THE

IIOS AIS I

2010-2013

INSPIRED BY
EARTH
SCIENCE

When Need Moves the Earth

Sutthirat Supaparinya

THAILAND

When Need Moves the Earth

When Need Moves the Earth is an artwork that reflects on the impact of altering the natural environment during the course of human activities such as mining or the creation of hydroelectric power. More specifically Sutthirat Supaparinya presents a visual exploration of a coal mine and a water dam, both of which are used to generate electricity. Her video installation combines documentary and experimental techniques to create a unique narrative of the Srinakarin Dam and the Mae Moh Lignite Mine, both sites administered by the Electricity Generating Authority of Thailand. These two large-scale sites are located along or near natural active faults, which are deep or shallow fractures that give expression to the dynamic Earth.



In addition to drastically altering the landscape, coal mining and dam building are also known to be a potential cause of man-made earthquakes. Most of these are small in scale compared to the most destructive natural earthquakes, but they can influence the stress load stored in natural faults. This artwork also encourages viewers to consider our high consumption of electrical power and proposes that communities and societies improve their sustainability planning and hazard reduction efforts.

OPPOSITE
When Need Moves the Earth
2013
Video installation, screens 1–3,
still frames at 00'10"

PAGE 72 and ABOVE
When Need Moves the Earth
2013
Video installation, detail



As I live in the northern Thailand, most of the earthquakes that affect the area have epicenters in Myanmar. When I see a map of active fault lines in the region, there are many big lines across Myanmar. It scares me because there are also many large-scale mining projects in Myanmar that sit on those fault lines, which means that man-made hazards in Myanmar could have an impact on Thailand.

-SUTTHIRAT SUPAPARINYA

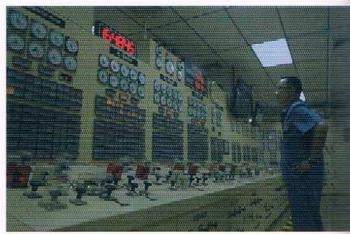
ABOVE
When Need Moves the Earth
2013
Video installation, still frame

OPPOSITE

When Need Moves the Earth
2013

Video installation, screens 1–3, still frames at 00'16"





What Earth science ideas inspired your artwork?

I like the way in which EOS, a scientific research institution, opened their doors to artists. I like the fact that the program gave artists and scientists a chance to learn from one another before the production of artworks.

I learned to use new tools to understand the Earth and new methods of mapping. I am now aware of the possibility of interpreting the formation of cracks on site and on Google Earth and tag them to a Global Positioning System (GPS).

What did you learn from the interaction with the Earth scientists?

I learned that there are many forms of energy, other than what we often use, to produce electricity. The scientists at EOS showed me visual evidence of the Earth's energy and this inspired me to conduct further research on the topic.

I learned that everything gets energy by its interaction with other elements. The movements and the transformation of Earth shows that it is full of energy.

PAGES 78–79
When Need Moves Earth
2013
Video installation, detail



How does your artistic work provide a better understanding of Earth?

I was surprised when I learned that large-scale electricity generators sit on active fault lines. I think that a basic knowledge of Earth science should be part of our primary education system. We should remember that we are part of an ever-changing system, and we should learn the best ways to adjust it.

Is this artwork likely to inspire people?

I hope that people will see a connection between themselves and the causes of electricity over-generation and waste. I wish that people will take issues of energy and Earth science more seriously. I also want to encourage others to reconsider designs of homes and electrical devices, and find solutions to consume less energy.

ABOVE
When Need Moves the Earth, 2013
Video installation
Screens 1–3, still frames at 6'



The ancient knowledge and practices such as Feng Shui create a harmonious environment for us to live and work in.

But Earth science helps us undertand how the Earth works and this ultimately influences our way of life.

-SUTTHIRAT SUPAPARINYA

ABOVE

Lignite, also know as brown coal, is a soft combustible sedimentary rock formed from naturally compressed peat

OPPOSITE When Need Moves the Earth, 2013

Video installation Left-middle-right screens, still frames every 15" starting at 19'30"

List of Works

COASTLINE

Zhang Xiao

Donggang, Liaoning, 2012 C-print • 90 × 70 cm

Zhuanghe, Liaoning, 2012 C-print • 90 × 70 cm

Dalian, Liaoning, 2012 C-print • 90 × 70 cm

Gaizhou, Liaoning, 2012 C-print · 90 × 70 cm

Jinzhou, Liaoning, 2012 C-print • 90 × 70 cm • p. 16

Shanhaiguan, Hebei, 2013 C-print • 90 × 70 cm

Beidaihe, Hebei, 2018 C-print • 90 × 70 cm • p. 12

Tangshan, Hebei, 2013 C-print · 90 × 70 cm

Caofeidian, Hebei, 2013 C-print \cdot 90 \times 70 cm \cdot p. 19

Binhai, Tianjin, 2018 C-print • 90 × 70 cm • p. 6

Binzhou, Shandong, 2012 G-print · 90 × 70 cm · p. 21

Yantai, Shandong, 2012 C-print - 90 × 70 cm Haiyang, Liaoning, 2012 C-print \cdot 90 \times 70 cm \cdot p. 19

Qingdao, Shandong, 2012 C-print • 90 × 70 cm

Rizhao, Shandong, 2012 C-print • 90 × 70 cm • p. 14

Lanshan, Shandong, 2012 G-print · 90 × 70 cm pp. 22–23

Sheyang, Jiangsu, 2012 C-print · 90 × 70 cm

Qidong, Jiangsu, 2012 C-print - 90 × 70 cm

Haian, Jiangsu, 2012 C-print • 90 × 70 cm • p.16

Fengxian, Shanghai, 2012 C-print • 90 × 70 cm • p. 19

Xiangshan, Zhejiang, 2012 C-print - 90 × 70 cm pp. 16–17

Beilun, Zhejiang, 2012 C-print • 90 × 70 cm • p. 20

Taizhou, Zhejiang, 2012 C-print • 90 × 70 cm • p. 21

Wenling, Zhejiang, 2012 C-print • 90 × 70 cm • p. 15 Cangnan, Zhejiang, 2012 C-print • 90 × 70 cm

Lingkun, Zhejiang, 2012 C-print · 90 × 70 cm · p. 10

Wenzhou, Zhejiang, 2012 C-print · 90 × 70 cm

Ruian, Zhejiang, 2012 C-print • 90 × 70 cm • p. 21

Fuzhou, Fujian, 2018 C-print • 90 × 70 cm

Zhangzhou, Fujian, 2013 C-print • 90 × 70

LUPANG

Clara Balaguer and Carlos Casas

Lupang, 2013
Video installation with two sets
of four screens each
41 min 49 sec, and 46 min
stereo sound • pp. 24–39

SOUND OF THE EARTH

Chen Sai Hua Kuan

Sound of the Earth, 2013 Installation with soil inside 80 glass bottles, 4-8 clay bowls, wires and metal rods pp. 38–49

SUDDEN NATURE

Isaac Kerlow

Scream I, 2012

Pigment print • 110 × 61 cm artist's proof • pp. 54–55

Color Scream, 2012

Pigment print • 110 × 61 cm artist's proof • p. 50

Durian 013, 2012

Pigment print \cdot 110 \times 61 cm artist's proof \cdot pp. 48 and 59

Unravel, 2012

Pigment print • 110 × 61 cm artist's proof • p. 53

Mutation, 2012

Pigment print \cdot 110 \times 61 cm artist's proof \cdot p. 52

I think he loves me, 2013

Interactive video installation video projector, computer, arduino, ultrasound sensors 20 sec video loop • pp. 56–57

Dialog of monologs, 2013

interactive audio installation 6-10 ultrasound sensors, arduino, speakers, stenciled words • pp. 51 and 58

THE POSSIBILITY OF KNOWING

Robert Zhao Renhui

All the cafes along the beach of Padang from the series
The Possibility of Knowing,
2013

Set of 32 black and white photographic prints \cdot 30 \times 30 cm

All the cafes along the beach of Padang from the series The Possibility of Knowing 2013

Set of 9 black and white photographic prints • 20 × 20 cm p. 62

All the cafes along the beach

of Padang from the series
The Possibility of Knowing,

Set of 16 color pigment prints $54 \times 36 \text{ cm} \cdot \text{pp. } 66-67$

Padang, Swift Houses, 2013

Pigment print • 121 × 84 cm

30 years, 2013

Pigment print \cdot 121 \times 84 cm p. 60

Padang, 2013

Pigment print · 121 × 84 cm

Padang II, 2013

Pigment print - 121 × 84 cm pp. 64–65

Aceh, 2013

Pigment print \cdot 121 × 84 cm pp. 70–71

30 years II, 2013

Pigment print • 121 × 84 cm pp. 68–69

WHEN NEED MOVES THE EARTH

Sutthirat Supaparinya

When Need Moves the Earth 2013

Video installation, 3 screens 20 min 34 sec • pp. 72–83

Acknowledgments

EOS Director

Kerry Sieh

EOS Principal Investigators

Sylvain Barbot, Earthquake physics Fidel Costa, Volcanic petrology, lab volcanoes Nathalie Goodkin, Marine geochemistry Emma Hill, Geodesy Huang Zhenhua, Tsunami modeling Judith Hubbard, Structural geology Isaac Kerlow, Art, film Koh Tieh Yong, Tropical atmosphere Qin Xiaosheng, Hydroclimatology Mikinori Kuwata, Atmospheric chemistry Qin Xiaosheng, Hydroclimatology Benoit Taisne, Magma transport dynamics Paul Tapponnier, Tectonics Charles Rubin, Earthquake geology Kerry Sieh, Earthquake geology Adam Switzer, Coastal lab Wang Xianfeng, Isotope geochemistry

Visiting Artist Program Jury

Fidel Costa, Earth Observatory of Singapore Noor Effendy Ibrahim, The Substation Charles Merewether, Institute of Contemporary Arts Gunalan Nadarajan, School of Art and Design, University of Michigan

Coastline

Special thanks: Chua Kai Qing, Wang Xin, Aida Azlin, Liu Yang, Adam Switzer, Yu Feng Ling, Wang Xianfeng, Antonius Ratdomopurbo, Iwan Hermawan, Fidel Costa, Kenneth MacPherson, and Judith Hubbard.

Lupang

Stefan Jørgensen, DOP Lupang screens 5–8; *Manila production*: Marta Llorente, Head of Production; Karen Batiño and Marc Chavez, Production Assistants. *Pampanga production*: Roman King, Producer; Elsie Abuque, Translator. *Ayta storytellers*: Ruben Sison, Marissa Sison, Angel Sison, Julio Serrano, Allan Abuque, Pastor Bert, Tony Sumilang, Peter de la Cruz, Bernie. *Special thanks*: Tina Sison, Ysagani Ybarra, Robbie Tantingco, Ramon Santos, Cynthia Neri Zayas, Abong Tayag, Chris Newhall, Nadia Balaguer, University of the Philippines (Ethnomusicology Department), Holy Angel University (Center for Kapampangan Studies), and PHIVOLCS.

Sound of the Earth

Special thanks: Adam Switzer, Yves Descatoire, Kerry Sieh, Sylvain Barbot, Victoria Tan, Wang Ruobing, and Zainudin Samsuri.

Sudden Nature

Main production: Wendy Chee Wei Ling, Nature; Ivan Yong Wai Wan, Man; Lim Yu-Beng, male voice; Oon Shu-Ann, female voice. Kevin Teoh and Neil Lim, voice recording and sound mix. Emil Polyak, arduino programming and electronics. David Lee and Jonathan Chong, main cameras. Liu Yang, computer animation; Nguyen Thi Nam Phuong, paint animation; Alicia Yang, editing; Sergio Moure, music.

When Need Moves the Earth

Credits: Sutthirat Supaparinya, direction; Chatchai Suban, director of photography; Sutthirat Supaparinya, editing. Monruadchanan Laphatphakkhanut, assistant director; Nakarin Rodput, sound editor; Arnont Nongyao, sound designer; Chatchai Suban, main camera; Sutthirat Supaparinya, second camera; Thanayos Roopkhajorn, camera assistant; Sutthirat Supaparinya, sound recordist and color correction; Jessica Loh and Robert Low, English editing. Special thanks: Electricity Generating Authority of Thailand (EGAT), EGAT Mae Moh Power Plant, and EGAT Mae Moh Lignite Mine. Somyot Therawongskul, Assistant Director EGAT Mae Moh Lignite Mine; Kittikij Svetsarnee, Mae Moh Mining Museum Director. Dejnarong Suriya, Head of Public Relations; Mr. Teera Thareepueech, Public Relations Staff. Siriwat Techata, Shift Engineer; Tayuporn Intarachit, Shift Engineer; Aumpon Koghanil, Mine Staff; Supan Jaisuk, Unit Operator; Choonpol Katepoo, Spoiler Pool Unit 4. Stock media: EGAT, Srinagarind Dam; Google Maps.

EOS Art Group

Project Research Assistants: Aida Azlin, Deena Shareena, Chua Kai Qing, Wang Xin, and Cheryl Han. Elizabeth Wong, group secretary.

Singapore Art Museum

Susie Lingham, Director; Siu Li Tan, *Unearthed* Curator; and the entire SAM team.

Photo Credits

Zhang Xiao, courtesy of the artist; Sai Hua Kuan by Yavuz Gallery; Clara Balaguer by Javier Tles; Carlos Casas by So Hirai; Isaac Kerlow by David Lee; Robert Renhui Zhao, courtesy of the artist; Sutthirat Supaparinya by Satoru Eguchi

