Standardization in the Public Interest since 1880

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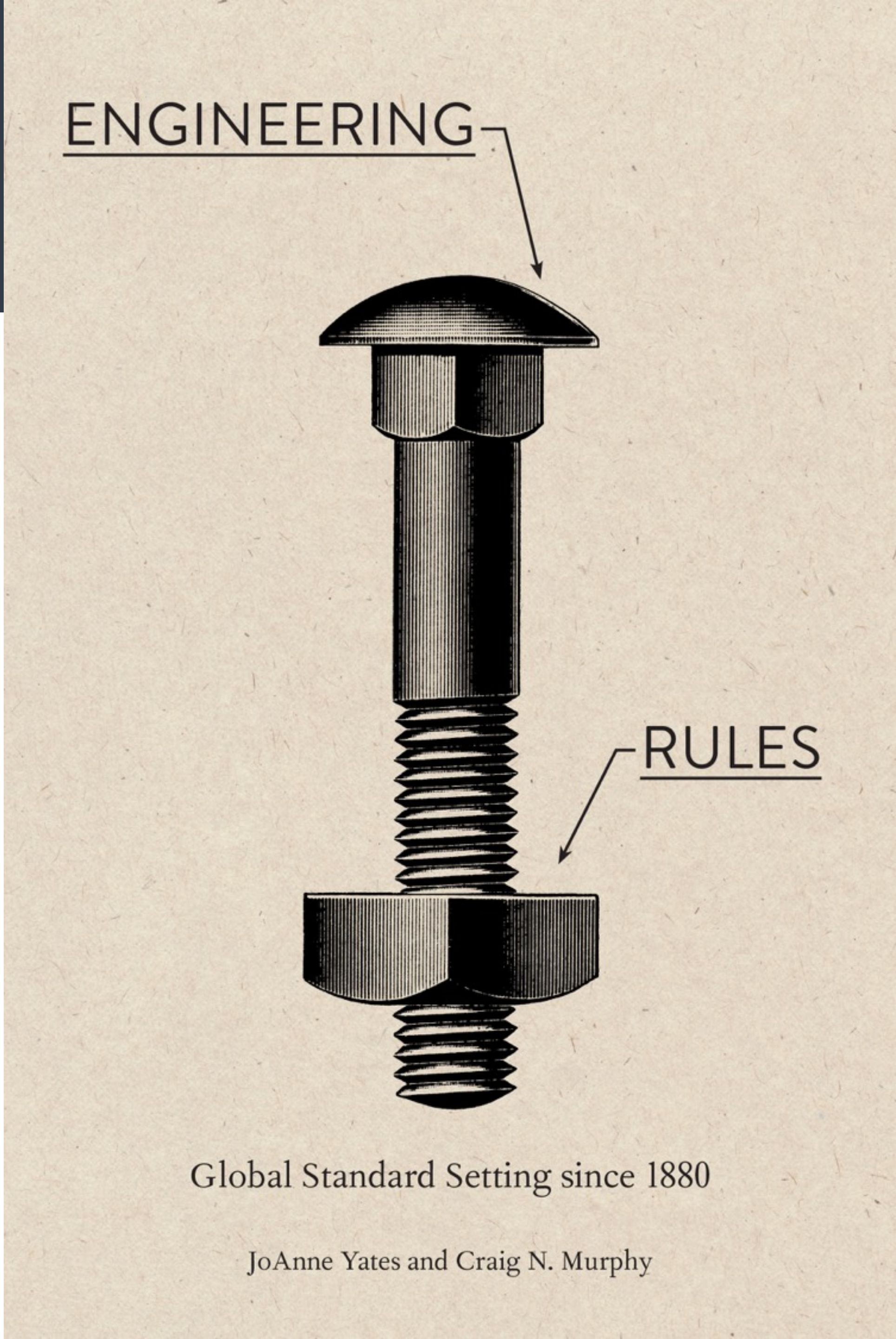
Human Rights Protocol Considerations Task Force

IETF Virtual Meeting

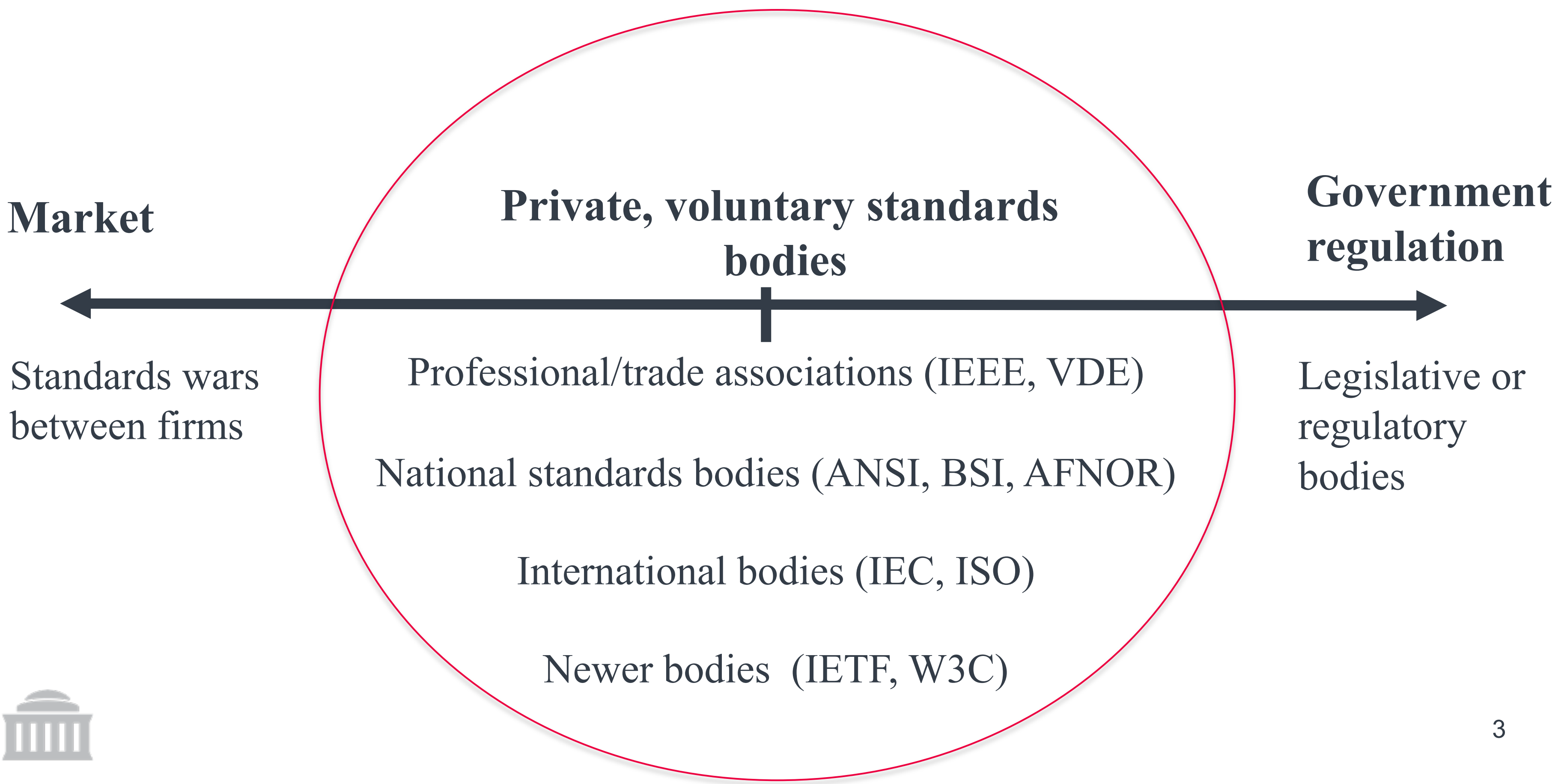
March 11, 2021

MIT MANAGEMENT SLOAN SCHOOL

Based on *Engineering Rules: Global Standard Setting since 1880*



Book focus: Private, voluntary, consensus-based standardization



Agenda

- The birth of the standards movement
- New types of standards bodies around internet
- Standardizing around social issues

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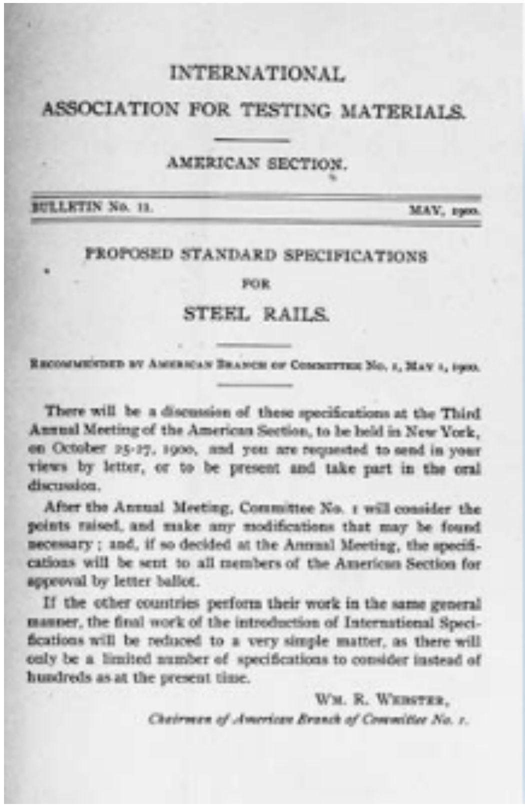
Birth of standard setting: Engineers professionalized in 19th century

Engineers in industrializing nations

- Formed engineering societies
- Sought to serve the public interest

Set 1st standards

- Steam boilers (safety,)
- Screw threads (compatibility)
- Steel rails (performance)


INTERNATIONAL

ASSOCIATION FOR TESTING MATERIALS.

AMERICAN SECTION.

BULLETIN No. 11. MAY, 1900.

PROPOSED STANDARD SPECIFICATIONS

FOR

STEEL RAILS.

RECOMMENDED BY AMERICAN BRANCH OF COMMITTEE No. 1, MAY 1, 1900.

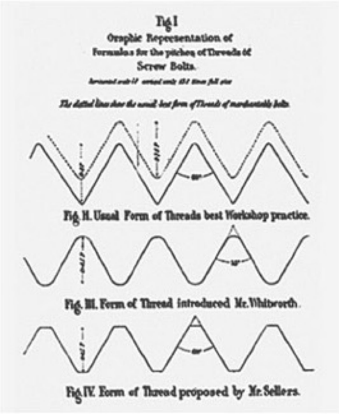
There will be a discussion of these specifications at the Third Annual Meeting of the American Section, to be held in New York, on October 25-27, 1900, and you are requested to send in your views by letter, or to be present and take part in the oral discussion.

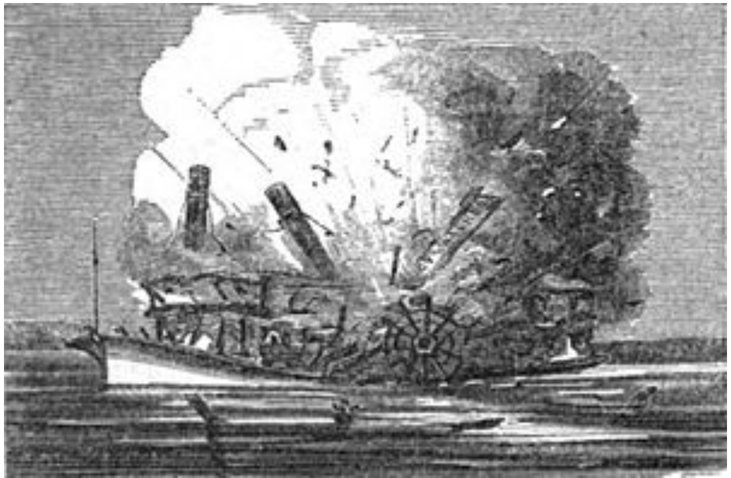
After the Annual Meeting, Committee No. 1 will consider the points raised, and make any modifications that may be found necessary; and, if so decided at the Annual Meeting, the specifications will be sent to all members of the American Section for approval by letter ballot.

If the other countries perform their work in the same general manner, the final work of the introduction of International Specifications will be reduced to a very simple matter, as there will only be a limited number of specifications to consider instead of hundreds as at the present time.

WM. R. WEBSTER,

Chairman of American Branch of Committee No. 1.





Birth of national and international standards bodies ca. 1900

1^{st} national body

BSI, 1901

Technical committees with

- Balance of stakeholders
- Consensus and due process
- Voluntary adoption of standards

John Wolfe Barry

1st int'l body

IEC, 1906

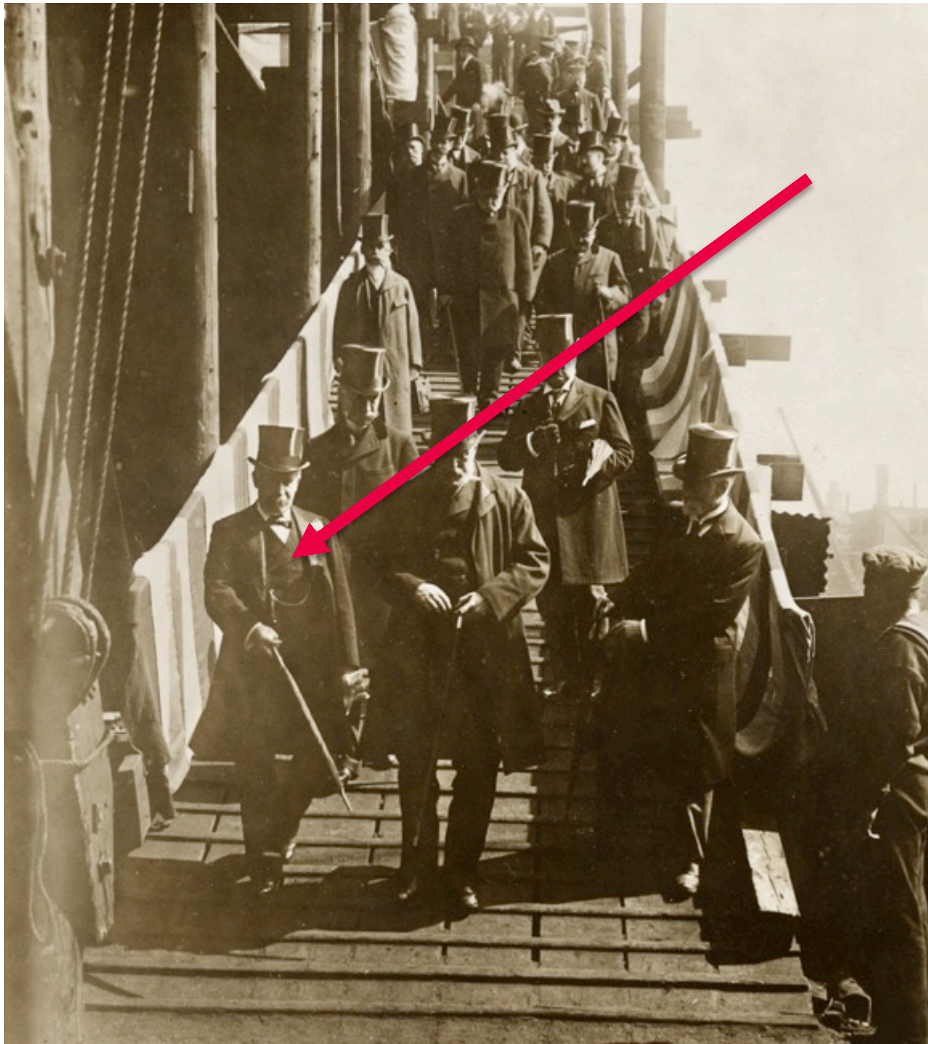
Technical committees with nat'l reps

- Nat'l standards bodies, not govts, chose delegations
- One vote per country

Col. R.E.B. Crompton

Birth of the standardization movement with Charles le Maistre at head

- Standardizers formed a transnational community
- Charles le Maistre as leader
  - Secretary of BSI
  - Convener of meetings of all secretaries of national bodies
  - Secretary General of IEC



Shared belief in social good & social transformation via standards

Movement leaders shared beliefs that standards promote

- National prosperity
- National interests
- Humanity's interests
- Internationalism and world peace

Standards strengthen national industry and prosperity

There are markets in which we cannot hope to compete successfully on equal terms, by reason of imposts and protective duties, but the work which has been effected by the Committee should very materially assist in ***keeping the trade of our Colonial Empire in the hands of British Manufacturers****…. Standardisation affects the whole engineering trade of the Kingdom and Empire.*

Sir John Wolfe-Barry, 1908

Standards serve nation's interests by mitigating class divisions

*We must either face the possibility of **a Bolshevik movement in this country** or devise some means for **increasing the average productivity of labor**. This can be done by **cooperation** and **standardization**, which go hand in hand.... It would do more to solve the present problems of the United States than anything else we could do.*

Comfort A. Adams, 1919

Standards promote humanity's interests

*To effect [standardization] may necessitate the **sinking of much personal opinion**, but if its goal, through wideness of outlook and unity of thought and action, is the **benefit of the community as a whole**, standardization as a coordinated endeavor is bound increasingly to **benefit humanity** at large.*

Charles le Maistre, 1918

Standards promote internationalism and world peace

In a broad sense, international standardization means a common industrial language ***and the removal of one of those barriers which tend to separate nations*** *and give rise to misunderstandings. The more of these barriers we can remove and the more we come to realize that our interests are after all in common, the more likely we are* ***to attain that lasting peace for which the world longs.***

Comfort A. Adams, 1919

Formation of ISO, peak of int'l standards system, after WWII

War shifted focus to within nations, but int'l movement reemerged post WWII

Post-war conferences resulted in

- Creation of ISO in 1946
- IEC to partner with ISO
- Le Maistre was key figure
- Int'lism requires inclusion
  - Both Germanies
  - Japan
  - Italy
  - Soviet world

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Computer networking brings new standard setting bodies

- 1980s networking standards war
  - By 1990s Internet's TCP/IP became de facto standard
  - IETF (created 1986) became de facto standards body for the Internet
    - ➢ **Not** directly influenced by traditional standards bodies
    - ➢ Very different style

IETF was not a typical voluntary standard setting body

IETF manifesto

We reject: kings, presidents, and voting. We believe in: rough consensus and running code.

David Clark, 1992

- Open to all individuals, but does not require stakeholder balance
- Values timeliness over consensus and due process
- Global, but without national representation
  - In practice, dominated by western, English-speaking men
- Has movement energy around internet, not standardization itself

W3C: New private standard-setting body for the Web

Tim Berners-Lee formed World Wide Web Consortium (W3C) in 1994

- Familiar with IETF, traditional model, & corporate consortia, but created his own hybrid
  - Berners-Lee gave himself extensive powers
  - Corporate, nonprofit, & govt. members provide revenue (but sliding scale)
  - Strove for robust consensus; provided (limited) due process

Tim Berners-Lee

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Management standard for quality: ISO 9000

ISO 9000, Quality Management and Quality Assurance, 1987

- First process standard
- Widely mocked, but widely adopted
- Created lucrative certifying & accrediting businesses in standards bodies

Social and environmental standards modelled on ISO 9000 followed

ISO & others created new environmental, labor, and human rights standards

- ISO 14000, Environmental Management Systems
- ISO 26000, Social Responsibility
- Private, but non-ISO, e.g., SA 8000 for labor
- UN-system-based, e.g., Global Compact for human rights, labor, environment

Alice Tepper Marlin, SAI

Uncertain Legitimacy of these Efforts

ISO typically seen as more legitimate than newer organizations because it assures input from global South

but

Supporters of UN system tend to see all private efforts as a takeover by corporations

Global voluntary standards and the global good

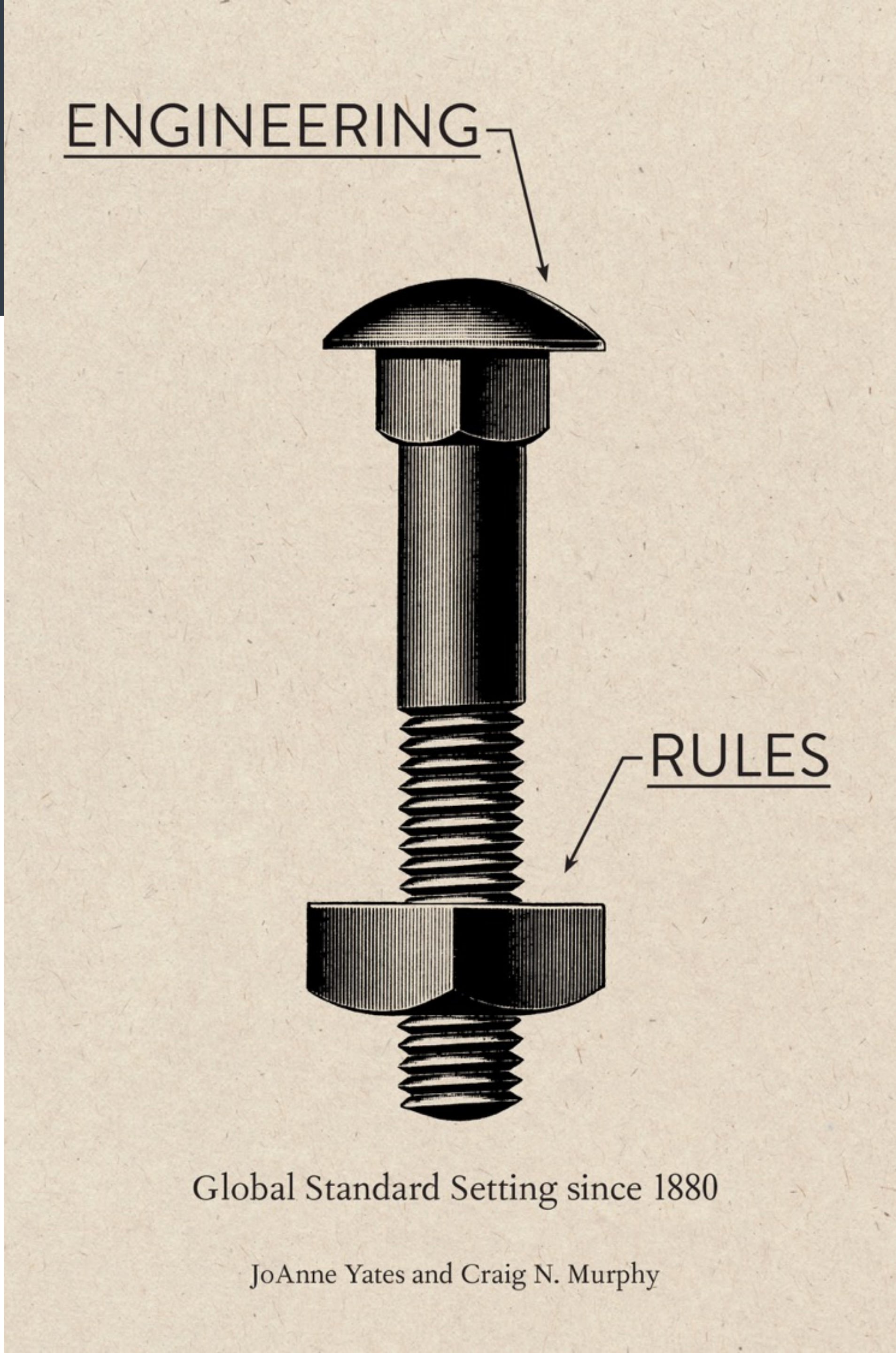
Standardization has been good for the average person

It has its own social movement logic

- Harnessed social movement energy
- Designed to encourage acting in the public interest
- Participants acted on ideals as well as economic interests

If you are interested in learning more…

- Just out in paperback
- 30% discount during March at Johns Hopkins University Press with code HMAR



Thank you