HARRY BURKE 6 MARCH 2024

In his far-reaching practice, Bagus Pandega sets out to disrupt mechanical and industrial systems, and to suggest alternative ways of relating to technology. The Bandung-based artist's installations, which frequently feature light and sound, are characterized by a DIY (do-it-yourself) spirit, and offer nuanced explorations of recycled materials and circular economies. His artworks are often modular, assembling different components into new propositions.

O, the artist's second solo presentation at ROH, is organized around a series of interwoven themes, among them energy, resources and biofeedback. Two recent works examine chemical elements-substances that, because of their atomic makeup, cannot be broken down. Hyperpnea Green (2024) transforms air into purified oxygen. The installation was conceived in the early days of the Covid-19 pandemic, when oxygen concentrators, used to care for patients in critical conditions, were repeatedly in the news. Given their short supply, Pandega experimented to see if it was possible to make one. Air, sucked in by an air compressor in the artwork's center, passes through three filters to produce oxygen. After accumulating in a tank, this flows through tubes to thirtysix humidifying jars which, lit by LEDs and containing a medley of minerals mined in Indonesia, circulate it back into the gallery.

In Nio (2024), a video that investigates electroplating, the artist reflects on the ubiquity of nickel in consumer devices. In electroplating processes, nickel is deposited onto other metals to create a corrosion-resistant coating, enhancing durability, performance, and appearance. The metal has become central to political and economic policies in Indonesia, which holds over a third of the global reserve. Nickel is widely used in rechargeable batteries and electric vehicles, leading President Joko "Jokowi" Widodo's government to facilitate multibillion-dollar deals with companies like Tesla, Hyundai, LG Energy Solution and Foxconn. But despite the technology's green credentials, its impacts are dire. Mining and smelting facilities destroy forests, spoil waters, and disturb ecosystems stewarded by Indigenous communities for generations. Workers, toiling in filthy, risky conditions, are undercompensated and mistreated, as journalists like Ayomi Amindoni and Adi Renaldi courageously report.¹ In his video, scored by New York-based musician Lydo, Pandega electroplates an orangutan figurine, picked up in an antiques shop in Jakarta, as well as a craggy clump of raw nickel mined in Sulawesi. Nio speaks to the profound irony of environments being ruined so that commercial metals can be optimized.2

Plants, as living beings providing biofeedback, collaborate in numerous artworks in O. Biofeedback is an emergent research area in which microcurrent fluctuations in the leaves of plants are used in electronic systems. Sansevieria plants, or snake plants, a non-flowering houseplant with dagger-like leaves, control the air flow in Hyperpnea Green. These plants, which sit on the air compressor, are watered by an automated system that draws moisture from the room, meaning that the installation dehumidifies the gallery as well as produces oxygen. In a related manner, plants act as switchers in ocularflux//1 and ocularflux//2 (both 2024), deciding which out of a cache of five videos appears on each screen. These artworks take secondhand LED displays, likely previously used for advertising or entertainment, and repurpose them using open-source code. Close-up videos of the eyes of healthcare clinic workers in Bandung blend together to generate glitching, blinking composites, calling attention

to the human interactions that animate all types of digital networks. In differing ways, these meditations on eye-to-eye connection and biofeedback make the philosophical claim that nature and technology are intrinsically interrelated.

Circles also recur in the show, appearing formally and conceptually. Built at a monumental scale, Hyperpnea Green is a five-meter-wide ring. A Diasporic Mythology (2021), first displayed at the 10th Asia Pacific Triennial of Contemporary Art in Brisbane, Australia, is also arranged in the round. This installation investigates traditional musical instruments from Japan and Indonesia. Pandega became fascinated by the taishogoto, an instrument, played by strumming strings while pressing typewriter-like keys, developed in Japan during the short, liberal Taishō period (1912–26). A Diasporic Mythology puts the taishogoto in dialogue with Indonesian zithers that resemble it, including a mandaliong from Sulawesi, a kecapi sijobang from Sumatra, and pentings from Lombok and Bali. While the makers that Pandega was in touch with assert that there is no recorded connection between their instruments and the taishogoto, there is nonetheless a speculative belief that they were introduced to Indonesia during Japan's 1942-45 occupation. The kinetic, musical installation features interviews with musicians who play these traditional instruments. A coterie of tea plants provides, through biofeedback, electrical signals that generate the improvised scores.

But perhaps most intriguingly, throughout O, materials and ideas travel in circular flows. Hyperpnea Green, with the help of exhibition-goers' lungs, makes a localized oxygen cycle within ROH. A Diasporic Mythology acknowledges the creativity sparked by exchanges, both invited and imposed, between people and places. In Nio, the nickel-coated orangutan statuette faces its own projected image, modeling a feedback loop, and bringing to mind Nam June Paik's seminal video sculpture TV Buddha (1974). More literally, circuits of information, mostly traveling through custom-made circuit boards, are the basic building blocks of almost every work in O. The exhibition functions almost like one, interconnected installation, with even the gallery's air and lighting systems playfully

0

¹ Ayomi Amindoni, "As EVs surge, so does nickel mining's death toll," Rest of World, 27 July, 2023, accessed online: https://restofworld.org/2023/indonesianickel-mining-deaths/; Adi Renaldi, "The Price of Indonesia's Nickel Profits," Asia Democracy Chronicles, 20 January, 2024, accessed online: https://adnchronicles. org/2024/01/20/the-price-of-indonesias-nickel-profits/.

² For more on the relationship between art and the ecological imprint of digital technologies, see Cajetan Iheka, *African Ecomedia: Network Forms, Planetary Politics* (Durham, NC: Duke University Press, 2021).

manipulated by the artist.

In his influential essay "Dua Seni Rupa" (1984), Sanento Yuliman discusses the relationship between technology and art in Indonesia in the mid-1980s.³ An outspoken critic, and a lecturer at Institut Teknologi Bandung at the time, Yuliman observes that novel technologies, tied to the economic imperatives of advanced industrial societies, have widened the audience for contemporary art. However, he also argues that these technologies, which he links to the fields of construction, manufacturing and media, reinforce imperialism, and exacerbate social inequalities. With a hacker's curiosity, Pandega wrenches apart the desperately uneven logics of growth and development peddled by the executives of Silicon Valley and their accomplices across the planet. These values reproduce plantation logics within digital economies, imposing, as Yuliman foresaw, and as seen today from the Democratic Republic of Congo to the islands of Sulawesi and Halmahera, new kinds of colonial bonds.4

Instead, the artist's open-ended experiments attend to art and technology more holistically. In Attenuation Coefficient and Exponential Attenuation (both 2024), a small processed nickel sculpture and a nugget of nickel ore rotate on revolving disks, and are 3D scanned to create videos streamed to nearby monitors. These artworks make few claims on behalf of nickel; rather, they use modeling devices to prompt viewers to encounter the mineral in different ways. This subtle intervention resonates with what British anthropologist Marilyn Strathern calls a "relational" framework for critique.⁵ In her book Relations (2020), which takes relationships as its object of study, Strathern contends that many common metaphors in modern critical theoryfor instance, connection, association, resemblance, and comparison-stem from changing understandings of kinship in Europe in the early modern period. During this time, she claims, certain ways of relating fell out of currency, resulting in "relational deficits," structured around the figure of the autonomous individual and replicated throughout modern life, that have come to shape how we understand and care for our precarious, precious world.⁶ Her rich scholarship invites its reader to

imagine intellectual lineages rooted in other ways of being together. After all, in what senses might our thinking be different if it was tied to different forms of conviviality? Or to different practices of relating to nickel, or to taishōgoto playing tea plants, or to any of the morethan-human companions we share our planet with?

Strathern advocates for an ontological pluralism—in other words, in a lucid departure from universalist methodologies, she insists that there are many ways to think about how we come to be in the world. Indigenous knowledge traditions have recognized this for generations. Urgently relevant to this exhibition's concerns, Sophie Chao's In the Shadow of the Palms (2022), a study of the harm caused by palm oil plantations in West Papua, attests to the sacred, interconnected status of knowledge and land for the Marind people of Merauke. As Chao relates, Marind cosmologies see the forest as kin, and the Marind thus understand the arrival of oil palm as not only dispossessing them of forest but, even more apocalyptically, as stopping time.7 Chao's Marind friends and collaborators, who speak throughout the French-Chinese anthropologist's text, relay that the abu-abu (ash gray) world of oil palm is one in which even dreams lose their luster.8

Throughout O, Pandega makes the case for a more pluralistic way of understanding the tools we use to shape our environment. Through this approach, the artist seeks to open technology to the fragility of the world that it is part of. The exhibition's title—which can be pronounced as lingkaran, an Indonesian term for "circle"—reinforces this point. Like many of the installations on view, this symbol is circular, without beginning or end. Similarly, there is no beginning or end to relating. This is the koan, and the provocation, that O gifts to us.

⁶ Ibid., 173.

³ Sanento Yuliman, "Dua Seni Rupa," Berkala No.12 (October 1984).

⁴"Democratic Republic of the Congo: Industrial mining of cobalt and copper for rechargeable batteries is leading to grievous human rights abuses," *Amnesty International*, 12 September, 2023, accessed online: https://www.amnesty.org/en/latest/news/2023/09/drc-cobalt-and-copper-mining-for-batteries-leading-to-humanrights-abuses/.

⁵ Marilyn Strathern, Relations: An Anthropological Account (Durham, NC: Duke University Press, 2020), 1.

⁷ Chao, In the Shadow of the Palms: More-Than-Human Becomings in West Papua (Durham, NC: Duke University Press, 2022), 4. ⁸ Ibid., 173.

B. 1985, Jakarta, Indonesia Lives and works in Bandung, Indonesia B. 1990, Jersey, UK

Working primarily through the medium of installation, Bagus Pandega often challenges pre-conditioned relationships between objects and its viewer. In his works, Pandega assembles various electronic systems as 'modules' and explores objects such as voice recorders, cassette and record players, lamps and electronic circuit boards among others— to construct his works. Many of his artworks become activated through the interaction of movement, sound and light.

Pandega graduated from Bandung Institute of Technology with a Bachelor of Arts (Fine Art) in 2008, majoring in sculpture. Pandega's selected solo exhibitions include A Pervasive Rhythm at Yamamoto Gendai, Tokyo, Japan (2018); Random Black, ROH Projects, Jakarta, Indonesia (2016); and A Monument That Tells Anything, Cemeti Art House, Yogyakarta, Indonesia (2015). Selected group exhibitions include Voice Against Reason at MACAN Museum, Jakarta, Indonesia (2023); Frieze Seoul with ROH, Seoul, South Korea (2022); WAGIWAGI at documenta fifteen, Hübner areal, Kassel, Germany (2022); Declaring Distance: Bandung - Leiden, Selasar Sunaryo Art Space, Bandung, Indonesia (2022); ArtJog MMXIX: Common Space, Jogja National Museum, Yogyakarta, Indonesia (2019); Paris Internationale with ROH, Paris, France (2018); all of which feature his collaborative practice with Kei Imazu; The 10th Asia Pacific Triennial at QAGOMA, Brisbane, Australia (2021-2022); Tiger Orchid presented at Art Basel OVR: Miami Beach (2020); Ripples: Continuity in Indonesian Contemporary Art at Taipei Dangdai, Taipei, Taiwan (2019); Distorted Alteration at Project Fulfill, Taipei, Taiwan (2018); Amsterdam Light Festival, Amsterdam, the Netherlands (2017); and Clandestine Transgression at Art Basel Hong Kong: Discoveries with ROH Projects, Hong Kong (2015). Pandega had also collaborated with Adi Purnomo and Irwan Ahmett in presenting Freedome, Indonesia Pavilion at the London Design Biennale: Utopia by Design in 2016.

Harry Burke is an art critic and a PhD candidate in History of Art at Yale University, New Haven. HARRY BURKE LYDO LE ADITYA SENA HADIKUSUMO WAMA FONIKA LARA SAKTI KEI IMAZU COUNE ARIO WIBHISONO TAKU PAK UUS PAK ASEP PAK YAYAT KANG OPIK KANG EDDIE PAK HAMID AURORA ARAZZI ROSANA JULY CLARA JUN TIRTADJI DEA APRILIA TUTI HARYATI ADINDA YUWONO ANNISA RIANTI RAKA IMAM MUNADZAT DEDI SUTOYO AIRIEN ADANI LUDIN KAYLA KAI WIWIT BUDI SANTOSO RAHMAT SURYADI EAST HANDLER BAGUS SESAR EKO JAEINURI MUHAMMAD ILSA SAIRI DIMAS ADITRIYA RAHMAN HAKIM

DIMAS ADITRIYA RAHMAN HAKI MOCHAMAD FARIS AKHRAM MANIKAM BIMO WICAKSONO ANUNG ASASONGKO NARPATI KUSUMA YUDHA

RATKOLO FAMILY TAKUSTUDIO INDOMODULAR C.ON.TEMPORARY FAMILY

BUMI MEDIKA GANESA PUSKESMAS CIBEUNYING DR. AYU DR. MELA