Agile

is **not**

the

end-game

of project

management

methodologies

how and why project management will continue its path of adaptation...

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☐ the agile phylomemtic tree ☐ the lineages of agile

## the future of project management

☐ looking back to look ahead ☐ implications for project management

previous **research**

- both the of the paper's authors have examined **project management** from an **evolutionary** perspective

- this entails in part analysing **project management** as a collection of **memes**

- today's presentation continues that line of research but narrowing the focus to **agile methods**

- by its nature this research is **ongoing** and accommodates consideration of **alternative views** and **inferences**

reconceptualising project management

- presented a **phylomemetic tree** to depict **inferred relationships** among tools and **methodologies**
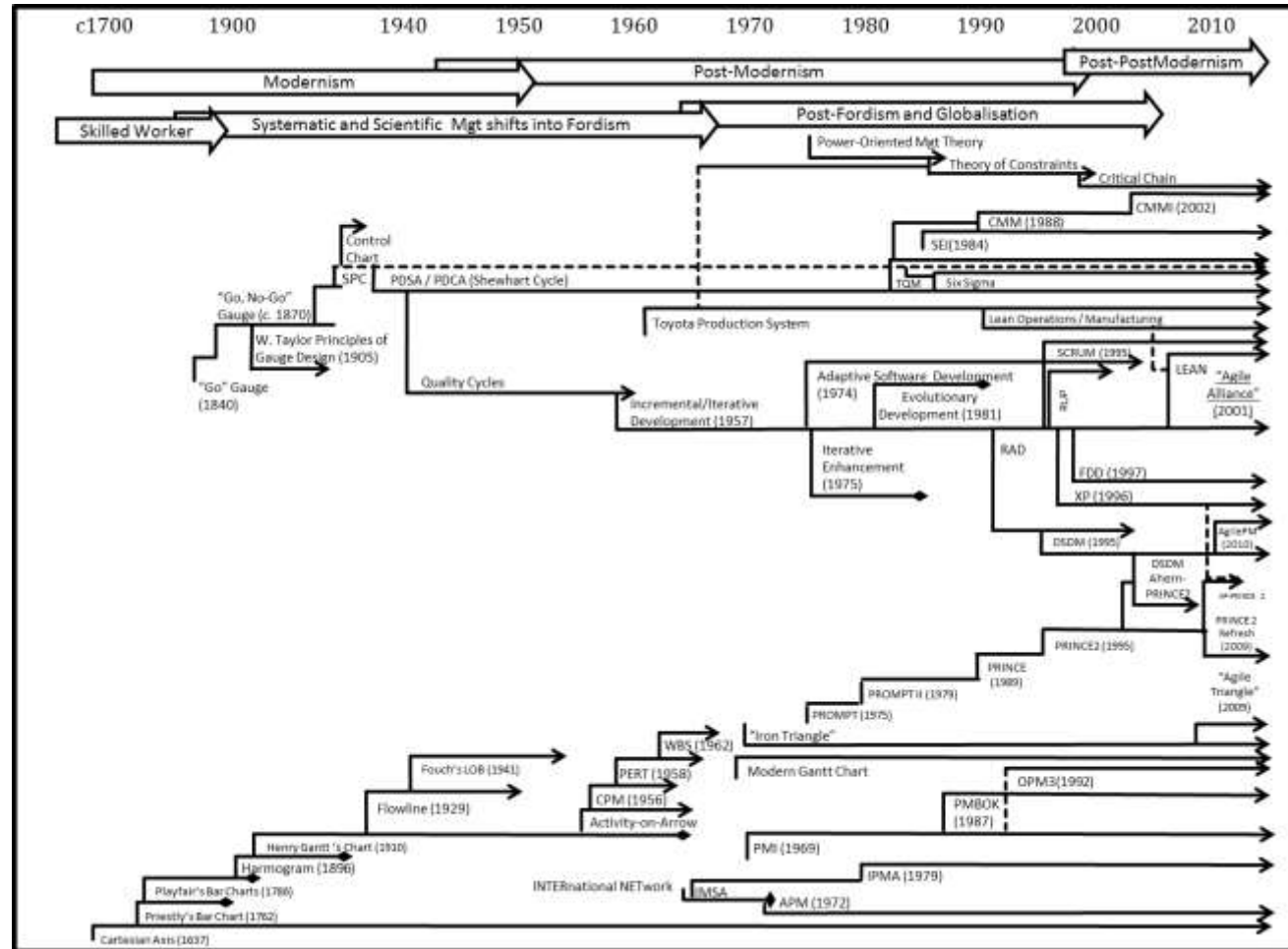

McKenna, T. and S. Whitty. *Reconceptualising project management methodologies for a post-postmodern era*. in *PMOZ - 9th Annual Project Management Australia Conference*. 2012. Melbourne.

the issue at hand

- **agile methods** are perceived as a **revolution** in project management

- **agile manifesto gathering** self-described as **organisational anarchists** (Beck *et. al.* 2001)

- **but** research shows **agile methods** are merely part of an ongoing **evolution** of project management

what's in a **meme?**

- Dawkin's "*The Selfish Gene*" (Oxford University Press 1976)

- gave rise to widespread and diverse research into applications of "**memetics**"

- a definition…
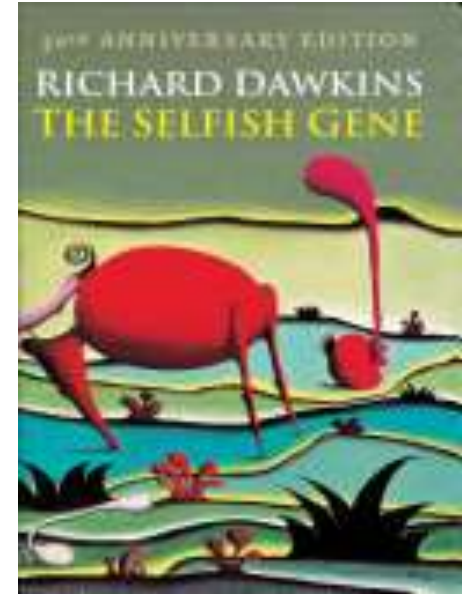
> "*The least **unit** of **sociocultural information** relative to a **selection process** that **has favourable or unfavourable selection** bias that exceeds its endogenous tendency to change*"

Wilkins, J.S. *What's in a Meme? Reflections from the perspective of the history and philosophy of evolutionary biology*. Journal of Memetics - Evolutionary Models of Information Transition, 1998. 2, 21

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# of memes and memeplexes

- **"memeplex"** is a **grouping** of memes which **increases** the memes' **prospects of survival and propagation** better than the memes would individually management
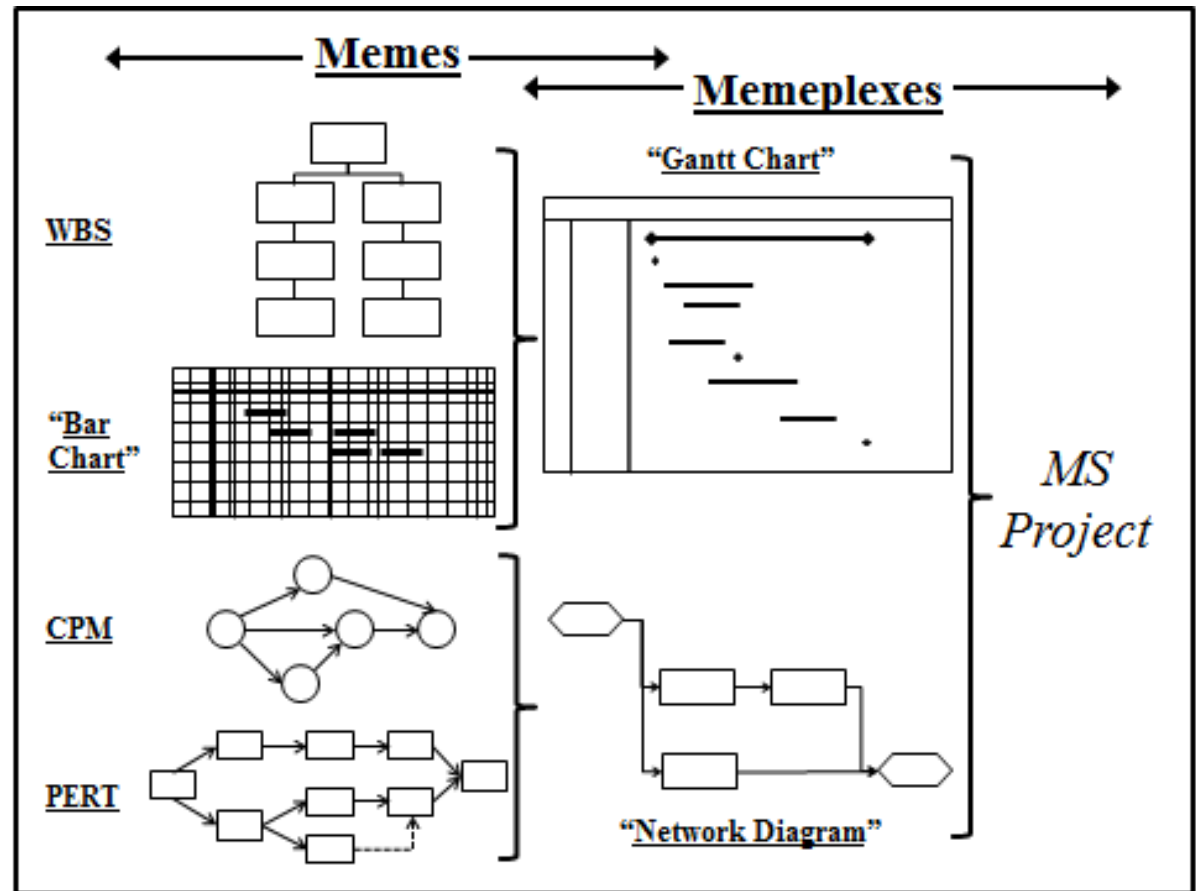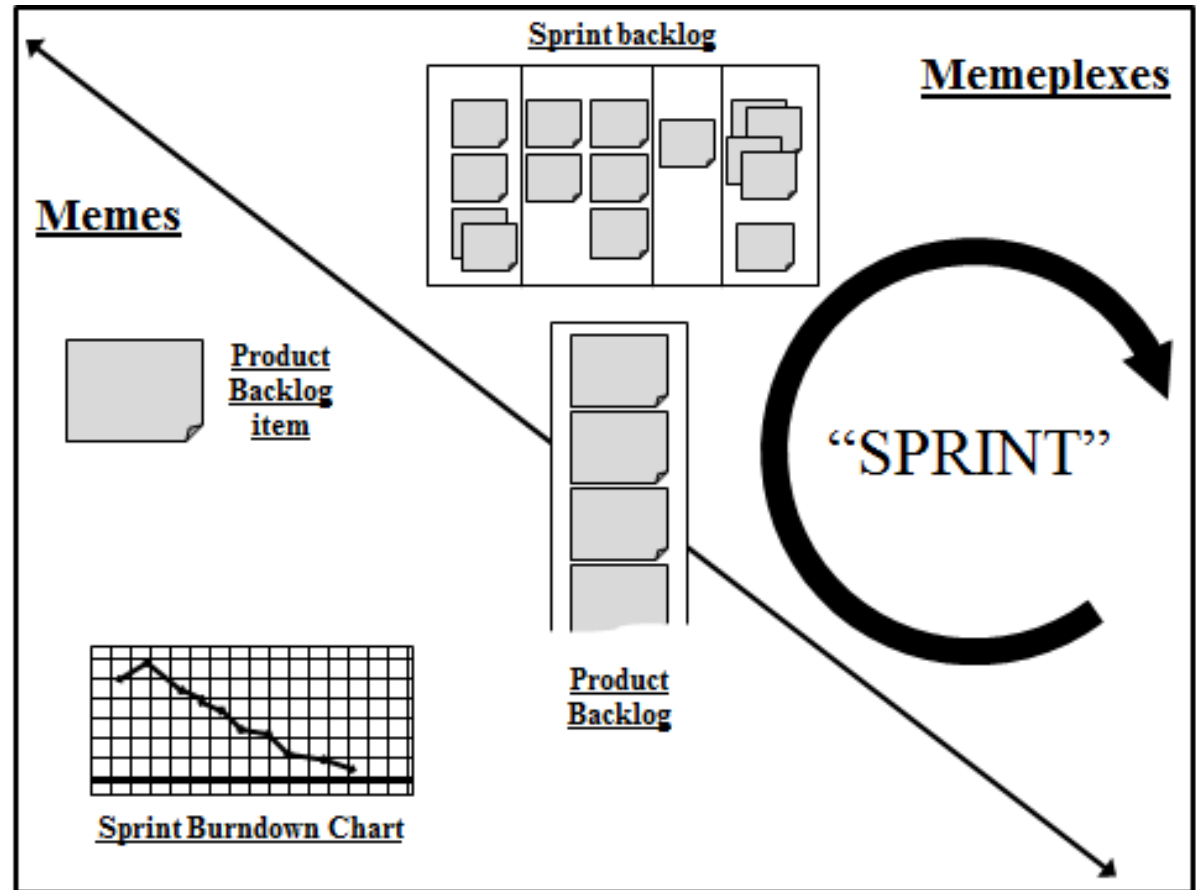
# of memes and memeplexes

- **"memeplex"** is a **grouping** of memes which **increases** the memes' **prospects of survival and propagation** better than the memes would individually management

research approach

- project management is a **socio-cultural phenomenon**

Socio-Cultural Evolution	→	Non-biological Phylogenetic Analysis	→	Phylomemetic Analysis	→	'Agile' Phylomemetic Tree
society and culture evolve in response to environment		*we can compare this evolution with biological evolution*		*we can compare the behaviour of memes with genes*		*we can trace Agile's lineage*

phylomemetic **analysis**

"**phylomemtics**" is to the exploration of the origin and propagation of **ideas**, or 'memes' as "**phylogenetics**" is to the study of evolutionary relationships among groups of **organisms**

Timeline (1870–2010)

- 1870 | 1900 | 1920 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010

Modernism → **Post-Modernism** → **Post-Postmodernism**

Systematic and Scientific Management shifts into Fordism → **Post-Fordism and Globalisation**

Skilled Worker

Motion Studies
Process Charts
Work simplification
Management Training Programs (MTP) - USAF
Japanese Software Factories
Process standardisation
SLCP-JCF
Continuous Improvement
CMM (1988)
CMMI (2002)
ISO9000
ISO21500

Taylor introduces Scientific Management at Midvale Steel (1878)
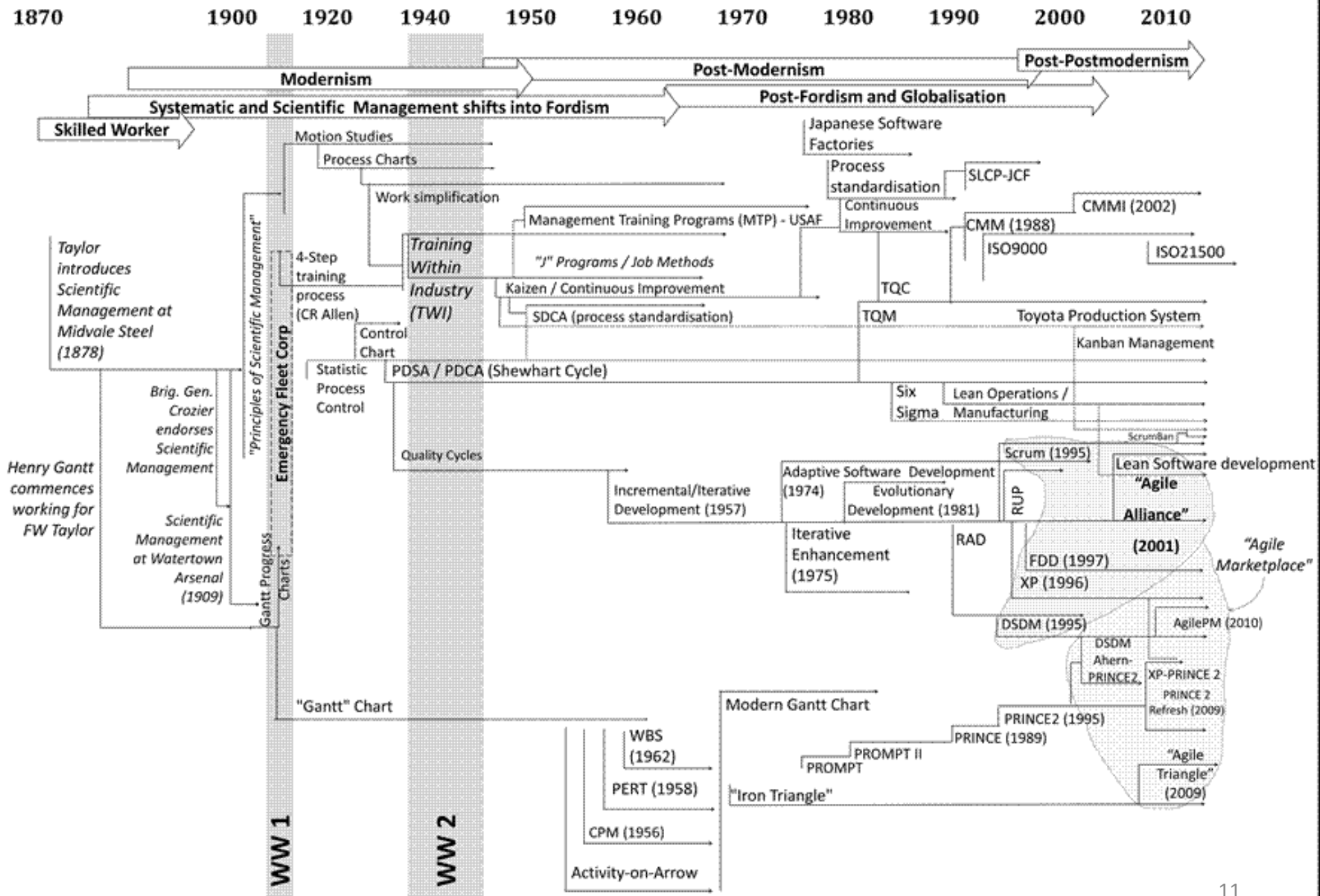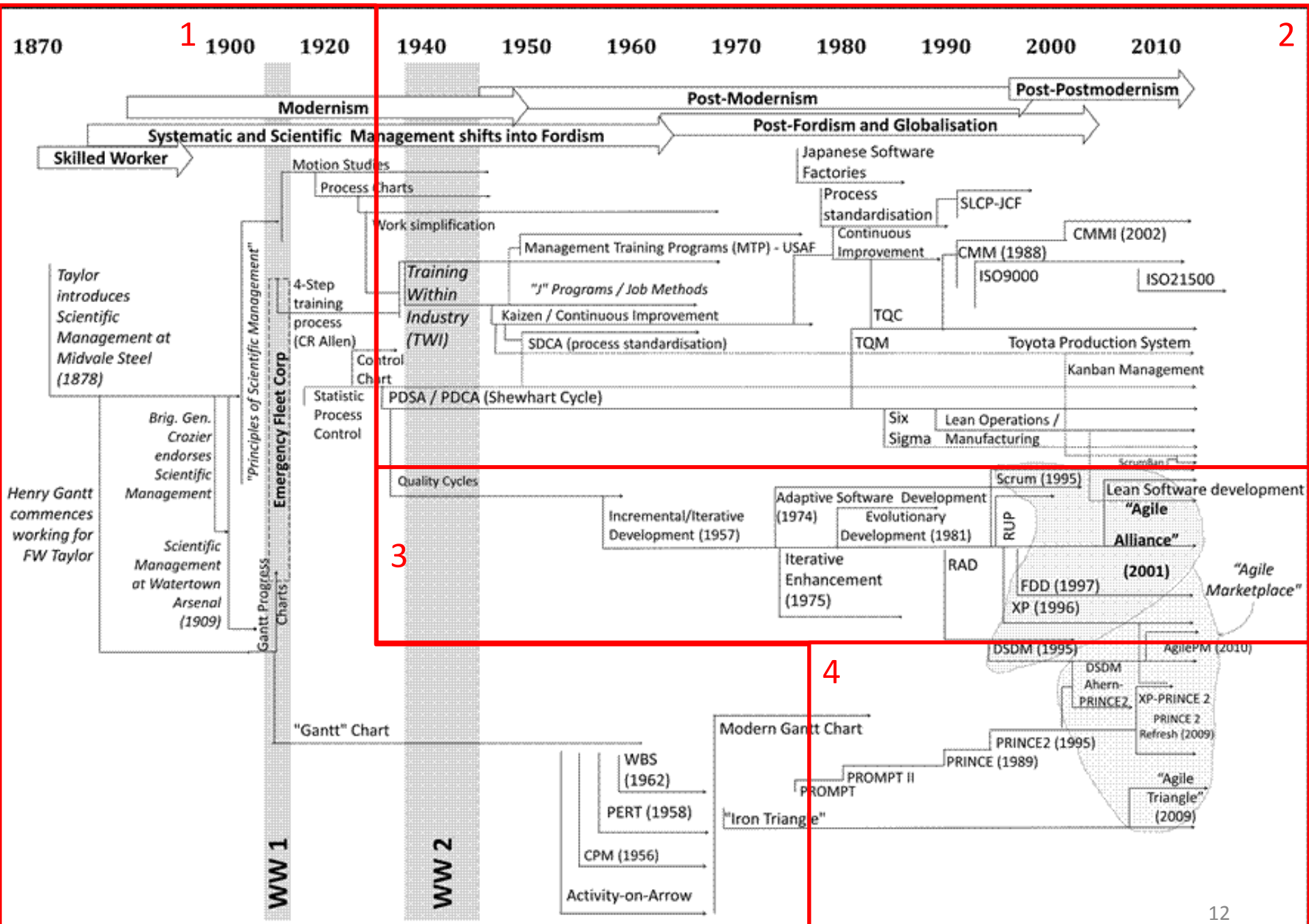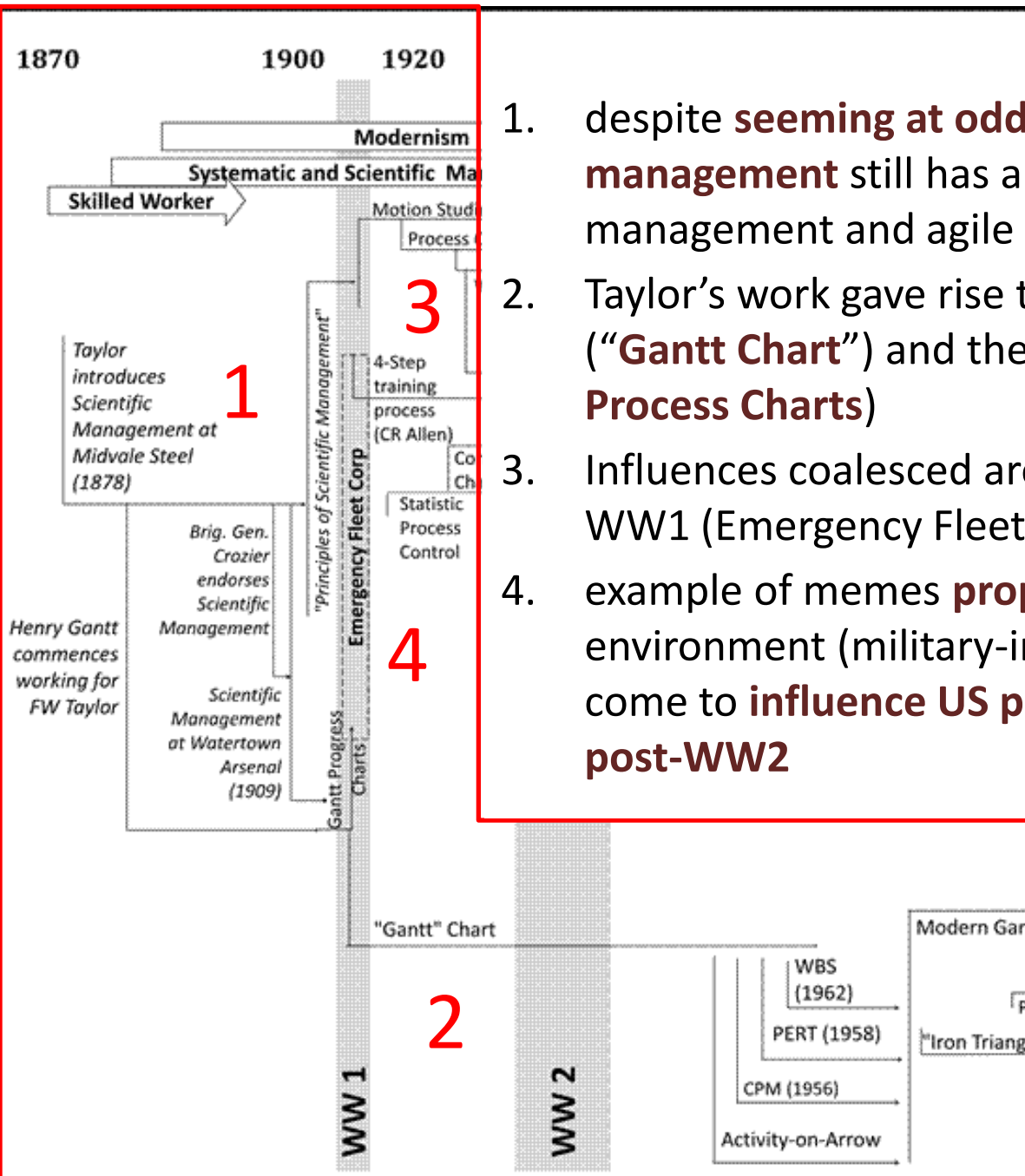
"Principles of Scientific Management"
Emergency Fleet Corp

4-Step training process (CR Allen)
Training Within Industry (TWI)
"J" Programs / Job Methods
Kaizen / Continuous Improvement
SDCA (process standardisation)
TQC
TQM
Toyota Production System
Kanban Management

Control Chart
Statistic Process Control
PDSA / PDCA (Shewhart Cycle)

Brig. Gen. Crozier endorses Scientific Management

Henry Gantt commences working for FW Taylor

Scientific Management at Watertown Arsenal (1909)

Gantt Progress Charts

Quality Cycles

Six Sigma
Lean Operations / Manufacturing
ScrumBan

Incremental/Iterative Development (1957)
Adaptive Software Development (1974)
Evolutionary Development (1981)
Scrum (1995)
Lean Software development
"Agile Alliance" (2001)
RUP
Iterative Enhancement (1975)
RAD
FDD (1997)
XP (1996)
DSDM (1995)
"Agile Marketplace"
AgilePM (2010)
DSDM Ahern-PRINCE2
XP-PRINCE 2
PRINCE 2 Refresh (2009)

"Gantt" Chart
Modern Gantt Chart
PRINCE2 (1995)
PRINCE (1989)
PROMPT II
PROMPT
WBS (1962)
PERT (1958)
"Iron Triangle"
CPM (1956)
Activity-on-Arrow
"Agile Triangle" (2009)

WW 1
WW 2

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1870 1 1900 1920 1940 1950 1960 1970 1980 1990 2000 2010

2

Modernism → Post-Modernism → Post-Postmodernism →

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Skilled Worker →

Japanese Software Factories

Motion Studies

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Process standardisation — SLCP-JCF

Work simplification

Continuous Improvement — CMM (1988) — CMMI (2002)

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Control Chart

SDCA (process standardisation) — TQM

Toyota Production System

Kanban Management

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Six Sigma — Lean Operations / Manufacturing

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Quality Cycles

Scrum (1995) — Lean Software development

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Incremental/Iterative Development (1957)

Adaptive Software Development (1974) — Evolutionary Development (1981)

RUP — **"Agile Alliance" (2001)**

Scientific Management at Watertown Arsenal (1909)

Iterative Enhancement (1975)

RAD — FDD (1997)

"Agile Marketplace"

XP (1996)

Gantt Progress Charts

DSDM (1995) — AgilePM (2010)

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DSDM Ahern-PRINCE2 — XP-PRINCE 2

"Gantt" Chart

Modern Gantt Chart

PRINCE2 (1995) — PRINCE 2 Refresh (2009)

WBS (1962)

PROMPT II — PRINCE (1989)

PERT (1958)

PROMPT

"Iron Triangle"

"Agile Triangle" (2009)

CPM (1956)

WW 1

**WW 2**

Activity-on-Arrow

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1. despite **seeming at odds** with modern work, **scientific management** still has a strong influence on project management and agile methods
2. Taylor's work gave rise to the influence of Henry Gantt ("**Gantt Chart**") and the Gilbreths (Time & Motion, **Process Charts**)
3. Influences coalesced around work in building ships in WW1 (Emergency Fleet Corporation)
4. example of memes **propagating** in a suitable environment (military-industrial complex) which would come to **influence US programs** introduced in **Japan post-WW2**

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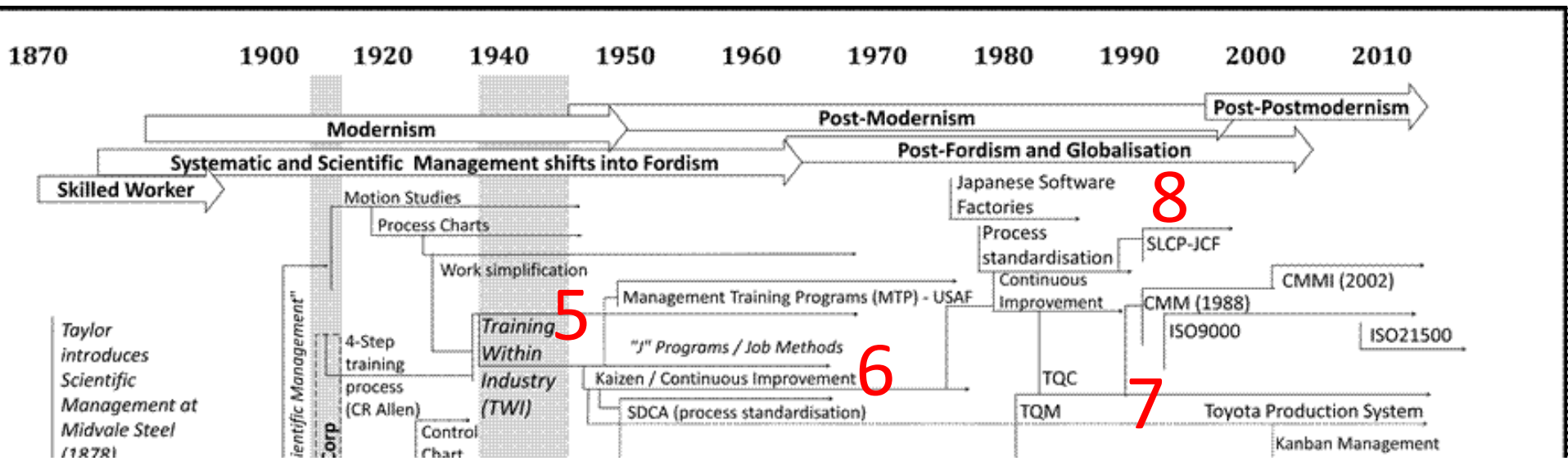
5. the **Training Within Industry** program introduced by US to help **rebuild Japanese industry** relied heavily upon the work in the Emergency Fleet Corporation and its **scientific management** influences

6. large emphasis upon **standardisation** (e.g. PDCA / SDCA cycles) which originated in the US in the 1920's - **work simplification** and **process control** were other scientific management tools which took hold in the lean movement

7. acknowledged as major influence upon **lean methods** and **kaizen (Toyota Production System**

8. 1980's-1990's saw **Japanese software industry** adopt "**agile project management**" in response to globalisation and move to standardisation
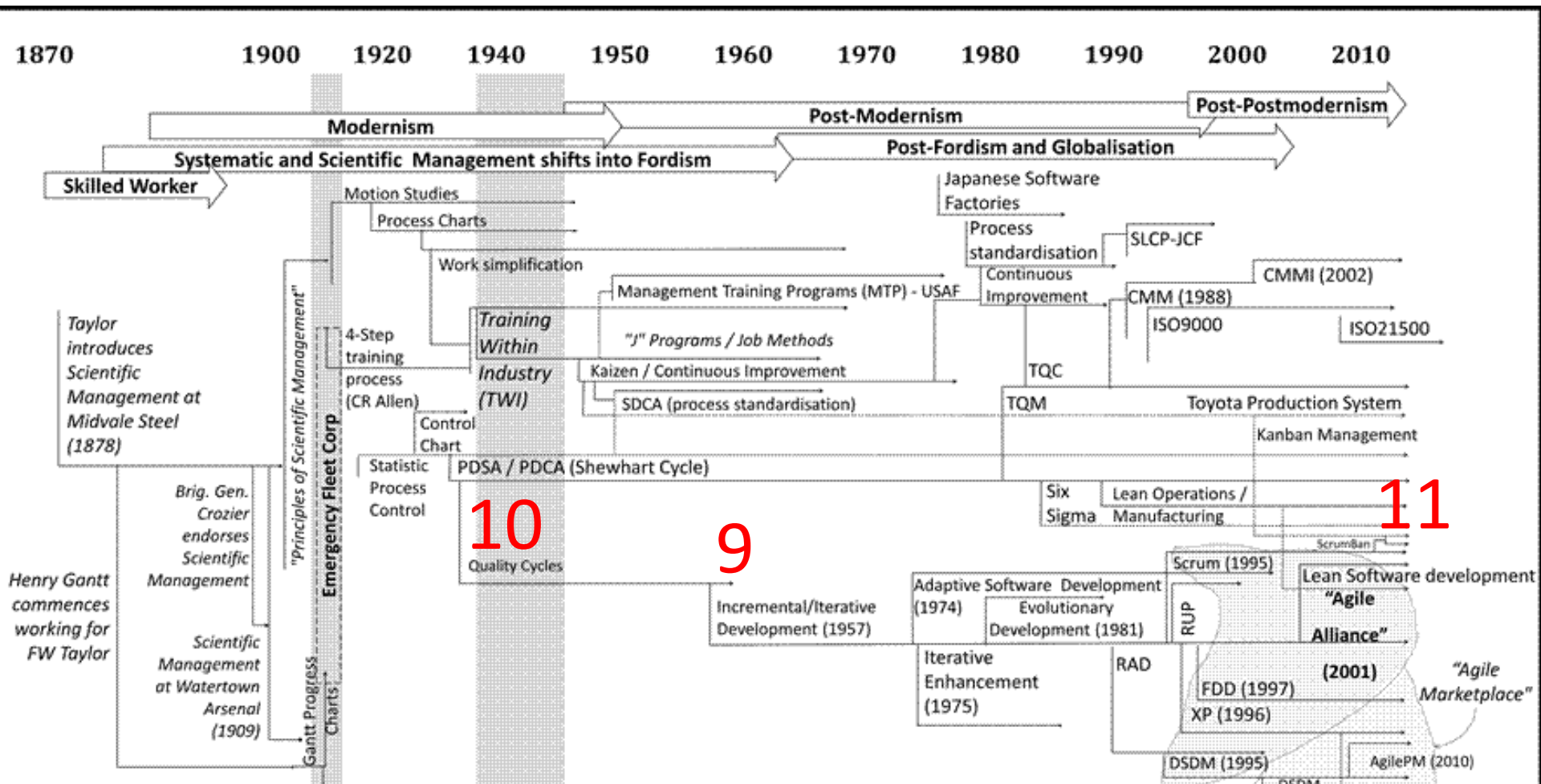
9. Post-WW1 **US military programs** provided environment for emergence and adaptation of new methods – **incremental methodologies**

10. these had their **roots** also in the early quality movement (Shewhart)

11. various methodologies emerged which influenced the likes of **XP** and **Scrum**

12. Influence of "**traditional" project management** takes a different path

13. Some **traditional memes** (e.g. Iron Triangle) are re-cast to suit the new "Agile Marketplace" – need to **adapt to survive**

14. once-dominant **memeplexes** (e.g. PMBoK, PRINCE2) try to "attach" themselves to the new environment (e.g. co-hosting in agile methods) to retain relevance

15. agile methods respond through their own adaptation of traditional project management and agile methods to evolve to "Agile Project Management"
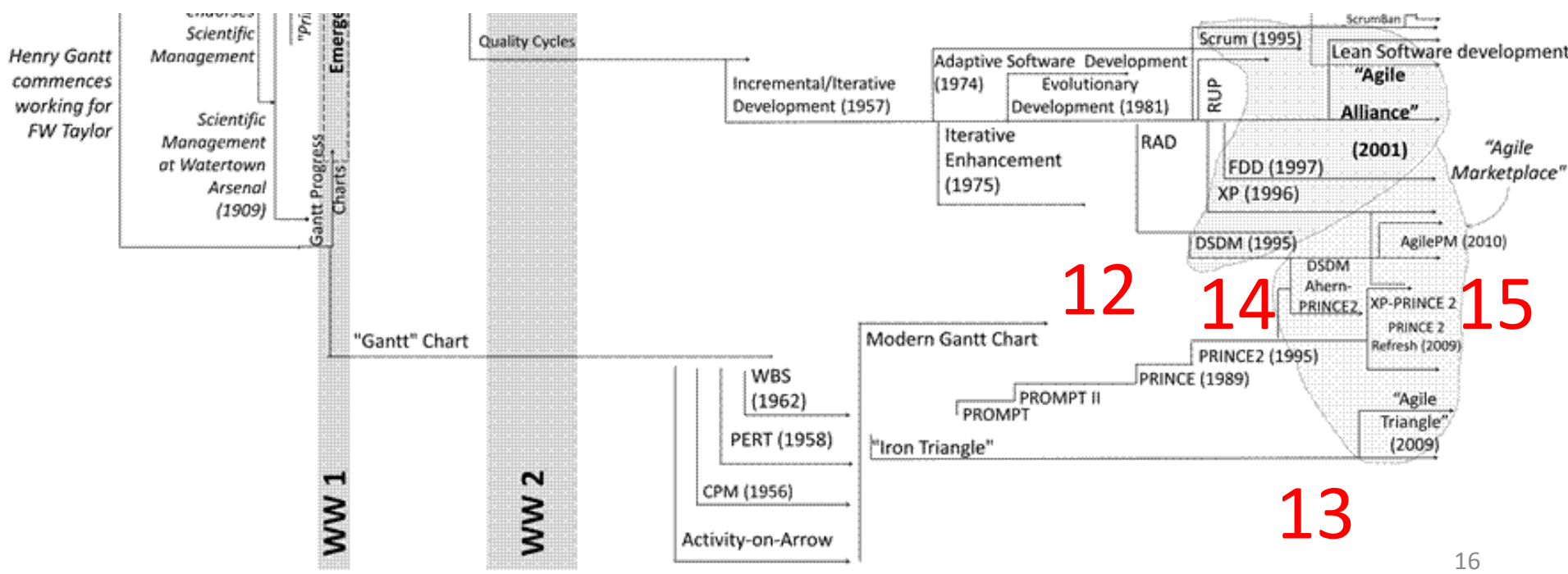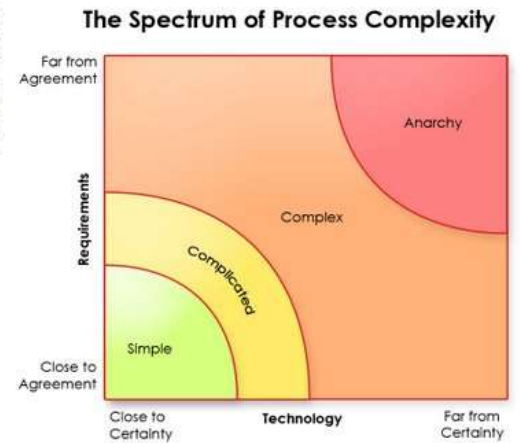
looking back
to look ahead

WIKISPEED
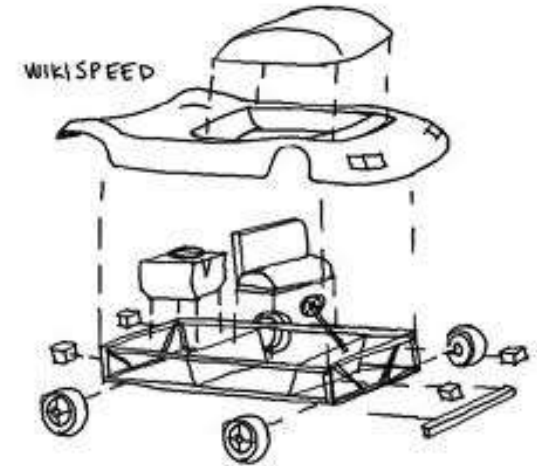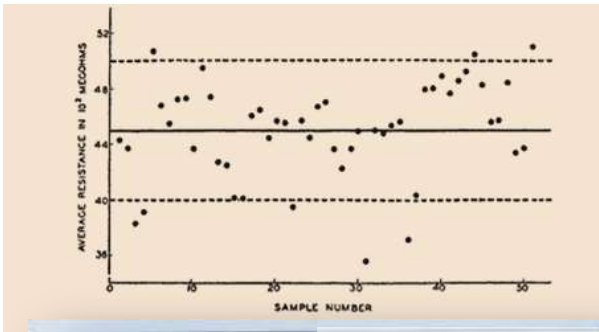
Gantt Layout Chart (Clark 1923, p. 54)

The Spectrum of Process Complexity

Memetic paradigm frees us to infer how influences interact and without any "grand design"...

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implications
for business

- diverse "religious views" on project management result in **entrenched positions** which see opposing views as not being 'real' project management, or being 'dinosaurs'

- regardless, the **evolution** of **project management** occurs in response to **changes** in the socio-cultural **environment**

- **project management** also influences how work is organised by **adapting memes** and **forming memeplexes** which in turn find new fields of application

- businesses need to be aware of how the environmental shifts, such as globalisation and the adaptation of technologies, impact upon work and embrace approaches to project management

- but, have we reached…

the end ????