Michael Polanyi on the Trustworthiness of Science—A Promising Response to the Renewed Skepticism about Science?

Stefan Kosak

In Offended Freedom, sociologists Carolin Amlinger and Oliver Nachtwey identify a new form of political protest in Western societies: libertarian authoritarianism. This seemingly paradoxical phenomenon combines a rebellion against all perceived constraints on individual freedom with an authoritarian insistence on one's own will. The authors show that this revolt extends across multiple social domains, notably to science, which many regard as an instrument of restriction rather than enlightenment. Several key themes in their analysis—skepticism toward science, the individualist conception of freedom, and the rise of authoritarian tendencies closely parallel Michael Polanyi's reflections on the cultural origins of totalitarianism in early twentieth-century Europe. This overlap makes Polanyi's analysis a valuable point of reference for reflecting on libertarian authoritarianism. From a Polanyian perspective, the rejection of science appears not merely as a symptom of a libertarian notion of freedom but as a formative influence on it. Moreover, Polanyi's insights indicate that radical individualism is inherently unstable and tends to collapse into collectivist authoritarianism, in which self-realization becomes identified with the destiny of the nation. Assuming that countering scientific skepticism is essential to addressing current manifestations of libertarian authoritarianism, the paper argues that Polanyi's epistemology provides promising conceptual resources for this task. These include his view of scientific knowledge as possessing an inexact yet rational foundation, his model of the "republic of science" as a self-regulating community ensuring intellectual integrity, and his understanding of scientific inquiry as an exemplar of public liberty. Consequently, a deeper engagement with these Polanyian ideas is vital for confronting the intellectual and social challenges of the present.

1. Libertarian Authoritarianism and Scientific Skepticism

In their recent study *Offended Freedom* (2024), sociologists Carolin Amlinger and Oliver Nachtwey analyze a significant social development: the rise of protest movements that have gained increasing traction across Western societies over the past decade. In Germany, this movement is represented by the so-called *Querdenken* ("lateral thinking") scene, which encompasses various subgroups such as the *Reichsbürger* ("citizens of the Reich") movement. Their adherents protest against rules, laws, and prohibitions, and lament the suppression of dissenting opinions. They direct their protest against "mainstream society," by which they mean the

political establishment, liberals, the left, the "woke" movement, science, and global corporations. This broad opposition reveals that supporters of the *Querdenken* movement come from diverse social milieus once considered incompatible. Some originate from the alternative or New Age milieu, others from the progressive left, and still others from the far right. It is this puzzling constellation that Amlinger and Nachtwey seek to explain in their study.

According to the authors, these recent protest movements can be understood only by recognizing that late modernity is characterized by a distinctly libertarian conception of freedom. This notion differs markedly from the Enlightenment understanding of freedom, which inspired the civil and working classes to fight against dogmatic rule, economic dependency, clerical authority, and censorship in the name of equality, civil rights, and universal suffrage. In contrast, the late-modern idea of freedom—what Amlinger and Nachtwey term "libertarian freedom"—centers on the individual's right to pursue personal desires, interests, and aspirations. Freedom is thus conceived as the capacity to realize one's individual will.

However, this libertarian notion of freedom is inherently contradictory and, in many cases, leads to frustration. While it appeared to be fulfilled for a time—during an era of growing welfare, prosperity, and social liberalization—its promises have become increasingly untenable. As individuals strive to maximize their personal autonomy, they inevitably enter into competition with others seeking the same. The more people pursue self-realization, the more they encounter its limits—inequality, failure, and disappointment. Furthermore, the ideology of endless self-fulfillment breeds chronic dissatisfaction with the status quo. As Amlinger and Nachtwey argue, many individuals in late modernity thus experience their freedom as offended freedom: they feel deprived of the ability to achieve the autonomy that society has led them to expect. They perceive a gap between the promise of boundless self-determination and the constraints of their lived reality. This sense of deprivation manifests as frustration, resentment, and even indignation—negative emotional responses to the perceived betrayal of the late-modern promise of self-fulfillment.

According to Amlinger and Nachtwey, those who experience such frustration often respond by turning against institutions and authorities that they believe to illegitimately limit their self-fulfillment. Consequently, they oppose state interventions such as public health measures during the COVID-19 pandemic, resist taxation, and refuse to contribute to collective goods like infrastructure, education, or research. In more extreme cases, this rebellion takes the form of conspiracy thinking, which offers a simplified explanation for perceived oppression and designates clear enemies. Paradoxically, this unrestrained assertion of individual autonomy thus

gives rise to what Amlinger and Nachtwey call "libertarian authoritarianism": a form of protest that demands absolute freedom while simultaneously exhibiting authoritarian traits through its intolerance of dissent and its aggression toward perceived opponents.

Amlinger and Nachtwey identify several social domains affected by this libertarian authoritarianism, among which science occupies a central role. They argue that many individuals experience science as an imposition for two main reasons.

First, the division of labor in late-modern societies has produced an enormous expansion of specialized knowledge. As a result, individuals can comprehend only a fraction of the knowledge generated. Expertise has become concentrated among specialists, leaving non-experts dependent on their authority. This dependence offends the late-modern ideal of autonomy and self-reliance: individuals are no longer deemed competent to judge matters independently but are asked to defer to experts. Thus, the very structure of modern scientific knowledge confronts the individual with her cognitive and epistemic limitations, frustrating her aspiration to self-determination.

Second, scientific authority increasingly underpins political decision-making, especially when such decisions restrict individual freedom. For instance, during the COVID-19 pandemic, government measures—often involving severe limitations on everyday life—were justified by reference to the findings of virologists and epidemiologists. Similarly, climate policies are grounded in the results of climate science. In both cases, scientific knowledge provides the rationale for political constraints, making science itself a target of resentment. Hence, libertarian authoritarians not only rebel against political institutions that implement restrictions but also against science, which legitimizes them.

In lamenting these perceived impositions, Amlinger and Nachtwey note that libertarian authoritarians (selectively) adopt postmodern critiques in order to justify their rejection of science as a guiding institution in modern societies. In this respect, they refer to the French post-structuralists, who, from the 1970s onwards, questioned the existence of objective foundations for truth, emphasizing the need to avoid committing to any position in order to prevent dogmatism and power hierarchies. They also see a similar reference in Paul Feyerabend's philosophy of science, which argues that there is no universal scientific method leading to truth, implying that non-scientific belief systems—such as astrology or esotericism—deserve equal consideration. According to their analysis, Bruno Latour carried this position forward, maintaining that science cannot claim a privileged epistemic position; instead, knowledge claims should be democratically negotiated within society.

2. Some Polanyian Reflections on Libertarian Authoritarianism

Having summarized Amlinger and Nachtwey's account of libertarian authoritarianism as an analysis of a contemporary protest movement, the following section offers some reflections on their argument. These reflections are informed by Michael Polanyi's analysis of the social upheavals that took place in early twentieth-century Europe. Polanyi's historical account shares several overlapping themes with Amlinger and Nachtwey's study—particularly skepticism towards science, the relationship between this skepticism and a libertarian conception of freedom, and the linkage between such conceptions of freedom and authoritarian tendencies. It is therefore reasonable to expect that Polanyi's insights can enrich Amlinger and Nachtwey's analysis.

The central impulse for reflecting on Amlinger and Nachtwey's account comes from Polanyi's theory of moral inversion, which he devised to explain the rise of totalitarianism in early twentieth century. In this context, Polanyi discusses a critique of social institutions that was popular at the time. According to this critique, the universal acceptance of institutions such as science, morality, or law is based on the assumption that they are grounded in objective truth. However, since this assumption is rejected, it seems that their authority rests solely on subjective preference or material interest. According to Polanyi's portrayal, once authority is reinterpreted as mere domination, adherence to it is seen as submission to oppression or heteronomy. Therefore, the individual must reject all forms of authority in order to overcome self-alienation and achieve authenticity. From this perspective, the ideal of the autonomous, self-reliant individual who acts solely according to his or her own will emerges as the supreme moral standard. Polanyi identifies the bohemians of the late nineteenth century as the prototypes of this stance.

What, then, does Polanyi's analysis contribute to Amlinger and Nachtwey's account of libertarian authoritarianism? It suggests that the deconstruction of authority, particularly the authority of science, plays a crucial role in shaping the very ideal of the autonomous individual that Amlinger and Nachtwey identify as constitutive of late modernity. In this light, skeptical philosophical positions that undermine the validity of science and truth in general do not merely support libertarian authoritarians in their rebellion against scientific authority. Rather, such skepticism may have been foundational in producing the libertarian ideal of the autonomous self—an ideal from which science and other social institutions are subsequently rejected as illegitimate constraints on self-fulfillment. Therefore, Polanyi's analysis complements Amlinger and Nachtwey's theory by highlighting the interdependence between scientific skepticism and libertarian conceptions of freedom.

A second aspect of Polanyi's discussion of the bohemians of the late nineteenth century may also illuminate Amlinger and Nachtwey's account. Polanyi observes that the solitary Bohemian, rebelling against all forms of social authority in the name of self-assertion, occupies an inherently unstable position due to his isolation. This radical individualism, Polanyi argues, is thus prone to collapse into collectivism. In this sense, the individualist's rejection of all authority leads, paradoxically, to the search for a collective cause to which one can belong. For the Bohemian, this may take the form of nationalism—devotion to the unique destiny of one's nation in its struggle for survival.

Applying this insight to Amlinger and Nachtwey's notion of libertarian authoritarianism, Polanyi's analysis suggests that this stance may also devolve into a collectivist one. The libertarian authoritarian may project his desire for self-assertion and uniqueness onto the nation, identifying with authoritarian leaders perceived as capable of realizing his aspirations. This dynamic might also explain why some adherents of the *Querdenker* scene express sympathy for far-right parties that espouse nationalist ideologies. Thus, the individualistic authoritarianism described by Amlinger and Nachtwey may transform into a collectivist authoritarianism, akin to the political movements that dominated Europe in the first half of the twentieth century.

These Polanyian reflections on Amlinger and Nachtwey's account propose that countering scientific skepticism is essential for addressing the libertarian conception of freedom that underlies both individualistic and collectivist forms of authoritarianism. The following section outlines several concepts from Polanyi's post-critical philosophy that may help to challenge scientific skepticism and mitigate its broader social consequences.

3. Polanyi's Argument for the Trustworthiness of Science

The first relevant concept is Polanyi's understanding of science as an inexact yet evidence-based enterprise. He demonstrates this by examining the heuristic processes through which scientists arrive at their conclusions—processes guided by tacit judgments and informed intuition. Through this analysis, Polanyi establishes the credibility of science as a genuinely truth-seeking endeavor, even though it operates without absolute certainty. Thus, Polanyi's approach offers a promising framework for defending the rational basis of truth claims, even if they are not objective. This idea may help to counter the contemporary challenge to the legitimacy of other social institutions that guide modern society.

A second key concept is Polanyi's notion of the "republic of science." According to this model, scientific integrity is maintained through a network of mutual control among researchers working in overlapping fields and through the authority that experienced scientists exercise over

novices. This distributed system of accountability fosters trust in the scientific enterprise as a self-regulating community devoted to the pursuit of truth. Moreover, the institutional structure of science serves as an exemplar for the organization of other social domains. This may strengthen public trust in the idea that truth prevails in these domains, even in the absence of an overarching authority.

A third concept of particular relevance is Polanyi's idea that scientific freedom entails the liberty to follow one's personal intuitions in the pursuit of truth. This redefines liberty not as the ability to do whatever one pleases, but as the freedom to contribute creatively and responsibly to a shared search for truth. Polanyi's notion of "public liberty", exemplified in the scientific community, therefore offers a constructive alternative to the destructive libertarian conception of freedom that afflicts late-modern societies. By understanding freedom as participation in a collective, truth-oriented enterprise rather than as the assertion of unbounded individual will, Polanyi provides a normative ideal through which the excesses of libertarian authoritarianism might be overcome.

Literature

Amlinger, Carolin, Nachtwey, Oliver (2024): *Offended Freedom. The Rise of Libertarian Authoritarianism*, Cambridge.

Polanyi, Michael (1946): Science, Faith and Society, Chicago, London.

Polanyi, Michael (1951): *The Logic of Liberty*, Indianapolis.

Polanyi, Michael (1958): *Personal Knowledge. Towards a Post-Critical Philosophy*, Chicago, London.