information

Article

Keeping the Spirit in the Bottle: On Pathological Reduction of Information in Totalitarianism

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Abstract: This article begins with disputing the teleologically charged notion of unstoppable information growth, pointing at the alternation of informational contraction and expansion in open dynamic systems. Narrowing the focus, it turns to the 20th century totalitarian systems as particularly paradoxical informational environments: Being less capable of processing information than their democratic counterparts and therefore more vulnerable to overloads, they are particularly prone to suppressing informational transmission in some areas, codes and media. *Dilution* and *conflation* are singled out as the most common ways of lessening the informational value of communication in totalitarian societies. Whereas the first greatly increases the ratios of signs to messages and messages to interactions, causing redundancy and semantic inflation, the second rolls back preexisting functional differentiations (person vs. social role, sender vs. message, message vs. information etc.) within societies and their communicative system. It is argued that both attempts at semantic impoverishment of public communication in totalitarianism lead to the pathological states, failing to reduce the overall amount of information within the systems in question and precipitating the very informational explosions they were designed to prevent.

Keywords: information; noise; redundancy; semantic inflation; totalitarianism; democracy; functional differentiation

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1. Introduction: Why (Information) Greed Is Not Always Good for Open Systems

The title of this article begs some explanation: Why should information in a system be ever reduced in the first place? The answer to this question highlights the specificity of open dynamic systems in relation to their closed homeostatic counterparts. In the world described by classical physics, information decrease would never become an issue worth pondering since this is what happens to systems all the time anyway: Hot and cold streams in a sink eventually converge on the same temperature, the molecules of different velocities get mixed up more and more evenly in a room as time goes by, and the frequency of individual letters in an unfolding narrative gets ever closer to the general probability of their occurrence in a given language [1–3]. Whenever there is an initial difference between the parts of the system—hot vs. cold, quick vs. slow, and frequent vs. rare—it evaporates in the process of progressive homogenization. In the end, the shapeless heaps of chaos have nothing to tell themselves since all their parameters have more or less the same values everywhere [4,5].

Inversely, open dynamic systems keep themselves alive by producing, importing and maintaining the differences between themselves and others, as well as between their own states and parts [6–8]. Whereas the first distinction (*self* vs. *other*) measures systemic autonomy, the second (*before* vs. *after*) monitors the system's learning and adaptation, and the third (*here* vs. *there*) evaluates its diversity. The respective cases in point are the intake of complex molecules high in free energy by a living organism, the self-organization of human memory and language, and the multiplicity of social roles, institutions and cognitive networks in modern societies [2,9–21]. In each of these processes, the total information is

a sum of minimal (1-bit) differences pinned, in their turn, to the aforementioned binary distinctions. Evidently, the open system with the biggest number of such privative oppositions at a given moment possesses the highest volume of information [22–27]. This richness on various occasions has been interpreted as a positive correlate of self-organization, a negative correlate of entropy, and more broadly, a general symptom of fitness in the fight for systemic survival [2,28–30]. While each of those correlations seems right, particularly at a small scale, things get more controversial as long as we attempt approaching actual open systems in their entirety.

Indeed, there are reasons to believe that the slogan 'the more the merrier' does not necessarily apply to information, and self-organization is not always preferable to entropy as far as systemic well-being is concerned [31]. Ethnic segregation in many American cities is the antipode of the random distribution of various races across urban dwellings [32]. If the habitat choices were made in a colour-blind fashion, ghettos were statistically improbable. Nevertheless, it is hard to dispute that the reduction of systemic entropy by means of racial or religious separation corrupts societies from within and damages their long-term stability [33]. If anything, modern societies are too well-organized in terms of ethnicity, immigration status and income: in recognition of this fact, such measures as school enrolment lottery are specifically designed to disrupt multiplication of privileges through the injection of stochasticity into educational careers [34].

The flip side of letting uncertainty in is keeping information out, which has been commonly adjusted to the throughput capacity of systems in question. The collapse of human organism were inevitable if its doors of perception were wide open all the time. It is for that reason that only a tiny part of the sensory impressions gets transferred to the brain, protecting the later from the overflow of information [35–37]. There is some circumstantial evidence that such aptly placed bottlenecks protect minds better than societies: at any rate, the laments of people drowning in the sea of information have been heard since time immemorial, and they grow louder with every change of cultural or communicative paradigms [38,39].

As a kind of system greatly dependent upon micromanagement and generally hostile to social self-regulation, dictatorship could be expected to have hard time balancing suppression of information with its intake and production on the spot [40]. Even the preliminary study of this balance in its dynamic complexity would require much more data and methodological insights than a short article would allow. Hence, the current text is focused on informational reduction only. In the following section, the particularly severe constraints regulating production and intake of information in autocracies are explained through the close intertwining of their peculiarly configured political and interactional systems.

2. *Odi et Amo*: Why Autocracies Seek and Abhor Information at the Same Time

It is well-known that the pervasive fear of information explosion reaches its peak in a totalitarian state, and that it is habitually combined with the stereotypical laments about information shortages across the state which keep both leaders and followers in the dark [41–43]. One of the main reasons for this anomaly is probably the suboptimal distribution of information across such systems: the collection of data essential for staving off momentous challenges has been given a clear priority over the informational backing of the more lasting concerns. This distribution appears to be at variance with the high proportion of long-term memory in brains, computers and political systems: insofar as the information collected in such storages affects probabilities of future events far beyond the horizon of observation, it is capable of preemptively reducing social complexity and boosting their stability [44–47]. Even such a volatile system as a hereditary monarchy could stabilize political lives for generations if succession rules were spelled out clearly enough [48–50]. Indeed, those rules more often than not translated the difference between *before* and *after* (see above) into a seamless, unopposed transition from one ruler (A) to another (A'), with hardly any uncertainty sneaking in between *le rois est mort* and *vive le roi* [51]. The same could be said, with some qualifications, about democracies which

organize themselves through elections and laws [52]: the multiplicity of political choices (*A*, *B*, *C*, ... X) gets absorbed through the preemptive regulation of transition points from *before* to *after* via term limits, eligibility regulations and other invariant long-term constraints [53].

In contrast, the informational foundations of dictatorships are disproportionally skewed towards short-time sensitivity to environmental pressures. Since the assumption of extraordinary power commonly involves the destruction of rotation mechanisms (or succession rules), compounded by the betrayal of allies and the violence directed against adversaries [54], the stability of most tyrannies ends abruptly with the death of a tyrant: indeed, the variety of futures contained in the move from *before* to *after* lacks temporal or procedural limitations, bordering on unpredictability. Instead of conditional causality common for monarchic successions ($A \rightarrow A'$), or procedurally restricted equipollent oppositions in democratic elections (*A* vs. *B* vs. *C* ... vs. *X*), the choices in totalitarian systems are limited to the murky privative opposition between the current, deictically defined center of power (*A*) and all other imaginable political agents (*non-A*) [53,55]. Lacking legitimacy and facing threats from all sides, such regimes are generally preoccupied, if not overwhelmed, by instantly responding to cues spelling betrayal, breakup or sudden resource depletion [56]. In this vein, inverting the saying attributed to Jesus—"Whoever is not against us is for us" (Luke 9:50; Mark 9:40), Benito Mussolini interpreted the difference between power and opposition as the all-out struggle between 'us' and 'them' ("*O con noi o contro di noi*" [57]). Whenever such regimes care to stage elections, they most commonly function as plebiscites in which the participants are offered a single choice between confirming the incumbent(s) and bearing the consequences of non-compliance [58]. Accordingly, as the unmarked pole of the opposition, devoid of stable identity and function in the system, 'them' (*non-A*) remains an inexhaustible source of systemic uncertainty: the notoriously underspecified semantics of such othering terms as 'barbarians' or 'enemies of the people' results in relentless repressions which often frequently amplify, rather than reduce, the unpredictability of the future [59]. While the whole totalitarian societies get violently reduced to the Manichean dichotomies of self-appointed Good and other-defined Evil, their basic social semantics—the differences of status, income or ideology—remains unarticulated, buried here and there like the time bombs waiting to go off.

The attempts to prevent such explosions by limiting the amount of information in communication are as rational in political systems as they are in human brain (see above), but the details of the former have been hardly ever given a close look up to date. Indeed, most studies up to date merely mentioned information scarcity caused by censorship, prohibitions of foreign publications and other forms of extreme external regulation, without looking at the specific small-scale processes making communication less informative [60,61]. Hence, it seems worthwhile to look for the specific glimpses of information containment in totalitarian societies, focusing first on a couple of major strategies.

3. Dilution: Reducing Information by Increasing the Ratios of Signs to Messages and Messages to Interactions

It has been stated above that information in dictatorships is not structurally involved in the frictionless functioning of the power system. Rather, it is often deployed locally, serving scattered individuals high and low on the power ladder for assessing their situational political threats in real time. As these threats are aligned with power hierarchies and subjectively magnified by mutual distrust [62], public interaction in totalitarian state into a risky endeavor marred by a strong disincentive to credible signaling [63]. Under such circumstances, feigning the expected bottom-up loyalty (or a top-down protection) and concealing real intentions appear to be the preferable, if not the only possible, survival strategies [64]. As a result, information quickly evaporates from the tried and tested routines of communication: since the announcements of forthcoming political decisions turn out to be either superfluous and obligatory (loyalty/protection) or dangerous and avoidable (dissent/repression), the difference between honest signaling and cheating ceases to influence interactional outcomes [47]. As long as supporting—or being—anything

else than *A* turns out to be prohibitively costly, the qualitative dissimilarity of political opinions gets recoded into their quantitative difference: the fleeting boundary between loyalty and dissent, protection and betrayal becomes measured by the comparative length of applause, frequency of stereotypical protection pledges, regularity of participation in interactional rituals, and so on [65]. Put differently, the absence of equipollent alternatives in politics results in the positive linear correlation between the sheer quantity of signifiers spent on upholding the only legitimate ideology, and the payoffs of the participating interlocutors involved.

The relative ornateness of political acclamations has long been considered a symptom of nominal devotion and a reliable indicator of informational impoverishment. Indeed, the more extensive was the praise heaped by a single individual at a given time upon the Emperor Caligula, the Chairman Mao or the president Chavez, the less information was contained in every single sign within an acclamatory message expressing adoration [66–68]. To see whether this state of affairs holds true in totalitarian environments (as opposed to the democratic ones), and whether the semantic dilution of communication correlates with the political circumstances within the systems in question, I have chosen to measure the ratio of acclamatory epithets to nominative references made to the Soviet dictator Joseph Stalin and the American President Franklin Delano Roosevelt on the first four pages of the respective national newspapers (Table 1).

Table 1. Acclamations and other references to Joseph Stalin and Franklin D. Roosevelt in major Soviet and American newspapers (pages 1–4).

	References to Stalin in *Pravda*			**References to Roosevelt in *New York Times***		
	1928/1929 (18–23.12)	**1938/1939 (18, 20–24.12)**	**1948–/1949 (18–19, 21–24.12/18, 20–24.12)**	**1931–1932 (8–13.11)**	**1935–1936 (8–13.11)**	**1939–1940 (8–13.11)**
Number of references → Types of references ↓						
(1): *Nominative* references (*Stalin/President/him*)	1126	1921	2176	576	942	479
(2): *Acclamatory* epithets (*Glory* to Stalin!/President's *dignity*)	684	1228	2555	56	78	5
(2)/(1): Ratio *acclamatory* epithets/*nominative* references	0.56	0.64	1.17	0.10	0.09	0.01

'Acclamatory epithets' are understood in this context as all adulatory adjectives (*beloved*), adverbs (*brilliantly*) and nouns (friend) referring to the respective leaders. In their turn, 'nominative references' are direct references to their personal names (*Roosevelt*) and official titles (*Secretary General*). (The individual examples above and in the table are for illustration purposes only). I have counted them by hand using the newspaper originals held in the Newspaper Section of the Berlin State Library (Germany). The figures in the first two rows of the table are absolute and account for the whole periods indicated in the respective columns.

The benchmark dates chosen for comparisons are grouped around the significant public events justifying the heightened interest to the leaders' personalities—Stalin's 50th, 60th and 70th birthday in 1929, 1939 and 1949 and Roosevelt's elections to the highest executive post in 1932. 1936 and 1940. The qualification of jubilees as public events comparable in their status to elections may raise eyebrows, but their publicness in personalist dictatorships has been cultivated since Antiquity [69–72]. To offset the influence of official birthdays and presidential elections upon the overall statistics of acclamations, the chosen benchmarks have been paired with random dates (the same periods a year before).

First and foremost, the obtained results paint starkly different pictures for the totalitarian and the democratic environments. Already at the dawn of Stalin' personality cult in Soviet Union the majority of references to the Soviet dictator in *Pravda* contained acclamatory epithets, whereas the latter remained exceptional in conjunction with FDR's name or title in *NYT*. Furthermore, the frequency of both naming and acclamation of Stalin grew from one benchmark date to another, whereas in the case of Roosevelt we have two inverted U-shaped curves.

Remarkably, the correlation with the political standing of the respective heads of state appears to be stronger for the nominative references than for acclamatory epithets. Thus, the rapid development of personality cult in Soviet Union after 1929 and its subsequent stabilization until Stalin's death in 1953 is mirrored through the steep spike in the number of references to the Soviet leader between 1928 and 1939 and their much slower growth in the next decade. This correspondence is largely confirmed by the other related data such as the frequency of Stalin's name in *Pravda* editorials or the number of his portraits in the leading Bolshevik paper [73–75]. Accordingly, the name and title of the 32nd President of the United States appeared on the pages of *New York Times* far more often in 1935–1936 than in 1931–1932 or 1939–1940: FDR's victory in the presidential election of 1936 was significantly more resounding that four years before and after, and it was only natural that Roosevelt's presence on the newspaper page was most frequent at the time of his biggest political success.

In contrast, the changes in the ratio of acclamatory epithets to nominative references presents in both cases a more divergent and nuanced dynamics than a mere reflection of their referents' newsmaker value. Never numerous, the acclamations to Roosevelt remain in constant proportion to his mentions from 1931 to 1936, notwithstanding the surge in FDR's public popularity at the end of this period and the corresponding proliferation of nominative references to him in the *New York Times*. However, in 1939 they all but disappear from the newspaper's pages, even as the number of nominative references to Roosevelt remains substantial (just below the level of 1931–1932). The sober mood of the beginning WWII might be partially responsible for this drastic change, but in any case acclamations seem to be a fringe element of the discourse addressed to the American President, and their use even at the most pivotal moments seems to be too sparing to trigger any inflationary development. Inversely, in the case of Stalin the ratio of acclamatory epithets to the nominative references displays the traits of the veritable runaway semantic inflation [76]: between 1939 and 1949 the absolute number of acclamations addressed to the Soviet dictator doubles while the quantity of nominal references grows only slightly. Simply put, whereas in 1929 only every second reference to Stalin was accompanied by a servile adjective ('*beloved*') or a noun ('*friend*'), in 1949 most of such mentions would contain at least one acclamation, and many would contain two or more.

Since all such messages, roughly speaking, would convey the same information—**I profess my loyalty to comrade Stalin in exchange for protection*—it is easy to calculate, on the basis of Table 1, the inflation rate for the verbal signs used in the acclamations to Stalin published in *Pravda*: it is 82.8%, or 7.52% a year. While not extraordinary, this semantic devaluation has a clear bearing upon the amount of information transmitted in public discourse: combined with the questionable epistemic status of such praises (see above), the swelling of the messages' signifiers in relation to their signifieds dilutes verbal semantics and invariably slows down the transmission of information in the system. By the same token, the publication of the ever longer panegyrics in newspapers, journals and books eats up their limited space and prevents other information from being communicating in the same issues.

Of course, the increase of the ratio sign/message is just one of many variations of semantic inflation. The same trick is commonly and routinely performed in various kinds of media one level up: the consecutive placement of multiple identical messages in a single interaction could drive down the cumulative informational value of the batch. In non-interactive media (such as print or radio) this sort of topical or even verbal redundancy

waters down the system's semantics because the preset volume of a single newspaper issue or a radio program accommodates far less information than it could if all messages had different topics or wording. In this sense, it is remarkable that the references to the commemoration of the celebrated aviator Valery Chkalov, killed in a plane crash just days before, accounted for 63% of the articles in the Soviet daily *Izvestija* on December 12, 1938, whereas such a paramount political event as elections in the U.S. on November 4th, 1936, was the topic of only 23.8 % of the articles published in *New York Times* the day after. To be sure, given the dissimilarity of the two most popular topics as well as the vast difference in size between the two newspapers, this difference should not be over-interpreted. Nevertheless, it would be safe to assume that Soviet newspapers of the 1930s (and probably other mass media as well) were far less efficient in passing information on to the audience than their American counterparts.

This is particularly apparent if the letters to the editors chosen for publication are compared. The respective part of *New York Times* on December 13th, 1948, presents a colorful palette of feedbacks on previous publications in *NYT* and other remarkable events: the topics and genres range from the praise of a newspaper magnate and the disapproval of the recent bus fare rise to the comments upon a Supreme Court decision and even a reflective Christmas poem. Alternatively, the five letters sent from Moscow, Volga region and Georgia and published in *Pravda* at almost the same time—on 19 December 1948—could easily substitute one another: in fact, all but one share the title (*To the Head of the Ministry Council of the USSR Comrade Stalin Iosif Vissarionovich*), and all but two begin with the same form of address (*We report to you, dear [Iosif Vissarionovich/Stalin]*) and end with the identically phrased reassurance (*The [above-target] supply of [milk, butter and meat / beetroot, cotton, fruit . . . /flax fiber, potatoes, vegetables . . .] goes on*). If the objective of the *Pravda* editors were informational efficiency, the five letters (which occupied more than a half of the front page of the respective issue) could had been reduced to a summary going over the recurrent points of the reports. Instead, such a summary of other similar reports was published alongside the aforementioned letters on the very same page.

Matching the pattern registered by earlier scholars [63,72], the last example also constitutes a convenient transit point between the micro- and the macro-semantic dilution. While published as standalone pieces in a non-interactive medium, *Letters to the Times* respond, for the most part, to the material published in the paper before, and also provide a convenient standpoint for a subsequent counter-response. In this way, they partake in the most universal interactional practice commonly known as 'turn-taking' [77]: every message decreases the entropy of the system by limiting the otherwise boundless options for constructing a counter-message [35,78,79]. This mechanisms works at various levels ranging from big politics to small talk: as the uttering of "Thank you" greatly reduces the probability of any response other than "You are welcome" and its derivatives, the ticking of a box on the ballot next to Franklin D. Roosevelt's name diminished the chances of anybody else to become the President of the United States in the 1936 elections, [21,80–84]. Overall injecting information into the socio-political system by means of interactional cooperation is a common, even ubiquitous practice which is by no means limited to the democratically inclined humans [85].

Nevertheless, this seemingly unshakeable staple of systemic development gets challenged in autocratic environments: since Stalin, Hitler and Co. run unopposed, do not shy away from electoral manipulations and show little tolerance to non-compliance, voting for them (or against them) has negligible effect on the election outcomes but may greatly affect the voter's well-being or even survival. Indeed, in such a situation almost every profession of loyalty, no matter how recurrent or repetitive, increases the chances of obtaining an offer of protection without significantly binding the addressee. In other words, turn-taking gives way to random signaling [53,86]: with the link between messaging and interaction significantly damaged, multiple stereotypical messages are required to secure communication—or at least make it probable.

Common in biological communication (where multiple spermatozoa are sent in the direction of a single egg to ensure fertilization), random signaling flourishes in systems where interactional coordination cannot be ascertained [87,88]. In totalitarian states. such messages usually take the shape of increasingly meaningless oaths or petitions—which still may fail to affect probabilities of future communicative and other events: Nikolai Bukharin, a leading old-guard Bolshevik condemned by Stalin to death for alleged deviations on fantastic "espionage" grounds, sent several dozens of letters to his nemesis in 1938 requesting a private conversation, only to be ignored and executed [53]. The top-down version of multiple messaging aimed at jump-starting interaction through sheer numbers is the proliferation of overlapping channels of control and command. Unlike, say, a two-man rule in launching nuclear weapons which presupposes turn-taking to be fully intact and strives to prevent (catastrophic) interaction due to the signal error [89], the multiple requests for data or surveillance networks, common in autocratic environments from Mughal India to Nazi Germany, already operate on the premise of diluted semantics and faulty interaction chains [63,76,90–92]: it is easy to see that sending regular packages of four reminders to forgetful recipients would quickly bring down the efficiency rate of each to 25 % no matter how strongly-worded such requests are.

By breaking the crucial causal relation between messaging and interaction, random signaling appears to inhibit information transmission in the system even more substantially than the mere replication of stereotypical pleas, queries, orders, reminders, etc. described above does. Indeed, the proliferation of unanswered messages results in missing the entropy reduction targets associated with habitual turn-taking: the absence of any expected response to an apology—its acceptance or rejection—not only nullifies the informational synergy created by piecing together suitable interactional turns, but also puts the very fact of interaction, or even the existence of the recipient, in question [93,94]. The most probable consequence of this profound disorder is the mutual reinforcement of dilution on the sign and message levels locking both processes in the seemingly inescapable cycle of circular causality [95]. Perceived as a chronic interaction failure, random signalling under such circumstances oscillates between the ever more active production of standard messages with the decreasing information value and the adjustment of messaging to the recipient's apparent expectations at the expense of their remaining veracity (if any) [63]. Since the first option obviously boosts semantic inflation and the second escalates cheap signalling, the choice between the two has little effect on the ongoing information reduction in public discourse.

4. Conflation: Reducing Information by Rolling Back Functional Differentiations (Person vs. Social Role, Sender vs. Message, Message vs. Information, etc.)

In the earlier discussion, the suppression of information transfer in totalitarian environments was shown to result from the widely tolerated (and tacitly encouraged) semantic deterioration of interaction. A more proactive strategy of putting society on an informational diet is the explicit disregard of preexisting functional differentiations in a socio-political system and its communicative subsystem. Similar to the proliferation of minimal pairs in semantics discussed above, the development of privative oppositions between the channels carrying information enables systems to better grasp their environment and thus stabilize their functionality [30,96]. The diversification of human communication into words and gestures, or writing and print, has in this respect the same purpose as the growth of dendrites and formation of synapses in the embryo [5,97,98]: in effect, both processes improve the ability of respective systems to detect the diversity of the outside world and help in arranging the growing number of perceptions into the neat rows of minimal contradistinctions.

The difference between the expressive potentials of the drum beat from a hilltop practiced by early Arapesh in New Guinea and the modern mass media reveals the preference of evolution for creating ever more functional dissimilarities in open dynamic systems and their interactional subsystems [99,100]. Whereas in the first case the empowered individ-

ual, the top position in the society and the right to initiate interaction are as inextricably tied together as the mere fact of rhythmic drumming and its emotional connotations, the contemporary societies boast advanced sets of internal differentiations (person vs. social role, sender vs. message, message vs. information) allowing for transmission of highly specific information through the channels invariant to the sources, targets and media of communication [89,101,102].

That said, it would be counterintuitive—and just plain wrong—to assume the unstoppable and irreversible functional differentiation in all systems under all circumstances: nowadays such and similar beliefs seem to be a throwback to the optimistic teleology of history reminiscent of Condorcet [103–105]. Indeed, the evolutionary advantage of phonetic diversification seemed evident a century ago [28], but modern anthropology detects successive adaptive contractions and expansions of phonemic diversity in multiple languages [106]. Given the already established propensity of dictatorships for information reduction, it makes sense to scrutinize them for such and similar manifestations of suspended functional differences.

In reality, even a cursory glance at totalitarian politics confirms this supposition [107,108]. For the general observer, it may be mostly noticeable on the socio-political level. Whereas the type-token distinction between roles (monarch, president, chancellor) and persons (Wilhelm II, Franklin Roosevelt, Angela Merkel) is regularly upheld in democratic elections and—with some qualifications—monarchic successions [53,108,109], it seems to be much more blurred in personalist dictatorships which, as has been shown before, lack machinery for recoding the privative "timeless" distinction between the empowered Self and hostile Other into a fleeting equipollent difference between power and opposition [110,111]. (If anything, the careers of such seasoned autocrats as Recep Tayyip Erdoğan prone to changing political hats on a whim attest to the reversal of the type/token—or the signified/signifier—relation in this case [53]). However, the blurring of functional distinctions appears to be even more conspicuous in the realm of communication [112–114].

To compare its extent in totalitarian and democratic environments, the interactional differentiation of the audience's feedback to the speeches of Joseph Stalin, Adolf Hitler and Konrad Adenauer at the most prominent official public gatherings has been evaluated in Table 2. The meetings in point were the 8th Congress of Soviets in Moscow (where Stalin gave a plenary talk on the project of the new Soviet Constitution), the NSDAP 'Day of Honor' in Nuremberg (where Hitler spoke at length on various occasions several times), and the early post-war Bundestag sessions (where Adenauer gave governmental reports to the deputies). The calculations were made by hand and based on the published accounts of the gatherings [115–119]. While the first row displays total figures for the respective gatherings, rows 2–5 give their breakdown into respective categories, followed by the relative frequencies of feedback in relation to sentences and speeches in row 6. As in Table 1, the examples in the first column of Table 2 are for the illustrative purposes only.

Table 2. Degree of communicative differentiation in public feedback to the speeches of Joseph Stalin, Adolf Hitler and Konrad Adenauer.

	Feedback to Stalin's Talk at the 8th Congress of Soviets (25.11–5.12.1936) 80 Speeches (6077 Sentences)	**Feedback to Hitler' Speeches at the Nuremberg Party Rally (8–14.9.1936) 20 Speeches (2619 Sentences)**	**Feedback to Adenauer's Reports at the Bundestag Sessions (9.3.1951, 7.2.1952) 16 Speeches (2592 Sentences)**
Number of references → Types of references ↓	3358 (100%)	328 (100%)	429 (100%)
to *persons/personal* emotions (beloved leader/Adenauer does not want)	1435 (42.7%)	35 (10.7%)	86 (20.0%)
to *social* roles/action my leader/Stalin leads us to victory	798 (23.7%)	241 (73. 5%)	123 (28.7%)
to *communicative* roles/actions speaker Stalin/Hitler's speech)	745 (22.2%)	46 (14. 0%)	70 (16. 3%)
to information transmitted (excellent statement/said that X)	380 (11.3%)	6 (1.8%)	150 (35.0%)
ratio *references/sentences*	0.55	0.13	0.17
ratio *references/speeches*	41.87	16.4	26.8

While the Soviet data has a much higher volume than the German one which precludes proper statistic comparisons, this discrepancy probably does not stand in the way of the cautious quantitative cross-evaluation of the material gathered.

Whereas the choice of feedback for measuring the informational efficiency of interaction is based on the essentially cooperative nature of communication discussed above, the success in transmitting information could be arguably judged by the degree of correlation between the informational value of the original message and the resulting response [120]. In this respect, the question "May I have something to drink?" does its carrier job well if one gets a glass of water—or a pointed refusal to give one—in return, and fares poorly if the saltshaker is offered or the answer is missing altogether. Consequently, the transmission of information from a public speaker to his or her followers is judged to be most efficient if the response touches upon the verbal content of the speech. Accordingly, the feedback gets a lower mark if its content is centered upon the speaker's social or communicative roles or even physical person, revealing the disregard for the functional differentiations of society and its interactional mechanisms.

Seen from this angle, the feedback profiles of Stalin's. Hitler's and Adenauer's audiences at the most significant political gatherings display significant variations, which only partially—but crucially—can be related to the unlikeness of autocracies and democracies. Perhaps the most significant internal difference of public feedback to totalitarian leaders exposed by the gathered data concerns the immediate references to the Soviet and Nazi dictators. Displaying conflation of society and one of its subsystems (communication), the mentions of dictators themselves constitute the most productive variant of responses to their speeches both in the Nazi Germany and in the Bolshevik Soviet Union data gathered. However, the degree of this amalgamation significantly varies. In effect, the division between person and social role, frequently ignored in references to Stalin (who is predominantly addressed at the 8th Congress of Soviets as a private individual—'our *beloved* leader'), is consistently upheld in the case of Hitler (who is normally called at the Day of Honor 'my *Führer*'—the reference to the novel executive post created for its holder a year after the electoral success of NSDAP in Germany [121].

This dissimilarity reveals the two opposite approaches to rendering the contradistinction between living beings and their societal functions invisible. In line with many other

personalist dictatorships, Bolsheviks sought stabilization of power relations in a patriarchal metaphor, often portraying their leader as the 'father of the people' [122]. Nazis, in their turn, attempted a more creative—albeit not entirely dissimilar in its outcomes—reduction of Hitler's private self to his divinized office: some notable exceptions aside [123], the leader of Nazi Germany was stripped in public discourse of his private identity, and those calling him 'Adolf' at party gatherings were severely reprimanded [124]. As for the mentions of the first postwar German Chancellor, there is a slight—and predictable—preference to alluding to his office rather than human personality. However, since both figures, taken together, constitute less than a half of all feedback to Adenauer's speeches, this predilection does not appear too consequential.

By far the most relevant outcome of the analysis summarized in Table 2 is the glaring disparity of informational efficiency in the feedback to totalitarian and autocratic leaders: whereas the majority of the references to Adenauer's Governmental Declaration (35.0%) respond to its text, the corresponding figures for the reaction to Stalin's and Hitler' speeches are 11.3 and 1.8% respectively, making them the least popular forms of feedback in both cases. If the 100% topicality of the response could be seen as the efficiency maximum of the information transmission [125], the post-war figures do not look that impressive, but the extreme effectiveness of communication is neither possible nor particularly desirable: in the absence of redundancy, every single error would make the semantics of the respective message irrecoverable [84,126]. Nonetheless, in relative terms, the informational value of the responses to Adenauer is high—more than three times higher than that to Stalin, and almost twenty times higher than that to Hitler. What are we to make of those figures?

Given the different sizes and interactional heterogeneity of the Soviet and Nazi gatherings, one should not perhaps over-interpret the difference between their informational efficiencies. The Nuremberg Party Rally of 1936 was a low-content ritual gathering where the feedback to Hitler's multiple speeches was more of a side effect of his political and textual domination [127]. The 8th Congress of Soviet in Moscow, in contrast, was summoned for the very specific purpose of promulgating the new General Law of USSR, and the deputies, no matter how servile or excited by Stalin's presence, had to pay at least a lip service to the project of Constitution he was reading aloud and commenting upon [128]. Nevertheless, even keeping all these qualifications in mind, the general order of preferences seems incontrovertible: in both pre-war Soviet Union and Nazi Germany, the audiences choose the least informationally efficient form of public feedback to their leaders, whereas in Germany after the WWII the situation was diametrically opposite.

The structural role of information in keeping democracies running, as well as their relative preference for the informationally efficient form of interaction was only cursorily examined above, but the penchant of autocracies for choosing the least informative messaging and interaction strategies seems to be at least highly plausible. What remains to be seen, or at least discussed, is the results of such a massive and multifactor information reduction: could autocratic systems be considered successful in stabilizing themselves by sweeping information under the carpet?

5. Conclusions: Information Laughs at Locksmiths

One of the goals of this article was the rehabilitation of informational stabilization in open dynamic systems. The scholars dealing with genetic code, organizational hierarches, rituals, phatic communication, verbal language, and other forms of systemic self-organization are familiar with the phenomenon of efficiency reduction in information transfers for the sake of their reliability [3,5,29,83,129–142]. From the outset, semantic inflation and the rollback of functional differentiation in totalitarian communication look rather similar to these mechanisms of homeostatic control. Yet the poor record of political stability in autocracies breeds doubt in their success in taming information [56]: in fact, there are reasons to believe that precisely the reckless accumulation of combustive information made Soviet Union explode [143]. How could this failure be explained?

The answer to this question would require a separate article and some further fieldwork, so it would be prudent at this stage to focus on collecting and ordering hypotheses worth pursuing in the future. It appears likely that dilution and conflation impede circulation of information in the public sphere, draining semiotic resources and damaging credibility of interlocutors and their gadgets. Nevertheless, it is almost equally probable that such diverse and flexible social systems as modern societies can cope with the occasional code failures or functional differentiation setbacks. In Ancient Rome, Weimar Germany and Soviet Union hyperinflation led to the virtual destruction of codes used for measuring and communicating the differences in exchange value. However, the relevant information kept being transmitted via new alphabets (hard currency) or, in the worst case, reactivated old codes and interaction mechanisms (barter exchange) [144–148]. In a similar vein, the sensitive data about socio-political differences of opinion or income abandoned in Soviet Union and Nazi Germany the nearly defunct print media and public interaction settings and migrated to private conversations and clandestinely disseminated handwritten manuscripts called *samizdat* ('self-publish[ing]') in Soviet Union [42,149]. Other somewhat more cumbersome techniques included metonymical allusions to the mutually recognizable but politically hazardous information (Aesopian language), or the outsourcing of transmission to the less controlled media areas: in the latter case, the foreign radio senders enjoyed popularity in late Soviet Union and Nazi Germany despite heavy penalties levied upon their users [150–152].

The downside of code-switching or plugging in to the external information carriers has always been the dwindling number of interaction participants. Neither the ability to decipher euphemistically camouflaged messages nor the readiness to take the risks of illicit information consumption were widespread in any of the two dictatorships, and the competition of the communicative underground with the virtually costless messaging via state-controlled mass media channels proved difficult. In return, the artificially created information hunger among large swaths of the population resulted in information cascades whenever the informed few could be observed and emulated. In this way, for instance, the rapid spread of slogans carried at the Monday demonstrations in Leipzig in 1989–1991 through the countrywide echo chambers precipitated the end of Eastern Germany as a totalitarian state [153,154]. Always returning through the back door and quickly occupying the whole house, information usually has the last laugh with its jailers.

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References

1. Postoutenko, K. From Asymmetries to Concepts. In *Asymmetrical Concepts after Reinhart Koselleck: Historical Semantics and Beyond*; Postoutenko, K., Junge, K., Eds.; Transcript: Bielefeld, Germany, 2011; pp. 195–250.
2. von Bertalanffy, L. *General Systems Theory: Foundations, Development, Applications*; George Braziller: New York, NY, USA, 1969.
3. Burgin, M. *Theory of Information: Fundamentality, Diversity and Unification*; World Scientific: Singapore, 2010.
4. von Foerster, H. *Wissen und Gewissen: Versuch einer Brücke*; Suhrkamp: Frankfurt am Main, Germany, 1993.
5. Flusser, V. *Kommunikologie*; S. Fischer: Frankfurt am Main, Germany, 1996.
6. Wiener, N. Cybernetics and Society. In *The Human Dialogue: Perspectives on Communication*; Matson, F.W., Montagu, A., Eds.; Free Press: New York, NY, USA, 1967; pp. 15–23.
7. Davies, P.C.W. *The Physics of Time Asymmetry*; University of California Press: Berkeley, CA, USA, 1974.
8. Cherry, C. *On Human Communication*; M.I.T Press: Cambridge, MA, USA, 1966.
9. Young, O.R. The Impact of General Systems Theory on Political Science. In *Systemtheorie und Systemtechnik*; Nümphenburger Verlagshandlung: München, Germany, 1974; pp. 280–294.
10. Boulding, K.E. General Systems Theory—The Skeleton of Science. In *Systems Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: Brunswick, NJ, USA, 1968; pp. 3–10.
11. Miller, J.G. The Nature of Living Systems. In *Systemtheorie und Systemtechnik*; Händle, F., Jensen, S., Eds.; Nymphenburger Verlagshandlung: München, Germany, 1974; pp. 62–87.

12. Bergson, H. *Essai sur les Données Immédiates de la Conscience*; Alcan: Paris, France, 1889.
13. Husserl, E. *Vorlesungen zur Phänomenologie des Inneren Zeitbewusstseins*; Niemeyer: Tübingen, Germany, 1928.
14. Derrida, J. *Positions*; Minuit: Paris, France, 1972.
15. De Condillac, É.B. *Traité des Sensations. Traité des Animaux*; Fayard: Paris, France, 1798.
16. Locke, J. *An Essay Concerning Human Understanding*; Dover: New York, NY, USA, 1959.
17. Jakobson, R. Mark and Feature. In *Selected Writings*; Jakobson, R., Ed.; Mouton: Berlin, Germany, 1974; Volume VII, pp. 122–124.
18. Postoutenko, K. How Narration Shapes History: Self-Descriptive Narratives and Their Social Functions. In *Varietas in Concordia. Essays in Honor of Pekka Pesonen*; Hellman, B., Huttunen, T., Obatnine, G., Eds.; Helsingin yliopisto: Helsinki, Finnland, 2007; pp. 96–123.
19. Bourdieu, P. *Ce que Parler veut dire: L'économie des Echanges Linguistiques*; Fayard: Paris, France, 1982.
20. Dahrendorf, R. *Homo Sociologicus: Ein Versuch zur Geschichte, Bedeutung und Kritik der Kategorie der Sozialen Rolle*; Westdeutscher Verlag: Opladen, Germany, 1971.
21. Argyle, M.; Furnham, A.; Graham, J.A. *Social Situations*; Cambridge University Press: Cambridge, UK, 1981.
22. Mannheim, K. *Wissenssoziologie*; Luchterhand: Berlin, Germany, 1929.
23. Ackoff, R.L. Towards a Behavioral Theory of Communication. In *Systems Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: Brunswick, NJ, USA, 1968; pp. 209–220.
24. McKay, D.M. *Information, Mechanism and Meaning*; MIT Press: Cambridge, MA, USA, 1969.
25. Bateson, G. *Steps to an Ecology of Mind*; Chandler Publishing Company: San Francisco, CA, USA, 1972.
26. Luhmann, N. *Soziologische Aufklärung*; Westdeutscher Verlag: Opladen, Germany, 1981; Volume 3.
27. Schroeder, M. The Difference that Makes a Difference for the Conceptualization of Information. *Proceedings* **2017**, *1*, 221.
28. Simmel, G. Aufsätze 1887–1890. Über sociale Differenzierung. In *Die Probleme der Geschichtsphilosophie*; Suhrkamp: Frankfurt am Main, Germany, 1892.
29. Wiener, N. *Cybernetics, or Control and Communication in the Animal and the Machine*; M.I.T. Press: Cambridge, MA, USA, 1961.
30. Atlan, H. Disorder, Complexity and Meaning. In *Disorder and Order*; Paisley Livingston, Ed.; Anima Libri: Saratoga, CA, USA, 1984; pp. 109–128.
31. Postoutenko, K. Inclusion of Exclusion, Tolerance and Struggle: Domesticating Noise in Complex Systems. *Entropy*, 2022; 24, *in press*.
32. Schelling, T.C. *Micromotives and Macrobehavior*; W.W. Norton and Co.: New York, NY, USA, 2006.
33. Odoms-Young, A.; Bruce, M. Examining the Impact of Structural Racism on Food Insecurity Implications for Addressing Racial/Ethnic Disparities. *Fam. Community Health* **2018**, *41* (Suppl. 2), 53–56. [CrossRef]
34. Cullen, J.B.; Jacob, B.A.; Levitt, S.A. The Effect of School Choice on Participants: Evidence from Randomized Lotteries. *Econometrica* **2006**, *74*, 1191–1230. [CrossRef]
35. Wiener, N. Thermodynamics of the Message. In *Collected Works with Commentaries*; Wiener, N., Ed.; MIT Press: Cambridge, MA, USA, 1955; Volume 4, pp. 206–211.
36. von Foerster, H. From Stimulus to Symbol: The Economy of Biological Computation. In *System Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: Brunswick, NJ, USA, 1968; pp. 170–181.
37. Watzlawick, P.; Bavelas, J.B.; Kackson, D.D. *Pragmatics of Human Communication*; W.W. Norton and Co.: New York, NY, USA, 1967.
38. Bawden, D.; Robinson, L. Information overload: An overview. In *Oxford Encyclopedia of Political Decision Making*; Redlawsk, D.P., Ed.; Oxford University Press: Oxford, UK, 2021; pp. 121–126.
39. Floridi, L. *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*; Oxford University Press: Oxford, UK, 2014.
40. Rosenfeldt, N.E. Stalinism as a System of Communication. In *Essays on Revolutionary Culture and Stalinism*; Strong, J.W., Ed.; Slavica Publishers: Columbus, OH, USA, 1989; pp. 138–165.
41. Rittersporn, G.T. The Catastrophe, the Millennium and the Popular Mood in the USSR. In *The Soviet Union—A Popular State? Studies on Popular Opinion in the USSR*; Vihavainen, T., Ed.; Evropeiskii Dom: Saint-Petersburg, Russia, 2003; pp. 50–66.
42. Hoffmann, E.P. Communication Theory and the Study of Soviet Politics. In *Communist Studies and Social Sciences: Essays on Methodology and Empirical Theory*; Fleron, F.J., Ed.; Rand McNally & Co.: Chicago, IL, USA, 1969; pp. 379–396.
43. Postoutenko, K. Soviet Communication and Soviet Society (1917–1953): Alignments and Tensions. In *Media and Communication in Soviet Union (1917–1953): General Perspectives*; Postoutenko, K., Tikhomirov, A., Zakharine, D., Eds.; Palgrave Macmillan: New York, NY, USA, 2022; pp. 1–18.
44. von Neumann, J. *First Draft of a Report on the EDVAC*; Stanford University: Stanford, CA, USA, 1945.
45. Raymond, R.C. Communication, Entropy and Life. In *Systems Research for Behavioral Science: A Sourcebook*; Walter Buckley, Ed.; Transaction Publishers: New Brunswick, NJ, USA, 1968; pp. 157–160.
46. López, M.T.; Fernández-Caballero, A.; Fernández, M.A.; Delgado, A.E. Sensitivity from Short-Term Memory vs. Stability from Long-Term Memory in Visual Attention Method. In *Artificial Intelligence and Knowledge Engineering Applications: A Bio-Inspired Approach*; Mira, J., Álvarez, J.R., Eds.; Springer: Berlin, Germany, 2005; pp. 448–458.
47. Skyrms, B. *Signals: Evolution, Learning and Information*; Oxford University Press: Oxford, UK, 2010.
48. Kurrild Klitgaard, P. The Constitutional Economics of Autocratic Succession. *Public Choice* **2000**, *103*, 63–84. [CrossRef]

49. Boureau, A. How Christian Was the Sacralization of Monarchy in Western Europe (Twelfth-Fifteenth Centuries)? In *Mystifying the Monarch: Studies on Discourse, Power, and History*; Deploige, J., Deneckere, G., Eds.; Amsterdam University Press: Amsterdam, The Netherlands, 2006; pp. 25–34.
50. Kokkonen, A.; Sundell, A. Delivering Stability—Primogeniture and Autocratic Survival in European Monarchies. *Am. Political Sci. Rev.* **2014**, *108*, 438–453. [CrossRef]
51. Postoutenko, K. Towards a conceptual history of canonization in totalitarian societies. *Ariadna Histórica. Leng. Conceptos Metáforas* **2016**, *5*, 197–209.
52. Guriev, S.; Treisman, D. A theory of informational autocracy. *J. Public Econ.* **2020**, *186*, 104–158. [CrossRef]
53. Postoutenko, K. Deification, canonization and random signalling: Upholding and sustaining personality cults. In *Ruler Personality Cults from Empires to Nation-States and Beyond: Symbolic Patterns and Interactional Dynamics*; Postoutenko, K., Stephanov, D., Eds.; Routledge: London, UK, 2020; pp. 163–217.
54. Myerson, R.B. The Autocrat's Credibility Problem and Foundations of the Constitutional State. *Am. Political Sci. Rev.* **2008**, *102*, 125–139. [CrossRef]
55. Edelman, M. *Constructing the Political Spectacle*; University of Chicago Press: Chicago, IL, USA, 1988.
56. Parsons, T. *The Social System*; Free Press: New York, NY, USA, 1951.
57. Mussolini, B. *Dizionario Mussoliniano. 1500 Affermazioni e Definizioni del Duce su 1000 Argomenti*; Ulrico Hoepli: Milano, Italy, 1940.
58. Qvortrup, M.; O'Leary, B.; Wintrobe, R. Explaining the Paradox of Plebiscites. *Gov. Oppos. 2018. 55*, 202–219. [CrossRef]
59. Postoutenko, K. Introduction. 'Asymmetrical Counter-Concepts': Chances and Challenges. In *Beyond 'Hellenes' and 'Barbarians': Asymmetrical Concepts in European Discourse*; Postoutenko, K., Ed.; Berghahn: New York, NY, USA, 2023; pp. 1–40.
60. Robert, R.A. Censorship and Libraries in the Soviet Union. *J. Libr. Hist. Philos. Comp. Librariansh.* **1973**, *8*, 22–29.
61. Zelenov, M.V. K istorii pervonachal'nogo etapa stanovleniia spetskhrana v glavnoi bilioteke Sovetskoi Rossii (1920–1930-e gody [On the history of the initial stage of the special storage creation in the main library of the Soviet Russia (1920s–1930s). *Solanus Int. J. Russ. East Eur. Bibliogr. Libr. Publ. Stud. New Ser.* **1998**, *12*, 57–76. (In Russian)
62. Tikhomirov, A. Trust and Distrust in a Modern Dictatorship: A Case Study of the Soviet Union. In *Trust and Happiness in the History of Political Thought*; Kontler, L., Somos, M., Eds.; Brill: Leiden, Belgium, 2017; pp. 436–461.
63. Wintrobe, R. *The Political Economy of Dictatorship*; Cambridge University Press: Cambridge, UK, 1998.
64. Besançon, A. *Les Origines Intellectuelles du Léninisme*; Gallimard: Paris, France, 1977.
65. Postoutenko, K. Bottom-up Non-verbal Messaging: Applause. In *Media and Communication in Soviet Union (1917–1953): General Perspectives*; Postoutenko, K., Tikhomirov, A., Zakharine, D., Eds.; Palgrave Macmillan: New York, NY, USA, 2022; pp. 207–241.
66. Winterling, A. *Caligula. Eine Biographie*; C.H. Beck: München, Germany, 2003.
67. Márquez, X. Two Models of Political Leader Cults: Propaganda and Ritual. *Politics Relig. Ideol.* **2018**, *19*, 265–284. [CrossRef]
68. Márquez, X. The mechanisms of cult production: An overview. In *Ruler Personality Cults from Empires to Nation-States and Beyond: Symbolic Patterns and Interactional Dynamics*; Postoutenko, K., Stephanov, D., Eds.; Routledge: London, UK, 2020; pp. 21–45.
69. Lane, C. *The Rites of Rulers. Ritual in Industrial Society—The Soviet Case*; Cambridge University Press: Cambridge, UK, 1981.
70. Ennker, B. Führerdiktatur—Sozialdynamik und Ideologie: Sozialdynamik und Ideologie. In *Terroristische Diktaturen im 20. Jahrhundert: Strukturelemente der Nationalistischen und Stalinistischen Herrschaft*; Vetter, M., Ed.; Westdeutscher Verlag: Oppladen, Germany, 1996; pp. 85–117.
71. Ennker, B. Politische Herrschaft und Stalinkult 1929–1939. In *Stalinismus: Neue Forschungen und Konzepte*; Plaggenborg, S., Ed.; A. Spliz: Berlin, Germany, 1998; pp. 151–182.
72. Devlin, J. Visualizing Political Language in the Stalin Cult: The Georgian Art Exhibition at the Tretyakov Gallery. In *Political Language in the Age of Extremes*; Steinmetz, W., Ed.; Oxford University Press: Oxford, UK, 2012; pp. 83–102.
73. Alekseev, G. Kolichestvennye parametry kul'ta lichnosti [The quantitative parameters of the personality cult]. *SSSR Vnutr. Protivorec.* **1982**, *9*, 5–10. (In Russian)
74. Pöppel, L. *The Rhetoric of Pravda Editorials: A Diachronic Study of a Political Genre*; Acta Universitatis Stockholmiensis: Stockholm, Sweden, 2007.
75. Plamper, J. *The Stalin Cult: A Study in the Alchemy of Power*; Yale University Press: New Haven, CT, USA, 2012.
76. Junge, K.; Postoutenko, K. Redundancy, Noisy Signaling, and Semantic inflation: Studying the Patterns of Self-Destruction in Complex Systems. *Syst. Res. Behav. Sci.* **2021**, *38*, 902–910. [CrossRef]
77. Schegloff, E.A. Interaction: The Infrastructure, Social Institutions, the Natural Ecological Niche for the Language, and the Arena in which Culture is Enacted. In *Roots of Human Sociality*; Enfield, N.J., Levinson, S.C., Eds.; Berg: Oxford, UK, 2006; pp. 70–98.
78. Sacks, H.; Schegloff, E.A.; Jefferson, G. A Simplest Systematics for the Organization of Turn-Taking in Conversation. *Language* **1974**, *5*, 696–735. [CrossRef]
79. Foucault, M. *L'ordre du Discours*; Gallimard: Paris, France, 1971.
80. Levinson, S.C. Interactional Biases in Human Thinking. In *Expressions and Implications of the Social Bias in Human Intelligence*; Goody, E.N., Ed.; Cambridge University Press: Cambridge, UK, 1995; pp. 221–260.
81. Schegloff, E.A. On Some Questions and Ambiguities in Conversation. In *Structures of Social Action: Studies in Conversation Analysis*; Atkinson, J.M., Heritage, J., Eds.; Cambridge University Press: Cambridge, UK, 1984; pp. 28–52.
82. Edelman, M. *Political Language: Words That Succeed and Policies That Fail*; Academic Press: New York, NY, USA, 1977.
83. Pierce, J.R. *An Introduction to Information Theory: Symbols, Signals and Noise*; Dover Publications: New York, NY, USA, 1980.

84. Linell, P. *Approaching Dialogue. Talk, Interaction and Contexts in Dialogical Perspectives*; John Benjamins: Amsterdam, The Netherlands, 2001.
85. Tomaselllo, M. *Why We Cooperate*; The MIT Press: Cambridge, MA, USA, 2009.
86. Zeitlyn, D. Divination as Dialogue: Negotiation of Meaning with Random Responses. Social Intelligence and Interaction. In *Expressions and Implications of the Social Bias in Human Intelligence*; Goody, E.N., Ed.; Cambridge University Press: Cambridge, UK, 1995; pp. 189–205.
87. Postoutenko, K. Prolegomena to the Study of Totalitarian Communication. In *Totalitarian Communication: Hierarchies, Codes and Messages*; Postoutenko, K., Ed.; Transcript: Bielefeld, Germany, 2010; pp. 11–42.
88. Schuss, Z.; Basnayake, K.; Holcman, D. Redundancy principle and the role of extreme statistics in molecular and cellular biology. *Phys. Life Rev.* **2019**, *28*, 52–79. [CrossRef]
89. Becker, Z. Two-man rule. In *Weapons of Mass Destruction: An Encyclopedia of Worldwide policy, Technology, and History II*; Crodd, E.A., Wirtz, J.J., Eds.; ABC-CLIO: Santa-Barbara, CA, USA, 2005; p. 385.
90. Neumann, F. *Behemoth: Struktur und Praxis des Nationalsozialismus 1933–1944*; DTV: Frankfurt am Main, Germany, 1944.
91. Perlmutter, A. *Modern Authoritarianism: A Comparative Institutional Analysis*; Yale University Press: New Haven, CT, USA, 1981.
92. Krippendorff, K.A. *Dictionary of Cybernetics*; University of Pennsylvania: Philadelphia, PA, USA, 1986.
93. Luhmann, N. *Soziale Systeme. Grundriß Einer Allgemeinen Theorie*; Suhrkamp: Frankfurt am Main, Germany, 1987.
94. Bell, A. Audience Accommodation in Mass Media. In *Contexts of Accommodation: Developments in Applied Sociolinguistics*; Giles, H., Coupland, N., Coupland, J., Eds.; Cambridge University Press: Cambridge, UK, 1991; pp. 69–102.
95. Kaufman, L.H.; Umpleby, S.A. A Brief History of (Second Order) Cybernertics. In *New Horizons for Second-Order Cybernetics*; Riegler, A., Müller, K.H., Umpleby, S.A., Eds.; World Scientific: Singapore, 2017; pp. 3–6.
96. Hall, A.D.; Fagen, R.E. Definition of a System. In *Systems Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: Brunswick, NJ, USA, 1968; pp. 81–92.
97. Ashby, W.R. Principles of the Self-Organizing System. In *Systems Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: Brunswick, NJ, USA, 1968; pp. 108–122.
98. Luhmann, N. *Macht*; Lucuis & Lucius: Stuttgart, Germany, 1975.
99. Hahn, A. *Konstruktionen des Selbst, der Welt und der Geschichte*; Suhrkamp: Frankfurt am Main, Germany, 2000.
100. Mair, L. *Primitive Government*; Penguin Books: Harmondsworth, UK, 1964.
101. Mead, M. Some Cultural Approaches to Communication Problems. In *Mass Communications*; Schramm, W., Ed.; University of Illinois Press: Urbana-Champaign, IL, USA, 1975; pp. 329–345.
102. Bell, D.V.J. *Power, Influence and Authority*; Oxford University Press: New York, NY, USA, 1975.
103. Goffman, E. *Encounters: Two Studies in the Sociology of Interaction*; The Bobbs-Merrill Company: Indianapolis, IN, USA, 1961.
104. de Condorcet, N. *Esquisse d'un Tableau Historique des Progrès de L'esprit Humain (Suivi de Fragment sur l'Atlantide)*; Flammarion: Paris, France, 1795.
105. Postoutenko, K. Anschlußverhalten in Totalitärer Gesellschaft Zwischen Pathos und Ethos: Zur Rezeptionsanalyse der Rede von Joseph Stalin auf dem VIII Sowjetkongress der UdSSR am 8. November 1936. 2015; *Unpublished manuscript*.
106. Labov, W. *Principles of Linguistic Change (Social Factors)*; Blackwell: Malden, MA, USA, 2001; Volume 2.
107. Habermas, J. *Vorstudien und Ergänzungen zur Theorie des Kommunikativen Handelns*; Suhrkamp: Frankfurt am Main, Germany, 1984.
108. Behrends, J.S. Freundschaft und Sowjetunion, Liebe zu Stalin: Zur Anthropomorphisierung des Politischen im Stalinismus. In *Die Massen Bewegen: Medien und Emotionen in der Moderne*; Bösch, F., Boruta, M., Eds.; Campus: Frankfurt am Main, Germany, 2006; pp. 172–192.
109. Kantorowicz, E. *The King's Two Bodies. A Study in Medieval Political Theology*; Princeton University Press: Princeton, NJ, USA, 1957.
110. Cherniavsky, M. *Tsar and People: Studies in Russian Myths*; Random House: New York, NY, USA, 1969.
111. Adorno, T.W.; Lowenthal, L.; Massing, P.W. Anti-Semitism and the Fascist Propaganda. In *Soziologische Schriften*; Adorno, T.W., Ed.; Suhrkamp: Frankfurt am Main, Germany, 2003; Volume 1, pp. 397–407.
112. Schmitt, C. *Die Diktatur*; Duncker & Humblot: Berlin, Germany, 1921.
113. McLuhan, M. The Relation of Environment to Anti-Environment. In *The Human Dialogue: Perspectives on Communication*; Matson, F.W., Montagu, A., Eds.; Free Press: New York, NY, USA, 1967; pp. 39–47.
114. Epping-Jäger, C. Laut/Sprecher Hitler. Über ein Dispositiv der Massenkommunikation in der Zeit des Nationalsozialismus. In *Hitler der Redner*; Kopperschmidt, J., Ed.; Wilhelm Fink: München, Germany, 2003; pp. 143–158.
115. Postoutenko, K. Listening to comrade Stalin: Multimodality and code-switching in public response to the leaders' speeches in the twentieth century. *Russ. J. Commun.* **2016**, *8*, 136–152. [CrossRef]
116. *Chrezvychainyi VIII Vsesoiuznyi S'ezd Sovetov: Stenograficheskii Otchet*; The 8th Extraordinary Congress of Soviets. The Stenographic Record; TsIK SSSR: Moscow, Russia, 1936. (In Russian)
117. *Der Parteitag der Ehre vom 8. bis 14. September 1936—Reichsparteitag 1936*; Zentralverlag der NSDAP: München. Germany, 1936.
118. Deutscher Bundestag—125. Sitzung (9 March 1951). Available online: https://www.bundestag.de/mediathek?videoid=7232020_2_1#url=L21lZGlhdGhla292ZXJsYXk/dmlkZW9pZD03MjMyMDIwXzJfMQ==&mod=mediathek (accessed on 17 October 2022).
119. Deutscher Bundestag—190. Sitzung (7 February 1952). Available online: https://www.bundestag.de/mediathek?videoid=7234218#url=bWVkaWF0aGVrb3ZlcmxheT92aWRlb2lkPTcyMzQyMTg=&mod=mediathek (accessed on 17 October 2022).

120. Berlo, D.K. *The Process of Communication: An Introduction to Theory and Practice*; Holt, Rinehart and Winston: New York, NY, USA, 1960.
121. Kershaw, I. *The 'Hitler Myth'. Image and Reality in the Third Reich*; Clarendon Press: Oxford, UK, 1987.
122. Günther, H. Wise Father Stalin and his Family in Soviet Cinema. In *Socialist Realism Without Shores*; Lahusen, T., Dobrenko, E., Eds.; Duke University Press: Durham, NC, USA, 1997; pp. 178–190.
123. Hoffmann, H. *Hitler wie Ihn Keiner Kennt*; M.B.H.: Berlin, Germany, 1935.
124. Plöckinger, O. *Geschichte Eines Buches: Adolf Hitlers "Mein Kampf". 1922–1945*; Oldenbourg Wissenschaftsverlag: München, Germany, 2006.
125. van Kuppewelt, J. Discourse structure, topicality and questioning. *J. Linguist.* **1995**, *31*, 109–147. [CrossRef]
126. Miller, G.A. What is Information Measurement? In *Systems Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: New Brunswick, NJ, USA, 1968; pp. 123–128.
127. Thamer, H.-U. Faszination und Manipulation: Die Nürnberger Reichsparteitage der NSDAP. In *Der Fest: Eine Kulturgeschichte von der Antike bis zur Gegenwart*; Schulz, U., Ed.; Beck: München, Germany, 1988; pp. 352–368.
128. Velikanova, O. *Mass Political Culture Under Stalinism. Popular Discussion of the Soviet Constitution of 1936*; Palgrave Macmillan: Cham, Switzerland, 2018.
129. Malinowski, B. The Problem of Meaning in Primitive Languages. In *The Meaning of Meaning*; Ogden, C.K., Richards, I.A., Eds.; Harcourt Brace Jovanovich: Orlando, FL, USA, 1989; pp. 296–336.
130. Orwell, G. Politics and the English Language. In *A Collection of Essays*; Orwell, G., Ed.; Doubleday and Company: Garden City, NY, USA, 1954; pp. 65–74.
131. Rapoport, A. The Promise and Pitfalls of Information Theory. In *Systems Research for Behavioral Science: A Sourcebook*; Buckley, W., Ed.; Transaction Publishers: New Brunswick, NJ, USA, 1968; pp. 137–141.
132. Rappaport, R.A. Ritual, Sanctity and Cybernetics. *Am. Anthropol.* **1971**, *73*, 59–76. [CrossRef]
133. Roloff, M. Zur Kontaktfunktion der sprachlichen Kommunikation. *Zeitschrift Phonetik Sprachwissenshaft Kommunikationsforschung* **1985**, *38*, 239–250. [CrossRef]
134. Quine, W.V. *Quiddities: An Intermittently Philosophical Dictionary*; Harvard University Press: Cambridge, MA, USA, 1987.
135. Kertzer, D.I. *Rituals, Politics and Power*; Yale University Press: New Haven, CT, USA, 1988.
136. Bailey, F.G. Why is Information Asymmetrical? Symbolic Behavior in Formal Organizations. *Ration. Soc.* **1991**, *3*, 475–495. [CrossRef]
137. Baiburin, A.K. *Ritual v Traditsionnoi Kul'ture*; Ritual in the Traditional Culture; Nauka: Saint Petersburg, Russia, 1993. (In Russian)
138. Hoffmanova, J. Fatická funkce jazyka, konverzace a její žanry. *Slovo A Slovesn.* **1996**, *57*, 191–205.
139. Javeau, C. Parler pour ne rien dire. "Ça va? Ça va!". *Ethnol. Française* **1996**, *26*, 255–263.
140. Zegarac, V.; Clark, B. Phatic Interpretations and Phatic Communication. *J. Linguist.* **1999**, *35*, 321–346. [CrossRef]
141. Garfinkel, H. *Seeing Sociologically: The Routine Grounds of Social Action*; Paradigm Publishers: Boulder, CO, USA, 2006.
142. Tannen, D. *Talking Voices. Repetition, Dialogue and Imagery in Conversational Discourse*; Cambridge University Press: Cambridge, UK, 2007.
143. Shane, S. *Dismantling Utopia: How Information Ended the Soviet Union*; Ivan, R. Dee: Chicago, IL, USA, 1994.
144. Jones, A.H.M. Inflation under the Roman Empire. *Econ. Hist. Rev.* **1953**, *5*, 293–318. [CrossRef]
145. Dalin, S.A. *Infliatsii v Epokhu Sotsial'nykh Revoliutsii*; Inflations in the Periods of Social Revolutions; Nauka: Moscow, Russia, 1993. (In Russian)
146. Bernholz, P. *Monetary Regimes and Inflation: History, Economic and Political Relationships*; Edward Elgar: Cheltenham, UK, 2003.
147. Postoutenko, K. Public Print (2): Coins and Bank Notes. In *Media and Communication in Soviet Union (1917–1953): General Perspectives*; Postoutenko, K., Tikhomirov, A., Zakharine, D., Eds.; Palgrave Macmillan: New York, NY, USA, 2022; pp. 207–241.
148. Kallmes, K. Imperial Monetary Policy and Social Reaction in Third Century Rome. *J. Des Économistes Et Des Études Hum.* **2018**, *24*, 1–11. [CrossRef]
149. Remington, T. 1981. The Mass Media and Public Communication in the USSR. *J. Politics* **1981**, *43*, 803–817.
150. Sandomirskaia, I. "'Bez stali i leni': Aesopian language and legitimacy". In *Power and Legitimacy—Challenges from Russia*; Bodin, P.-A., Hedlund, S., Namli, E., Eds.; Routledge: Abingdon, UK, 2012; pp. 188–198.
151. Hensle, M.P. *Rundfunkverbrechen. Das Hören von "Feindsendern" im Nationalsozialismus*; Metropol: Berlin, Germany, 2003.
152. Magnúsdóttir, R. *Enemy Number One: The United States of America in Soviet Ideology and Propaganda, 1945–1959*; Oxford University Press: New York, NY, USA, 2019.
153. Lohmann, S. The Dynamics of Informational Cascades: The Monday Demonstrations in Leipzig, East Germany, 1989–1991. *World Politics* **1994**, *47*, 42–101. [CrossRef]
154. Fränken, J.P.; Pilditch, T.D. Cascades Across Networks are Sufficient for the Formation of Echo Chambers: An Agent-Based Model. *J. Artif. Soc. Soc. Simul.* **2021**, *24*, 1–15. [CrossRef]