

Designing future APIs based on isology

The Study of References, Standards and Standardization

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Definitions

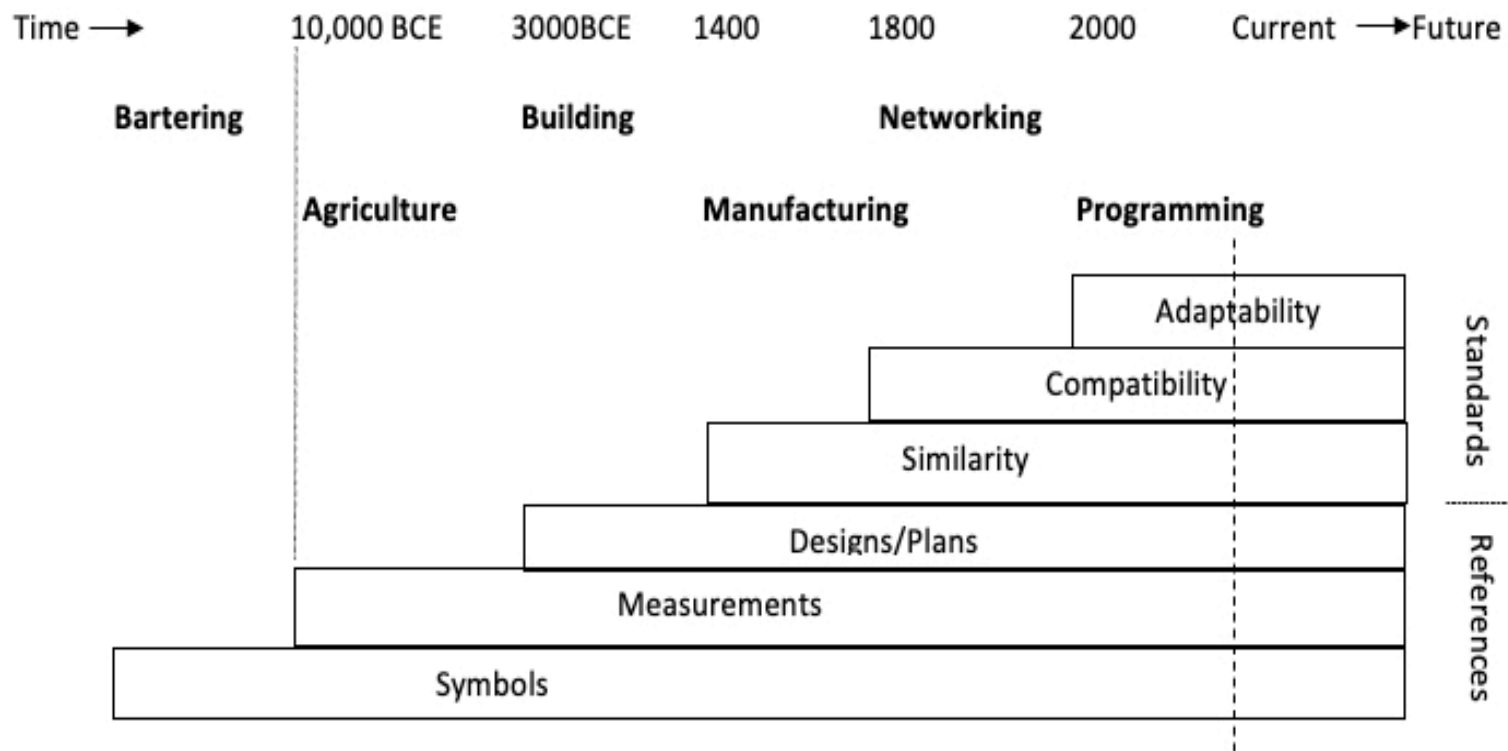
Reference: Axiomatic. A reference is required to make a comparison.

Standard: A codified and quantified set of references imposed by a public jurisdiction.

Specification: A codified and quantified set of references imposed by a private jurisdiction.

Standardization: Process of creating, implementing, or using a standard or specification.

Evolution of technology

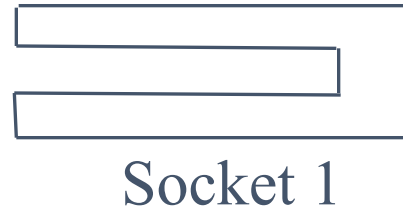


Successions of references and standards

Succession	Examples	Function	Effect
6. Adaptability	AI, discovery protocols, Plug n Play,	Interwork	Communications, less control, emerging openness
5. Compatibility	APIs, air interface, Gillette razor, G3 fax, railway gauge	Network	Communications with control
4. Similarity	Pharmaceuticals, Venetian galleys	Replicate	Control, patents, efficiency
3. Design/plan	7 wonders of the world	Build	Political control
2. Measurement	Numbers, currency	Quantify	Agriculture, trade (accounting)
1. Symbol	Animal, hand signs	Identify	Recognize, barter

Compatibility

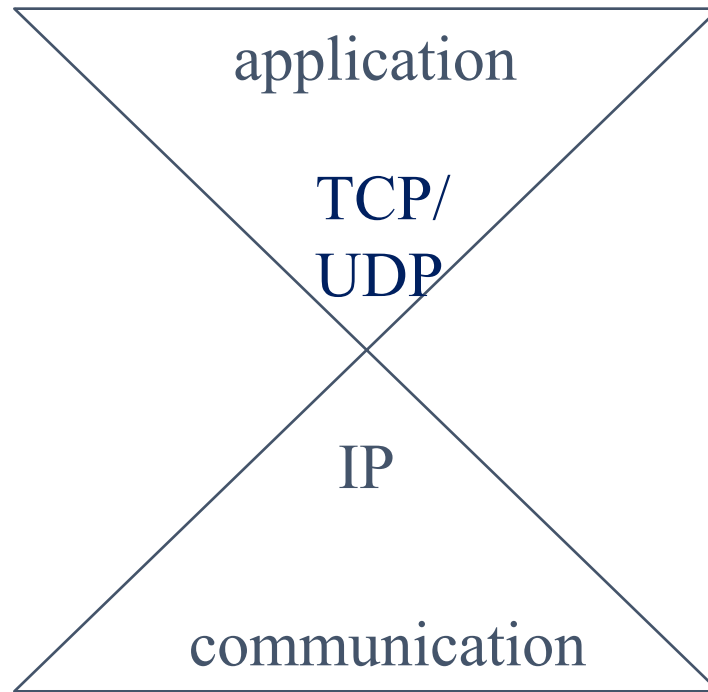
Similarity



The economics of standards

- Similarity creates efficiency
- Compatibility creates network effects
- Adaptability reduces network effects with “openness”

Internet Openness



The hour glass

Software Interfaces (APIs)

Private

Partner

Public open

Adaptable openness

revisions

private functions



Definition

Openness: Supports both public and private operation via an interface between between two programmable systems

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Thank you

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