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 technoscientistist 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
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Robert Anton. 2023. «Le déclin de la théorisation en sciences».


