





The declin of theorization : a threat for science integrity

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Introduction

Scientific research is the basis for technical innovation

But the technosphere threatens the biosphere because of a positivist and technoscientist vision → misalignment between technique and knowledge

→ disruption

Example: endocrine disruptor → knowledge delay to prevent toxicity

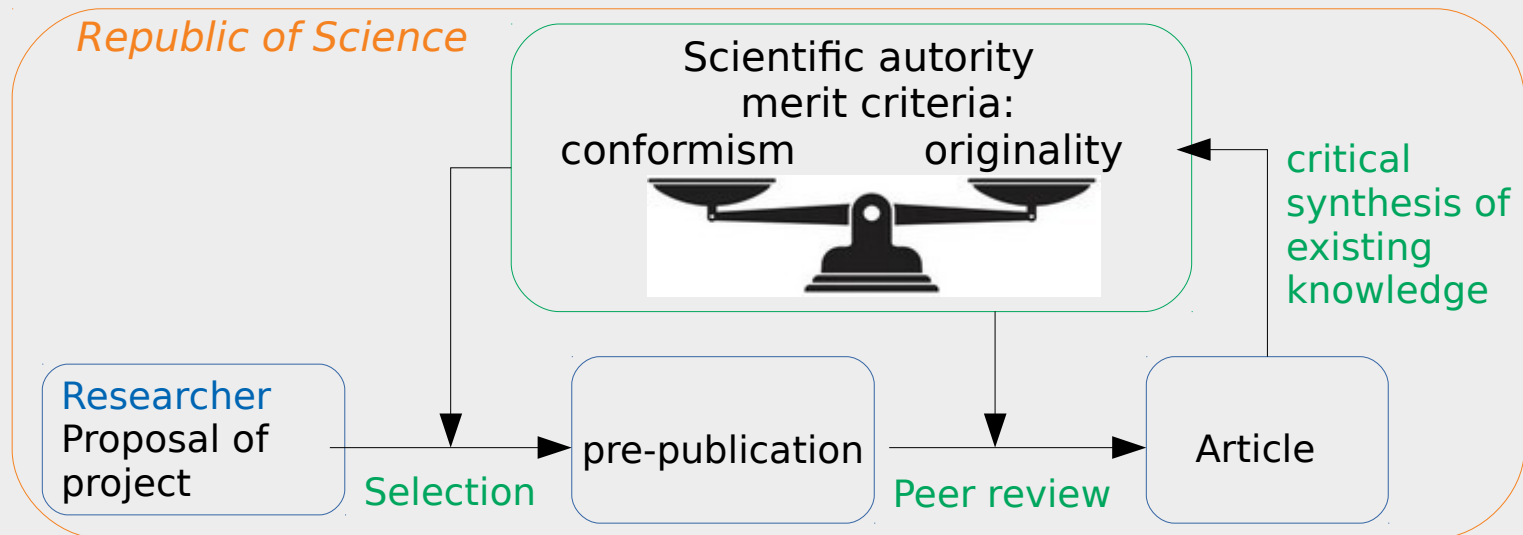
Necessity for new knowledge and new theories but decline in theory

→ disorganization of knowledge which threatens science integrity

What are the historical and political roots of this decline?

Model of the Republic of Science from M. Polanyi

- Scientific research: a non-mechanistic organization of explorers, distinct from a market model
- Parallel researchers/ economic actors whose goal is to maximize their reputation → evaluation by antagonistic merit criteria: conformity and originality

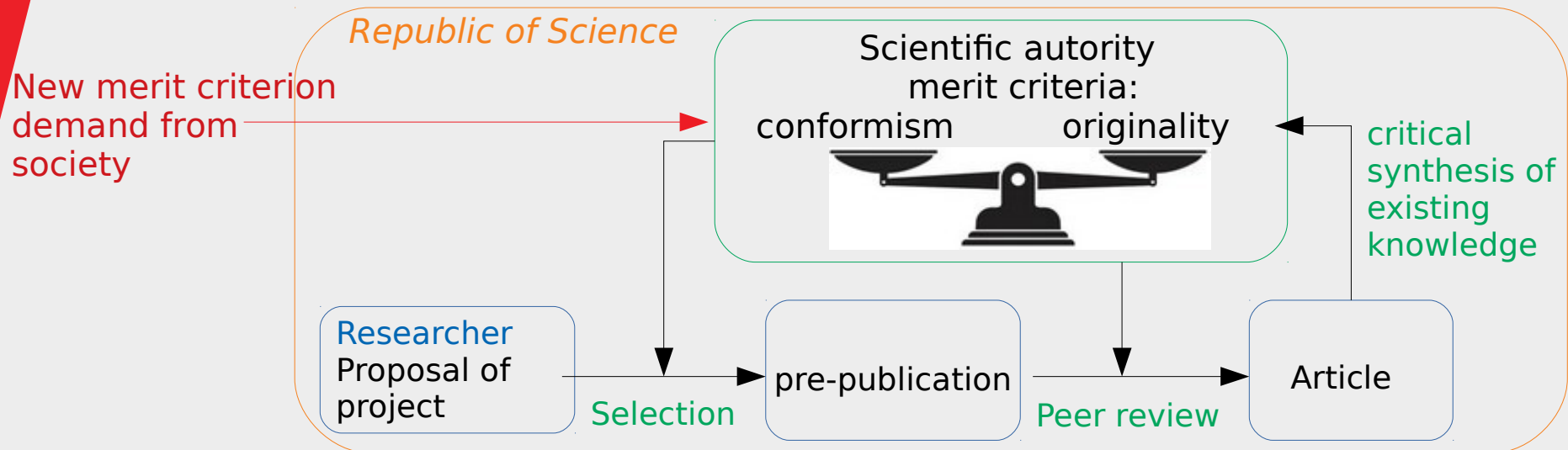


- Dynamic circularity that encourages its own questioning

Disruption of the Republic of Science

Technicist ideology : governmental planning of research → **new merit criterion**: the societal relevance of the research topic

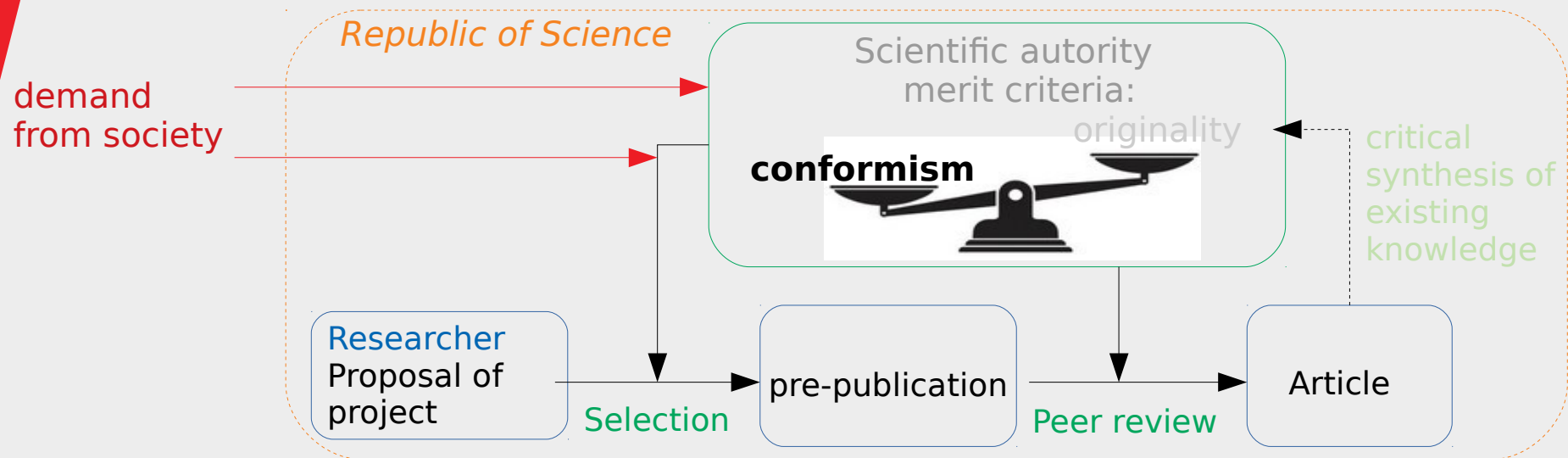
Neoliberal era: establishment of a **market of scientific project** → instrumentalisation of research, the market **partially assumes the selection** of research projects



Consequences: artificial competition between researchers, rapprochement between private and public research, managerial vision of research → promises, lack of reproducibility and frauds → loss of reliability and transparency

Erosion of encouragement to critical synthesis work

« Facts call for theories, but they do not give rise to concepts that unify them internally or the intellectual intentions they develop » (Canguilhem 1992, p. 100)



Disruption of the interest to do critical synthesis → loss of know-how to make theory → **proletarianization**, erosion of scientific authority and submission to the market

Erasing of conflictual plurality and historicity

Fundamental rule of the game of science and democracy: the **conflictual plurality** between **minority** cultivating **critical thinking** → until consensus becomes functional scientific knowledge

Consequences of the market system of science :

- competition → dissipation of conflictuality and collaboration; disciplinary **compartmentalization**
- bibliometric evaluation → **normalization** to majority thinking = the banality, the average trend
- Productivism → Massification of articles in a **standardized** and compressed format → favours quantity over interpretative quality and polarizing opinions
- global law of balance between supply and demand with theories considered **timeless** → absence of theoretical renewal

Conclusion

Current science policy favours **computational empiricism**

→ breaks the conflictual plurality, erode diversity, originality and critical synthesis work of existing knowledge → **decline of theorization**

→ synchronous erosion of the republic of science and the democratic republic

→ loss of science integrity

Necessity to “change our relationship to the living” → propose new theories especially in biology:

- conduct **epistemological reflection**
- **Reconsider current research organisation and its evaluation**
- Fight against the avatars of old theories and their transhumanist delusions

Acknowledgment and bibliography

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