Distortion and Credibility within China’s Internal Information System

KEZHOU XIAO and BRANTLY WOMACK*

Behind the problems of credibility of public official information in China lie two patterns of internal information distortion, one restricting the downward flow of sensitive general information and the other filtering the upward flow of local information. Information gathered at the center is increasingly restricted as it is transmitted down the bureaucracy. Meanwhile, the ‘facts on the ground’ are sifted by local official interests at each level of upward transmittal. Awareness of these distortions has been increased by the Internet revolution, but the structures that encourage them remain in place. An empirical survey of different levels of local cadres in Guangdong Province indicates the different perspectives produced by different positions in the internal information system. Municipal level officials, who have more general information but less diverse local information, tend to be more positive about the quality and objectivity of statistics, while their staff members, further from central sources but closer to messy local realities, are more skeptical.

While the most spectacular failures of credibility in the Chinese information system occur in connection with the public coverage of unexpected events such as the August 2011 train wreck in Wenzhou or the slow reporting of the SARS epidemic in 2003, the problem of information distortion through downward restriction and upward filtering is also a problem of the government’s own internal system and of routine information gathering. With the widespread availability of international media, the Internet and social media, slow coverage and misreporting in the official public media is now more easily countered. Given the cost to credibility of event misreporting and the government’s increasing ineffectiveness in controlling public opinion, continuing reforms in official public media coverage might be expected, but the vertical core of government information remains secretive. This study provides a general analysis of information distortion and its place in China’s general information system. It then demonstrates the empirical effect of vertical distortion on the perspectives of cadres at different levels in the hierarchy.

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The problem with information distortion in the internal information system is complex. The center restricts the downward flow of information to those in the bureaucracy who need to know. The logic of downward restriction is fairly straightforward: it preserves some private space for decision making, it impedes second-guessing by subordinates, and it adds to the mystique of higher authorities being ‘in the know’. As in every government’s information system, the most intimate information is reserved for top officials, and there are cascading levels of less and less sensitive information down and across the hierarchy. In China the problem of downward flow is magnified by the scale of the country, the complex and monolithic structure of the bureaucracy, and an informational culture of secrecy supplemented by rumor.

Although the problem of upward information filtering is not unique to China, it is particularly severe. While Carsten Holtz demonstrates that conscious distortion is only one source of statistical inaccuracy, it is an important one with structural roots. Because ‘the facts’ as perceived by upper levels are major criteria for reward and punishment, there is the incentive and capability to bend the information flow toward the positive and away from the negative. At each level of information aggregation—village, urban district, city or province—the task is not simply to compile the lower-level data (and reward and punish those levels accordingly), it is also to present the most attractive package of information to the next level. Because the party committee and its secretariat at each level exercise comprehensive leadership, information occlusion occurs not only according to local interests within each vertical professional system but also according to the general reputational interests of the leadership at each level.

China’s ultimate information system of ‘the facts’ is its statistical system. Any statistical system has problems of categorization, aggregation, estimation and primary data gathering that can be reduced but not eliminated. As Holtz argues, these challenges are aggravated in developing countries because both the society and the methods of data collection are changing. The particular problems of China’s statistical data were highlighted by the controversy over GDP growth ignited by Thomas Rawski and confirmed by the gap between the national GDP and the aggregate of the provincial GDP claims. In China, not only does every province want to be above average, but it does its best to exaggerate its achievements. In 2010 only three out of 31 provinces were below the national average GDP growth. The same motivation affects information distortion at each level and in every branch of the bureaucracy. Because the gathering of routine data is complicated and technical, its distortions are less likely to be exposed by social media than the misreporting of an event such as a train wreck. Of course, higher-level leadership would like greater

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accuracy, and any iteration of statistical reporting has to be plausible in terms of previous reports and of comparable units. But the frustration caused by upward information filtering is painfully evident in the following remarks by Premier Li Keqiang to US Ambassador Clark Randt as reported by Wikileaks. At the time Li was Party Secretary of Liaoning Province:

GDP figures are ‘man-made’ and therefore unreliable, Li said. When evaluating Liaoning’s economy, he focuses on three figures: 1) electricity consumption, which was up ten per cent in Liaoning last year; 2) volume of rail cargo, which is fairly accurate because fees are charged for each unit of weight; and 3) amount of loans disbursed, which also tends to be accurate given the interest fees charged. By looking at these three figures, Li said he can measure with relative accuracy the speed of economic growth. All other figures, especially GDP statistics, are ‘for reference only’, he said smiling.6

The study of rural reporting by Cai, of poverty statistics by Park and Wang,7 and of the formal statistical system by Holtz certainly support Li’s caution. There can be motives besides career opportunism for distorting information supplied to superiors. As Dong Wang argues in the case of the Longmen Grottoes, local interests can require showmanship.8 Beyond the immediate incentive to ‘optimize’ reports, officials must maintain consistency with previously distorted series, and they cannot afford to be the only honest reporters in a context of inflated information. Moreover, their superiors in turn depend on aggregating positive data. The interaction of personal interest and data is well recounted by a brace of slogans recounted by Cai: ‘Numbers produce officials’ (shuzi chu guan) and ‘officials produce numbers’ (guan chu shuzi).9 Higher-level interest in more accurate data (and more honest officials) leads to laws against misreporting, inspections, sample surveys and censuses. While these measures ameliorate the situation, correct data and restart reporting series at more realistic levels, they do not address the basic structural problem. Information slippage in normal times undermines the government’s grasp of local situations and its public credibility in times of crisis.10

The problem of information distortion is similar to that of official corruption in that serious efforts are made to control it but it cannot be eliminated; and like corruption, information distortion is more easily described than researched empirically. However, if the people gathering the information in various departments across the bureaucracy feel that distortion is taking place, and moreover the pattern of their opinions about credibility correspond to the upward/downward pattern presented here, then an opinion shadow of information distortion can be traced. As Kingsley

Edney has argued in the context of soft power, information loses its persuasiveness if it is seen as mere propaganda.11 The hypothesis of this empirical study is that if lower levels of the bureaucratic system perceive that they are out of the loop of sensitive central information and yet are directly aware of the distortion at their own level they will be more cynical about statistical quality than their superiors.12 The perceptual difference between the positions of staff or supervisor should be a more significant variable than age, sex, education or party membership in explaining degrees of cynicism. Although our survey can only be indicative, it bears out our hypothesis. If the hypothesis is generally correct, it suggests that cynicism regarding official information is not simply the result of outsiders being suspicious of insiders, but that cynicism within the system corresponds to gradations of hierarchy. Evidence of the internal shadow of information distortion is the main empirical contribution of this research. The carvers of the Buddha do not believe.

We begin with a general structural description of the information system and proceed to the results of a survey of different levels of municipal officials in Guangdong carried out in the summer of 2010. We conclude with questions of the policy implications of information distortion for systemic reform.

The structure of internal information distortion in China

Although the motivations for information distortion can be found in any society, they are amplified in China by the monopoly of official information, the enforcement of a propaganda control on the content and formulas of information, and the closed structure of the party-state. No one wants to be the bearer of bad news, especially about themselves, and total transparency is desired only by outsiders and recent recruits, traits that are poorly correlated with power. But external credibility is important for any government, and the accurate and free flow of information within the government itself is essential for prompt, appropriate and cohesive action.

In the Great Leap Forward China suffered the most extreme effects of information distortion and since then it has taken the accuracy of internal information more seriously. As one account describes the Great Leap Forward, "Cadres reported crops that never grew, allocated grain that did not exist, undertook projects that had no hope of success, and when the projects failed they reported them as triumphs".13 Even Mao Zedong complained that he felt like 'a fly in a glass house, blindly banging against the glass'.14 The disastrous results led to greater concern with accuracy, but virtually

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12. This line of inquiry shares a similar spirit with a few recent articles; see Jie Liu, ‘Acquiring political information in contemporary China: various media channels and their respective correlates’, *Journal of Contemporary China* 22(83), (2013), pp. 828–849.
total secrecy about statistics remained in place until the landmark World Bank field trip in 1980 to study the Chinese socio-economy. National and provincial data gradually became more available, and the National Bureau of Statistics has become more active in the direct collection of statistics. China’s accession into the WTO in 2001 provided another external boost to statistical quality and transparency. Nevertheless, the opacity of the information system remains a stumbling block not only to external transparency but also to internal accuracy.

In his seminal analysis of the informational context of the Tiananmen events of 1989, Tang Tsou contrasted a ‘core pyramid’ of power resting on a base of Party branches in functional and territorial units and a ‘reverse pyramid’ of policy information in which the center has broadest access and less and less information is provided to lower-level units. Together, the pyramids make an hourglass shape in which the top has the broadest information and the bottom has the most direct experience of social reality. But the pyramid of power has its own upward flow of controlled information since the center is dependent on its subordinates for reports. Meanwhile around the internal system is an unorganized mix of information, misinformation and disinformation, both official and informal, that is especially important to intellectuals, students and urbanites. The informational disconnect breeds alienation and suspicion between insiders and outsiders and between higher and lower strata of cadres. Thus the leadership and the populace are in different worlds, and at Tiananmen these worlds collided.

In Figure 1 we propose a refinement of Tsou’s original sketch. The most prominent information distortion occurs in the downward transmission of sensitive information (Pyramid 1 in Figure 1). An article that appeared in Phoenix Weekly in 2008, which was quickly washed out of the Internet by censorship, detailed the hierarchy of information within the CCP. Three levels of classifications are reported. Internal reference (内参副页, neican fuye), the highest classified level of information, is available only to Politburo Standing Committee members. It is published at irregular intervals and accessible only to members of the Standing Committee in the Politburo and other selected Politburo members. Internal listing (内参清样, neican qingyang), the second highest level of the classified information, is only available to leaders at the provincial level or higher. Internal selected reference (内参选编, neican xuanbian), a collection of less sensitive articles than those mentioned above, is available for county-level leaders. In addition, leaders can make comments on the margins of downward circulated internal documents as a way to express their opinions and to

20. ‘Dianji quanli gaoceng di xinxi tequan—yulun jiandu taozhan neican zhidu’ ['Checking the privilege of information to the powerful—a clash between media supervision and internal institution'], Feng Huang Zhou Kan [Phoenix Weekly], (9 August 2008).
give a personal spin to the message. Because of the privilege attached to these documents, any circulation to unauthorized recipients and even open discussion with ‘outsiders’ could cause serious consequences to the disseminator. The article also claims that leaders in the top echelons generally never access any news in the public media. While the official media may be the ‘mouthpiece of the Party’,\textsuperscript{21} it is not the earpiece.

Upper levels of leadership supplement the official chain of reporting with parallel internal information channels. These secret reports, along with discussions of sensitive issues and directives, form a major part of the content of the downward pyramid. The editor of a provincial newspaper commented that he wrote two internal reports and the more restricted one went straight to Beijing. He estimated that his reporters spent 70\% of their time on official public reporting and 30\% on internal reporting.\textsuperscript{22} The selective cascade of information and authoritative opinion about information to the lower tiers of the bureaucracy forges a remarkably strong link between formal power and information control, a symbiosis that is likely to be resistant to potential political reform of transparency and accountability.


\textsuperscript{22} Hsiao and Cheek, ‘Open and closed media’, p. 81.
Upward information filtering (Pyramid 2 in Figure 1) is not based on the privileges of power, but rather on the opposite: the awareness of vulnerability. Each level reporting to its superiors knows that it will be judged according to what it reports. Of course, the problem is not unique to the People’s Republic of China. It is part of the ubiquitous principal–agent problem of slackness in the reins of control in complex organizations. The particular difficulty that it creates is perhaps best described by the classical realist theorist Han Fei Zi:

The ruler must not reveal his desires, because if he reveals his desires his ministers will put on the mask that pleases him . . . Discard likes and dislikes and the ministers will show their true form . . . Be empty, still, and idle, and from your place of darkness observe the defects of others.23

Upward information distortion has had dramatic effects in Chinese history. James Hevia describes the role of information distortion in the frustrations of both sides during Lord Macartney’s visit to Chengde in 1793.24 Mao Haijian points out that one reason the Qing court was slow to respond to the defeat of the First Opium War was that local officials exaggerated successful resistance and minimized the military failure.25 Perhaps the most dramatic current accounts of local-level information distortion are the stories of unreported peasant oppression collected in Will the Boat Sink the Water?26 Local governments siphoned funds taxed from farmers and reported a falsified figure to their upper-level authorities. In his discussion on statistical monitoring, Yasheng Huang observed that even after reforms were adopted to include employees at the local statistical bureau in the central nomenklatura and to fund operations centrally, ‘administrative expenditures have continued to be funded locally, indicating that local governments still command a great deal of administrative authority over the operations of the local State Statistical Bureau branches’.27

Tsou claims that upward information distortion is ‘worst of all’.28 It not only gives a false picture to the top leadership, it gives a picture that is pre-formed by the preferences of the leadership as perceived by their subordinates. Information distortion therefore is not random misreporting; it is a constructed reality leaning away from the factual reality testing of preconceptions and toward unwarranted confirmation. Internal channels can provide only a partial corrective. Upper levels can launch special investigations, censuses and surveys, and they can punish misreporting, but correction is constrained by the need to preserve the hierarchy and limited by the economies of attention of upper levels. Moreover, other units aware of an investigation learn to adjust their reporting to new preferences.

Of course, the internal information system does not exist in a vacuum. Both superiors and subordinates would be foolish to ignore other sources, and the

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proliferation of electronic communication has affected the information environment even within the government.29 Figure 1 presents three general levels of external information that provide a context for the internal pyramids. The first and most important for routine as opposed to crisis information is guanxi-based (relationship-based) rumor (Circle 3 in Figure 1). Rumor provides personalized communication between different levels of the informal political system. In situations of internal information distortion it becomes important for both superiors and subordinates—but especially for subordinates—to develop an active informal information network. Rumor, ‘alley news’ (xiaodao xiaoxi 小道消息), fills in the personality context and informal politics of the system, who is doing what to whom, what is happening next door, how reliable is the officially available information, how serious is the latest directive. Rumor has its own distortions, and it can be a form of entertainment as well as information, but in an environment of incomplete and occluded official information it can be a vital source. The capacity to pass on useful rumors becomes a major item of exchange and an important mark of status in personal relationships.

The most dramatic changes in the information environment have occurred in unofficial information that is made available to a broad audience (Circle 4 in Figure 1) rather than being passed from friend to friend. This broad category includes everything from domestic social media to international media. International media has penetrated national boundaries since the first radio news broadcast in 1920, but it has become much more accessible in China during the reform era, and it now includes referencing systems such as Google as well as news broadcasting. Social media has the communications advantages of nearly universal and costless production capacity with real time availability to an unlimited audience. With the advent of social media, censorship can only come after the fact. The domestic media monopoly of production is lost. Social media has become crucial for event and crisis information in the reform era because of the slow reaction time of official media and public suspicions of its bias. It is significant but less important for routine information systems since it is unlikely that an ‘outsider’ would have access to better information, or that an ‘insider’ would risk the vulnerability of going public with a constant stream of facts deviant from the official channels. However, as Chen and Wu’s rural investigations show, at the grassroots level people can report what they see with their own eyes. In the case of the Wenzhou crash, rumors spread on micro-blogs concerning the number of deaths in the accident and captured a wide audience skeptical of official information outlets.30 Social media has already had major effects on public media. In the Wenzhou case, for example, public media coverage was quite comprehensive after the initial hesitation.31 It remains to be seen how this sphere of information alters the power relationships between supervisors and their subordinates as well as between the government and its people.

The last contextual category is official public media (Square 5 in Figure 1). Chinese official media has become more professional and diverse in the reform era, but it still has the root problem of being official. The official media can report problems and undertake investigative reporting, but it can do this only when a problem is officially recognized and an investigation is approved. As Judy Polumbaum observes, Chinese journalists are in the awkward position of both reporting events and presenting the official viewpoint. Thus the media was silent on the SARS epidemic of 2003 until it was officially acknowledged, and then—months after the initial outbreaks—it went after the story in full force. Perhaps the most striking blank spot in official media is the total absence of discussion of prospective candidates for leading positions. Hints are given, but there is no overt discussion even when the forthcoming leadership transition is a foregone conclusion, as in the succession of Hu Jintao by Xi Jinping at the 18th Party Congress. It isn’t discussed in print beforehand because it is not yet official. The official media loses credibility as a news source not primarily because of egregious misinformation, but because of the slow response to events (the news must wait for official judgment), a predictable (and therefore uninteresting) slant, the absence of personality gossip and notorious censorship. However, the official media is useful for lower levels of the hierarchy and for outsiders precisely because it is official. A close reading, supplemented by the various internal directives of the party’s propaganda system, can detect shifts in priorities and personalities.

Essentially the government has lost its monopoly on public information even as it continues rearguard actions of control. However, vertical information distortion within the government is based on the power to restrict downward transmission and the ability of the vulnerable to shape upward reports. Without external transparency, the potential for distortion remains intact. Official reality remains top down, inside out, and is distorted as a result. To use a metaphor, government operations in China, like government cars, tend to have reflective glass that blocks the view of outsiders and tints the view of insiders. However, officials—and especially lower-level officials—cannot live in their cars, and the disparity between what they do and the increasingly free opinion in society and over the Internet contributes to alienation within the system.

We have presented a picture of the structure of information distortion and speculation on why information is occluded, but not a general assessment of how much distortion occurs. All participants in the internal system have an overarching interest in knowledgeable subordinates on the one hand and their own credibility to superiors on the other. Neither leaders nor subordinates want to act blindly, and a secret or lie that is useful at one moment might have unforeseen negative consequences later on. As modern governance has become more routinized in the reform era, both the quality of transmittal and the transparency of the system have been much improved. What we are interested in here is not a dysfunctional information system, but rather the structures and shadows of its distortion.

33. See Anne-Marie Brady, Marketing Dictatorship: Propaganda and Thought Work in Contemporary China (Lanham, MD: Rowman and Littlefield, 2008), especially ch. 2.
The survey of Guangdong bureaucrats

We hope that the above structural analysis of information distortion is plausible to those familiar with China and useful to those who are not. However, it is not an easy task to demonstrate the effects of the structure empirically. Information distortion is not part of the official informational scheme, rather, it is a byproduct of its structural flaws—the shadow of the system. The shadow can be witnessed, experienced and described, but it is hard to count.

We address this challenge by testing the following hypothesis. If intermediate-level officials have better access to top-down information but are more distant from the actual gathering of the facts, then we hypothesize that they will be more optimistic about the reliability and objectivity of the information system. Moreover, if the main business of intermediate officials is the packaging of data, then their daily concern is the acceptability of the package, and one aspect of their selection and socialization is likely to be a rather optimistic attitude toward the system. By contrast, the lower levels—and especially the lowest, fact-collecting level—have less access to central information and must rely more on rumor and unofficial media for the general context of their activities. More importantly, since they are closer to the ‘booming, buzzing confusion’ of reality, they know the incompleteness, inadequacies and ambiguities of the data they report. Their job is to seek the official truth from facts, and so they are more aware of the difference. In short, our hypothesis is that there will be a significant difference of opinion between lower and higher levels of the statistical hierarchy and especially between the lowest level and their administrative superiors regarding the reliability and objectivity of information. Given our description of the rigidity of internal information structure, we expect that position in the hierarchy should be more effective than other variables in determining perception of information distortion. The point here is not to determine which level is correct in their reflection of reality, but rather to use the differential in their opinions by level to demonstrate empirically the effects of the intersecting pyramids of information distortion.

To clarify, the point here is not that bureaucratic superiors are naı¨ ve about the quality of information that they receive and that subordinates are totally in the dark about restricted central information. Both naivété and ignorance should be correlated with lack of experience, and we find that seniority in government service and in current position are irrelevant to perspective. Moreover, we are not saying that superiors are more loyal to the Party than subordinates. We find that Party seniority also does not determine perspective. We also control for other external factors such as age, education and local familiarity. Rather, we hypothesize that vertical power shapes positional perspectives on information distortion, and that is what the data indicate.

The Guangdong Cadre Opinion Survey34 was conducted in the summer of 2010 with the help of the School of Government at Sun Yat-sen University (Zhongshan Daxue 中山大学), Guangzhou, China. The survey collected a wide range of demographic variables (see the summary in Table 1 below) and a number of perception questions regarding the quality and reliability of statistical information.

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34. To see the original dataset, questionnaire (both in English and Chinese) and more detailed statistical analysis, please feel free to send an email to the authors.
Because of the sensitivity of the topic, we were unable to randomize our subjects and conducted the survey on students of Master of Public Administration programs, most of whom are cadres in various systems within the bureaucracy in Guangdong Province. The participation of the survey was completely voluntary and unrelated to their course performance and they were free to skip any or all questions. We received 102 questionnaires and 84 questionnaires were returned with completed demographic information. The following quantitative results are based on the 84 completed questionnaires.

Research designs in comparative politics rely heavily on random samples of a cross-section of respondents. The quality of the sampling design strongly affects the quality of survey data collected. However, random sampling is difficult when the subject of interest is cadres in Chinese bureaucracy. These officials are suspicious of any kind of soliciting of opinions, whether quantified or not, for fear of punishments and loss of potential benefits, despite assurances from our collaboration partner at Sun Yat-sen University. Moreover, as a result of the voluntary participation of the survey, about 18 cadres in the raw data have incomplete responses including empty responses, yielding a completed response rate of 82% (84/102). In addition, the cadres are all from Guangdong Province; this fact makes the interpretation and extrapolation of the quantified results to the national level problematic. However, given these limitations, we are confident that the recruitment of the students in the Master of Public Administration comes from diverse backgrounds, positions as well as systems, which means that these respondents are from various government organs but have to deal with the data within their own unit. Despite the variety of units and responsibilities, the significant effect of bureaucratic rank on cadre perceptions is evident. Therefore, our empirical investigation provides a preliminary attempt at identifying the vertical perception heterogeneity across cadre ranks under current institutional arrangements. Further research could replicate this study in other provinces and hopefully create time-series data of perception and career data as cadres move upward through the bureaucratic levels and as reforms progress.

Survey results and quantitative analysis

Table 1 presents the summary statistics of the demographic variables for each of the respondents. In each of the opinion questions, we asked the respondents to what extent do they agree with a particular statement. For instance, in Opin8, the corresponding question is ‘From my knowledge, I believe political pressure is only a minor factor affecting data quality. How much do you agree with this statement?’. The table computes the sample mean of each response in the completed questionnaires. As for explanatory variables, the key parameter of interest is the Position variable. We would like to know whether this variable exerts significant influence on each of the opinion variables as well as the magnitude of such influence. We classify each respondent by his/her bureaucratic rank since these respondents are all from within bureaucracy. Those classified as staff are full time cadres who have the lowest rank in the hierarchy. These people might perform assisting duties to their superiors, but they are not interns or temporary personnel.
Other than the Position variable, we control for the generational difference by the Age variable, number of years serving as party member by P_age, number of years serving as state official as C_age, number of years in current position by Po_age, education level by Education and whether the cadre serves in his/her hometown as a measure of familiarity with the working place. The summary statistics provide an overall view of the mean of Age, P_age, C_age and Po_age. For Age, Education, Position and Working in your childhood place, the number for each option should be interpreted as a percentage. That is, the number is a measure of the percentage of respondents in the respective category. For other variables, the value is the mean value aggregated from all the respondents.
The opinions expressed in Table 1 show general reservations about the quality of national data, though more confidence in the respondents’ own department. There is also general agreement that government data collection is improving. The last four questions cover views on personal vulnerability and on the impact of vertical pressure on data collection, and these show a markedly more pessimistic picture. Especially with these questions it would be useful to differentiate the viewpoints of superiors and subordinates, and that is accomplished in the subsequent analysis. In Opin5 and Opin6, we have carefully differentiated between the evaluation of general performance and of promotion because we are aware of the disjunction between performance and promotion when the factor of relationships (guanxi) might be involved, and as expected the outcomes differed.

In order to determine the importance of bureaucratic rank in predicting an official’s opinion about statistical quality and reliability, we use an ordinal logistical regression on each of the individual opinion values. Table 2 presents a summary of the significant predictors for each of the opinion variables. As we can see, bureaucratic rank is consistently the most significant predictor in determining an official’s attitude. No other competing demographic variable achieves comparable importance.

In order to show clearly the contrast between different levels of cadres, we focus on the differences between the predicted values in our model from staff (the lowest ranked respondents in our sample) and vice municipality level official (the highest ranked respondents in our sample, futingji, 副厅级). There are 11 cases for Vice Municipality, about 13% of the total sample (11/84 = 0.13095); on the other hand, there are 49 cases that are categorized as staff, about 58% of the total respondents (49/84 = 0.58333). Instead of looking directly at their frequencies, the predicted probability derived from our ordinal logistic regression mode helps focus on the effect of bureaucratic position on perceptions, excluding the effect of other confounding variables by holding these variables at their mean. The following two figures display these comparisons for two questions (Opin7 and Opin8). These two questions are quite political and sensitive, providing an interesting look into our information distortion model.

Figure 2 plots the predicted values for the highest and lowest ranked officials in our sample. When asked ‘from my knowledge, I believe that outright data fabrication is rare’, the predicted value for staff responding to either ‘mostly disagree’ or ‘perfectly disagree’ is about 60% as compared with less than 20% for higher-level cadres. On the other hand, the predictor value for staff answering ‘perfectly agree’ or ‘mostly agree’ is less than 20% as compared with about 70% for higher-level cadres. In Figure 2 the shadows of the intersecting pyramids of information distortion stand out clearly. This pattern of divergence is consistent across all opinion questions where Position serves as a statistically significant variable.

Similar patterns are present even when we restrict our attention to the influence of political forces on statistical reliability. As noted in Table 2, no variable has been statistically significant in this question. Yet, Figure 3 plots the predicted values for the highest and lowest ranked officials in our sample, holding other variables constant to

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35. For more detailed statistical results, especially coefficients of each of the ordinal logistic regressions, please email the authors.
the mean. When asked ‘from my knowledge, I believe political pressure is only a
minor factor affecting data quality’, the predicted value for staff responding to either
‘mostly disagree’ or ‘perfectly disagree’ is about 57% as compared with less than
30% for the highest rank. On the other hand, the predictor value for staff answering
‘perfectly agree’ or ‘mostly agree’ is about 15% as compared with about 37%.
Although the differential is not as large as in the previous figure, the gap between
these two groups of officials is beyond doubt.

Respondents’ comments on the statistical system and data quality

The questionnaire included the opportunity for general comments on the statistical
system and 17 respondents out of the 102 (all the questionnaires including the
incomplete ones) included a comment. Since the comments were free-form they

<table>
<thead>
<tr>
<th>Variable label</th>
<th>Opinion questions</th>
<th>Significant predictors</th>
</tr>
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<tbody>
<tr>
<td>Opin1</td>
<td>General attitude towards national statistics</td>
<td>Position*</td>
</tr>
<tr>
<td>Opin2</td>
<td>General attitude towards departmental statistics</td>
<td>Position**</td>
</tr>
<tr>
<td>Opin3</td>
<td>General attitude towards state capacity</td>
<td>Position*, C_Age*, Degree*</td>
</tr>
<tr>
<td>Opin4</td>
<td>General attitude towards public policy based on scientific data</td>
<td>Position**</td>
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<tr>
<td>Opin5</td>
<td>Evaluation based on measurable criteria</td>
<td>Position***, C_Age*</td>
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<tr>
<td>Opin6</td>
<td>Promotion based on measurable criteria</td>
<td>Position***</td>
</tr>
<tr>
<td>Opin7</td>
<td>Rare case of data fabrication</td>
<td>Position*, Gender*, Po_Age*</td>
</tr>
<tr>
<td>Opin8</td>
<td>Minor problem of political pressure</td>
<td>None</td>
</tr>
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Notes: One, two or three stars denote decreasing levels of significance at 0.01, 0.05 and 0.1, respectively.

"From my Knowledge, I believe that outright data fabrication is rare,”

Figure 2. Predicted probability for different groups of officials: rare case of data fabrication (Opin7).
cannot be easily aggregated, but linking the written comments to the bureaucratic rank of the respondents, an interesting pattern emerges. Staff and vice-village level officials (one rank above staff, *fukeji*, 副科级) are quite cynical about the quality of statistical information collected and the degree with which politics affect the reliability of these data, while two comments from higher ranks provide complexity to the data inaccuracy story by pointing out the technical details and cross-industry differences. Except for one comment about sharing our surveys and one comment without a bureaucratic rank with which to be linked, we present the 14 most interesting comments and the corresponding bureaucratic ranking linked to that comment.36

From officials in the higher hierarchy:

- ‘Accuracy depends on the type of the data collected. We have to distinguish whether it is sensitive data or not’ (Vice county level, *fuchuji*, 副处级).
- ‘Because of the mismatch between statistical surveying and correction, we have a problem of statistical inaccuracy so that the quality of decision has suffered’ (Vice municipality level, *futingji*, 副厅级).

From vice-village level (*fukeji*, 副科级) officials:

- ‘If the promotion system of the cadre is not altered fundamentally, then the cult of GDP will not change. Neither will the problem of data quality.’

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36. For a complete review of the comments, please email the authors. The original Chinese remarks are also available.
‘Data come from officials.’
‘The quality of statistical information is related to many factors. Public orientation is just only one of them. There are other aspects: (1) the standard of statistical survey should match one another; (2) staff from statistical bureaus should be trained and supervisor’s discretion should be minimized; (3) there should be a supervisory department and collaborations between finance department and statistical department should be established; (4) for discrepancies in statistical information, the respective supervisor should be responsible. A mechanism of punishment and reward should be built up.’
‘Personally, I believe that official data only has face value. They serve merely a showoff as official’s bargaining tool for promotion. So official statistics are rarely concerned about the well-being of the people.’

From staff:
‘Grassroots governments have the accurate information. But because of the promotion considerations of the cadres, they tend to digest unfavorable information. Having multiple bookkeeping for different purposes is a common practice not only in government but also in civic organizations.’
‘Accuracy depends on the type of the data collected. We have to distinguish whether it is sensitive data or not.’
‘Abolish the statistical bureau and replace it with third party non-profit organizations.’
‘The so-called “official data” are not completely authoritative and reflective of reality and cannot ignore the influence of political factors and become completely objective. This is not just in China, but in every country in the world. Statistical information has to serve political interests for the sake of state. Therefore we need to combine official data and data from the other sources.’
‘In China, I don’t believe in any government published data.’
‘There are huge discrepancies between what we feel in our daily life and the official index and data, such as Consumer Price Index, average income and price for real estate property.’
‘Data come from officials. Officials get promoted by the data.’
‘Data depends on official attitude.’

Information distortion and systemic reform

There is no golden key that solves the problem of information distortion in organizations. Like an electron, a piece of information has spin as well as charge, and its handlers will be aware of both. The problem of what to say and how to say it occurs at each link in an information chain. Moreover, if there were a golden key to complete and undistorted information, it is doubtful that any government would dare use it. Governments value their privacy. The American government’s recent experience with Wikileaks is more likely to drive it into more secure waters of secrecy rather than to open all its diplomatic cables. Indeed, in a case worthy of Chinese officialism, a US federal judge ruled that the government could refuse to
release classified diplomatic cables already available on Wikileaks. The problems of secrecy and of information distortion are of management rather than cure.

However, information distortion is particularly acute in China. By creating a gap between reality as perceived and reality as reported, information distortion reduces government effectiveness and creates skepticism, cynicism and alienation. Moreover, as the comments vividly demonstrate, a subculture of misinformation emerges among officials in which the incentives to supply desirable data are stronger than the responsibility to supply accurate data. The entry-level cadres can see both the disparity between report and reality and the irony that politically correct reporting is more important than accurate reporting. Similarly, as Li Keqiang’s remarks illustrate, the top leadership is aware that some of the routine information available to them has passed through a chain of distortions. On the positive side, it should be noted that most respondents considered their departmental statistics reliable or basically reliable (91.67% for beyond staff level and 70% even for staff level), though all held a considerably lower opinion of national statistics (63.89% for beyond staff level and 28% for staff level). Similarly, most (85.71% for beyond staff level and 84% even for staff level) thought that state capacity in collecting national data was improving. Meanwhile the public’s long-standing reservations regarding the credibility of official media are now magnified by the alternative information channels created by the communications revolution.

Reducing the informal incentives for information distortion is a difficult challenge. As Yasheng Huang observed, the state strengthened the central monitoring of officials at the same time as it decentralized personnel processes in the 1980s, and localities remain an important and often decisive influence on budgets and careers. As Pierre Landry showed, despite decentralized personnel processes, the political control of the center has remained largely intact, but secrecy and political control strengthen the two pyramids of information distortion. As several of the respondents’ comments suggest, professionalization should raise the incentives for accuracy, but in an unsupportive work environment it can only produce frustrated professionals. Transparency tempers information distortion by making more information available publicly and thereby setting standards of credibility of new information. However, if a previous information series has been shaped by distortion, then more accurate information can produce an apparent downturn that is actually only a return to reality.

A deeper problem underlying information distortion is the general proclivity of the Chinese party-state to shape reality through language. An all-pervasive command orthodoxy has roots in Chinese culture as well as in the vanguard role of a Leninist party, but it is increasingly ineffective as the CPC adjusts to its tasks of being the governing party of a modern political community with Internet connectivity. Similar
to the problems of a command economy, a command orthodoxy supplies increasingly ill-fitting stereotypes to a diversifying intellectual and informational world, and in the process it distorts its own inputs and lowers its credibility. China is in the midst of a material, societal and informational revolution. As Mao Zedong once pointed out about rural revolution, revolutionary comrades have three choices: to lead, to drag along behind complaining or to oppose.