ton/GJ	g/GJ	g/GJ
Fuel	Premium	0,069	5,00	0,60
	Bio Premium	0,062	4,75	0,57
	Pertamax	0,069	5,00	0,60
	Bio Pertamax	0,062	4,75	0,57
	Pertamax Plus	0,069	5,00	0,60
	Bio Solar	0,062	4,75	0,57
	Kerosene	0,072	5,00	0,60
	Solar Oil (ADO)	0,074	5,00	0,60
	Diesel Oil (IDO)	0,074	5,00	0,60
	Combustion Oil (FO)	0,077	5,00	0,60

b. Analysis of CO_2 Emissions Based on Electricity Consumption

The CO_2 emissions in this study were from household activities classified into two, primary and secondary. The primary is CO_2 emissions come from household gas (LPG), while the secondary is CO_2 emissions from electricity consumption. The calculation of CO_2 emissions was carried out using the following IPCC method:

     a.   Primary CO_2 Emissions

        CO_2 Emissions = EF x Fcy x NCV

     b.   Secondary CO_2 Emissions

        CO_2 Emissions = EF x Electricity Consumption (KWh)

     c.   Total of CO_2 Emissions

        Total of CO_2 Emissions = Primary CO_2 Emissions + Secondary CO_2 Emissions

Notes:

Fcy: Fuel Consumption (Kg/month)

EF: Emission Factors (Mass/MJ)

NCV: Net Calorific Volume (*energy content*)

Source: (IPCC, 2006)

Result And Discussion

1. The CO_2 Emissions Based on Energy Sector During Covid-19 Pandemic

Indonesia's condition with a very dense population affects various sectors, including the increase in the number of vehicles, the demand for energy consumption such as electricity and gas generated from various activities, and others. Household activities have a significant contribution to increase CO_2 emissions, as data compiled by the Ministry of Environment and Forestry Indonesia (2012) shows that the energy sector, especially households, is the largest contributor to greenhouse gases. Energy consumption contributes 75% to CO_2 emissions. The CO_2 emissions affected by many aspects such as number of vehicles, atmosphere, and climate dynamics. Indonesia has enacted emergency response procedures and required people to stay at home instead of going out beginning in March 2020. As a consequence of social distancing, people will travel less, limit motor vehicle usage, and impact fuel consumption. The decline in transportation demand consequently translates to a reduction in energy and fuel demand. Some researchers have been funding the impacts of the Covid-19 outbreaks; a simulation study by Ruiz Estrada et al., (2020) predicts significant drops in tourism and transportation in China due to extensive quarantines. A research study by Arellana et al., (2020) found that in Colombia, at the national and local levels have decreased for vehicles use, giving benefits to the environment. Since mobility had been curtailed due to Covid-19, global oil demand was severely hit, decreasing nearly 15% in the first quarter of 2020. The existence of a social restriction policy by working at home (WFH) in handling the coronavirus disease outbreak is also likely to affect carbon emissions. It is related to the closure of several industries, decreased motorized vehicle use, and decreased fuel consumption. Pertamina oil company (2020), noted that in Indonesia the demand for fuel in big cities such as

Jakarta fell by 59%, Bandung 57%, and Makassar 53%. In contrast, electricity consumption continued to increase during the Covid-19 pandemic.

Mobility and transportation are essential services in every city (Hickman and Banister, 2014). All services are interconnected and are heavily populated, inspires the city to develop various transportation solutions. The impacts of the Covid-19 pandemic on transportation have been evident throughout the world, including Indonesia. According to the result of the questionnaire, in figure 3, explains that 79% of people believe that the implementation of WFH policy has an impact on the reduction of oil consumption by 26% - 50%. The decline of fuel consumption during WFH is close to the low frequency of people leaving the house and mobility using vehicles in a week. Based on this study's results, the fuel consumption of motorcycles has been declined by 35% during WFH. Similar to cars, the fuel consumption of cars has been decreased by 33%. Private car usage in cities fell as more people have been urged to work from home, and WFH has become the new normal for a much larger proportion of workers in the future. In many cases, these are justified based on controlling congestion, pollution and using the proceeds to promote alternative public transport choices. Although road usage did not fall by as much as public transport used during the initial lockdown in the pandemic, reducing pollution in cities during this period was significant.
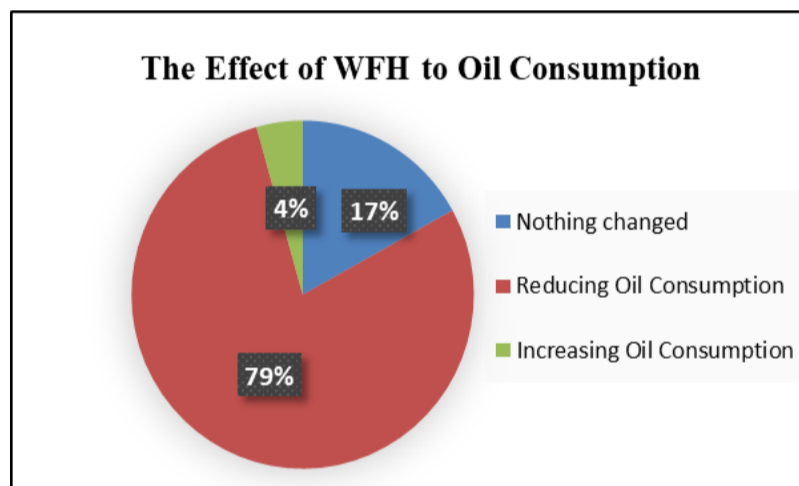

Figure 3. The Effect of WFH on Oil Consumption

According to Muziansyah et.al (2015), the type of vehicle affects the engine capacity, which is the vehicle with large engine sizes consumes much fuel and resulting in large emissions into the atmosphere. The type of fuel has the same emissions, but because the engines that operate the vehicles vary, this can make the number of emissions produced by each vehicle different. Each type of fuel from the vehicle has a different emission factor, and it makes a different number of CO_2 emissions (Grelier, 2018). The CO_2 emitted by the motorcycles given in Table 2 is lower than the cars before and during WFH. As shown in Table 2, the total number of CO_2 emissions of motorcycles and cars before WFH lower than during WFH. During WFH, the total CO_2 emissions have changed into 19.120,57 tons/GJ/month or 229.446,8 tons/GJ/year. CO_2 emissions decreased between before and during WFH by 9.696,03 tons/GJ/month or 116.352,4 tons/GJ/year or in a percentage decrease of 33%. The declining amount of CO_2 emissions during WFH is due to the rapid decrease of fuel consumption during WFH. This is due to significant on human activities outside the home, so people must work from home during the WFH period. The benefits of that reduction include improved air quality and visibility in the cities. However, as Covid-19 restrictions ease, the vehicles will return dominantly and could cause congestion at levels not seen before the outbreak should sensible measures not be introduced.

Table 2. CO_2 Emissions Each Type of Fuel Before and During WFH

Condition	Type of Vehicle	Type of Fuel	Fuel Consumption (Ton/GJ/Month)	CO_2 Emissions (Ton/GJ/Month)	CO_2 Emissions (Ton/GJ/Year)
Before WFH	Motorcycle	Premium	829,66	686,95	8.243,50
		Pertalite	911,66	6.104,48	73.253,70
		Pertamax	823,23	3.674,90	44.098,78
	Total of CO_2 Emissions of Motorcycle			10.466,324	125.595,982
	Car	Premium	0	0	0
		Solar	5273,84	2.341,59	28.099,02
		Pertalite	3858,91	11.244,86	134.938,40
		Pertamax	4519,75	4.763,82	57.165,80
	Total of CO_2 Emissions of Car			18.350,262	220.203,22
Total of CO_2 Emissions Motorcycle and Car				**28.816,60**	**345.799,20**
During WFH	Motorcycle	Premium	626,68	518,891	6.226,69
		Pertalite	562,75	3.768,17	45.218,09
		Pertamax	553,11	2.469,08	29.629
	Total of CO_2 Emissions of Motorcycle			6.756,148	81.073,782
	Car	Premium	0	0	0
		Solar	3215,76	1.427,80	17.133,57
		Pertalite	2669,08	7.777,70	93.332,39
		Pertamax	2997,08	3.158,92	37.907,07
	Total of CO_2 Emissions of Car			12.364,418	148.373,03
Total of CO_2 Emissions Motorcycle and Car				**19.120,57**	**229.446,80**

As shown in Table 3, each region of Indonesia has different CO_2 emissions before and during WFH. The result shows that Java is the highest region of decreasing CO_2 emissions before and during WFH, significantly decreasing by 36%. Followed by Kalimantan decline by 32% and Sulawesi decrease by 28%. The lowest region of declining CO_2 emissions was in Sumatera fall by 22%, and Maluku Nusa Tenggara Papua decrease by 21%. The changes in CO_2 emissions in each region due to the changes in the amount of fuel consumption. As a result, the fuel consumption in Java Island has the most significant changes than other regions. Besides Indonesia, other countries like Brazil also have been impacted by Covid-19, which is the density of road traffic, and economic activity has reduced during lockdown (Dantas et.al, 2020). According to Rayash and Dincer (2020), the global mobility trend showed that declined rapidly since March 2020 in several world cities such as Tokyo, Amsterdam, London, New York, and Istanbul. Hence, the CO_2 emissions has been decreased significantly due to the decline of mobility. Governments should provide subsidies to maintain the system supply to avoid crowdedness and promote active transport by allocating less-used street space to cyclists and pedestrians. The report from Oxford Analytica, carbon emissions will diminish because of prolonged disruptions to economic activity. The longer this crisis persists, the more profound the short-term carbon impact will be in life.

Table 3. The CO_2 Emissions Each Region of Indonesia

Region	Type of vehicle	Type of Fuel	CO_2 Emissions Before WFH (Ton/GJ/Year)	CO_2 Emissions During WFH (Ton/GJ/Year)
Sumatera	Motorcycle	Premium	532,53	266,26
		Pertalite	3.584	2.026,47
		Pertamax	837,38	358,87
	Car	Pertalite	18.539,7	15.550,2
	Total		**23.493**	**18.201**
Java	Motorcycle	Premium	2.396,38	1.331,32
		Pertalite	51.506,3	31.538,3
		Pertamax	36.218,1	23.174
	Car	Solar	32.382,4	17.133,6
		Pertalite	86.711,1	58.616,9
		Pertamax	61.965,2	40.306,69
	Total		**271.179**	**172.100**
Kalimantan	Motorcycle	Premium	665,66	665,66
		Pertalite	8.254,21	5.263,56
		Pertamax	4.304,15	3.106,69
	Car	Pertalite	13.637,4	9.091,6
	Total		**26.861**	**18.127**
Sulawesi	Motorcycle	Premium	2.236,63	2.236,63
		Pertalite	1.794,39	1.196,26
		Pertamax	478,50	478,50
	Car	Pertalite	3.349,54	1.674,77
	Total		**7.859**	**5.586**
Maluku, Nusa Tenggara, and Papua	Motorcycle	Premium	2.396,38	1.717,41
		Pertalite	6.934,73	5.263,56
		Pertamax	1.650,84	1.794,39
	Car	Pertalite	4.545,8	3.349,54
	Total		**15.527**	**12.124**

WFH policy that began to be implemented by the Government of Indonesia since the first positive case of Covid-19 was confirmed in Indonesia made changes in various sectors, not least in the energy sector. When the community is required to do activities at home, resulting in community mobility outside the home becomes remarkably decreased, causing fuel consumption to decrease. Meanwhile, household electricity and LPG consumption increased during the implementation of the WFH policy. This is because activities at home encourage people to cook more often and use other electronic equipment that is usually used when outdoors. In addition, studies on energy consumption patterns also reveal that electricity and LPG are the main energies used in the household sector. While the main factors that affect total energy consumption in the household sector are the cost of energy consumed and the number of family members contained in a household (G & N, 2019).

Government policies in an effort to stop the spread of positive cases of Covid-19 have changed the pattern of energy demand around the world. Many international borders are closed, there are restrictions on people's mobility, causing a decrease in the amount of transportation and changing energy consumption patterns (Quéré et al., 2020). The survey results on respondents in this study showed that 81% of the 76 respondents stated

that there are differences and increases in electricity and LPG consumption's household during the implementation of WFH, as shown in figure 4.
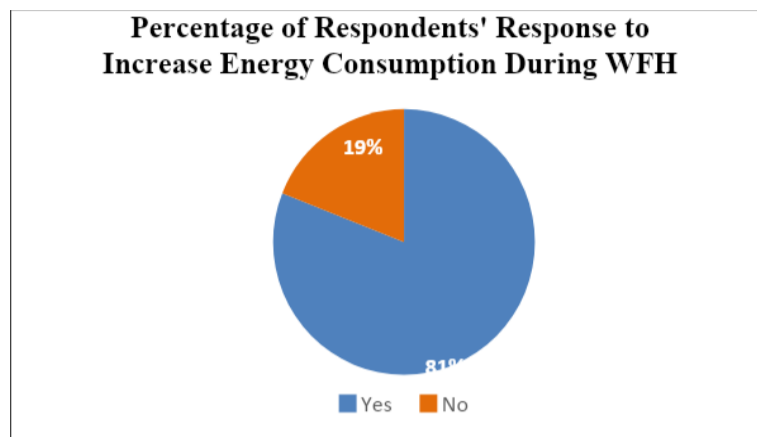

Figure 4. Percentage of respondents' response to increasing energy consumption during WFH

Based on the results of calculations obtained from a sample of respondents per region showed that there is a difference between electricity and LPG consumption's household at the time before the implementation of WFH policy and at the time of implementation of WFH policy. It will also affect the total emissions produced by each individual/month. Tables 4 and 5 show the emissions average against differences in electricity consumption and household LPG before the implementation of WFH policy and at the time of implementation of WFH policy divided into four regions. Besides that, not only in Indonesia, electricity use during the Covid-19 pandemic in European countries has also increased during the lockdown policy, impacting population activities that have changed electricity consumption. For countries that enforce lockdown policies strictly, electricity consumption is increased much from the time before the Covid-19 pandemic. It indicates that the lockdown policy changes the consumption profiles on the one hand. On the other hand, these profile changes can also reflect the effects of different approaches to dealing with the pandemic on people's activities (Bahmanyar et al., 2020). In Lagos, Nigeria there was also a significant increase in electricity consumption by 49% during the period of total lockdown in the household sector (Edomah & Ndulue, 2020).

Table 4. Average CO_2 Emissions from Household Electricity Consumption

No	Regions	Average CO_2 Emissions	
		Before WFH	**During WFH**
1	Sumatera	6,1188816 tons CO_2/ individual/month	6,5681268 tons CO_2/ individual/month
2	Jawa	2,1659526 tons CO_2/ individual/month	2,5870902 tons CO_2/ individual/month
3	NTB	2,5573152 tons CO_2/ individual/month	3,3043104 tons CO_2/ individual/month
4	Sulawesi	1,8608184 tons CO_2/ individual/month	3,5815752 tons CO_2/ individual/month

Table 5. Average CO_2 Emissions from Household LPG Consumption

No	Regions	Average CO_2 Emissions	
		Before WFH	**During WFH**
1	Sumatera	0,00924291 tons CO_2/ individual/month	0,00962803 tons CO_2/ individual/month
2	Jawa	0,00847267 tons CO_2/ individual/month	0,00693218 tons CO_2/ individual/month
3	NTB	0,00616194 tons CO_2/ individual/month	0,00693218 tons CO_2/ individual/month
4	Sulawesi	0,00924291 tons CO_2/ individual/month	0,010783 tons CO_2/ individual/month

The CO_2 Emissions During Covid-19 Pandemic Related to The Indonesia Carbon Emissions Reduction Target in 2030

The increase in population and income will increase energy utilization. Thus, resulting in CO_2 emissions from energy utilization also increased which also has an impact on the increase of environmental problems. The problem of climate change is a reality faced by the whole world, including Indonesia. The resulting impact is a domino effect that lasts across territorial boundaries and time. Indonesia's participation in the Paris agreement encourages Indonesia to be involved in efforts to reduce emissions through NDC's of 29% (Business as Usual) and 41% (International assistance) in 2030. NDC is a commitment containing the contribution of each member country to reduce GHG emissions. It requires a separate effort for Indonesia, considering Indonesia is one of the countries with the world's most extensive carbon absorption. However, on the other hand, deforestation and land-use change are still happening massively (Aisya, 2019).

The changes brought by the Covid-19 outbreak are widespread and unparalleled (Dewi et al, 2020). The impact of Covid-19 is an interdisciplinary discussed topic in social sciences. This evidence suggests that the government's request to 'stay at home' has been heeded. The coronavirus outbreak led to the emptying of streets and public spaces, whether by partial lockdown or by personal responses. According to this study, the Covid-19 pandemic in Indonesia has been impacted by changes in CO_2 emissions in the energy sector (fuel, electricity, and LPG consumption). For instance, the demand for fuel in Indonesia has decreased during WFH due to limited vehicle mobility. It impacts on the changes of CO_2 emissions from fuel consumption has been decreased by 33% during WFH.

The outbreak of the Covid-19 in various countries carried out regional quarantine policies to prevent the spread of infection. It has resulted in lower energy consumption and reduced emissions in the first quarter of 2020 (International Energy Agency, 2020). But on the other hand, due to a policy that requires people to do activities at home to break the chain of transmission of Covid-19, this leads to an increase in the amount of electricity and LPG consumption in the household sector. It shows that the changes in CO_2 emissions based on fuel consumption during pandemic contributes a little to the decreasing of CO_2 emission target on NDC Indonesia. In contrast, the changes in CO_2 emissions from electricity and LPG consumption encourage the increase of CO_2 emissions. According to this research, the changes of CO_2 emissions based on the energy sector during the Covid-19 pandemic did not have a massive effect related to the emission

reduction target and still far away from the target on NDC Indonesia in 2030. The lockdown policy leads to a substantial reduction of transport and economic activities, resulting in an 8% reduction in GHG emission compared to 2019. However, CO_2 emissions from transport are expecting to rise again with the increasing economic activities. The world globally has to reduce emissions by almost the same amount as during the pandemic. However, on figure 5, it can be shown that transport emissions reduction of China, Japan, and India compared to the largest global CO_2 emitters is only between 1% and 2% against last year in the same period (Dalkmann, 2020).
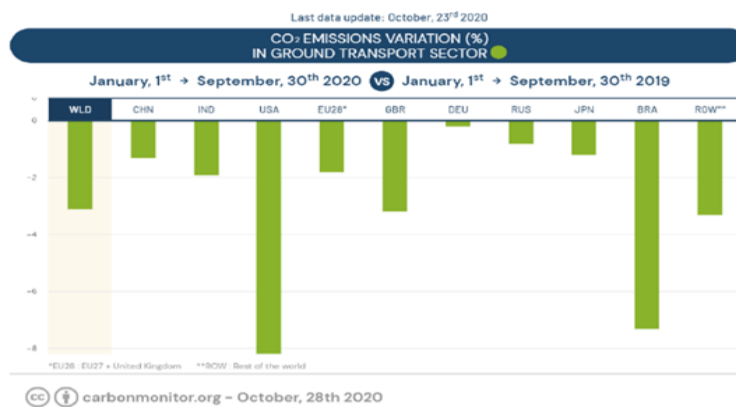

Figure 5. CO_2 Emissions Variation in Ground Transport Sector in Some Countries
(Sources: Dalkmann, 2020)

The Covid-19 pandemic could be as a momentum for Indonesia to rebuild sustainable strategies and maintain the environment's quality. However, post-Covid-19 will increase energy consumption and impact CO_2 emissions. Thus, the right effort and strategies are needed in arranged environmental policies. There are some policy recommendations to maintain CO_2 emissions from fuel consumption in the post-Covid-19 period. The first is the transformation of transportation, which priority for humanity and the environment. This policy, called humanitarian transportation, includes some aspects such as healthy, clean, comfortable, and justify. The green economy's implementation is needed, which includes low carbon, resource-efficient, and socially inclusive. Also, in the household sector, several policy recommendations can be applied by the community, including the utilization of Rooftop Solar Power Plants (PLTS), the efficiency of the use of electrical energy and LPG, using energy-saving electrical appliances and greening the household sector by increasing the planting of trees and ornamental plants that can help absorb CO_2.

In an attempt to contribute to the global endeavor of limiting the increase in global temperatures by the middle of the century to 2°C, Indonesia has pledged to reach development using a low-carbon approach 2020 – 2045 (Ministry of National Development Planning Indonesia, 2019). Indonesia has various energy sector mitigation options that could achieve reduction emission targets, such as energy efficiency usage, renewable energy, clean energy, electric vehicle, public transportation, vehicle usage efficiency and the use of nuclear power. These options can be considered part of low carbon energy system energy. In a country with limited wealth, mitigation actions' economic impact is an essential factor in selecting and eventually implementing these options. Several studies have discussed future options for energy systems in Indonesia, and they concluded that low carbon technologies bring multiple benefits, such as the reduction in the primary energy supply and reductions in CO_2 and air pollutants. While some studies have addressed Indonesia's future energy scenarios, there have been no attempts to assess its NDC. Energy consumption has grown with population and

economic growth. Indonesia is endowed with a wide range of energy resources include oil, gas, and coal have been intensively exploited to meet domestic and export demands. The prices of renewable energy cannot compete with subsidized fossil fuel energy.

The increase of CO_2 emissions can be reduced by utilizing environment-friendly energy sources and technology such as using low carbon energy sources and increasing energy technology efficiency. Transport is crucial for sustainable development, including poverty reduction, economic diversification, and human well-being, and its central role in modern economies and societies has been brought to the fore due to the Covid-19 pandemic. Short-term reductions in greenhouse gas emissions and other pollutants are also evident, but prior experience shows that these are rapidly reversed when the situation returns to normal unless structural changes take place. The transformation can lead to such changes in transport. Existing challenges, such as GHG emissions, urban pollution, and lack of access in rural areas, which have been brought to the fore by the pandemic, should be addressed in a sustainable manner and in line with the "avoid, shift, and improve" approach. The Covid-19 pandemic should be taken as a chance to accelerate a transition to sustainable transport systems and solutions in support of the implementation of the 2030 Agenda and the Paris Agreement on climate change.

Conclusion

The Covid-19 pandemic affects the amount of CO_2 emissions based on fuel, electricity, and LPG consumption during WFH policy. The CO_2 emissions based on energy sector during the Covid-19 pandemic shown an opposite result between fuel consumption with electricity and LPG consumption. The CO_2 emissions from fuel consumption during WFH have been declined about 33%. On the other hand, the CO_2 emissions increased by 20% based on electricity and LPG consumption during WFH. Implementation of some green strategies such as enhancing public transportation, vehicle usage efficiency, energy-saving electrical appliances, improve planting of trees are needed to pursue Indonesia's carbon emission reduction target in 2030.

Acknowledgement

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Landscape Fragility Assessment Based on Anthropogenic Impact in Parangtritis Coastal Dune, Yogyakarta, Indonesia

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A b s t r a c t

Landscape degradation can be investigated by ecological risk assessment, which consists of landscape disturbance and fragility assessment. The fragility index is generally based on how likely it is for a class in a landscape to change, determined by expert judgment, and ordered as an integer. This study aims to identify land cover/land use in the Parangtritis coastal dune and classify it into anthropogenic impact classes, then assess the fragility index of each class. The method in this study is visual interpretation of small-format aerial photography in 2011 and 2020, followed by field survey. The process of determining landscape fragility is carried out using a literature review and analytic hierarchy process (AHP). The study results show that there are 9 classes of anthropogenic impacts. The landscape fragility index from the largest are *natural* (1.000), *agrogenic* (0.686), *industrogenic* (0.472), *tourism-sports* (0.319), *water management* (0.215), *tree agrogenic* (0.145), *traffic* (0.098), *info-telecommunication* (0.068), and *urbanogenic* (0.048). *Natural* and *agrogenic* have the largest index because the changes from 2011 to 2020 show more extensive reductions, while *urbanogenic* has the lowest index because it tends to be permanent as a built-up area. The consistency ratio of the AHP result is 0.0754, meets the standard and can be used in ecological risk assessment.

K e y w o r d s: AHP, anthropogenic impact, landscape fragility.

I n t r o d u c t i o n

Background

Landscape degradation can be investigated by ecological risk assessments (F. Zhang et al., 2018). There are two major components in ecological risk assessment, namely landscape disturbance and fragility (Jin et al., 2019). The landscape disturbance indicates ecological processes spatially such as fragmentation, isolation, and dominance (Xie et al., 2013), while the landscape fragility depends on characteristics of the local landscape which is expressed by fragility or vulnerability index. The fragility index indicates how a landscape type or class tends to be changed (Peng et al., 2015). However, some ecological risk studies used expert judgment to assess the fragility index as an integer then be normalized (Di et al., 2014; C. Li et al., 2018; Lin et al., 2019; Peng et al., 2015; Xie et al., 2013; F. Zhang et al., 2018).

Analytic hierarchy process (AHP) is a theory and tool for decision making by deriving ratio scales paired comparisons. The comparisons come from actual

measurements or relative strength of preferences expressed in a fundamental scale (R. W. Saaty, 1987). Therefore, AHP comes as an alternative to in fragility index assessment (Liu et al., 2020). AHP accommodates all landscape classes to be compared in pairs. Although it will not reduce the overall subjectivity, at least it will give a consistency ratio as a note for the landscape fragility model.

One of fragile landscape is coastal area. Complex processes of the coastal area cause a fragile landscape (Di et al., 2014; Hayes & Landis, 2004; W. Zhang et al., 2020). Its geomorphological processes come from both the land and the sea as a transition zone. In a particular coastal morphology, sand dune is formed behind the shoreline. Parangtritis coastal dune has been being formed under coastal processes such as fluvial, marine, aeolian (Kaliraj et al., 2017; Sunarto, 2014), even anthropogenic impact (Kaliraj et al., 2017; Sunarto et al., 2018). It is different from desert dune because tropical climate zone drives more intervention than in arid climate zone. It has been degraded if observed from aerial photography, which decreased about 356 hectares area in the last 50 years (BLH DIY , 2017). In Catalan shoreline, Spain, the coastal dune landscape degradation ended up with decreased in size partially or lost totally (Garcia-Lozano et al., 2018).

Small-format aerial photography (SFAP) from unmanned aerial vehicle (UAV) has been widely developed, especially in monitoring of landscape degradation on a detailed scale. Its flexibility enables landscape monitoring in a relatively narrow study area (Alvarez-Vanhard et al., 2020; Wu et al., 2021). In landscape ecology study, landscape monitoring is not only observing the dominant landscape, in which this term is bare land, but also another land cover/land use at the patch level as well as class level. Therefore, land cover/land use classification in the coastal dune landscape will be more detailed, supported by fine resolution spatial data (Feng & Li, 2020).

The other side of AHP is its impossibility in comparing many pairs (Ozdemir, 2005), including many attributes such as land cover/land use. The detailed subclass of land cover/land use could not be processed in AHP. Therefore, land cover/land use classification should be standardized to simplify the pairs in AHP. One way of simplification in classifying land cover/land use is reclassifying them into intervention types (Adzima et al., 2020), which is called anthropogenic impact (Szabó, 2010). The objectives of this study are to (1) identify land cover/land use in the Parangtritis coastal dune, (2) classify land cover/land use of the Parangtritis coastal dune into anthropogenic impact, and (3) assess the fragility index of each landscape class in the Parangtritis coastal dune.

Methodology

This study was conducted in the Parangtritis coastal dune, Yogyakarta, which covers 412.8 hectares area (**Figure 6**). It is a unique coastal dune in tropical zone because of the barchan presence (Sunarto, 2014), besides the common form of parabolic. One of the factors in dune formation is climate. Parangtritis has D climate (moderate) based on Schmidt-Ferguson classification (Putri, 2008). The average wind speed is 5.3-9.2 ms^{-1} (Department of Public Works, Housing and Energy 2014), besides monsoon wind presence regionally (Aldrian and Susanto, 2003).
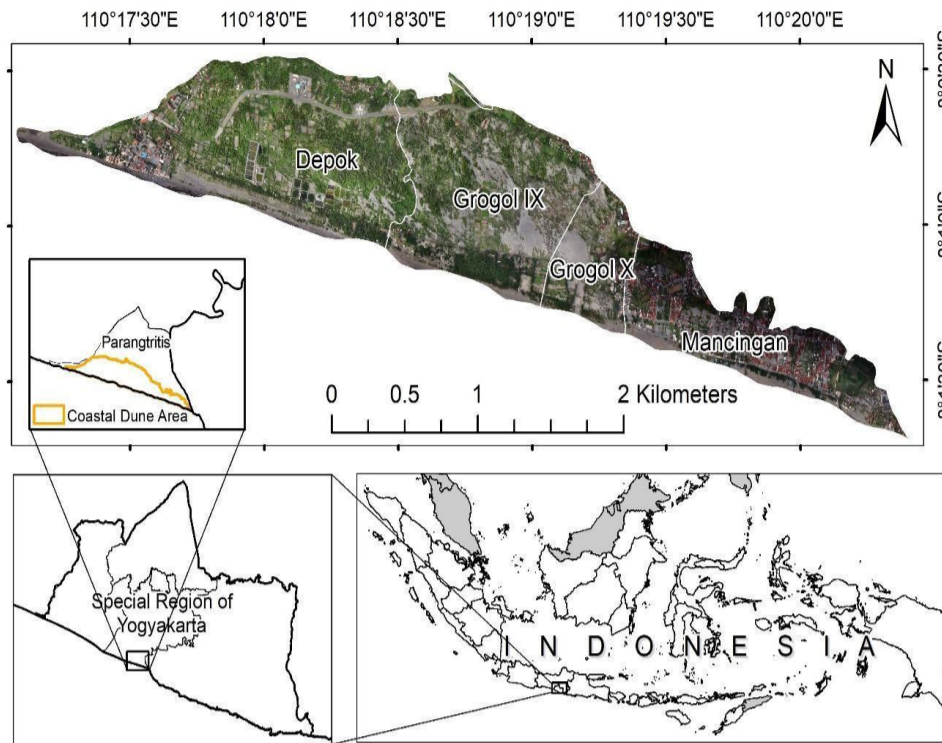
Figure 6. Study area

There are 4 administrative hamlets in the coastal dune, namely Depok, Grogol IX, Grogol X, and Mancingan. Each hamlet population in 2020 is 622, 429, 502, and 1.571, respectively. The population does their economic activity by adapting to the local environment, as well as doing an intervention. Some types of intervention enable landscape ecology change.

This study used SFAP covering Parangtritis coastal dune temporally as the main spatial data. SFAP in 30 cm and 10 cm resolution of 2011 and 2020 respectively were used to interpret land cover/land use visually using geographic information system (GIS). The SFAPs were integrated with hillshade generated by digital surface model (DSM). With the scale of 1:2,000, it requires a minimum legible area of 158.76 m^2 (Rossiter, 2000). A field survey was also conducted to validate the land cover/land use map and classification. The anthropogenic impact was also observed during the field survey, considering types of intervention by Szabó (2010).

Landscape fragility assessment was carried out by combining literature review, observation result analysis, and spatial change analysis of each intervention class. Literature review gives the order of fragility as an integer, based on expert judgment. Result observation analysis becomes the basis of correction in coastal dune landscape fragility order. The spatial change analysis of each intervention class will the basis for determining whether a landscape class is more vulnerable than another. The previous step in fragility assessment tent to be a qualitative method. To make it less subjective, semiquantitative of AHP using spatial multicriteria tool in ILWIS 3.4 has been applied in paired landscape class matrix comparison.

Determining the priority values of fragility and fragility categories using AHP is needed to quantify data of expert judgment. The following steps according to Chen et al. (2020) and Ying et al. (2007) explain the process of AHP. First, the judgment matrix was created. Suppose the matrix is Q, a set of fragility is calculated by the average comparative importance of each two fragilities (**Equation 1**).

$$Q = [q_{ij}]_{nxn} = \begin{bmatrix} q_{11} & q_{12} & \cdots & q_{1n} \\ q_{21} & q_{22} & \cdots & q_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ q_{n1} & q_{n2} & \cdots & q_{nn} \end{bmatrix} \tag{1}$$

Where

q_{ij}: average importance of the i-th fragility to the upper tier when compared to the j-th fragility (evaluated by the experts based on fundamental scales, **Table 6**).

n: number of the fragilities

The fundamental scales of AHP are shown in **Table 6**.

Table 6. Fundamental scales of AHP

Intensity of importance	Scale	Note
Equally	1	two classes contribute equally to loss or vulnerable
moderately more	3	slightly favors one over another
strongly more	5	strongly favors one over another
very strongly more	7	dominance of the demonstrated importance in practice
extremely more	9	evidence favoring one over another of highest possible order of affirmation
intermediate value	2, 4, 6, or 8	when compromise is needed
reciprocals of above	1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8, or 1/9	if class i has one of the above nonzero numbers assigned to it when compared with class j, then j has the reciprocal value when compared with i
(R. W. Saaty, 1987; T. L. Saaty, 1990, adapted)		

After defining the AHP scales, eigenvector and eigenvalue of judgment matrix were calculated, see **Equation (2)** and **(3)**.

$$w_i = \frac{\sqrt[n]{\prod_{j=1}^{n} q_{ij}}}{\sum_{i=1}^{n} \sqrt[n]{\prod_{j=1}^{n} q_{ij}}} \tag{2}$$

$$\lambda_{max} = \frac{1}{n} \sum_{i=1}^{n} \frac{(QW)_i}{w_i} \tag{3}$$

where

w_i: eigenvector

Π: product of every element

λ_{max}: eigenvalue

W: corresponding eigenvector of λ_{max}

w_i: weight value for ranking

Consistency is then tested by two indicators, namely CI and CR, see **Equation (4)** and **(5)**.

$$CI = \frac{\lambda_{max} - n}{n - 1} \tag{4}$$

$$CR = \frac{CI}{RI} \tag{5}$$

where

CI: consistency index

CR: consistency ratio

RI: random index, average of the resulting consistency index depending on the order of the matrix

If CR is less than 0.10, the matrix consistency is reasonable or accepted.

Overall, flow chart of steps in this study is summarized in **Figure 7**.

Result And Discussion

Land cover/land use as landscape subclass

The results of this study show that there are 34 types of land cover/land use in 2011, then increased in 2020 to be 37 types in 2020. The study area is dominated by bare land and sparse shrub. Bare land covers 123.17 and 81.64 hectares, while sparse shrub covers 82.10 hectares and 106.02 hectares area in 2011 and 2020, respectively. Each land cover/land use is called landscape subclass. Some subclasses are merged into an intervention class after reclassification. There are one class of natural intervention and eight classes of non-natural intervention which give impact to morphological, or processes change called anthropogenic impact.
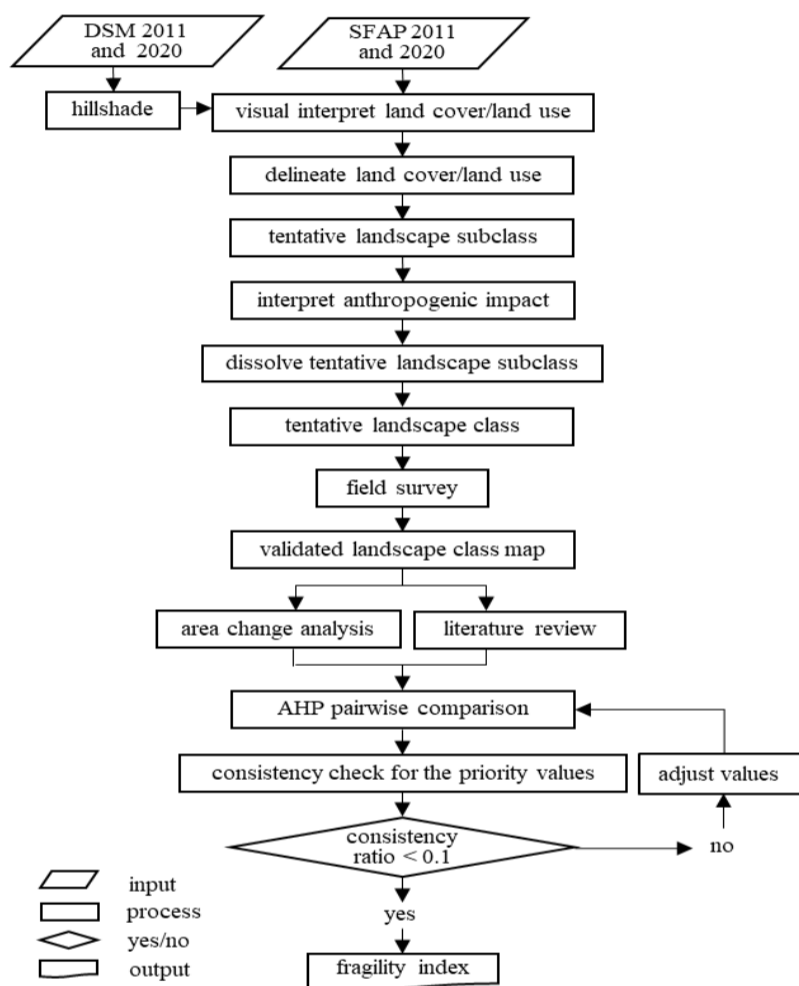

Figure 7. Flow chart of steps in the study

Anthropogenic impact as landscape class

The merged group of landscape subclasses (land cover/land use) into landscape classes (anthropogenic impact) are presented in **Table 7.** That reclassification is conducted based on anthropogenic impact either on morphology or process of landform changes. An example for each landscape class picture is presented in **Table 8**.

Natural class does not give significant change either on the coastal dune morphology or process. Bare land, grassland, sparse shrub, footpath, litter accumulation, natural river are subclasses which do not show anthropogenic impact. Bare land is one of the most representative *natural* landscape classes. Grassland, footpath, and litter accumulation do not have significant anthropogenic impact. Sparse shrub contains

vegetation, but it does not disturb the transportation process of sand materials. Natural river is regarded as natural landscape because its process is still natural, namely fluvial process.

Table 7. Land cover/land use classification 2011 and 2020

Land cover/land use	Anthropogenic impact
bare land, grassland, sparse shrub, footpath, litter accumulation, natural river	*Natural*
rice field, non-irrigated cropland, fishpond, plantation, livestock farm	*agrogenic*
green path, dense shrub, casuarina forest, multiple-species forest	*tree agrogenic*
shed*, fishery**	*industrogenic*
transceiver station, monitoring station**	*info-telecommunication*
unroofed/outdoor tourist attraction, roofed/indoor tourist attraction, swimming pool, sports field, parking area, market, bus terminal	*tourism-sports*
main road**, collector road, local road, other road, runway, street setback**	*Traffic*
office building, place of worship, settlement, school	*urbanogenic*
irrigation channel, seasonal river	*water management*

* existed only in 2011, ** existed only in 2020

Agrogenic was differentiated from *tree agrogenic* because *agrogenic* tends to give change on morphology directly, while *tree agrogenic* changes the morphology indirectly through decreasing on aeolian process intensity. *Agrogenic* changes the micromorphology through land planation such as planation of uneven land for plantation and non-irrigated cropland, also filling depression or marsh for rice field), accumulation of planting strips, and excavation for fishpond. Livestock farm has its characteristic to change micromorphology by the accumulation of haystack and slightly breaking the wind through the hedgerows.

Tree agrogenic contains introduced vegetation which can reduce the aeolian processes. Casuarina forest were planted on purpose to break the wind (Forman, 1995; Syahbudin et al., 2012). Green paths, dense shrub, and multiple species forest also can break the wind although they were not directly planted on purpose to break the wind. The green paths are usually dominated by *Gliricidia sepium*, the dense shrub is characterized by homogeneous higher and thicker *Gliricidia sepium* in the form of hedgerows, while the multiple-species forests contain non-native vegetation with certain regular pattern, such as *Acacia mangium, Swietenia mahagoni,* and *Anacardium occidentale.* Both casuarina forest and multiple-species forest produce organic litters which are potential to form soil as surface materials.

Industrogenic, info-telecommunication, tourism-sports, traffic, urbanogenic, and *water management* are the other landscape class which indicate the anthropogenic impacts. *Industrogenic* exists in the form of semipermanent objects which changes the morphology slightly through planation (for shed) and excavation process followed by water filling for fisheries. *Info-telecommunication* is differentiated from *urbanogenic* because it has lower density and gives less impact on aeolian process intensity change by transceiver and monitoring stations. The *Tourism-sports* is defined based on the utilization, although the impact is like or between *urbanogenic* and *natural*. It gives impact on dune micromorphology and process through the massive human activity, especially in holidays, which can produce accumulated impacts. *Traffic* changes the

micromorphology through planation for roads. *Urbanogenic* changes the morphology through excavation for foundation and planation for buildings. *Urbanogenic* also changes the aeolian process intensity by breaking the wind. *Water management* covers the smallest area after *info-telecommunication*. It gives an impact on morphology through channel excavation or riverside construction as well as discontinuing aeolian process by flowing water.

Table 8. Example of landscape class in SFAP and field view

Landscape class and the example	SFAP view (2020)	Field view (2020)
Natural (bare land)		
Agrogenic (non-irrigated cropland)		
Tree agrogenic (causarina forest)		
Industrogenic (fishery)		
Info-telecommunication (transceiver station)		
Tourism-sports (unroofed/outdoor tourist attraction)		
Traffic (local road)		
Urbanogenic (place of worship)		
Water management (seasonal river)		

The spatial distribution of landscape classes is illustrated in **Figure 8**. *Natural* has the largest area in 2011 and 2020, while *info-telecommunication* has the smallest area. The west part or supported zone is dominated by *tree agrogenic* and *natural*. The east part which is called restricted zone was dominated by *urbanogenic*, while the middle part

or core zone is dominated by *natural*. The linear component which covers overall study area is *traffic*.
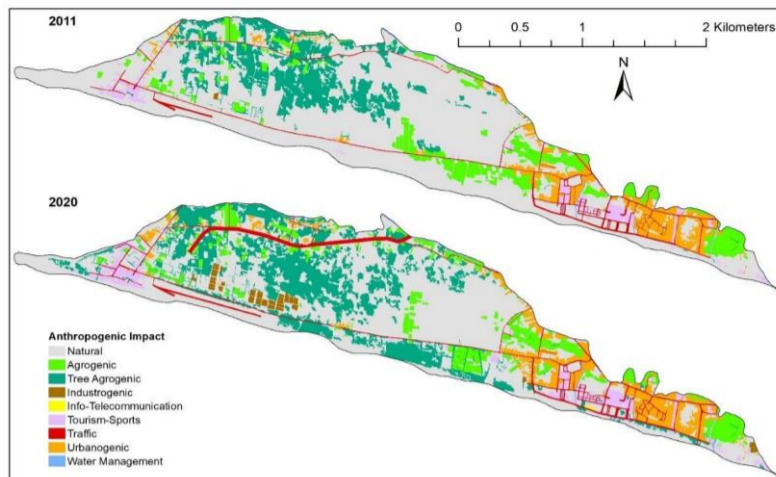
Figure 8. Spatial distribution of landscape class

Landscape classes of anthropogenic impact changed from 2011 to 2020, the summary is shown in **Table 9**. The classes which remain constant are various from 0.08 hectares up to 180.25 hectares. They are generally located at the same position in the SFAPs of 2011 and 2020. The decreased area from one class becomes another class has occurred in less class than the increased area. It indicates that landscape diversity increased during the nine years of observation, especially caused by the increased area of *tree agrogenic, industrogenic, tourism-sports, traffic, and urbanogenic*. **Table 9** is one of the aspects considered in the matrix of AHP pairwise comparisons (**Table 10**).

Table 9. Summary of anthropogenic impact change from 2011 to 2020

Class	2011-2020		
	constant (ha)	decreased (ha)	increased (ha)
Agrogenic	27.00	13.97	11.39
Tree agrogenic	32.63	24.46	58.02
Industrogenic	0.09	0.10	5.08
Info-telecommunication	0.08	0.00	0.15
Natural	180.25	84.37	31.33
Tourism-sports	10.45	0.63	6.26
Traffic	9.69	0.14	6.29
Urbanogenic	27.01	0.95	6.06
Water management	0.88	0.08	0.13

Landscape fragility assessment

Results of the AHP calculation are the normalized priority values or landscape fragility indices, as presented in **Table 11**. Normalization is conducted in AHP to show total dominance of the alternatives (T. L. Saaty, 1990). Landscape class area tendency to decrease significantly is considered in landscape fragility assessment. In the study area, natural is the most reduced area. It indicates that *natural* is the most fragile, vulnerable to loss because it is easily occupied by another landscape type (Gong et al., 2015; Liu et al., 2020; Mo et al., 2017; Peng et al., 2015; H. Shi et al., 2015; Xie et al., 2013; F. Zhang et al., 2018; W. Zhang et al., 2020). *Natural* class consists of mainly bare land, which some

previous studies called unused land. It is determined moderately more up to extremely more vulnerable than another in the pairwise comparisons. Its fragility index is 1.000.

The *agrogenic* class is the most reduced area after the natural in this study, even according to Di et al. (2014), it is the most vulnerable class. It is the second most fragile landscape because the main subclasses in *agrogenic* are rice field, non-irrigated cropland, and fishpond. Those landscape subclasses do not need too much effort to occupy. Moreover, those landscape subclasses are open area and have slight surface height. However, the difference between decreased area and increased area of *agrogenic* is small enough. Plantation and livestock farm relatively need more effort to be changed because they have slightly more surface height resulted from the commodity and the cattle pen. Therefore, its fragility index is 0.686.

Table 10. Landscape class AHP pairwise comparison for fragility assessment

Class	Agro-genic	Tree agro-genic	Industro-genic	Info-telecommu-nication	Natural	Tourism-sports	Traffic	Urbano-genic	Water management
Agrogenic		strongly more	moderately more	very strongly more	moderately less	moderately more	strongly more	extremely more	strongly more
Tree agrogenic			strongly less	moderately more	very strongly less	strongly less	moderately more	strongly more	moderately less
Industrogenic				very strongly more	moderately less	moderately more	strongly more	very strongly more	moderately more
Info-telecommunication					extremely less	strongly less	moderately less	moderately more	strongly less
Natural						strongly more	very strongly more	extremely more	strongly more
Tourism-sports							strongly more	very strongly more	moderately more
Traffic								moderately more	moderately less
Urbanogenic									strongly less
Water management									

Landscape class other than natural and *agrogenic* has the fragility index in the order of the smallest as follows: *urbanogenic, info-telecommunication, traffic, tree agrogenic*, *water management, tourism-sports,* and *industrogenic*. *Urbanogenic* has the least fragility index (0.048) because it is the least vulnerable landscape class (Gong et al., 2015; J. Li et al., 2017; Liu et al., 2020; Mo et al., 2017; Xie et al., 2013; W. Zhang et al., 2020; X. Zhang et al., 2013). It needs very much effort to occupy, including massive and/or permanent built-up land. Other constructed land such as *info-telecommunication* and *traffic* also have low fragility (C. Li et al., 2018; Liu et al., 2020; H. Shi et al., 2015), because they tend to be difficult to change. Their fragility indices are 0.068 and 0.098, respectively. More specifically, *traffic* is more vulnerable than *info-telecommunication* because *traffic* does not have significant surface height. *Tree agrogenic* has a fragility index of 0.145. It is mainly composed of green path and forest which are man-made. Artificial green paths and forests tend to have a low vulnerability (Di et al., 2014; Peng et al., 2015; F. Zhang et al., 2018) since they are dense, have surface height. Therefore, *tree agrogenic* tends to be difficult to change. Additionally, the evidence of artificial *tree agrogenic* is the spread of introduced vegetation type, not native to the Parangtritis coastal dune ecosystem (BLH DIY, 2017; Oktavianto & Handayani, 2017; Widyantoro & Handayani, 2017). *Water management* and *tourism-sports* are a combination of built-up

land and non-built-up land. They have higher probability to change than *tree agrogenic*, but lower than *industrogenic* (Liu et al., 2020). The fragility index of *water management* is 0.215, while *tourism-sports* is 0.319. *Industrogenic* is relatively easy to change since the shed and fisheries are included in semipermanent even non-permanent objects. Its fragility index is 0.472.

Table 11. Normalized priority values: fragility index of landscape class

Agrogenic	Tree agrogenic	Industr o-genic	Info-telecommu -nication	Natu ral	Touris m- sports	Traf fic	Urbano- genic	Water manageme nt
0.686	0.145	0.472	0.068	1.00 0	0.319	0.09 8	0.048	0.215
						consistency ratio		0.0754

The priority values resulted by AHP need to be evaluated. The consistency ratio gives a value of 0.0754. Therefore, the inconsistency of fragility indices come from AHP priority values are accepted because less than 0.1 (Ying et al., 2007). Besides the evaluation of AHP consistency ratio, it is known that its validity is good enough because the number of classes is around 7±2 (Ozdemir, 2005). However, the pairwise comparisons were processed using ILWIS 3.4 in spatial multicriteria analysis. The landscape class fragility level was determined relatively as presented in Table 9, showing neither integer nor fractional number as in Table 6. The priority values are not complemented with the value of calculation processes such as the eigenvector, eigenvalue, and consistency index.

There is a similar pattern between ecological risk and disaster risk formula. Disaster risk is the function of hazard (H), vulnerability (V), and coping capacity (C), written as R=f(H,V,C) (BNPB, 2012; Mardiatno, 2014) or the function of hazard, exposure (E), and vulnerability, written as R=f(H,E,V) (ADB, 2017; P. Shi, 2019). The hazard is like an external component, while the vulnerability, followed by exposure or coping capacity, is like an internal component in disaster risk. Therefore, in ecological risk, landscape disturbance in line with the hazard, and so does landscape fragility with the vulnerability. Vulnerability assessment plays a role in disaster risk assessment, so the fragility assessment plays a role too in ecological risk assessment.

Fragility assessment is important as the part of an ecological risk assessment. The consistency ratio in **Table 11** denotes the nine priority values can be used as fragility indices. The ecological risk assessment is usually carried out temporally. Therefore, fragility indices will be various depending on time (Di et al., 2014). In this study, the fragility indices as shown in **Table 11** are valid both for 2011 and 2020 spatial data because the two periods are assumed and observed as one stage of land transformation process. This assumption is supported by the study of J. Li et al. (2017) that ecological risk assessment was conducted using 1990, 2000, and 2010 spatial data, yet each landscape class has the same fragility index in the three years data. Ecological risk can also be assessed at either the class level or subclass level. Although the two levels give different landscape type classification, the fragility indices at the subclass level can be the same as the class level (H. Shi et al., 2015; Xie et al., 2013). Therefore, AHP utilization in fragility assessment on a detailed scale can be continued with ecological risk assessment, both in class level of anthropogenic impact and subclass level of land cover/land use at a relatively narrow area like Parangtritis coastal dune ecosystem.

C o n c l u s i o n

Landscape fragility can be assessed based on anthropogenic impact in Parangtritis coastal dune. The anthropogenic impact classification has been resulted from land cover/land use reclassification. There are 34 and 37 subclasses of land cover/land use in 2011 and 2020, respectively. Some landscape subclasses are merged into 1 natural landscape class, which has the highest fragility index (1.000), and 8 anthropogenic landscape classes with various fragility indices. The fragility indices of each anthropogenic landscape classes from the largest are: *agrogenic* (0.686), *industrogenic* (0.472), *tourism-sports* (0.319), *water management* (0.215), *tree agrogenic* (0.145), *traffic* (0.098), *info-telecommunication* (0.068), and *urbanogenic* (0.048). The highest index is caused by the changes from 2011 to 2020 showing the most reduced area, while the lowest index is caused by the characteristics of landscape, those are landscape permanence and surface height. The AHP inconsistency is acceptable, with consistency ratio of 0.0754 ($<$ 0.1). The fragility indices resulted by AHP can be continued with ecological risk assessment on a detailed scale such as in Parangtritis coastal dune ecosystem, temporally and spatially at class level as well as subclass level.

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IMPLEMENTATION OF TRI HITA KARANA IN COMMUNITY POLICING TO ACHIEVE REGIONAL RESI LIENCE IN DESA TANGGUH DEWATA DURING THE COVID-19 PANDEMIC

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Abstract

The reform of the INP from paramilitary to humane police created a new atmosphere in society. A community policing scheme provides opportunities for community representatives to participate in local security. Collaborative action between Police and Community Police Partnership Forum (*Pecalang*) to mitigate the pandemic through *Desa Tangguh Dewata*, Sumerta Kelod Village, East Denpasar District. One of the most prominent aspects is blending local wisdom values, *Tri Hita Karana*. Therefore, this study aims to analyze the implementation of community policing based on the *Tri Hita Karana* value in maintaining village resilience during the pandemic. This research is library research using a qualitative approach. Primary data sources consist of the *Desa Tangguh Dewata* Report of the Denpasar Police's Community Development Unit and the implementation of COVID-19 mitigation in Sumerta Kelod Village data. Related articles and publications serve as secondary data to support this research. The results of this study indicate that the activities carried out in Tangguh Dewata Village have been influenced by *Tri Hita Karana* values. Parahyangan, Pawonan and Palemahan strengthen the mitigation of Desa Tangguh Dewata. The impact was able to maintain the resilience of the village in terms of geography, natural resources, ideology, politics, economy, and security. In the socio-cultural and demography aspect, its resilience was weak since art performance is related to the crowd and increasing of pregnancy. Sumerta Kelod Village resilience during the pandemic is at strong level. Hence, it potentially creates an orderly, safe, and peaceful and harmony condition (*trepti, sukerta, sekala and niskala*).

Keywords: *Tri Hita Karana*, Community Policing, *Desa Tangguh Dewata*

Introduction

Background

In January 2020, WHO declared COVID-19 a global emergency. Hence, with the increasing number of positive cases of COVID-19 to 118,000 cases in 114 countries, on March 12, 2020, WHO officially declared Covid 19 a global pandemic (Widyaningrum, 2020). Although Indonesia is being affected by the pandemic at a later date, through Presidential Decree No.12 of 2020, the Government of Indonesia has determined that the Non-Natural Disaster of the Spread of COVID-19 is a National Disaster. The pandemic also affects various sectors of the state. The Sars-Cov-2 virus has a high infectious rate, so it requires humans to limit physical contact to prevent transmission from occurring (Kementerian Kesehatan RI, 2020). This limitation of physical contact has significant impacts on several sectors, such as the economy, education, tourism, and others, which causes the decline in Indonesia's national resilience index. In determining its resilience, the national resilience index has a scale of 1-5. In 2019, the Indonesian National Resilience Index stood at 2.82. However, after the pandemic occurred, this figure dropped

to 2.70 in 2020 (Sukoyo, 2020). With a decrease in resilience, the Government formulates regulations that are integrated with one another.

There are four main programs in order to handle the COVID-19 pandemic situation, including 3T (Test, Tracing, Treatment), 3M (Wearing a Mask, Washing Hands and Maintaining Distance), Economic Growth and Vaccination (Djalante et al., 2020). The implementation of these programs is not only the responsibility of the Central Government, but the community is also involved up to the community level. Supervision of the COVID-19 disaster management program is then integrated with the *Desa Tangguh* Program based on the Regulation of the Head of the National Disaster Management Agency Number 1 of 2012. *Desa Tangguh* are villages that have the independent ability to adapt and face the threat of disaster, and recover themselves immediately from the adverse impact of disasters (Kemendagri, 2020). Due to the regional autonomy system implemented in Indonesia, the *Desa Tangguh* COVID-19 Program is implemented in 34 provinces in Indonesia.

Bali Province is the province with the seventh highest cases in Indonesia, with the number of cases reaching 36,393 people or the equivalent of 2.6% of all cases (As of March 12, 2021) (Task Force for the Acceleration of Handling COVID-19, 2020). The condition of Bali Province, which is the center of domestic and international tourist destinations, increases the risk of COVID-19 transmission carried by tourists. Therefore, the Bali Government is participating in monitoring COVID-19 at the community level with the *Desa Tangguh Dewata* Program which is part of the *Desa Tangguh* Nusantara. The implementation of this resilient village program is expected to be an effort to fight the spread of the COVID-19 virus which will be carried out starting from the smallest scope, the village and surrounding residents (Megasari et al., 2020).

The city or regency with the highest positive rate was in Denpasar City (11,256 cases), followed by Badung Regency (6,936 cases) and (3930 cases) in the second and third positions (Pemerintah Provinsi Bali, 2020). As with the highest vulnerability, the city of Denpasar increases regional supervision and control by empowering the community into the *Desa Tangguh* program. One of the villages appointed as the Pilot Project in Denpasar City is Sumerta Kelod Village (Divisi Humas Polri, 2020). Sumerta Kelod Village is located in East Denpasar District with 265 confirmed cases. In its implementation, *Desa Tangguh Dewata* involves various institutions that are members of the Pentahelix concept. Pentahelix is a form of synergy between the Government, the private sector, academics, local communities and the media (Rizkiyah et al., 2019). Even so, the main sectors involved are Indonesia Army, Indonesia National Police, Local Government, Academics and Volunteers. Meanwhile, the role of the media is in the publication sector regarding the data and activities that have been carried out.

The National Police, as one of the implementing components of the *Desa Tangguh* Program, conducted by the INP Security Bureau (*Baharkam Polri*) through Community Policing, which as the core program of the INP reform, works towards achieving police activities rooted in the community. *Desa Tangguh* The Indonesian National Police is currently developing and implementing community policing, that is in accordance with Head of Indonesia National Police Regulation Number.7.of 2008 on Guidelines for Basic Strategy and Implementation Task of Community Policing by the Police. This regulation was implemented during the COVID-19 pandemic and was updated with Head of Indonesia National Police Regulation Number 1 of 2021 Thus, the police alongside the community need to identify and solve problems that occur in society. Prerequisite instruments required to establish community policing include a permanent community policing personnel that has primary duty to become a model and safeguard for a certain

region and some additional personnel part of *Bhabinkamtibmas* at *Polsek* (District Police Station) (Meutia, 2016, p. 37-39).

The partnership program conducted by *Bhabinkamtibmas* in *Desa Tangguh Dewata* is strongly influenced by local wisdom. It also considers that there is a uniqueness in the village-level government system in Bali. Bali Province has a dualistic system in the governance system at the village level, namely the *Desa Dinas* and *Desa Adat (Desa Pakraman)*. The *Desa Dinas* have the authority to regulate matters of a state administration. Meanwhile, the *Desa Pakraman* refers more to religious and cultural nature (Sari et al., 2021, p. 57). The big role of *Desa Pakraman* and the strong bargaining position have a big influence on the occurrence of the *negaranisasi* process in customary villages. The negaranisasi referred to in this study is the process of taking over a number of state roles, carried out by customary villages in the village community, as well as the customary village process in imitating the state in carrying out its duties. (Subanda et al., 2020, p. 54).

Bhabinkamtibmas collaborates with *Pecalang* in both administrative and customary village security. Refers to the classification of *Pecalang* duties in the religious and customary sectors. However, because the customary sector covers almost all areas of community life, *Pecalang* also takes on a role in the conventional security sector (Adiwijana, 2011). *Pecalang* has a clear legal framework, especially in Law Number 2 of 2002 concerning the Indonesian National Police and in the Regional Regulation of the Province of Bali Number 3 of 2001 concerning *Desa Pakraman*. Thus, the role of *Desa Pakraman* in maintaining security through *Pecalang* under Police Community Partnership Forum in securing and regulating traffic, controlling settlers, securing party congress activities and including other events. As an effort to maintain security, *Desa Pakraman* also built security posts. *Pecalang* held and used facility cars for patrols like police. In this pandemic, *Pecalang* who live directly in the village are able to know the current conditions. This knowledge is collaborated with the Police and the village government in the formulation of mitigation policies.

To determine the broad scope of duties/authorities of *Pecalang* in the field of Customs/Religion, they can use the *Tri Hita Karana* doctrine as a benchmark. *Tri Hita Karana* is one of the fundamental values inherent in Hindu life (Parmajaya, 2018). *Tri Hita Karana* can be defined as "The Three Causes of Happiness". This concept emphasizes the three human relationships in life. This relationship is the human relationship with God (*Parahyangan*), the human-human relationship (*Pawongan*) and the human-nature relationship (*Palemahan*) (Padet & Krishna, 2018). With the uniqueness possessed by the implementation of community policing, it is inseparable with matters relating to *pawongan*, but also *parahyangan* and *palemahan.* Thus, the function of *Pecalang* as a police assistant in maintaining security and order is broken down into 3 dimensions, namely; (1) protection against *parahyangan*, namely a balanced relationship with God Almighty. (2) safeguarding the existence of *pawongan* means a harmonious relationship between humans and humans. (3) safeguarding the existence of *palemahan* is a harmonious relationship between humans and the surrounding natural environment (Putri et al., 2021, p.203)

Based on the above background, *Desa Tangguh Dewata* has the potential to strengthen conditions of resilience during the COVID-19 pandemic. This is because there is a combination of philosophy in the community supported by a partnership program implemented by the Indonesia National Police (*Bhabinkamtibmas*). Therefore, the purpose of this study is to identify the implementation of *Tri Hita Karana* in Community Policing. The Community Policing program is a set of programs in the implementation

of *Desa Tangguh. Dewata* in Sumerta Kelod Village, East Denpasar District, Denpasar City during COVID-19. The condition of regional resilience will also be studied as an implication of the implementation of the program so that it can be seen the condition of regional resilience during the COVID-19 Pandemic.

There are three theoretical frameworks used in this research, namely the concept of Tri Hita Karana, Community Policing, and National Resilience. First, *Tri Hita Karana* is an element of Balinese culture that was inherited from generation to generation as a basic moral Hindu that is lexically comes from the word's "tri" means three, "*hita*" means welfare, and "*karana*" means the cause. These are understood by Hindus in Bali to be three causes of welfare (Lilik, 2021, p.19). Therefore, *Tri Hita Karana* concepts are illustrated as the *cause* and *effect*, which in addition to consist of a welfare cause, as well as it illustrates a result, and welfare purposes. Not only *cause* and *effect*, but also the process of welfare achievement through dynamic interaction with the three elements, related in "harmonious" inside and among *parhyangan, pawongan,* and *palemahan* (Sukarma, 2016, p.104).

Parhyangan taught the manner or way to reach the harmonic relationship with God (Sang Hyang Widhi Wasa) (Suarmini, 2011, p.2). *Pawongan* taught the manner of apprehending the harmonic relationship with others. Humans are both individual and social, so they need a relationship between humans with one another (Padet & Krishna, 2018, p.39). Then, Palemahan taught the manner of grasping the harmonic relationship with nature (Made Suarnada, 2014, p.28). The balance or harmonious atmosphere in the relationship can concretely be translated as an orderly, safe and peaceful atmosphere (trepti, sukerta, sekala, niskala) (Putri et al., 2021, p.205).

The *Pawongan* element is the harmonic core interaction of *Tri Hita Karana*, since it once pointed to the basis of moral Hindu (Bithara et al., 2020, p.3). *Pawongan* that wants to improve the harmonic interaction with fellow human beings indeed needs external support from the environment, both *palemahan,* and *parhyangan*. *Palemahan* environment that is objective an ethical zone while providing the real object into an instrument's behaviour. *A parhyangan* environment that is spiritual is an ethical world-spirit those idealistic-transcendental as well as the ideals that illuminate behaviour. An ethical zone is a natural law area that provides reasonable limits and reason to determine the basic principles of the good and bad. The concept of Tri Hita Karana will be described in Figure 9
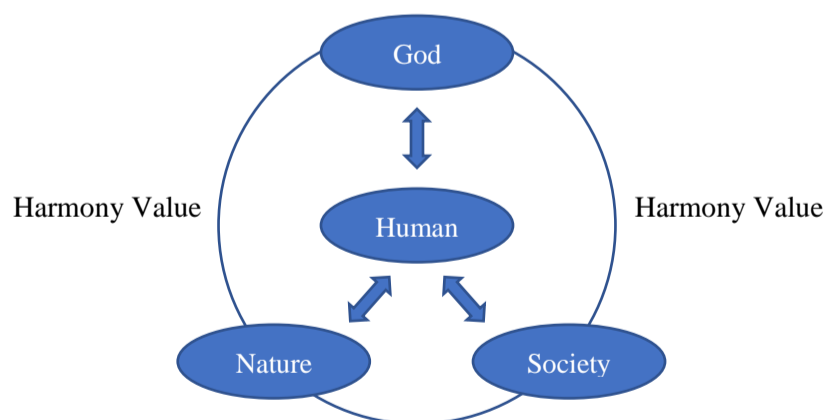

Figure 9. Tri Hita Karana Concept
Sources: Bithara et al., 2020.

One of the police's efforts to create harmony in society is through community policing. Community policing is emerging as a democracy in action. Active participation

from the community, i.e., participation of local government, public and private agencies, civic and business leaders, is required. The parties who share a concern for the welfare of the neighborhood should bear responsibility for safeguarding their own welfare. In addition, it has been suggested that community policing will play a primary role in changing the way of all government services that are provided at the community level (Meutia, 2016, p.11). Based on Head of Indonesia National Police Regulation Number 1 of 2021, Community aims to: a) create a partnership between the Police and the community based on a mutual agreement to handle and solve problems that cause potential disturbances to public security in order to create security stabilization; and b) increasing legal awareness and public/community concern for potential disturbances to security and public order in their environment.

There are two key elements of community policing are police and Community Police Partnership Forum that both establishing and maintaining mutual trust are the central goals of the first core components of community policing (Arka, 2019). The form of this relationship is to find a common solution to security problems in the community. Steps related to problem solving through Community Police Partnership Forum can be carried out through the following stages: 1) Scanning, stakeholders must collect any information such as information about the problem, data, background and demographic information, surveys and the influence of a person; 2) Analysis in non-criminal issues; 3) Respond, the team combines ideas and narrows them into planning with more specific assignments and within certain limits; and 4) Assessment, this stage the team develops a system to monitor plans and determine strategies to assess impact (Andayani, 2014, p.73).

Pecalang is an example of a Police Community Partnership Forum in Bali. *Pecalang* function according to Regional Regulation Number 4 of 2019 is to realize security, tranquility and public order in the customary village *wewidanga*. Meanwhile, in other laws and regulations that implicitly acknowledge the existence of *Pecalang* (as other forms of security) are Law Number 2 of 2002 concerning the Indonesian National Police. The second article states that the Indonesian state police in carrying out their main tasks, namely maintaining public security and order, enforcing the law, providing protection, protection and services to the community, are obliged to coordinate, supervise and provide technical assistance to the special police, civil servant investigators and other forms of self-defense (*swakarsa*) (Arka, 2019: p.1075). During a pandemic, security support elements are needed. The forms of cooperation during the COVID-19 Pandemic, *Bhabinkamtibmas* together with *Babinsa* and the community participated in the effort to implement *Desa Tangguh* to break the chain of spreading COVID-19.

If the pandemic condition can be controlled, it will also have an impact on village resilience. The scope of resilience varies from small to large, starting from personal, environmental, regional to national resilience (Mardiyah, 2021, p.25). National Resilience is a dynamic aspect of a nation covering all aspects of life to remain victorious in the midst of ever-existing order and change. The concept of national resilience is based on the strength that a nation already has and must possess to maintain its survival (Armawi, 2019). It is with this strength that a nation maintains its survival from various disturbances, obstacles and threats, both internal and external. National resilience supports the meaning of order and stability, which contains the potential for change (Widisuseno et al., 2013).

This national resilience study can also be applied to a smaller scope such as villages and cities. National Resilience is essentially the concept of regulating and implementing welfare and security in national life. This condition covers all aspects of national life, both natural and social determinant. Natural determinant consists of aspects

of geography, population and natural resources. While the social determinant includes aspect of ideology, politic, economy, socio-cultural and defense-security (Suryohadiprojo, 2016). These eight aspects were later named as Astra Gatra. Therefore, in order to realize a strong resilience, it requires unity from the building forces (Kusrahmadi, 2018). However, the impact of a phenomenon into resilience is sometimes only in several aspects. The interesting thing about Sumerta Kelod Village itself is the power of local wisdom in supporting COVID-19 mitigation. Hence, during the pandemic, intervention in the form of community empowerment through community policing is an effort to reduce threats and create environmental stability.

Methodology

This research is a library research in which studies that study various reference books and the results of similar previous research are useful for obtaining a theoretical basis for the problem to be studied (M. Sari & Asmendri, 2018, p.43). A theoretical study, references and other scientific literature related to culture, values and norms that develop in the social situation under study (Sugiyono, 2018). While the approach used is a qualitative approach. This study looks at the phenomena that occur in the community in the form of empowerment in elements of security support based on local wisdom values in Sumerta Kelod Village, East Denpasar District.

Primary data was obtained from the *Desa Tangguh Dewata* Implementation Report in Sumerta Kelod Village from November 2020 to January 2021. The report was compiled by the Bhabinkamtibmas of the East Denpasar Police Department. Other primary supporting data are articles and publications on the website and social media of Sumerta Kelod Village regarding COVID-19 Mitigation. Secondary data were obtained from publications and scientific articles related to the theme of this research, namely Tri Hita Karana, Community Policing, and National Resilience. Data reduction is done by coding the relationship between community policing activities and the contained Tri Hita Karana values. The classification assessed for its impact on each aspect of regional resilience. The findings will be presented descriptively equipped with a matrix and supporting visuals.

Result And Discussion
Tri Hita Karana Implementation in *Desa Tangguh Dewata* Community Policing

Desa Tangguh Dewata as part of the Tangguh Nusantara Village which was initiated by the Indonesian Army and Indonesia National Police in mid-2020, aims to create a community that is able to protect its area from the dangers and threats posed by the COVID-19 pandemic. Desa Sumerta Kelod, East Denpasar District was chosen as the pilot project location for the Denpasar City area in accordance with the direction of the Bali Regional Police Community Development Forum and *Perbekel* Sumerta Kelod Village in mitigate COVID-19. It is located in the center of Denpasar City bordering Sumerta Village, Sumerta Kaja Village and Sumerta Kauh Village in the North. Then, this village also borders Dangin Puri Kelod Village in the west, Panjer Village and Renon Village in the south and Kesiman Village in the East (BPS Kota Denpasar, 2020). The administrative area of Sumerta Kelod Village consists of 10 Banjar Villages, namely Kedaton, Bengkel, Kepiah, Sebudi, Tanjung Bungkak Kaja, Tanjung Bukak Kelod, Babakan Sari, Sembung Sari, Badak Sari and Sungiang Sari (Sumerta Kelod Village Permit, 2019). The number of COVID-19 cases in Sumerta Kelod Village as of January

2021, there are 172 people without symptoms, 11 people under surveillance, 22 patients under treatment and 265 confirmed cases (Denpasar City Government, 2020).

As one of the implementers, Indonesia National Police assigned the Community Development Unit (Sat Binmas) to be in charge of these activities. The part of the Community Development Unit which carries out field functions is *Bhabinkamtibmas* with supervision from the *Bintibmas* (Community Development and Security) Unit. The community policing agenda can be seen in the coordination between *Pecalang* and *Bhabinkamtibmas*. The dualism of government adopted by Bali creates a division of authority between administrative villages and customary villages. During the pandemic, the task of *Pecalang* in Sumerta Kelod Village also underwent a conversion from limited to customary activities, to took a part in the health protocols enforcement.. This conversion can be seen in figure 10.
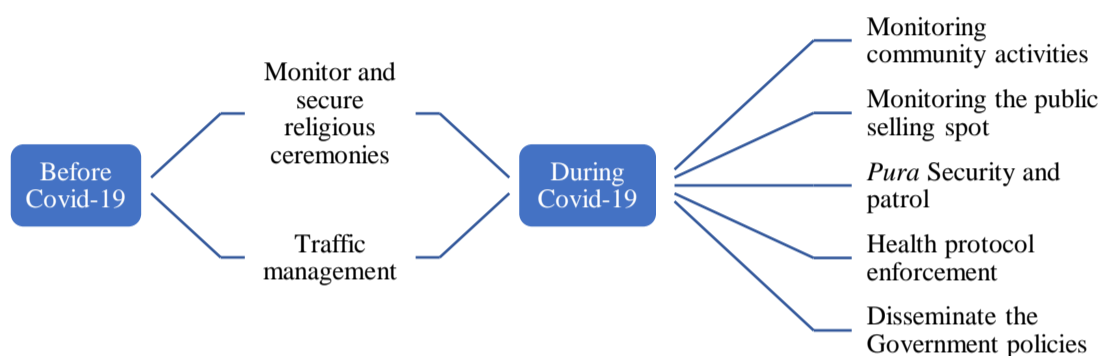
Figure 10. Pecalang's Duties and Function Before and During the COVID-19 Pandemic
Sources: (Putri et al., 2021, p.205)

Pecalang's duties and functions prior to the pandemic were to monitor and secure religious ceremonies and help manage the traffic. The local *Babinsa* and *Bhabinkamtibmas* are still on duty but are assisted by *Pecalang* so that the work will be easier. When there is a religious ceremony, the village *Pecalang* monitors it first because every banjar in the *Pekraman* Village area already has a *Pecalang*. If the *Pecalang Banjar* feels overwhelmed, it will be assisted by the *Pecalang Desa* (Pecalang Wira Praja) (Anak Agung Ngurah Sudiasa in Putri et al., 2021). Activities which *Pecalang* carries out during the pandemic are coordinated and reported through daily briefs, so both *Bhabinkamtibmas* and *Babinsa* monitor current conditions. *Pecalang*, who knows the condition of the village, becomes one of the references in making decisions. This includes local worship activities, locations that have the crowd's potential, health protocols enforcement condition, and community dicipline due to local policies. Therefore, the presence of *Pecalang* becomes one of the reinforcements in mitigating COVID-19 when many government officials and security officer limitations due to exposure to the virus.

In the implementation of Tangguh Village, Sumerta Kelod Village also involves other actors in the implementation of Covid-19 mitigation. Not limited to *Pecalang*, *Bhabinkamtibmas* and *Babinsa*, but also academics who are carrying out community service in the village. In its strategy, the Community Development Unit involves the community, government and other stakeholders in making efforts to deter, prevent and overcome threats and disturbances to security and public order in an equal partnership with the National Police, starting from determination up to policy implementation. The elements that join forces with the Indonesia National Police in the management of the *Desa Tangguh Dewata* use the Pentahelix concept which in this activity, based on the concept, involving the East Denpasar Police's Community Development Unit, East

Denpasar District Command's Babinsa, Sumerta Kelod Village Government, Sumerta Kelod Village Gotong Royong Task Force, Sumerta Kelod *Pecalang*, Local Private Company and University Students. As the fifth element, the Media are those that participate in helping in the publication of activities both internally and externally. Thus, the relationship between actors is described in Figure 11.
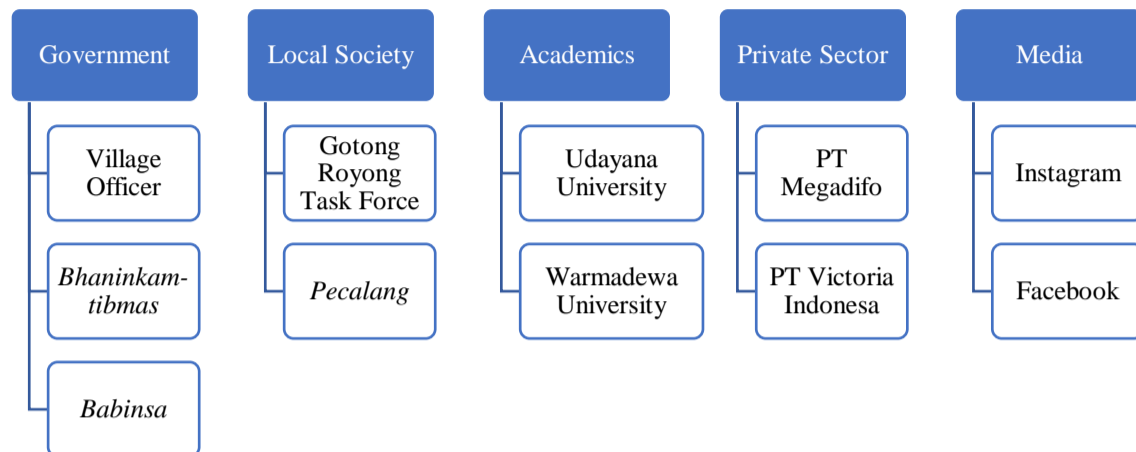
Figure 11. Sumerta Kelod Village Penthahelix Scheme
Sources: Analysis Result, 2021.

From the scheme, it can be seen that there is a division of roles in handling Covid-19 in Sumerta Kelod Village. The functions of data collection and dynamic monitoring (*pam swakarsa*) are carried out by *Pecalang* and the Gotong Royong Task Force. It is part of information sharing function in the Community Police Partnership Forum. The collected data is coordinated with the *Babhinkamtibmas* and *Babinsa* to be communicated with the Perbekel Sumerta Kelod Village. Policy making is carried out both bottom up and top down. A map of potential problems was created through a police/military community partnership to be used as a request for assistance to the district and regency government. The village policies created are then socialized to the community through village official social media. In implementation, students who carry out community service support the policies implementation through monodisciplinary and multidisciplinary programs. Then, the private sector plays a role in supporting the supply as part of Corporate Social Responsibility (CSR). The assistance provided was based on village needs such as medical equipment and health protocol signs.

Community Policing activities that are built in partnership with the penthahelix actors in Sumerta Kelod Village have three core programs, namely pandemic prevention, enforcement of health protocols and food security. Pandemic response focuses on activities to prevent the spread of the virus. Activities carried out include data collection on population migration, spraying disinfectants, security monitoring and periodic evaluations with the Sumerta Kelod Mutual Cooperation Task Force. The health protocol focuses on the 3T (Tracing, Testing and Treatment) and 3 M (Wearing a Mask, Maintaining Distance and Hand Washing) programs. Then, under conditions of social restrictions, the village opened a village barn to be used to help people who were exposed to the virus. Food security is obtained through planting food crops and reforestation.

	COVID-19 Mitigation	Health Protocol	Food Resilience
Nov-20	45%	45%	10%
Dec-20	71%	7%	22%
Jan-21	58%	25%	17%

Figure 12. Desa Tangguh Dewata Core Program
Source: East Denpasar District Police Office, 2020.

Within three months of implementation, it was found that COVID-19 mitigation had the largest portion in community policing activities. The quantity of mitigation activities is increasing because the health protocol has other special units that are directly responsible for enforcing health protocols, such as the *Satuan Polisi Pamong Praja* and the 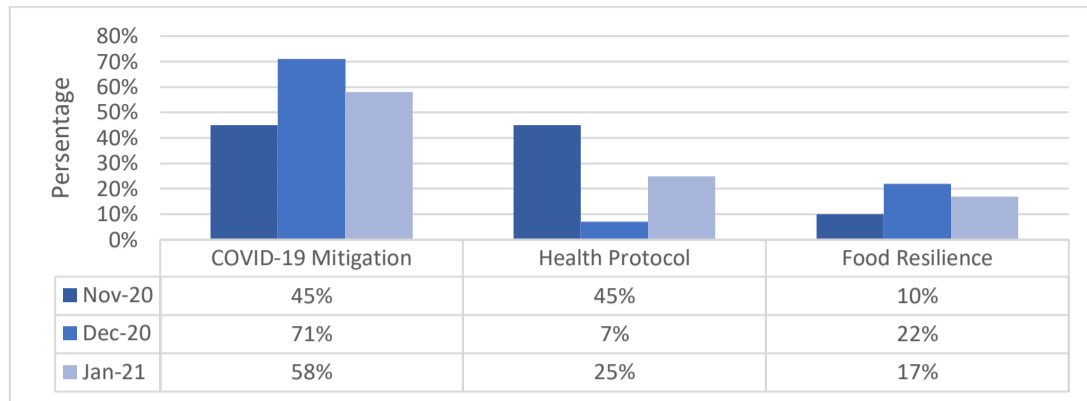COVID-19 Task Force for the City of Denpasar. Within the scope of the village, *Pecalang* together with other security officers carry out daily monitoring and security in the village area so that the situation remains conducive. However, if there are people who make crowds and ignore health protocols, *Pecalang* can bring order and persuade those who are in the crowd to disperse. This includes warning that business places that are still open exceed the operating hours according to health protocols to close it immediately. In patrolling, *Pecalang* is more likely to use a persuasive approach. The persuasive steps taken by *Pecalang* are as an effort to guide the community, so that awareness of the importance of health protocols will be formed. In food security, the program focuses on the availability of food in the villag barn to be allocated during the pandemic. The form of assistance is in the form of basic necessities which are distributed to affected communities.

The above activities are also supported from the Village budget. Non-natural disaster mitigation activities for COVID-19 are included in the village disaster management budget. Health protocol facilities are in the village health budget. Then, food security is included in the village food security budget. In 2020 the disaster mitigation budget amounted to Rp. 745,000,000.00 and increased to Rp. 994,200,000.00 in 2021. The budget for health protocols in 2020 is Rp. 645,404,880.00 and increased to 900,597,150.00 in 2021. In 2020 due to the pandemic, the budget is focused on disaster mitigation and health protocols with an allocation of 58% and from 51% of village funds. Despite the deficit, the village still gets assistance from the COVID-19 Task Force budget. Food security is an intervention from community policing activities that provide food crops and trees to Sumerta Kelod Village. Considering that village resilience must be established so that village food can be fulfilled, in 2021 the food security budget is allocated Rp. 41,196,000.00. This budget is equivalent to 0.7% of the village budget (Permintah Desa Sumerta Kelod, 2021).

Table 12. Desa Tangguh Dewata Implemented Program Based on Tri Hita Karana

Tri Hita Karana	**Implemented Program**
Parahyangan	Protection of places of worship by spraying disinfectants regularly. The location of places of worship includes: • Eleos Indonesia Jemaat Bethesda Church • GPPI Jemaat "Gembala Agung" Mokmin Church

Tri Hita Karana	**Implemented Program**
	• Kristen Protestan Presbiteri Indonesia Jemaat Mokmin Church • GTDI Filadelfia Church • Cathedral • Pura Ibu Pasek Gelgel Presanak Pura Dalem Sumerta • Al-Amanah Mosque
Pawongan	Protection of fellow human beings to prevent the spread of COVID-19 and ensure their survival under restrictions during the pandemic. Activities carried out include:Pembentukan Satgas Gotong Royong COVID-19: • Socialization of Health Protocol (3M) • Spraying disinfectants in residential areas, public facilities and educational facilities • Population migration data collection • Supervision of areas that cause crowds (Art Center Nusa Indah Street) • Tracing residents who come into contact with suspected COVID-19 • Conducting a COVID-19 test for the community • Distributing basic necessities to the affected community • Identifying and supervising houses that are self-isolating • Supervision of security during the pandemic • Disciplinary patrol of health protocols • Supervision of the Regional Election of Denpasar City
Palemahan	Efforts to conserve the environment go hand in hand with efforts to strengthen people's food needs. Activities include: • Cassava planting (Amerta Farmer Group) • Planting fruit trees (Amerta Farmer Group) • Tree planting (Amerta Farmer Group)

Source: Analysis result, 2021.

There are various activities that refer to the needs of the community during the COVID-19 era. Even in a pandemic state, the happiness and prosperity of the people must still be guaranteed by the government. This goal is in line with the *Tri Hita Karana* concept. *Tri Hita Karana* are the three reasons for the creation of human happiness. The three relationships that humans make in this world are relationship with God (*parahyangan*), relationship with fellow humans (*pawongan*) and relationship with nature (*palemahan*). The limited condition of COVID-19 demands synergy between related elements to maintain harmony in society. The community policing activity in *Desa Tangguh Dewata* Sumerta Kelod provides an integrated program to maintain order and security. Attention is given in accordance with this concept in the form of maintaining and safeguarding the places of worship of various people in Sumerta Kelod Village to maintain the inner relationship between humans and their creators. Humanitarian activities and COVID-19 countermeasures aimed at assisting fellow humans in dealing with disasters. Then the conservation activities and planting of food plants to appreciate nature as a provider of natural resources to meet human needs.

Table 1. shows that the implementation of *Tri Hita Karana* in community policing carried out by the East Denpasar Police Office Community Development Unit is dominated by *Pawongan*. The relationship between humans and humans (*pawongan*) is at the core of the harmony among the three concepts. Pawongan in *Desa Tangguh Dewata*

is a form of care, control and protection. Concern between fellow human beings with the existence of humanitarian assistance for people with weak economies. Monitoring of health protocols to break the chain of spreading the Sars-Cov-2 virus. Protection is provided with protection from visible factors (viruses) and factors disturbing order (crime). The relationship with the involvement of pecalang in social control shows that in social relations there is still local wisdom that strengthens regulations. A social approach that is more accepted by the community. Persuasive approach used because it is more humane and does not cause tension. Thus, along with the integration of related institutions, strengthens the harmony that exists in society.

       Pawongan strength is supported by the presence of *parahyangan* and *palemahan*. *Parahyangan* as the foundation of life that teaches humans to always do good, strengthens the human values that exist in *Desa Tangguh Dewata*. Man's responsibility to God in the form of prayer is maintained even though it is within limitations. Guarding the house of God keeps the people too. Protection by limiting the number of worship participants as well as sterilizing places of worship protects religious followers from attacks by the Sars-Cov-2 Virus. The worship program from home is also an alternative to maintain the relation between man and their God. This also applied in traditional ceremonies that continue but with strict health protocols. Pecalang conducts surveillance during social restrictions and disciplines the public regarding health protocols during customary activities. Then, *palemahan* is a resource for humans to stay alive. Nature provides its germplasm for human survival by carrying out conservation activities. Conservation does not only focus on woody plants, but also plants that are useful in human life. This activity is supported by food security efforts in the community policing program. From this program, food crops and trees have been distributed to farmer groups in Sumerta Kelod Village. Therefore, the concept of *Tri Hita Karana* in *Desa Tangguh Dewata* is a whole system of creating human harmony that is integrated with one another. What man does will return to man himself.

Desa Tangguh Dewata Resilience during COVID-19 Pandemic

       Regional resilience is a form of resilience that a region has in overcoming threats and disturbances to the region. In this case, the threat is the Sars-Cov-2 virus that has spread almost all over the world. This virus causes a pandemic that threatens human life. Restrictions on human movement are the main way to break the chain of spreading the virus. However, restrictions on movement will have an impact in various aspects of life such as health, economy, socio-culture and security. Therefore, *Desa Tangguh* was implemented to strengthen the regional resilience starting from the community sector. The form of resilience that is reflected in the implementation of community policing in *Desa Tangguh Dewata* has not yet been included in the realm of national resilience (*asta gatra*). However, the resilience created in this program lies in geography, natural resources, demography, ideology, politics, socio-culture, economy and security.

       The strengthening of the geographical and natural resources aspect can be seen from the attention to food security in the community policing program. The southern part of Sumerta Kelod Village is an area that can be used for farming. This area is used to support the village barn. The initiation of the food security program in 2020 is also a consideration for the allocation of village funds in 2021. The food crop provided is cassava. Cassava is a source of carbohydrates as well as food diversification efforts. The recipients of the support were handed over to the Amarta Farmers Group. Agricultural management with farmer group management, able to manage the implementation of

agriculture systematically. With the condition of Sumerta Kelod Village which is close to the city, urban farming is suitable to be carried out in the village. The agricultural sector has also become one of the supporters in providing food during the implementation of social restrictions and the provision of non-cash social assistance. Villages as community units are expected to be able to support regional food security at higher levels.
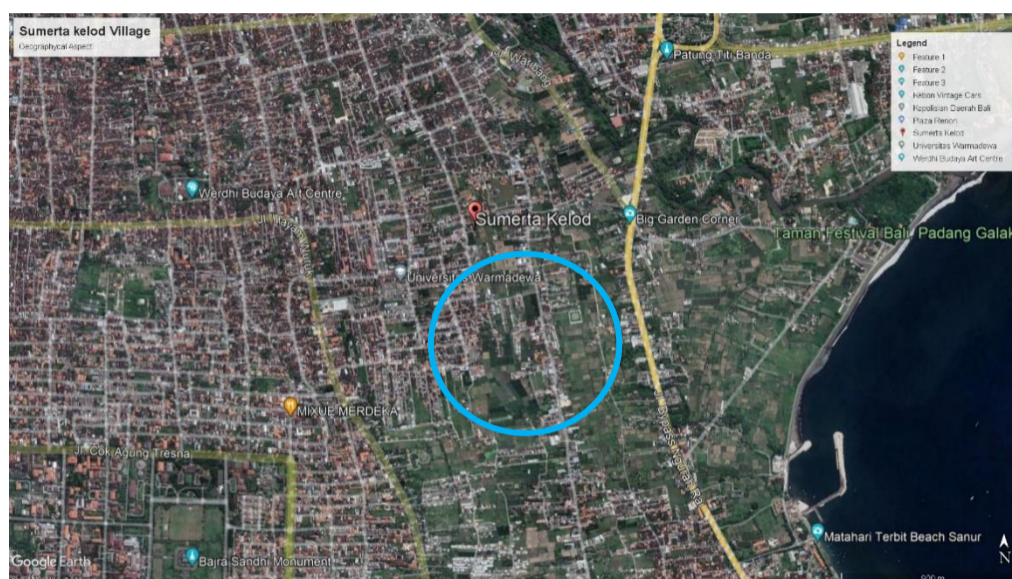
Figure 13. Sumerta Kelod Village Agricultural Potential
Sources: Google Earth Pro, 2022.

Aspects in demography are migration, mortality and birth rate. Efforts that have been carried out in Sumerta Kelod Village are tracing and tracking population movements carried out by the Gotong Royong Task Force. The relations of migration, death and birth are interrelated. Migration triggers the spread of the virus that triggers death. Then, the social restriction policy triggered an increase in the birth rate during the pandemic. This is also the concern of the Bali National Population and Family Planning Agency. In July, an estimated 180 pregnancies were detected per day. The pandemic is a dangerous time for pregnant women to exercise control. Hospital exposure also triggers the death of pregnant women during the pandemic (BKKBN Bali, 2020).

The ideological aspect is shown by the implementation of the Pancasila ideology in social life. In the implementation of the First Precepts, the limitations of carrying out worship can be carried out both at home and in places of worship with health protocols. The Second Precept is reflected in the solidarity between people to help each other during the COVID-19 pandemic. Implementation of the Third Precept with a combination of various agencies in the implementation of *Desa Tangguh Dewata*. Implementation of the Fourth Precepts with the right for citizens to vote in the Denpasar City Election. Meanwhile, the Fifth Precept is realized by the existence of justice in the distribution of aid in which aid has been calculated according to the portion and needs of the community.

Political aspects can be seen in the continued implementation of the Denpasar Mayor Election in *Desa Tangguh Dewata* with strict supervision of health protocols. The 2020 Denpasar Mayor Election was held on December 9, 2020 to elect the Denpasar Mayor for the period 2021-2024. This election monitoring is carried out by collaborative institutions, namely Police, Army, Public Election Committee. So that the election, which is a crucial political activity in regional leadership, is carried out without creating a new virus spreading cluster. Even in a pandemic, the elections are still important. If there is a delay, it is possible that a vacuum of power will occur. This condition certainly causes

instability in government management due to the absence of a leader. Pandemic conditions require a smart leader. The dynamic condition also affects regional policies that adaptive to the uncertainty of the pandemic. Therefore, the village as a member of the local government supports this activity while still considering the safety of its citizens.

Socio-cultural aspects are implemented under strict health protocol supervision. When the celebration raises a crowd. Several cultural centers such as the Art Center on Nusa Indah Street also weren't excluded from patrols, so that the implementation of celebrations as a form of culture that has been ingrained in society will not have an impact on the community. In this aspect, it can be seen that aspects that should be strengthened can become a threat during this pandemic. The Art Center is the center for performing arts in Bali. Its spacious location consisting of several stages makes the Art Center a multi-functional place in terms of culture. There are several stages ranging from *Kalangan Ratna Kanda, Kalangan Ayodya,* Madya Mandala, Ksirarnawa Building, *Kalangan Angsoka*, to the Ardha Candra Open Stage. The location is also used in the *Pesta Kebudayaan Bali* (Bali Arts Festival) with cultural presentations in the form of *peed aya* (parade), *recasedana* (performance), *kandrupa* (exhibition), *utsawa* (parade), *wimbakara* (competition), *kriya loka* (workshop), *widyatula* (rehearsal) and *Adhi Sewaka Nugraha* or arts service award. This activity is a big cultural event and can trigger a crowd. Therefore, in 2020, the activity which was supposed to be held in July was canceled due to the pandemic. Other cultural activities at the location will also be cancelled.

The economic aspect is indicated by the role of academics and the media. The Warmadewa University Community Service program provides opportunities for Micro, Small Medium Enterprise (MSMEs) to be promoted by their both monodisciplinary and multidisciplinary programs. The existence of promotion through this media has the potential to increase economic growth during a pandemic even though there has been a change from conventional sales to digital. MSMEs exposed during community service are businesses in the fashion sector (Nekko Fashion Store), beauty (Anita Beauty Salon and Spa), health (Home Made Faceshield) and handicrafts (Suling Bambu I Made Rana). In addition, there are also Village-Owned Enterprises (BUMDes), namely BUMDes Dasa Kriya Loka Amerta. The establishment of BUMDes is intended as an effort to accommodate all activities in the economic sector and/or public services managed by the village and/or inter-village cooperation. Thus, MSMEs around Sumerta Kelod Village can be accommodated properly. During this pandemic, with limited medical equipment such as faceshields, it can be produced independently and also used to mitigate COVID-19.

The strengthening of the security aspect can be seen from the relationship between Community Police Partnership Forum, Police and Army in maintaining security and enforcing health protocols. Joint patrols were carried out together with *Pecalang, Babinsa* and *Bhabinkamtibmas*. Although *Pecalang* before the pandemic tended to be in the traditional sector, but with assistance to the public sector, patrols can be carried out properly. This also reminds us of the condition of health protocol enforcers who are vulnerable to exposure and even some police personnel have died on duty. This limit of personnel is reinforced by *Pecalang* as the guardian of the customary village.

In order to avoid overlapping powers, a daily brief was held. The duties and functions of security have also been regulated in regional laws and regulations. This combination also has a good impact since its approach is more persuasive. The output in this partnership is how to understand the condition of Sumerta Kelod Village. The data collected in locations prone to health protocol violations, places of business that broke the pandemic regulation, potential crowds location and other related threats are used in

the consideration of village security governance. The expected outcome is the maintenance of security stability and the emergence of awareness of compliance with health protocols in the community.

Conclusion

The implementation of *Tri Hita Karana* in the implementation of community policing was carried out with the contribution of various institutions such as the Police, Army, Government, Academics and Media. The community policing program in *Desa Tangguh Dewata* is divided into *parahyangan*, *pawongan* and *palemahan*. Activities based on the value of *parahyangan* can be seen in the implementation of religious activities which are still carried out even though they need to pay attention to health protocols. *Pawongan* is implemented with a series of activities to protect and fullfil the needs of the community. Then *Palemahan* is seen by the movement of conservation and food crops plantation. So that these values merge into a single unit to create harmony in society. The harmonious impact that occurs has an impact on efforts to strengthen regional resilience in Sumerta Kelod Village. Sumerta Kelod Village is a village with a medium positive rate among other villages in the city of Denpasar.

Based on the eight aspects (*Asta Gatra*), the vulnerable aspects in a pandemic are socio-cultural and demographic aspects. This is closely related to the social restriction policy. Cultural activities are not carried out. Then, the number of pregnant women at risk is quite high considering the increasing number of pregnancies during the pandemic. However, it can be seen in other aspects that strengthen each other during the pandemic. The food security program is able to support the agricultural potential of Sumerta Kelod Village as well as a source of village food. The community's gotong royong attitude is also one of the keys to controlling the pandemic. Effective pandemic mitigation strategy resides in the community sector. The political aspect is also strong although it must be monitored. The MSMEs economy is able to produce personal protective equipment in the midst of its scarcity. The results of the production are also used for the village. Then, as disaster control is a pandemic policy that is enforced by the relationship between the community and stakeholders.

Of the eight aspects, there are two aspects that experience vulnerability. Therefore, the resilience of Sumerta Kelod Village during the pandemic is at a formidable level. However, although the resilience is not very strong yet. By the intervention of community policing, it is able to maintain stability during the pandemic. Threats from crowds and non-compliance with health protocols can be reduced. Sumerta Kelod Village was also able to adapt and overcome the uncertainty caused by the pandemic. Hence, it potentially creates an orderly, safe, and peaceful and harmony condition (*trepti, sukerta, sekala* and *niskala*).

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MANAGEMENT OF INFLUENCER EXPRESSION REGARDING VACCINATION COMMUNICATION ON INSTAGRAM

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A b s t r a c t

Middle January 2021, the death toll related to the Covid-19 pandemic reached 2 million people, and nearly 26 thousand people were recorded in Indonesia. The struggle of the Indonesian government to reduce the number of victims of COVID-19 by bringing the Sinovac vaccine and vaccinations to the community. Pros and cons occur in response to the covid-19 Vaccination with this Sinovac vaccine. The government's public communication strategy through influencers with many followers on Instagram is an option. The election of Instagram as social media for vaccination communication is because Instagram is the most up-to-date social media, and it is easy to provide understanding because it involves information in the form of visuals and text to the public. In carrying out vaccination communications, these influencers create messages or information that are organic or organic. Amplified Word of Mouth so that vaccination communication can reach the community simultaneously. The subjects studied in this study were influencer accounts (@arielnoah and @dr. Tirta) which were selected by purposive sampling with qualitative research using the literature review method. The results showed that the influencers in each post on vaccination communication activities in the form of distributing content and information in the feed room, likes, and giving comments showed that vaccination communication activities carried out identity politics. Influencers on Instagram understand health and responsibility. The results of this study provide an overview of how influencers on their Instagram carry out impression management to convince the public that vaccines are safe and try to refer to the government's public campaign regarding covid-19 Vaccination.
K e y w o r d s : Influencers, Vaccination Communication, Instagram

I n t r o d u c t i o n

On March 2, 2020, President Jokowi and his staff announced the first positive case of COVID-19 in Indonesia. It was stated that two Indonesian citizens were infected with the Coronavirus, namely a mother (64) and a child (31) in Depok, West Java. Reportedly, they contracted COVID-19 from a Japanese citizen who had visited Indonesia in February 2020. It only took 38 days for Covid-19 to infect all provinces in Indonesia on April 9, 2020[1]. When will the Covid-19 pandemic end? This is a question that hangs and wants to be answered immediately. The need for a vaccine to deal with the Covid-19 pandemic is urgently needed to answer the question of when the Covid-19 pandemic will occur in Indonesia. The vaccine is expected to help reduce the transmission rate of a new type of Coronavirus, SARS-CoV-2, the cause of Covid-19. The number of people who are infected with Covid-19 is still increasing. Sinovac COVID-19 Vaccine is the first vaccine to be imported by the Government of Indonesia. Although, the government, through the Ministry of Health, has a setsixCOVID-19 vaccine to be used in Indonesia. This determination is contained in the Decree of the Minister of Health Number 9860 of 2020[2].

The long journey has shown for the covid-19 vaccination program in Indonesia in preparing the vaccination program to be implemented throughout Indonesia. The

Vaccination is expected to take place starting on January 13, 2021. Minister of Health Budi Gunadi said the Vaccination would be carried out after issuing an Emergency Use Authorization by the Food and Drug Supervisory Agency (BPOM). Vaccine deliveries are carried out in stages, starting on January 3, and are targeted for completion on January 7, 2021. President Joko Widodo (Jokowi) said that the vaccine would be returned for the vaccination program's implementation. Jokowi explained that the government had ordered 329.5 million doses of the Covid-19 vaccine to implement the national vaccination program. The vaccine consists of [3]. On 9-30 September 2020, the Ministry of Health and Unicef and WHO held an online survey on Public Perceptions of the Covid-19 Vaccine in Indonesia. With a total of 112,888 respondents, the survey results show that nationally, 64.8% of Indonesians can receive the Covid-19 Vaccination, while 7.6% refuse and 27.6% say they do not know. From the group of Indonesian people who have not been able to receive the Covid-19 Vaccination, they reasoned that they were not sure about the safety of the vaccine; as much as 30% were not sure about its effectiveness as much as 22% did not believe in vaccines as much as 13%, were afraid of the side effects, such as fever and pain as much as 12 %, the reason for religious belief is 8% and (6) other reasons are 15%. One more fact generated by the survey is that only 65% of the people of West Papua are aware of information related to the Covid-19 vaccine. This percentage is lower than Papua Province at 70% but higher than Aceh Province at 61%[4]. The phenomenon of the rejection of the Covid-19 vaccination case that will be carried out began with DPR health commission member Ribka Tjibtaning Politician from the PDIP Faction. Rebekah took issue with the clinical trial of the Sinovac corona vaccine; according to her, the import was carried out before the clinical trial of the Sinovac corona vaccine was completed. The province in West Sumatra has a relatively high rate of vaccine rejection. The effect of this character made the anti-vaccine resistance stronger, which gave rise to the hashtag #TolakDivaksinSinovac which appeared on Twitter because it was tweeted tens of thousands of times. Furthermore, the governments of the two provinces with the lowest rates of receiving the Covid-19 vaccine, namely Aceh and West Sumatra, will not require this Vaccination or impose penalties on people who refuse this program. The phenomenon in these two areas is refusing vaccines mainly because of side effects on health and its hollowness. Aceh and West Sumatra are the provinces with the most significant number of vaccine refusals. Willingness to receive the Covid-19 vaccine in Aceh is only 46%, while in West Sumatra, it is 47. The refusal of Vaccination has occurred in Indonesia before, and such as during the National Immunization Week (PIN) March 8-15, 2016, not everything went smoothly. The officers only managed to give vaccines to 9 children under five from a target of 139. In the district of Harjamukti, Cirebon, West Java, there was a rejection because there was an assumption that the vaccine contained haram ingredients.[5].

Some negative sentiments on social media were also investigated by Katrina Feb, who revealed that there were also many rejections on social media regarding Measles-Rubella vaccination in Indonesia. Her research presented data that social media such as Twitter can be used to create negative views or sentiments in the community towards the vaccination program.[6]. The Indonesian government is also to provide socialization for the COVID-19 vaccine by issuing technical instructions for the implementation of vaccinations for the prevention of the COVID-19 pandemic in the Decree of the Director-General of Disease Prevention and Control of the Indonesian Ministry of Health No. HK. 02.02/4/1/2012. This decision letter considers the findings related to the behavior of seeking information on vaccines. Respondents mostly choose information sources are health workers (57%) and family members (32%). The preferred media choices are social

media (54%), print/electronic media such as TV/newspapers (22%), and telecommunication channels (SMS/telephone) (13%) [7]. The poor respondent groups prefer searching for information through social media; it tends to decrease with increasing economic status. In contrast, the use of print and electronic media is more in the upper-class society and decreases as the economic level declines. The Ministry has also detailed the information dissemination pattern of Health of the Republic of Indonesia.

Figure 14. Objectives, Strategies, Messages, and Communication Channels for COVID-19 Vaccination (source: Decree of the Director-General of Disease Prevention and Control of the Indonesian Ministry of Health)

The target community for Vaccination is reached using influencers as a program carried out by the Indonesian Ministry of Health. The use of influencers is why social media gives birth to influential influencers in digitally disseminating information and messages. Influencers are considered capable of impacting their followers through uploading photos and electronic word of mouth (E Wom) that they convey on their social media.[8]. Instagram social media is the media most often used by influencers because on Instagram social media, and influencers can directly interact with their followers through likes or comments, commonly known as mass-self communication.[9]. Instagram was born in 2010 as a mobile application that can be accessed via mobile or web. Globally, 77% of consumers will take action after receiving support or recommendations from family, friends, or online user reviews, an increase compared to traditional television and magazine advertisements in the 2000s[10]. Instagram gives birth to influencers, considered capable of influencing their followers. An influencer is an activist, well-connected, impactful, active-minded, and trendsetter for his followers.[11]. Influencers create content that they want to create themselves, commonly known as User Generated Content. In this case, the choice of photos and words is vital because this is where the influencer wants to convey the actual message. Influencers as communicators want to convey messages in the form of photos and exciting captions so that their followers can accept the message, in this case, being a communicant. Influencers have a significant role in marketing a product because they are considered credible in conveying a message about a product. The existence of influencers is essential in the disclosure of information during the COVID-19 pandemic. Because an influencer is someone who influences spreading information and experiences persuasively[12]. Brittani Hennessy's research in her book Influencers states that a person will become an influencer when he builds a reputation and self-image on social media based on his knowledge and expertise on a particular topic.[8]. The covid 19 vaccination was a bit of a blunder when using an artist as a covid-19

vaccination influencer like Raffi Ahmad because the use of celebrities with many followers was seen gathering at an event with his colleagues without implementing health protocols after a few hours of being vaccinated. This action made the public hesitate, and several parties protested what Raffi Ahmad had done [8]. Influencers must also have knowledge and expertise on the topics discussed, even though they do not have to be experts. This knowledge allows an influencer to explore a product in detail and depth so that the review becomes more honest and open. This study provides an overview of Influencer expression management in the COVID-19 vaccination socialization activity.

The paradigm in this research is the constructivist paradigm. The constructivist paradigm views communication science as a systematic analysis of socially meaningful action through direct and detailed observation of the social actors concerned in creating and maintaining their social world.[13]. Through this paradigm, the author attempts to analyze the impression built by Instagram users about the existence of Pancasila. This study uses a qualitative approach with virtual ethnography as a research study. Virtual ethnography is a method used to investigate phenomena in internet interactions and explore users on the internet when they are communicating with the internet. Virtual ethnography reflects the implications of mediated communication on the internet [14]. The study tries to disassemble influencers' persuasion of covid-19 Vaccination from photos uploaded by their personal Instagram account owners. Researchers collect data. Influencers selected in this study are dr. Tirta and Ariel Noah interpret their uploads related to information about Covid 19 at the beginning of Covid 19 starting to become a pandemic, namely from March 2020 to March 2021. The selection of these influencer accounts is purposive sampling because the account has many followers, which means that influencers have much influence. Impression Management Theory One form individuals often use to gain influence is Impression management. Impression management or often called impression management (Kreitner & Kinichi: 2005), is defined as a process by which a person attempts to control or manipulate the reactions of others to their self-image. Manipulation can take the form of conveying ideas. Impression management can be done by changing the way he dresses, obeying the norms and regulations in the place where he is, taking names for other people's work, the way he talks, the way he walks, and so on. All of this is done with the hope that someone will be influenced by the person he is addressing. Humans are actors who seek to impart personal characteristics and goals to others through "showing their drama." In achieving this goal, Instagram social media users, in this case, will develop behaviors that support this role. Like a drama show, a life drama actor must also prepare for the show's completion. This completeness includes taking into account settings such as the location of the photos he posts, costumes or clothes used by Instagram account users when posting their photos with the framing "I am Ready for the Covid-19 Vaccine", the use of words in their Instagram status or the dialogue that occurs in the comment's column, as well as other non-verbal actions such as choosing a non-verbal language. This, of course, aims to leave a good impression on the interaction opponent and pave the way to achieve the goal. Goffman revealed that the above actions are called "impression management." According to Goffman, [15]. Other people judge based on the instructions the person gives, and from that judgment, they treat the person himself. They do not get exceptional services if they judge a person with low status. If the person is considered stupid, they will set the personal. For that, the person deliberately presents himself or (self-presentation) as he wants.

Result and Discussion

The influencers chosen in this study are dr. Tirta and Ariel Noah because as influencers have a lot of followers or followers on Instagram and have influenced their followers to do something because Influencers can be 'critical actors'[16]. Ariel Noah's Instagram with the name @arielnoah has a blue tick in the sense that this is an original account or, say, an account that has been verified for authenticity by Instagram. In his bio, Ariel provides a quote to greet his followers, "The Day of Spirited Energies, The Week of the Literalist, The Month of the Regulator. - I Feel, I Create, I Serve -". Ariel started a post about her support for the fight against covid-19 on her Instagram on March 30, 2020.

Figure 15. Instagram @arielnoah is informing https://www.covid19.go.id/ for more info.

The post regarding this information has been liked by 108,711 followers, which means it has been enjoyed visually by @arielnoah's followers—followed by on February 1, 2021, showing @arielnoah supporting the covid-19 vaccination activity by making a teaser about him supporting the Vaccination. @arielnoah's seriousness in building his self-image for his support for the covid-19 Vaccination can be seen in the choice of words used in the teaser he made. "I am sure everyone wants a life as usual, back to activities, chatting. This is not about protecting myself, the covid 19 vaccine is in my body", the snippet of the narrative in this covid-19 influencer teaser, and this post received many responses from his followers, even some of them from celebrity friends too. Like Clara Bernadeth, Ariel, as a celebrity, asserts that she is a covid-19 vaccination influencer, reluctant to exaggerate the information she gets while participating in the Covid-19 Vaccination. Expression management is built by showing that Ariel Noah prefers to tell the truth about his experiences. The fact that he was injected with the covid-19 vaccine is also told in the post.
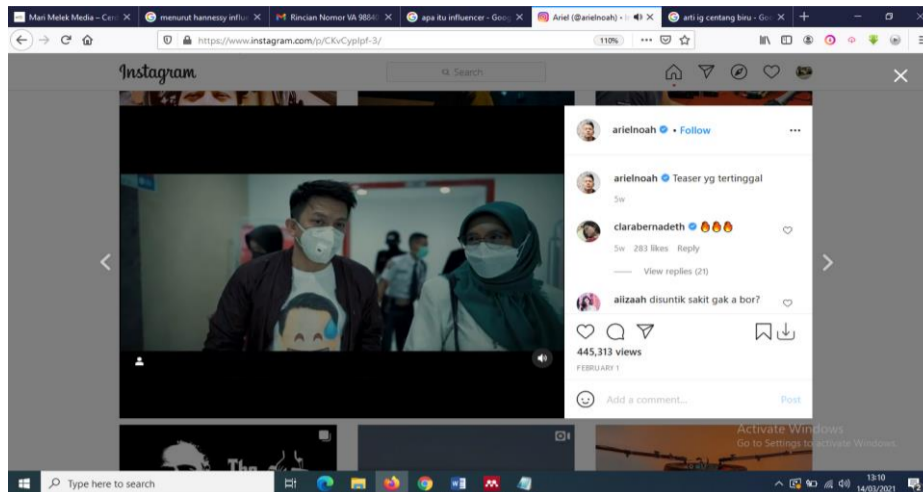
Figure 16. Instagram @arielnoah as a covid-19 vaccine influencer

After that post, he also confirmed by posting that he already had a covid-19 vaccine that protected his body from the contagion of COVID-19.
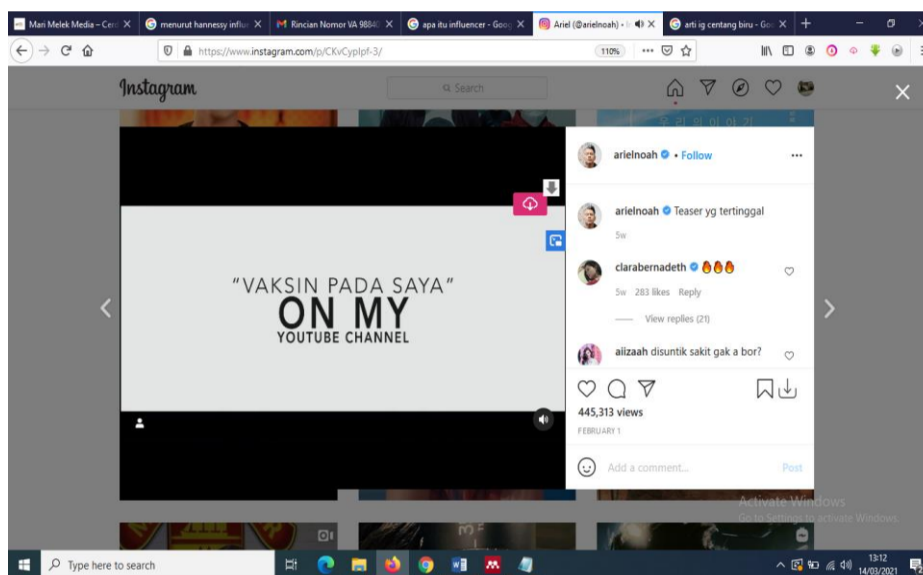
Figure 17. Instagram @arielnoah with the post of the covid-19 vaccine on his body.

@arielnoah avoids negative words and makes appropriate posts and photos to attract his followers' attention. @arielnoah shares interesting photos with good quality and captions containing positive personal experiences, as well as being practical and inspiring for his followers. @arielnoah's honest review when describing the advantages and disadvantages of the covid-19 vaccine makes influencers able to build networks on social media. Ariel asked what kind of vaccine was received and all kinds of side effects. The material Ariel conveyed in social media accounts encouraged them not to lie about the covid-19 that Ariel experienced. In the socialization of the covid-19 vaccine, @arielnoah is defined as a party that can influence the decisions of its followers. Through social media, interaction and trust are built between influencers and their followers so that @arielnoah's statement is considered more credible than the socialization displayed by the government. Even what testimony is on Instagram @arielnoah is further developed on Ariel Noah's YouTube with the nameaccount@Ariel Noah. On the youtube account, the material presented regarding Covid 19 information is more precise because the duration of Youtube content in the form of films can have long duration. YouTube amplifies Ariel's Instagram information. Influencers use the social media space to inform their followers. Trust in influencers even exceeds trust in experts.
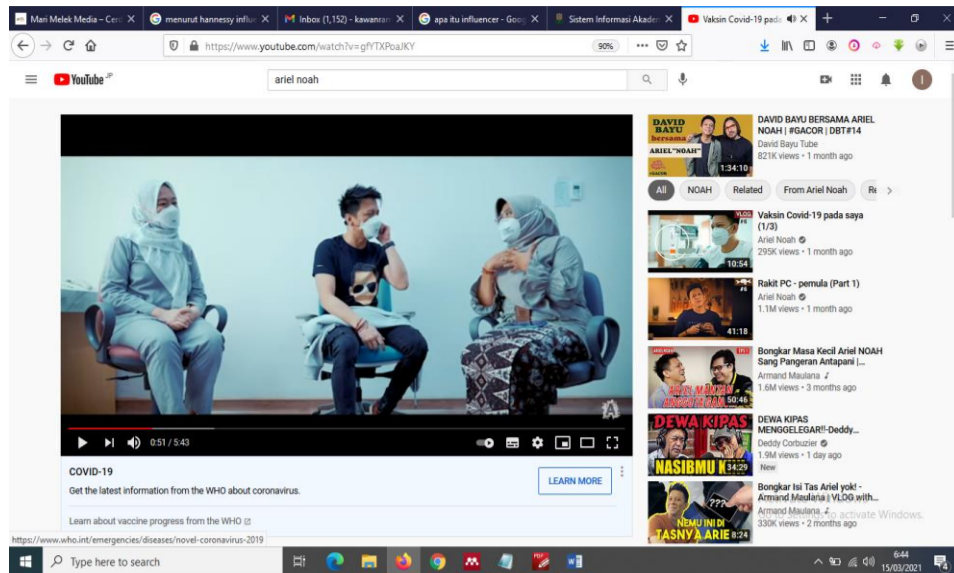
Figure 18. Youtube @ariel Noah with a discussion post about the Covid-19 vaccine.

The contents about covid-19 on @Ariel Noah's youtube are divided into three episodes with the theme "Covid-19 vaccine for me". The youtube material contains how Ariel Noah tells the story of Ariel and the Sinovac vaccine and how Ariel decided on the covid-19 vaccine he received. In this case, Youtube provides evidence of another strength of Youtube, namely its long duration, so influencers need to have other social media that can help their account on Instagram. Instagram has strength in artistic photos, while like YouTube has audio-visual power.

Figure 19. Ariel maintains that the Health Protocol is working to prevent the Covid-19 vaccine.

In posting February 3, 2021, Ariel, in her activities of creating musical works, emphasizes the importance of maintaining health protocols by showing that she uses a mask when doing activities with her band mates.

Ariel Noah's posts can influence perceptions and preferences in his social media environment. Influencers like Ariel Noah can be interpreted as someone who can change the way people think and act. These changes can occur in every aspect of a person's life. Not only do changes commercial in nature, but they can also impact other aspects, such as ideology. Influencers can not only be used as a marketing tool. More than that, influencers are also social relationship assets that can be invited to collaborate to achieve specific goals, such as the covid-19 vaccine activity. Influencers can be divided into specific types of categories. The most commonly used categories will usually refer to the number of followers, the type of content served, and the level of influence. Influencers can also be grouped into four groups: Mega-Influencers, Macro-Influencers, Micro-Influencers, and Nano Influencers. Based on their content, influencers are grouped as Bloggers, Youtubers, Social Posts Only, and recently more prevalent, Podcasters.

Meanwhile, when it comes to the level of influence, there are three types of influencers, namely Celebrities, Reputation/Chromo Influencers, and Key Opinion Leaders (KOL), such as journalists, academics, and experts. Like Ariel Noah, she falls into the celebrity category. Social Posts Only, and recently growing popularity has been Podcasters.

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Dr. Tirta is an influencer who provides an understanding of covid-19 Vaccination through his Instagram with the name @dr.tirta. In his account, Dr.Tirta calls himself an entrepreneur and shoe seller. The post regarding dr. Tirta's covid vaccine was posted on January 28, 2021.
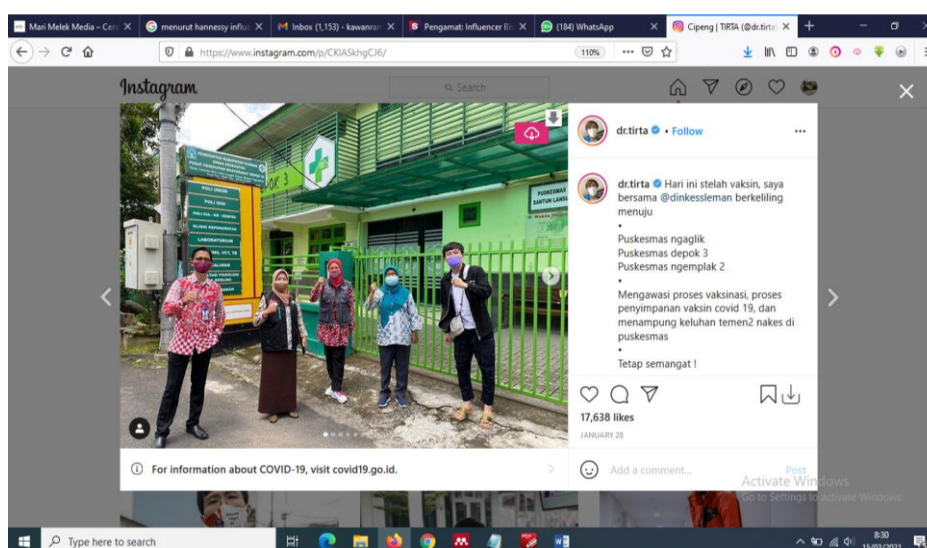
Figure 20. Instagram @dr.Tirta with posts about the Covid-19 vaccine.

The @dr.tirta account provides education about the covid-19 vaccine in its way. Dr. Tirta built expression management by giving his observations and detailed evaluations of how he uses the covid-19 vaccine. The delivery method tends to be straightforward and accurate because the @dr.tirta account is owned by a doctor responsible for his profession. When invited by the government as influencers to help promote policies or programs to the public, some influencers turn into propaganda tools for the government itself. Dr shuns this phenomenon. Tirta, so that he often fills his Instagram content with words that are loud enough to provide persuasion or information to his followers. Dr. Tirta often calls out in his content that he will simplify the message of a policy or program so that it is easy for his followers to understand who part of the community is. The shift of influencers to new propaganda tools to create a positive public perception according to the government's version often distances itself from reality. Propaganda such as diverting the performance measure of handling the pandemic according to objective measures on the government's socio-economic and medical dimensions tends to be misleading in distributing information regarding the COVID-19 vaccine in a particular profile. Dr.Tirta became a reference for his social media followers and the general public because dr.Tirta is considered to have the same fate as the people

currently experiencing turmoil, so what was revealed and appointed by dr. Tirta has become a foothold for her followers, as seen from the comments on her Instagram feed. "The same fate (the same fate) among people who are currently experiencing turmoil Congratulations, doc, hope you are always healthy, giving a lot of health information to all, opening up horizons, what must be done, input, about this pandemic, to the common people, the street vendors, hawkers, with simple and easy to understand things, to continue to be given counseling, which is good and right, not affected by misleading things 🙏 🙏 " from the account @ addanursyirwan. There is also @sitisibuea, "Doc, do not forget to stop by the Rusunawa covid shelter, MBR DIY Gemawang, doc... Waiting for the volunteers at the dock shelter 🙏 😊 ". Influencers, however, have a substantial humanitarian responsibility; the fate of society is also the fate of the influencers' future. In the end, the existence of influencers will develop well if they also side with community groups. Through the involvement of these two accounts during the current COVID-19 pandemic, people seem to sympathize and readily accept the covid-19 Vaccination. The key to being a good influencer for the community is social generosity to serve humanity, which can be seen in these two accounts.

Conclusion

The impression management built by Instagram social media users in carrying out Pancasila is carried out by displaying physical perfection, self-image, profession, and the identity of Pancasila nationalism. Young people more readily accept Pancasila through selfie photos on Instagram. The photos uploaded are certainly not arbitrary, but photos that show their strengths, starting from their self-image. Influencers create content that they want to create themselves, commonly known as User Generated Content. The choice of photos and words, in this case, is vital because this is where the actual message the influencer wants to convey. Influencers as communicators want to convey messages in the form of photos and exciting captions so that their followers can accept the message, in this case, a communicant. Influencers have a significant role in marketing a product because they are considered credible in conveying a message about a product. The author can conclude that basically everyone will do Impression Management according to what he wants to be displayed on the front stage, whether it is significantly inversely related to life backstage or there is only a slight difference with him backstage. The limitations of this research are only at the micro-level. In other words, the researcher only dismantled the impression management on Instagram users' photos displayed on Instagram social media.

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RONGGENG: EMBODIED FEMININITY AND SEXUALITY IN *SANG PENARI* (2011)

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A b s t r a c t

This research is aimed at revealing how the femininity and sexuality are embodied in ronggeng's body as depicted in Isfansyah's *Sang Penari (2011)*. As the cultural narratives is designed differently by the society, the intersection of gender and sexuality has a great impact on body. Therefore, this research will use intersectionality approach to reveal how the embodiment of femininity in this body as well as the sexuality paradoxically affirms the process of othering the body. Through Yuval-Davis theory, I argue that ronggeng's body experienced the ambivalence notion of gender ideology as mother of collectivity. Ronggeng's body is believd as the mother of figure in which all hopes and goodness are placed in her body. Yet, the shifting regime views this body through different lenses as depicted in this film. The results reveal that women's body is sexualized under heteronormativity, in which it relates to the gender oppression. The oppression is manifested into the ambivalence experienced by Ronggeng. In Old Order Era, the cultural narratives posit *Ronggeng*'s body as the symbol of fertility. Ronggeng is the dance performed in harvest time and is believed to spread blessings and fertility in relation with reproduction. On the other hand, the culture and society castrated the body by controlling her to be infertile. Further, the shifting regime let the *Ronggeng* body experience sexual slander for being labelled as the member of Indonesian Communist Party (PKI). Yet, the shifting discourse in New Order Era related *Ronggeng* with prostitution. All are the manifestation of sexual politics of regimes in Indonesia.

K e y w o r d s : ronggeng, intersectionality, femininity, sexuality, sexual slander

I n t r o d u c t i o n

The phenomenon of the dancer's body as the arena of power exercise is already familiar for Indonesian society. Hence, the cultural narrative that is constructed towards ronggeng positioned the body as the target of the practice of power in a political context. In this case, the body has become an important agenda along human history and culture. Based on the concept that humans are embodied subjects, the body becomes an arena where differences in gender, sexuality, race, ethnicity, and class are formed and manifested (Benson in Woodward, 2002: 128). This statement underlines the intersection of gender and sexuality, and it is fundamentally essential in embodiment practice of gender ideology. Through women's body, the shifting gender ideology of Indonesian regimes as well as the exercise of power can be clearly identified.

The practice of power towards the ronggeng body is also articulated through a film entitled *Sang Penari* (2011) produced by Ifa Isfansyah in 2011. This film, with the setting of Old Order and the New Order era, was inspired by the novel of *Ronggeng Dukuh Paruk* by Ahmad Tohari. Previously, in 1983 this novel had been filmed under the title *Darah dan Mahkota Ronggeng*, directed by Yasman Yazid. Interestingly, the film

Sang Penari (2011) depicts the complexity of body politics by relating it to the events of 1965. Subjugating the body by relating it to the 1965 discourse is intentionally constructed to arouse trauma and fear in the community. It is still clear in the collective memory of the Indonesian nation that the Indonesian Communist Party (PKI) is the communal enemy of the Indonesian nation. The PKI was constructed by the authorities as a group that was about to stage a coup against the legitimate Indonesian government. The PKI and all the mass organizations affiliated with it were associated as inhuman organizations. This association led the public to conclude that being part of the PKI or being related to the PKI was a fatal mistake that rise to a curse and justification for the torture or murder of this PKI member (S. Wieringa, 2019: 103). The labelling of the PKI is part of control mechanism towards the Indonesian people's body.

The Old Order and New Order eras with patriarchal cultures positioned women as subjects who experienced ambivalence. Yuval-Davis (2008: 56-58) stated that the ambivalence places women as a symbol of collective unity, bearers of honor, and even reasons for national or ethnic projects. This begins with a female construction that is usually placed with a mother figure symbolizing the spirit of collectivity. Further, Yuval-Davis (2008: 56) stated that female figures are usually associated with mothers symbolizing the spirit of collectivity. Thus, the woman's body will become the mother of collectivity, a mother figure in which all hopes, and goodness are placed in her body. At this point, women both individually and collectively will be attached with a burden of representation since women are constructed as symbols of collectivity. On the other hand, women are excluded from collectivity. This is manifested by positioning them as the object. Further, the cultural narratives also used the collective wisdom by relating it to the intersection of gender and sexuality to reproduce the commonsense.

The intersectionality of femininity and heteronormativity places the female body as a site of struggle that must fit the normative gender and sexuality. The interdependence between gender and sexuality lets the women's bodies as the target, and they must be controlled because of their sexuality which endanger the stability of the order. Intersectionality becomes a space to dismantle how these elements become axes in body politics. Crenshaw (in Nash & Nash, 2008: 3) states that intersectionality is a meeting point that dismantles marginalized and excluded subjects, when identity is formed through the intersection of race, gender, class and sexuality. Moreover, the intersection also has a great impact on the sexual slander experienced by the gendered body. At this point, Wieringa and Katjasungkana (2019: 101-103) stated that in this modern era Indonesia experienced two moral panic that leads to the scapegoating the Gerwani and the LGBT community. Therefore, the sexual slander views them through phornographic gaze.

The film will be observed in detail through close reading technique. The data are taken by capturing the screen on the scene related to issues of femininity and sexuality. Data are categorized and unnecessary data will be reduced, while important data will be analyzed. The data obtained then related to how the cultural narrative of the regime in Indonesia ambivalently positions ronggeng's body regarding issues of gender and sexuality. The last is making a conclusion. In this last step, the researcher concludes by identifying the intersection of gender, sexuality, and the dancer's body.

Research that raises the issue of gender in *Sang Penari* (2011) has been conducted by Mundi Rahayu. In her research, she questioned how the dancers' bodies become the agent of resistance. Eventhough the previous research discussed more about the representation of woman, the details about how the body becomes the arena has not been addressed in details. Therefore, this study will examine how the cultural narratives posits

the dancers' bodies ambivalently in the Old and New Order regimes. Further, this research also discusses the control mechanism toward this body which leads to othering by labelling the ronggeng's body as the member of communist Party (PKI).

Result And Discussion

In gender relation, women are attached with the "burden of representation" which positioned them in an ambivalent position. This ambivalence is also experienced by Srintil (the ronggeng dancer) as depicted in *Sang Penari (2011)*. Through her body, it can be seen that the ambivalence on the one hand reifies Srintil as a subject that represents the spirit of collectivity, but on the other hand places her to submit to the patriarchal order. As coined by Yuval-Davis (2008: 57-58), the ambivalence reifies women by idealizing them as the mother of the community (the embodiment of mother of collectivity mother), but it also positioned woman in the process of othering. Women becomes the symbol of guardians of collectivity, society and the nation. Thus, this ambivalence, on the one hand positions women as a symbol of a social collectivity, while on the other hand it positioned woman as the "other". Ronggeng's body is sexualized by the heterosexual society in which they also mystified her body as a symbol of fertility.

In *Sang Penari* (2011), ronggeng's body becomes an arena for the embodiment of femininity and sexuality in heteronormative relationships. This is in line with the Old Order and New Order eras that constructed heterosexuality as the legal sexuality in Indonesia. One of the markers of the discourse on heteronormative sexuality in this film is the relationship between Rasus and Srintil. As depicted in figure 21, Rasus and Srintil are revealing the heterosexual relationship. Through internal focalization, this scene depicts how the cultural domination operated by society. In the intradiegetic voice that implies a conversation between Rasus and Srintil, Rasus wants Srintil to stop being ronggeng so they can unite legally. The union of them is a final portrait of the wishful thinking of a heterosexual relationship which usually manifested in a marriage. However, without denying his origins as the daughter of a *bongkrek seller* who poisoned the villagers, Srintil prefers to devote herself to his ancestors as a ronggeng. Indeed, the cultural narratives constructed that being a ronggeng means Srintil cannot have a legal relation with any person because she is the embodied symbol of collectivity or known as the mother of collectivity.

Figure 21. Heterosexual relation of Rasus and Srintil

In *Sang Penari* (2011), women's bodies are sexualized in such heterosexual relationship in order to satisfy men's desires. As portrayed in figure 22, Srintil as ronggeng is visualized when she was dancing and is surrounded by men. Even Srintil is depicted in sexual relation with some men in this film. However, even though Srintil had relationships with man on her journey as a ronggeng dancer, she could not be bound into a legal relationship. This situation highlighted how sexuality becomes the axis of oppression experienced by Srintil because she is objectified to satisfy male desires. As coined by MacKinnon's (1982: 19 that sexuality is a form of power. Therefore, heterosexuality as a social desire constitutes the domination of male sexuality and female sexual submission. At this point, it can be interpreted that heterosexuality becomes a site for culture to exercise power over women's bodies.

The fact shows that sexualization of women's bodies which has been proliferated in the cultural narratives is practiced for the sake of dominant discourse. Indeed, this practice involves gender oppression. The implication of this practice then positioned women's bodies as socially and culturally constructed within the context of sexuality. As revealed in this film, it can be underlined that the shifting regime in Indonesia also has an impact on shifting the meaning of the ronggeng body related to the gender ideology adopted by a regime. However, women who are attached with the burden of representation, experience ambivalence as the mother of collectivity. In ronggeng's terminology, they are mystified as a symbol of fertility on which all blessings are embodied on their body. However, it is also practiced under heterormativity. This is in line with Edward's opinion (2004: 32) that sexuality is part of the reproduction of men's rights in sexual patriarchy. Therefore, various rules applied to women as a form of protecting woment will always be linked to sexuality. Indeed, this indirectly presents the female body as the object of male sexual desire.

Figure 22 Srintil is dancing, surrounded by male.

Further, ronggeng as a symbol of sexuality is constructed to satisfy male fantasies. Both the costumes and dance movements of Ronggeng show that the sexuality of the body gives sexual satisfaction to society as represented in figure 22. Indeed, it clearly opened the male bias. Further, Srintil as a ronggeng is glorified as both the symbol and object of sexuality in heterosexual relations. In this sense, Srintil is valuable in his relationship as a male's sexual object. Alexander (2011: 376) stated that women are positioned as the subordinate, therefore they are considered valuable only in relation to men for their sexual reproduction capacity and capability. This notion is continuously reproduced as an effort to perpetuate male's domination through gender relations which are practiced in heteronormative relationships.

While in the performance, ronggeng movement that explores the chest and hips is closely associated with fertility. It highlighted the practice of constructing male's fantasy. As stated by Lysloff (2002: 4-14). a female ronggeng dancer with opened costumes on her shoulders and a provocative movement of her hips will look tempting. It is related to the image of the ronggeng movement which is very sensual in male's fantasies. Yet, this image is interpreted as women's obedience to masculinity. Therefore, it cannot be denied that this film was also constructed through male gaze in visualizing Ronggeng. While Srintil is dancing, the camera's eyes will not be separated from highlighting the erotic body parts. Likewise, the male audience are more dominant in the ronggeng performance although there were several female audiences in this film.

The existence of women experiencing ambivalence is a cultural reduction of the position of women, but actually women's sexuality is also controlled by the society. In *Sang Penari* (2011), this effort can also be seen by castrating the fertility of ronggeng. This castration is done through physical action by massaging Srintil's uterus in order to make it infertile. It underlined the practice of controlling the symbol of sexuality. It is supposed to be tamed as the body could possibly endanger stability, in which it is castrated and is being sterilized. From the above explanation it can be highlighted that in the context of ronggeng, the cultural narrative built in the Old Order era shows ambivalence. This ambivalence reveals the experience of ronggeng on the one hand it reaffirms ronggeng as a symbol of sexuality but on the other hand it places ronggeng as a sexual object by castrating the sexuality. Thus, it cannot be denied that cultural control is basically an objectification of women's sexuality as well as a form of gender oppression. Everything is constructed for the interests of the dominant structure by manipulating it for the existence of a ronggeng. Indeed, it can be underlined that the sexual politics in the Old Order era which oppressed women was also practiced by controlling the symbol of sexuality. This is in line with Evan's statement (in Wieringa, 2002: 249) that if women's sexuality is controlled, it is believed that this will stimulate the development of social and moral order. Whereas for those who are not restrained or not being controlled, women will endanger society and cause chaos. It is highlighted the nuance of fear that continuously reproduced so that women are always controlled.

During the New Order era, the condition of how the power perceive ronggeng is completely different. Women's body still becomes the arena for power exercise but on different way. Biopower was practiced against the ronggeng's body because it began to be considered dangerous to the national order. Ronggeng is believed as a bitch since the cultural narratives closely associated her with prostitutes. Thus, in the shifting regimes from the Old Order into early new Order, Srintil experienced sexual slander. She is labelled as a member of Indonesian Communist Party (PKI). Consequently, she was abjected by the nation.

It is still clear in the collective memory of the Indonesian about the 1965 genocide that every individual who was considered as PKI would be arrested, imprisoned, persecuted, and exiled from society. This is a manifestation of body politics as coined by Mirzoeff (2010: 55) that in the practice of body politics involves the justification and rationalization of violence, in which the resistance body against the state is considered as capital crime. Srintil experienced sexual slander by being labeled a PKI member. She was considered against the state for supporting the PKI party. Basically, it was not only related to the reason that the artist was close to the PKI but also her embodied sexuality made her to be the target of subjugation. Furthermore, the intersection of gender and sexuality positions Srintil as a dangerous body because ronggeng's body is then associated with prostitution.

As depicted in figure 23, Srintil is taken from a detention camp and forced to serve sexually. She was sold to the rich man by the apparatuses, but she did not get any amount of money for his body. Therefore, Srintil was arrested and tortured, but in this case, it is not only the physical torture but also sexual torture.

Figure 23. Srintil was arrested and tortured in a Camp.

In this film, the submission of female body by New Order regime is practiced through a control mechanism such as the biopolitics. This is also manifested in government regulations for ronggeng dancers which also involve the state apparatus. In its development, biopolitical practices on dancers' bodies were carried out through the institutionalization of rules by the New Order regime such as the creation of policies known as coaching. Larasati (2013: 21), explained that the existence of dancers and dances in the New Order era was structurally regulated by the state through the Ministry of Culture with one of its systems called coaching. This terminology shows an indication that art construction is becoming better or more feasible and is usually applied to folk arts to conform to New Order standards. Further, Lysloff (2018: 14), stated that lengger or ronggeng must be Pancasila in ideology by participating in the New Order cultural ideology class and being given an identity card to be able to perform in the show. Therefore, it is not surprising that *Lengger* in the New Order era was increasingly marginalized because the dancers were considered not to fit with the virtuous cultural orientation of the New Order. In some cases, some folk dances such as ronggeng or lengger in Banyumas must be "subdued" so that they conform to the values of the New Order. New Order norms that refer to the Pancasila ideology require that ronggeng performances should be in line with the Pancasila ideology. Formerly, ronggeng is seen as primitive because its movements are too sensual so that it invites lust. The sexuality of the ronggeng dancer is considered dangerous for other men and women. For men, ronggeng is considered to destroy men's morale and undermine masculine power because they are unable to resist temptation. On the other hand, for women the existence of ronggeng is considered to disturb the harmony of their household. Thus, it clearly can be seen how the shifting regime positioned ronggeng. In the Old Order era, ronggeng sexuality was not considered to be dangerous, instead it became the foundation of collective hopes for fertility and social harmony. This notion became much different when the New Order era positioned ronggeng's body as a threat that possibly destroys the society's order.

Furthermore, ronggeng dancers were associated with dangerous and immoral women in new Order era. Thus, Srintil is visualized that she is no longer has desire for Rasus at the end of this film. As depicted in figure 24, Srintil avoided Rasus while Rasus just stared at her at their meeting at the Dawuhan market in 1977. The cultural narrative

constructed from this scene is to support the New Order era that perceive ronggeng as a symbol of sexuality and associated with prostitution. Moreover, as Srintil was labelled as the member of PKI, and Rasus as the state apparatus, their relationship is barely prohibited.

Figure 24. Srintil was running away from Rasus

Another important notion of sexuality in the New Order era is the construction of heterosexuality as the only legal sexuality in Indonesia. This regime, which was very dominant with its masculinity, constructed the relationship between men and women legally in the institution of marriage. Marriage is an institution that legitimizes the relationship between women and men under heteronormativity is the only relationship that is legitimized by the state. Thus, it is stated in the Marriage Law No.1 of 1974, which defines marriage as a physical and spiritual bond between a man and a woman to form a family. While Srintil as a ronggeng dancer is positioned outside the order, in which it leads her being so far from the marriage institution. In new Order era, Ronggeng which is associated with prostitution is a woman who will not be chosen to be a spouse, especially for a state official such as Rasus. This fenomena underlines the cultural narratives that positioned being women is such a difficult thing. Women are increasingly facing a lot of pressure because they are often demanded to be "proper" to be legally chosen as male partners. Infact, these various cultural narratives that required women's obedience are the constructions of the Indonesian sexual politics. Therefore, through the ronggeng's body it can be underlined that Indonesian sexual politics in Old Order and New Order Era cannot be separated from the gender oppression experienced by women's bodies.

C o n c l u s i o n

The intersection between gender and sexuality becomes a very strong notion to dominate the dancer's body as revealed in S*ang Penari (2011)*. However, there are fundamental differences in sexuality articulated in the Old and New Order in perceiving woman's body. In the Old Order and the New Order, sexuality which was regulated by state power used heteronormativity as the legal sexuality of the nation. As articulated in this film, the sexuality exposed by these two regimes cannot be separated from the heterosexual relationship. Heterosexuality in this case is also associated with normative gender roles that define a person's identity. This connection shows how Indonesia positioned itself as a privileged nation, which means that sexuality in the New Order era was constructed in ideology as one country, one gender, and one sexuality supported by social, political, and cultural institutions that construct and benefit it (Mayer, 2002: 5).

The stability of the ideology of the nation is established to support the privilege right of the master narrative. Therefore, the dominant discourse is continuously reproduced for the sake of ruling regime which leads to the stability power of masculinity.

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DISMALAND OR DISNEYLAND? CULTURE JAMMING AS A RESISTANCE PRACTICE

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A b s t r a c t

The media offer a more varied form of resistance against the power of capitalism. The dominated class continues to be the antithesis of the "status quo", as is the hegemony that will not function entirely. One form of resistance is carried out through culture jamming (CJ). CJ can be observed in the advertisement of Dismaland which is a challenger against the Disneyland theme park which has been shaping the lifestyle and culture of modern society. This paper tried to elaborate on the form of culture jamming in the Dismaland video and explain the extent to which this form of resistance affects socio-cultural practices against Disneyland. It used a qualitative descriptive approach by using the discourses on culture jamming and critical theory as analysis. The results show that Dismaland as a form of culture jamming was successful in redefining playgrounds for children that were deemed "ideal" such as Disneyland. Through the audio-visual component, Dismaland presents satire and builds satirical discourse on the imagination of the people who are persistently trapped in the unending ideology of consumerism. The "interference" is shown by arranging, remediating, and representing Disney's characters and brand images using language that has been embedded in the minds of the public through the various existing artistic resources. Dismaland also demonstrates the irony of a hegemonic playground. Many visitors of Dismaland are part of the culture 107ammingg practice as consumer activism. Therefore, the Dismaland theme park becomes a place where boring and scary things are made to rethink reflectively the cultural implications of the consumptive dream theme park of Disneyland. Jamming culture analysis needs to be considered through political and economic aspects to be used effectively as a suggestion to convey a more provocative message through diverse media that culture must be tied to a bigger objective. In practice, Jammers can raise broader issues.

K e y w o r d s : Culture Jamming; Dismaland; Resistance; Capitalism

I n t r o d u c t i o n
Background

Culture is understood as an ideological arena. As long as there is a dominant culture, then, opposition cultures emerge that trigger changes. Discussing media based on a cultural perspective is understanding the ways of cultural production in ideological contest. As a cross-disciplinary study and based on ideological perspectives, media and cultural studies critically examine alternative cultural processes of the media in dealing with dominant cultural. It is as explained by Gramsci that knowledge and popular culture have become a vital arena of the ideology of power (Arifiannto, 2015).

Along with the development of advanced industry, capitalism keeps improving and adapting to the social culture of society. Frankfurt School intellectual figures, Horkheimer and Adorno in Dialectic of Enlightenment (2002) developed the concept of the cultural industry when entertainment and mass media became an industry in the capitalist era of post-World War II, both in circulating cultural commodities and manipulating human consciousness. The cultural industry deliberately creates false awareness of the world around the society by consuming false pleasures. Capitalism works in such a way that consumers are willing to consume the products of the cultural industry and finally lost in isolation. Further, it is increasingly difficult for society to get out of the capitalism flow, including through advertisements that create 'false needs' in consumers (Heidy, 2013).

Stuart Ewen (1976: 5) states that advertising creates a consumption ideology by promoting desires to the consumer. It is considered as a way to create a 'consumer culture' in which consumer will think that they have solved the problem by simply purchasing the offered product. One of the products of advanced capitalism is Disneyland that has shaped the lifestyle and culture of modern society over the years. Then, the mass media have a vital role to communicate it to society.

Then, the media approach and cultural studies reflectively and critically view Disneyland a phenomenon that was initially assumed merely as entertainment for children, by bringing up an analytical perspective beyond that assumption. Disneyland and its cartoon characters have become a cultural apparatus and bring ideology into a wider community. Further, based on the perspective of the cultural industry theory, society is currently in the middle of an ideological arena that comes through the commodification of culture. However, as a dialectical contradiction to the domination and hegemony of capitalism, its resistances have emerged. As widely known, hegemony never works totally. The dominated class will continue to be the anti-thesis of the "status quo". One of the resistance is through culture jamming. Culture Jamming is a response to dominant culture through parody and language rhetoric that has been widely known by the wider community. This "unique" form of resistance can be seen through a theme park, Dismaland.

Figure 25. Disneyland's logo dan Dismaland's logo

Dismaland is a temporary art project organized by Banksy, a street artist. It was built in the seaside resort town of Weston-Super-Mare in England. This project was secretly prepared. It opened on 21 August 2015 and permanently closed on 27 September 2015 or 36 days later. This exhibition became popular then many visitors queued for hours every day to get the entrance ticket. The project managed to attract 150,000 visitors from around the world, boosting Weston-super-Mare's local economy by £ 20 million. Then, in May 2016, Dismaland was announced achieving the South Bank Sky Arts Award.

Banksy created ten new works and funded the construction. The event featured 58 artists and managed to sell 4,000 tickets per day for £ 3 of each.

As a form of culture jamming, Dismaland is interpreted as a "gloomy" work aimed at criticizing Disneyland. Culture Jamming can be observed in various media, such as in Adbusters (a culture jamming group that criticizes advertisements). For example, to question Nike's image and invite the public to consider more factors behind this famous shoe brand including the commercial climate and exploitation production, especially the exploitation of workers around the world. However, Adbusters' criticism of dominant ideology and culture can potentially be faded as the criticism is ignored or marginalized by the mainstream media (Arviani, 2011).

Moreover, the practice of culture jamming can also be seen in 1989, a group known as Barbie Liberation Organization (BLO) which replaced the voice chip of G.I. Joe with the Barbie doll. It was done as resistance to gender stereotypes ideas through children's toys. Then, it causes both voice chips were deliberately exchanged. As a result, the toy was returned to the shop in which a Barbie doll with a masculine voice and a G.I. Joe with a feminine voice. It creates hopes for a protest against gender inequality (Harold, 2004). Another example is shown by resistance to Victoria's Secret. By social media, FORCE managed to "hijack" Victoria's Secret by covering them as part of the brand through the Pink Loves Consent campaign. It is disguised as consensus creating entry points into conversations with Victoria's Secret followers which triggers an online dialogue about creating awareness of sex and body health (Madden, 2018).

Indeed, there are many cultures jamming that can be observed as a form of resistance to power and oppression. The 2011 Cop Spraying Pepper and Meme Tankman, based on Weibo created parodies of iconic historical events. Further, culture jamming was also in the form of a flash mob with an entertaining nuance. Meanwhile, in Spain in 2015, culture jamming was practiced through holographic media of hologram demonstrations in the context of prohibiting demonstrations held in front of government buildings without the authorities' permission. It results in the term "gag law". Thus, the protest was carried out through a hologram in which there is no physical presence and replaced by a hologram at night. It is considered a form of mocking regarding the presence of a political body (López, 2016). Even though there were many polices on guard, none of them were arrested as they did not violate the rules. It can be said that the media used in culture jamming have various techniques. In this case, communication is the entry point for culture jamming as a strategy not only for branding and commercialization but also subversion through the role of media.

Based on the elaboration above, this paper aims to elaborate the question "*What is the form of culture jamming in the Dismaland video*?" and "*To what extent does this form of resistance affect socio-cultural practices against Disneyland*?" The next section explains the concept of culture jamming and then followed with a discussion.

Culture Jamming Phenomenon

The term culture jamming, or CJ comes from the slang word "jamming" intended to interfere with the transmission of the message. The interference can be in the form of sabotage, trickery, prank, or banditry on the monolithic power structure that governs socio-cultural life. Culture Jamming also has some terms of "*semiological guerrilla warfare*" as proposed by Umberto Eco (1986: 135), while Stuart Ewen calls it political "*visual literacy*". Jammer culture is understood as an attempt to find an alternative understanding of the resistance movement (Dery, 1993). Culture jamming is usually

described as non- "overblown" resistance to the system. It is the rhetoric of contradictory messages to bring about a qualitative change. In this context, culture jamming is not simply seen as destroying or stopping corporate media. Rather, it is more useful to consider as artistic messages, a rhetorical process that challenges the corporate to bring out new meanings with an added sense of humor or jokes. Generally, jammers modify media as a practice of cultural resistance to advanced capitalism (Dery, 2017: 29).

Culture jamming, sometimes known as *guerrilla* communication, a form of rhetorical protest as an anti-consumerism movement utilizing marketing tools and mass media to subvert hegemonic messages which are often mediated (Harold, 2004). Moreover, Klein (1999: 280) defines culture jamming as the practice of parodying advertisements and billboard piracy to drastically change messages. Historically, culture jamming emerged and developed in the 1950s and 1960s as a movement against anti-consumerism. In America, this movement is associated with the emergence of hippies, punks, critical students, and street art that are worried about the spread of consumer culture. The jammer commits to warp established politics through commercial rhetoric to subvert and reclaim their freedoms. This concept was initiated by Guy Debord (201), the author of the book Society of the Spectacle, who saw daily life flooded with visual spectacles. The domination model of capitalism creates a promise of entertainment and consumer culture resulting in the strategy of "detournement", as an attempt to "devalue the spectacle" (Lasn, 1999: 108). Detournement can be translated as "detour" or "diversion" or "derailment" in a more subtle sense, while in France it is referred to as "piracy," "embezzlement," "corruption" and "diversion" (Sadler, 1999).

The presence of the Situationists has been interpreted as an attempt to update Marxist theory to the specific conditions of consumer society (Best and Kellner, 1997). And in turn, it broadens the concept of consumer culture analysis. The implications of advanced capitalism have hegemony the working class who raises the standard of living but loses critical awareness in which the needs and demands are shaped by the consumer culture. This détournement strategy allows cultural resistance to the spectacle.

Culture Jamming as a Social Practice

Culture Jamming is an alternative that can be used by active consumer in interpreting consumer culture. Debord in Dery (2017) explains that advertising is not merely a means of parody or entertainment. Debord and the postmodern Situationist group oppose parody as an effective rhetorical strategy as it maintains and reinforces the brand image, rather than disturbing the audience in building awareness. Therefore, it requires forms of advertising communication with an extreme work of art that 'destroys' or 'deflects' the message of the advertisement as a parody that mocks or satirizes certain advertisements which are considered to have political, social, or environmental issues. Then, this movement is called the Culture Jamming practice.

At the same time, the advertising industry continues to reproduce and create standardization through increased control over consumer desires. Community is not controlled through confinement, physical repression, and silencing of individuals but "continuous" control and communication (Harold, 2004). It means that people are not prohibited from accessing information and knowledge, but they are given greater freedom of access through open technology and institutional hybridization. However, freedom emerges as a new and irrational freedom. Consumers lose their critical power due using advertising to create voluntary compliance (Carducci, 2006).

Besides, Fowles explains the emergence of criticism of popular culture and the advertisement. Fowles cites the critique that emerged in Horkheimer and Adorno considering that all mass culture is identical and superficial resulting in the uniformity of societies' minds where this culture industry is considered to rob individuality of one's thinking (Putri, 2011). Culture jamming is good at interrupting a spectacular culture by turning against it as one of its most effective tools and Christine Harold calls it "rhetorical sabotage" (Farrar, 2008). In practice, the culture jamming accommodates groups and individuals who protest symbolically against the expansion and domination of companies and the logic of the market in public and private settings. The 'symbolic protest' refers to the targeting of central symbols such as advertising objects, logos, or other symbols essential to framing the dominant discourse of company policy. The reintroduced symbol in alternative contexts is reversed or destroyed through critics of mainstream discourse and declares independence and autonomy simultaneously (Wettergren, 2009).

Therefore, it can be said that culture jamming is a tactic that uses the language of capitalism to attack the capitalist regime itself. Culture Jamming is very different in formulating a revolutionary political movement as it is not based on the ideology of the active mass that vulgarly fight but uses the consumer language in the communication context of consumer culture. In other words, culture jamming has the aim not to undermine capitalism but to cause disruption.

Methodology

Based on the description in the previous section, this paper deeper examines the practice of culture jamming at Dismaland. It used a descriptive qualitative approach which describes conditions, situations, or social reality phenomena as the object of research, namely culture jamming as a theory of analysis. It used a combination of critical theory and visual analysis. It used primary and secondary data collected through documentation. Primary data are in the form of Dismaland videos and secondary data are from books, journals and website.

This study uses documentation and observation data collection techniques which are a way of collecting data by observing the culture jamming phenomenon in advertising media through text, images, and audio by taking screenshots. This study uses a purposive sampling technique which is based on the focus of the study with the intention of capturing information, depending on the research objectives. The data analysis technique used in this research is qualitative analysis used by researchers, including data collection, data reduction, data presentation and conclusions.

The next section discusses the culture jamming in Dismaland as a form of resistance to the established power system.

Results and Discussion

The result of this study shows that Dismaland as a form of culture jamming was redefining playgrounds for children that were deemed "ideal" such as Disneyland. Through the audio-visual component, Dismaland presents satire and builds satirical discourse. The "interference" is shown by arranging, remediating, and representing Disney's characters and brand images using language that has been embedded in the minds of the public through the various existing artistic resources. Dismaland also demonstrates the irony of a hegemonic playground.

Dismaland: Hijacking through the audio-visual.

As the initiator of Dismland, Banksy described Dismaland as "*a family theme park which is not suitable for children*". This idea was inspired by the "Disneyland" painting series by American artist, Jeff Gillette, who also participated in the exhibition. Culture jamming is understood as a practical instrument resulting in a real movement in an advanced capitalist society. Dismaland can be found in art exhibitions in the UK as part of a public space without intervention. The video presented on Youtube begins with a picture of a nuclear family consisting of a father, mother, and children. As a white middle class, they seem to gather at the dining table but are bored with their daily activities. The woman (read: mother) is pouring milk (domestic work) for her children, while the father is reading the newspaper.

Figure 26. The scene of a nuclear family at home

The narrator communicates to the family and the audience saying, "*Is there something missing in your life?"* And offers a place that can get rid of boredom. In turn, the family rushed together to the happiest place on earth, a theme park that is different from the others, called Dismaland.

Shortly, at the entrance to Dismaland, they underwent a security check procedure. Uniquely, the guards look unfriendly and expressionless (object), like a robot. Likewise, security facilities look fake made from cardboard shaped to resemble detector doors, CCTV, computers, tables, chairs, pistols, and the communication media used. They are showed explicitly and intentionally. It is funny that the staff then carried out a very strict search of the bags of children who were thought to carry weapons or grenades to the theme park.

Figure 27. Guards at the entrance to Dismaland

It indicates a form of satire on the security issue at Disneyland, as a safe park for children, by being treated with great suspicion. It is the same case with the strict conditions in prison. The depiction was aimed at Disneyland which has regulations and various baggage restrictions, as part of its compliance and control system. Visitors

inevitably have to comply with it to enter Disneyland. After the security check, they proceeded to the rides and displays. Many "strange" rides can be observed.

Figure 28. Fictional characters at Dismaland

Figure 28 shows a Dismaland video presenting a mermaid who has a green paddle and purple shells with a distortion effect with an abandoned, mossy, and damaged palace as the background. Based on a culture jamming perspective, it seems familiar to one of the famous Disney characters, Ariel. Ariel is the main character of the 28th Disney animated film entitled The Little Mermaid (1989). She has also appeared in the sequels of the videos of The Little Mermaid II: Return to the Sea and The Little Mermaid: Ariel's Beginning. Further, she also has appeared in TV series. As the fourth princess character, Ariel is known as a woman (mermaid) with white skin, and red hair with bangs. Her large eyes color is sea-blue green. Her body is quite small and slim with red lips. However, the depiction of the characters between Dismaland and Disneyland is very different with a distorting effect that is disturbing to the viewer. Typically, the character depiction of a beautiful princess is to have white skin and slim. The comparison can be seen clearly due to the awareness that has been developed previously even though it was reconstructed with some changes.

This family looks surprised and confused by the Dismaland rides which provide fun and enjoyment. It also shows a miniature display of Burger King and there are fire and damage at the toll road. This "chaotic" condition is added with polices who block the road with their car. Further, there is "vandalism" on the city walls. It can be understood as a medium that deals with aspects beyond the public space reclaim through graffiti to communicate messages symbolically, politically, and artistically to the audience. It also presents upside-down baby artwork, scary magic bunnies, rats, and Cookie Monster character in the Sesame Street TV series who joins the battle with a rifle. The funny characters on the Disneyland display are then copied and re-represented by changing some elements to provide different meanings such as transforming funny, cute, and fun into creepy and scary things for children for example inverted Cinderella horse carriage and swirling skull as a sign of death and irony.

Furthermore, Dismaland also showed how the theme park burns books. As widely known, theme parks do not educate children at all but become a part of advanced capitalism. Disneyland, which is a hyper-real image according to Baudrillard (1994), positions theme parks as a solution to human alienation in a fun way. Herbert Marcuse (2013) calls this phenomenon "repressive desublimation" It is a condition in which the community is satisfied with what they feel, even though it is intellectually and culturally oppressive, but works subtly and pleasantly.

Figure 29. Rides at Dismaland

The narrator also promises a world that can fulfill all the dreams of the visitors by narrating "*Dismaland, a place with all your dreams come true*". However, the visualization is deliberately made as something inconclusive and deceptive. In the deeper observation showed that the narrator conveys a quite similar utterance as Disney land's existing tagline "*The happiest place on Earth"* and the famous slogan of "*Where Dreams Come True*". As widely known, Disneyland has changed its slogan several times as a promotional campaign strategy. Over the past few years, Disneyland has used Disneypark's slogan, "*Where Dreams Come True,"* interchangeably with "*The happiest place on Earth.*" During the 2009 campaign, with free admission on birthdays, it used "*What Will You Celebrate*? ". In 2005 for its 50th Anniversary Celebration, Disneyland called it" *The Happiest Homecoming on Earth*". Disneyland's advertising slogan in the late 50s or early 60s had a "More Funable!" slogan. Parody of brand names and marketing slogans is one of the effective tools in organizing contemporary forms of consumer "boycott"(Friedman, 1999: 221). Cultural jamming provides a channel for sharing feelings in a consumer society, an environment where brand knowledge is a form of cultural capital and facilities that are part of the habitus (Bourdieu, 1984). Finally, the family goes home at night with the children sleep soundly in the car and the father falls asleep while driving. The scene ends with a screaming background sound and crumbled and destroyed the Dismaland logo. The two-minute video is a part of the resistance practice. Culture jamming of Dismaland raises the idea for consumers to think back reflectively about the continuously reproduced consumption culture through a pleasant advertising image that promises enjoyment.

The high demand for tickets to the exhibition caused the Dismaland website to repeatedly crash or down. It can also be interpreted as a part of the irony of Dismaland's unpleasant experience. Many celebrities were interested in trying the Dismaland experience such as Brad Pitt, Jack Black, Neil Patrick Harris, Nicholas Hoult, Wayne Coyne, Russell Brand, Ant & Dec, Mark Ronson, Darren Criss, Daddy G, CGP Gray, and Brady Haran (Ziyena, 2021). The exhibition received various reviews from critics as a creative sarcasm. It shows the community's consciousness that has been hegemonized by the dominant power. It can also be understood that visitors of the Dismaland are part of culture jamming as consumer activism. Considering the nature of the culture jamming which "hijacks" the language of capitalism to destabilize capitalism itself, it a tactic and co-optation to Disneyland.

Disneyland World Dystopia

In contrast to the utopia of children's theme parks in which an imaginary society is created with highly coveted or nearly perfect qualities. Dismaland positions itself as a

creepy and frightening theme park. But, it clearly shows how the utopia imagination offered by Disneyland never materialized which is built on egalitarian principles of equality and justice. The dystopia in the Dismaland video is constructed by incorporating media to lead visitors to unpleasant and "bad" places, even it looks gloomy, shabby, and abandoned. Besides, Dismaland shows the characteristics of Bansky's work related to the tremendous deterioration of the "ideal" value in society. Disney's dystopian representation has relevant political meaning to understand culture jamming from the perspective of cultural and media studies. The movement of disruption and subversion of consumption culture through Dismaland has emphasized the importance of resistance based on the redefinition and remediation of media. Culture jamming as an expressive means is a social practice that has an affinity with contemporary social movements (Carducci, 2006).

The varied artworks at Disneyland make visitors feel a subjective experience that is very different from children's theme parks. Many visitors look disappointed, even bored. For some, the park doesn't live up to expectations, while others see the disappointing experience as the heart of a Disneyland parody. Dismaland manages to represent jokes, poor rides, clumsy security guards, unattractive artworks, and disproportionately arranged installations. It seems that the only satisfied visitors were those who saw disappointment as part of the deal and agreed to see Dismaland as a satirical insight into the state of the theme park's mainstream culture. The Dismaland can be read-only through its political messages. It covers unsatisfying messages about the treatment of immigrants, racism, economic hardship, death, and alienation.

Conclusion

Dismaland, as a form of culture jamming, has managed to redefine theme parks for children which are considered "ideal" like Disneyland. Through the art media, which is then videotaped, Dismaland presents satire and builds a satirical discourse of the community's mind that is constantly trapped in an endless consumerist ideology. "Disturbance" is shown by arranging, remediating, and representing the character and brand image of Disneyland by using language embedded in the community's minds through available artistic resources. Dismaland also presents the irony of a hegemonic playground. Visitors of the Dismaland as a part of culture jamming practice are a part of consumer activism. Dismaland is a place with boring and scary objects to reflect the cultural implications of Disneyland's theme park.

In the social analysis, some consider culture jamming as a counter-cultural idea based on capitalism as a counter-productive thing. It causes the counter-culture movement to constantly meet "failures". Culture cannot be "jammed" as it does not include "culture" or "system" as a whole. However, culture jamming can adapt to be an alternative to creative forms of resistance activist movements. It can also be understood that culture jamming does not focus on mobilizing the mass in the context of revolutionary politics that is overthrowing capitalism. But it plays an effective role as an instrument that disrupts the "status quo". Culture jamming analysis needs to consider political and economic aspects to be effective and provocative media to share the message that culture has to be tied to a larger goal. In practice, Jammers can raise broader issues by linking social, global ecological crises, gender, racism, human rights, and other issues. This paper is expected to provide a more comprehensive understanding of culture jamming to unlock subversive potential in the future.

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CULTURAL COPING MECHANISM IN FLOOD DISASTER AND DISEASES AFTERMATH: UTILIZATION OF MEDICINAL PLANTS ON KARET BIVAK CEMETERY IN URBAN COMMUNITY

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A b s t r a c t

This study concerned about urban community's experiences and responses who lived in flood plain at Karet Tengsin, Jakarta. They had been dealing with flood disaster and diseases aftermath that cause health's problems (diarrhea, common cold, Dengue Hemorroic Fever (DHF), pulmonary infection, and skin infection). The aims of this study were to understand the meaning of flood disaster and diseases aftermath from community's experiences who encountered vulnerabilities frequently. To know how they made response and strategy dealing with vulnerabilities. This study used ethnography's method which datas collecting with actor's approaches. The result showed that flood disaster and diseases aftermath had been seen as normal occurrences. When flood disaster come frequently, community had strategies infacing the diseases aftermath. One of the strategies was using medicinal plants to medicate vulnerable diseases. Medicinal plants were available free on Karet Bivak cemetery area, at the same neighborhood where the community lived. There were nine items of medicinal plants which were used for the diseases tradisionally, like *Jarak (Jatropha curcas L. & Jatropha gossypipolia L.), Saga (Abrus precatorius L), Sente (Alocasia macrorrhiza), Kamboja (Plumeria), Sigsag (Euphorbia tithymaloides), Dadap (Erythrina variegata), Waru (Hibiscus tiliaceus), Jambu biji ((Psidium guajava), and Lidah buaya (Aloe vera)*. This study concluded that utilization of medicinal plants on the Karet Bivak cemetery area to medicate the diseases aftermath, was the one of the strategies of cummunity's cultural coping mechanism to deal with vulnerability. That the culture adjusted to disaster which deal as normal occurences.

K e y w o r d s : Flood disaster, diseases aftermath, medicinal plants, cultural coping mechanism

I n t r o d u c t i o n

Background

Flood disaster was accounted for 50% of the total disaster incidences in the worldwide. The second disaster was accounted for 28% incidences were caused by water and vector borne diseases. Every year, flood disaster affected to 520 million people's lives, and caused 25 thousand people of death. When flood disaster was occured in developing and under developing countries, it could cause greater mortality and a wider disease epidemic (Shady, 2006).

In Indonesia, flood disaster occured on almost all regions in every year, both in urban or rural areas. Data from the National Disaster Management Agency (BNPB)

showed that during 1998-2004, there were 402 flood disaster, with 1.144 total mortality (Kartodiharjo & Jhamtani, 2006). During 2008 to 2017, based on data from BNPB showed that flood disasters recorded 599 incidences per year and increased into the rainy season. Flood disaster's victims averaged 194 people per year (Suprapto, 2020).

BNPB also recorded that the causes of flood disaster in several regions in Indonesia, including the urban areas in the DKI Jakarta Province, were (1) High rainfall, (2) High population and density, (3) Development of areas that were uncontrolled, not in accordance with regional spatial planning, and not environmentally visibility, causing a reduction in water catchment and storage areas, (4) Inadequate drainage system, lack of drainage infrastructure and maintenance, (5) Overflowing of several large rivers, (6) Environmental damage to the upstream area, (7) The condition of the tides when it rains causing backwater, (8) Reduced drainage capacity due to river narrowing, illegal land used along the riverbanks, (9) the river flow jammed due to piles of garbage, (10) Unclear status and function of canals (Kartodiharjo & Jhamtani, 2006).

One of impacts of the flood disaster on the community was a health problem. Flood disaster caused water and vector borne diseases. Water borne diseases such as leptospirosis, diarrhea (including cholera and dysentery), respiratory infections, hepatitis A and E, typhoid fever, infectious skin diseases, and vector borne diseases such as dengue fever and malaria (WHO, 2020). Diseases caused by the impact of the flood could be contagious, and if not treated properly could cause of death. In addition, conditions of vulnerability to diseases could reduce the quality of life.

People who consciously settled and lived in flood-prone areas such as riverbanks, they known the risks they would be faced in every rainy season, such as member of community in Karet Tengsin, Jakarta. For member of the community who were affected by flood disaster, it would be considered as a part of their daily life experience and as a normal occurrence. They would respond to flood disasters and implement the coping mechanisms in dealing with emerging vulnerabilities. They would stay on where they lived and faced the threat of the disease aftermath. Flood disaster in Jakarta was a routine occurrence, according to a historical study conducted by Gunawan (2010), showed that flood disaster in Jakarta had been a problem since the colonial era (Gunawan, 2010).

This study concerned about experiences and responses from member of community, who lived in flood plain at Karet Tengsin Tanah Abang Jakarta. How they had been dealing with flood disaster and disease which came aftermath frequently. Flood disaster can cause a wide range of health impacts to the members of community. General diseases which came aftermath the flood was diarrhea, common cold, Dengue Hemorroic Fever (DHF), pulmonary infection, and skin infection.

The aims of this study were to understand the meaning of flood disaster and the disease aftermath from the member of community's experiences who always encounter the same vulnerabilities frequently, and to know how the members of community made responses and strategies dealing with those vulnerabilities.

Methodology

This study used ethnography's method as a qualitative approach which used in anthropology to interpret qualitative datas which is related to flood disaster and disease problems in urban community. It used to interpret the relation of human behavior both collectively and individually to understanding vulnerable event like flood disaster and the diaseases aftermath frequently.

This study was conducted on urban area in Karet Tengsin, Jakarta. The area where had been choosed by the frequently experiences of flood disasters in years. Data collected by building rapport, participant observation, and unstructured interviews with historically

records were used to gain datas about experiences and responses from members of community, who lived in flood plain dealing with flood disaster and the disease aftermath frequently. Datas collected with actors' approaches, while actors as informants were the members of the community. There were 13 informants consisting of eight women and five men. The selection of informants took into accounts by the length of they had been lived in the area, the number of family members, their susceptibility to diseases that have been suffered by both themselves or their family members, and their willingness to participate with this study.

Secondary datas were also used as supporting data obtained from reports from Primary Healthcare and district's authority. Primary data were obtained from the results of participatory observations, in-depth interviews, and data triangulation which were written on transcripts and field notes by bringing up categories according to the theme, and then assembled with discourses on culture and health's theories and concepts.

Result And Discussion

The Meaning of Flood Disaster and The Disease Aftermath

As Sorensen & White (1980) and Hoffman & Oliver-Smith (2002) stated people that ussually affected by flood disaster who always lived on a flood plain area, disaster would be considered as a part of their daily lives and as a normal occurrence (Hazard as normal occurrence) (Sorensen & White, 1980) (Hoffman & Oliver-Smith, 2002). The flood disaster that had been occured every year on Karet Tengsin, Jakarta, had been considered as normal occurance by the member of community.

There were two concepts of floods based on member of community meaning. They named of big floods and ordinary floods. Big floods were interpreted of rainwater and river overflows that submerge the entire of their houses for days and then receded. Meanwhile, what was called an ordinary flood was a routine inundation that occured every year due to rainy season and overflow of river water which only inundates their environment being measured by knees and waist of adults, and water flood only entered some houses to the extent that they did not completely submerge and could recede for less than a day. Member of community in Karet Tengsin believed that big floods occured in a five-year cycle, such as those in 1996, 2002 and 2007. Even in recent years in 2020 and 2021, flood occured every year.

Whether it was a big flood cycles or just an ordinary flood that occurs every year, it was not seen as a disaster that made difficult for the community to carry out their daily activities. Even though considered to be obstacles, they were adaptable to the conditions in their environment. Member of community who had live for decades in Karet Tengsin considered prone to flooding, namely along the banks of the Karet Kalimati river, a channel from Kalikrukut.

In the big flood cycle story between women member of community in Karet Tengsin, it was revealed that every time a big flood occurred that did not recede for days, it was believed that the river would ask for human sacrifice. Therefore, they would keep their young children away from the riverbank, and not allowed to swim during the flood. River condition had invisible limit, because the overflow exceeds the boundary of the river embankment. Their experiences in every time when a big flood occured, there would be someone drown. After someone drown, the flood and the river would recede immediately.

Table 13. The Meaning of Flood Disaster

Meaning of Flood Disaster	Flood as a normal occurance
2 Types of Floods	- Big Flood Cycle
	- Ordinary Flood
Myth Story Believe about Big Flood	River Flood would take a life sacrifice, as a sign of recede

The diseases aftermath which ussually suffered by member of community in Karet Tengsin during floods were Upper Respiratory Tract Infection (URTI/ISPA), itching (infectious skin disease), diarrhea, common fever, and dengue haemorrhagic fever (DHF). Those flood disaster seaseonal diseases were recorded on nearest Primary Health Cares of Bendungan Hilir and Karet Tengsin.

Caljouw, Nas, & Prawiro (2004) stated that after the flood Jakarta became an endemic area for diseases such as diarrhea, URTI, and skin infections (Caljouw, Nas, & Prawiro, 2004). Everywhere people cleaned their houses from the mud. Most of the families whose houses were flooded lost their valuables things such as furnitures and vehicles.Even though the member of community in Karet Tengsin experienced difficulties due to flood disaster, it did not be seen as a problem, instead of relying on the benefits when a big flood occurred for their survival as a coping mechanism. For example, they were using opportunities of donations from outsider, liked equipment, food, or health assistance.

During flood disaster or in normal condition, Karet Tengsin member of community's access to health services were affordable. The area in central of Jakarta was near to many hospitals, practical doctors, and clinics. As described by Goffman (1971) that the ideal behind health services was more similar to other official services and was often realized. Patients come to the doctor of their own will, place/entrust themselves to the doctor's hands, follow the doctor's instructions, and get results that include giving reasons for their trust and costs. For sure there were certain points that were emphasized. The patient might not know the need for services, knowing his needs, he might choose another pharmacist's service, wanted to go to another health care, but he might not be able to; although capable, he might choose many options before going to a particular doctor, and seek treatment for him, and he might not follow the advice which the doctor gave him; patient could also follow the doctor's advice and find the situation somehow alleviated, but not fundamentally changed (Goffman, 1971). Member of community had a free will to explain about their behavior to choose medication. Because of their experiences about the flood disaster and the diseases aftermath, they had their own meanings in their culture.

The diseases aftermath was related to community's concept about water itself. Flood disaster had been seen as water concept that could clean and wash every dirts, even they seen water of flood as dirty too. When flood disaster occured, they also wasted their trash to the water flow, and still doing defication activity on the riverbanks. Agreed with Landy (1977) that described the flood diseases aftermath which suffered by member of community would be faced in various ways to deal with, so that they could adapt successfully. Even if the death might come, various ways have been done to avoid it. Sickness was a part of life itself, which was a manifestation of life under certain conditions (Landy, 1977).

Table 14. The Meaning of the Diseases Aftermath and Health Seeking Behavior

Types of the Disease Aftermath	Meaning by Member of Community	Health Seeking Behavior
URTI	common cough and cold, not serious disease	1. Self medication by using traditional medicinal plants 2. Self medication by buying general medication on store 3. get medication from PHC or hospital nearby
Skin Infection Disease	Itchy caused of dirty water flood.	1. Self-medication by using antiseptic soap or traditional oil (*minyak tawon*) 2. Get medication from flood emergency healthcare's volunteer
Common Fever	Fever in two days	1. Self-medication by using traditional medicinal plants. 2. Self-medication by buying general medicine on store. 3. get medication from PHC or hospital nearby
Diarrhea	Stomachache caused of dirty water flood, with liquid defication continuously	Self-medication by using traditional medicinal plants
DHF	Long term fever	get medication from PHC or hospital nearby

The diseases aftermath that occured after flood disaster in Karet Tengsin, Jakarta that had been seen and meaned as normal occurence, caused of the routine's incidence and the ability of human adaptation. But what is the meaning of disease itself? Winkelman (2009) stated that the threat to the human health was already discussed as Malady. Malady descibed about unwanted human health condition and live dangerous. Health malady condition caused by many things like bacterias, viruses, candidas, behavior, and/or psycological condition (Winkelman, 2009).

Table 15. Malady Concept

Malady Concept		
Disease	**Illness**	**Sickness**
Medic	Personal	Social reality
Biological problems that involve abnormalities in the structure, chemistry or function of the body	The patient's experience of something that is wrong is happening, a feeling of being disturbed by circumstances that are thought to be favorable to cause disease or causes due to cultural beliefs	Focuses on the consequences of a person's social response.

Sources: (Winkelman, 2009), (Notoatmodjo, 2003)

Utility of Karet Bivak Cemetery Area during Flood Disaster

The Karet Bivak Cemetery had a land area of 16.2 hectares, directly adjacent to the residents of Karet Tengsin. Some residents lived in semi-permanent houses in the cemetery area. Even though they lived in cemetery area, they were feeling lucky when big flood disaster occured. They never been impact by floods, because its location was higher than other areas in Karet Tengsin. Their houses were spared from drowning, while other residents whose position were below were flooded. When big floods occured,

member of community evacuated to Karet Bivak cemetery area. They built emergency tents and slept on the burial ground. In Karet Bivak Cemetery, there were two wells and a public bathroom that were not affected by the flood that inundated the area below.

The Karet Bivak Cemetery area was indeed used as a Water Infiltration Area. Water sources in the cemetery area were never dry. In terms of public policy where cemetery area was included in the scope of open green space (*RTH/Ruang Terbuka Hijau*) which was included in the Spatial Planning Law Number 31 article 1. RTH was an open space where various functions could take place according to planning. As well as the design, namely such as urban parks, land conservation (soil, water and other natural resources) such as urban forest parks, as well as the aim of maintaining aesthetics according to historical cultural values. This group includes the Public Cemetery (Hasni, 2009).

The Karet Bivak Cemetery area was included in the conservation of RTH as a water catchment area by the government of Jakarta Province. For this reason, the Government used a policy of plakatization of headstones on all graves, to replace all grave headstones into inscribed stones only, not allowing buildings on the tombs. Government has already replaced 2,000 headstones with the new one, plain not tiled and gray as the tomb. The program served to increase water resistance in Jakarta and eliminate the impression of horror that the community had regarding funerals (Dis, 2009). This policy also protected medicinal plants that grow wild or were deliberately planted by local residents for the availability of free herbal medicines. As a water catchment area, the Karet Bivak cemetery area was a buffer for rainwater, even though the surrounding areas were flooded.

For member of community of Karet Tengsin, the Karet Bivak cemetery area was not just a burial ground. There were ties between member of community and the Karet Bivak cemetery. Some of the residents got income from the cemetery area. When big flood disaster occured, Karet Bivak cemetery area become a temporary residence for member of community whose entire houses were submerged in water. Karet Bivak cemetary area also hold many plants for ingredients of traditional medicinal plants.

Flood disaster has been seen as normal occurrence, and so as with diseases aftermath. When flood disaster come frequently, members of community have many strategies infaced the disease aftermath. One of the strategies was using the herbal medicine to medicate their vulnerable disease. Herbal medicine plants were available free on 16.2 ha Karet Bivak cemetery area which were still on the same area where the community lived. There were nine items plants which were used by the members of community for medication the diseases tradisionally, like *Jarak (Jatropha curcas L. & Jatropha gossypipolia L.), Saga (Abrus precatorius L), Sente (Alocasia macrorrhiza), Kamboja (Plumeria), Sigsag (Euphorbia tithymaloides), Dadap (Erythrina variegata), Waru (Hibiscus tiliaceus), Jambu biji (Psidium guajava), and Lidah buaya (Aloe vera)*.

Table 16. Utility of Medicinal Plants in Karet Bivak Cemetary

Plants	Part of Plants	Utility by Member of Community's Experiences	Efficacy
Saga (*Abrus precatorius L.)*	leaf	for the treatment of heartburn, sore throat, and mouth sores. Raw Saga leaves chewed.	saga leaves were efficacious for treating mouth sores, anti-parasitic, anti-inflammatory, relieves coughs, heartburn, and useful for blood circulation (Hariana, 2009b).

Plants	Part of Plants	Utility by Member of Community's Experiences	Efficacy
Jarak (Jatropha curcas L. & Jatropha gossypipolia L.)	leaf	For treatment of diarrhea, bloating, colds to babies Jarak leaves were crushed and then rubbed on babies' belly.	Jarak is useful as a blood circulation, anti-inflammatory, stops bleeding and relieves itching. Jarak Ulung is useful as a fever-reducing, anti-inflammatory, laxative (constipation) and eliminating appetite (Hariana, 2009a).
Guava/*Jambu Biji (Psidium guajava)*	Leaf and fruit	For treating adult's diarrhea and DHF. guava leaves were mashed and squeezed and filtered up to one glass. Drink it twice a day, one glass each until the intensity of diarrhea or diarrhea decreases and stops. Guava fruit is known to treat dengue fever	Guava leaves treated for digestive problems (stomach and intestines), pain, and heal wounds.Guava fruit contains vitamin C, fiber and antioxidants (Yovita, 2020).
Frangipani/ *Kamboja (Plumeria)*	flower	To avoid mosquito bites and minimize susceptibility to dengue fever, residents use frangipani flowers as a mosquito repellent. Some flowers are squeezed and smeared on the body; the fragrance of frangipani flowers is not favored by mosquitoes	Antipiretic, antidiuretic and antitusive (Hariana, 2011).
Dadap (Erythrina variegata)	leaf	To treat fever in children "*Acian*" to treat fever, take plain dadap leaves (*dadap serep* = Java) mashed with a mixture of onions, then carve it all over the body, after that there is no need to take a shower. In addition, dadap leaves to treat colds, by being used as a *tapel* (rub) on the stomach.	reduce fever (antipiretic) and efficacious to cure rheumatism (Sehat, 2016).
Waru (Hibiscus tiliaceus)	leaf	For fever mash it and then apply it to the child's body, as is the use of dadap leaves. To nourish hair, smooth it with water, then apply it on hair, let it sit for a while, then rinse and shampoo it.	In traditional medicine, hibiscus root is used as a coolant for fever, hibiscus leaves help hair growth, as a cough medicine, a medicine for diarrhea with blood / mucus, and tonsils. Flowers are used to treat trachoma and colds (Edison, 2001).

Plants	Part of Plants	Utility by Member of Community's Experiences	Efficacy
Lidah Buaya (Aloe vera)	leaf	For heartburn, sunburn, hair sprinkling and for cold drinks.	Aloe vera can be used as an anti-inflammatory, laxative, parasitic, and repair the pancreas. To treat headaches, dizziness, constipation, seizures in children, malnutrition, whooping cough, vomiting blood, diabetes, hemorrhoids, shedding menstruation, and fertilizing hair (Hariana, 2011).
Sente (Alocasia macrorrhiza)	stems	for external medicine, namely for the spread of skin diseases. Lumbu (stem) is cut and then burned so that the water is released, lukewarm is applied to the wound or itching.	the Sente plant is useful as a fever, anti-inflammatory, swelling remover, overcoming influenza, fever, malaria fever, acute diarrhea, typhus, rheumatism, vaginal discharge, pulmonary tuberculosis, glandular tuberculosis, ulcers, ringworm, scabies, overcoming bite effects snakes, dogs and insects (Hariana, 2009b).
Sigsag (Euphorbia tithymaloides)	roots	for aching pain, rheumatism, rheumatism due to cold air. The roots that spread in the grave are made of jamu pegel-pegel, rheumatism, mixed with *suji* leaves, boiled and drunk, usually immediately subsided after drinking the concoction.	The sigsag plant was useful as an anti-inflammatory, eliminating swelling, stopping bleeding, reducing heat, cleaning toxins, boils, ulcers, ulcers, fractures, bleeding wounds, centipede bites, centipedes and for red or swollen eyes (Hariana, 2011).

Traditional medicinal plants' utilization had been known from generation to generation by member of community in Karet Tengsin. There were also introduced to women in Karet Tengsin as a Family Medicinal Plants' Program (TOGA/*Tanaman Obat Keluarga*).

Sorensen & White (1980) and Hoffman & Oliver-Smith (2002) stated community that frequently hit by floods, they would be considered that flood disaster as a part of their daily lives, as a normal occurrence. The community responded to changes and had a strategy to survive where they lived and faced the threat of disease aftermath. When a flood becomes a routine event, the disease aftermath becomes a routine event as well (Sorensen & White, 1980) (Hoffman & Oliver-Smith, 2002).

Regarding response and strategy, Bennett (1976) explained the coping mechanism for vulnerability at individual and group level. Humans were seen as organisms that acted actively in relation with environment. Behavioral adaptation had meant a coping mechanism that humans describe to get what they want or adapt their life to their surroundings, or the surrounding environment with human life and goals (Bennett, 1976).

Coping mechanism had been shown by the individual in their life span. The quality of coping differed from one individual to another, since it involved elements of cognition. Adaptation had different meanings depending on the level of the individual or

group as the discussion. Adaptation at the individual level, emphasized reduction, reduction of anxiety, feelings of accomplishment, or feelings of achieving desires to the end. Meanwhile, adaptation at the group level emphasized the adaptation of choices made by standards in dealing with situations that exist in cultural groups. Adaptation was generally defined as the process of allowing survival as a satisfying term to reduce stress, similar to learning to deal with change as a result of adaptive responses.

In the social context explanation, adaptive behavior could be seen as innovation, seeking change, producing new ones, or being conservative and tolerant. Individuals and groups adapted by finding new solutions to new and old problems; or perhaps adapting by learning to live with the situation and reducing anxiety about it or adapting other behaviors to the prevailing reality. To some extent, adaptation differs between societies. Humans would not be always the same voluntary or dynamic in their adaptive strategies, but these tendencies exist and tend to strike a balance.

Regarding to human responses and adaptation strategies to disease, Landy (1977) revealed that humans everywhere, at all times and places, and in all forms of social and cultural organization, were always associated with disease. Disease in humans has always challenged the ingenuity of humans both individually and in groups to find ways and forms of disease prevention, control and treatment. Sigerist in Landy (1977) stated that disease was a part of life itself, a manifestation of life under changing conditions. There was a close relationship between disease, medicine, and human culture, where culture was the response made by human groups to deal with disease and trauma as a successful adaptation (Landy, 1977). In line with Landy, Winkleman (2009, p.264) states that culture and its resources are useful for mediating pressures and accessing resources to produce human health through adaptation to the environment (Winkelman, 2009).

There were many strategies used by humans to solve environmental problems based on the information and skills they had already learned. Children learnt from adults how to obtain food, avoid hazards, create safe protection against the weather, and use rough materials for tools. They did not inherit this information genetically, and if a child was abandoned from the group, it would be very unlikely for him to learn all of this through trial and error. Every human generation must learn the basic survival techniques of the previous generation through a process of cultural transmission. The content of cultural adaptation differs from population to population and from generation to generation. The cultural complexity of ideas, techniques, strategies and rules built across many generations encompasses more knowledge and ideas than an individual can learn or need to learn. Living in a cultural system, humans have a set of knowledge, skills, and innovative ideas in various solutions. Change also occurs through selective storage of new ideas and techniques that consider the effectiveness of groups or individuals in dealing with problems, including situations that threaten the integration of groups and themselves. These new ideas may be created in groups, but often they borrow them from outside. Adaptation in this context extends beyond ecology, involves adjustments and changes that increase group competence and safety, regulate community stability, and protect the physical and emotional health of individuals (McElroy & Townsend, 1996).

Johnson and Sargent (1990) stated that cultural adaptation to disease includes behaviors and beliefs that serve to limit morbidity and mortality in two ways, namely: (1)Some behaviors and beliefs had a preventive function to reduce exposure to disease organisms for certain segments of society, (2) Involves existing therapies to treat disease, commonly known as ethnomedicin (Johnson & Sargent, 1990). When a threat come continuously, the incident would be considered as a normal experience, which according to Anderson in Bankoff (2001) had been called the normalization of threat, and by

someone it would be transmitted to others as part of of cultural knowledge (Bankoff, 2001). Bankoff (2003) stated that the possibility behind the vulnerability of a society was a culture that had the ability to adapt (culture's adaptability) (Bankoff, 2003).

Conclusion

Members of community in Karet Tengsin Jakarta's responses in dealing with diseases after flood disaster occurred, was to treat the symptoms by stages as treatment at home (remedy), bought medicines from store, or got medical treatment from healthcare. When big flood disaster occured, the free medical treatment provided by health emergency's volunteer. Infacing flood disaster and diseases aftermath, they were not thinking about the unfavorable things, but the beneficial things from where they lived, and made availibility of all the facilities around them to deal with floods and diseases aftermath. They mainly used the knowledge of medicinal plants as natural remedies, which various of medicinal plants available in Karet Bivak cemetery area nearby to where they lived. Utilization of medicinal plants at Karet Bivak cemetery area to medicate the disease aftermath tradisionally, was the one of the strategies of coping mechanism by members of community to deal with vulnerability that the culture adjusts to disaster which deal as normal occurence.

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READING THE SIGNS OF THE TIMES: CHRISTIAN APOCALYPTICISM AND THE CONSPIRACY OF THE COVIDIANS

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A b s t r a c t

T his study concerned about urban community's COVID-19 Pandemic provoked conspiracy theories and for some religionists, initiated the sequence of end time (*akhir zaman* or *hari kiamat*). The present paper delved into the meaning of pandemic for some Indonesian Christians, notably among those who understand the crisis as part of the God's eschatological scenario. Eschatology is discourse of end time (*eschaton*), prominent notably among the Abrahamic traditions. The eschatological aspiration oftentimes is overlapping with the discourse of interpreting the secret of God's mystery, which is within the purview of apocalypticism that created the academic discourse of *apocalyptic eschatology* - in short *apocalypticism*. The overlapping mostly informed by the interpretations of some biblical passages, notably the Book of Daniel (*Kitab Daniel*) and Revelation (*Kitab Wahyu*) in Christian Bible, which embraced both discourses. There are several versions of Christian apocalyptic narratives but in general incorporating the Second Coming of Christ and welcoming the messianic age. Conflation with the wide spread conspiracy theory, such as displayed by the anti-vaxx discourse and the proponents of Trump, which the conversation echoed as well among Indonesian Christians, further gravitated the narrative of the emergence of Antichrist force, as the main opposition to the "true" Christianity in the end time. The paper is focusing on the dynamic of the discourse manifesting in four cases as the representations, all to emphasize the significant contribution of digital culture in mobilizing such religious aspiration. The exploration further clarified through the interviews with the proponents of apocalyptic eschatology from two theological positions. The findings among others disclosed the subtext of the apocalyptists such as through the discourse some Christians comprehend the global effect of pandemic, the appeal of the acceleration of evangelization, and the subversion toward secularism and anti-Christian forces.

Keywords: Christian apocalypticism, eschatology, conspiracy theory, COVID-19 conspiracy, Indonesian Christianity

"Tell us," they said, "when will this happen, and what will be the sign of your coming and of the end of the age?" - Gospel According to Matthew, 24.3 (NIV).[1]

INTRODUCTION

Background

The present paper is a research report and an exploration of the meaning of *apocalyptic eschatological* narrative (*akhir zaman* or *hari kiamat*) among Indonesian Christians, first of all in the context of pandemic, moreover, in the context of digital mediatization of religious expression. This work, however, is not a biblical commentary

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[1] All the biblical passages are taken from New International Version (NIV)

(*tafsir Alkitab*) that assesses the subject's perception of biblical apocalypticism. Biblical commentary on the subjects is legion, though, the paper could not entirely escape from it. It may appear in the most relevant points.

To simplify the discussion and concurred with the popular understanding, the discourse of end time is understood within the term *apocalyptic* and *apocalypticism* - e.g. as per definition provided by Merriam-Webster Dictionary (2019) it means, "a doctrine concerning an imminent end of the world and an ensuing general resurrection and final judgment." A proper explanation of this choice is provided in the next part.

While the apocalyptic aspiration thus far remained at the fringe of Indonesian Christianity and the consequences are insignificant in the public space, compared to Muslim apocalypticism (cf. Fealy, 2019) and such discourse in the United States, it may be expected to contribute some insights on religious expression in the accelerated digital world during the pandemic. Firstly, it may broaden our understanding of the particular response of the religious community to the pandemic. Furthermore, it may say something on the evolvement of the discourse within the curfew of religion online, and eventually, it helps us to understand the contemporary dynamic of Christian apocalypticism as understood within two religious' modes, i.e. intellectual affirmation that is more visibly among the Ecumenical and most of Evangelical churches, and on the other hand, the emphasis on experiential appeal, displayed mostly by many Pentecostal, Charismatic, and independent churches (see the dynamic of Christian denominations in Aritonang, 2018). The discourse of apocalypticism to a certain extent heightened the denominational demarcation but on the other hand there were also fluidity beyond those lines, in which the apocalyptic appeal and urgency displayed by the interdenominational subjects. The example was the aforementioned Whatsapp message that was residing in a WAG that the members came mostly from the Protestant churches, leaning to Ecumenical outlook.

Methods and Methodology

The research was initiated by a number of Whatsapp messages, appeared in my Christians' Whatsapp Groups (WAGs). Then it followed up through the socmed links appearing in those messages or having the replication from it. Furthermore, the observation was directed at several YouTube video postings, and lastly, by chance the data was sought as well from some TikTok postings.

The material objects were selected from 40 Whatsapp messages in three WAGs I am subscribed with, within the period March 2020 to January 2021. Seventeen YouTube postings were part of the observation, and additional 30 other postings in Facebook and blogs, two editions of *Bahana* Christian magazine (1997 and 2000), which published special editions on apocalypticism, and other sources. Three TikTok postings were selected among several others that might indicate certain apocalyptic aspirations. Out of those numbers and regardless of a number of topics that can be explored, I decided to probe four representations, while considering insights from other data feeds as well. Those are a Whatsapp message, one TikTok account, and two YouTube accounts.

The research also sought insights through interviews from two informers, i.e., Rev. Janni Lewi from *Sekolah Tinggi Teologi Injili Indonesia* (STTII, Indonesia Evangelical Theological College), and Rev. Stephanes Irawan from *Gereja Masehi Adven Hari Ketujuh* (Seventh-Day Adventist Church). The importance of two informers as they came from two apocalyptic theologies, the former from Dispensational Evangelical theology, which is the most influential apocalyptic theology as we shall see. The latter

was coming from a Christian denomination that evolved from a certain version of Christian apocalypticism.

The significance of Whatsapp in this regards is because it is one of the most popular instant messaging applications - by October 2020, the third of the most-used social platforms, after Facebook and YouTube, with two billion users (We Are Social, 2020b, p. 50), and second for Indonesians after YouTube (We Are Social, 2020a, p. 43). Whatsapp provides relatively secure privatized public space, or *public sphericule* (Gitlin, 1998), through which the gossips, and other subversive talks, message reposting, either from the mainstream or partisan media outlets are running, hence expectedly provided candid discussion and religious agenda. Nevertheless, it was limited in scope as it is not easy to join WAGs without invitation from the group admins.

Literature reviews were conducted toward the most relevant books from the apocalyptists and evangelist such as from Harold Lolowang (2008, 2010), Rev. Robert Robinson (2020), those who wrote and interviewed by *Bahana* magazine (1997 and 2000 editions), and the late Morris Cerullo (2002). The references of conspiracy theory and the apocalyptic discourse and theorization appeared in the following discussions.

Apocalypticism and eschatology are two separate discourses that interrelated to each other. Among many proposals, I took the definition of apocalypticism as a "phenomenon of the disclosure of heavenly secrets in visionary form to a seer for the benefit of a religious community experiencing suffering or perceiving itself victimized by some form of deprivation" (Hanson, 1992, p. I: 279). The term derived from the Greek, *apokalypsis*, "revelation" or "disclosure." The aforementioned definition has framed us that such aspiration is associated with the human crises, hence COVID-19 pandemic served as a perfect context for apocalypticism.

Eschatology on the other hand is teaching or discourse of "the last things" and "it refers to a time in the future when the course of history will be changed to such an extent that one can speak of an entirely new state of reality" (Petersen, 1992, p. II: 575). Both discourses are prominent in many religions, but Judaism and Christianity are distinct in developing them, in particular because historically Second Temple Judaism and early Christianity were deeply affected by the early form of apocalyptic eschatological discourses (see full discussions e.g. in McAllister, 2020). In modern times both discourses are often confused with each other, as the heavenly secret revelation might be including the nature and features of the end of human history, the discourses epitomized and simplified by the term *apocalypticism*. From this on, we testified the derivative term emerged, which is the definition not so strongly guarded, the term of "secular apocalypticism" to refer to the non-religious discourse of the natural and socio-political devastation or the vision of a perfect future. The feeling of a version of an end of history hardly a religious monopoly discourse. A score of intellectuals and political movements of the eighteenth and nineteenth centuries, preached the coming era of "reason, freedom, and progress," hence proclaimed the culmination of human history, as a version of "secular eschaton or millennium" (Toft et al., 2011, p. 68). This version furthermore was conversed through the notion of "end of ideology" by Daniel Bell (Bell, 1988), which further manifested in the idea of "the end of history" by Francis Fukuyama (Fukuyama, 1992; see also Derrida, 2006, p. 17) and "clash of civilizations" by Samuel Huntington (Huntington, 1993, 1996; cf. Barkun, 2006, p. 17). To the latter, "apocalyptic" vision was associated with the revival of global Islam (Lewis, 1990).

The analysis rests upon discourse analysis, notably through Baktin's theory of dialogism (Bakhtin, 1984). Dialogism in this sense is different from the popular buzzword of public dialogue, which has a strong appeal in the interfaith encounter in Indonesia. It

is more on the acknowledgement of the interactivity of text, or utterance, and its social character. It furthermore is an interplay of mutual challenging or contesting narrative or utterance among the social agencies. Dialogism may appear as a provocative interaction and exchange that often has the effect of testing assumptions and preparing or imagining for further social transformation. In this regard, apocalyptic discourse is a subversion toward what would be a dominant narrative.

A final note. *Covidian* as a neologism related to the COVID-19 pandemic context, provided by Urban Dictionary (Urban Dictionary, 2020) and Peter McLaren (McLaren, 2020). Urban Dictionary defined it as a derogatory to "someone who has elevated COVID-19 prevention or mitigation to the point of a religious persuasion." McLaren on the other hand, related it as a pun of the Waco-based religious extremist group, Branch Davidian. Hence, Branch Covidian, for him, is a negative effect of American Christian Conservatism in relationship with the pandemic. My usage of the term is relatively closer to McLaren to emphasize the unique apocalyptic narrative upon the pandemic.

Theoretical Framework

There are two kinds of relationships between the notion of apocalypticism and eschatology, i.e. *prophetic eschatology* and *apocalyptic eschatology*. The former is referring to the understanding of historical events through the mythical (or we can say theological) language. The latter is a way around a mythical (or we can say cosmic) mindset that is exposed into the concrete historical events (Jindo, 2005; replied by DiTommaso, 2006). While apocalyptic eschatology seems dominant in the present research project, in fact both conditions were well represented among data engaged and often appeared overlapping. It means that for some the pandemic context since the onset is understood as the continuation apocalyptic drama, while for the other is a moment to respond theologically and ethically in the proper way, and indeed some others appeared in hybrid versions as well.

The famous remark by German theologian Ernst Käsemann sixty years ago still haunts Christian theology up until the present day. He asserted, "[a]pocalyptic … was the mother of all Christian theology … apocalyptic is the real beginning of primitive Christian theology" (Käsemann, 1969, p. 40). Beyond theological discussion, Käsemann suggested apocalypticism is part of early Christian identity hence along the course of history the aspiration would appear and reappear again.

The problem rests upon what kind of apocalyptic discourse is offered. As critically observed by Latour, Modernity to certain sense influenced the notion apocalypticism by putting the possibility to immanentize the end time (*eschaton*) (Latour, 2017) - later appeared in the struggle between futuristic apocalypticism holding by some section of Evangelical Christians and historicized apocalypticism, which with portion of spectacularism and sensationalism appeared in commodified and an easy-to-prey of conspiracy theory. Latour drew his complex idea from German American historian, Eric Voegelin who once remarked "such an immanentist hypostasis of the eschaton, however, is a theoretical fallacy" (Voegelin, 1987, p. 120), later on popularized by a conservative public intellectual, William Buckley, "don't immanentize the eschaton." The issue at hand then, the extent of immanentization of apocalyptic discourse by Christians in the context of pandemic.

The research on apocalypticism, in particular Christian apocalypticism, was matured. It was first of all part of biblical studies and the study of early Jewish-Christian interactions. Within theological discipline the research on the subject, notably as apocalyptic literature are legion. To name the least the works of John Collins (e.g. 1998),

two-volume collections of non-canonical scriptures, edited by James H. Charlesworth (1983, 1985), and among the younger scholar we found the extensive works of Andrei Orlov (e.g. 2017).

Beyond theology, which is more pertinent for the present undertaking, in particular apocalypticism as modern religious movements, many are justifiably focusing on the phenomena among American Christianity, or American culture at large. I found the works of Stephen Spector on Zionist Christians (2009), Michael Northcott on the apocalyptic imageries exploited by President George W. Bush in enhancing the agenda of War on Terrorism (2004), Michael Barkun on relationship between Conspiracy Theory and Christian Apocalypticism (2006), Sarah Posner on relationship between White American Evangelicalism with former President Donald Trump (2020), and Joseph Uscinski on the politics of Conspiracy Theory, including during the tenure of President Trump and its relationship with Christian apocalypticism (2020). The present research is following the aforementioned work's steps and attempting to contextualize their insights in Indonesian context, notably among the Christians.

According to Hummel, American Evangelicalism influenced not only theological landscape, but also cultural, and political lives (Hummel, 2020, p. 288). Benjamin Park observed that "[t]he United States of America was to be, beyond anything else, a Christian refuge from a fallen world. … In a world of growing secularism, the United States is presented as a last refuge for explicit Christian devotion. The country's religious nationalism has even made possible one of the unlikeliest of alliances: the loyalty between evangelical ministers and Donald Trump" (Park, 2018; McLaren, 2020).

Among Evangelical Christianity roughly there are three positions of eschatology, i.e., Premillennialists, Postmillennialists, and Amillennialists. Premillennialist argued that Jesus Christ will return before the thousand years Kingdom prophesied by the book of Revelation. Postmillennialists understood that the church is evolving in fulfilling the coming Kingdom of God, until the coming of Christ. However, the Ammillennialists argued that there is no millennium kingdom but a figurative sense. When Jesus is coming, the church will immediately usher into the new heaven and earth (Blaising et al., 1999, p. 7).

The sub-narrative includes the end of human history, great tribulation for the faithful, the emergence of anti-Chrisian force (Antichrist), and one thousand years of the Christ reign, which is called *millennialism*. Global catastrophe, including major wars, natural disaster and plague - epidemic and pandemic in modern sense - are mandatory for ushering the end time. For some, the prominent position of modern state of Israel is formative. While there is a huge spectrum of interpretation among Christian branches, the narrative is embedded among certain Christian theologies, such as Dispensationalism and formative for some other Christian denominations, such as Seventh-Day Adventists. The spectacular and historicism version is prominent in public space, beginning in the United States, rendered in Indonesia among, though not exclusively, Pentecostal and Charismatic Christianities, and through social media immersed interdenominational among other Indonesian Christians.

Premillennial Dispensationalism Theology

There were a number of end time understanding among the Christians, let alone the prophetic and apocalyptic version of eschatology, Premillennial Dispensationalism theology among the American Evangelicalism is one formative agency in shaping the discourse of apocalypticism globally, including in Indonesia. It is a complex movement with a number of branches of ideas and institutions that I could not properly address in

the present paper. However, in its traditional understanding and through the specific reading of the Bible, it understood the world history divided into seven dispensations (hence Dispensationalism): *Innocence*, *Conscience* or *Moral Responsibility*, *Human Government*, *Promise*, *Law*, *Church* and *Kingdom* (Scofield & Rikkers, 2002, pp. 4; inset). To put simply, the Dispensationalist took biblical prophecy seriously. It "finds the historical meaning of biblical prophecy relevant for understanding God's purpose for the earth and for its human inhabitants" (Blaising & Bock, 2000, p. 18).

Dispensationalism is a premillennialist movement that holds a belief that the second coming of Jesus Christ will take place before the promised one thousand years of the fulfilled Kingdom of God. Before the return of Christ to the world, there will be a troubled period called *Tribulation* in which the Antichrist figure appeared to make trouble with the Christians. For the true faithful they will not live under the spell of Antichrist because right before his (thus far Antichrist is male figure) appearance, they will be saved through the process of *Rapture* (*pengangkatan*) to the clouds, welcomed personally by Jesus Christ.

One important detail that makes this theology influential is the status of Jews and the modern state of Israel. Both played prominent roles in the apocalyptic construction, as biblical prophecies largely discuss the fate of Israel. Hence, unlike other Christians, which the attitude toward Jews and Israel are complicated, in general Dispensationalist take Jews and Israel outrightly the truest inheritor of God's promise and prophecies, which divide clearly between prophecies to Israel and prophecies to the Church (J. Lewi, personal communication, November 29, 2020). Indeed, a large part of Dispensationalists are supporters of the modern state of Israel. Because without Israel returning to the promised land, the sequence of apocalyptic events could be initiated. Though this is not exclusively Dispensationalist, the fulfillment of prophetic promise and apocalyptic event is related as well with global evangelization, including evangelization among the Jews.

Finally, there are two versions of Dispensationalism, the futurist-progressive Dispensationalism, and historicist. The futurist holds that since the Church underwent Rapture during the Tribulation, it is impossible for Christians to identify the present events as Tribulation. They catapulted the apocalyptic event to the future and beyond the human calculation. Though, indeed they believed, considering the devastation of global quality of life that the historical process gradually is leading to the fulfillment of biblical prophecies (J. Lewi, personal communication, November 29, 2020). In contrast, the historicist holds the beliefs that we can sense the historical events that lead to Tribulation and Rapture. Such position that put the apocalyptic moment at odds as earlier mentioned, there is a tendency to "immanentize the eschaton" hence could easily slip into sensationalism, spectacularism, but at the same time popularizing religious apocalypticism (Blaising & Bock, 2000, pp. 18–19). To the latter many books translated into Indonesians, hence provided an intellectual base for Indonesian apocalypticism (e.g. Lindsey, 1977; Ryrie, 1981, 2005; Walvoord, 1996, 2003; LaHaye & Jenkins, 2010; cf. the responses to the discourse Wijayanto, 2009, pp. 105–108; Burge, 2010, p. 290; satuharapan.com, 2014).

Between Conspiratorial Politics and Conspiracy Theory

Like earlier histories, COVID-19 pandemic initiated new conspiracy theories as it heightened the existing one. It prolonged the historical racism and created a new one, embodied in a group such as QAnon (Uscinski, 2020, p. 8; Žižek, 2021, pp. 151–152). The new theories targeted for instance, Chinese, not only as the origin of the spread, but also as a technological giant, evidently in 5G conspiracy (Ahmed et al., 2020), and as

cultural and ethnical denotation that impacted Eastern Asians and other "Oriental" look people in the Western countries (Kim, 2020). Historical antisemitism, Islamophobia, anti-Black, and anti-minorities were simply amplified during these dark hours (Cassen, 2020; Sahoo, 2020; United Nations Human Rights, 2020), in which "traditional" conspirators such as The Freemason and Illuminati, despite their mundane history, enjoyed transcendental popularities (Isbouts, 2017, pp. 56–59, 62–65).

As observed by Bale and others, in times of crises such conspiracy met the social and psychological function as it helped people to comprehend the complicated cause and effect of human affairs, through reductionism, totalizing and oversimplifying the matters. The theorists believed in the monolithic, unrepented, omnipresent, omnipotent conspirators, overlooked nuances and complex subject situations. The theory further helping them to make a comprehensible identification of the source of the problem, and finally, by personifying and contextualizing the subject of conspiracy, it gives people degree of "control" and "safer" over the situation (Bale, 2007, pp. 50–53; cf. Dagnall et al., 2015; Douglas et al., 2017).

Still, Bale differentiated between conspiracy theories with mundane political dynamics, which he termed "conspiratorial politics." It is accordingly, a "hidden or disguised and often deleterious in their impact, simply does not correspond to the bleak, simplistic image propounded by conspiracy theorists." He further asserted that, "Far from embodying metaphysical evil, it is perfectly and recognizably human, with all the positive and negative characteristics and potentialities that this implies" (Bale, 2007, pp. 53–54). Conspiratorial politics appeared in for instance the indication of Chinese covering up the earliest moment of COVID-19 spread that in many ways the evaluation was not based on social, cultural or religious prejudice, but from complicated and informed assessment of the case. Nevertheless, extreme political view might be a fertile soil for conspiracy theories (cf. van Prooijen et al., 2015), such as displayed by pro-Trump politicians and right wing Americans. Trump's relationship with the Alt-right (alternative right), a predominantly White, conservative, evangelical Christian group is evident (see Posner, 2020; Uscinski, 2020), continuing the earlier history of Christian conservatism and apocalypticism (Barkun, 2006; Spector, 2009).

RESULT AND DISCUSSION
Immanentized the eschaton #1: Coronavirus and 666

Since March 2020, several Whatsapp messages have been circulated among Indonesian Christian Whatsapp Group (WAG), evidently attempting to relate COVID-19 with the nearing end time. A message received by April 23ʳᵈ is suggestive in this regard. It was a quick summary of three subsidiary messages: one on the relationship between pandemic and the emergence of Antichrist - the ultimate anti-Christian force or figure. A longer message was on evangelism in Argentina, and lastly the prophecy (*nubuat*) on Global Pentecostalism, a projection to a new Christian revival during the pandemic. While seemingly only two relevant to our discussion, moreover all of them are interconnected and its presentation in single message was well crafted. The extent of distribution of the message cannot be gauged but presumably filled up many Christian WAGs and reshared by the enthusiasts.

The first lines of the message are crucial through the heading "Steve Ciocolanti just uploaded that NWO (New World Order) and the sign 666 (Wah13) is in fact initiated through the plague [i.e. COVID-19 pandemic]" (*Steve Ciocolanti baru sj mengupload bhw NWO (New World Order) & tanda 666 (Wah13) sebenarnya telah dimulai melalui*

wabah ini). The message was referring to Pastor Cioccolanti's YouTube posting on April 19, 2020 entitled "BREAKING: It's Happening...Total NWO Control | Anti-Christ Beast System 666" (Steve Cioccolanti & Discover TV, 2020) which disclosed the unholy partnership between Apple technology company and, of what he allegedly "Antichrist's" COVID-19 tracing technology. Steve Cioccolanti is a pastor of Discover Church and Discover Ministry, a Melbourne-based Christian institution, and also an active YouTuber. He was converted to Christianity from a Thai Buddhist family. With 55.6K, 319K and 21.4K of YouTube and Twitter followers of his personal and institution respectively, he was one of pro-Trump global Christian preachers outside the United States. He could be classified as per Ruth Graham of the *New York Times*, one of the raising "prophets" among the American Christianity (Graham, 2021); which I argued the phenomenon is not limited to United States alone but echoing throughout global Christianity as well, including to Indonesia (cf. Christina, 2020).

The following line of the aforementioned message asserted that "[t]here are countries applying vaccine cards" (*Ada negara yg sdh akan memulai penggunaan kartu vaksin*). It is interesting to read such prophecies in the present context where vaccination is already a global commitment, including by Indonesian government, which the author of the message was seemingly on the side of the anti-vaxx campaign that tried to obstruct it. The fear of body intrusive substance through vaccines is in a plane with the earlier discussion of chip injection.

The latest episode was the fear of luciferase enzyme in the vaccine, which will immerse into the human DNA, even changing the DNA structure, and in the end let the receptor to be controlled by the New World Order, the Antichrist system. Such fear has been countered by many independent churches (e.g. Real Talk with Michael Gunawan, 2021; Truth.id, 2021). Stretching period of the pandemic indeed suffered the element of spectacular and sensationalism of apocalyptic discourse, expecting abrupt and phenomenal manifestations of apocalyptic moments. Once the euphoria died out, people were returned to their daily struggle. To a certain extent, conspiracy theory served well to prolong such a sensation.

A quick note can be drawn from the aforementioned message. First, at the face value such message was simply an echo of traditional apocalyptic scenario that was already current, though undergone ups and downs, since the 1970s after the translation of apocalyptic books written by figures such as Hal Lindsey, John Walvoord, David Wilkerson, Tim LaHaye and others. The scenario in general was a contextualization, or more correctly historicizing many global events, such as Middle East wars, Israeli-Palestinian conflict, natural disasters, and notably, the emergence of European Economic Community (EEC), the harbinger of European Union (EU), and put those as the signs of the end time and specifically, the coming force of Antichrist. Those was associated to the cryptic, highly symbolized narrative of the Book of Revelation (*Kitab Wahyu*), the last book of Christian New Testament, coupled with the interpretation of Book Daniel in the Old Testament, and many other biblical passages that considered since the early of Christianity, holding the cosmic secret of the future of Christianity and humanity. The most prominent message is that Jesus Christ will come for the second time, defeating Satan and his followers, and establishing the new heaven and earth in which He will reign to eternity and perpetual peace is going to be maintained. In many versions, to that agenda the role of Jews and the state of Israel to usher to the new age were striking and formative.

Hence, eventually, the Whatsapp message forewarned the Christians that the sequence of end time has been initiated through the pandemic, by mentioning the emergence of the Beast, or the Antichrist force, buried deep behind the sign code "666."

As informed by the message, the reference was Revelation chapter 13 (*Wahyu 13*) with regards to the appearance of two beasts from sea and earth. 666 numerology might be seen as a symbol of incommensurable agency, a discontinuity of a known human realm. Internet, barcode, chip and so on, were an array of technological embodiments crucified as the Antichrist signs. Once *sabun Camay* (Camay soap) was charged by some Indonesians in the 1980s as the representation of Antichrist, because of its producer's logo, Procter & Gamble for some, could be interpreted as 666 and devil's horns, as told by the Book of Revelation. Evidently, such discourse appeared among Indonesians was simply the echo of American apocalypticism (Belkin, 1985).

Further investigation to the rest of messages on evangelism in Argentina and the prophecy of Global Pentecostalism revealed the recent tendency observed by many scholars about the stronger Pentecostal churches in South America (e.g. Jenkins, 2007). However, such information endorsed during the pandemic might be connoted to the fulfillment of one among many apocalyptic visions by some Christians, i.e., the acceleration of global evangelization.

Second, such a short message might persuade the reader to check on the original source in YouTube, but moreover, for some Christians, it also activates Christians' cultural memory on the biblical narrative of the ultimate redemption through the narrative of end time. The shortness of the message might tell the popularity of the main outline of the narrative; hence the sender did not bother to supply more information. Indeed, not all of messages were short as this one, but short message with spectacular punch line might be the manifestation of the logic of digital communication, i.e. viralized form of communication, communication that revolved on controversial and contentious topic, or "social drama" (Postill & Epafras, 2018, pp. 112–113). It attempts to drag the reader to spectacularism and sensationalism in hoping to initiate the chain of reaction and virality. Viral communication is prominent within the discourse of digital communication, notably in socmed.

Later on, such apocalyptic-nuanced messages appeared more and more, along with similar postings in socmed such as Facebook and YouTube during the pandemic, though they were not dominating much over the more urgent conversation surrounding the pandemic. The appearance fluctuated over time, and once more got fresh attention as the news of the availability of vaccines went to the mainstream media and the anti-vaxx movement caught the wind. At this moment, once again the alleged Antichrist force, which believed to attempt to control human minds through intrusive substances such as vaccines, was prominent. The controversy initiated a number of webinars and YouTube talk shows among Christians.

Immanentized the eschaton #2: Rapture in TikTok

A TikTok account @ypxxxxx provided a different venue to understand the apocalyptic discourse. The observation was conducted to the account with 156.4K followers in August 2020. The scene started with an image of a young beautiful girl sitting in front of a laptop, with notebook and pen in her hands, and an open Bible next to the laptop. On the background is a fragment of Hillsong Worship, *What a Beautiful Name* (2017), written by Ben Fielding and Brooke Ligertwood. The caption started with "Online Worship" (*Ibadah Online*), followed strings of lines, "First Week" (*Minggu pertama*), corresponding with the sentence "Focus listening the sermon" (*Fokus dengerin kotbah*), "First Month" (*1 bulan pertama*), corresponding with "Jot down every God's word" (*Catat setiap firman yang didapat*). While the first part the girl displayed enthusiasm, the third string "Third Month" (*Bulan ke-3*) corresponding with "Get bored and unfocused"

(*Mulai bosan dan ga fokus*) and with the boring face and crossed hands. Further the situation is worsened, she displayed no more interest in the service, chit chat instead with her friends on the gadget. Suddenly, she was shocked when found her household members disappeared, leaving their clothes on the floor, and in the middle of the screen a word appeared "Rapture" (*pengangkatan*). The short video ended with her kneel down full of regret, with a caption over her "too late to regret" (*Menyesal ga akan ada gunanya*).

In less than a minute the video told us so much. It smartly squeezed the complex apocalyptic narrative into a more contextual and engaging way. The main message of Rapture is immediately associated with the spiritual discipline of online worship service, a practice which marked the ritual during pandemic. The video epitomized how Rapture became the primary signifier in the Dispensational-leaning apocalypticism. While the video was produced in 2020, it is in fact a fruit of historicist Dispensationalism through pop culture. It was started by Hal Lindsey with his best seller book *The Late Great Planet Earth* (1970), translated into Indonesian by 1977. Followed by books and multimedia franchises by Tim LaHaye and Jerry B. Jenkins entitled *Left Behind* (1995-2007), the vivid imagery of the Rapture and those who left behind imprinted deeply to the Christian psyche and rendered it to global Christianity.

Regardless the numerous criticism and skepticism volleyed to Dispensationalism in general and to the Rapture theology in particular, as one prominent Indonesian theologian branded it as "destructive theology" (e.g. satuharapan.com, 2014; AkhirZaman.org, 2012), the adoption and repackaging the message over the socmed such as TikTok, demonstrated the power of apocalyptic narrative sown among certain Christian group.

Different performance but the same message, revolved on Rapture and Tribulation displayed as well by several other Christian's TikTok accounts such as @axxnetwork and @draxxxblessing.

How such "heavy" stuff could easily be consumed by the younger generation. An intertextual observation might suggest an answer for this. A shared message from Facebook appeared in a WAG in August 2020. A 1500-words article written by a self-styled "End-Times Observer" entitled "End Time Thanos" (*Thanos Akhir Zaman*). In short, the vicious COVID-19 was equated with Thanos from the Marvel Comics. As the ultimate destroyer of the world, the author related Thanos with passages in the Book of Revelation, i.e., 6.7-8 (NIV): "When the Lamb opened the fourth seal, I heard the voice of the fourth living creature say, 'Come!' I looked, and there before me was a pale horse! Its rider was named Death (*Thanatos*), and Hades was following close behind him. They were given power over a fourth of the earth to kill by sword, famine and plague, and by the wild beasts of the earth." He produced complicated rationale to relate Thanatos (the Death) with Thanos, famine and plague with numerous viruses including COVID-19, wild beasts with ISIS. The imagination of a cosmic war, the battle between the *absolute* good and *absolute* evil forces, between light and darkness, deeply ingrained in the mating between Christian apocalypticism and conspiracy theory. ISIS and COVID-19 juxtaposed together might represent absolute evil.

Intertextuality and intercontextuality allowed us to understand popular culture, which is a form of modern mythology living in the same imaginative terrain with apocalyptic narrative. The doomsday or the end time with all of its proxies, i.e., hungers, famine, natural disasters, and terrorist could easily reperform through the Hollywood-like performance, and furthermore, personalized through medium such as TikTok.

Since the immediate association of the piety, religious narrative with the presentation of spectacularization of apocalypticism, hence it is to a degree a consumption of religiosity, or perhaps spirituality as well.

Immanentized the eschaton #3: Marketing and Consuming Prophetic Messages

Thanos connection with end time through the presence COVID-19 confirmed by another preacher from a Revival Feraxxx YouTube channel (56.1K followers), which in tandem with Instagram account @RRS. In its video posting February 3, 2020, the same Revelation passages once again employed to explain the coming of COVID-19 in relationship with the hastened end time, and explicitly mentioned the Second Coming of Christ. The most striking features of this channel, however, is that apocalypticism as end time (*akhir zaman*), prophesy (*nubuatan*), prophetic (*kenabian*), and prophet (*nabi*), all became ministerial brands, an Indonesian version of the new layer of religious authority that christened themselves "prophets" (Graham, 2021)

Almost all of its 138 posted videos entitling with bombastic titles, such as "News from the Future," "Prophetic Dream," "God's Message for 2020," "Spiritual Warfare," "BREAKING: Disclosing the secret of Coronavirus and the End Time's Message," and so on. In her preaching she repeatedly using "prophetic" as the adjective of her message, such as "doing prophetic research on virus in Wuhan," and identified herself as "prophesy code breaker." Thus far from my observation this is an example of Christian ministry that openly takes as its brand "prophetic" and apocalypticism. Other interesting features is that the adoption of biblical calendar and Jewish numerology (*gematria*) such as Purim holiday and *peh aleph*, which emphasize the exposure of Judaic sub-culture. Epafras argued that such exposure might give balance for some Indonesian Christians to their Muslims co-religionists with Arabic sub-culture, in the religious identity competition (Epafras, 2014). Besides that, the Mandarin translator in some of the programs might signal the global connectivity and the fulfillment of global evangelization as the pre-condition of the end time.

The urge to create a new niche in the spiritual market is straightforward. Nevertheless, aside from the visible sensationalism, many of the substance of the program aimed at encouraging the audiences to keep their hopes in the pandemic.

Immanentized the eschaton #4: Apocalyptic Response thru Healthy Life

The final example is a display of different responses to the discourse of apocalypticism. A preacher-businessman, Pastor DT, renowned for his prophecy, created a new attitude of apocalypticism. In an interview with a Christian channel on vaccination, he provided an interesting insight (Real Talk with Michael Gunawan, 2021).

In 34 minutes of interview, he gave a number of interesting insights. First of all, he declared to have a vision that the Indonesian recovery will be started by 2023, and furthermore, in coming 25 to 50 years there will be a much more malicious virus. That alone positioned him departed from those who claimed on the nearing end time during the pandemic. While holding the belief of the end time, he on the other hand challenged the fear of vaccination as the means of Antichrist. To that theological position he branded "fake theology" (*teologi abal-abal*), "junk theology" (*teologi micin*), and warning the Christians to "not blindfolding subscribe to such theology" (*tidak usah ikut-ikutan*).

To the question of taking vaccination shoots, he let Christians to choose whether to take it or not. The choice for him is simple, "take the vaccination or arm wrestle with the virus" (*mau vaksin atau adu sakti*). The solution for him is to maintain healthy body. He further shared the prophecy from God to him the secret of maintaining our health is

by consuming parsley, carrot, guava, banana and other fruits. Because the coming virus will not weaken our respiratory but digestion. Among other prophetic sharing he discussed the melting of Antarctica, and the emergence of "minor" Antichrists (*antikris-antikris kecil*) such as the unifying monetary system. But over all of those developments he warned the preacher to not make commotion and deliver peaceful messages (*kita hamba Tuhan jangan bikin ribut ... bawa pesan damai*).

Among the Pentecostal and Charismatic circles, Pastor DT is probably atypical. Nevertheless, Seventh-day Adventists denomination in fact has been taking health issues as its theological posture, as part as well as its apocalyptic theological construction. Adventists movement was an offshoot of the failed apocalyptic movement by William Miller - hence it was called Millerite Movement. While maintaining the premillennialists outlook, Adventists modified and moderated their views over time, and simply maintained the Second Coming will take place "soon" (S. Irawan, personal communication, November 29, 2020; Lawson, 2000, p. 676).

Pandemic indeed entertained the Adventists to the nearing the Second Coming of Christ. Along with other apocalyptists, they also interpret the word of Jesus in eschatology and the Book of Revelation pregnant with signs of the end time, nevertheless, they prepared among others through the health service. Ellen White, accordingly already prophesied a century ago, the coming of plague and airborne disease. Hence, the COVID-19 pandemic is simply a further stage to the fulfillment of biblical prophecies. Adventists renowned for their healthcare system through the establishment of hospitals and the encouragement of vegetarian lives. Consequently, they never have a problem with vaccination initiatives (S. Irawan, personal communication, March 15, 2021).

CONCLUSION

Summarizing the above observations, some conclusions can be drawn.

Apocalypticism provided hope and strength to endure the dark hours. Hence, in regards of prophetic and apocalyptic modes of eschatology, both are fluidly present in the conversation. In the larger part, in fact it is irrelevant to categorize the discourse by using the two modes. Pandemic is both understood as historical reality, read through the apocalyptic eyes. It also, on the other hand, is a prolongation of the cosmic moment that has been recorded in the Bible, through which the apocalyptists merely forge an association with specific historical events such as pandemic. In some of the conversation, indeed the pragmatic approaches were combined with apocalyptic vision. In the mediatized context such as in socmed, the apocalyptic vision appeared in instrumentalized platform, hence the *immanentized eschaton* meet its fullness through the digital system.

Referring to the Hummel observation that American Evangelicalism version of apocalypticism is present in three levels, i.e., theology, culture, and politics, Indonesian chapter is having different variations. In term of cultural, in particular of digital culture, apocalypticism is also a form of consumption, through the commodification of the message, its consumptive structure (followers, likes algorithm, hashtags, and endorsement), and performative engagement, which the branding and packaging are the rule of thumb. In terms of politics Indonesian apocalyptists are overwhelmingly pro-Jokowi, hence displayed a minority-complex that tended to subscribe to the incumbent.

Premillennialism theology is prominent. The influence of Dispensationalism is apparent as many of the subjects of observation kept mentioning Rapture (*pengangkatan*),

except the Seventh-Day Adventist. Nevertheless, it seems that it is a popular version that is closer to the *historicist* Dispensationalism position, rather than the *futurist* one. The side effect of that is some of Indonesian apocalyptists fell into sensationalism and conspiracy theories, in particular in regards to pandemic as a moment of the emergence of Antichrist power, a Deep State and New World Order conspiracies, and vaccination as an intrusive agent to alter the Christian faiths. While the more futurist adherents of Dispensationalism, and in particular Adventists, pandemic is considered as a moment for faith enhancements and maintaining social solidarities. Seventh-day Adventists have a long presence in healthcare services in Indonesia and on a global scale. Pandemic, while understood as part of the apocalyptic drama, simply boosted their well-grounded theology of health and social activities. Good health as the proper response to the rapture also endorsed at least by one prominent preacher.

To push further the above observation it can be said, with cautiousness that Apocalypticism in Indonesian context evolved along with the larger exposure for Christians to align themselves into the national and global issues. To a degree, apocalypticism is a symptom of being a minority and the complicated relationship between Christians and Muslims in Indonesia. It provided theological-mythological charged language to make sense of the tension. At this juncture, apocalypticism was a symptom of tension between Christianity and Islam (cf. Chevedden, 2013).

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