



SCWS 2017

Connecting the World  
for a Sustainable Future

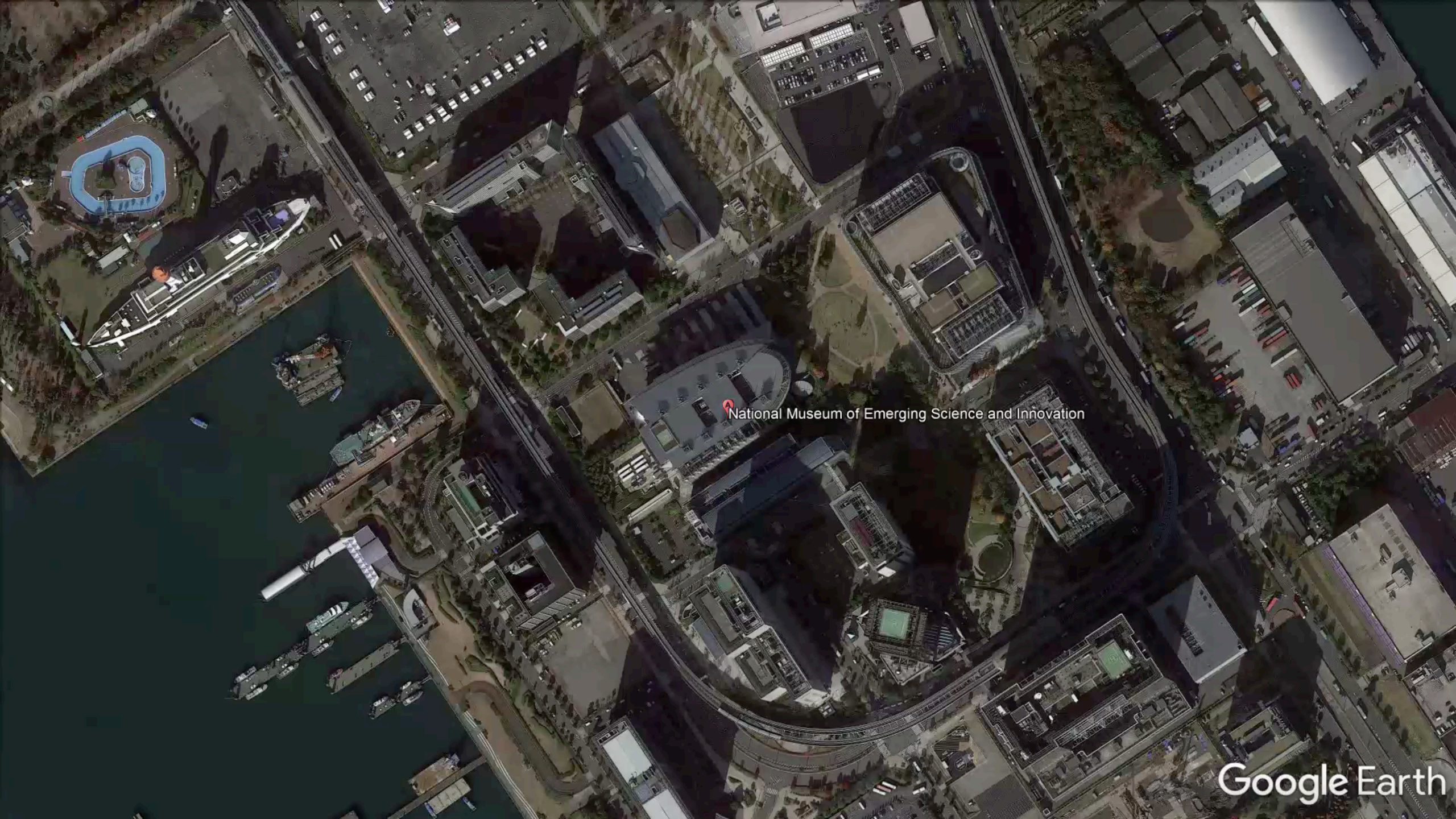
**BIG DATA FOR VISITOR EXPERIENCE  
AND EMPOWERMENT**



**COLUMBUS**

EARTH CENTER

**HANS GUBBELS**



National Museum of Emerging Science and Innovation





The **overview effect** is a cognitive shift in awareness reported by some astronauts and cosmonauts during spaceflight, often while viewing the Earth from orbit or from the lunar surface.

It refers to the experience of seeing firsthand the reality of the Earth in space, which is immediately understood to be a tiny, fragile ball of life, "hanging in the void", shielded and nourished by a paper-thin atmosphere. From space, national boundaries vanish, the conflicts that divide people become less important, and the need to create a planetary society with the united will to protect this "pale blue dot" becomes both obvious and imperative.



# The Overview Effect

Space Exploration and  
Human Evolution  
Third Edition

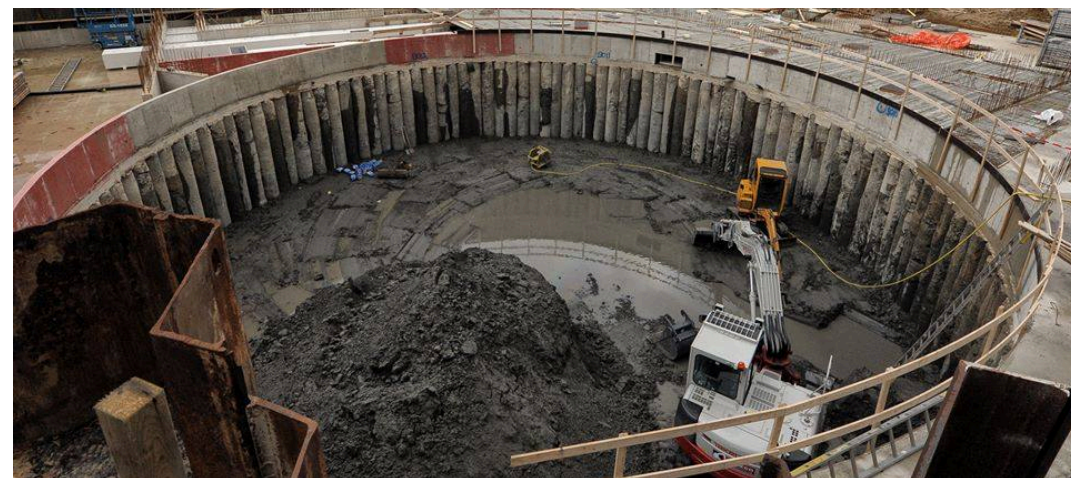
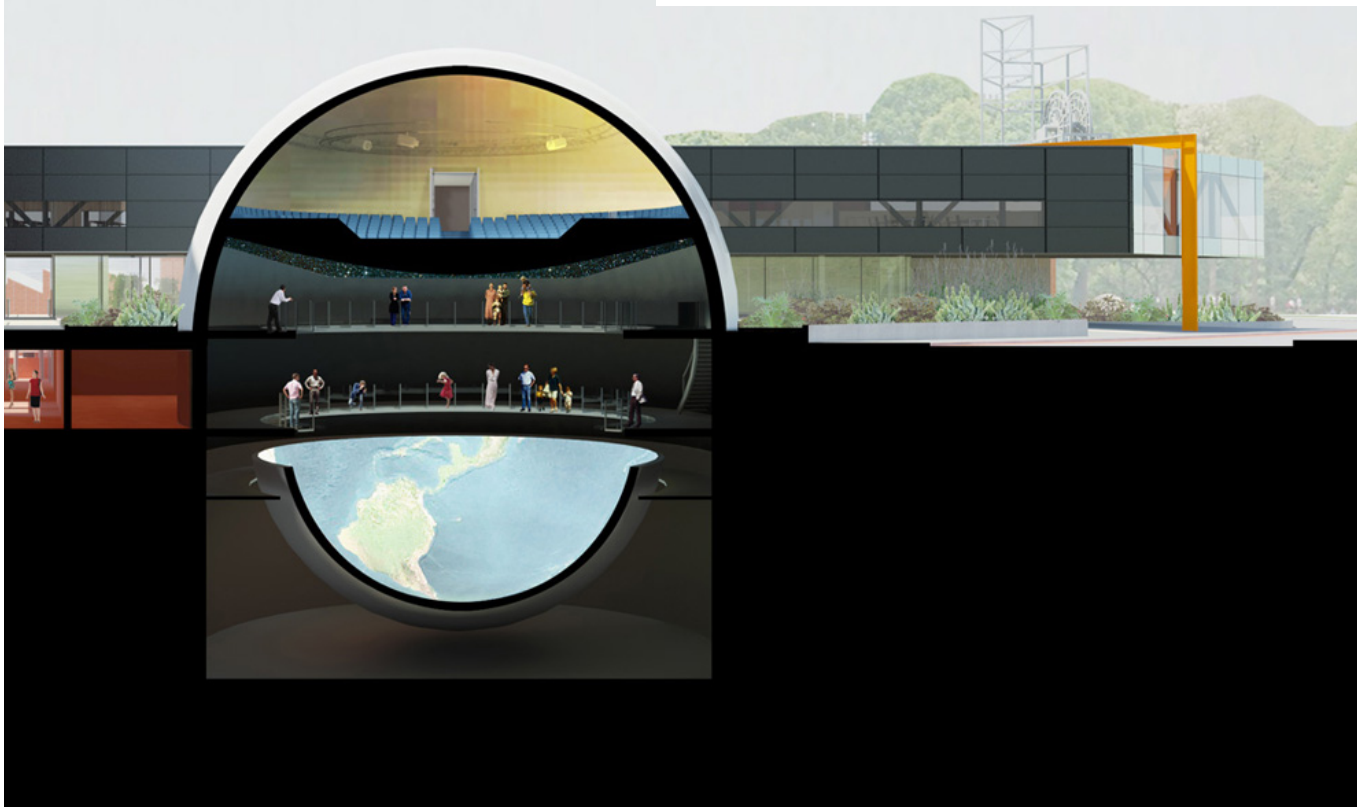
Frank White

LIBRARY  
OF CONGRESS  
Ned Allen  
Editor-in-Chief

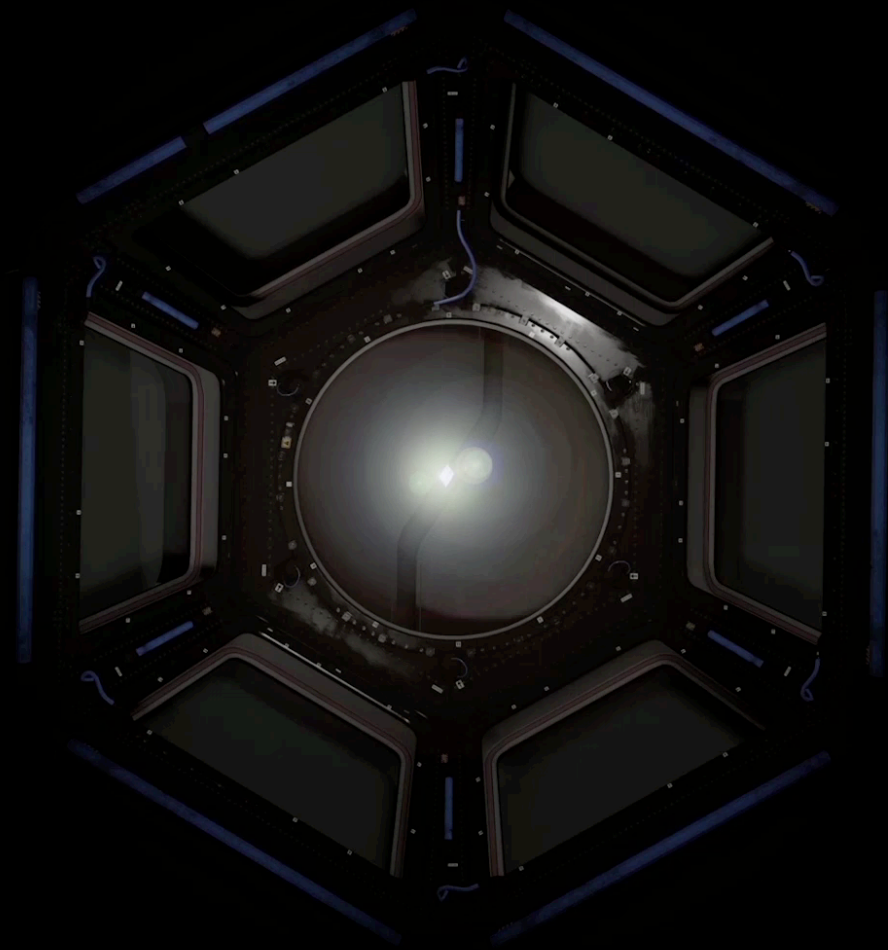
WOULDN'T IT BE EASIER TO WORK TOWARDS A  
SUSTAINABLE FUTURE IF EVERYBODY COULD  
EXPERIENCE THE OVERVIEW EFFECT?



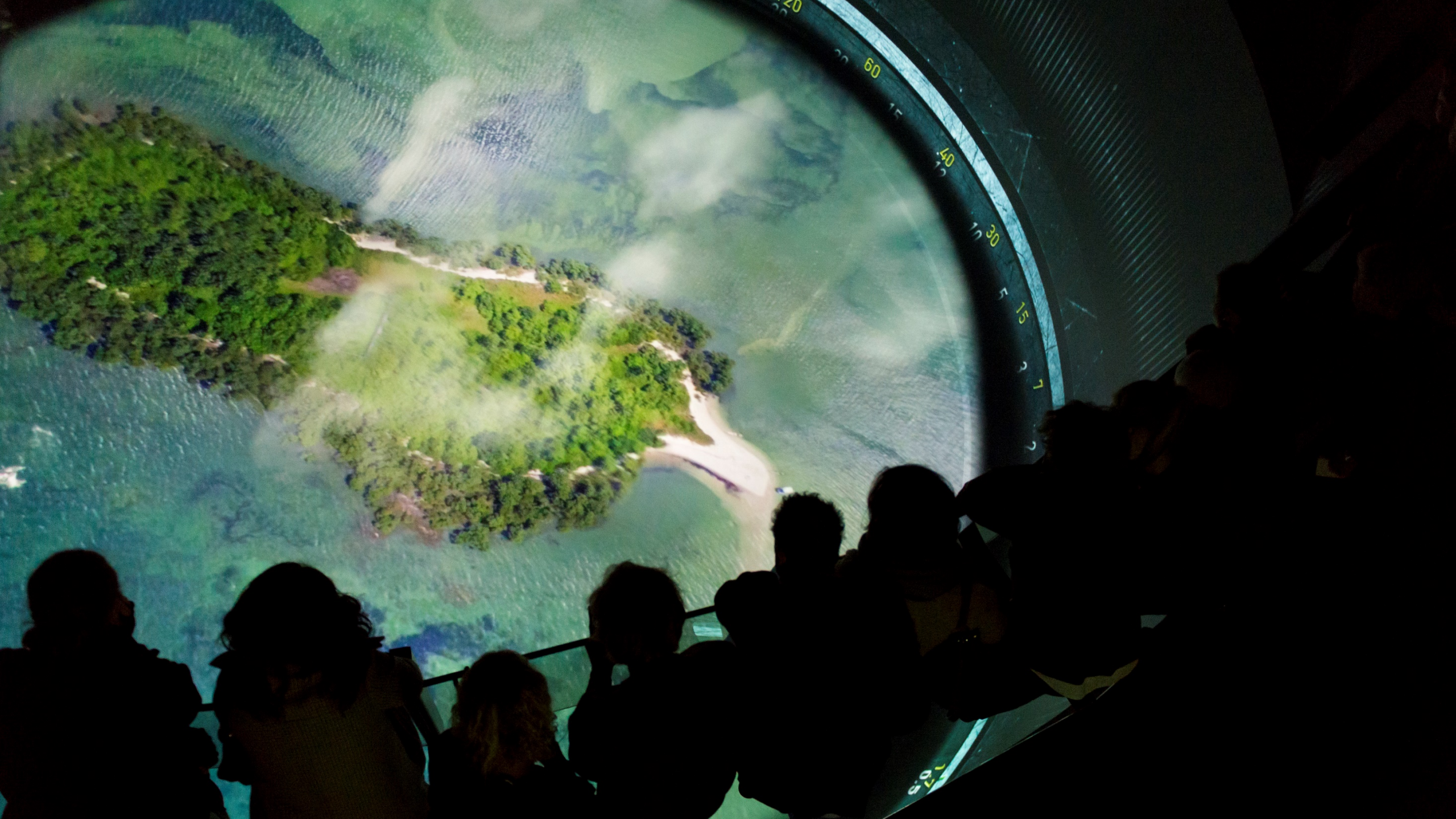
**TO BRIDGE THE GAP WE NEED A TRANSFORMATIVE EXPERIENCE**











Spirit of the Earth



Spirit of the Earth



Spirit of the Earth





DID WE BRIDGE THE GAP ?

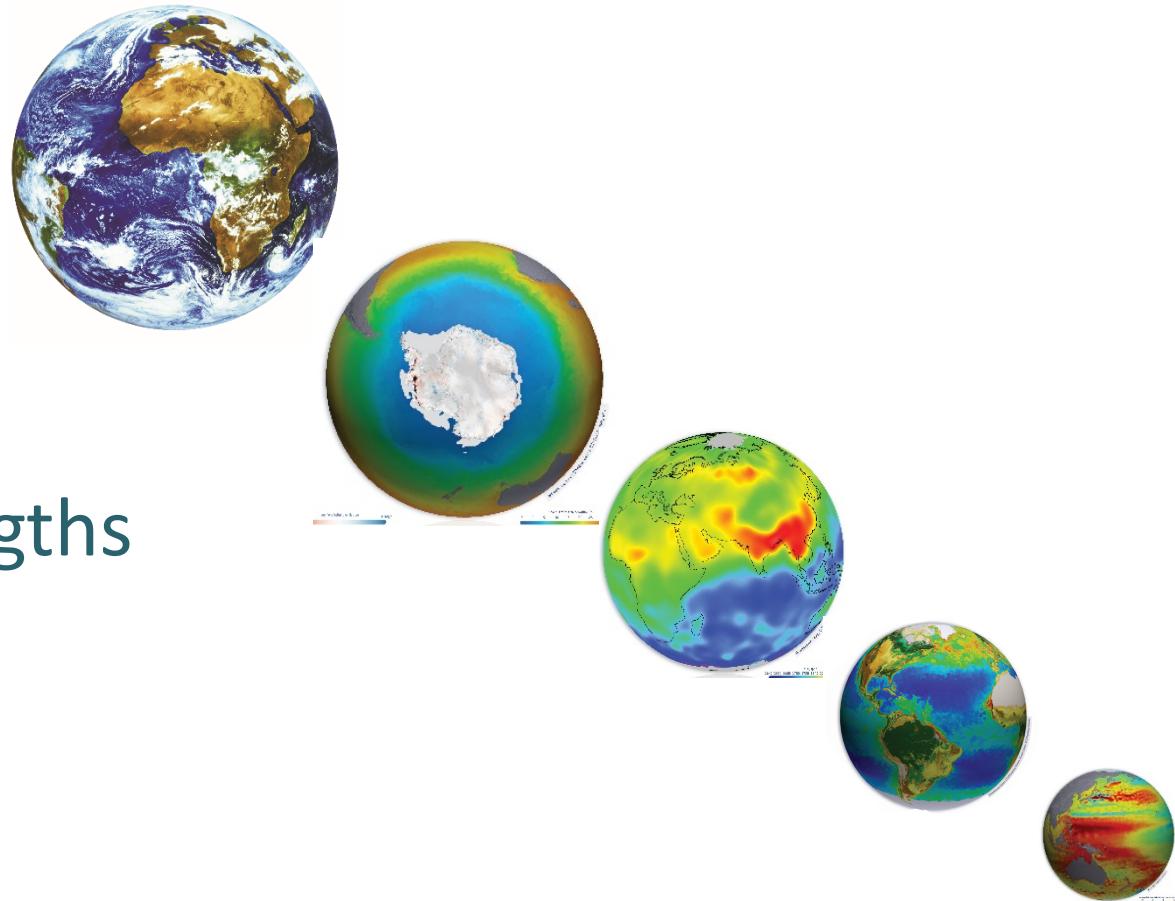
**NO, OR AT BEST PARTLY**

VISITORS GET THE RIGHT MINDSET BUT WANT  
ACCESS TO MORE INFORMATION, ACCESS TO  
DATA AND DISCUSSION ON FUTURE SCENARIOS

**THIS IS WHERE BIG DATA COMES IN.**

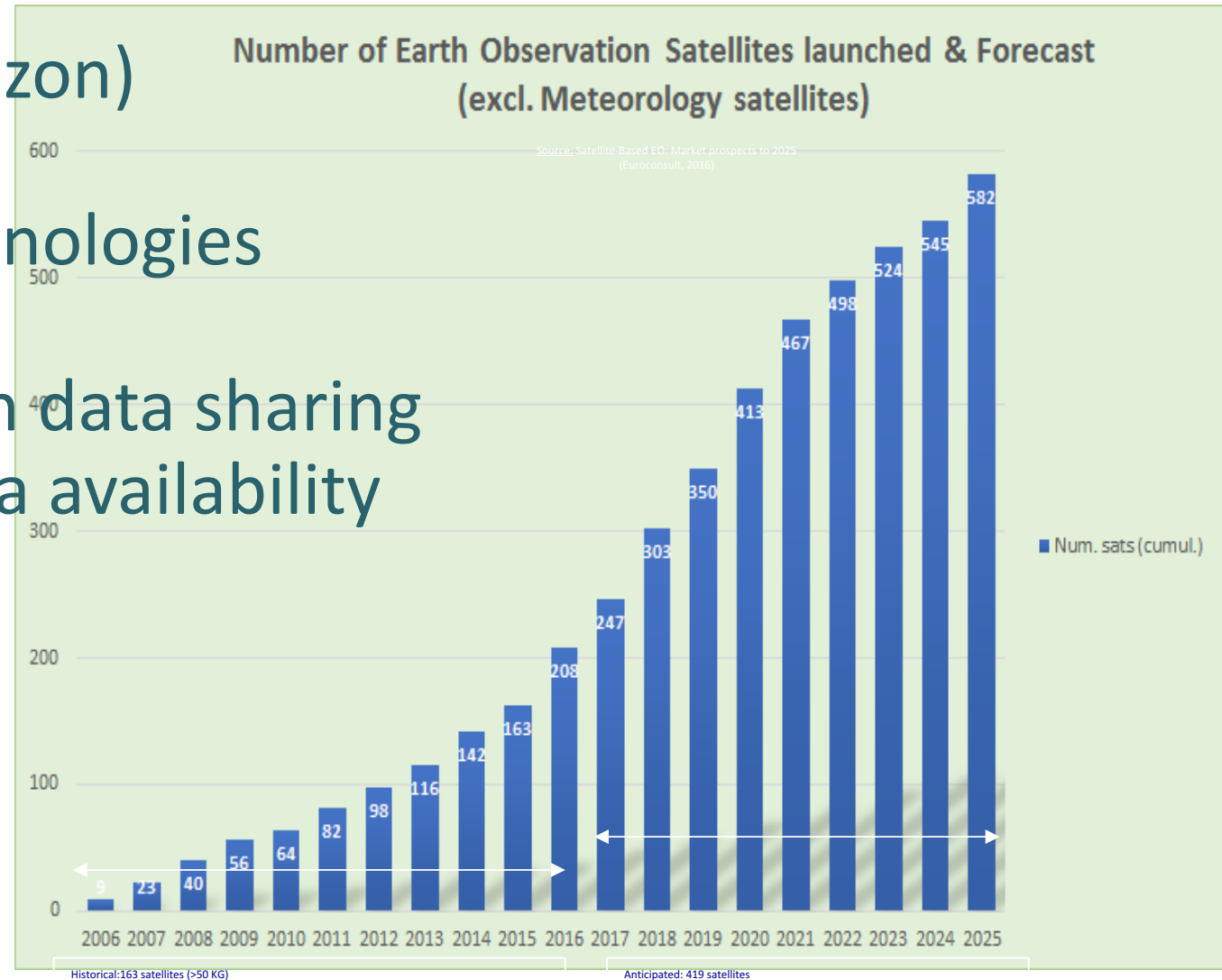
# Earth Observation Remote Sensing is:

- Global
- Non-Intrusive
- Consistent
- Rapid
- Repetitive
- Across many wavelengths



# Earth Observation in the Digital Age:

- New actors (e.g. Google, Amazon)
- Sensors development
- Rapid advances in digital technologies
- International policies for open data sharing
- Exponential growth of EO data availability



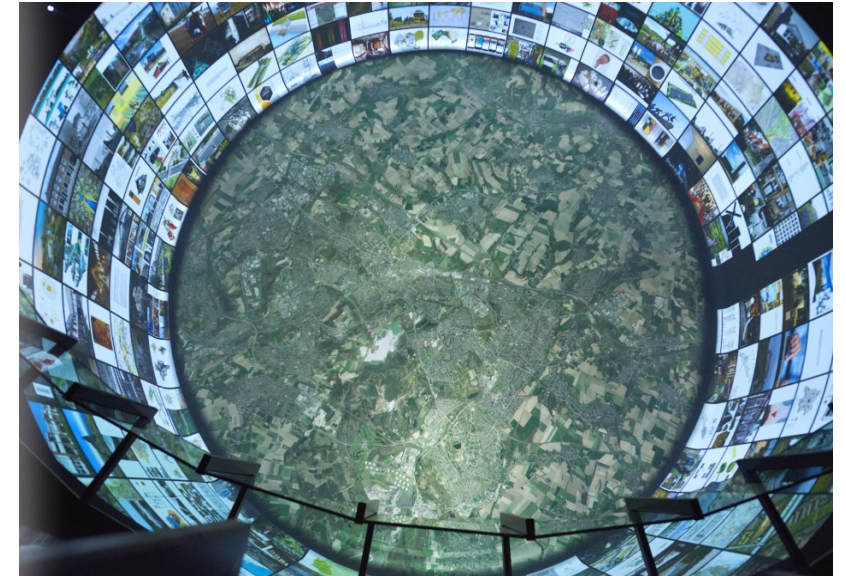
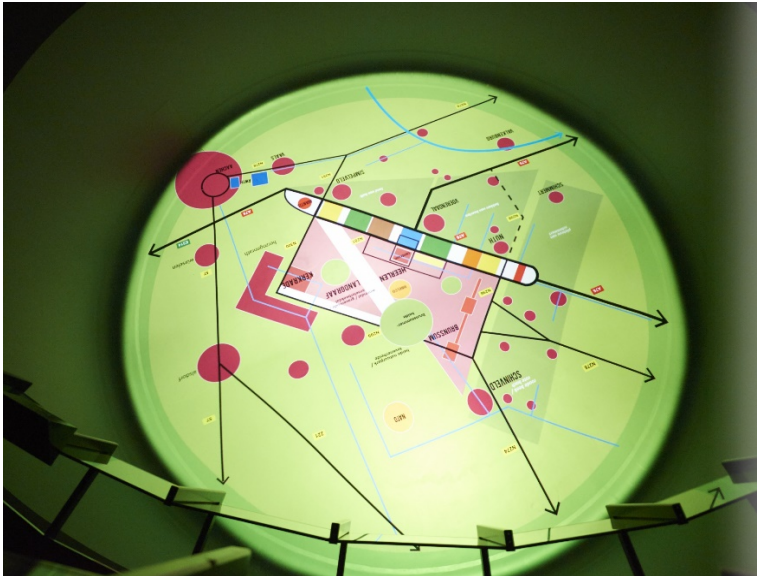
## BIG DATA

...increased **Volume** of EO space data  
(accumulating past, current and future data)

...increased **Velocity** (higher rate at data being  
collected and made available)

...increased **Diversity** (in media, formats and  
processing)

**BUILDING AN EXPERIENCE OF FUTURE SCENARIO'S THROUGH BIG DATA VISUALISATION  
..... FOR BRIDGING THE GAP FROM KNOWLEDGE TRANSFER TO BEHAVIOUR CHANGE  
..... WITH THE GOAL OF CITIZEN EMPOWERMENT ..... PROVOKING DISCUSSION,  
DEBATE, CALL FOR ACTION..... WORKING TOWARDS A SUSTAINABLE FUTURE FOR ALL.**



**WE ARE JUST AT THE BEGINNING OF THIS PROCES .....**



# **OVERVIEW SYMPOSIUM 2017**

**Exploring the transformative potential of the  
planetary perspective for social responsibility**

**Friday November 3rd, Kerkrade, The Netherlands**

# European Overview Forum



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The Overview Forum is a network of ambassadors who commit to a better world. By giving attention to the Overview Effect, they want to help more organizations achieve their sustainability ambitions. The forum works as a catalyst for the Overview Effect. It was founded during the first Overview Symposium in November 2017 and is derived from the American Overview Institute.



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