

OPEN ACCESS

EDITED BY Ana Campina, Fernando Pessoa University, Portugal

REVIEWED BY
Maximiliano De La Puente,
National Scientific and Technical Research
Council (CONICET), INCIHUSA, Argentina
Novi Amalia,
Universitas Darussalam Gontor, Indonesia

*CORRESPONDENCE Henrique Varajidás ⊠ henrique.varajidas@ulusofona.pt

RECEIVED 06 June 2025 ACCEPTED 10 July 2025 PUBLISHED 23 July 2025

CITATION

Varajidás H (2025) The Great Terror on steroids: exploring the counterfactual scenario of artificial intelligence-driven purges under Stalin. *Front. Polit. Sci.* 7:1642328. doi: 10.3389/fpos.2025.1642328

COPYRIGHT

© 2025 Varajidás. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

The Great Terror on steroids: exploring the counterfactual scenario of artificial intelligence-driven purges under Stalin

Henrique Varajidás*

Faculty of Law and Political Science / CEAD, Lusófona University, Porto, Portugal

For self-evident reasons of historical synchrony, most research probing the frontiers between totalitarianism studies and artificial intelligence studies to date has centered on mass surveillance in Xi Jinping's China. The Great Terror on Steroids, an exercise in experimental Political Science grounded on a version of the historical-contextual analysis method adapted to support counterfactual reasoning, takes an entirely different approach. Namely, the article explores the counterfactual hypothesis of what difference it could have made if the perpetrators of a key part of the Stalinist Soviet Union's Great Terror-specifically, the campaign targeting "Trotskyists" in the Party—had had at their disposal an artificial intelligence tool modeled after the cutting-edge technology utilized in predictive policing today. We start by reviewing totalitarianism and artificial intelligence studies, with a focus on their potential intersections. Next, we describe our method, including its promise and limitations. Then, we introduce the Great Terror as a case study. Subsequently, we delve into our research question in detail, process-tracing the origins, background, setup, dynamics, and results of the aforementioned campaign and deducing the advantages and drawbacks that the use of the predictive policing artificial intelligence tool would likely have brought to its design and implementation. We conclude that, on the "positive" side, the selection of targets would have been more neutral in the sense that literally everyone could become one for reasons that would have been almost entirely out of the arbitrary hands of the perpetrators and that the brutal interrogation sessions and inter-related snowballing effects would have been substantially minimized. On the other side, nonetheless, we reckon that enhanced neutrality would in no way have equated with enhanced rationality since, owing to its inherent defects, the tool would not have been able to rid the process of the dark shadow of entirely irrational detentions and escalatory paranoia. Finally, we come to conjecture that the Stalinist leadership would probably have preferred the historical version of the purge due to the key human mobilization functions that the artificial intelligence-boosted version would have precluded.

KEYWORDS

artificial intelligence, Great Terror, Soviet Union, Stalinism, totalitarianism

1 Introduction

This article's main goal is to explore a counterfactual hypothesis on the frontiers between totalitarianism studies and artificial intelligence (AI) studies from a different perspective from the well-established research programs centered on mass surveillance in China under Xi Jinping. We start by outlining what we mean by totalitarianism studies and AI studies. Next,

we clarify the question of method. Afterward, we introduce our case with growing precision and detail. Then, applying the Political Science research method of historical-contextual analysis in general and anchored counterfactual reasoning in particular, we explore the question of what difference it could have made if the perpetrators of a key part of the Stalinist Great Terror—specifically, the campaign targeting "Trotskyists" in the Party—had had at their disposal a fitting artificial intelligence tool. We conclude by briefly reflecting on the issue of the AI-enhanced version of the campaign's desirability from the viewpoint of the Stalinist leadership.

2 Totalitarianism studies and AI studies

By totalitarianism studies, we mean studies that attempt to capture or model the origins and nature of the key differentiating regime-defining aspiration behind a peculiarly extreme type of non-democratic polity most unambiguously instanced, at first, by the Stalinist Soviet Union and Nazi Germany; the peculiarly totalitarian implementation strategy for the pursuit of that aspiration once in power; the quintessentially totalitarian implementation process thus unleashed, including the dynamics and mechanisms typically resulting from an attempt to pursue the totalitarian aspiration in key policy spheres; and the prototypically totalitarian range of horizons of possibility and results arising from within that process.

Countless studies fitting such criteria *in toto* or in part have been documented in masterful literature reviews produced by authors like Gleason (1995), Traverso (2001), and Roberts (2020).

What we find striking within totalitarianism studies, given its one-hundred years plus history, is the degree of convergence displayed by authors associated with wholly different epochs, backgrounds, scientific and political-cultural affiliations, and idiosyncratic proclivities around the basic concept and main theoretical possibilities implicated.

In a nutshell, the main contours of the concept of totalitarian regime practically emerged with the advent of totalitarianism studies when, between the final years of the 1910s and the end of the 1930s, pioneering public intellectuals such as Tillich (1934), Sturzo (1936) or Gurian (1978) pinpointed a series of symptoms, traits, or signs eerily common to the Soviet Union, Fascist Italy (not yet dismissed as "less totalitarian," as would later become the norm), and Nazi Germany. These authors converged toward a sort of "totalitarian syndrome" involving a chasm between the totalitarian regimes—as avowed challengers—and the established liberal-democratic regimes (as well as more traditional forms of rule). The most recurring symptoms identified had to do with the claim to a superior vision of the future offered by an ideology; the demand for absolute power in order to organize its pursuit; and the active use of such power to put all human and material resources available, whether in the positive sense of mobilization or the negative sense of sacrifice, fully to the service of that inherently radical and experimental quest.

On the theoretical front, it would not be simplifying matters too much if we affirmed that most developers and critics of totalitarianism theory coalesced in their theoretical or critical efforts around three models for explaining totalitarian regimes along the dimensions outlined above: totalitarianism as the doomed attempt to force societies to conform to an ideological blueprint, as instanced in the works of Lefort (1986), Arendt (2017), or Talmon (1961);

totalitarianism as the elusive pursuit, through permanent mobilization, of a post-ideological leap beyond less bold and ambitious, more parochial, modes of politics (especially liberalism), as displayed in the works of Rauschning (2010), Neumann (1965), or Roberts (2006); and totalitarianism as the pathological pursuit of total control over whole societies as an end in itself, a sort of strawman theory popularized by case-expert historians more or less hostile to the totalitarianism category like Bosworth (1998, pp. 31-32, 106-132), Fitzpatrick (2000, pp. 1-13, 218-227), or Broszat (1994).

For our current purposes, what is important to highlight is that albeit all three models have been tentatively utilized to try to make sense of the nexus between totalitarianism and AI studies, such attempts focused overwhelmingly, mostly for obvious reasons of historical synchrony, on a single case, namely Xi Jinping's China. The case has been treated as a totalitarian-leaning regime either by virtue of its resort to AI to tighten the control over the population in the sense outlined by the ideological and (more often) control models, with a heavy emphasis on the adoption and deployment of a suffocating apparatus of surveillance, repression, and reeducation "against the three evils of terrorism, separatism, and extremism" in Xinjiang, especially under Chen Quanguo's regional leadership (Cain, 2021; Chin and Lin, 2022, pp. 1-6, 15-66, 263-279); or, more in line with the permanent mobilization model, by virtue of its resort to AI as a means to propel China to the vanguard of 21st century Historymaking, highlighting the aspiration to consolidate a pioneering alternative to the Western model of polity by exploring the possibilities of AI to an extent impossible in liberal-democratic societies (due to redlines concerning privacy and other civil rights). The emphasis in this last approach is on the proliferation of an expansive network of digital sensors—ID and biometric scanners, surveillance cameras, archives of private instant messages, digital payments logs, and social media interaction records, among others—as well as human bureaucrats, vigilantes, and minders, to collect data in multiple formats for AI processing with a view to making possible and striving toward, first, well-ordered, safe and efficient "smart cities" endowed with advanced public services like automated crime-spotting, disorder-spotting, traffic management, emergency personnel deployment, and tourist crowds management (with Hangzhou as the most exemplary yet); and, second, "smart societies" where people would be constantly nudged toward "the right path" and "the right decision," from the authorities' standpoint, by "automated social credit systems" (Roberts, 2020, pp. 122–130; Chin and Lin, 2022, pp. 6–11, 92, 114-127, 137, 215-231, 253-254).

As we shall briefly see, our approach to exploring the intersection between totalitarianism and AI studies is entirely different. Nevertheless, first, let us clarify what we mean by AI studies.

We use that designation to refer to any study, in a lineage conventionally traced to a dashingly daring 1956 Dartmouth College workshop organized by the mathematician John McCarthy, on the possibilities and potential consequences of developing machines endowed with computer programs meant to equal or outperform humans in the execution of practical tasks by simulating or even redesigning crucial dimensions of human intelligence (Mitchell, 2020, pp. 3–7; Poulton, 2024, pp. 1–5).

We find it illuminating to organize AI studies around three distinct, if inevitably overlapping, axes of interest. The first axis encompasses studies revolving around the nature and level of intelligence potentially involved in AI. Artificial narrow intelligence

studies focus on "actually existing" AI tools, giving special attention not only to their already palpable benefits but also to their presentform limitations like their proneness to replicate human-introduced biases; their inability to resort to abstraction and analogy and hence to learn and progress beyond the confines of the tasks they were originally programmed to perform (the best chess-playing AI tool cannot and would be impossible to be made to "learn" to play checkers—a distinct tool would have to be created); their lack of even the most basic situational awareness or common sense understanding of the nature of the tasks they perform; and their vulnerability to making increasingly rare but often abstruse and highly consequential mistakes-something which can be exploited with potentially devastating results by adversarial hackers. By contrast, artificial general intelligence studies concentrate on the still elusive hypothesis of AI tools evolving to the level of entities capable of learning beyond their original programming and tasks (so that, for example, a tool programmed to perform tasks in mathematics might teach itself economics and medicine, or a robotic tool programmed to play pingpong could transfer some of those skills to help it learn to play tennis), thus becoming something like super-intelligent humans. Finally, artificial superintelligence studies explore the even more remote hypothesis of AI tools self-developing forms of intelligence far superior to and beyond the comprehension—and worrisomely the control—of humans (Mitchell, 2020, pp. 37-42, 109-139, 145-147, 150-152, 156-157, 209-220, 259-275, 289-303, 307-309, 345-349; McDaniel and Pease, 2021a, pp. 14–19; Poulton, 2024, pp. 6–8, 27–29).

The second axis is concerned with delineating and exploring the main human-like capabilities that AI tools have proven capable of emulating to date, namely vision (e.g., facial recognition); language processing in general (e.g., Google Translate), and conversation in particular (e.g., ChatGPT); decision-making (e.g., AlphaGo); and content-generation (e.g., EMI). The axis can be further divided into, first, general or lay studies; and, second, studies of a more technical nature, including in-depth discussions of the science, technicalities, and mechanics involved in AI tools, with such discussions revolving around two dominant AI paradigms: expert systems, programmed with exhaustive instructions (algorithms), rules and pathways for performing a task, on one side; and, on the other, machine learning systems, programmed to discover ("learn"), through parsing through vast troves of data guided by pre-defined basic instructions (algorithms), the most effective (even if counterintuitive) rules and pathways for performing a task, with the second better suited to tasks for which humans cannot easily define rules and pathways (Mitchell, 2020, pp. 7-26, 37-42, 67-108, 161-208, 223-289, 307-345).

The third axis of AI studies delves in detail into all aspects of the application of AI tools to very specific practical domains (e.g., medicine, law, finance...) and tasks (e.g., skin cancer diagnosis, probation eligibility, credit scoring...). One domain and task of particular interest for this study is that of predictive policing, a term applied to a range of law enforcement tools and practices based on the premise that, to a useful degree, it is possible, through finding in past data behavioral trends and patterns associated with specific factors, to forecast where and when ("hot spot analysis") or by whom ("individual risk assessment") a crime will be committed with the intention of identifying likely targets for police intervention and thus preventing crimes before they happen (Moses and Chan, 2016, pp. 806–807; Hamilton, 2021, pp. 58–59; McDaniel and Pease, 2021a, pp. 7–10; Utset, 2021, pp. 167–168; Poulton, 2024, pp. 45–64).

What follows explores the nexus between totalitarianism and AI studies by applying general and specialized knowledge on present-day narrow AI tools to the case of the Stalinist Soviet Union (rather than China) and the issue of political purging (rather than population control).

3 The question of method

This study utilizes a peculiar instance of the Political Science historical-contextual analysis method adapted and calibrated for exploring a counterfactual scenario. The method involves two steps. Firstly, the technique of dense narrative, at once descriptive and analytical, assists us in reconstructing and process-tracing tracing the profiles, diagnoses, prescriptions, and decisions of the main agents involved in the main purge of the Stalinist Great Terror, as well as the main policies, dynamics, and results unleashed by or closely interconnected with them. All elements are duly woven into their original, understanding-enabling context. Secondly, we explore some of the probable and plausible consequences if the actually registered historical scenario was tweaked by the introduction of our variable of interest, that is, the possibility of resorting to a predictive policing individual risk assessment tool. Keeping with the best practice in counterfactual scenario exploration as a scientific prop, the sole departure from the actually registered historical scenario involved in this exercise is the introduction of our variable of interest conceived in the narrowest of senses, which means that we assume a ready-todeploy AI tool without the technological infrastructure and smart environment that could have led to its creation and development in the first place; and, also, that we attempt to exercise the highest level of caution, sobriety and circumspection in estimating our variable's potential impact and consequences (Griffin, 1993, pp. 1,094-1,128; De Meur et al., 2008, pp. 152-155).

4 Introducing the Great Terror

If we were to make sense, in a nutshell, of the almost impossibly thick forest of interpretations and evidence brought together in the wake of a multitude of highly specialized studies in collections such as those put together by Getty and Manning (1993), McLoughlin (2004) or Harris (2013), we could state that the Great Terror was a set of escalating and more or less chaotically overlapping repression campaigns and operations conceived by the leadership of the Stalinist Soviet Union and executed above all but not only by the Main Directorate of State Security (GUGB) of the People's Commissariat for Internal Affairs (NKVD)—the Soviet political police—from the summer of 1936 to the autumn of 1938. The intention, we believe, was to rid the Communist Party, the Soviet State, and, ultimately, the entire Soviet social fabric, by means of job termination, deportation, imprisonment, or execution, of loosely defined categories of potential opponents or hinderers of the Stalinist regime as intolerable liabilities when the anticipated History-deciding great war of liberation against capitalist encirclement materialized.

With a dose of *ex post facto* rationalization, it can be argued that the Great Terror can best be understood if organized in three more or less distinctive phases, each composed of a set of major repression campaigns as well as smaller ramifications. The first phase, roughly

spanning between the summer of 1936 and the winter of 1937–1938, essentially targeted elements of the Party-State elite. For our purposes here, it suffices to highlight that it included a major repression campaign (we shall call it "The Great Anti-Trotskyist Party Purge") against Left Oppositionists—present and former Party members that at some point had rebelled against the Right-leaning "New Economic Policy" originally devised by Vladimir Lenin and were ever since suspected of conspiring to form an opposition to sabotage and overthrow the established Party leadership (something often associated with disgraced former political heavyweights like Leon Trotsky, Grigory Zinoviev and Lev Kamenev). The second phase, which unfolded from the summer of 1937 to the autumn of 1938, primarily targeted the Soviet masses, including "socially harmful elements" and possible fifth columnists associated with potentially irredentist nationalities. The third phase, which for the bulk took place in 1938 (but continued until 1940), targeted Party members and their accomplices accused of having unduly exacerbated or taken advantage of the preceding repression waves. Arguably, every campaign and operation had its own peculiar set of long-tail origins, immediate background, setup, dynamics, and results. What follows focuses exclusively on The Great Anti-Trotskyist Party Purge.

5 The Great Anti-Trotskyist Party Purge

5.1 Origins

On December 1, 1934, the Soviet dictator Joseph Stalin was informed that Sergei Kirov, one of his closest associates, had been shot on the premises of the Leningrad Communist Party organization by a disgraced former Party member. After inconclusive preliminary investigations, during which he criticized the political police, under Genrikh Yagoda, for negligence, the dictator ordered the creation of an extraordinary commission to investigate the murder to be led by Nikolai Yezhov, a top executive within the Stalinist leadership, and Leonid Zakovsky, an exuberantly overzealous political police officer disliked by Yagoda. A few days later, they announced the discovery of a "Leningrad terrorist center" composed of former Left Oppositionists. With Stalin's assent, fourteen were arrested by the NKVD and prosecuted as provided for by the Law of December 1, which authorized arrests and trials, with no possibility of legal defense or right to appeal, in cases of "anti-Soviet terrorism." Shortly, Stalin appointed Yezhov as something like "the Politburo's [the de facto highest organ of the Soviet dictatorship supervisor within the NKVD," a sort of shadow to the GUGB leadership with the right to pursue its lines of investigation. As soon as Yezhov assumed his new position, he decided to interview Zinoviev and Kamenev. Surprisingly, Zinoviev casually confessed that he had throughout continued to be plagued by doubts about the correctness of the Party line under Stalin and had known about previous informal anti-Stalinist groups within the Party but failed to report the matter. Egged on by Yezhov, Stalin ordered that nine formerly leading Left Oppositionists residing in Moscow, including Zinoviev and Kamenev, be arrested and prosecuted under the Law of December 1 (Jansen and Petrov, 2002, pp. 23-25; Boterbloem, 2004, pp. 119-127; Priestland, 2007, pp. 329–332; Khlevniuk, 2009, pp. 128–129; Lenoe, 2013, pp. 195–209; Davies and Harris, 2014, pp. 84–85).

Determined to clean house, among other measures, Stalin decided to launch a major Party purge to be led by Yezhov, who was suitably given de facto leadership over a new Department of Leading Party Organs (ORPO) charged with overseeing the entire Central Committee's nomenklatura (directly nominated posts). The last purge, launched in the spring of 1933, had meant to identify, interrogate and, if necessary, reprimand, demote or expel the Left-leaning and Rightleaning "careerists and opportunists" that the Stalinist leadership had elected as scapegoats for the countless instances of derailing that the collectivization and dekulakization policies had experienced during 1930-1933. That purge, according to Stalin, had failed, which meant that the new one would have to tighten the screws. Now, the purge commissions were to carefully compile and study all of the autobiographical sketches that suspect Party members had written when entrusted with Party and State posts in the past (something more or less mandatory) rather than basing their decisions on information collected during hearings. Moreover, those expelled were to be signaled to the NKVD for judicial investigation (Kotkin, 1997, pp. 298-311; Jansen and Petrov, 2002, pp. 25-38; Priestland, 2007, pp. 297-300, 318-329, 332-340; Khlevniuk, 2009, pp. 129-131; Brandenberger, 2012, pp. 39-50).

Within weeks, Yezhov wrote a manuscript entitled *From Factionalism to Open Counter-Revolution* arguing that, under Trotsky's leadership, cohorts of unrehabilitated former Left and Right-leaning dissidents had been conspiring with hostile forces abroad to install "organizational centers" throughout the Soviet Union to undermine the Stalinist leadership by perpetrating acts of terrorism (like Kirov's murder), sabotage, and espionage. Ultimately, the conspirators planned to weaken the country to make it an easy prey for foreign countries whose fascist-leaning governments had promised to reinstall them in power in a dismembered and capitalist-friendly Soviet Union. Yezhov submitted the manuscript to Stalin, who dismissed it as far-fetched and ordered him to close Kirov's dossier (Jansen and Petrov, 2002, pp. 23–25; Priestland, 2007, pp. 331–332; Davies and Harris, 2014, pp. 84–85).

5.2 Immediate background

By July 1935, Yezhov denounced that "self-entitled" local Party leaders were obstructing the purge, with a sense of impunity, by sheltering "their people" from scrutiny. Stalin authorized him to cancel the ongoing purge and replace it with a stricter one. Under the revised stipulations, regional Party leaders and ORPO delegates would organize and monitor the process. Also, during the hearings of those under scrutiny, anyone would be allowed to come forward with incriminating information. Still, in December 1935, Yezhov intensified his criticism, alleging that a significant number of regional Party leaders and ORPO delegates had been discovered to be in cahoots with deviant local leaders. With Stalin's blessing, the ongoing purge was canceled, and a harsher one was announced for 1936 (Kotkin, 1997, pp. 298–311; Jansen and Petrov, 2002, pp. 25–38; Priestland, 2007, pp. 297–300, 318–329, 332–340; Khlevniuk, 2009, pp. 129–131; Brandenberger, 2012, pp. 39–50).

Then, from January to March 1936, the Stalinist leadership came around to the conclusion that the main capitalist powers were, as in

1918-1919, toying with the possibility of diverting their economicmilitary tensions against the isolated socialist State. In response, Stalin ordered the NKVD to deport potentially irredentist populations in the Western border districts to the Soviet hinterland and authorized Yezhov to reopen the investigation surrounding Kirov's murder. In no time, Yezhov claimed to have obtained a confession from Valentine Olberg, a top spy whom the NKVD had recently arrested on suspicion of having become a Trotsky-sent "double agent," confirming his manuscript's thesis. Stalin hesitated over how to proceed until the final weeks of July 1936. Then, an attempted "fascist coup" and a Civil War erupted in Spain, where a friendly government was in power. Stalin was particularly impressed by Comintern reports that argued that, egged on by anti-Stalinist Communist organizations, the Spanish Communist Party had played a significant role in precipitating the unfortunate developments. Stalin concluded that, as harbingers of indiscipline and backstabbing, unrehabilitated Left-leaning communists had to be "unmasked" and put away sooner rather than later. The way was paved for what would evolve into the Great Terror (MacKenzie, 1994, pp. 74-77, 84; Samuelson, 2000, pp. 157-161; Jansen and Petrov, 2002, pp. 38-42, 43-48; Pons, 2002, pp. 1-3, 5-37, 44-45; Haslam, 2003, pp. 73-77; Jackson, 2003, pp. 94-101; Payne, 2003, pp. 1-62; Montefiore, 2004, pp. 188-193; Watson, 2004, pp. 149-150; Clark, 2005, pp. 186-203; Watson, 2005, pp. 133-136, 149-151; Baberowski and Doering-Manteuffel, 2009, p. 212; Khlevniuk, 2009, pp. 190-191; Rees, 2012, pp. 183-184; Haas, 2013, pp. 283-284, 287-291; Silverstone, 2013, pp. 65-82; Davies and Harris, 2014, pp. 60-61, 87-89, 125-130).

5.3 Setup

On July 29, 1936, Stalin decided to escalate the newest purge into a much broader anti-Trotskyist crusade, with Trotskyism now symbolizing Left Oppositionism in general. Genuinely unconditional unity under the Stalinist leadership was the envisioned goal. The essentials of the campaign were planned in early August 1936. Along with massive propaganda efforts to discredit potential dissidents as coup plotters and puppets of fascist powers, two operational dimensions were to be paramount. Under the organizational dimension, the ORPO and the Party Control Commission (KPK) were instructed to compile lists of former and present Party members that the materials gathered during the Party purges since 1933, including regular Party archives and purge-hearings reports, signaled as potential Left Oppositionists. Those materials were to be complemented by new information collected during sessions of criticism and self-criticism to be hosted by all Party organizations. All plausible suspects remaining in the Party should be immediately expelled. Under the judicial dimension, the NKVD was instructed to detain and interrogate everyone on the lists to assess personal guilt and find out about accomplices for follow-up detentions and interrogations. If an interrogation did not clear the suspect, the NKVD was to forward a judicial indictment to the appropriate Prosecutor's Office and court. The accused were to be tried under the existing legislation on counter-revolutionary crimes, including Article 58 of the Penal Code and the Law of December 1 (Manning, 1993, pp. 168–185; Jansen and Petrov, 2002, pp. 38, 46–48, 57; Hedeler, 2004; Montefiore, 2004, pp. 192–202; Unfried, 2004, pp. 186–190; Chase, 2005, pp. 228–237; Priestland, 2007, pp. 348–352; Khlevniuk, 2009, pp. 169; Clark, 2011, pp. 242–275; Rees, 2012, pp. 184–185; Schlögel, 2012, pp. 68–80, 95–103; Brandenberger, 2013, pp. 146–147; Goldman, 2013).

5.4 Dynamics and results

The Purge went ahead according to plan during the following weeks. By the second half of September 1936, Stalin unceremoniously replaced Yagoda with Yezhov as NKVD leader. In February 1937, Yezhov accused Yagoda's NKVD leadership of having fallen prey to "the great anti-socialist, anti-Soviet and anti-Stalinist conspiracy," citing hard evidence of an embarrassing reality of ineffectiveness, inefficiency, and amateurism deep within the GUGB. The move boosted Yezhov's aura in the eyes of the Stalinist leadership, paving the way for major purges in the NKVD and elsewhere. When Stalin decided to authorize the launching of new repression campaigns directed against the masses in the summer of 1937, Yezhov was very much in his good graces. From the winter of 1937-1938 on, however, troubling signs started to accumulate around Yezhov's NKVD's handling of the mass operations. Ruthless purges were depriving the political police of its already sparse number of experienced officers when most of the staff was overburdened with multiple repression waves, which was leading to the ad hoc employment of amateurs to help carry out the job. Rumors started to circulate that cases were being fabricated in a frenzy to produce results; that the use of torture to obtain confessions had become the norm; and that no one was reviewing the "investigatory" work allegedly done. A shadow over Yezhov's NKVD leadership steadily grew in the following months, until, in November 1938, Stalin ordered the termination of all still ongoing repression campaigns and operations, and replaced Yezhov as NKVD leader. Ultimately, a commission tasked with reviewing the NKVD's work during the period reported that the rumored litany of "excesses and deviations" had impacted almost all of the campaigns and operations, and not only the mass operations, since the summer of 1936. The self-evident and abundantly documented complicity of the Stalinist leadership with Yezhov's "better ten innocent imprisoned or dead than one guilty man free" approach throughout the period remained unmentioned. Yezhov and his entourage were sacrificed as proverbial scapegoats. Finally, in March 1939, Stalin admitted that many innocent communists had wrongfully been caught in the process but credited the gigantic purge with bringing unshakable unity and energy-boosting rejuvenation to the Party ranks. Tellingly, by then, around 80% of all Party members had only joined the organization after 1923; more than 25% had only joined in 1938-1939 (Stalin, 1977, pp. 367-376; Manning, 1993, pp. 193-194; Kotkin, 1997, pp. 329-332; Jansen and Petrov, 2002, pp. 49-50, 53-59, 97-98, 108-111, 125-128, 136-138, 156-165, 172-192; Rees, 2002, p. 194; Boterbloem, 2004, pp. 168-174, 178-179; Khlevniuk, 2004, pp. 26-30; McLoughlin, 2004, pp. 126-144; Montefiore, 2004, pp. 204-205, 287-293, 301-304; Petrov and Roginskii, 2004, pp. 158-171; Schafranek and Musienko, 2004; Shearer, 2004, pp. 87-89; Vatlin and Musienko, 2004; Zhuravlev, 2004, pp. 233-238; Watson, 2005, p. 136; Priestland, 2007, pp. 385, 388-393; Baberowski

Doering-Manteuffel, 2009, pp. 214–216; Khlevniuk, 2009, pp. 198–201, 205–216; Shearer, 2009, pp. 130–157; Barnes, 2011, p. 55; Rees, 2012, pp. 185–186; Schlögel, 2012, pp. 190–193, 446, 472–491, 500–501, 516–517; Rittersporn, 2013, pp. 184–186).

6 Discussion of the counterfactual scenario

What could have changed in the design and implementation of The Great Anti-Trotskyist Party Purge had the Stalinist authorities had had access to an AI tool for identifying potential carriers of disloyal and coupist propensities within the Party by July 1936? Specifically, from the point of view of the designers and implementers of the campaign, what would have been the advantages and drawbacks? Before attempting to answer, it is important to mention three points.

First, a somewhat technical introduction is due. The AI tool involved would have been a ready-to-deploy predictive policing individual risk assessment tool based on a multi-layered deep neural network trained (phase one) and fine-tuned (phase two) with thousands of detailed profiles (built from general Party archives and the usually mandatory autobiographical sketches) of members of Comintern-affiliated Communist Parties all over the world labeled with one of two, either-or outputs: "untrustworthy" (meaning someone who adopted disloyal or oppositionist behavior in times of crisis) and "trustworthy" (meaning someone who remained obedient toward the established Party leadership in times of crisis). Thus, the tool would use disloyal behavior and coupism as a proxy for what, in Soviet parlance, passed for Left Oppositionism or Trotskyism. During training and fine-tuning, that is, after its foundational architecture and hyperparameters had been set by the programmers, the tool would have had the chance to organically derive from the data and steadily refine multiple intuitive and non-intuitive correlations between dozens of factors, that is, aspects of a profile potentially usable as predictors, like birthdate, birthplace, nationality, ethnicity, family history, residence history, job history, military record, pre-Party political history, record of detentions and exiles under non-communist authorities, official Party posts history, special Party assignments history, travel history, non-Party contacts inside the country of residence, contacts outside the country of residence, personal achievements, personal failings, and so on. As a result, under the tutelage of learning supervisors operating a feedback and reward scheme, it would have had computed from scratch and then steadily adjusted the factor-based formula of rules for performing its task, including the weights, values, and thresholds to assign to each factor, so as to deliver an as confident as possible output for the training and fine-tuning datasets, and hopefully beyond (Mitchell, 2020, pp. 72–88; Hamilton, 2021, pp. 60; McDaniel and Pease, 2021a, pp. 8-10, 14-17; Utset, 2021, pp. 167-168; Chin and Lin, 2022, pp. 15-18, 220-221; Poulton, 2024, pp. 15-16).

Second, a political theory point is relevant. The tool would have been eerily in tune with the Stalinist *cum* totalitarian way of framing political crime captured by Hannah Arendt, in *Origins of Totalitarianism*, through the notion of "objective crime." According to Arendt, under totalitarian conditions, the suspected offense is replaced by the possible crime, which is based on the logical anticipation of objective developments independently of the would-be perpetrator's subjective motivations and intentions at any given moment. Thus,

someone who is judged a carrier of negative tendencies is deemed worthy of preventive punishment for that alone in order to shield the regime and its ideology-based vision of the future, beforehand, from every imaginable threat (Arendt, 2017, pp. 551–559).

Third, an assumption must be spelled out at this point. Namely, we presuppose throughout that the perpetrators would deal with the tool from a plausible but somewhat stereotypical communist standpoint of optimistic faith in material progress in general and cutting-edge technology in particular as harbingers of superior solutions for resolving human problems (also due to their supposedly enhanced neutrality and objectivity).

6.1 Potential advantages

What would be the likely advantages, for both the designers and implementers, of deploying such a tool to help carry out The Great Anti-Trotskyist Party Purge?

First, with abundant data in existence, the purge net could be cast much wider than originally envisioned, potentially to all Party and former Party members and candidates. What would be needed would be to convert all the dispersed regular Party archives and autobiographical sketches concerning present and former Party members and candidates not touched by the 1930–1936 purges into the sort of profiles that had been put together for those targeted (Hamilton, 2021, pp. 59–61; McDaniel and Pease, 2021a, pp. 19–26).

That would, of course, be a labor and time-intensive task in itself, but second, and on balance, since the tool would afterward be able to scan thousands of profiles at great speed, the resources and time needed to carry out the organizational dimension of the purge would probably diminish (Hamilton, 2021, pp. 59–61; McDaniel and Pease, 2021a, pp. 19–26).

Third, the judicial task itself would become much faster, smoother and, significantly, much less prone to snowballing effects too, since most of the investigation work of the NKVD, including the whole task of post-detention interrogation, with the litany of abuses and mushrooming instances of follow-up repression associated, as well as most of the hunch-based arbitrary initiatives of the professional political police officers and their amateur co-workers, could be scrapped (Hamilton, 2021, pp. 59–61; McDaniel and Pease, 2021a, pp. 19–26).

In brief, then, it is reasonable to assume that an AI-boosted purge would permit the disciplined filtering of an incomparably larger universe of potential political criminals and proceed in a much more orderly, impersonal, and selective manner.

6.2 Potential drawbacks

What about the drawbacks resulting specifically from the use of the AI tool? They would likely come in many peculiarly subtle ways, categorizable into three types: drawbacks related to data collection, data analysis, and follow-up intervention.

First, the tool could have deeply ingrained within its system a series of flaws resulting from the processes of collecting the data that would have had originally fed its training and fine-tuning stages (in a sense underlined by the adage "there is no such thing as raw data; all data are cooked"). A number of issues merit reference. The Soviet and

foreign archives and auto-biographical sketches feeding the profiles, even if large enough for the purpose, could be a mere and skewed sample of the total profiles that all Comintern-affiliated Communist Parties could have collected and put together (for instance, for security reasons data density would probably be much lower in countries with highly repressive anti-communist governments). Moreover, the actually recorded data could have been inaccurately registered in the first place (for example, due to members lying about certain factors involved in their profiles, or due to bureaucrats carelessly compiling or verifying such records, or doctoring them under orders of Party leaders eager to minimize records of dissent). Also, the original datasets would have come from different organizations with different organizational cultures operating in different countries, subject to different political-cultural contexts, using different languages (something as trivial as idioms and nuances lost in translation could matter). All that could have affected the way records had been made and made available to the tool's programmers as distinct datasets. One fundamental aspect is that quite different guidelines, definitions, and thresholds for signaling and taking stock of disloyalty and opposition could have had been used by each Communist Party and even by different leaderships of those parties at different times, resulting in inconsistently labeled data. Intriguingly, certain categories of people could have had been deemed disloyal oppositionists within foreign Communist Parties at some point for being pro-Stalinist when Stalinism had not yet fully triumphed in the Soviet Union. Significantly, even if the tool's programmers had attempted to minimize biases unduly discriminating against certain groups, underlying factors highly correlated with the excluded factors could still be present in the data and contaminate other factors (Moses and Chan, 2016, pp. 809-819; Mitchell, 2020, pp. 120-139, 263-275, 289-303; Babuta and Oswald, 2021, pp. 225-231; Chan, 2021, 44-54; Hamilton, 2021, pp. 65-70; McDaniel and Pease, 2021a, pp. 19-26; McDaniel and Pease, 2021b, pp. 84-98; Shapiro, 2021, pp. 187-199).

Second, even if fed perfect data, the tool's analytical abilities would be inherently limited, and owing to the nature of the task, there would be no way to assess its on-the-job performance. Crucially, it would output a forecast based on a probability calculus inseparable from a level of confidence and a margin of error, which means that many innocents could be targeted anyway (conversely, many that would be found "guilty" by other means could evade the new system). It merits clarification that rather than answering the question, "What is the likelihood that this individual will be disloyal or oppose the leadership in times of crisis?" the tool would answer the question, "To what extent is this individual similar to other individuals in the historical data who went on—according to the existing records—to behave in a way akin to disloyalty and opposition in times of crisis?" Significantly, the tool would have to work from the premise that the future would be like the past, that is, that people would behave in the same way as their past analogs even if the dramatic conditions of the Soviet Union in the late 1930s, when a final crusade against capitalist encirclement was envisioned, would have naturally tended to push communists toward the sort of unconditional loyalty and obedience that would have made little sense in less dramatic contexts captured by a good deal of the historic data. The possibility that past contexts would have been very different from present times in terms of motives, means, and opportunities for disloyalty and oppositionism would constitute a severe handicap for the tool. A related critical issue would be that the tool would have been unable to pick up or at least give due weight to most of the Soviet-specific factors that would probably be better at predicting disloyalty and opposition in the Soviet late 1930s, like loss of relatives and hence resentment against the unprecedented and (as of yet) unparalleled process of Stalinist collectivization—as they would have been absent from the significant portion of the historic data pertaining to members of foreign Communist Parties. Moreover, owing to the black box properties inherent in deep neural networksthe tool would have "learned" cues statistically associated with the relevant outputs, whether they were clear, relevant, and made sense, or they were inscrutable and abstruse from a human perspective—the ORPO, KPK, and NKVD officials would have been unable to explain to the Stalinist leadership why a particular individual was to be or had been arrested and not the other, which, given Stalin's trademark suspiciousness and capriciousness, would render them vulnerable to accusations and repression for shirking responsibility and accountability ("tech-washing"). They would also remain as liable to over-suspicious accusations and repression for negligence regarding "hidden enemies" as in the historical scenario since the tool itself, like all deep neural networks, would be possible to surreptitiously trick into making errors and hence vulnerable to suffering hardly detectable adversarial attacks (for example, as Stalin would plausibly be informed at some point, the possibility would exist of "enemies of the Revolution" undercover within the ORPO, KPK, and NKVD, having grasped the tool's modus operandi, finding ways to fudge with the auto-biographical sketches to be analyzed almost imperceptibly and just enough to maliciously change outputs). Paranoia could thus still poison and derail the whole process on a large scale (Moses and Chan, 2016, pp. 809-819; Mitchell, 2020, pp. 120-139, 263-275, 289-303; Babuta and Oswald, 2021, pp. 225-231; Chan, 2021, pp. 44-54; Hamilton, 2021, pp. 65-70; McDaniel and Pease, 2021a, pp. 19-26; McDaniel and Pease, 2021b, pp. 84-98; Shapiro, 2021, pp. 187-199).

Third, there could be drawbacks associated with the tool's handling by the ORPO, KPK, and NKVD operatives. A host of issues can be imagined. We cannot assume that even if the tool gave "accurate predictions" and even if we presume that most of the involved would tend to defer to the automated decision-making system ("trust the machine")—which would, in any case, mean that even the tool's most egregiously wrong forecasts, in either sense, could end up being wrongfully trusted -, the possibility of specifically human error would disappear. On one side, many of the involved could go rogue in the sense of developing doubts concerning the machine and preferring to correct its results with their intuition ("humans know better"). On the other, it would not be guaranteed that, even if predictions were perfect and trusted, the NKVD would be able or willing to perfectly follow up with the appropriate measures, including locating the targets, arresting them, and subjecting them to the planned judicial process (Moses and Chan, 2016, pp. 809-819; Mitchell, 2020, pp. 120-139, 263-275, 289-303; Babuta and Oswald, 2021, pp. 225-231; Chan, 2021, pp. 44-54; Hamilton, 2021, pp. 65-70; McDaniel and Pease, 2021a, pp. 19-26; McDaniel and Pease, 2021b, pp. 84-98; Shapiro, 2021, pp. 187-199).

7 Conclusion

All things considered, it can be said that the counterfactual AI-enhanced version of The Great Anti-Trotskyist Party Purge would have limited a not insignificant portion of the worst

"excesses and deviations" that plagued the historical version. That the *quantity* of terror would likely decrease significantly deserves to be highlighted. However, terror prone to randomness would remain terror prone to randomness, rather than targeted, let alone surgical, repression, in the *qualitative* sense that the main promise of superior neutrality and objectivity would have gone hopelessly unrealized. In no way would AI have made the process "more rational" in the conventional sense of reasonable and efficient congruence between means and ends.

If cogent of both advantages and drawbacks, would the Stalinist leadership choose to adopt the tool? That is a matter of speculation. Nevertheless, it is worth noting that it would probably have missed two of the functions that The Great Anti-Trotskyist Party Purge came to fulfill within the Communist Party of the Soviet Union. First, to force Party members in general to become fully rallied and active behind the Stalinist leadership through assuming the responsibility of permanent vigilance over their peers; furthermore, second, and in the wake of their active participation, to impel the ultimate winners of the purging process to develop a deep and lasting sense of complicity in the Stalinist leadership's crimes and a sort of Stockholm syndrome-like gratitude to it for the outcome. Resort to AI would have precluded both functions, eliminating from the equation the human involvement and mobilization factors that the Stalinist leadership so keenly valued and, justifiably or not, so ostensibly relied upon as a distinctive advantage of the regime for the coming conflict.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

References

 $Arendt, H.\,(2017).\,The\,origins\,of\,total itarian is m.\,Great\,Britain:\,Penguin\,Random\,House.$

Baberowski, J., and Doering-Manteuffel, A. (2009). "The quest for order and the pursuit of terror: National Socialist Germany and the Stalinist Soviet Union as multiethnic empires" in Beyond totalitarianism: Stalinism and Nazism compared. eds. M. Geyer and S. Fitzpatrick (New York: Cambridge University Press), 180–230.

Babuta, A., and Oswald, M. (2021). "Machine learning predictive algorithms and the policing of future rimes: governance and oversight" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 214–236.

Barnes, S. A. (2011). Death and redemption: The gulag and the shaping of soviet society. Princeton: Princeton University Press.

Bosworth, R. J. B. (1998). The Italian dictatorship: Problems and perspectives in the interpretation of Mussolini and fascism. London: Arnold.

Boterbloem, K. (2004). The life and times of Andrei Zhdanov, 1896–1948. Montreal: McGill-Queen's University Press.

Brandenberger, D. (2012). Propaganda state in crisis: Soviet ideology, indoctrination, and terror under Stalin, 1927–1941. New Haven: Yale University Press.

Brandenberger, D. (2013). "Ideological zig-Zag: official explanations for the great terror, 1936-1938" in The anatomy of terror: Political violence under Stalin. ed. J. Harris (Oxford: Oxford University Press), 143–157.

Broszat, M. (1994). "A social and historical typology of the German opposition to Hitler" in Contending with Hitler: Varieties of German resistance in the third Reich. ed. D. C. Large (New York: Cambridge University Press), 25–33.

Cain, G. (2021). The perfect police state: An undercover odyssey into China's terrifying surveillance dystopia of the future. New York: PublicAffairs.

Chan, J. (2021). "The future of AI in policing: exploring the sociotechnical imaginaries" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 41–57.

Author contributions

HV: Writing - review & editing, Writing - original draft.

Funding

The author(s) declare that no financial support was received for the research and/or publication of this article.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative Al statement

The author(s) declare that no Gen AI was used in the creation of this manuscript.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Chase, W. (2005). "Stalin as producer: the Moscow show trials and the construction of mortal threats" in Stalin: A new history. eds. S. Davies and J. Harris (New York: Cambridge University Press), 226–248.

Chin, J., and Lin, L. (2022). Surveillance state: Inside China's quest to launch a new era of social control. New York: St. Martin's Press.

Clark, M. (2005). Mussolini, Great Britain: Pearson.

Clark, K. (2011). Moscow: The fourth Rome: Stalinism, cosmopolitanism, and the evolution of soviet culture, 1931–1941. Cambridge: Harvard University Press.

Davies, S., and Harris, J. (2014). Stalin's world: Dictating the soviet order. London: Yale University Press.

De Meur, G., Rihoux, B., and Yamasaki, S. (2008). "Addressing the critiques of QCA" in Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques. eds. B. Rihoux and C. C. Ragin (Thousand Oaks: SAGE Publications), 147–165.

Fitzpatrick, S. (2000). Everyday Stalinism: Ordinary life in extraordinary times: Soviet Russia in the 1930s. New York: Oxford University Press.

Getty, J. A., and Manning, R. T. (1993). Stalinist terror: New perspectives. Cambridge: Cambridge University Press.

Gleason, A. (1995). Totalitarianism: The inner history of the cold war. New York: Oxford University Press.

Goldman, W. Z. (2013). "Small motors of terror: the role of factory newspapers" in The anatomy of terror: Political violence under Stalin. ed. J. Harris (Oxford: Oxford University Press), 241–262.

Griffin, L. J. (1993). Narrative, event-structure analysis, and causal interpretation in historical sociology. *Am. J. Sociol.* 98, 1094–1133. doi: 10.1086/230140

Gurian, W. (1978). The totalitarian state. *Rev. Polit.* 40, 514–527. doi: 10.1017/S0034670500046155

Haas, M. L. (2013). "Soviet grand strategy in the interwar years: ideology as realpolitik" in The challenge of grand strategy: The great powers and the broken balance between

the world wars. eds. J. W. Taliaferro, N. M. Ripsman and S. E. Lobell (Cambridge: Cambridge University Press), 279–307.

Hamilton, M. (2021). "Predictive policing through risk assessment" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 58–78.

Harris, J. (2013). The anatomy of terror: Political violence under Stalin. Oxford: Oxford University Press.

Haslam, J. G. (2003). "Soviet Russia and the Spanish problem" in The origins of world war two: The debate continues. eds. R. Boyce and J. A. Maiolo (New York: Palgrave MacMillan), 70–85.

Hedeler, W. (2004). "Ezhov's scenario for the great terror and the falsified record of the third Moscow show trial" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 34–55.

Jackson, P. (2003). "France" in The origins of world war two: The debate continues. eds. R. Boyce and J. A. Maiolo (New York: Palgrave MacMillan), 86–110.

Jansen, M., and Petrov, N. (2002). Stalin's loyal executioner: People's Commissar Nikolai Ezhov: 1895–1940. Stanford: Hoover Institution Press.

Khlevniuk, O. V. (2004). "Party and NKVD: power relationships in the years of the great terror" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 21–33.

Khlevniuk, O. V. (2009). Master of the house: Stalin and his inner circle. New Haven: Yale University Press.

Kotkin, S. (1997). Magnetic mountain: Stalinism as a civilization. Berkeley: University of California Press.

Lefort, C. (1986). The political forms of modern society: Bureaucracy, democracy, totalitarianism. Cambridge: MIT Press.

Lenoe, M. (2013). "Fear, loathing, conspiracy: the Kirov murder as impetus for terror" in The anatomy of terror: Political violence under Stalin. ed. J. Harris (Oxford: Oxford University Press), 195–215.

MacKenzie, D. (1994). From Messianism to collapse: Soviet foreign policy, 1917–1991. United States of America: Harcourt Brace College Publishers.

Manning, R. T. (1993). "The great purges in a rural district: Belyi rayon revisited" in Stalinist terror: New perspectives. eds. J. A. Getty and R. T. Manning (Cambridge: Cambridge University Press), 168–197.

McDaniel, J. L. M., and Pease, K. G. (2021a). "Introduction" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 1–38.

McDaniel, J. L. M., and Pease, K. G. (2021b). "Policing, AI and choice architecture" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 79–110.

McLoughlin, B. (2004). "Mass operations of the NKVD, 1937-38: a survey" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 118–152.

Mitchell, M. (2020). Artificial intelligence: A guide for thinking humans. Milton Keyes: Pelican Books.

Montefiore, S. S. (2004). Stalin: The court of the red tsar. London: Phoenix.

Moses, L. B., and Chan, J. (2016). Algorithmic prediction in policing: assumptions, evaluation, and accountability. *Polic. Soc.* 28, 806–822. doi: 10.1080/10439463.2016.1253695

Neumann, S. (1965). Permanent revolution: Totalitarianism in the age of international civil war. New York: Frederick A. Praeger.

Payne, S. G. (2003). Soviet anti-fascism: theory and practice, 1921-1945. *Totalit. Mov. Polit. Relig.* 4, 1–62. doi: 10.1080/14690760412331326118

Petrov, N., and Roginskii, A. (2004). "The "polish operation" of the NKVD, 1937-38" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 153–172.

Pons, S. (2002). Stalin and the inevitable war: 1936-1941. Milton Park: Routledge.

Poulton, N. (2024). AI explained: Facts, Fiction & Future. Great Britain: Packt Publishing Limited.

Priestland, D. (2007). Stalinism and the politics of mobilization: Ideas, power and terror in inter-war Russia. Oxford: Oxford University Press.

Rauschning, H. (2010). The revolution of nihilism: Warning to the west. Kila: Kessinger Publishing.

Rees, E. A. (2002). "The great purges and the XVIII party congress of 1939" in Centrelocal relations in the Stalinist state, 1928–1941. ed. E. A. Rees (New York: Palgrave MacMillan), 191–211.

Rees, E. A. (2012). Iron Lazar: A political biography of Lazar Kaganovich. London: Anthem Press.

Rittersporn, G. T. (2013). "Terror and soviet legality: police vs judiciary, 1933-1940" in The anatomy of terror: Political violence under Stalin. ed. J. Harris (Oxford: Oxford University Press), 176–190.

Roberts, D. D. (2006). The totalitarian experiment in twentieth-century Europe: Understanding the poverty of great politics. Milton Park: Routledge.

Roberts, D. D. (2020). Totalitarianism. Croydon: Polity Press

Samuelson, L. (2000). Plans for Stalin's war machine: Tukhachevskii and military-economic planning, 1925-1941. New York: Palgrave MacMillan.

Schafranek, H., and Musienko, N. (2004). "The fictitious "Hitler-Jugend" conspiracy of the Moscow NKVD" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 208–224.

Schlögel, K. (2012). Moscow, 1937. Oxford: Polity Press.

Shapiro, A. (2021). "Accountability and indeterminacy in predictive policing" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 185–213.

Shearer, D. R. (2004). "Social disorder, mass repression and the NKVD during the 1930s" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 85–117.

Shearer, D. R. (2009). Policing Stalin's socialism: Repression and social order in the Soviet Union, 1924–1953. New Haven: Yale University Press.

Silverstone, S. A. (2013). "The legacy of coercive peace building: the Locarno treaty, Anglo-French grand strategy, and the 1936 Rhineland crisis" in The challenge of grand strategy: The great powers and the broken balance between the world wars. eds. J. W. Taliaferro, N. M. Ripsman and S. E. Lobell (Cambridge: Cambridge University Press), 65–92.

Stalin, J. (1977) in Report to the eighteenth congress of the communist party of the Soviet Union (bolshevik) on the work of the central committee (1939), in the essential Stalin: Major theoretical writings, 1905–52. ed. B. Franklin (London: Croom Held), 334–392.

Sturzo, L. (1936). The totalitarian state. Soc. Res. 3, 222–235.

Talmon, J. L. (1961). The origins of totalitarian democracy. London: Mercury Books.

Tillich, P. (1934). The totalitarian state and the claims of the church. Soc. Res. 1, 405-433.

Traverso, E. (2001). Le Totalitarisme: Le XXe Siècle en Débat. France: Éditions du Seuil.

Unfried, B. (2004). "Foreign communists and the mechanisms of soviet cadre formation in the USSR" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 175–193.

Utset, M. A. (2021). "Predictive policing and criminal law" in Predictive policing and artificial intelligence. eds. J. L. M. McDaniel and K. G. Pease (Milton Park: Routledge), 163–182.

Vatlin, A., and Musienko, N. (2004). "Stalinist terror in the Moscow district of Kuntsevo, 1937-8" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 194–207.

Watson, D. (2004). "The politburo and foreign policy in the 1930s" in The nature of Stalin's dictatorship: The politburo, 1924–1953. ed. E. A. Rees (Gordonsville: Palgrave MacMillan), 134–167.

Watson, D. (2005). Molotov: A biography. Basingstoke: Palgrave MacMillan.

Zhuravlev, S. (2004). "Terror against foreign workers in the Moscow Elektrozavod plant, 1937-8" in Stalin's terror: High politics and mass repression in the Soviet Union. eds. B. McLoughlin and K. McDermott (New York: Palgrave MacMillan), 225–240.