

MIT Building 34

April 2, 2016

Reducing the Dangers of Nuclear War

Elaine Scarry

Harvard University

Democracy and Nuclear Weapons
Cannot Co-Exist

Alfred Eisenstaedt, "Mother and Child in Hiroshima, Japan, December 1945." Getty Images



Meridel Rubenstein "Four Elements" 1993



Blue Marble

NASA




SO MANY EXIST READY TO BE USED

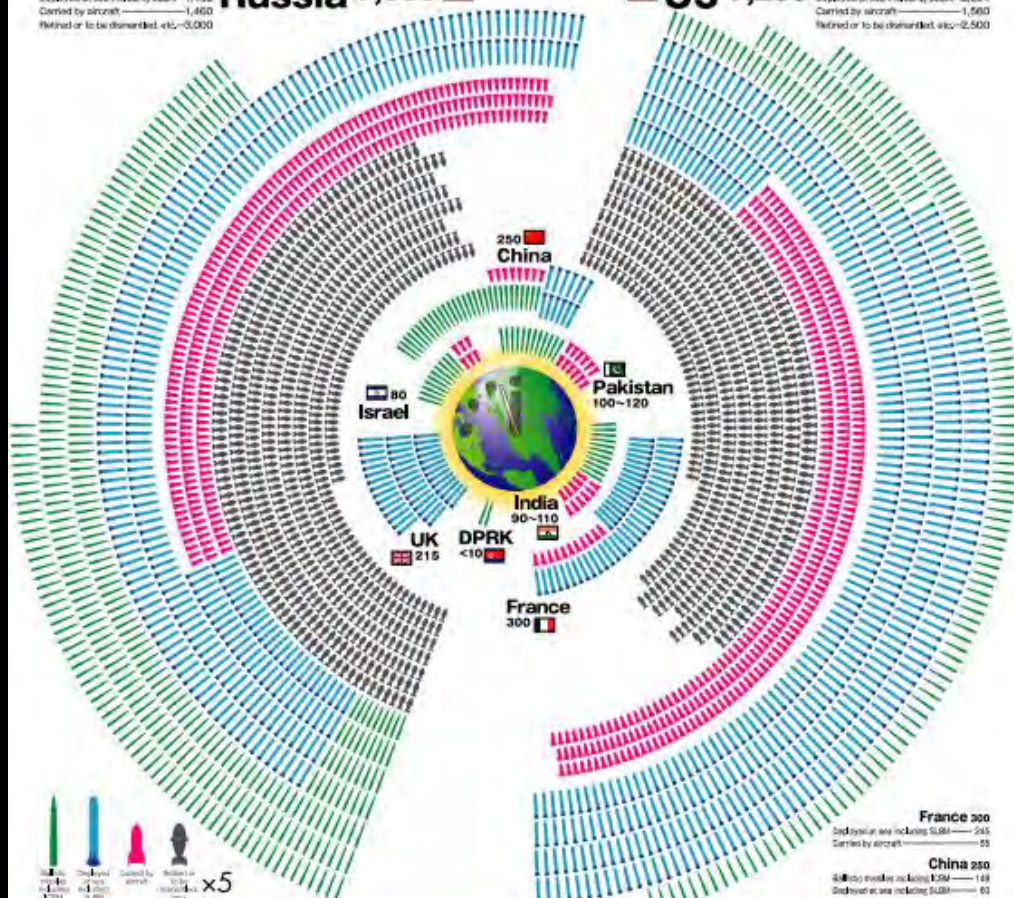
The World's **Nuclear Warheads** Count June 2015

Deployed warheads including K2M—1,503
Deployed at sea including SLBM—1,458
Carried by aircraft—1,460
Retired or to be dismantled, etc.—0,000

Russia 7,500 

US 7,200 

Deployed warheads including K2M—840
Deployed at sea including SLBM—2,304
Carried by aircraft—1,500
Retired or to be dismantled, etc.—0,500



15,700

Decrease from 2014: -700

The Doomsday Clock
(see the center)
The Doomsday Clock is a symbol of the threat of nuclear war. On the last day of the year, the clock is set to a time that represents the estimated time remaining until nuclear war. The clock is set to 12 minutes to midnight.

France 300
Deployed at sea including SLBM—245
Carried by aircraft—55

China 250
Deployed warheads including K2M—148
Deployed at sea including SLBM—60
Carried by aircraft—42

UK 215
Deployed at sea including SLBM—215

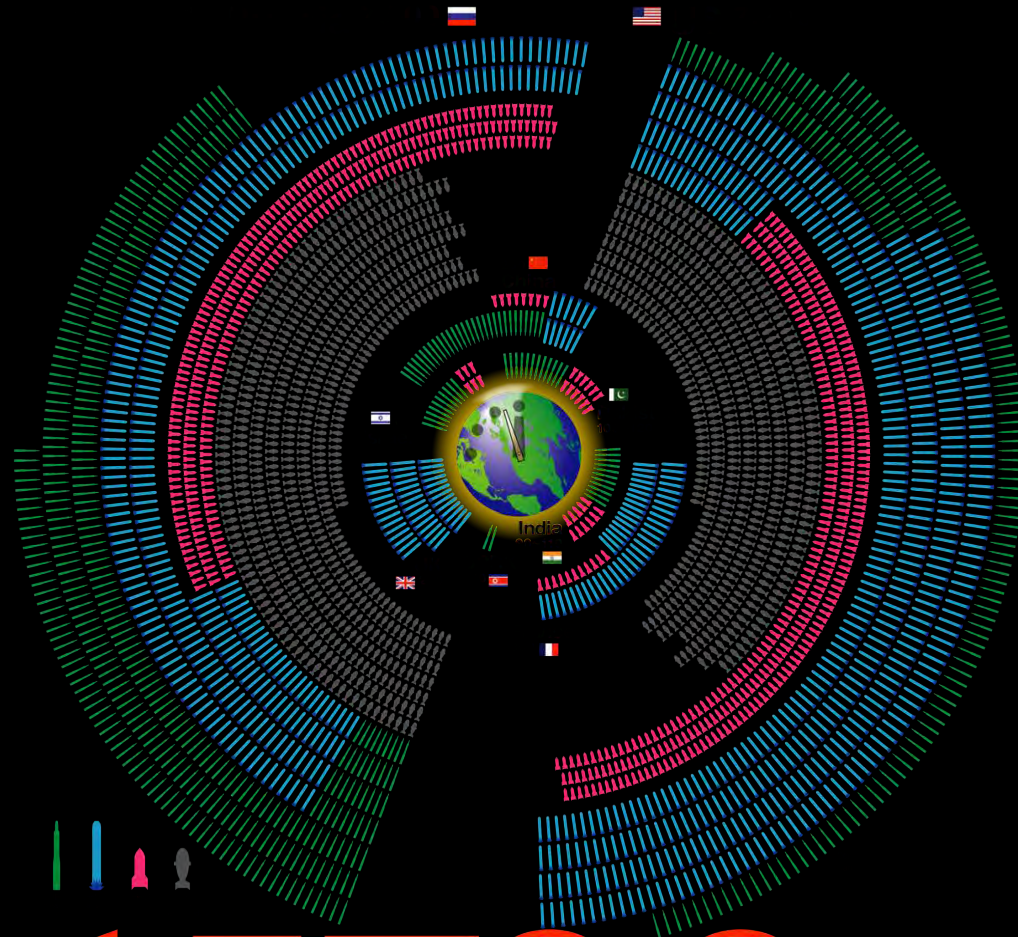
Israel 80
Deployed warheads including K2M—60
Carried by aircraft—20

Pakistan 100-120
Deployed warheads including K2M—60
Carried by aircraft—40-60

India 90-110
Deployed warheads including K2M—64
Carried by aircraft—26-56

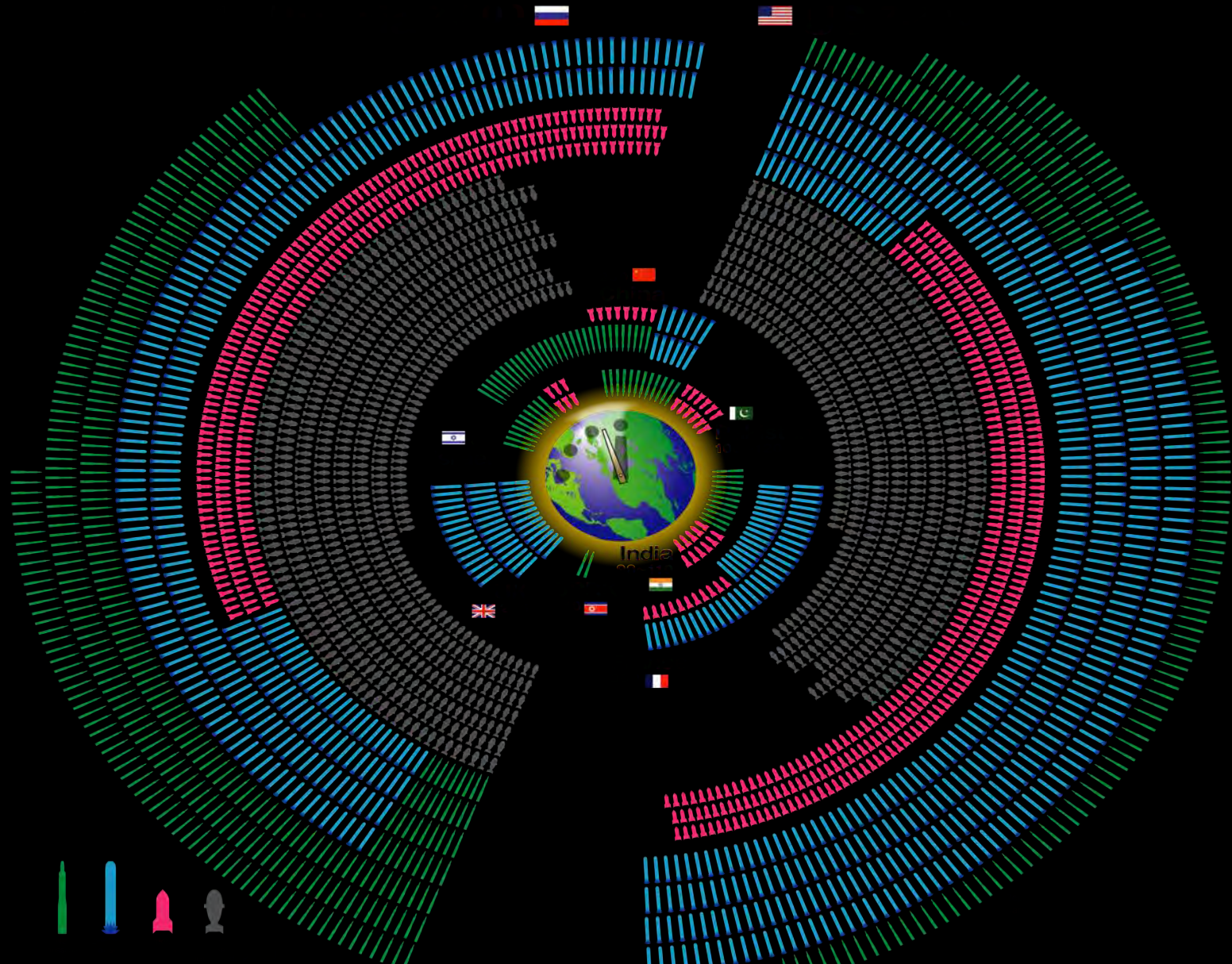
DPRK <10
Deployed warheads including K2M—10

The World's Nuclear Warheads Count



15,700

The World's Nuclear Warheads Count



CHOOSING BETWEEN
DEMOCRACY AND DOOM

THERMONUCLEAR MONARCHY

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Injury to the Persons and to Earth

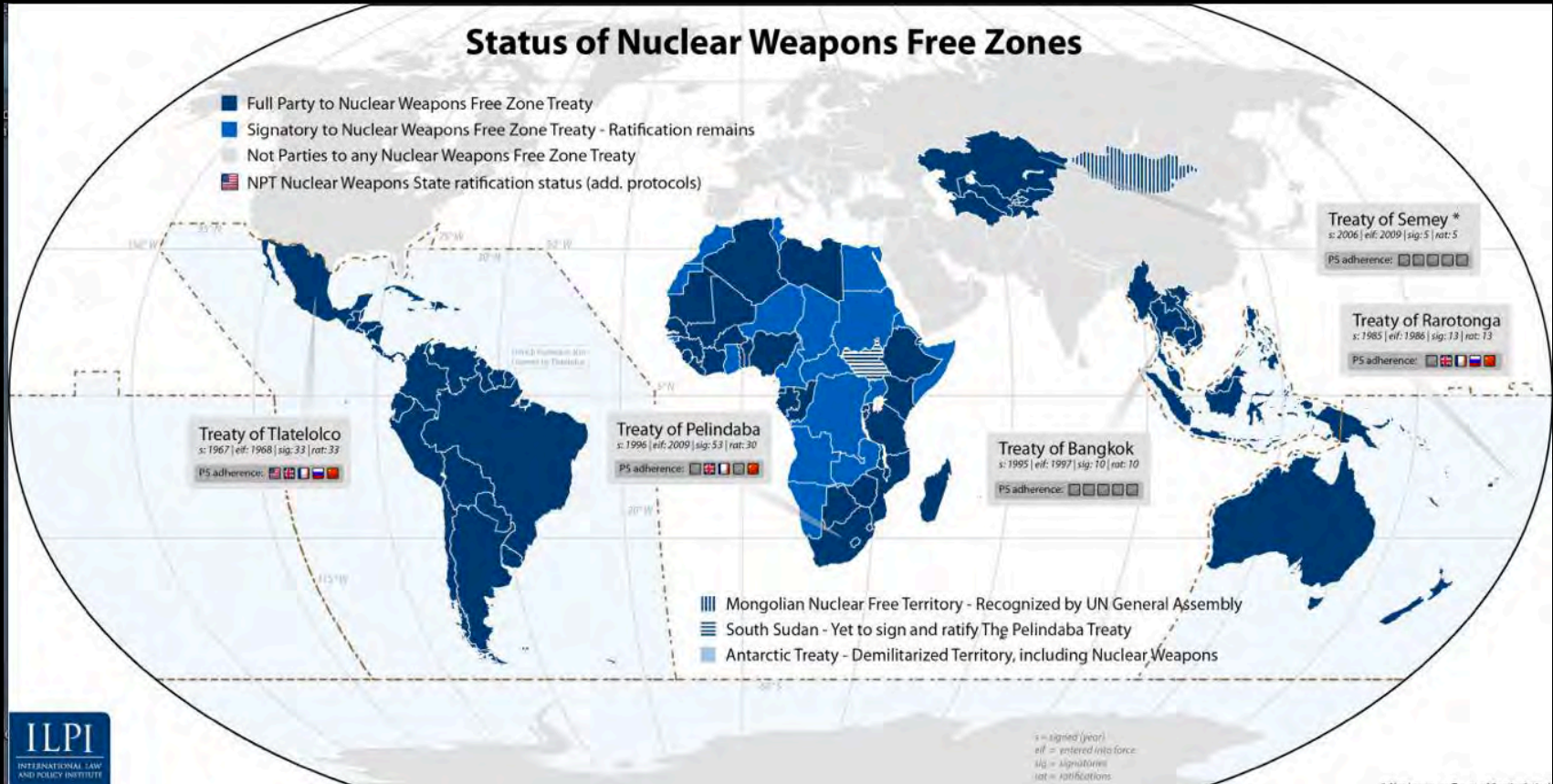
International Law prohibits this injury

International Law solves the problem of
“statistical compassion”

National Law solves the problem of
“statistical compassion”

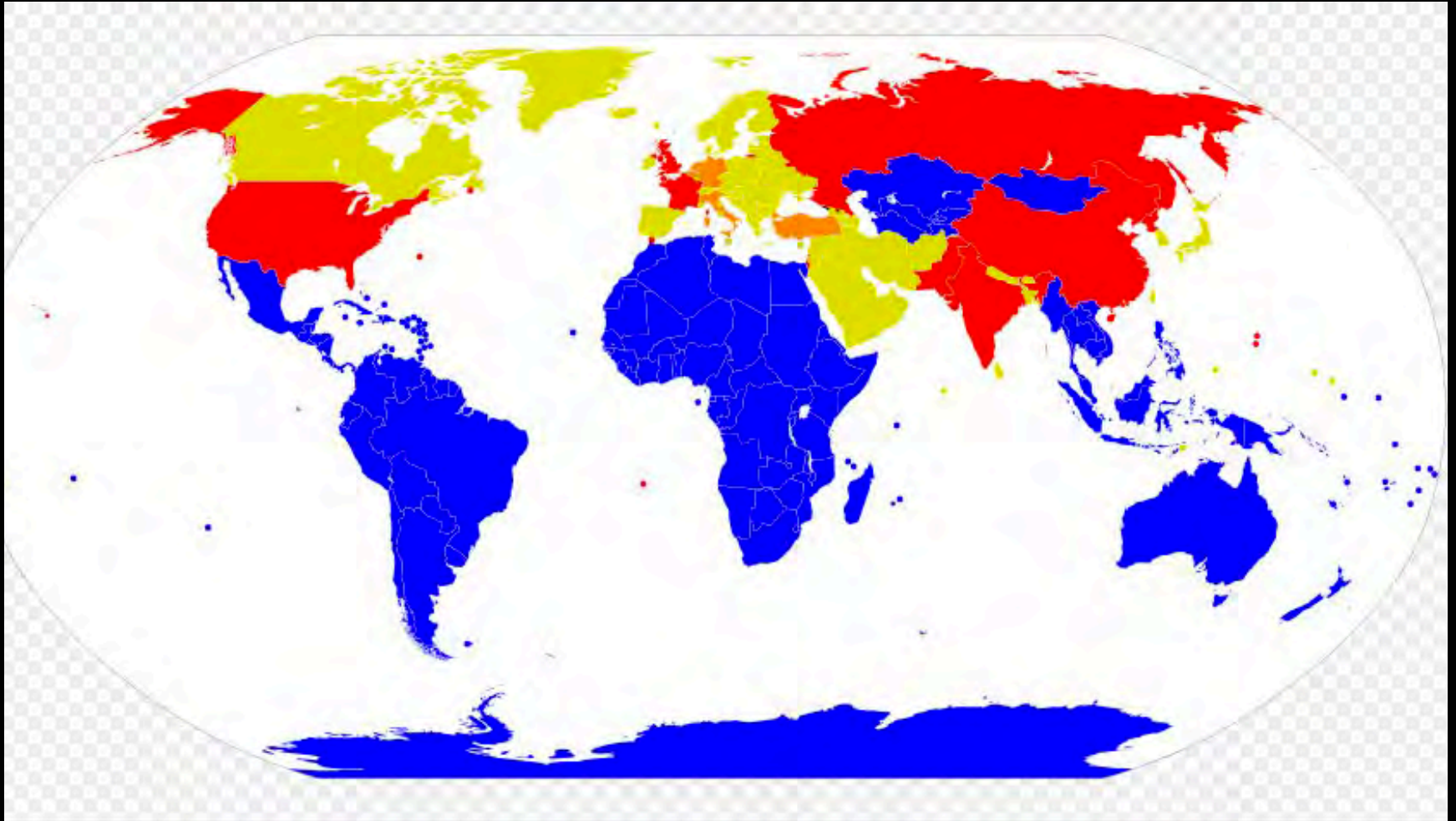
Nuclear Weapons Free Zones

International Law and Policy Institution

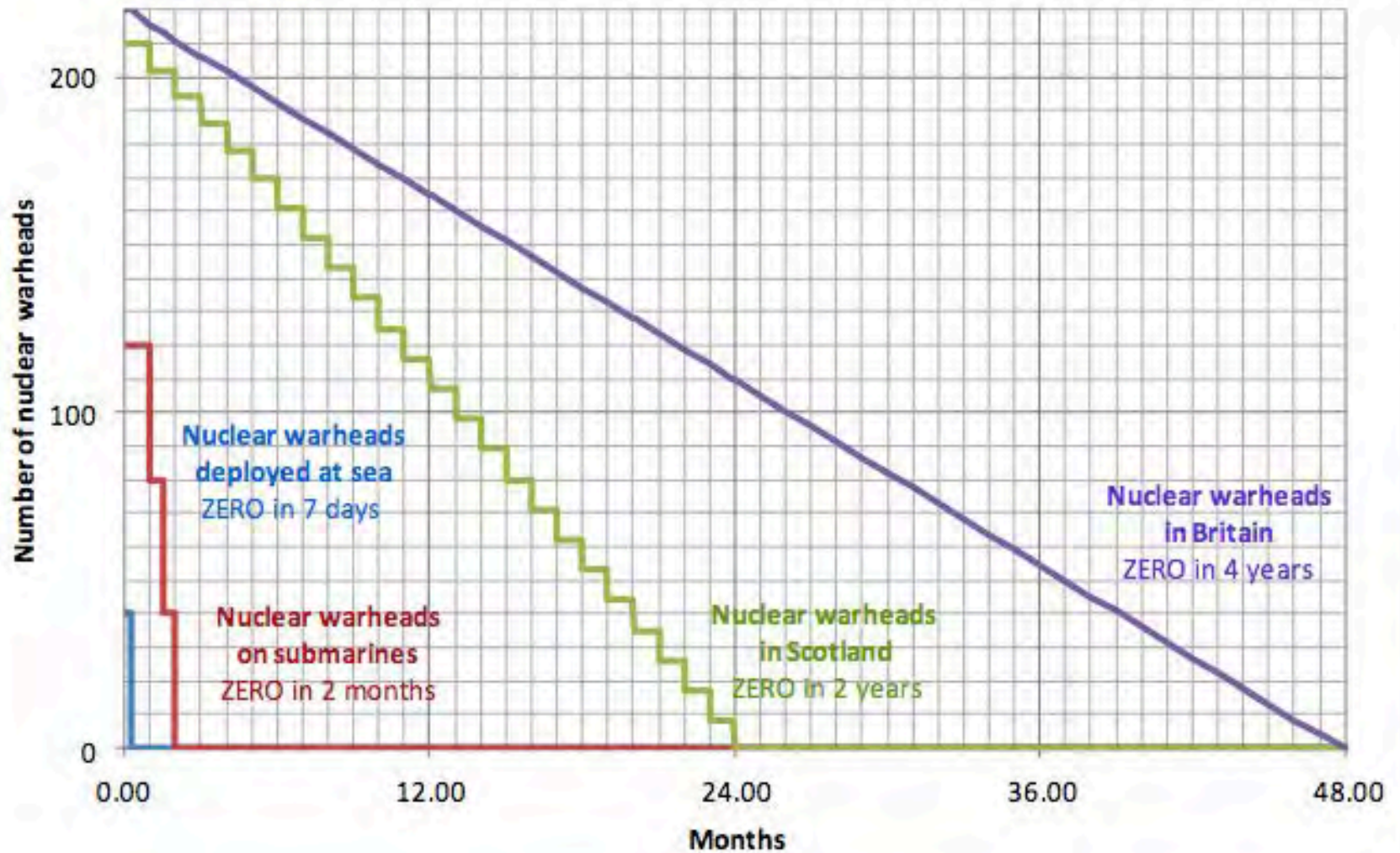


Nuclear Weapons Free Zones and Nuclear Weapons States

Wiki



John Ainslie *Disarming Trident* Timetable



CHOOSING BETWEEN
DEMOCRACY AND DOOM

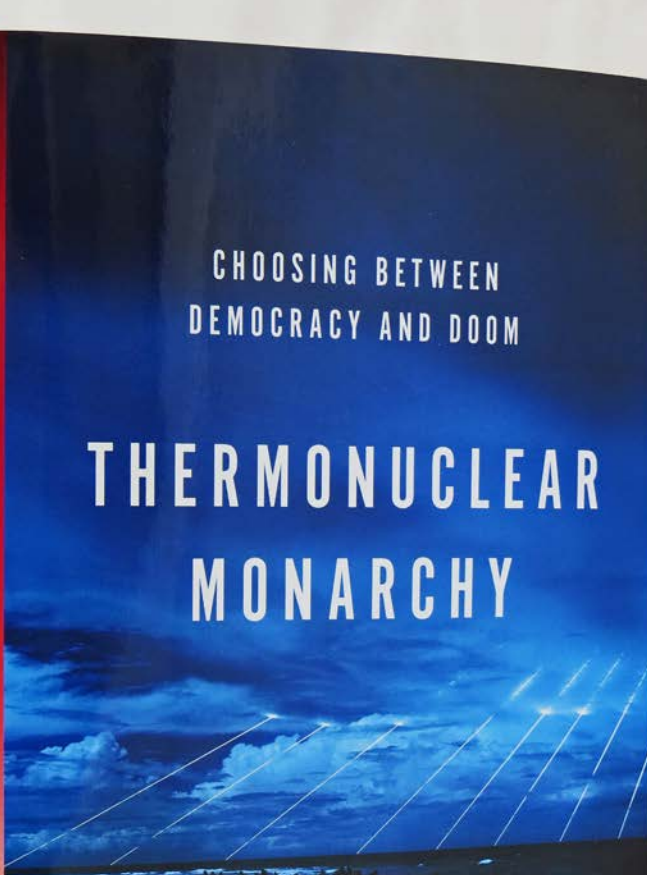
THERMONUCLEAR MONARCHY

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- **Two brakes** on warmaking in U.S. Constitution

First brake: Article 1 section 8 clause 11

No war without a Congressional
“Declaration of War”

Second brake: Second Amendment

What are the formal features of a Congressional “Declaration of War” in the five cases where the U.S. has had a declaration?

War of 1812 (with England)

Mexican-American War 1846

Spanish American War 1898

World War I

World War II

What are the formal features of presidential deliberation about using a nuclear weapon?

Taiwan Straits Crisis 1954

Berlin Crisis 1959

- **Congressional Deliberation** vs. **Presidential Deliberation**
-
- Visible to the Public
years
-
- Clear set of sentences
-
- Conspicuously staged vote
-
- Participants equal
-
- Dissent and contestation:
Testing
- Invisible to Public for thirty
-
- No clear statement of action
-
- No vote
-
- Participants are subordinates
-
- No dissent. No contestation.
No testing.

- **Second Brake:** The Right to Bear Arms

1 Constitution arranges for many “intervening layers of resistant humanity”

2 Resistant humanity? Do soldiers dissent?

3 Second Amendment arrives during ratification of Constitution:
A distributional requirement created during distributional moment

4 Supported by militarists and pacifists alike

5 Civil stature in U.S. is premised on military stature
15th, 19th, and 26 Amendments

- **Double brake** provides two gates of authorization
- Double location is what differentiates statutory law from Constitutional law: Constitutional law requires passage by Congress and ratification by population
- 5000 amendments proposed; 27 passed

War making requires passage by Congress and ratification by population

Constitutions of Other Nuclear States

French Constitution

Article 35

Article 89

Indian Constitution

Article 246

Russian Federation Constitution (1993)

Article 102

Article 59

⋮



Non est potestas Super Terram quae Comparetur ei. Iob. 41. 24.





from Elaine Scarry *Thermonuclear Monarchy*

At the close of the *Second Treatise of Government* (in the chapter examining the legitimate grounds for rebellion), Locke quotes a memorable observation about one of history's tyrants: "And of Caligula . . . he wisht that the people had but one neck, that he might dispatch them all at a blow." Nuclear weapons and the highly practiced arrangements for their use have made Caligula's wish come true: the people of earth now have but one neck and can be dispatched all at a blow. It does not matter that the thermonuclear monarchs who preside over us today are ordinarily much nicer people than Caligula, for it is the nuclear architecture itself that literalizes and monumentalizes Caligula; the individual personalities of our monarchs, and the always amusing differences among them, are at best a temporary check on a vast structure of cruelty that stands ready to be used. It is national monarchs, not terrorists, who have put this in place and readied it for use, whether by themselves or by stateless actors. And it is these colossal structures of illegitimate non-governance that must be dismantled.

Meridel Rubenstien "Nuclear Trigger" 1993



The Floor of the World

Elaine Scarry

Imagine that there one day came to exist on earth—sometime in the future—a solitary country with a new technology. The technology has let this solitary country station a door (or more precisely, a series of doors) under the floor of every other country in the world.

If the leader of the solitary country ever feels imperiled or impeded by another country, he can open the trap door and, in a single day, eliminate the population of that rival country. Because the arrangement of doors beneath each national floor is sectioned, the leader can alternatively choose to eliminate just part of the enemy country, a fourth of it, or a third of it; he might choose to open the doors beneath the floor of the opponent's military installations only, thereby eliminating those installations and, say, one-thirtieth of the country's population. As a shorthand, this ingenious technology and the policies that enable its use might be called the Flexible Floor Doctrine

Architect Carolina Dayer's Rendering of "The Floor of the World"

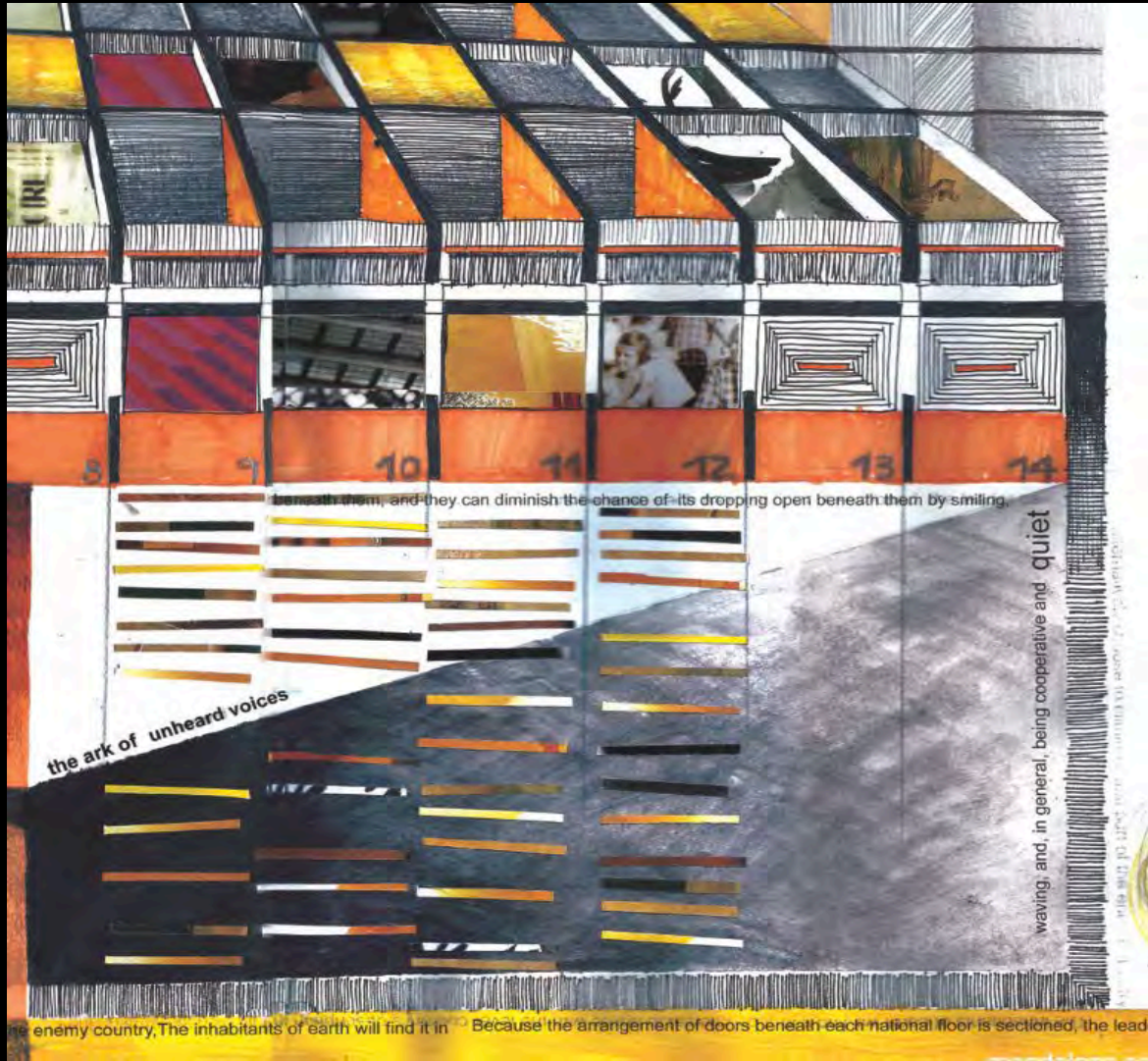


Architect Magdalena Egues's Rendering of "The Floor of the World"



Though it is hard to conceive of an international arrangement with greater asymmetry and therefore greater unfairness, the advanced country might come to think of itself as fair, even as the fairest of nations, for it each day has the power to annihilate millions of people and each day (or almost each day) abstains from doing so. (Other countries, in its view, seem to hit each other with sticks and stones every chance they get.)

The inhabitants of earth will find it in their interest to agree with the lever country's description of its own generosity: *they cannot influence whether the flexible floor is absent or present but only whether it stays closed or suddenly drops open beneath them, and they can diminish the chance of its dropping open beneath them by smiling, waving, and, in general, being cooperative and quiet.*



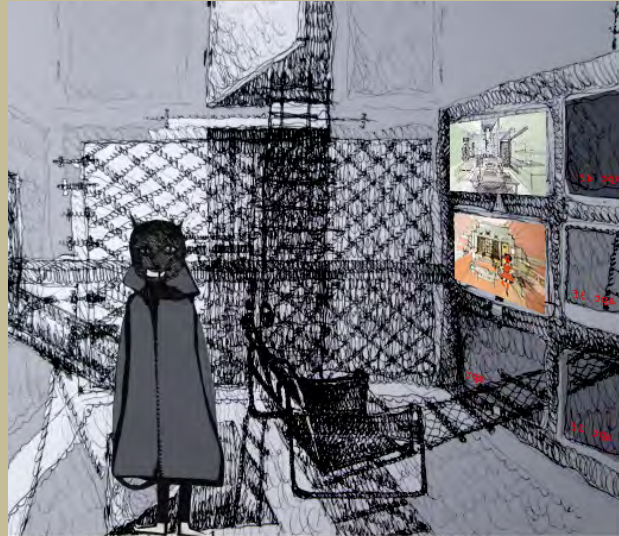
the ark of unheard voices

beneath them, and they can diminish the chance of its dropping open beneath them by smiling.

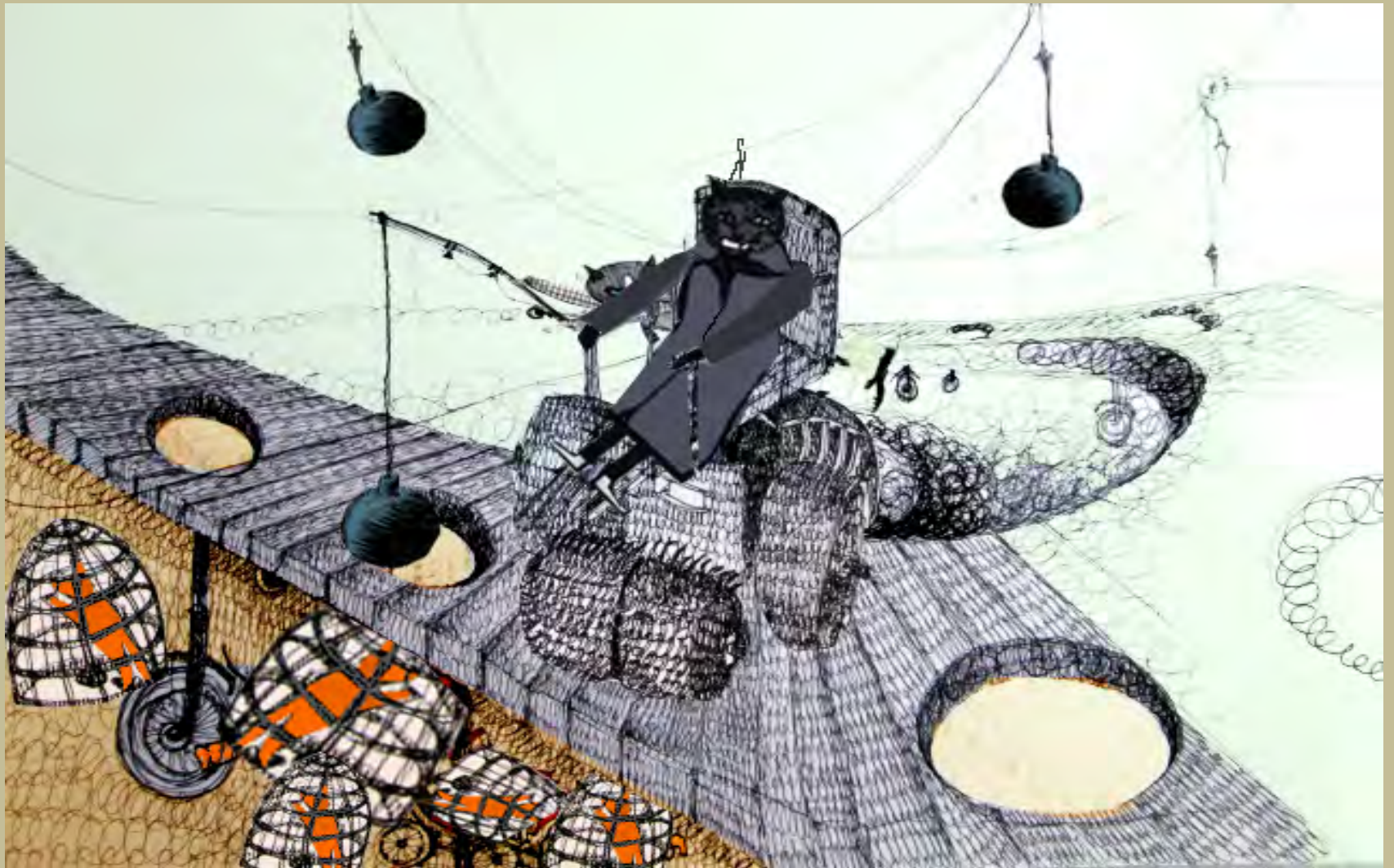
waving, and, in general, being cooperative and quiet

the enemy country, The inhabitants of earth will find it in ¹⁰ Because the arrangement of doors beneath each national floor is sectioned, the leader

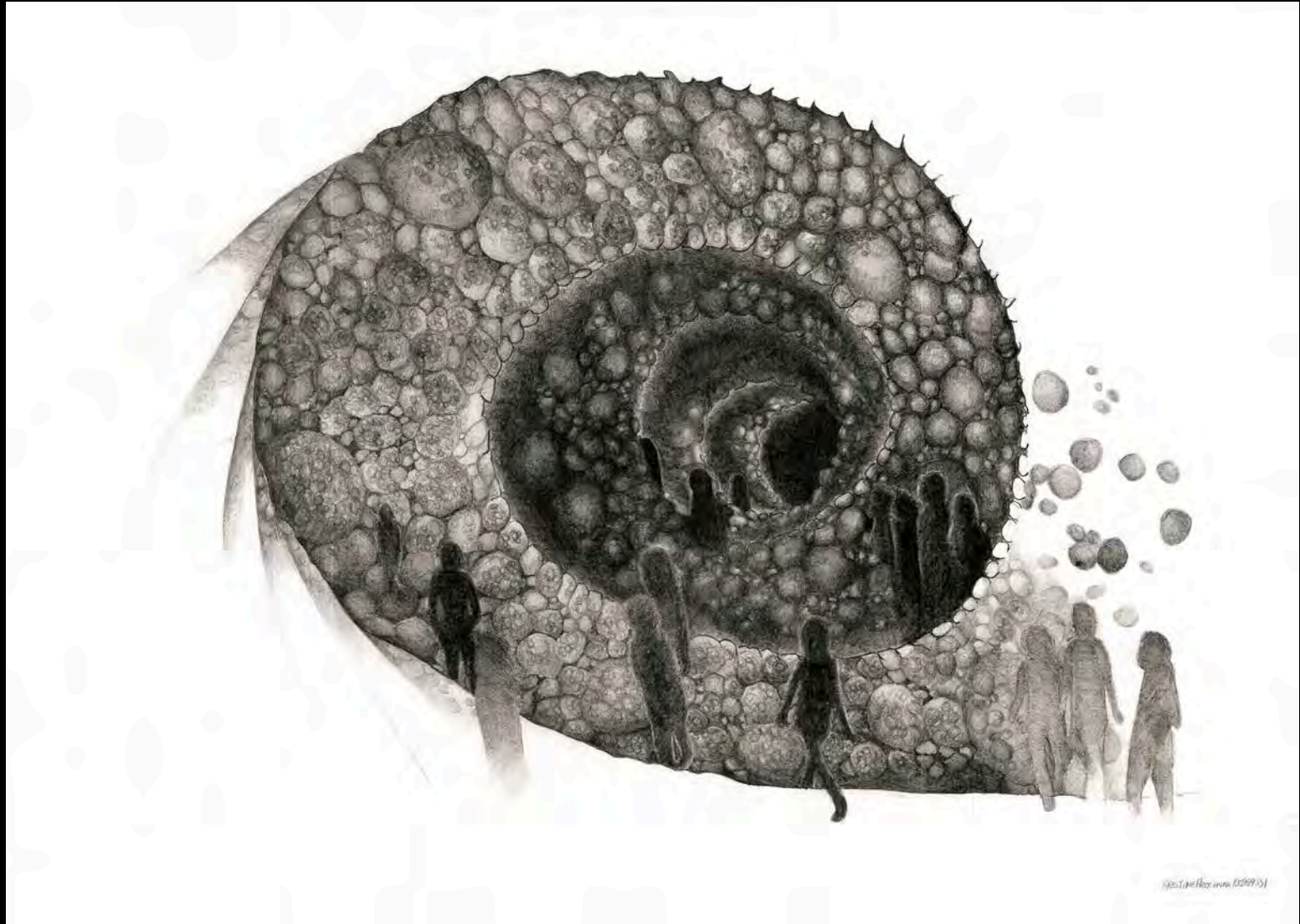
Adriana Ross Architect



Adriana Ross Architect



Architectural Student Kristine Prochnau's Rendering of "Floor of the World"



National Geographic. Dec 2015 “The Formidable, Fragile Beauty of Warming Landscapes” Photographs by Fernando Molerés Ice sheets in Greenland.

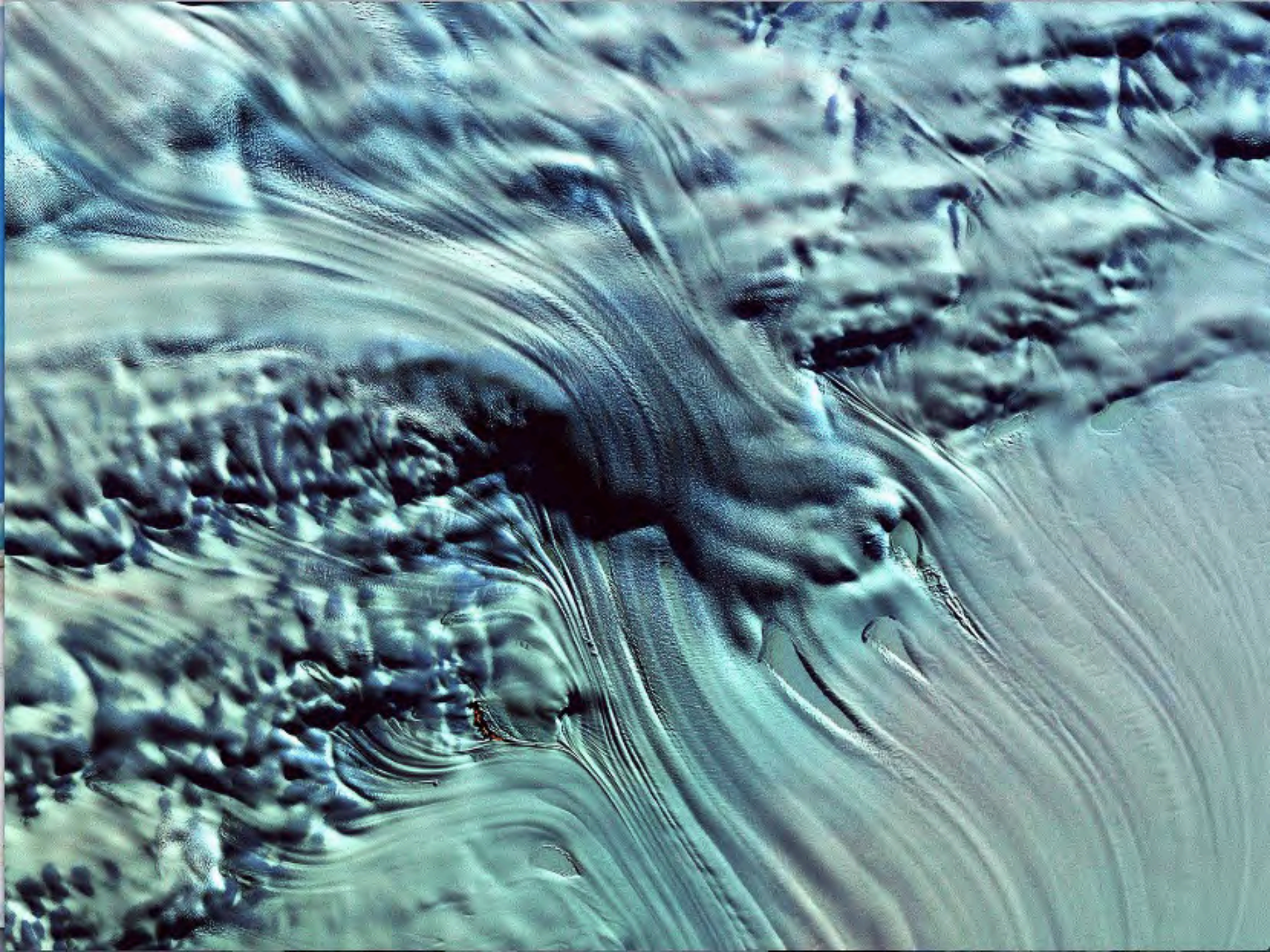
Scientific American “Arctic Beauty in Black and White: Alaska Before the Effects of Global Warming” 8 black and white photographs.

Wired Magazine: “Beautiful Polar Photos Tell a Haunting Story about Climate Change”
Photographs by Camille Seaman (and story by Jakob Schiller)

NASA . “Climate Change: Vital Signs of the Planet: Beautiful Earth





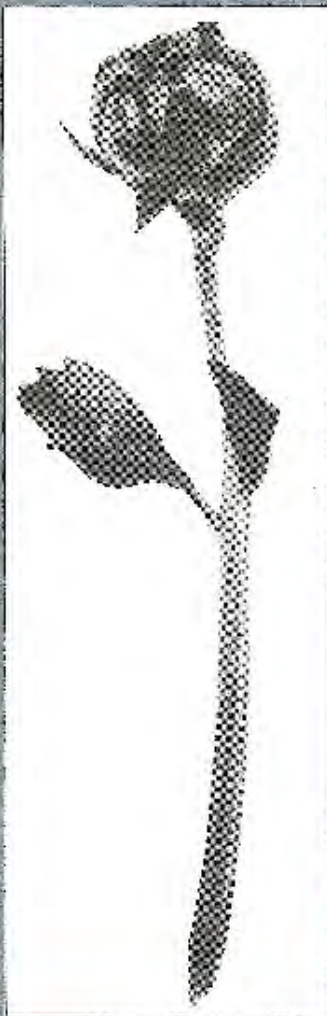












WHY WOULD YOU NOTICE?

A single Marguerite seems hardly worth your attention. Why picture this little flower on the inside cover of this magazine, you may wonder, when the space could be used for real information?

But is not everything important encapsulated in this little bud: color, growth, beauty... and the miracle of life itself.

Aware of the dangers of nuclear war pressing upon us, many of us feel as fragile as this flower. And as vulnerable.

But there is a way you can do something about this danger — make a difference — utilize the power inherent in the bud. That is, by joining a group of people who are really doing something.

Pugwash is such a group. Since 1956, scientists from East and West, from Communist, capitalist and third world countries, have been meeting, working towards the breakthroughs that are necessary if we are to stave off nuclear war. Without publicity, without fanfare, they have been responsible for some of the most significant developments of the past twenty-five years.

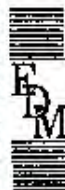
Based on the principle that scientists have a way of thinking and problem solving that allows them to communicate with one another across barriers of nationality and ideology, Pugwash offers a real — a proven — hope.

A crucial meeting is scheduled for Geneva this summer. But there is a problem.

Pugwash has no vested interest or government support. It relies on people like you to keep it going. Now, your help is crucial. Each individual donation will contribute to the success of the Geneva meeting.

By helping Pugwash you make possible the honorarium necessary for an important paper to be produced — or provide the travel allowance for a scientist whose work is vital.

Please, don't delay. Fill out the form below and become a friend of Pugwash. (It is deductible.) The Pugwash scientists need your help.



Please enroll me as a Friend of Pugwash and send me summaries of its major meetings. I enclose \$1.00 as my 1982-83 contribution.

Please enroll me as an associate member of Friends of Pugwash and send me digests of its important meetings.

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Make check payable to Pugwash, American Assembly of Arts and Sciences, and mail to WILLIAM SWARTZ (Chairman), Finance Committee, Pugwash Conferences on Science and World Affairs, 1430 West Wrightwood Avenue, Chicago, Illinois 60614. All contributions are tax deductible.

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WHY IS PUGWASH LIKE THIS LEAF?

This tiny leaf, with its network of delicate connecting lines, was hardly noticeable when our photographer picked it out of the forest undergrowth.

She chose this leaf to symbolize Pugwash, a small fragile network . . . a hidden but very precious part of the living community. Pugwash is like this leaf. It is a network of scientists dedicated to peace, dedicated to using their skills to quietly bring it about.

Since 1956, scientists from East and West, from developed and developing countries have been meeting . . . working to allay the threats to world peace. Working without fanfare or publicity — for twenty-seven years — in the changing climate of international relations, Pugwash has constantly renewed itself. It has brought forth real contributions when all else failed.

Pugwash scientists have been credited with the SALT breakthroughs, the Non Proliferation treaty, and much else of value that has been done behind the scenes to help keep us from the brink of nuclear war.

NOW the Pugwash scientists need your help. In these perilous times your financial support is necessary to keep Pugwash alive. You — as a reader of the *Bulletin* — know better than most our present danger. Never has Pugwash been so necessary . . . and never has its financial health been so imperilled.

The current economic situation threatens Pugwash which has no government or vested interest to support it. Without your help, Pugwash may not survive. So don't delay. Every day makes a difference. Fill out the coupon below, and become a friend of Pugwash. Help keep alive this fragile network of hope.



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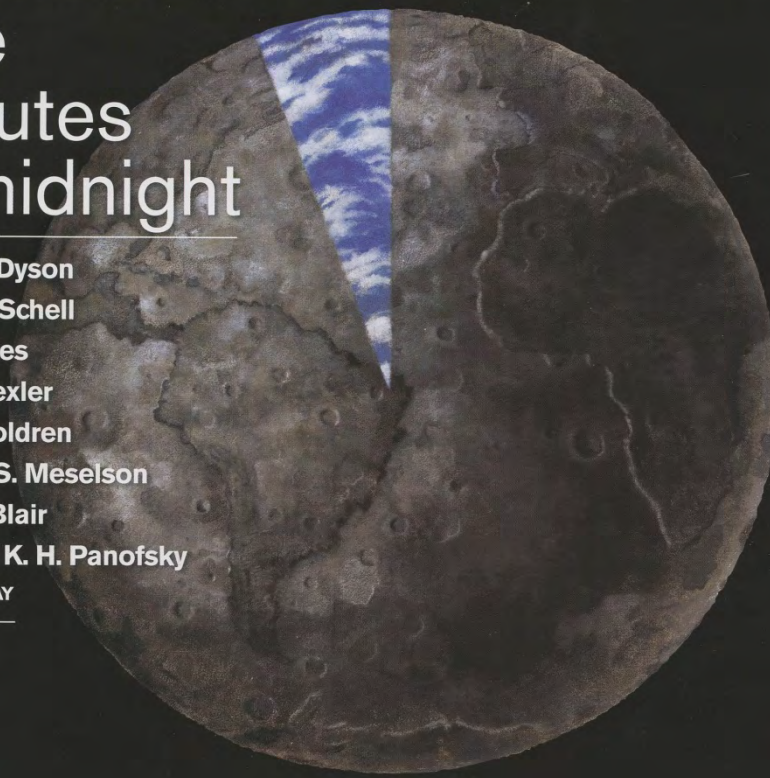
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ON DOOMSDAY



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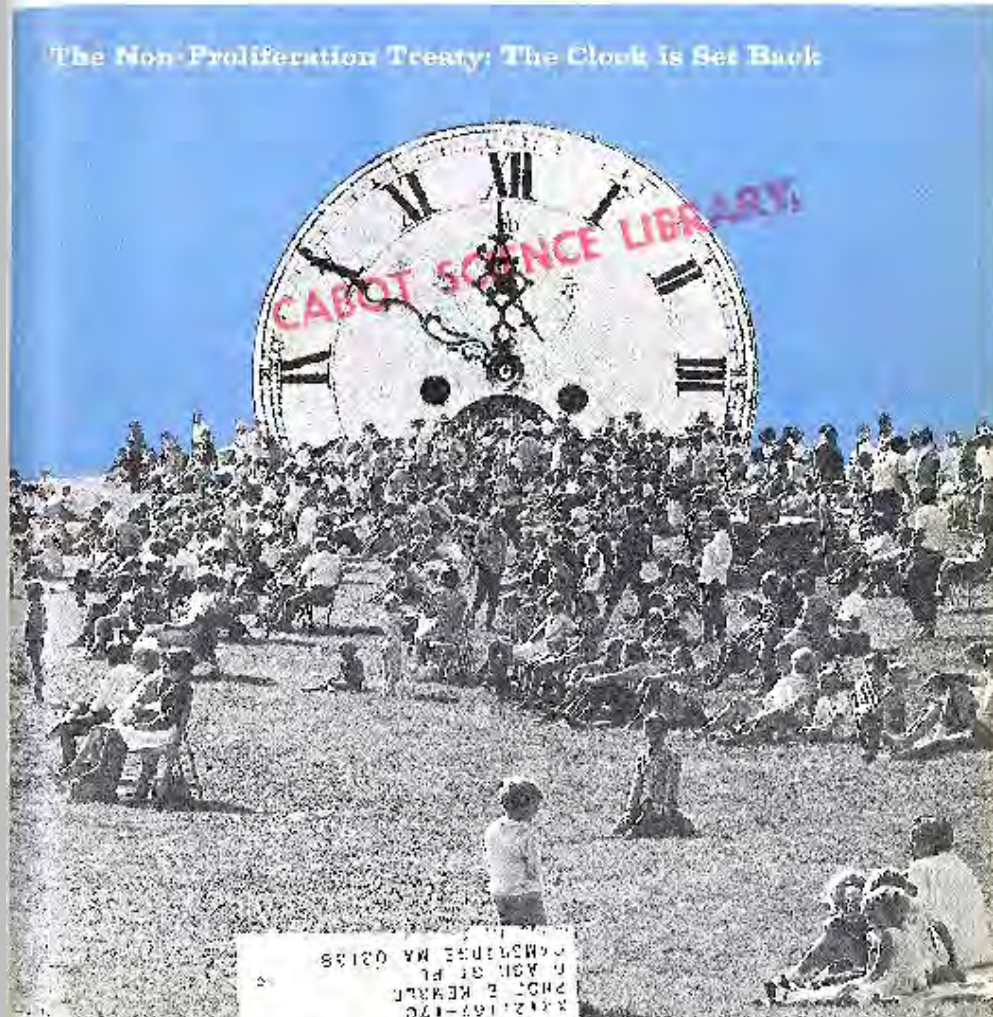
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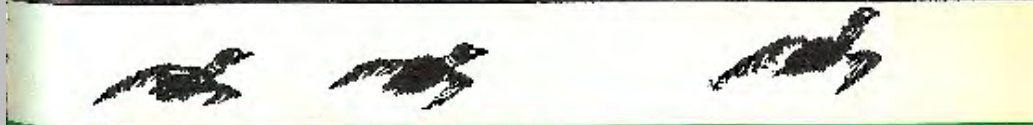


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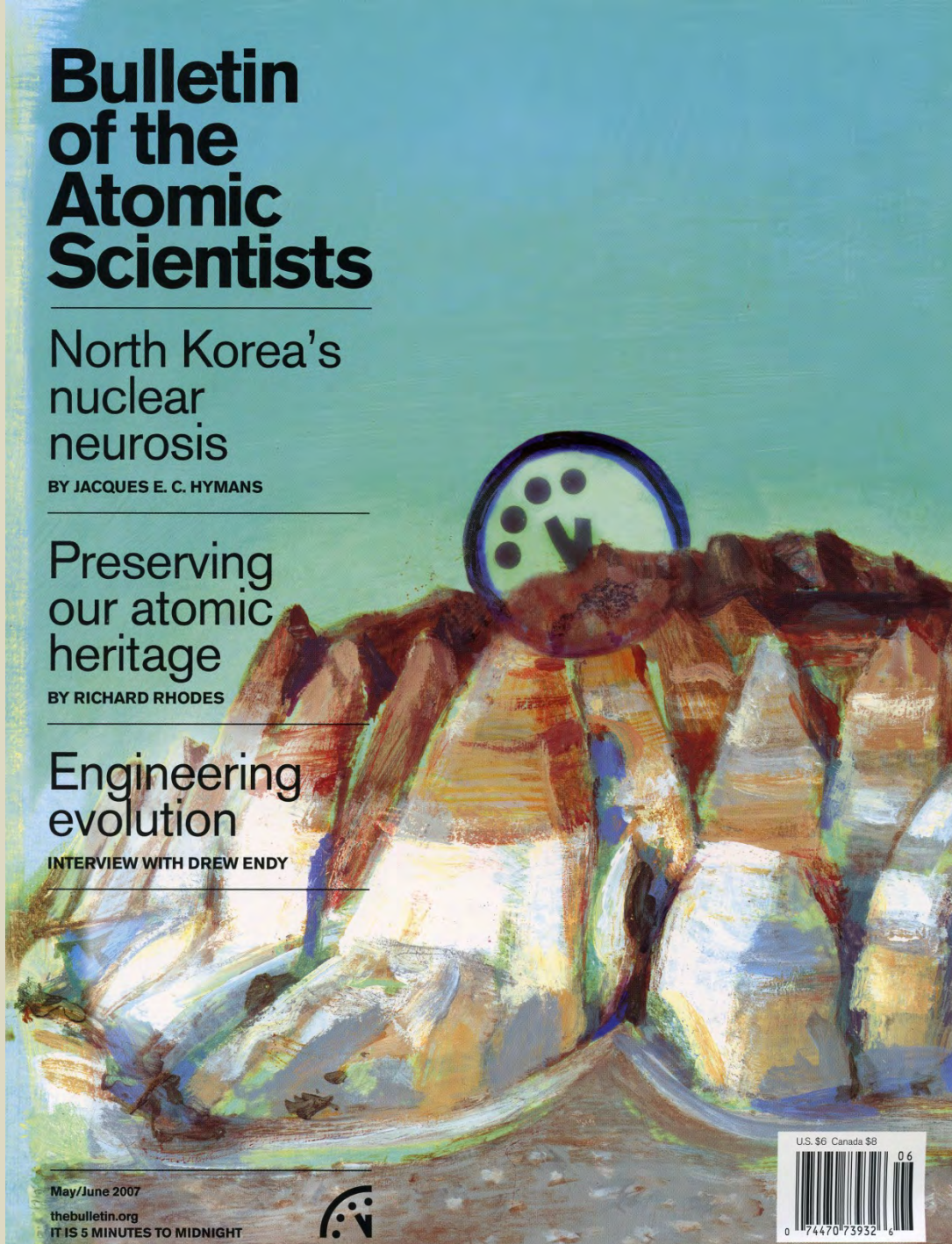
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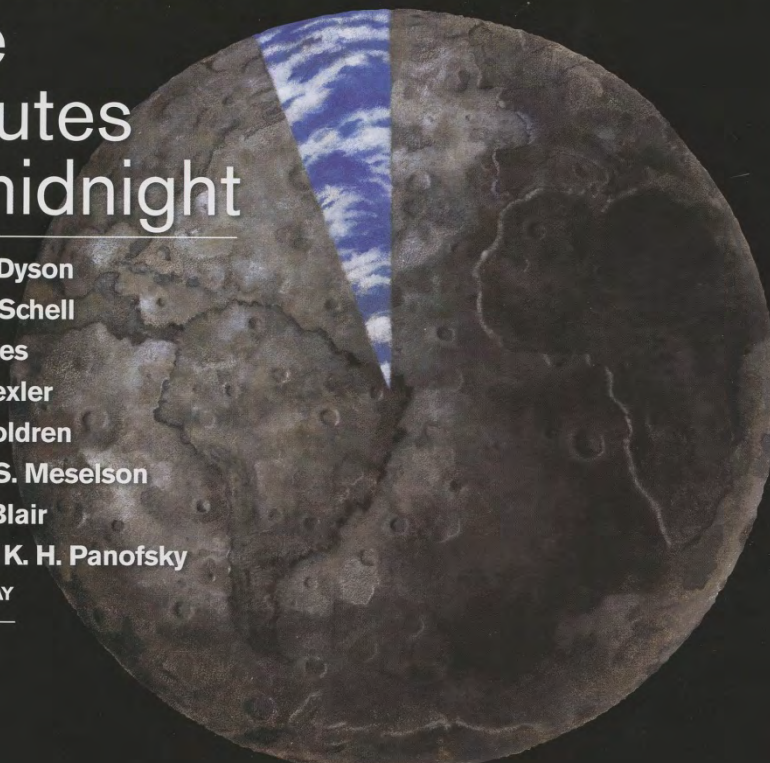


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Five minutes to midnight

Freeman Dyson
Jonathan Schell
Martin Rees
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John P. Holdren
Matthew S. Meselson
Bruce G. Blair
Wolfgang K. H. Panofsky

ON DOOMSDAY



January/February 2007

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(From text at the top of the bird's eye view) The Description of Malmesbury or firstlie Meadalsbury a borough of north Wiltshire both ansient and famous now in th possession & soole jurisdiction of a familie of Antiquitie and Honour viz Sr John Davers of Dansie house knight a membre of the house of Comones this Parliament 1647, wch place is not only Renowned for its naturall streinth Seated on a step hill, unclimbable by reason of the manie Rockes extending unto or containing not more ground than what it standeth on and (within lesse than pistoll shotte) surrounded wth unfordable Rivers. But Also for its unquonquered streinth and victorie obtained against the Danes for a long Sedge for Athelstane, a Saxon King (shut up wth in it); Manifest by his Charter, extant there, whoe for its Services and fidelitie bestowed besides severall other priveleges and immunities veriy faire Landes which to this day it enjoyeth and where likewise in testimonie of his affection to soe great a faviour his bodie (at his desire) was Intombed: This shewes the direct figure of that Borough or Garison as it stode fortified the 23 Octobre 1646: the day it was demolished by Parliametes order (the whole Kingdom being a little before Redused) when it had stode a firme Garison for Parliament of England (under the Command of Collonell Nicholas Devereux) 2 years, 4 months, and odd weakes: wch Description or draught as proper unto the said Sr John Davers (the soille Lord and owner of it) together wth the Cotte of Armes of his familie, the said Cotte presented in acknowledgement of his many noble favours this 10th of April 1648.

