



DANIEL K. INOUE ASIA-PACIFIC CENTER FOR SECURITY STUDIES

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DANIEL K. INOUE ASIA-PACIFIC CENTER FOR SECURITY STUDIES

DIGITAL AUTHORITARIANISM

Dr. Virginia B. Watson

19 Aug 2020

Webinar

Educate Connect Empower

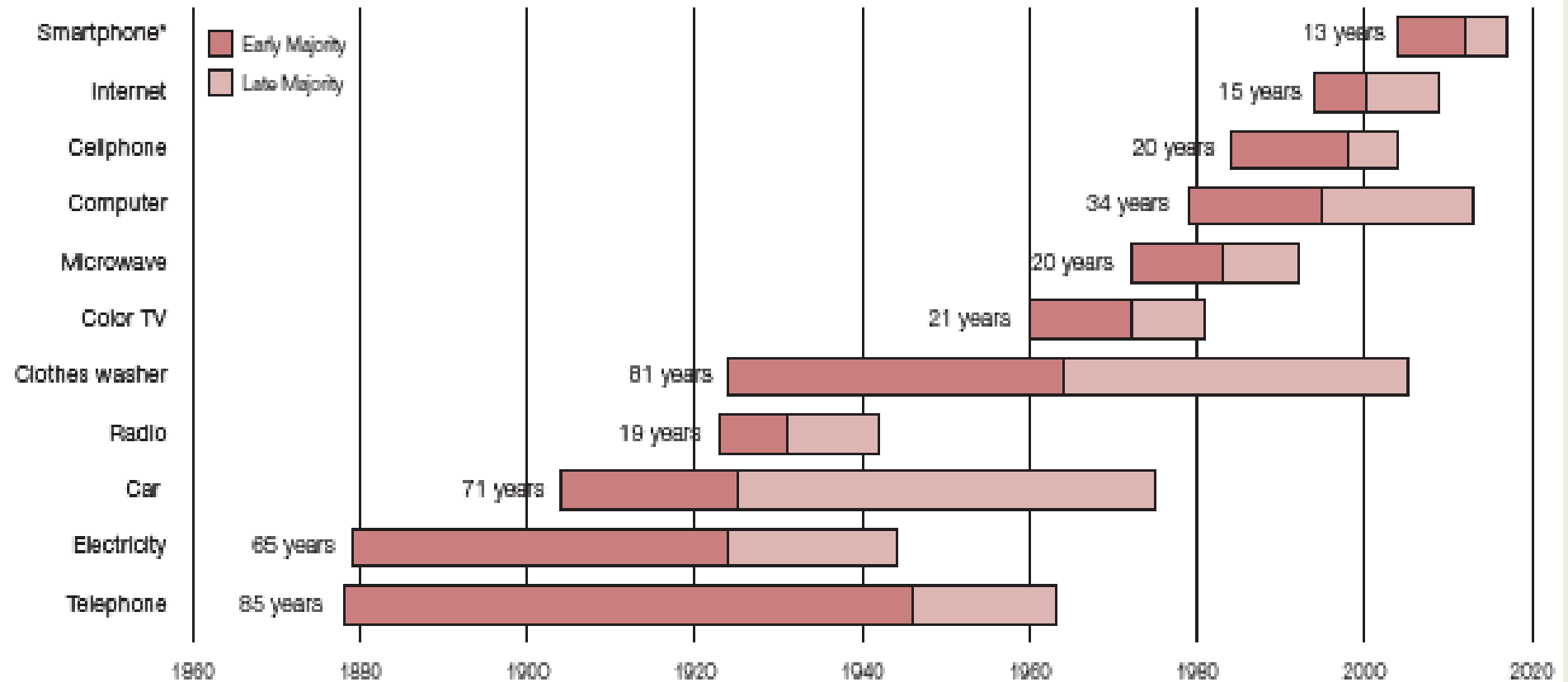
Industrial Revolutions

- ◆ First Industrial Revolution – steam, water to mechanize production
- ◆ Second Industrial Revolution – electric power to create mass production
- ◆ Third Industrial Revolution – electronics and information technology to automate production

The Fourth Industrial Revolution (4IR)

- ◆ **Digital revolution (hyperconnectivity)**
- ◆ **Technology fusion (metaconvergence)**
- ◆ **Ubiquitous (“omni-intelligence”)**
- ◆ ****Speed, scope, scale of advance**

Adoption of Novel Technologies 1860-2020



SOURCES: Bell Telephone System, 1953; Cox and Alm, 2008; Hartig, 1998; Kirby et al., 1990; U.S. Census Bureau, 2014.

* Smartphone Late Majority is estimated based on current trends.

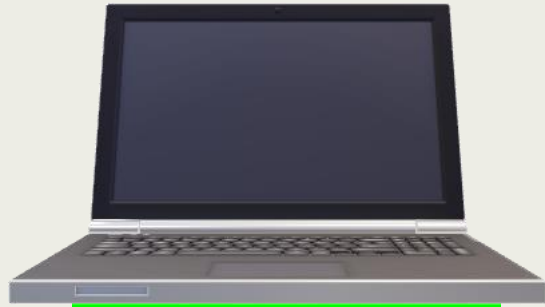
BLOCKCHAIN

5G

Artificial
intelligence

robotics

Smart
cities



Digital
trade

PRECISION
MEDICINE

IoT



drones

autonomous
mobility



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DIGITAL AUTHORITARIANISM

The use of ICT products and services to surveil, repress, and manipulate domestic and foreign populations.*

Alina Polyakova & Chris Meserole,
“Exporting Digital Authoritarianism: The Russian and Chinese Models,”
The Brookings Institution, Aug. 2019

***ICT – Information and Communications Technologies**



DIGITAL AUTHORITARIANISM

- **State - full control**
- **Private Sector (Tech)**
- **New technologies (Fourth Industrial Revolution [4IR] emerging technologies)**
- **Subversion of Democracy**



DIGITAL AUTHORITARIANISM: THE CHINA MODEL

- **Economic growth in Asia**
- **Asia as a global Science & Tech hub**
- **Rising power/end of U.S. hegemony**
- **Xi Jing Ping**
 - **Techno-nationalism**
 - **Technological leadership**
- **Fourth Industrial Revolution (4IR)**
- **Digitization of geopolitics**
- **Strategic Competition**

DIGITAL AUTHORITARIANISM: THE CHINA MODEL

Strategy/Policy ecosystem

- “Techno-nationalism” (1990s)
- First internet regulations (1994, 1996)
- State gives Huawei status of “national champion” (1996)
- First content restriction for internet content providers (2000)
- Social Credit system on regional trials (2009)
- OBOR (2013) → Digital Silk Road (2015)
- Made in China 2025 (2015)
- Military-Civil Fusion (2015)
- Natl Informatization Development Strategic Guideline (2016)
- Natl Strategic Guidelines for Innovation-Driven Devt (2016)
- Natl Cybersecurity Strategy (2016)
- New Generation Artificial Intelligence Devt Plan (2017)
- China Natl Defense in the New Era (2019)



DIGITAL AUTHORITARIANISM: THE CHINA MODEL

Domestic

- **State (CCP) - Citizen control & manipulation**
- **Technologies – AI-enhanced surveillance, big data processing/analysis, spying malware, facial recognition, high-resolution camera, automated text analysis, Internet censorship, social credit system, etc.**
- **Physical + Virtual repression – e.g. Uighurs in Xinjiang province**



DIGITAL AUTHORITARIANISM: THE CHINA MODEL

International – “Exports”

- **Technology**
 - high quality, designed/made in China
 - subsidized by state
 - value-added: foreign policy/strategic
- **Authoritarian institutions, legal framework, narratives**
 - “Cyberspace management” training sessions of foreign officials in PRC;
- **Influence abroad: shaping global governance**
 - UN, WTO, International Telecommunications Union, International Organisation for Standardisation



TECHNOLOGY GOVERNANCE

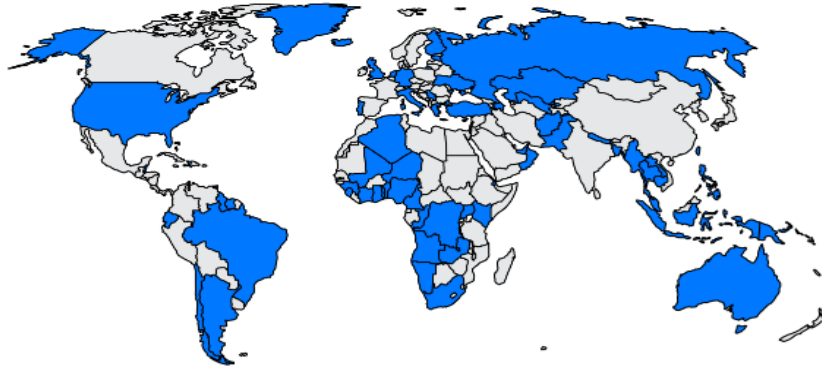
...shared principles, norms, rules, decision-making procedures, and programmes that shape the use of information technology and the internet worldwide.

<https://www.chathamhouse.org/research/topics/technology-governance>

China's Digital 'Belt and Road'

Chinese companies are expanding their global footprint, installing fiber-optic cable, surveillance systems, and telecommunications equipment in dozens of countries around the world.

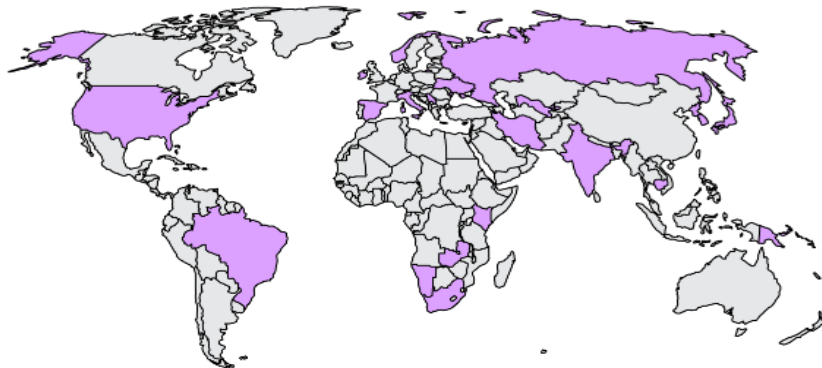
● Internet cables (fiber)
Number of countries: 76



● "Smart city" initiatives; surveillance
Number of countries: 56



● Telecom equipment
Number of countries: 21



● Internet-connected appliances
Number of countries: 27



Data compiled by RWR Advisory Group, a Washington-based research firm that tracks Chinese investments abroad. Only projects completed or initiated outside China since 2012 that involve the sale or installation of telecommunications equipment or technology to enhance the digital infrastructure of the target country have been included. As RWR research reflects what has been publicly reported, errors and omissions are possible.



DIGITAL AUTHORITARIANISM: ON THE GROUND

- The Chinese startup CloudWalk is partnering with the Zimbabwean government on a mass facial recognition program in Zimbabwe;
- Huawei is advising Kenya on its information and communication technology (ICT) Master Plan and Vision 2030;
- In Mauritius, Huawei is installing 4,000 cameras;
- Zambia is spending \$1 billion on Chinese-made telecommunications, broadcasting, and surveillance technology;
- Chinese start-up Yitu bid for a contract for facial recognition cameras in Singapore and opened its first international office in Singapore in January 2019.

([The New Big Brother: China and Digital Authoritarianism](#), A Democratic Staff Report Prepared for the use of the Committee on Foreign Relations United States Senate July 21, 2020), p. 31.



DIGITAL AUTHORITARIANISM: ON THE GROUND

- Malaysia is not barring Huawei from spectrum bids relating to its 5G rollout, saying that security decisions will be made by its “own safety standards”;
- In Thailand, Huawei offered to build a tech training center in Bangkok as a means of enticing Thailand to allow Huawei to build its 5G network;
- In Italy, Huawei offered to provide cloud computing services that would link Italian hospitals both with each other and with hospitals in Wuhan in response to the COVID-19 pandemic.

([The New Big Brother: China and Digital Authoritarianism](#), A Democratic Staff Report Prepared for the use of the Committee on Foreign Relations United States Senate July 21, 2020), p. 29.



DIGITAL AUTHORITARIANISM: RESPONSE

- **U.N. High-level Panel on Digital Cooperation (2018)**
 - **“The Age of Digital Interdependence” (2019)**
 - Build an inclusive digital economy and society;
 - Develop human and institutional capacity;
 - Protect human rights and human agency;
 - Promote digital trust, security and stability;
 - Foster global digital cooperation.
- **U.S.-EU Digital Code of Conduct (proposal)**
 - **But:**
 - Europe: Data, data privacy, human rights
 - U.S.: tech-building, ‘light-touch’ regulations



DIGITAL AUTHORITARIANISM: ON THE GROUND

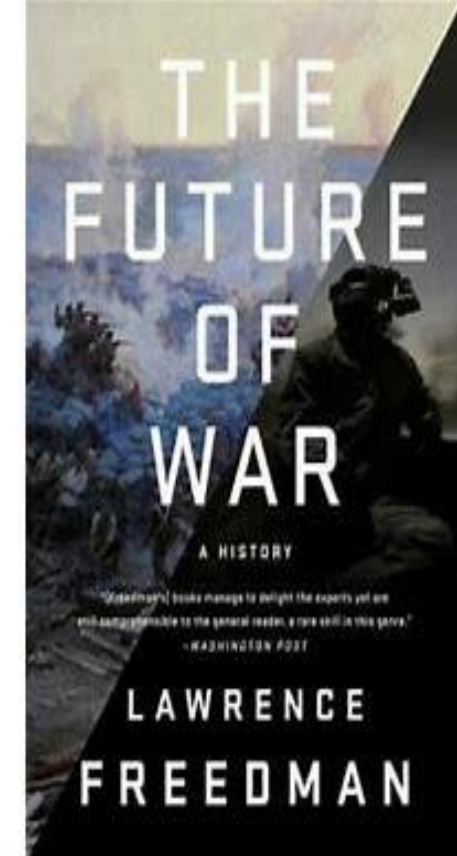
- European Union:
 - **EU-China – A strategic outlook (2019)**
 - **General Data Protection Regulation**
- Private Sector:
 - **Partnership on AI, Paris Call for Trust and Security in Cyberspace**
- Russia-China joint venture discussions
- U.S.:
 - Dept of Defense: **5 Principles of Artificial Intelligence Ethics (2020) + American AI Initiative (2020) - 10 Principles**
 - Executive Order on Maintaining American Leadership in AI (2019, <https://www.whitehouse.gov/ai/>)



DIGITAL AUTHORITARIANISM: IMPLICATIONS

- **Formulate national strategies**
- **The competition is over norms, the future world order**
- **A new global cyber divide(s)?**
- **Roles of Big Tech**
- **Geopolitical agenda**

“The world isn’t run by weapons anymore, or energy, or money. It’s run by ones and zeroes, little bits of data. It’s all just electrons...there’s a war out there, old friend, a world war. And its not about who’s got the most bullets. It’s about who controls the information: what we see and hear, how we work, what we think. It’s all about the information.”



Freedman, Lawrence. The Future of War, cited from the movie script of *SNEAKERS* (1992). NY: Hachette Book Group, 2017: 234.



DISCUSSION QUESTIONS:

- **What are the possible consequences when a government is too reliant on technology: A) to obtain societal peace and stability? B) to control its people? (closed information ecosystem)**
- **What are the prospects for international cooperation in cybersecurity governance?**
- **Can countries genuinely adopt an equidistant strategy (digital authoritarianism and liberal democracy)?**



A Vincent van Gogh-inspired Google Deep Dream painting. Image courtesy of Google. (Painting made by Google Artificial Intelligence)

A Vincent van Gogh-inspired Google Deep Dream painting. Image courtesy of Google.

THANK YOU!