

The Argus

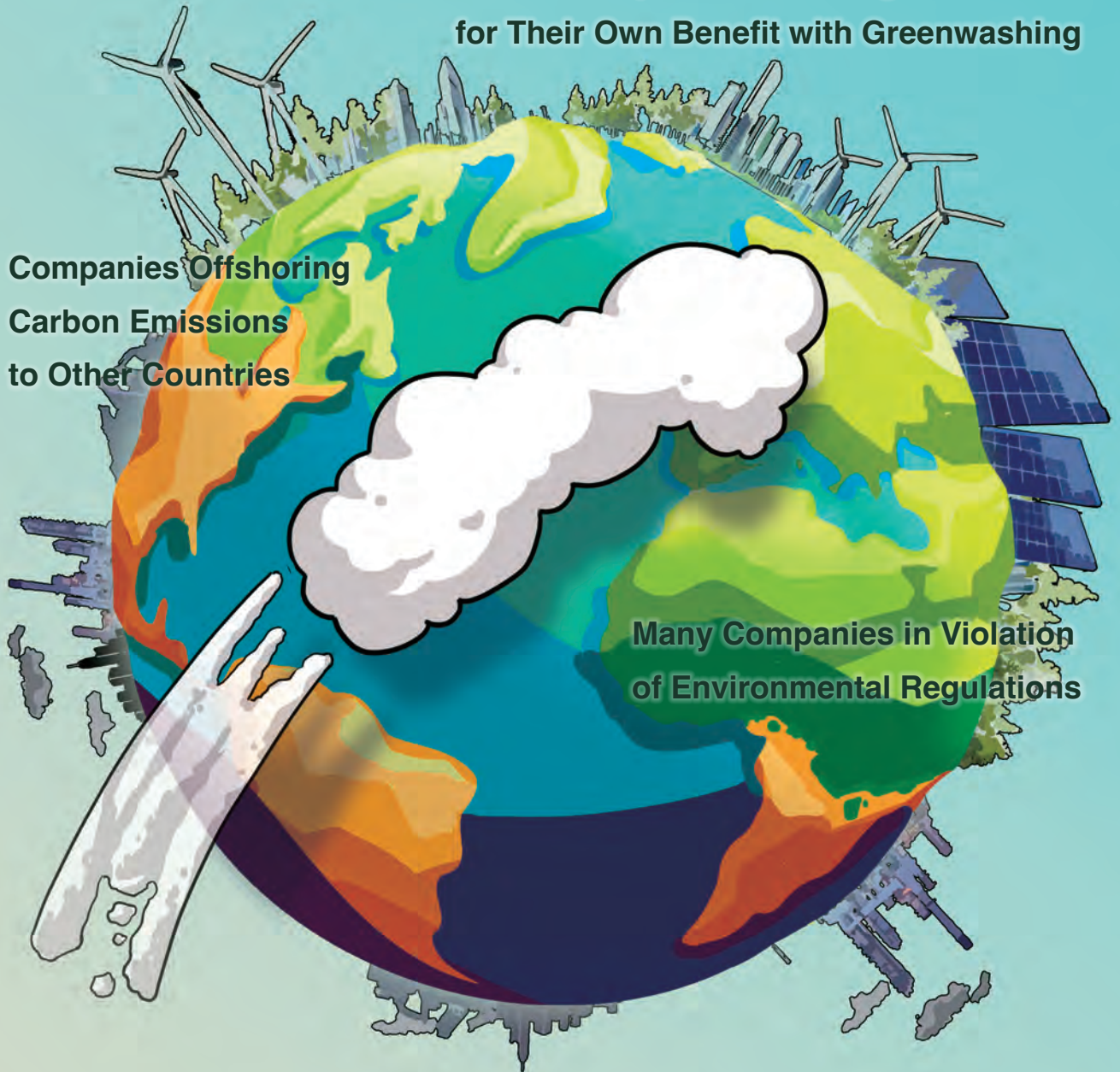
Since 1954

No. 543 JUNE 7, 2024

**Companies Deceiving Consumers
for Their Own Benefit with Greenwashing**

**Companies Offshoring
Carbon Emissions
to Other Countries**

**Many Companies in Violation
of Environmental Regulations**



**The World Moving Together toward Net-zero and Green
Getting in the Way of Green**

The Argus

ESTABLISHED 1954

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Editorial

Inevitable Shift

Everything changes, even if it happens at different speeds. Some changes occur rapidly, while some are barely noticeable. Except when it comes to negative trends, we usually adapt to these shifts. However, there is no need to condemn things that are now quite obsolete, since they have paved the way for modernity.

This June issue features new discourses emerging across various fields in terms of the environment, technique, and culture. Eco-consciousness is now a major player in product markets, with companies striving to keep up by adopting ESG management practices. However, some companies are still backpedaling by greenwashing environmental pollution. Thankfully, stricter regulations are forcing them to join the wave of environmental responsibility. The construction industry, which has traditionally heavily contributed to carbon emissions, is also being challenged to adopt greener practices. Culture is not immune to the winds of change, either. With the rise of generative AI in the art world, debates are raging about copyright ownership. Dance, another area of artistic expression, reflects the times as well. African dance, for instance, is not a static tradition but rather a dynamic art form that evolves by blending with modern influences, creating a unique result, Afropop.

After initial tension between old and new, a compromise is often reached. As we have the ability to differentiate positive changes from negative ones, there is no doubt that embracing changes as time goes on will broaden our views. 🌱

By **Kim Su-yeon**
Editor-in-Chief

김수연



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Cover Story

>> The increasing global trend of carbon neutrality and green has led many companies to focus on eco-friendly practices and to engage in ESG management. However, some companies engage in deceptive practices to cultivate an eco-friendly image, while others flout environmental regulations with minimal penalties and even repeat such violations. Additionally, certain companies transfer the amount of carbon emissions they reduce to their subsidiaries in other countries. In today's environmentally conscious world, it is crucial to reflect on the true meaning of sustainability and to remain mindful of our collective responsibility to protect the planet we inhabit. This responsibility is particularly pertinent for companies and countries with significant environmental impacts and social obligations.

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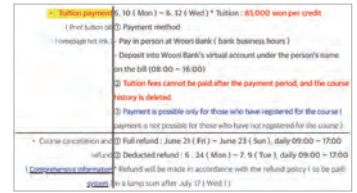
Memories in The Argus

HUFS Announces Term of Payment for 2024 Summer Semester

Payment for the 2024 summer semester tuition must be remitted between June 10 and 12, 2024, for both campuses, Academic Support Center and Registrar announced on May 10. To pay the tuition fee, students should visit any branch of Woori Bank nationwide during business hours and make a deposit to their individual virtual account listed on the invoice, from 8 a.m. to 4 p.m. After the payment period ends, course enrollment will be canceled for those who did not make the payment on time.

After paying tuition fees, it is possible to cancel enrollment and receive a refund on designated dates. If a refund is requested by June 23, which is the day before the start of the summer semester, a full refund will be issued. From the following day, June 24, until July 9, partial refunds will be processed. When unenrolling by June 27, five-sixth of the tuition fee will be refunded; by July 3, two-thirds of the tuition fee will be refunded; and by July 9, half of the tuition fee will be refunded.

According to the refund policy, all refund amounts will be processed and disbursed on July 17. The Academic Support Center and Registrar said “All refund policies are based on the University Tuition Rules, Education Ministry ordinance No. 257, effective Feb. 7, 2022.” Students with further questions about paying the tuition fees for the summer semester can visit the website or call the Academic Support Center and Registrar for more information. [A](#)



▲ HUFS announces summer semester tuition payment and return policy on May 10.

By Lee Seun
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HUFS Recruiting Students for Summer Semester Korean Short-term Course

HUFS Center for Korean Language and Culture (CKLC) is currently taking applications for the 2024 summer semester for Korean short-term course. The last day to apply is June 21. The course is open to current university students, university graduates, or those with a minimum of a high-school degree who are interested in learning the Korean language and culture. The level test for placement will be conducted on June 24 online, and the course will start on Aug. 2 and end on Aug. 30, 2024.

This short-term course is offered to foreigners and overseas Koreans twice a year in the spring and summer. The course consists of four weeks of Korean speaking, listening, reading and writing. Additionally, students can participate in various activities. Classes take place Monday to Friday from 9 a.m. to 1 p.m., with seven to 13 students per class. The tuition fee is 1,050,000 won (US\$766.42).

Regarding the students of the course, HUFS Center for Korean Language and Culture mentioned that, “Since the course is a month-long intensive study and four cultural experiences, it is mostly attended by students who are living abroad rather than regular or exchange students of HUFS. One student who participated in the short-term program in the spring semester this year applied again for the summer semester.” Participating in the course will make a fruitful month not only to learn but also to enjoy cultural experiences. For those who are interested, there is more detailed information about the course and application process on the HUFS CKLC website. [A](#)



▲ Students can see the detailed application procedure on the CKLC website.

By Kim Yi-eun
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Completion of Online Courses Required for Grade Access

Undergraduate and graduate students must complete the Violence Prevention Education of Sexual Harassment and Violence by June 14, while international students must complete the Understanding Korean Laws course by June 20 to access their grades. If students who are eligible for each course do not complete the Violence Prevention Education or Understanding Korean Law courses, they will be restricted from viewing their grades starting June 15 and June 21, respectively, until completion.

Both courses are available online through the HUFS online education system website: <https://online-lecture.hufs.ac.kr>. The violence prevention education consists of nine video lectures covering sexual harassment, sexual violence, domestic violence, and dating violence prevention. As well as viewing the video lectures, students must take an exam based on the video content and submit a satisfaction survey to complete the course. The Understanding Korean Laws course is a roughly 25-minute video on understanding Korean laws, produced with the cooperation of the Seoul Dongdaemun Police Station. The course is available in Korean, English, and Chinese.

The Violence Prevention Education, mandated by laws like Article 31 of the Framework Act on Gender Equality as well as campus regulations, fosters a university community of mutual respect and equality. Since 2022, international students in Korea have been required to take the laws course, directed by the Ministry of Education, to ensure their safety on campus. However, while online courses are enforced by restricting access to grades, some students say this is no guarantee of the effectiveness of the education. An anonymous student, a junior studying International Studies, worries, saying, “Despite being compulsory, there are many detours, such as playing the video and not listening, so the mandatory enforcement is not effective.” An educational approach that is practical and meets the requirements of these courses is needed. 📧

By Cho Subin

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College of Central and East European Studies, College of International and Area Studies Integrated

On April 30, HUFS President Park Jeong-Woon announced a revision to the school regulations. Accordingly, the College of Central and East European Studies and the College of International and Area Studies were integrated into the “College of National Strategic Languages.”

With the establishment of the College of National Strategic Languages, the range of subject matter covered will be expanded to not only linguistics but also regional studies. In the case of changes in subjects, matters such as the opening of regional studies courses will be decided through consultation between professors within each department. In addition, the field of education will be expanded by considering each department’s politics, finances, and international situation through an academic seminar conducted in cooperation between the College of Central and East European Studies and the College of International and Area Studies. Furthermore, by expanding the range to regional studies and moving into a larger unit, the benefits for students, such as research support and scholarships from the government, are expected to increase.

However, there are concerns from students that student opinions were not properly reflected in the integration process. In this regard, Professor Han Kyung-min, chair of the College of Central and East European Studies, said, “It is unfortunate that we were not able to properly collect and reflect student opinions. We had to integrate the colleges within a tight time frame to meet the input deadline for the Korean Council for University Education system.” Professor Han added that in the process of making detailed changes to areas such as lectures, the opinions of students who receive education will be reflected as much as possible through public hearings or surveys. She asked for students’ understanding and cooperation, as there will clearly be many benefits to students. 📧

By Park Seun

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Limited Summer Session Courses Hinder Students from Meeting Graduation Credits

HUFS has announced courses that students can register for during the summer session, but a significant portion of major lectures in the language departments remain unincluded in the list.

HUFS Academic Support Center and Registrar decides upon the courses to be offered during the seasonal semesters depending on whether at least 30 students have enrolled in them or not. This 30-student threshold is posing difficulties for some students, serving as an obstacle to earning enough credits to meet HUFS graduation requirements. According to the HUFS course handbook, students must accumulate at least 54-70 credits to graduate. Earning all of them during the regular semester often can be demanding for students, so additional seasonal semesters are needed for students.

However, the current system is marginalizing departments with a small number of enrolled students, impeding them from meeting the graduation requirements. An anonymous user on Everytime described the difficulties of students who major in these disciplines by stating, “It is understandable that courses with a small number of students enrolled may not open during the seasonal semester. However, it is still frustrating that we must always consider which courses we can take during the regular semester and courses that are available during the seasonal semester, while students from other departments don’t have to.”

A representative from the Academic Support Center and Registrar stated, “This procedure was devised when our university was established, so it is hard for us to amend this suddenly. However, the school has recognized the hardships students are facing and is working to alleviate the pressure on students by aligning with government policies to lower graduation credit requirements.”

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Illegal Activity Happens on the HUFS Global Campus

From around 9:30 a.m. on Thursday, May 2, between the Centennial Complex and the HUFS Dorm, two young females asked students on the Global campus to help them with an assignment. They asked students to listen for three minutes to a presentation on their phones.


However, this was not an actual assignment, but rather a ploy to gather student information and attempt to take them to a nearby church. According to an anonymous freshman, “The reason that I listened to them was that I was trying to help with their assignment as I thought that they were students of HUFS, but I was embarrassed and worried that other students might have given them their personal information.” It also became an issue in the Everytime online community, because a significant number of students were not aware of such cults and pseudo churches nor how to deal with and report situations like this.

It is a problem if HUFS students do these recruiting activities at campus, but it becomes far more serious if strangers come on campus and attempt to solicit HUFS students with unapproved messages or recruiting. The Student Affairs Team of HUFS sent a message through the HUFS application, to warn students and to encourage students to report them to the HUFS situation team. If any student encounters such a situation, they should report it immediately by calling the HUFS situation team at 031-330-4171.

By Ko Seo-young
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HUFS Operates ‘1000-won Breakfast’ through the Spring Semester

HUFS has operated “1000-won Breakfast” on both the Seoul and Global Campuses through the first semester of 2024. This “1000-won Breakfast” is a program that allows undergraduate and graduate students of HUFS to have breakfast for 1,000 won (US\$0.73). A limited number of 200 people per day can take advantage of this breakfast. This is available at the Humanities Building student cafeteria in the Seoul Campus and the HUFS Dorm cafeteria in the Global Campus.


“1000-won Breakfast” is so popular that students had to wait in line from the first day. Lee Kwon-se, a senior studying English for Translation, who frequently uses “1000-won Breakfast,” said, “Breakfast is available for five days at the price of about one day of lunch, and it is not differentiated from the regular breakfast, so it has real merit in terms of price, as it offers the same menu as the breakfast served after ‘1000-won Breakfast.’ It is comparable to dinner.” Meanwhile, there were some voices of disappointment. Lee Soo-hyung, a junior studying Greek Studies, said, “Overall, it is excellent, except that the limit of 200 people is too small, and the availability time is short.” “1000-won Breakfast” will not be operated during summer vacation after the first semester in June but will resume in the second semester. 

By Park Kyoo-tae
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GlobeeDorm Recruiting Volunteers for Exchange Student Assistance

GlobeeDorm is currently seeking volunteers from HUFS Seoul Campus to support the stay of foreign exchange students during the summer vacation period from June 22 to Aug. 31, 2024. The deadline for volunteer applications is June 7, 2024, and applications can be submitted through email from the Management Team of GlobeeDorm at house@hufs.ac.kr.

The volunteers will help exchange students by managing their mail and packages and providing translation services. The applicants are required to have been enrolled in the first semester of 2024 at the Seoul Campus and should have earned at least 12 credits in the previous semester. They should have maintained a grade point average of over 2.0 within eight semesters and must have proficiency in English communication. Prior experience in school office work is preferred. Volunteers will receive a scholarship of 1,000,000 won (US\$730.9) for their service. Applicants need to submit an application form, a personal information collection and usage agreement, an academic transcript, and an official English language proficiency certificate via email to the Management Team. The application form is available in the online notice on the HUFS website.

The Management Team of GlobeeDorm mentioned, “We are recruiting volunteers to help foreign students at HUFS who face challenges with the Korean language and have difficulty expressing their problems during their stay. We aim to select two students from our campus to provide assistance.” They also noted, “Last year, we had seven applicants in the first semester, eight in the second semester, and 10 during winter break. Typically, students tend to apply on the last day. We are still taking applications, so feel free to sign up.” 

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TAGG, Show Your Dance Spirit!



By **Kim Su-yeon**
Editor-in-Chief

The phrase “Art is life, and life is art” serves as a reminder that art is intricately intertwined with everyday life. One such example is the dance company “TAGG,” which actively promotes African dance culture. TAGG teaches both traditional and modern African dance, and actively participates in various annual events, including the Seoul African Festival, to showcase their performances and introduce the attraction of African dance to the public. In commemoration of the 2024 Korea-Africa Summit to be held in Seoul, South Korea (hereafter Korea) in June, The Argus met TAGG, a leading figure in cultural exchange between Korea and Africa. The Argus hears from Kwon-Lee Eunjung, the representative of TAGG, and Daniel Ahifon, a dancer from the Republic of Benin, to explore the cultural background of African dance.



We Are TAGG



The Argus: Please introduce yourselves to The Argus readers.

Eunjung Kwon-Lee: Hello. I am Eunjung Kwon-Lee, and I run an African dance company called “TAGG.” Dancing is my profession.

Daniel Ahifon: Hi, I am a dancer from the Republic of Benin.



▲ Kwon-Lee Eunjung, a representative of TAGG, gives an interview to The Argus.



▲ Daniel Ahifon, a dancer of TAGG, has an interview with The Argus.

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The Argus: Could you give a brief explanation about the dance company, TAGG, and what you do?

Eunjung: TAGG is a Senegalese word meaning “nest.” I had a strong desire for an emotional and symbolic space. I wanted to create a mature space, like a nest, where members encourage each other’s growth and can gracefully depart when it is time for independence. That is why I chose the name for our dance company. Also, I wanted the name to embody the hope that students who come to learn dance can fully enjoy themselves, free from fear.

Daniel: We teach and give classes, do lots of performances and join competitions. I also choreograph many of our performances.

Eunjung: As Daniel mentioned, we conduct many self-produced dance classes and serve as guest instructors elsewhere. However, we mainly deal with performances, especially during the busy period of May and June when the weather warms up. We also engage in projects related to culture and arts, and even produce festivals. We create dance films to capture our performances on video. Recently, our dance film titled “Fight Like a Girl” (2023) was selected for a public diplomacy project and had its first

screening. It is currently being submitted to various film festivals.



▲ “Fight Like a Girl” (2023)



▲ Members of TAGG pose in front of a movie poster.



The Argus: How did you both come to be dancers? When did your love affair with African dance begin?

Eunjung: Ever since I was a child, I loved to dance. However, I had good academic achievement, so my parents did not allow me to pursue art. My suppressed passion for dance erupted belatedly. I majored in English-Korean translation in graduate school and worked as an English teacher. So, I had no choice but to start by taking a professional dance curriculum open to the public. I once wanted to make money with teaching English and self-actualize through dance, but I realized that both were going nowhere. That is when I met African dance, and after about three years of trial and error, I learned that I should do it in earnest to survive in this field. Thanks to African dance, I made up my mind to live as a corporate artist who makes a living on my own. I have had a vague longing for the African continent since I was a child, and I was even more delighted to learn that all dance originated in Africa. Now I am trying to convey messages through my own dance.

Daniel: I was born to be a dancer. I was born with dance. No one taught me how to dance. I just grew up dancing. In Benin, everyone dances. And I held on to this dream even when I was in college. My first performance was shown to my family. All my family was sitting and watching me dancing. At that moment, I felt like an artist. At a young age

I realized that I liked someone watching me. After that, my first outdoor performance was at church. Many people came, and I got motivated by that. Then a big company hired me as an official dancer. It became normal for me to dance, and I never left it. After university, I went to a dance institution and entered a professional dance company at the age of 22. Of course, I learned some other genres such as street dance and contemporary dance, but my dance is equipped with an African spirit, a kind of fusion. When I dance, I see identity from what I do. My dance is a fusion of contemporary and traditional, something original from my persona that represents my culture. All genres include the trace of African dance.



The Argus: According to interviews with other media outlets, Eunjung moved from Korea to Senegal, Africa, and met Daniel who is now living in Korea. When you both went to a new place that was not your home country, how did you feel about the way people view and experience dance in each country? Is there any difference between them?

Eunjung: Dance is a part of daily life in Africa. This is also why I frequently visit West African countries, like Senegal, Guinea, Burkina Faso, and the Republic of Benin. These countries are like a real-life version of the common saying, “Art is life, and life is art.” In Korea, art is perceived in a grand way. People think of dance as something they pay to see at a performance, and even when they try to dance themselves, they hesitate because they think in advance that they are not good at dancing. However, in these West African countries, art is taken for granted. Of course, not everyone dances well, and there are those who do not. However, what art means to them is little different. It is not the concept of finding solace in dance and music. Instead, when someone dances, they think, “Oh, something good must have happened to that person,” and they congratulate them. It seems like a blessing is based on dance. It does not matter where they dance or who dances. On the other hand, the perception that art is not important, because it does not generate money, still exists deep within Korean society. Some people also perceive the barrier to art to be too high, making it difficult to approach.

Daniel: Society is always with people. In the Republic of Benin, we dance in everyday life. If we are happy, we dance. For any emotion, we dance. This is not the case in Korea. People need a ticket, and they have to go to the theater to approach art, which is not on the street. They have to pay for it. It seems that there is a systematic way to separate art from daily life. Dance is just an expression of emotion and body. But they are now far from people in Korea. We are happy because we keep dancing. If art and daily life do not contact, people cannot meet their culture.

Eunjung: Of course, art must have existed in the daily lives of Koreans in the past. However, as the society modernized and industrialized, it seems that we have forcibly separated the things that were once part of our daily lives. Ironically, the separation has made it possible for artists to make money. However, I believe that we should not forcibly separate art from everyday life and instead let it live in its original form. That is why I am working to help people experience art through performances and classes. It is not about injecting something into people, but rather about drawing out the nature that is already within them.

Daniel: I agree with her. It is human nature. If you do not connect to the culture, it is difficult to recognize where you are from. And I see people totally far from their identity. I really like when elderly people in Korea dance with my performance. See. This is Korea. They meet their identity at that moment.



Deep into the African Dance



The Argus: As the African continent is vast, there are many different types of dances. I wonder what types of dances each of you now specialize in. Could you also explain the characteristics of each dance, such as how they differ in rhythm or gestures?

Eunjung: My main genre is Manden dance, a traditional dance that still exists in countries that once belonged

to the West African kingdoms. It is a dance performed to the rhythms of the djembe and dundun drums. It is characterized by the use of long arms and a low-to-the-ground posture. This means that one jumps and brings his or her knees close to the chest. One is high off the ground, but the overall height does not increase. One uses a tremendous amount of force to push off the ground while using the arms smoothly to create a subtle power. In addition, the dance covers a large area. People who learn the dance may be surprised that their boundaries can be this large. It can be related to a form of self-defense against attempts by others to encroach on them. The most important thing is the interaction with the musicians. When I dance freestyle, the musicians play their instruments in time with my landings. There is a thrill in that. At the end of the song, everyone comes forward and dances a specific movement together. It is another pleasant part of the dance where you can feel a sense of community.

Daniel: I dance Afropop. It is a kind of African street dance. But my Afropop is unique because it accumulates a series of traditional dances. It is a mixture of traditional and modern dances. Historically, all the dances come from other dances, all of them are connected with each other. I added something traditional to make it more original, using my knowledge about different styles to create my own expression. We have a dance called “ndombolo” from Democratic Republic of the Congo. It features circular movement of the pelvis. I also use the chest and other body parts but still you need to use your hips a lot.



The Argus: As Daniel was born and raised in the Republic of Benin, you must be well-versed in traditional Beninese dance such as Agbadja. I understand that Agbadja is a traditional Beninese dance characterized by its fast tempo. If there is some interesting cultural or historical background associated with Agbadja, could you please introduce it?

Daniel: Agbadja is a dance from Benin, Togo, and Ghana. It originated from the Ghanaian ethnic group called Ewe. Originally, Agbadja was a war dance using shoulders and feet and a lot of power. Since there is no war

anymore, it has changed a little bit. After going fishing and getting a lot of fish, one dances Agbadja to express his or her happiness. As they are geographically close to each other, Agbadja spreads from Ghana to Togo and Benin. Although it is a dance performed after catching a lot of fish, people now dance Agbadja in any ceremony and on any occasion.



The Argus: While the types of African dance vary by country, do you think there is one keyword that runs through all dances? Are there any common emotions or themes that are felt in African dances?

Daniel: Even though cultures differ, the essence of dance remains consistent across regions. In many ethnic groups and communities throughout the country, ceremonies marking adulthood or birth involve dancing, all for the same reason. While the dances themselves may vary, they are united by this shared purpose.

Eunjung: I felt the same way. When I visited Senegal, I came across a dance called “nduep.” It is a kind of ritual dance that is performed when someone is sick. People dance to the rhythm of the music to heal the sick person. I saw something similar in the Republic of Benin. The music was completely different, but it was also a dance performed when someone was sick. We have a musician from Burkina Faso in our dance company. I asked him if there was a dance performed when someone was sick in his hometown. He said yes. There are similar dances performed on similar occasions in African countries due to their similar way of life, such as dances performed when sowing seeds and harvesting crops. It may be difficult to categorize the dances of African countries into a single category of African dance because there are so many different kinds, but they can be said to be the same in that they share a similar cultural context.



The Argus: What are the attractive points of African dance?

Eunjung: African dance epitomizes the essence of dance. Unlike other dance forms, it requires minimal preparation. You do not need shoes; all you need is your

body. This stands in stark contrast to hip-hop, where you need to wear stylish clothes, or ballet, where you need to wear pointe shoes. As a result, some people approach African dance thinking it is less formal and easier. However, when they actually try it, they realize it is quite challenging. It requires a lot of stamina and involves a low-to-the-ground posture, similar to a squat, which can be quite taxing. Yet, the charm of African dance lies in the joy of mastering simple yet intricate movements and the sense of community that comes from dancing together.

Daniel: African dance gives us joy, physical strength, better body condition, and spirituality.

Dance with TAGG



The Argus: You both also participate in many performances in addition to teaching dance. What is the most memorable performance you have ever had?

Eunjung: My most memorable performance took place in February 2018 in Burkina Faso. It was at the International Dance Festival of Ouagadougou, a prestigious international dance festival. It was particularly meaningful as it was the first time our dance company performed an original work under our name, and it was also the first time we were selected to perform at an international dance festival outside of Korea. I was pregnant at the time, and perhaps because my baby was in my belly, I felt a deep sense of connection with the baby as we danced together. Additionally, Daniel, my partner, was able to join me and provide support, as his home country, the Republic of Benin, is right next door to Burkina Faso.

Daniel: For me, it was the first professional contemporary team performance in 2013. It was a big stage, and I was motivated by how capable I was. And I was also selected to be on Africa Got Talent in 2017, which was also very big for me. That was a step for me to start with my professional journey.



©TAGG

▲ Eunjung Kwon-Lee delivers a performance titled "Renaissance" at the International Dance Festival of Ouagadougou on Feb. 23, 2018.



The Argus: When do you feel most proud or rewarded: while teaching African dance or performing in front of a large audience?

Eunjung: I find it particularly moving when my students cry while dancing. They often say they do not know why they are crying, but the tears just flow. I believe it is a form of awakening. After all, living in Korea can be tough, with all the stress and pressure, which they often relieve by watching YouTube videos. And when they discover through dance, something deep within themselves that they did not know existed, they cannot help but cry. The dance I teach can be very intense, and in the process, my students are often surprised by their own physical capabilities. When they finish dancing, they feel refreshed and like they have grown as individuals. This is what makes teaching so rewarding for me."

Daniel: When I teach and see people enjoying what I am teaching with happiness, I feel rewarded. I am proud of my job seeing people dancing to my culture. They learn from me. Seeing them growing is also a very big happiness for me.



The Argus: What are your goals with dance? Also, if there are any performances that you are currently preparing for or that are planned for this year that readers can look forward to, please let us know.

Eunjung: I aspire to become more well-known and to connect with more people through our dance. To achieve

this, I dream of creating a camp on Jeju Island where people can come and experience the sacred moments I have encountered in Africa, such as dancing by the ocean. We have several exciting performances planned for this year. On June 1, we will participate in a dance battle hosted by Red Bull at the DDP in Dongdaemun Ward, Seoul. This is a highly regarded battle that all dancers aspire to be a part of. For a while, there were no national competitions held in Korea, which made it difficult for Korean dancers to showcase their talents. However, we are thrilled to be able to participate this year.

Daniel: My goal is to conquer the world! I will be proud to see that my dancing is spreading around the world. We don't have a dance school in the Republic of Benin, so I want to create a big one to give young people a chance to live with their passion. For another hope, I want to invite many professional dancers from many continents to the African Street Festival to show their dance which includes the identity of their hometown.



©Kim Su-yeon/The Argus



©Kim Su-yeon/The Argus




▲ TAGG delivers a group performance at the 2024 Africa Culture Festival held in Gwanghwamun Gate Plaza.



The Argus: If you have any words for young readers, please share them.

Eunjung: I would be delighted if you could come and see TAGG's performances and take a dance class to experience the power of dance for yourselves.

Daniel: If you dance, it will give you something good. You will improve your mental health and your physical strength. And then happiness.

“Contact your culture and meet your identity.” Throughout the interview, dancer Daniel’s words resonated deeply. The culture of a nation is intricately woven into the very fabric of its people’s identity, and dance transcends mere physical movement to embody this essence. Just as the diverse ethnic groups of the African continent express their joys, sorrows, and struggles through dance, the rhythms of their daily lives become infused into their movements, creating a unique and expressive language of the body. Dance is not an exclusive art reserved for professional performers or confined to their specialized realm. Rather, it is an accessible and joyful experience open to anyone with a willing heart. How about embarking on a journey into the allure of African dance with TAGG? 

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By Kim Yi-eun

Staff Reporter of Social Section

Are reusable cups from popular franchise cafes and eco-bags given as gifts genuinely environmentally-friendly products? As awareness of the necessity of environmental protection increases among the public, the global trend towards carbon neutrality is expanding, leading to the increased social responsibility of nations and companies. The trend of “ESG” management, encompassing Environment, Social, and Governance factors, underscores sustainability, corporate social responsibility, and transparent governance structures, reflecting an expanding emphasis on these principles.

However, some companies and organizations use the term “eco-friendly” as a marketing tool, wearing a mask of eco-friendliness to cultivate a positive image of themselves while deceiving consumers and producing harmful effects on the environment. Furthermore, compared to other countries, South Korea (hereafter Korea) takes relatively weak measures against companies’ violations of environmental regulations, and strategies to reduce costs by companies may negatively impact the environment. In the midst of the global trend of increasing interest in the environment and moving towards eco-friendliness, in order for Korea to confidently stand among advanced countries, it is important for both the government and companies to fulfill their social responsibilities. The Argus, in celebration of World Environment Day on June 5, aims to examine cases where companies have a harmful impact on the environment, analyze the causes behind these cases, and propose solutions to solve them.

Marketing Strategies of Companies That Deceive Consumers

Problem Greenwashing, Eco-friendly Only in Words



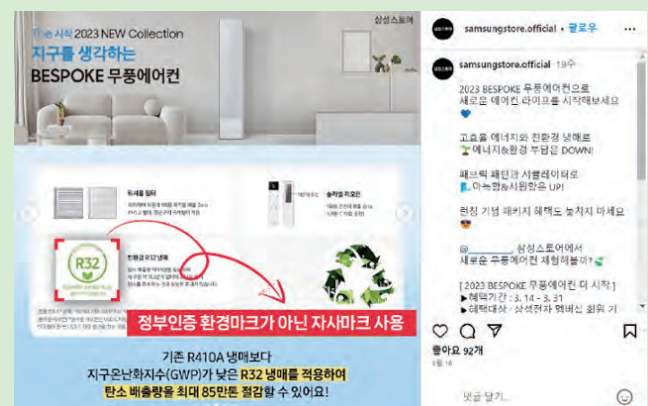
▲ The plastic bottle is under the paper package.

“HELLO, I’M PAPER BOTTLE.” This was a phrase written on the package of cosmetic products released by the Korean cosmetics company INNISFREE. Upon seeing this phrase, consumers would likely assume that INNISFREE had made the product using paper packaging instead of plastic bottles, with environmental considerations in mind. However, upon closer inspection of the product’s packaging, it was revealed that there was a plastic bottle inside the paper packaging, sparking controversy and leading to consumer boycotts. As public awareness of environmental protection increases and preferences for eco-friendly products grow, companies and organizations are also producing and providing eco-friendly products and services. However, are these companies that tout themselves as environmentally friendly truly protecting the environment? Unfortunately, not always. This practice of advertising products as environmentally friendly, when they are not, is known as greenwashing. Greenwashing, a term coined by American environmentalist Jay Westerveld in 1986, is a combination of “green” and “whitewashing.” At the time, Westerveld encountered a memo in a hotel urging guests to reuse towels for environmental protection, but it was actually a cost-saving measure. Based on this incident, the term “greenwashing” was born.

Using unofficially certified marks or engaging in actions claiming to be environmentally friendly, which may actually lead to environmental pollution, is a typical example of greenwashing. Product labels containing descriptions or certification marks are often the first elements consumers check to understand a product. Greenwashing takes advantage of the flaws originating from this aspect. One of the most deceiving aspects is what is commonly referred to as fake eco-friendly marks. The marks applied by the industry through its own voluntary evaluation and certification process, or the marks created by companies to highlight the excellence of their products, are similar to the statutory certification marks based on the Ministry of Environment’s requirements, causing confusion among consumers. For instance, the Samsung Store promoted air conditioners from Samsung Electronics, claiming they used eco-friendly refrigerants and featured solar cell remotes. While not having received eco-friendly certification by the government, they included their own mark, specifying only in fine print that it was their own, giving the impression of being certified by accredited institutions. Additionally, they included, also in fine print, a statement that the remote cannot be used solely through solar charging, potentially misleading consumers who do not read the fine print.



▲ Ministry of Environment provides information about the certification marks it gives when its strict criteria are met.



▲ Samsung Store advertises using its own mark.



▲ Starbucks holds an event and gives reusable cups to customers.

Another instance of greenwashing occurred on September 28, 2021, in certain countries including Korea, where Starbucks celebrated its 50th anniversary and World Coffee Day. Starbucks had provided customers with a special reusable cup featuring a 50th-anniversary design for one day, purportedly to reduce disposable cup usage. This event was perceived as a limited-edition freebie from Starbucks, causing a frenzy and drawing criticism as merely a form of greenwashing. OhmyNews requested an analysis from the non-profit private research institute, the Institute for Climate Change Action, comparing the greenhouse gas emissions from the production and disposal processes of reusable cups made of polypropylene, commonly used for delivery containers, and disposable plastic cups. According to the results, it was found that the greenhouse gas emissions could be reduced only if the reusable cup was used more than four times. Researcher Lee Yoon-hee stated that reusable cups are only meaningful when used until they are damaged, emphasizing that this event seemed to emphasize owning yet another single-use cup, rather than a true reusable cup, ultimately raising concerns about the “rebound effect.”* Despite the event being marketed as an environmentally-friendly initiative under the strategy of “Better Together,” aiming at goals such as carbon reduction, it was actually revealed to be an accelerating factor in environmental pollution.

*Rebound effect: In environmental contexts, it refers to the unintended consequence where actions taken with the intention of being environmentally friendly end up having negative effects on the environment.

Cause

Corporate Greed and Regulatory Ineffectiveness

Greenwashing is closely related to the increasing demand for eco-friendly products and the growing interest in ESG management. As public awareness of climate and environmental issues rises, there is a tendency for consumers to prefer eco-friendly products and services. In response,

companies have incorporated “eco-friendly” into their marketing strategies to secure market competitiveness. According to a survey conducted by the Korea Consumer Agency in 2023, among 1,000 adults nationwide, 90.7 percent expressed willingness to purchase eco-friendly products, with 95.3 percent willing to pay slightly higher prices compared to regular products. With the rise of the “greensumer,” where the realms of “green” and “consumer” intersect, along with the growing influence of the “green innosumer,” who actively engages in corporate eco-friendly initiatives, companies are increasingly endeavoring to portray themselves as eco-friendly. However, these efforts have sometimes resulted in greenwashing, wherein companies merely make superficial claims of environmental friendliness.

Greenwashing arises from corporate greed, irresponsibility, and the lack of effectiveness of regulation against it. Greenwashing is driven by several factors, including asymmetry of information where consumers lack detailed product knowledge, manufacturers’ insufficient transparency awareness, an excessive emphasis on short-term gains over long-term marketing strategies from market-oriented or customer-centric perspectives, and a lack of accountability for the adverse environmental impacts of greenwashing practices. In addition, the lack of effective regulation of greenwashing by companies that deceive consumers is also a problem.

Currently, regulations and guidelines related to greenwashing are established in various forms such as Korea’s Environmental Technology and Industry Support Act, Europe’s Ecolabel system, France’s Consumer Protection Act (Code de la consommation), and the United Kingdom’s Green Claims Code, which restricts eco-friendly advertising and labeling for products and services. In Korea, unfair labeling and advertising are regulated with corrective orders, penalty surcharges, imprisonment with labor for up to two years, or by a fine not exceeding 20 million won (US\$14,571.95). However, according to Chosun Biz, instances of greenwashing by domestic companies surged from 110 cases in 2020 to 4,558 cases in 2022. Out of a total of 4,940 cases over three years, 4,931 cases, that is 99.8 percent, received administrative guidance without legal force or penalties, with only nine cases receiving corrective orders. Not surprisingly, there is a lack of improvement. In contrast, France became the world’s first to legalize greenwashing fines in 2021. If a company’s products, advertisements, or other materials are found to be greenwashing, fines of up to 80 percent of the false advertising



expenses can be imposed, and the company is required to publish explanatory materials on its website for 30 days.

Lee Yong-Ki, a professor of the School of Business at Sejong University, cited the lack of consistency in standards for regulating greenwashing as one of the major factors. Various standards or frameworks for measuring and reporting sustainability along with ESG practices and performance, such as the Global Reporting Initiative, the EU Green Taxonomy, and the recently finalized Corporate Sustainability Reporting Directive, lack coherence and coordination, providing loopholes for greenwashing. Professor Lee pointed out that, “The ambiguity of defining ‘environmentally friendly’ and the diverse characteristics of industries, products, and services have left room for interpretation regarding environmental friendliness.” Professor Lee also added, “Simultaneously, as public awareness and interest in ESG have increased, along with demands for sustainable consumption and investment, subjective and aggressive interpretations of environmental friendliness have led to the universalization of ESG washing, namely, corporate greenwashing, which is one of the main causes.” Amidst the growing interest in environmental issues, the lack of clarity in regulation and definition contributes to the prevalence of greenwashing.

Solution

Clear Regulations, Accountability for Eco-friendly Strategies, and Proactive Consumption

Addressing the issue of greenwashing requires coordinated efforts from businesses, governments, and consumers alike. Recently, the Korean Green Taxonomy (K-Taxonomy), which defines the scope of environmentally sustainable economic activities, and the Ministry of Environment’s guidelines for labeling and advertising eco-friendly management activities, have been issued. “Training experts in greenwashing and ESG-related matters and hiring them in government agencies could be a solution. Simultaneously, establishing dedicated departments and providing education



▲ Guidelines for labeling and advertising eco-friendly management activities along with the guidelines for K-Taxonomy give specific definitions of eco-friendly.

to public officials to enhance their knowledge about greenwashing is necessary,” Professor Lee said, suggesting that national efforts are needed.

As lawsuits against greenwashing increase, companies are beginning to recognize the risks and focus on preventive measures and responses. Professor Lee stated that to address greenwashing, “Companies need to establish and internalize compliance management systems, engage in proactive communication, disclosure, and monitoring with internal and external stakeholders.” Additionally, he suggested, “Companies should prioritize environmental orientation as a core element of long-term strategy, recognizing the trend and interest in eco-friendly consumption as a business opportunity and establishing an environmentally-friendly corporate image.” To resolve environmentally deceptive practices by companies that deceive consumers, it is essential for companies to create a culture that fosters sustainable environmental thinking, generate and disseminate information for environmental orientation, and execute such strategies.

On the other hand, consumers also need to read reviews and check information about companies before purchasing to avoid greenwashing products. Consumers should verify whether the company’s environmental claims are certified by independent organizations and supported by objective data, whether the company demonstrates consistent environmentally-friendly behavior and does not announce unattainable plans, and whether they refrain from using symbols that exaggerate environmental friendliness, such as layout, images, and colors. Moreover, consumers should also determine if the company is making the public feel green for something that is dangerous or controversial, such as green tobacco or natural gas. Highlighting these various verification points, Professor Lee suggested, “Ultimately, consumers need to become smarter to prevent the intention of greenwashing by companies, so environmental education for consumers should be adopted as a regular subject in schools at all levels.” Additionally, providing consumers with information about eco-friendly certification marks and distinguishing criteria from the Ministry of Environment could be helpful in dealing with and promoting methods to counter greenwashing companies.



Who Is Responsible for Environmental Pollution?

Problem

Violation of Regulations Related to Environmental Pollution by Companies

According to data received from the Ministry of Environment by Lee Soo-jin, a Democratic Party member of the National Assembly's Environment and Labor Committee, 1,492 domestic businesses were found to have violated environmental pollutant discharge regulations from 2022 to August 2023. The cases included golf courses that exceeded sewage discharge limits and car washes that exceeded wastewater discharge limits or failed to report changes to wastewater discharge facilities. Furthermore, public corporations, such as the Gwangju branch of K-Water and the Future Development Institute of the Korea District Heating Corporation were also implicated. Some companies were found to repeat violations after being fined for neglecting to repair air pollution-related facilities such as exhaust outlets. In addition, according to data obtained from the Ministry of Environment by Lim Lee-ja, a People Power Party member of the National Assembly's Environment and Labor Committee, the total number of violations of waste discharge facilities from 2018 to August 2023 reached 26,067. From 3,265 in 2018 to 5,417 in 2022, the number of violations jumped 66 percent in five years. At a time when everyone is calling for the need to protect the environment, many facilities, including public enterprises, are violating environmental pollutant discharge regulations, and the number of waste discharge violations is only increasing.

Cause

Minor Penalties for Polluting Companies in Korea

From 2022 to August 2023, 1,068 out of 1,492 cases, or 71.6 percent, of companies found to be in violation of environmental pollution regulations received a warning, a fine, or an improvement order, requiring them to take measures within one year to reduce pollutant levels to the permissible emission standards. According to data from the Geumgang River Basin Environment Agency, fines averaged about 900,000 won (US\$655.74) per violation. Of the 39 cases of violation, all 39 were issued warnings and fines for failing to complete pollutant discharge logs or falsifying them. In addition, when looking at the disposition of waste discharge

sites that violated regulations from 2018 to August 2023, fines were issued in 14,054 cases, improvement orders and others in 6,585 cases, accusations in 5,222 cases, suspension of business in 2,058 cases, and suspension of use (closure) in 79 cases.

While Korea's enforcement of environmental regulations has been lax, other countries are increasingly enforcing them. According to a December 20, 2023 article in eKoreaNews, the United Kingdom removed the cap on fines on December 11, allowing polluting companies to face unlimited financial penalties from the Department for Environment, Food and Rural Affairs (DEFRA). This removes the £250,000 (US\$313,236.79) cap on variable penalties for polluting companies. The DEFRA explained that the money raised from fines will be reinvested in the water restoration fund. The EU has also made it possible to imprison individuals or company representatives who cause pollution. On February 27, 2024, the EU Parliament voted to impose up to 10 years in prison and a fine of up to 5 percent of the turnover of the company to the individual or company representative responsible for the worst environmental pollution that causes someone's death. "Under the current law, most first-time offenses are relatively minor and are 'warned,' while serious offenses that can have a major adverse impact on the environment are prosecuted and ordered to close down," the Korean Ministry of Environment told eKoreaNews. Lee pointed out the weak level of enforcement, saying that since it ends with a warning or a fine, businesses are simply violating the law.

Solution

Changing Perceptions and Driving ESG Management

On November 27, 2020, the Act on the Control and Aggravated Punishment of Environmental Offenses expanded the scope of penalties and increased the fines to within 5 percent of the cleanup costs and turnover of the business. It also stipulated an "environmental leniency system" that provides partial reductions for those who promptly report and correct violations. "The increased penalties for environmental crimes mean that the scope of environmental crimes may be expanded and strengthened in the future," Professor Lee said, noting that the perception that it is more beneficial for companies to violate environmental laws and receive a light penalty than to not violate them is expected to disappear.

Currently, environmental crimes are enforced by the Ministry of Environment. On November 14, 2022, the Hangang River



Basin Environment Agency and the Special Judicial Police Division of Gyeonggi Province launched the “Environmental Crime Joint Specialized Investigation Team” within the Uijeongbu District Prosecutors’ Office, to strengthen the investigation of major environmental crimes. “Investigations into environmental crimes should be controlled by agencies like these,” said Professor Lee, adding that “specialized personnel such as ESG management experts, environmental law experts, and scientists should be hired, and organic cooperation between ministries should be established.”

In addition to legal sanctions, Professor Lee said that ESG assessments for large and listed companies and supply chain ESG assessments for suppliers that do business with large companies are increasingly subject to indirect pressures, such as deducting points from the assessment score or excluding them from the assessment if they violate environmental laws and regulations. There should be a consensus or awareness that environmental risks will have a financial impact on the business,” Professor Lee said, suggesting that in addition to legal regulations, there are ways to penalize companies to encourage ESG management.



Outsourcing Environmental Pollution

Problem — Offshoring



▲ Companies offshore some of their work.

The “net-zero” strategy, mainly discussed in advanced countries like the United States and the EU, is a significant topic. But when companies in developed countries show a decrease in carbon emissions, does it really mean that their overall carbon emissions have decreased due to their environmental efforts? Perhaps not. What is happening is that they are shifting carbon emissions from their home countries

to countries abroad. This phenomenon, where companies move their production facilities overseas, is known as “offshoring.” Taking Korean companies as examples, Samsung Electronics relocated its smartphone factories to Vietnam in 2009, and LG Electronics moved some of its TV production lines to Indonesia in 2020. Offshoring mainly involves companies of advanced countries relocating parts of their business operations to developing countries with lower labor costs. In this process, additional environmental issues may arise.

According to Impact On’s article dated April 30, 2024, titled “Analysis of Net-Zero in the Semiconductor Industry (Part 1): The Hidden Side of the Global IT Industry, ‘Carbon Offshoring,’” the most proactive users of a strategy called Carbon Offshoring are global IT companies, such as Apple and Microsoft. Carbon Offshoring, a concept that emerged in the 2010s, is essentially the carbon version of “outsourcing risk.” It involves concentrating high-carbon emission processes in regions with relatively lax greenhouse gas regulations, especially in Asia, thereby shifting the responsibility for managing greenhouse gasses overseas. This logic is similar to the outsourcing of industrial health and safety risks within the value chain to overseas partners. According to “China’s Carbon Emissions Report 2015” by Zhu Liu of Harvard Kennedy School, products consumed abroad accounted for a whopping 25 percent of China’s greenhouse gas emissions. The regions with the highest shares were Europe and the U.S. Similarly, about 20 percent of India’s greenhouse gas emissions were attributed to products consumed overseas. Many companies have shifted their carbon emissions overseas through offshoring strategies.

Cause — Companies Shifting Carbon Emissions to Foreign Countries

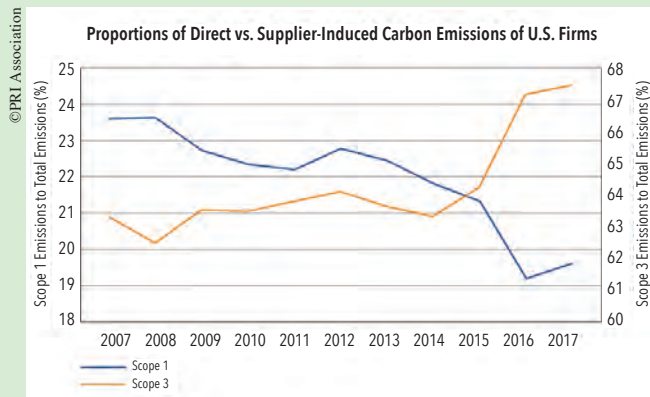


▲ Carbon emissions are categorized into Scopes 1, 2, and 3.

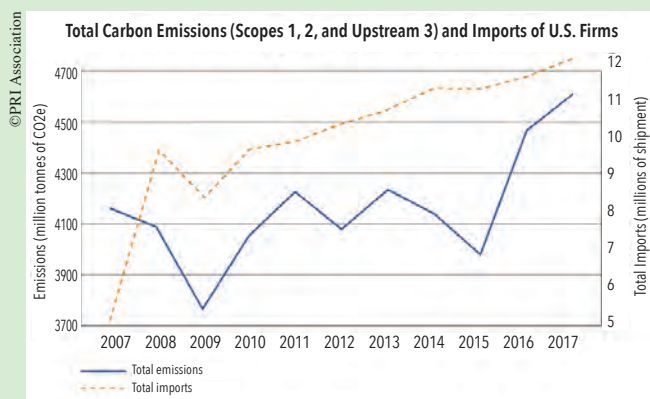
Cover Story

The primary reason for such offshoring policies is mainly due to the lower labor costs and relatively lax environmental regulations in the developing countries to which they relocate. As environmental regulations for companies tighten domestically, they opt to export their carbon emissions to countries where environmental regulations are more relaxed. Professor Lee pointed out, “According to the research by Dai, Duan, and Liang, while efforts seem progressive, a closer look reveals that firms are committed only to greenhouse gas emissions from their production and energy consumption.” Carbon emissions are categorized into Scopes 1, 2, and 3 based on their nature and measurement scope. “Scope 1” refers to carbon emissions directly emitted from sources owned or controlled by the company, such as internal energy combustion and processes within the company’s facilities. “Scope 2” encompasses greenhouse gas emissions indirectly generated when the company purchases and consumes energy. Since most companies do not directly produce energy but procure it from external sources like power plants, these emissions are considered indirect. “Scope 3” emissions represent a broad range of indirect emissions associated with the company’s activities excluding “Scope 2” emissions, but which occur outside its direct control. This includes emissions from transportation, waste disposal, and activities of suppliers and customers, particularly those located overseas. Nevertheless, “Scope 3” emissions are often overlooked. This “Scope 3” includes carbon emissions from overseas suppliers that are under the influence of the organization but not directly controlled by it.

In the PRI blog titled “Do U.S. Companies Outsource Their Carbon Footprints to Overseas Suppliers to Maintain Competitiveness?” explaining the paper “Outsourcing Climate Change” (2021) presented at the PRI Academic Network Week by Dai, R., Duan, R., Liang, H., and Ng, L., it is asserted that “Companies actively outsource their carbon emissions to overseas suppliers as domestic pressure to reduce emissions intensifies, leading to greater risks and lower valuations.” The paper analyzed the Scope 1 emissions generated by U.S. firms, direct carbon emissions, and upstream Scope 3 emissions, a type of Scope 3 produced by the firms’ suppliers located abroad. Analysis found that, as the proportion of Scope 3 emissions generated by suppliers increased, the proportion of direct Scope 1 emissions decreased. The paper also shows that both total carbon emissions and total income of U.S. firms are increasing, suggesting that carbon emissions and



▲ The graph shows that the proportion of Scope 1 emissions has fallen as the proportion of Scope 3 emissions has increased.



▲ The graph shows that total emissions and total imports of U.S. firms are trending upward.

income are highly correlated. This shows that U.S. companies are outsourcing some of their pollution to global suppliers to avoid emissions liability. It also suggests that Scope 3 is more likely to replace Scope 1 as domestic legislative pressure and regulatory stringency increases and that companies in high-emitting industries or industries that require large pollutant inputs have a real incentive to outsource their emissions requirements, explaining that companies tend to outsource their emissions to supply countries with less stringent environmental regulations.

The reasons for strict environmental regulations are firstly common sense in business management and increased pressure from non-governmental organizations. In addition, environmental regulations can drive technological innovation by increasing the demand for clean and environmentally relevant technologies, which in turn secures the international competitiveness of environment-related industries. And can further secure export competitiveness by increasing the demand for environmentally-friendly products. “Therefore,

through environmental regulations, countries can protect their industries and secure competitiveness,” said Professor Lee. “Rather than perceiving the strengthening of environmental standards as a punishment, Korea should use an approach that ensures that it is done from the perspective of enhancing the competitiveness of companies,” he added.

Solution

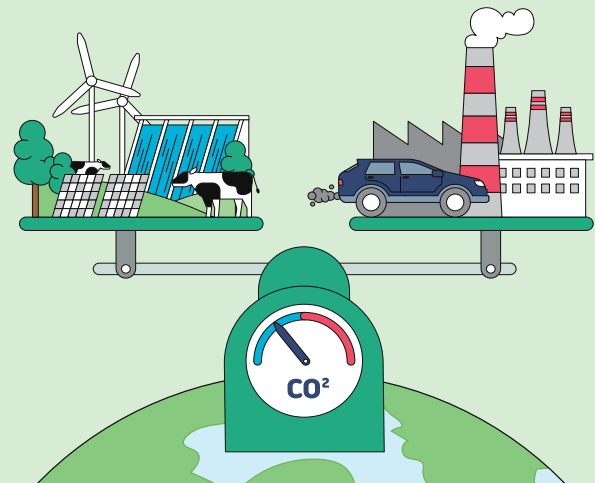
Be Environmentally-friendly Oriented and Organized

According to the aforementioned paper (Dai, Duan, Liang, and Ng, 2021), decisions regarding pollution management and outsourcing are influenced by internal and external pressures. Internally, there is a desire among management and board members to maintain an environmentally-friendly reputation and attract more customers and investors. To achieve this, companies face internal pressure to maintain their reputation by outsourcing pollution-intensive production overseas. On the other hand, externally, environmentally-friendly corporate customers and investors are more concerned about the ESG performance of companies’ global supply chains* and investment portfolios. Therefore, external monitoring and significant external pressure are needed to suppress such behavior by companies. Similarly, government organizations or entities purchasing products or services from companies, known as government customers, also emphasize global emission reduction to effectively address climate change for the public good. Thus, they will inhibit companies’ outsourcing behavior. When formulating environmental policies to regulate corporate behavior, it is important to consider carbon emissions across the entire value chain, especially those of suppliers.

Meanwhile, Professor Lee emphasized that, “supply chain ESG management is being implemented, including the

submission of ESG reports related to the management and activities of companies engaging in offshoring,” anticipating that the related issues would gradually be resolved. He added, “The most important aspect is whether CEOs and staff members possess a mindset oriented towards environmental protection and execution. Therefore, continuous education and support from national and related institutions are necessary for this purpose,” explaining that addressing the problems arising from offshoring is not solely the responsibility of companies but also requires collaboration from the country. Additionally, he suggested that there is no need to suppress corporate outsourcing, but to establish a compliance management system when outsourcing. Proposing that rather than inhibiting outsourcing itself, it is essential to implement a systematic approach to comply with legal, regulatory, and ethical requirements, preventing legal violations, and safeguarding corporate reputations by adhering to ESG-related standards.

*Global supply chain: The material, financial, and informational flows and outflows that occur as raw materials and components are produced, intermediate and final products are produced, and distributed to different parts of the world.



As countries worldwide strive for carbon neutrality, the social responsibility of businesses becomes paramount. Companies should refrain from deceiving consumers for profit, disregarding environmental regulations, or shifting responsibility to other countries. Governments must enact clear regulations on environmental pollution and enforce sanctions against non-compliant companies while assessing their contributions to carbon neutrality. Effective use of incentives and penalties is essential. Consumers should autonomously assess environmentally-friendly actions and adjust consumption habits accordingly. The era of ignoring environmental pollution is over; it is time for everyone to take responsibility. 🌱

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The Generative AI Dilemma: Are All AI Rights Reserved?

By Cho Subin

Staff Reporter of Theory & Critique Section

In November 2023, the legendary British rock band The Beatles released their last new song, “Now and Then,” using AI to capture the voices of all the members, including those who had died, John Lennon and George Harrison, who died in 1980 and 2001 respectively. It was possible to include the voices of John Lennon because AI technology was used to isolate and extract his voice from an unreleased demo of “Now and Then” that he had left behind. While some people were excited to hear a new song with all four voices, the British publication, the Telegraph, criticized the idea, calling it creepy and “digital necromancy.” The question of whether or not generative AI* works should be recognized as equal to human-created works is controversial.

Generative AI is being used in various artistic fields, such as art and video. The debate continues, with claims that it infringes on the copyrights of existing human works and concerns that it could threaten the jobs of humans, such as cartoonists and composers, whose primary job is to create art. In June 2024, the world’s first law to regulate AI, the AI Act, seems to come into force after being passed by the EU Parliament, and it is expected that countries around the world will begin to discuss passing laws to regulate AI works. The Argus examines the debate over copyright for AI-enabled creations to help readers understand the issues that arise as generative AI develops in the arts.

*Generative AI: Generative AI refers to a computer program that creates content, such as text, images, and video, based on commands entered by humans in natural language. It is a type of deep learning that uses the same process as the human brain’s neural networks to learn from data to create patterns and make inferences.



Should AI-created Work Be Given Copyright?

What if your AI-composed song became a hit and made you rich in royalties? Billboard estimates that the Michael Jackson Foundation, which manages the American pop star's estate after his death, earns US\$75 million a year in copyright income. The enormous amount of money that hit songwriters make from copyrights is the envy of many. If songs composed by generative AI are recognized as copyrighted works, it may be possible for people who do not have the ability to compose music themselves to receive royalties. In fact, EvoM, an AI composer developed by Professor Ahn Chang-wook of the Gwangju Institute of Science and Technology (GIST) Graduate School of AI, composed "24 Hours of Love" in 2022, but it is not eligible for royalties, and there has been discussion in South Korea (hereafter Korea) about whether AI creations should be recognized as copyrighted works.

Generative AI is being used to create not only music, but also artwork and novels. However, the debate on whether these works of art should be recognized as copyrighted works is still ongoing. Article 2 of Korea's current Copyright Act stipulates that "Work means a creative production that expresses human thought or emotions," and Article 2-2 defines "author" as "the person who creates the work," limiting the subject of the work to humans. Under this law, artworks created by AI are currently not recognized as copyrighted works because AI is not a human being.

Argument 1 Artwork created by generative AI should be recognized as copyrighted work.

The artwork of AI has been debated since the artwork "Space Opera Theater" drawn by AI won first place in the Digital Artist category at the 2022 Colorado State Fair Fine Art Competition in the United States. This specific exhibition recognizes the use of digital technology in the creative process and the act of digitally editing images, such as adjusting colors. American game designer Jason Allen, who created the artwork, argued that he had disclosed in his entry that he had used Midjourney, a generative AI that creates images based on the text entered by a user. Therefore, he had not anticipated



▲ Jason Allen wins first prize with his work "Space Opera Theater" at the Colorado State Fair Fine Arts Competition.

© Discord Jason Allen

having a problem winning the award and even applied for copyright registration. He argued that the process of using generative AI to create the artwork involved his own labor and effort, as he spent 80 hours entering instructions for his own design, including over 900 prompts.* His argument was that the process was no different from using a camera or design software to create a painting.

The rationale for recognizing art created by generative AI as a copyrightable work leads to two main arguments. The first is that AI can be viewed as a tool for creation, and the second is that AI can be recognized as a juristic person, and therefore AI art can be copyrighted. Those who see AI as a creative tool point to the debate over whether photography should be recognized as an art form, which began with the invention of the camera in 1839. Photography was officially recognized as artistic work in 1862, when the Parliament of Paris ruled that "photography is a clear means of artistic expression, and the copyright of a photograph is recognized as a creative work." Similarly, proponents argue that the use of generative AI to create art can be considered human creation. As long as the process of generative AI is appropriate and the result is original and useful, it requires artistic creativity and should be recognized as a work of authorship. In fact, the human creative process is integral to the process of creating art with Midjourney. To do so, the user must type a word or phrase into the main prompt bar. The way the user types the prompts determines what the generative AI produces, to the point where there is a profession of prompt engineers who type the right words into the generative AI to achieve the desired result. In his paper "A Study on Creation by Generative AI and Copyright" (2023), Son Young-hoa, a professor at Inha

learns questions and the corresponding answers in Chinese. When a person outside the room writes a question in Chinese and places it in the room, A writes down the correct answer based on what he has learned. To the outside world, it looks like A is taking notes in Chinese, but this is possible without understanding what the question-and-answer means. John Searle likened A in the thought experiment to an AI, arguing that AIs mimic humans like A, who appears to write in Chinese even though he does not know the language. In other words, people can build machines that mimic human intelligence, but they cannot actually embody human intelligence.

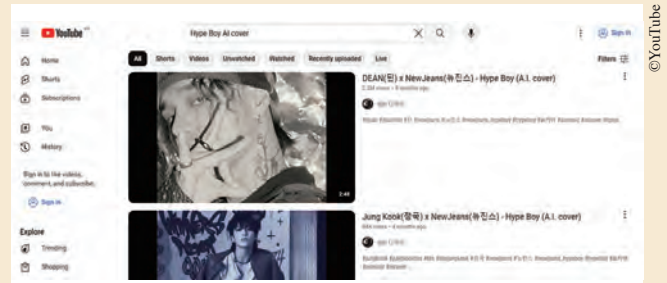
Others argue that legislative efforts to recognize AI as legal entities could upend the legal system. “If you confer personality to an AI that can be a computer program, which is a specific piece of software, that creates a lot of follow-up issues,” said Moon Jin-Gu, a lawyer at Shin & Kim LLC. As AI is not yet capable of thinking and making decisions on its own, he said, legal issues may arise regarding the use of AI-created creations and the accrual of copyright fees, and it is not easy to resolve legal issues by assuming a third-person entity rather than an actual natural or juristic person.



▲ Discussion on recognizing AI as a juristic person is ongoing.



Does Generative AI Infringe Copyrights in the Learning Process?

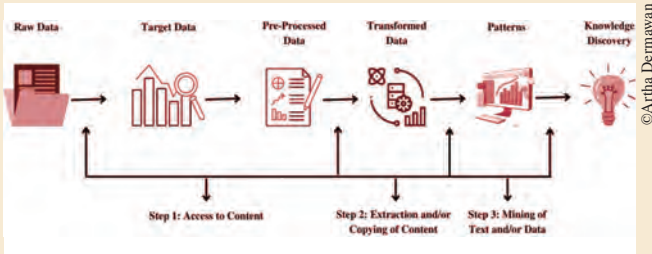


▲ Searching YouTube with the song “Hype Boy” followed by “AI cover” shows several covers of diverse singers.

If you search YouTube with the title of your favorite song followed by “AI cover,” you will find many AI-generated covers of different singers’ voices. For example, the K-pop song Hype Boy has two AI-generated versions: one covered by famous singer Bruno Mars’s voice and one by DEAN’s, a Korean singer who has not released a new song in a while. Both versions have more than two million views and are becoming a hot topic. Many people are excited to be able to enjoy different music with the voices of their favorite singers or to enjoy their favorite songs with the voices of different singers. Not only that, but there are also AI cover songs that have been created by teaching AI the voices of celebrities and anime characters. But when an AI learns other people’s voices and uses them to create something, is it infringing on the voice owner’s copyright?

The nature of generative AI, which learns from existing data and makes inferences based on it, raises the question of copyright infringement during the learning process. The process by which AI collects and analyzes data, including multiple works, is called Text and Data Mining (TDM). Since this process inevitably involves the reproduction and transmission of copyrighted works, there is a possibility that the transmission and reproduction rights of copyrights may be infringed upon. If you do not have permission from the copyright holder, you must acknowledge the legality of the use. However, even if the copyright holder does not give permission, Article 35-5 of the Korean Copyright Act provides

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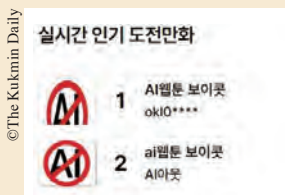


▲ The TDM process is largely accomplished through the steps of content access, content extraction and/or copying, and text and/or data mining.

for fair use, which allows you to use the work legally under certain conditions. Fair use is recognized only if it does not conflict with the normal use of the work, such as enjoyment of the work, and does not unreasonably prejudice the legitimate interests of the author. Therefore, whether AI's use of data in the TDM process can be considered fair use is a key issue in the copyright infringement debate. Since the recognition of fair use is determined by the court, there are active discussions around the world on whether to legislate a TDM exemption clause that exempts data learning in the AI's TDM process from copyright infringement at the outset.

Argument 1 Copyright infringement occurs in the process of AI learning existing data.

“AI Webtoon Boycott.” In 2023, popular webtoons on “Challenge Comics,” the free upload section of Naver Webtoon, a popular Korean webtoon platform, had their covers and titles changed to “Boycott AI Webtoons.” NAVER Webtoon’s new terms and conditions sparked a backlash from webtoon artists and aspiring webtoonists. They argued that their works could be used to train AI, citing Article 16-2 of NAVER Webtoon’s Terms of Service, which states that submissions to NAVER Webtoon may be used for research purposes for NAVER Webtoon and NAVER services. Thus, many artists argue that copyright infringement issues inevitably arise because AI imitates existing works.



◀ Popular webtoons in Challenge Comics, the free upload section of Naver Webtoon, change their covers and titles to “AI Webtoon Boycott” in June 2023.

Similar to the artists’ argument, there is an opinion that copyright infringement in the TDM process can be recognized under copyright law. In his paper, “Legal Issues on Protection of Trainable Datasets for Artificial Intelligence under Copyright Law: Focusing on The Copyright Exception for Text and Data Mining(TDM)” (2021), Professor Cha Sang-Yook of Kyungpook National University Law School said that even if the dataset for AI training extracted from big data is not creative, referring to the case law on database creators, “If the dataset for AI training extracted from someone else’s big data or database is collected and used without authorization through illegal crawling, etc., the dataset will be copyrighted.” He suggested that the cases where the dataset contains copyrighted works, or does not contain copyrighted works but is used without authorization by copying someone else’s performance, are illegal. “In these cases, the tort of Article 2 of the Unfair Competition Prevention and Trade Secret Protection Act or Article 750 of the Civil Act can be established,” he said.

Some argue that it would be premature to create a new exemption that would allow copyright infringement to be judged as fair use, as there is a high possibility that copyright infringement could be claimed in the data learning process of TDM. In his paper, “Generative AI and Copyright Issues,” Koo Chang-hoon, a lawyer in the Intellectual Property Department of KBS, explains the reasons of those opposing the creation of an exemption to protect the rights of creators. “It is mainly based on the fact that the fair use provisions of the existing copyright law are very likely to balance the legal interests of generative AI developers and copyright holders, and that it is more efficient to legislate with specific solutions and visions as the relevant industry grows and the relevant interests become clear,” he said. Additionally, they suggest that when the relevant discussion has not yet matured, it is more efficient to legislate specific solutions and visions once the relevant industry has grown and the relevant interests become clear. He also noted that TDM exemption clauses are mostly enacted in countries that do not have fair use provisions. The main argument is that the existing fair use provisions are uncertain in determining fair use, which could hinder the development of the AI industry.

Argument 2 The learning process of generative AI should not be considered copyright infringement.

In the fair use debate over the TDM process, some argue that copyright infringement claims arising from the TDM process should be addressed by broadly recognizing the scope of immunity for use in the TDM process. In Korea, Rep. Do Jong-hwan introduced Article 43 of the Copyright Act Amendment Bill 2021, which included a TDM exemption clause, but it was only considered by a subcommittee before being debated in the plenary session of the National Assembly. At the Forum, “In the age of generative AI, copyright issues are on the rise,” in May 2023, Lawyer Lee Yong-hae explained that the basis for opposing the TDM exemption clause is the development of the AI industry and industrial competitiveness, the fact that learning from open data does not excessively infringe on the rights of copyright holders, and that AI only creates new rules through TDM and does not utilize and exploit the original data itself. Lawyer Moon said, “Intellectual property rights, which are a type of copyright, are not always protected rights, and in some cases, the exercise of copyright is restricted. The purpose is to contribute to the purpose of copyright law, which is to contribute to the development of culture and related industries,” referring to Article 1 of the Copyright Act, which protects copyright holders but also promotes the fair use of works, which is what the law aims to achieve.

In the art world, some artists have expressed hope that AI will increase productivity and open up new creative fields. For example, Lee Hyun-se, a famous Korean cartoonist who drew popular works such as “The Terrifying Mercenary Baseball Team” (2009) and “Romance of the Three Kingdoms” (2013), is working on the “AI Lee Hyun-se” project, a project to teach his drawing style to an AI so that the AI can draw comics in his style even after his death. In October 2023, through the Korean webtoon agency Jaedam Media, the artist taught the computer 4,174 comic books he



▲ Lee Hyun-se is one of the most prominent cartoonists in Korea, with works including “The Terrifying Mercenary Baseball Team” (L) and “Romance of the Three Kingdoms” (R).

created over 44 years to use his drawing style. In an interview with AI Times, the artist said, “Even if I die, my fictional universe, drawings, and thoughts will survive and continue to communicate with people of that era 50 or 100 years later, which is very exhilarating and exciting.”



▲ The AI director of the “AI Lee Hyun-se” project explains the AI technology for the project.



The Prospect of Controversy

As disputes over the creative works of generative AI continue, such as an U.S. newspaper New York Times filing a copyright infringement lawsuit against Open AI, the developer of Chat GPT, a text-generating AI, a more organized discussion will be important. It will be crucial to look at these lawsuits on a case-by-case basis. “So far, the U.S. Copyright Office and the law are still firmly of the opinion that AI-generated artworks are not works of authorship,” Lawyer Moon explains, “and the outcome of the various lawsuits will largely determine the direction of the debate.” He added that it is important to look at the rulings on a case-by-case basis, especially in the U.S. where every precedent becomes law.

Meanwhile, the negative reactions of some consumers and public to AI creations is also an important factor in the outlook for the debate. While there have been positive reactions to generative AI, there have also been negative consumer reactions, with reports of AI-generated images and text being found to contain false information. Therefore, it is expected that technology to determine the level of AI involvement in AI creations will become important. In fact, Kim Jun-koo, CEO

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of Naver Webtoon, said at the “DAN 23” conference in August 2023, “We are conducting research on generative AI that can actually be used by writers without copyright controversy.” The problem of copyright infringement has arisen because existing generative AI creates works based on randomly learned image data without the consent of the original artist. Therefore, the plan is to solve the copyright infringement problem by learning only one artist’s painting and using it to produce the artist’s next work and to create innovation in terms of productivity and diversity of creation. In addition to technical research, there has been a legislative debate in Korea to regulate AI rather than to develop it since Chat GPT was highlighted. “Before the emergence of generative AI, there were many positive discussions and views that Exemption Clause on TDM should be adopted, but since the emergence of generative AI, the trend has changed to a more cautious attitude,” Lawyer Moon explains.

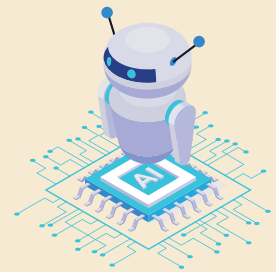


©Naver Webtoon

▲ Kim Jun-koo, CEO of Naver Webtoon, introduces a plan currently under research for AI technology that avoids copyright issues.

Another limitation of the current AI debate is that it has not kept up with the pace of technological progress. Kang Su-mi, a professor of the Department of Painting at Dongduk Women’s University, argues that the current debate on copyright and creativity around AI creations comes from a historical perspective that needs to be moved away from. “From an epistemological perspective, it is backward-looking to assume human intelligence and sensory perception as absolute values and to judge whether today’s generative AI is creative simply

because it is a technology and a machine. In the reality where new technologies emerge every day, such judgments are not valid and cannot keep up with current changes,” Professor Kang said. She also emphasized that as the capabilities of generative AI evolve, it is necessary for various areas of our society to change as well.



As generative AI technology advances, the quality of the art it creates is not only improving but also becoming more similar to human thought. However, society as a whole is not prepared for the rapidly advancing technology, and the debate that began in the art world is now extending to legal issues. As conflicts arise around the world in this transition to the AI era, it is necessary to prepare for an era of coexistence with AI by revising laws and institutions. The Argus hopes to prepare readers for the new society by predicting and discussing various social issues arising from the AI era not only in academia but also among all in society. 📖

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CCU concrete: Technology to Save the Earth



By Lee Seun

Staff Reporter of Theory & Critique Section

“**T**he top risk factor facing humanity in the next 10 years is the climate crisis, followed by failure to mitigate it.” This statement is from the “Global Risks Report” (2019) by the World Economic Forum. According to We Save Oceans, an organization focused on addressing climate change through ocean conservation, if the Earth’s average temperature rises by 1 C, the rate of melting of Arctic ice will accelerate, putting polar bears at risk of extinction. With a 2 C increase, Greenland could entirely melt, leading to the submergence of cities like Miami and New York City and causing tens of thousands of deaths from heatstroke. The Earth’s temperature has already risen by 1 C, and the remaining 1 C will determine the fate of our planet. Global warming is thus a pressing issue that requires immediate attention. One of the primary causes of this phenomenon is the increase in carbon dioxide (CO₂) emissions due to industrialization, so countries worldwide are exploring various measures to reduce CO₂ emissions.

In response to the need for reducing greenhouse gas emissions, a technology gaining attention involves trapping carbon dioxide during the concrete* production process. Toward this end, on April 28, the Korea Institute of Civil Engineering and Building Technology (KICT) announced its success in domestically producing the first concrete that consumes carbon dioxide in South Korea (hereafter Korea). Following this, The Argus plans to commemorate Concrete Day on June 24, initiated by seven concrete-related organizations including the Korea Concrete Institute, aiming to explain the technology, principles, and prospects of Carbon Capture and Utilization for concrete production (CCU concrete) providing readers with insights into solutions for climate change, arguably the most critical issue facing humanity.

*Concrete: A mixture made by blending cement, water, sand, gravel, and, if necessary, additives for performance enhancement in appropriate proportions

1. Concepts

1) CCUS and CCU concrete



▲ CCUS goes through three stages: (1) capture, (2) compression and transportation, (3) storage or utilization.

It was revealed that last year’s global CO₂ emissions related to energy reached an all-time high. The International Energy Agency (IEA) stated in its “2023 Carbon Dioxide Emissions” report that global CO₂ emissions in 2023 increased by 410 million tons compared to 2022, when it reached 37.4 billion tons. Concrete, which is utilized in various ways, significantly contributes to CO₂ emissions. Approximately one ton of carbon dioxide is emitted per ton of cement produced, which is the main ingredient of concrete, and accounts for 8 percent of global CO₂ emissions. Furthermore, the carbon dioxide emissions from the global cement industry rank third in quantity, following the entire CO₂ emissions of China and the United States. According to an IEA report from 2017, global cement production is expected to exceed 5 billion tons annually over the next 30 years. With the increasing demand for new buildings, it is inevitable that the demand for concrete and cement will also increase.

In order to cope with the increasing global CO₂ emissions, CCU concrete has emerged. CCU concrete, which applies CCUS technology, involves capturing and storing CO₂ emitted during industrial processes and converting it into high-value materials or products. This technology is known as the only technology that stores CO₂ within concrete without re-emitting it into the atmosphere through chemical reactions between captured CO₂ and concrete. CCUS technology, which is the base of CCU technology, involves the capture, utilization, and storage of CO₂. Essentially, it comprises capturing CO₂ emissions from large sources, such

as power plants and steel and cement factories, before, during, or after combustion and either storing them underground or in the ocean, or converting them for various uses. This technology is increasingly recognized as essential for carbon neutrality. CCUS goes through three stages: capture, compression and transportation, and storage or utilization and sale. In the capture stage, CO₂ is separated from various impurities produced in large industrial processes, like coal and natural gas power plants, steel mills, cement, or oil refineries. The second stage involves compression and transportation. Typically, the separated CO₂ can be liquefied by applying pressure with a hot steam heater to achieve 80 to 100 atmospheres of pressure. The liquefied CO₂ is then transported via pipelines, trucks, ships, or other means to proceed to the next stage. The final stage is storage or utilization and sale. Depending on the need, the transported CO₂ can be stored, known as “carbon capture and storage (CCS),” or utilized and sold for other purposes, known as “carbon capture utilization (CCU).” CCS typically involves burying liquefied CO₂ deep underground in geological formations such as deep-sea sediments to reduce greenhouse gas emissions. Safety is crucial during the storage stage, ensuring secure burial underground. The technology developed by KICT is part of CCU technology.

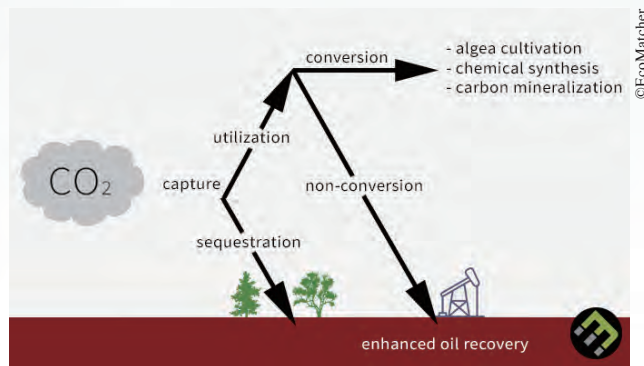


▲ Concrete significantly contributes to CO₂ emissions.

CCU is primarily composed of options for using CO₂ directly or converting it for utilization. Among these,

the method that Korea has focused on is conversion for utilization. There are various conversion methods, but they can be classified into three promising fields. The first is chemical conversion, which involves catalytic reactions of CO₂ to convert it into raw materials for chemicals, such as methanol, elements, and urethane. The second is biological conversion, which utilizes microalgae with high photosynthetic rates, such as plankton, to convert CO₂ into chemical substances for bioresource utilization. The last is mineral carbonation, which involves CO₂ reacting with

minerals like calcium salts to produce construction materials. The technology KICT created is based on the mineral carbonation conversion method. Dr. Park Jung-Jun, research fellow of the Department of Structural Engineering Research, who participated in the development of this concrete at KICT, explained, “The method developed by our research team utilizes captured CO₂ in the concrete production process to create concrete where the embedded CO₂ is permanently trapped without being re-emitted. We named it Carbon Eating Concrete, abbreviated as CEC.”



▲ CCU is classified into three promising fields: chemical conversion, biological conversion and mineral carbonation conversion.

2) Companies Using CCU

The industries most actively utilizing CCU in Korea are the energy, petrochemical, and oil refining sectors. According to a news article dated March 31, 2021 in The Korea Economic Daily, Hyundai Oilbank claimed it was pursuing “carbon-neutral green growth,” becoming the first domestic refinery to do so in August 2020, in response to the strengthening global environmental regulations. Under this new growth strategy, Hyundai Oilbank plans to drastically reduce the carbon emissions of its Daesan plant through CCU, including carbon capture, introduction of eco-friendly power generation methods, operational efficiency improvement, and commercialization of the blue hydrogen business. Additionally, along with the Korea Research Institute of Chemical Technology, the company possesses technology to convert CO₂ into methanol, which is used to produce next-generation eco-friendly fuels, plastics, rubber, and various industrial materials. Hyundai Oilbank plans to commercialize methanol production by 2030. Furthermore, Lotte Chemical installed CCU facilities on factory chimneys to use carbon as

a raw material for producing polycarbonate products widely used in many fields, such as greenhouse roofs, public phone booths, and building connecting passages, or to be sold to nearby small and medium-sized chemical companies for use in dry ice, semiconductor cleaning solutions, and other products. KC Cottrell is conducting demonstration projects by installing dry CO₂ capture facilities after combustion in fluidized bed boilers, aiming not only to reduce fine dust emissions but also to capture CO₂ emissions. In this manner, various domestic energy, petrochemical, and oil refining companies in Korea are utilizing CCU to reduce CO₂ emissions by either utilizing CO₂ or selling it to small and medium-sized chemical companies.

Hyundai Oilbank

©Hyundai Oilbank

LOTTE CHEMICAL

©Lotte Chemical

KC Cottrell

©KC Cottrell

▲ Many companies in Korea utilize CCU to reduce CO₂ emissions by either utilizing CO₂ or selling it to small- and medium-sized chemical companies.

The steel industry also utilizes CCU to reduce carbon emissions. The steel industry, with its significant CO₂ emission sources and reducing agents, is well-suited for carbon resource utilization. In the ore smelting process, where coal is used for reduction reactions to remove impurities from iron ore, carbon is primarily emitted. ThyssenKrupp, Europe’s largest steel company based in Germany, has attempted Carbon2Chem, which converts CO₂ into carbon, and the Hydrogen Route, which replaces coal with green hydrogen for reduction reactions. The Hydrogen Route aims to process captured CO₂ into chemicals such as ammonia, methanol, polymers, and alcohols by combining it with hydrogen. Swedish aircraft and automotive company, Saab, and Europe’s top steelmaker, ArcelorMittal, have also established factories that utilize the hydrogen reduction process. In particular, SSAB has set a goal to introduce green steel to the market by 2026, which will be the world’s first steel production process not utilizing any coal or other fossil fuels. Additionally, POSCO, a steel company in Korea, has established a Low Carbon Process Research Group following its declaration to enter the hydrogen business, aiming to

develop industrial gas, hydrogen businesses, and carbon-neutral steelmaking technologies. Various steel companies worldwide are striving to develop diverse CCU to reduce CO₂ emissions.

2. Principles

1) CCU Utilizing Nano Bubble Water

The CEC, developed as the first of its kind in Korea by KICT, is based on the mineral carbonation reaction based on CCU. Within CEC, two types of technologies are applied. The first involves the use of nano bubble water instead of regular water during the manufacturing process. The core of concrete production lies in cement, the main source of CO₂ emissions. To produce cement, clinkers, which are porous chunks ranging from two to 25 millimeters in size, are first created by combusting various materials, such as limestone, clay, and gypsum, at temperatures exceeding 1,500 C in a kiln. During this process, calcium carbonate (CaCO₂), the primary component of limestone, is heated and broken down into calcium oxide (CaO), releasing a significant amount of CO₂. This is where the CO₂ nano bubble water comes into play, enabling the high concentration storage of CO₂ within concrete even under normal atmospheric pressure conditions. Nano bubbles refer to bubbles smaller than 300 nm* that are invisible to the naked eye, and CO₂ nano bubble water refers to water in which CO₂ is highly dissolved, resulting in numerous nano bubbles in the water. Dr. Park explained, “CEC replaces water used in concrete production with ‘CO₂ nano bubble water’ to reduce CO₂ emissions. Through advanced analytical techniques, we have verified that CO₂ present within CO₂ nano bubble water chemically reacts with concrete.” Using CEC, it is possible to directly store 1.0 to

1.8 kilograms of CO₂ within one cubic meter of concrete produced.

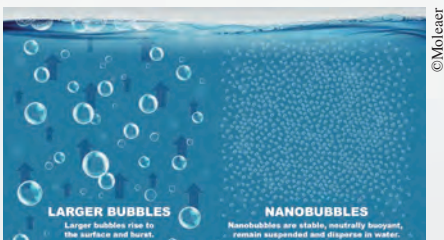
Dr. Park explained, “The technology developed

at KICT utilizes mineral carbonation reaction to create a solid substance called calcium carbonate. When gaseous CO₂ interacts with the alkaline earth metals such as calcium or magnesium present in concrete, it forms solid CaCO₂.” In other words, the gas is transformed into a solid state, converting CO₂ into a new solid substance, CaCO₂, preventing its re-release into the atmosphere. The CaCO₂ generated within concrete exists as a concrete component, effectively immobilizing CO₂ within the concrete structure. This is referred to as carbon dioxide fixation within concrete, indicating that CO₂ has been stored within the concrete. Dr. Park stated, “The CaCO₂ generated within concrete remains stable and does not re-release into the atmosphere even when subjected to impact or cracking, but it melts at temperatures exceeding 800 C, leading to CO₂ re-release. However, in reality, instances where concrete structures face such conditions typically occur during fire incidents, where concrete must undergo intense heating to reach internal temperatures of 800 C. Such occurrences are extremely rare in real-life fire situations,” emphasizing a minimal risk of the re-release of CO₂ in the future and highlighting the advantages of CEC concrete.

*nm: 0.000,000,001 of a meter

2) CCU Utilizing CO₂ Curing

The second technology developed by KICT involves placing block-like concrete in a specific chamber at secondary product* production plants to rapidly absorb CO₂, ensuring early strength development. Dr. Park stated, “We have developed CEC technology, which utilizes industrial by-products with high CO₂ reactivity to partially replace cement, thereby reducing cement usage while optimizing temperature, humidity, and mixing conditions. The developed CO₂ curing technique allows concrete to achieve its maximum physical performance with minimal cement usage.” Here, the term “curing technique” refers to providing appropriate temperature and moisture during the mixing and curing process of concrete to ensure sufficient strength development, preventing excessive impact or loads until the concrete reaches adequate strength, and protecting the exposed surface of concrete from elements like wind, frost, and sunlight. The developed CO₂ curing technique not only consumes less energy compared to conventional steam curing techniques



▲ CEC replaces water used in concrete production with CO₂ nano bubble water to reduce CO₂ emissions.



©etnews

▲ KICT has constructed the largest-scale high-pressure CO₂ curing system for concrete in Korea to simulate various temperature and pressure conditions for CO₂ curing.

but also ensures equal or higher compressive strength than conventional methods.

Generally, concrete undergoes a carbonation reaction when it comes into contact with CO₂ in the atmosphere, causing a decrease in internal pH and loss of alkalinity. The concentration of CO₂ in the atmosphere is typically around 400 ppm,* which is quite low, resulting in a slow progression of carbonation reaction. However, the risk of corrosion of embedded reinforcing steel is significant. However, CEC intentionally induces high concentrations of CO₂ to react with the materials inside the concrete. Through this chemical reaction, the captured CO₂ is converted into carbonate minerals, which act as strength-enhancing substances, permanently storing the CO₂ within the concrete. Dr. Park explained, “Not only CEC, but all CCU concrete utilizes captured CO₂. During the capture process, gasses emitted from industrial sites through chimneys while using fossil fuels, which is called flue gas, are captured and undergo a purification process to extract only CO₂. On the other hand, atmospheric CO₂, due to its low concentration, cannot be directly used in CCU concrete. Atmospheric CO₂ can be absorbed by concrete over time through a process known as carbonation.” In other words, the utilization of CCU concrete involves capturing CO₂ from flue gas emitted at cement manufacturing plants and then utilizing the captured CO₂ creating a closed-loop cycle. Ultimately, the formation of carbonate minerals through CO₂ absorption increases the density of the concrete microstructure, resulting in enhanced strength and durability compared to conventional concrete. Additionally, one can expect supplementary benefits such as improved concrete performance and reduced cement usage.

The research team at KICT has constructed the largest-scale high-pressure CO₂ curing system for concrete in Korea to simulate various temperature and pressure conditions for CO₂ curing. With this CO₂ curing technology, it is possible to sequester 15 to 20 kg of CO₂ per cubic meter of concrete.

Dr. Park mentioned, “The technologies utilizing nano bubble water and CO₂ generation technology each have their own strengths and weaknesses. Using ‘CO₂ nano bubble water,’ can limit the amount of CO₂ that can be sequestered, as it accounts for 90 percent of concrete production for on-site casting. However, it can be widely utilized. On the other hand, applying CO₂ curing technology to factory products offers a significant advantage in terms of higher CO₂ storage efficiency, but it has limitations in its applicability.”

*Concrete secondary products: These are concrete products made by curing and processing fresh concrete, also known as ready-mix concrete. They encompass a wide variety of products such as bricks, blocks, curbstones, culverts, manholes, etc.

*ppm: An abbreviation for parts per million, which represents one part in a million. It is used to denote the proportion of a substance in either weight or volume.

3. Prospects

1) Current Research Status of CCU concrete

To further advance CCU concrete technology, various research efforts are underway. According to a paper published in the journal *Nature Communications* in 2021, CCU technology is theoretically estimated to sequester 0.1 to 1.4 gigatons of carbon dioxide by 2050. CCU concrete is known as the only technology capable of mineralizing CO₂ through its reaction with concrete, enabling stable storage of CO₂ within the concrete without re-release into the atmosphere. However, not all methods of isolating or immobilizing CO₂ can be classified as CCU concrete. Additionally, for concrete to be classified as CCU concrete, it must meet certain conditions, such as increasing the strength of concrete through the use of CO₂ or avoiding excessive electricity consumption during the concrete manufacturing process for CO₂ generation. This ensures that the CCU concrete is environmentally acceptable.

From the perspective of Life Cycle Assessment (LCA), it is emphasized that CCU concrete should be developed and applied to achieve CO₂ reduction effects. Dr. Park stated, “KICT is currently at the stage of developing the core technology of CEC. We are conducting research to develop CEC with CO₂ reduction effects through LCA analysis. For the future commercialization of CEC, we recognize the need for research on field and construction site verification, establishment of structural design standards,

and establishment of evaluation methods and methodologies internationally recognized for carbon reduction, and we plan to continue pursuing these efforts.”

2) Requirements for Commercialization of CCU




▲ Lotte Capital applies CCU technology in the field.

In order for CCU to make a substantial impact on climate change, technological advancement alone is not enough; the commercialization process is also necessary. However, without economic viability, commercializing CCU becomes extremely challenging. This is because products need to be produced and traded in the market, making the product’s price competitiveness, which is how much revenue it generates through the market, more critical than the initial investment cost. Representative materials, such as polyurethane, polycarbonate, carbon monoxide, and methanol, produced through CCU have existed as fuels or raw materials in the market for a long time, so their prices have already been established through centuries of optimization in technology. However, capturing CO₂ through CCU incurs significant costs, and because CO₂ itself is a highly stable compound, the process of decomposing it and transforming it into other products requires substantial fuel and process costs. Achieving economic viability is therefore challenging for each specific product. This means that when analyzing the economic viability of CCU products, of which the costs are calculated per ton, predicting the revenue or income sources rather than just cost analysis is more important. Carbon prices vary from country to country and over time, and

the profitability of CCU can vary significantly depending on how carbon taxes and carbon border adjustments are implemented. Therefore, predicting the economic viability of CCU is very challenging. In conclusion, to facilitate the commercialization of CCU technology by businesses, it is crucial for governments to recognize their public role and provide economic incentives or benefits for CCU products.

To make this feasible, various supportive policies are needed. According to an interview with Kwon Yikyun, a professor of the Department of Geoenvironmental Sciences of Kongju National University, in the 2050 Carbon Neutrality Roadmap, CCUS technology requires various economic incentives and benefits for CCU products, such as purchase quotas, priority purchase systems, and government subsidies, as it serves a clearly public function. For CCS, investment and operational costs for sites and facilities can be supported. However, for CCU, it is challenging to receive direct subsidies that do not align with WTO agreements because CCU involves selling products rather than receiving direct support. On the other hand, facility subsidies may be allowed to some extent, but determining the extent can be very challenging. Therefore, to assist and make decisions in this regard, the K-CCUS Task Force has been launched. K-CCUS is an organization aimed at promoting the activation of the CCUS industry and ecosystem through the participation of companies, private sector experts, and the government in Korea’s CCUS Task Force. K-CCUS also supports the development and commercialization of CCUS technology. It contributes to the success of national CCUS projects by establishing and operating systematic and exemplary support programs and technical programs focused on achieving the commercialization of CCUS.

To address the ongoing deterioration of the Earth’s environment, humanity is exploring various solutions. One of the outcomes of these efforts, CCU concrete technology, is expected to have a significant impact on reducing carbon dioxide emissions in the future. However, as it is still in the stage of technological development, establishing regulatory frameworks to enable the commercialization of this technology is necessary for it to demonstrate practical effectiveness. Only when technology, regulations, and human awareness regarding the environment are all aligned can we truly address environmental issues. The Argus hopes that the realization of the fact that concrete, one of the most significant contributors to environmental issues, can be transformed into an environmentally friendly material will serve as the beginning of substantive environmental change, driven by humanity’s technological advancements and positive perspectives on the environment. 

yisuws@gmail.com

The Argus Prize



1st place



Human Nature: Contemplations on Life's Purpose



Lee Min-Young

Department of Electronics
Engineering

“There is but one truly serious philosophical problem, and that is suicide.”

The contemplation of suicide: it is the ultimate philosophical dilemma that Albert Camus confronts in his seminal work “The Myth of Sisyphus.” In Greek mythology, Sisyphus is condemned to push a rock up a hill endlessly, only to have it roll back down each time he nears the top. The torment of Sisyphus’ punishment lies in the fact that it is never-ending and thus devoid of meaning. Drawing inspiration from this, Camus delves into the absurdity of human existence. The futility of Sisyphus’ task mirrors the repetitive nature of human life, where mundane activities such as eating, sleeping, working, or bathing seem to offer no lasting satisfaction. In an interminable cycle until death, those activities can be likened to a retribution. Schopenhauer also spoke about life as follows: “Life swings like a pendulum backward and forward between pain and boredom.” At this point, we cannot help but ask: Why must we continue a life akin to a swinging pendulum? What is the purpose of our existence?

Here, we catch a glimpse of what makes us human. We are endowed with the capacity for introspection to objectify ourselves while engaging in repetitive, basic activities that sustain life, and to question the rationale behind those actions. Furthermore, we have the “freedom” to either submit to or escape from the fate of perpetuating these activities until quietus. This cognitive process is unparalleled in any other animal on Earth and not even

the most sophisticated AI can replicate it. The characteristic exclusive to humanity is arguably the most human trait. Therefore, the crux of human nature resides in wondering about the meaning of life and acting upon the conclusions we arrive at.

“The struggle itself toward the heights is enough to fill a man’s heart. One must imagine Sisyphus happy.”

Camus challenges us to unearth meaning in a world that appears barren of it, to embrace the struggle as a wellspring of fulfillment. The path toward self-actualization is rife with setbacks and uncertainties, yet it is within this exertion itself that we discover our true essence. What holds significance is not solely reaching the summit, but the endeavor and perseverance exhibited along the way. Thus, resorting to shortcuts or deceitful means is inherently worthless. Instead, we must seek joy in the journey toward achieving our objectives.

However, we understand that certain individuals endure lives marked by extraordinary suffering or face intricate demands. For them, simply striving for worldly success, such as career achievements or providing for their families, does little to convince them to sustain their lives. They yearn for an unwavering foundation and iron resolve to break free from the haunting existential crisis that plagues their minds.

Back to the initial point, why are we here? Evolutionary biologist Richard Dawkins states, “We are survival machines – robot vehicles blindly programmed to preserve the selfish molecules known as genes.” Biochemist Jacques Monod echoes a similar sentiment, “Every organism has the intention of preserving and proliferating its species. Invariable self-replication is the essence of an organism.” According to them, humans are not created in the shape of a god or descended from Hwanung of the heavens, as in South Korea’s (hereafter Korea) founding myth. We are no better than a tool for blind self-replication and the maintenance of genes. Therefore, asking about the aim of life is an “erroneous question.” A being that is merely a means cannot become an end.

Yet, every question requires two types of answers: one from a scientist and another from a poet. A life without emotion is empty, and a life without reason is blind. We are not bound by the deterministic forces of biology alone; we have the freedom to choose our path and to define our values in a seemingly indifferent universe, regarding human autonomy. So, how about considering this perspective: the purpose of life is not a tangible esse but rather a concept, perhaps a byproduct of human intelligence surpassing instinct. If our destiny is not preordained, we can shape it anew, continuously. Even in the moments when we feel adrift in the search of it, we are already living a full life. Each gesture we make is a complete life in itself. Life is nothing but the footprint of a being, a continual process rather than a finished product.

In the cutthroat modern society of Korea, the pressure on the youth is beyond words. While survival and procreation are deemed intrinsic to human nature, they fail to explain the nation’s alarmingly high suicide rates and its record-low birth rates. We humans seek something more elevated and noble. Without that fulfillment, a “human life” becomes elusive. Conversely, with a clear goal in life and the optimism that it can be realized, one can triumph over financial struggles or physical anguish. No matter how brilliant the book or eloquent the policy, they fall short in furnishing a universally applicable calling and remedy that fits everyone’s life. All of us must become a “pope” to answer the reason for being tailored to our own life.

I, too, am one of the young people in Korea still searching for a path. Nevertheless, my only wish at present is to retain what I have, or should it slip away, to have the strength to overcome it. I aspire to the vitality that laughs, shouts, and sheds tears with the constant movement towards a better life and a tireless curiosity. I long for a heart brimming with gratitude, the courage to confront everything that happens to me head-on and conquer it, and the ability to eventually smile at my own missteps, those of others, and the inevitable fallibility of humanity. I seek to love unreservedly, just as a child untouched by pain. Thus, I hope to enter this world as a human and depart from it as a human. 🐼

2nd place



How Media Defines the Political Landscape of the World



David Lee Jee

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America is split — or rather, the world is split — between two men, in perhaps the most jarring democratic election the world has ever seen. On the left stands Joe Biden, acting President of the United States, championing world peace and climate action. His opponent? Donald J. Trump, former President and conman, charged with over 90 felonies ranging from business document falsification to election interference to mishandling classified records. At a glance, the preferred candidate seems rather clear. Biden stands for traditional “western” values such as free speech, human rights, and equality. Trump embodies the rise of populism, environmental decline, and the destruction of democracy as we know it. It would be nothing short of a dystopia if Trump is elected again. Or so the media says.

But to the dismay of the media, to the dismay of many a civilized person, America is confronted with a perplexing number. It is that most polls show Trump maintaining an advantage over Biden. To many, this is a confounding statistic. It seems illogical, delusional even, that people want Trump back in office. And so, the media has scrambled to analyze the confusing polls. Some have dismissed the polls as unreliable because they are too early. Others have argued that the polls are flawed or rigged. Yet more claim that the crux of the problem lies in the uneducated “elderly and rural” Trump supporters who are “so blind to his faults.” Overall, mainstream media tells us that the polls are an alarming reminder that Trump is a vicious, snobby dictator who will bring chaos and destruction to the world.

They are lying.

A recent study shows that 95 percent of evaluative statements on broadcast media concerning Trump were negative. This is a striking number, considering Trump’s evident popularity in the polls. In contrast, 67 percent of such statements were positive for Biden, when polls clearly indicate that most Americans consider Biden’s presidency as a failure. While it is true that mainstream media does not necessarily portray the general consensus of the public, it is clearly unnatural that there is such a difference in opinion. We can find further discrepancies between the portrayal of the two candidates, especially when it comes to public image. Many people are unaware that Biden has been accused of sexual assault. Many are unaware that Biden has mishandled classified documents. Many are unaware that Biden’s son Hunter Biden has faced charges including tax evasion and illegal possession of firearms. There is a stark contrast to the depth and span of media coverage when it comes to the faults of Biden and Trump. Had Trump’s son committed millions of dollars’ worth of tax evasion like Hunter Biden, the media would have a field day, plastering sensational headlines on the front pages for days to come. The same cannot be said for Biden.

To be absolutely clear, this is not an attempt to portray Biden or Trump in a negative or positive light. Rather, it is to show that mainstream media has a narrative. They omit what contradicts the narrative and build on the facts that support it. In layman’s terms, mainstream media has become a cesspool of propaganda and disinformation that defines the very political landscape of the world. The U.S. election is but a single example that showcases this phenomenon. Another such example is the war in Ukraine.



The conflict in Ukraine is often shown in the media as a heroic fight for freedom, with American and European allies fighting against the satanic forces of President Putin. Articles detailing the evils and weaknesses of the Russian army can be easily found; jubilant declarations of victories by Ukraine are also abundant. Any who dares to suggest halting funding to Ukraine are labeled as right-wing extremists doing Putin a favor. And yet the media does not mention that Putin had repeatedly warned the West against the eastward expansion of NATO. The media does not provide context that Russia had expressed strong concerns over Ukraine joining NATO lest it would present a prominent security risk, something that Europe and America conveniently ignored when acting to incorporate Ukraine under Western influence. The media also glosses over the fact that many of the Ukrainian people speak Russian and ethnically identify themselves as Russians who welcome Russian intervention. Furthermore, mainstream media hides the massive extent of Ukrainian losses while highlighting the relatively lower number of Russian casualties, giving a warped view of the battlefield in Ukraine.

In conclusion, the examination of both the U.S. election and the conflict in Ukraine reveals a troubling pattern of media bias and manipulation. Mainstream media outlets, driven by their own agendas and interests, often distort facts, omit crucial information, and perpetuate biased narratives that shape public opinion. In order to navigate and correctly assess the world's political landscape, it is imperative that we seek out diverse sources of information and question the narratives presented to us. As the prominent human rights activist Malcom X once said, "The media's the most powerful entity on earth. They have the power to make the innocent guilty and to make the guilty innocent, and that is power. Because they control the minds of the masses." Keep that in mind. 🇺🇸

3rd place



Is the Liberal International Order Fading Away?



Park Sejeong

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Thirty years ago, with the end of the Cold War following the collapse of the communist bloc, the international community was drawn into a massive wave of globalization. As a result, goods and capital became freely mobile within an integrated global society, and human interactions occurred more frequently than ever. The world has embarked on a path of significant integration. However, the situation of the United States building a wall on the Mexican border is unfolding, and the U.S. and China are engaged in a highly unpredictable competition for supremacy. Moreover, the Ukraine War shows no signs of ending after more than two years. Particularly since the outbreak of COVID-19, questions have arisen about whether the current liberal international order we live in is desirable and sustainable. The situation is unfolding quite differently from the global peace and prosperity humanity dreamed of when globalization began in earnest three decades ago. Because of the following statements, liberal international order will likely be maintained.

Problems and Prospects of the Liberal International Order

The current principle of operation in the international community, the liberal international order, was established after World War II. As the Cold War concluded with the victory of the free bloc, the international community uncontrollably moved towards globalization. In the last 30 years of globalization, almost all types of goods, capital, and human exchanges have become commonplace, blurring national borders. The liberal international order has focused on global economic growth and the spread of democracy as its two main axes. The international order, characterized by free trade, the liberalization of financial movements, and the institutionalization of relations among nations, tended to remain within the Western bloc during the Cold War. However, with the end of the Cold War, it rapidly spread across the globe, and the collapse of the communist bloc was a decisive factor in integrating international production activities and diplomatic relations. The core premises emphasized by the liberal international order include nations that emphasize democracy and capitalism, the spirit of market autonomy and free competition, multilateral international institutions, and commitments among superpowers for global security. These operating principles of the international order presuppose an important condition: that the U.S., a superpower, exercises global leadership to maintain the stability of the international order by providing various international public goods. However, the election of President Trump in 2016, championing “America First,” led to the U.S. abandoning its traditional role in providing these “international public goods,” resulting in further cracks in the liberal international order.

Additionally, nationalism among U.S. citizens, the United Kingdom’s decision to leave the EU, Japan’s right-wing nationalism, Russia’s strengthening of authoritarian leadership, and China’s hegemonic project which is called “Belt and Road Initiative” all broke out simultaneously, signaling a retreat of the liberal international order. The COVID-19 crisis faced criticism as these crises were peaking. Indeed, “Is globalization retreating?” The excessive concentration of the global “supply chain” for efficient production delivered the coronavirus instantaneously to




every corner of the world. Should humanity stop globalization to prevent incidents like this in the future?

What will the liberal international order, solidly maintained since World War II, look like in the future? Although it will undergo changes, the liberal international order is expected to continue. There are three reasons for this. First, the core element of the liberal international order is the spirit of democracy, and so far, no political ideology capable of replacing democracy has emerged to gain global support. In the economic field, although there are examples like socialist economic systems or authoritarian state control systems, none can maximize human creativity as much as the market economy. Moreover, the state has been considered the most important actor in the international order since the emergence of the modern international order in the 17th century.

Second, the liberal international order operates very efficiently. Multilateral problem-solving, a key element of maintaining the liberal international order, is one of its most representative advantages. Although the U.S. sometimes adopts unilateral solutions through force, and the opinions of superpowers are more strongly reflected in the process of dialogue between nations, the fundamental spirit of resolving issues through mutual concessions is widely recognized by NATO. Also, the principle of providing incentives to nations that adhere to international commitments and rules, and applying penalties to those who violate and cheat, supports the efficiency of the liberal international order.

The liberal international order can also prevent situations like the U.S. – China conflict from escalating into catastrophes such as war. It should not be overlooked that the relationship between the U.S. and China is too intricately intertwined to rush into war. China secures substantial benefits within the U.S.-created liberal international order, and the U.S. also depends heavily on the massive production of China.

Third, the prospect that the liberal international order will continue for a significant time can also be seen through past crises. Although the current crisis differs in content from the past, the liberal international order has faced several major crises in the past. Notably, in the 1980s, the U.S. faced enormous trade deficits economically, and at the same time, the economic power of countries like Germany and Japan surged, bringing the global economic order to a crisis of instability. At that time, major countries worked together through the “Plaza Accord” to stabilize the global economic order, and as a result, the then G5, now G7 was born, greatly enhancing the joint responsibility of major countries to secure the international order.

After more than 30 years of globalization, it is challenging to predict how the “Globalization 2.0” will materialize, but it is clear that it will look different from the globalization that has so far benefited countries who are not power states. If the liberal international order goes through an adjustment process and recovers its dynamism, countries such as South Korea may also have opportunities to exercise global leadership within the new face of the liberal international order, an experience it has never had before. 

No. 540 (March Issue)




Article Review: True Owner of the
Consumerist Desire

By Park Kyoo-tae
Cub Reporter

The article contains comprehensive information about neuromarketing. It explains the concept of neuromarketing and provides examples of companies that have utilized it, as well as how it functions in real-life scenarios. It explains the beginning of neuro-marketing in 2003 with the example of Coca-Cola and Pepsi and elucidates the relationship between brain activity and consumer behavior, citing companies such as Frito-Lay that employ EEG technology. Additionally, it mentions AmorePacific, which introduced neuromarketing for the first time in Korea and utilized fMRI technology.

One thing regrettable is that the article only presents fragmented aspects of neuromarketing when discussing examples involving companies. While the cases of these companies are explained alongside their utilities, the drawbacks of neuromarketing are not discussed in the article. Including a discussion about the negative aspects would have allowed for a more balanced and multi-sided discussion of neuromarketing.

Neuromarketing, which leverages psychology and behavior based on the unconscious reactions of the brain, may entail a range of errors. Measuring brain response is just one of several indicators and this one indicator may not lead to actual purchases. Brain reactions may also vary among buyers, influenced by factors such as culture. Moreover, conducting tests to understand psychology and behavior based on unconscious brain reactions requires expensive equipment and specialized expertise. Each fMRI machine costs billions of won. Considering this, such a marketing technique could exacerbate corporate imbalances, widening the gap between businesses with substantial capital and those without. It would have been beneficial to provide readers with additional information regarding this aspect. 



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No. 541 (April Issue)




Article Review: Bridge to Justice: Aligning Legal
Sentiment with the Judicial System

By Park Seeun
Cub Reporter

The article categorizes the phenomenon arising from the discrepancy between public sentiment and actual judicial rulings and punishments into three main aspects: low rate of recognition for self-defense, weak punishment for criminals, and protection of the personal information of criminals. It suggests clarifying and expanding the range of self-defense recognition, applying stronger sentences in law standards, and adopting a balanced approach to the disclosure of personal information. In terms of structure, the article classifies the phenomena into three categories, making it easy for readers to understand the problematic phenomena and their causes.

In terms of content, it maintains a neutral perspective by addressing both the perspectives of the citizens and the judiciary. This allows readers to view the issues from multiple angles and understand the judiciary's standpoint. The article logically presents evidence for realistic problems that cannot be solely decided based on public sentiment. For instance, in addressing the need to expand the range of justifiable self-defense in regard to the first phenomenon, it questions whether recognizing all defensive actions as justifiable is the right approach and concludes that finding the appropriate balance is crucial.

Meanwhile, it is true that improvements in the legal system and the reconstruction of social consensus are needed to address unfair judgments against victims. However, since it is not feasible to adapt the legal system solely to public sentiment, convincing the public is crucial for solving fundamental issues such as side effects or effectiveness issues. However, in the prospect section regarding the third phenomenon, the article only discusses superficial solutions rather than offering solutions for more fundamental issues. In particular, it said that a rational and consistent explanation is needed to enable the public to fully sympathize and understand the inability to disclose personal information, but a method to convince the public was not discussed in the article. Practical solutions, such as implementing educational programs to improve legal awareness, improving accessibility to legal services, and strengthening legal transparency or examples of such programs should be considered more. 



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MEMORIES IN THE ARGUS



Kim Su-yeon



Over the past year and a half at The Argus, I have realized that the articles I have written would not have been possible without the contributions of many. My deepest gratitude goes to the sources with whom I have connected. Through in-person meetings, phone calls, and texts, they have generously shared their insights, expecting nothing in return. Some even offered a heartening reminder that amidst the online noise of hatred and intolerance, there are voices of reason. I also want to thank our copy readers for their insightful feedback and designers who bring the magazine to life visually.



Kim Yi-eun



For me, every single activity at The Argus was a challenge. My memories of this semester are filled with The Argus, and while it was busy and a little overwhelming at times, the meetings, feedback, and interviews were all impressive and meaningful. I will always have fond memories of my peers, who would laugh and talk but were consummate professionals when it came to work, our editor-in-chief, who was so supportive, at times guiding us and at times accompanying us from winter training to publishing four magazines this semester, and my interviewees, who kindly answered many questions that might have been annoying without expecting anything in return. I am grateful to The Argus for all this.

Lee Seun



One of the most challenging yet meaningful activities during my time at The Argus was interviewing. While there was always an uncertainty about whether I could successfully conduct interviews, when I did succeed, I was able to feel the pure passion for the fields of those who delved deeply into it. Even amidst their busy lives, receiving thoughtful responses to each question filled me with tremendous inspiration. I am grateful for the opportunity to experience various positive emotions that I had not felt before through the activities I could engage in through The Argus.



Cho Subin



The refreshing scent of the night air, shared with The Argus reporters after our editorial meetings, remains my most vivid memory. The conversations we had while walking across campus to the main entrance were a source of motivation. During the editorial meetings, there were moments of joy but also times of self-disappointment. However, in the quiet of the fresh air, I could let go of any negative feelings. I would like to thank the 112th reporters who supported and encouraged me and the editor-in-chief who worked harder than anyone else.



Lee Jue-hyun



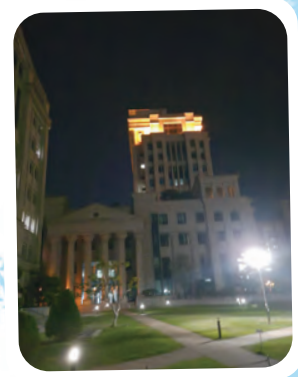
I often find others facing similar problems, such as how to deliver a message more logically or how to make The Argus better. Just knowing that there are colleagues out there who share similar concerns gives me strength. I believe this was possible because we all gathered with a desire to become better writers and better colleagues. I am deeply grateful to all the people I have come to know through The Argus and to the many people who have communicated with us through our articles.



Cho Eun



At the end of every semester, I get to write the epilogue and reflect on what The Argus means to me. Being apart from the scene of The Argus, I truly realize that my time at The Argus has been really valuable. As I get closer to the job market than university, regardless of what job I ultimately have, I feel that the time and effort I have given at The Argus will always have been worth it. I also doubt that there was ever a time I tried harder to learn something, as I did for my articles, so Argusians, even if you sometimes feel that this time is wasted and excessively demanding, I promise that this time is worthwhile!



Special Thanks to: Prof. Lee Yong-Ki, Prof. Kang Su-mi, Partner Lawyer Moon Gin-gu, Research Fellow Park Jung-Jun, Kwon-Lee Eunjung and Daniel Ahifon of Dance company TAGG





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