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Great Leap, Great Famine

Cormac Ó Gráda, University College Dublin

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Great Leap, Great Famine¹

Cormac Ó Gráda

University College Dublin

¹ Review of Yang Jisheng, *Tombstone: The Great Chinese Famine 1958-1962* (New York: Farrar, Strauss and Giroux, 2012; \$35.00) and Zhou Xun, *The Great Famine in China 1958-1962: a Documentary History* (New Haven: Yale University Press, 2012; \$45.00). The very helpful comments of Anthony Garnaut, Andreas Hess, Morgan Kelly, Carl Riskin, and Peter Solar on an earlier draft are much appreciated.

Yang Jisheng's *Tombstone*—an abbreviated translation of *Mubei*² (Hong Kong, 2008)—was one of the Big Books of 2012. *Tombstone* is also a long book, even though ten of the fourteen provinces allocated chapters in the original have been omitted in the translation. We should still be grateful for Yang's powerful accounts of the Great Leap Famine in Henan, Sichuan, Anhui, and Gansu. The death of the author's stepfather as a famine victim lends his account an added intensity.

Arriving just two years after Frank Dikötter's *Mao's Great Famine* (which had some ungracious things to say about *Mubei*) and hot on the heels of Zhou Xun's *The Great Famine in China*,³ *Tombstone* leaves readers spoilt for choice. Yang and Dikötter both rely on the kind of documentation reproduced by Zhou—'sensitive' material surreptitiously accessed from official archival sources—which they supplement with oral and written information gained from eyewitnesses. Indeed, Zhou's volume is a byproduct of her time as Dikötter's research assistant; most of its 121 documents are a subset of the 'well over a thousand' used by Dikötter (2010: x). The similarities do not end there; Yang, like Dikötter and Zhou, provides plentiful horrific cameos of famine and state terror, as well as new estimates of excess mortality. All three accounts are highly politicized. While Dikötter and Zhou

² Yang reckons that there are 0.5-0.6 million copies of *Mubei* circulating in China, counting original and bootleg versions (<http://www.bbc.co.uk/news/world-20410424>).

³ A shortcoming of Zhou's useful volume is its relative brevity, particularly since some of its content is only loosely linked to the famine. This applies particularly to the twenty-two documents on religion—interesting in themselves—but mostly with little direct bearing on the famine. Zhou should have explained exactly how the material transcribed and published was selected.

blame the famine on Mao Zedong personally, for Yang—who is no apologist for Mao—it proves that ‘a system without a corrective mechanism is the most dangerous of all systems’ (pp. 496-7)⁴.

A Unique Famine:

The famine’s setting, the rash and disastrous attempt at rapid economic modernization known as the Great Leap Forward—and not just its size—made it unique. One striking feature of *Tombstone* is the paucity of references to shops, moneylenders, pawnbrokers, or prices. And because there were no landlords or private farmers, there were no evictions and no distress sales. Did markets function at all? They did, if only to the extent that commune members in some provinces continued to cultivate minute parcels of land and to raise pigs and ducks (p. 439-40). We know too that some people sold their children and that pre-cooked human flesh was sold as pork in Anhui (p. 302), and Zhou reproduces documents on hunger-induced prostitution and black markets in Sichuan (Zhou, pp. 132, 134, 135-37, 129-31). In *Tombstone* there is also a hint of a market in kind for sex (p. 196); there are fleeting references to fines (pp. 223, 224, 226) and to profiteering (p. 478). But that China lacked a functioning, integrated market economy during the Great Leap surely made the famine worse.

Tellingly, neither public action nor private charity—dominant themes in the historiography of pre-1949 Chinese famines (e.g. Will 1990; Li 2007; Fuller 2011)—plays much part in *Tombstone* either. Accounts such as that from

⁴ All page references are to *Tombstone*, unless indicated otherwise.

Gansu's Tongwei county in December 1960, where the authorities were shamed into a relief effort that 'reclaimed eighty thousand souls from the brink of death', or from Linhuai in Anhui, where an influential cadre sent five thousand kilos of soy pulp—and was reported for 'right-deviating thinking' for doing so—are exceptional (pp. 151-52, 279). Public works, soup kitchens, workhouses, private philanthropy, and foreign aid: these are the dogs that didn't bark in 1959-61. Why relieve a non-existent famine?

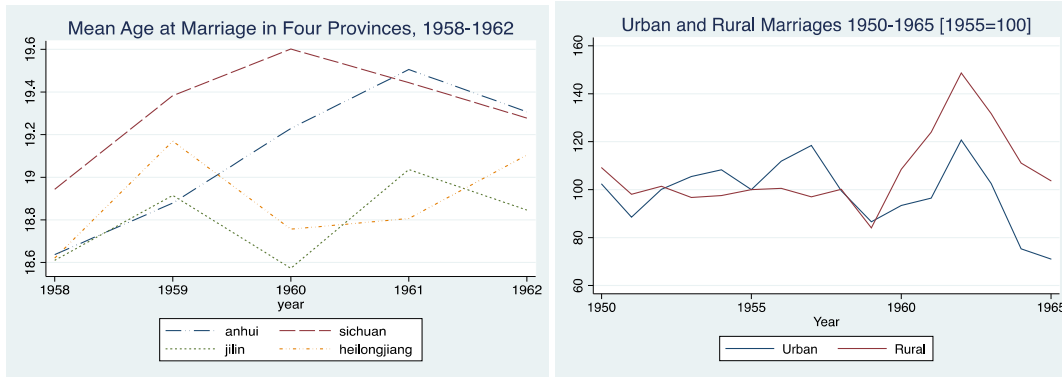
Also lacking in *Tombstone* are references to deaths from typhus, typhoid, malaria, measles, or cholera. This could be an oversight, but more likely it reflects a perversely 'modern' feature of the Great Leap famine, the primacy of starvation as the cause of famine deaths. Whereas in earlier Chinese famines, such diseases did most of the killing, in 1959-61 'disease' was a euphemism for edema, dysentery, and starvation (pp. 217-19).

Another unusual feature of the period was the many violent deaths, mainly from beatings and other forms of physical abuse associated with the Great Leap Forward. The victims were often recalcitrant and bewildered peasants, mainly men, suspected of hoarding or stealing food (Zhou, pp. 31-35, 139). But who was most likely to die in the 'classless' society being created during the Great Leap? Yang (p. 42) notes only that peasants were much more likely to succumb than cadres (Communist Party office-holders), but a loose hierarchy of suffering by socioeconomic class may be inferred from the impact on the number and timing of births during the famine. A mother's low occupational status or lack of education were strong predictors of the likelihood of a miscarriage or losing an infant, whereas higher status

was linked to the greater likelihood of induced abortions (Cai and Wang 2010). Some of these patterns may be seen in Figure 1, derived from the 1982 China fertility survey. The mean age at marriage rose more in badly-affected provinces (Sichuan, Anhui) than in less-affected provinces (Jilin, Heilongjiang); the percentage of women giving birth within two years of marriage fell more in rural than in urban areas; the number of marriages rebounded powerfully in the wake of the famine, and more so in rural than in urban areas. The survey also indicates that the fertility of the better off, represented by mothers who had attended senior middle school (SMS), was less affected.⁵

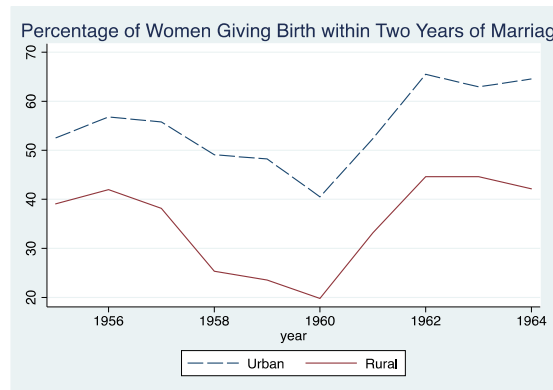
Homeless vagrants are often the first casualties of famine, so it comes as no great surprise to read that the first recorded case of cannibalism in Anhui involved a 'vagrant' (Yang, p. 302; Zhou, pp. 139-40; compare Li 2007: 233-34; Will 1990). Still, the role of migration during the Great Leap remains unclear in *Tombstone*, which rather equivocates between arguing that migration was impossible (due to the system of household registration introduced in 1958) and that it was common (pp. 20-21, 27, 29, 57, 127, 270, 473).

⁵ Cai and Wang (2010) infer from the 1988 fertility survey that 1959 was when infant and child mortality rose most, when the marriage rate dropped most, and when miscarriages and abortions increased. The 'observed maximum impacts of the famine are mostly delayed effects of the adversity in 1959'.



(i)

(ii)



(iii)

Figure 1. Marriage and Fertility in China in the 1950s and 1960s

Source: China Population Information Centre (1988), vol. 2

Like Dikötter and Becker (1996), Yang and Zhou linger over disturbing and convincing evidence of a feature often glossed over in accounts of famine, famine cannibalism. It is a recurring theme in Yang's long chapter on Anhui (pp. 278-79, 289-90, 302-04), the worst affected province of all, but there are also detailed reports from Gansu (pp. 141-44) and Henan (pp. 41-46) of both what might be dubbed survivor cannibalism and murder for human meat. Zhou (pp. 59-71) reproduces documents from Gansu and

Sichuan that include lists with the names of several perpetrators and victims; these are at the core of Dikötter's searing account (2010: 320-23). Such horrific evidence will shock non-specialists in famine and Chinese history, as it is surely intended to do. Yet accounts of cannibalism were hardly new in the 'land of famine'. A mere three decades before the Great Leap in Sichuan's Wanyuan county:

People got used to the idea of eating human flesh in order to survive. This flesh was bought in quarters, at prices that varied by a factor of one or two depending on whether it had been taken from a corpse or from a person killed for the purpose. In the east of Sichuan at the beginning of May 1936, the going rate was 500 copper pieces for a pound of flesh from a corpse and 1,220 copper pieces a pound if it was freshly killed (Bianco 2001: 153).

Seven years later an American journalist working for the London *Times* reported in his diary a mother's arrest for having eaten the flesh of her deceased six-year old daughter. This prompted a Chinese friend to remark that 'if they start eating dead, they'll soon be eating live people'; perhaps that explains why the unfortunate mother was reportedly buried alive 'for punishment and example'. *Time Magazine* journalist Theodore White also referred to accounts of cannibalism in Henan in 1942-43.⁶ Historians of famine are familiar with such stories (Arnold 1988: 16, 19; Ó Gráda 2009: 63-68; 2013); Yang and Dikötter are not. Still, widespread⁷ cannibalism in a society

⁶ Harrison Forman diary, December 1942-March 43, University of Wisconsin-Milwaukee [collections.lib.uwm.edu/cdm/ref/collection/forman/id/50]; White and Jacoby 1946: 163.

⁷ Xhou Xun was told by survivors in the Xinyang area of Henan and in Anhui that

allegedly on the verge of 'the ultimate paradise of human history' (p. 250) was in a league of its own.

Leaders and Cadres:

The profound economic naiveté that defined the Great Leap and the gullibility—initially, at least—of Mao and a majority of the Party have often been described before. So has defense minister Peng Dehuai's brave attempt at halting 'rash advance' at the Lushan Party Conference of July-August 1959 (e.g. Schram 1974; Li 1994: 313-23), but Yang's lengthy account of that episode (pp. 350-93) is the best we have. Alas for the Chinese people, Peng failed to convince Mao that there were 'different rules for politics and economics, and that's why ideological education cannot replace economic work' (p. 357). Instead, a majority accepted Mao's stance that 'in a big country like ours, always taking the slow and steady route will lead to disaster' (pp. 103, 263). What did the masses think? Yang concedes—and this should not be forgotten—that 'in all fairness, the people's genuine aspirations lay behind much of the folly of the Great Leap Forward' (p. 125; but see too Wemheuer 2010: 190).

For a year or two, millions of 'true believers' and 'hot-headed youths' wanted to believe—and Mao certainly believed at the outset (p. 497; Li 1994: 278)—the spectacular stories of achievements in agriculture and industry (dubbed 'sputniks') that would have been the envy of Joseph Stalin's

'almost every village had cannibal incidents and some people even ate their own children' [<http://www.youtube.com/watch?v=61fQ2zHXxE>].

Stakhanovites. The 'sputnik' yields culled by Yang from the *People's Daily* reached 64 tonnes/ha of wheat on a farm 2,800 meters above sea level in Qinghai and 450 tonnes/ha of rice in a hilly part of Guangdong by September 1958. Even Mao's credibility was stretched by a claim of 50,000 kilos per *mu* (750 tonnes/ha) in Tianjin (pp. 200, 327-28, 497). Yields in China today average only about 7 tonnes/ha for rice and 5 tonnes/ha for wheat. The prospect of bountiful harvests led to the mass diversion of labor out of agriculture, with calamitous consequences for food availability.

After Lushan nobody dared point to the state of the Emperor's clothes. When Mao inspected Henan, provincial leader Wu Zhipu covered up the starvation (p. 81); there were myriad cover-ups at local level (p. 39, 49), and even senior officials could not communicate freely (pp. 51, 52, 279; compare Gao 2011: 179; Thaxton 2008: 231-32; Li 1994: 279, 283-4). One of Mao's cousins told him, 'You live in Beijing, as remote as the emperors of old, and you don't know what is happening' (p. 192). According to his personal physician—invoked as a reliable source by Dikötter—Mao was both depressed by bad news and annoyed at how people hid the truth from him. But 'the vexation of falsehood' (p. 497) was part and parcel of the system, and 'negative feedback' was lacking (p. 103).

How much did Big Brother know? Although many stories of edema and even starvation deaths at local level reached him during 1959 and 1960, Mao failed or refused to link these to systemic failure and nationwide famine (pp. 447-48; Li 1994: 339; Riskin 1998: 119). In April 1961, much too late, a horrified head of state Liu Shaoqi discovered the scale of the famine on a trip

to his home village in Hunan. That visit and what followed are well documented (p. 436; Zhou, pp. 158, 162-4; Dikötter 2010: 119, 329).

While Dikötter's stance on the famine is evident from his book's title, Yang flatly denies that Mao ever said (or meant literally) that 'it is better to let half of the people die so that the other half can eat their fill' (Yang 2012a; compare Garnaut 2013a; Zhou, p. 25). Yet if intent was lacking, both the scale of the disaster and the failure to confront it stemmed from the edifice that Mao, his comrades, and their 'upwards of 60 million cadres of various ranks' (p. 168) built.

Politics help explain why the intensity of the famine varied from region to region (p. 155). In Sichuan, for example (pp. 197-247; see too Goodman 1980), the extremism of party secretary Li Jingquan was a key factor in determining the scale and duration of famine. This tallies with the findings of a recent study by Chen Yixin contrasting the role of province-level politics in Anhui and Jiangxi 'under the same Maoist sky'. In Anhui another radical, Zeng Xisheng, a native of Hunan and friend of Mao, diverted five million peasants from the land to over-ambitious irrigation projects, with disastrous consequences, while in neighboring Jiangxi a home-grown collective leadership did what they could to cancel the Leap's excesses (Chen 2011; see too Chen 2009). So provincial boundaries mattered: Anthony Garnaut's map of county-level diminution of 1958-62 cohorts with provincial boundaries superimposed highlights the role of borders. The contrast in famine severity across the Sichuan-Shaanxi and Sichuan-Yunnan borders is striking. The same holds for the Jiangxi-Anhui border, while some of Qinghai's borders can be

predicted with confidence from its county cohort depletion rates (Garnaut 2013b).

Yang accepts that the intensity of the famine also varied considerably within provinces. Yet his long chapter on Sichuan, which dwells on the malign influence of Li Jingquan, takes insufficient account of the marked contrasts in mortality inside that vast province, where differences in cadre responses to central government policy were decisive in determining the scale of famine (Bramall 2011: 998). Again, in Fenyang in Anhui province, the focus of an extended account in *Tombstone* (pp. 270-86), the suffering was even greater than in Anhui as a whole. Estimates by Cao Shuji (2005) suggest that mortality in that province was subject to a marked south-north gradient, with the death rates in the northern counties of Su and Taihe being nearly ten times those of Wangjiang and Dongxi in the south.⁸ Such contrasts suggest that interpretations that lean heavily on the zeal of the provincial party leaders like Li Jingquan and Zeng Xisheng leave a lot unexplained; more disaggregated analyses are needed.

The Great Leap placed local cadres under pressure to deliver. One former cadre in Sichuan declared that 'the job of a good official is to guard the people while listening to the upper leaders. Bad leaders just listen to upper leaders.' Easier said than done; this cadre had sailed pretty close to the wind himself more than once.⁹ It was easier to be a bad cadre than a good one (p. 49; compare Kung and Chen 2011). Yang, like Dikötter, implies

⁸ My thanks to Anthony Garnaut for supplying me with Cao's county-level data; these also highlight Fengyang as one of the worst affected counties.

⁹ <http://xiakou.uncc.edu/chapters/history/famine.htm>

that most cadres buckled under the pressure. Jeremy Brown and Gao Hua are more positive: Gao (2011: 194) claims that 'the great majority of cadres shared in the hardship of the masses', while Brown (2011: 247) has documented how in the northeastern city of Tianjin municipal and central leaders went to 'extraordinary lengths to prevent urban starvation'.¹⁰ Brown may be right, but it must be said that Tianjin's party secretary faced fewer food distribution challenges than his counterpart in, say, Sichuan.¹¹ Famines bring out the worst in people, but why were some cadres more brutal and more cowardly than others (pp. 155, 398-99, 405-06)? Lacking micro-level studies of groups of cadres, we can only speculate that factors such as birthplace (local or not), ideological stance, hunger, fear of retaliation, and previous participation in violence all counted. The responses from center and periphery depended on, but could also exacerbate, the informational gap between the center and the regions.

Numbers Matter:

The scale of the 1959-61 famine continues to be controversial, and Yang devotes a whole chapter (pp. 394-430) to it. He begins with calculations derived from the well-known official population data published in 1984, which yield an estimate of 'unnatural deaths' of 16.2 million (p. 409).

¹⁰ In a detailed account of Wuwei county in Anhui based on local party records, Cao Shuji (2010) accused the prefectural and provincial party committees of murder, on the grounds that they had full knowledge of the state of grain supplies and knew that excessive requisitioning was causing mass mortality. But he concluded that headquarters in Beijing might not have been informed.

¹¹ Although the Great Leap privileged the cities, urbanites were also at risk, as Yang (p. 339) and Zhou (p. x) note.

Next he uses provincial data available since 1986, which he deems more reliable, to calculate excess deaths by province; these add up to an aggregate 21 million (pp. 411-16). After a survey of three well known estimates by foreign scholars—but overlooking Ashton *et al.* (1984), Peng (1987), Luo (1988), and the useful review by Riskin (1998)¹²—Yang turns to research by Chinese scholars. Dismissive of the estimates of both Jiang Zhenghua (17 million) and Chen Yizi (43 million), he opts for a ‘still too low’ 36 million.¹³ Yang’s dismissal of the wilder ‘sputniks’ of 50 to 60 million lent credence by Becker¹⁴ and Dikötter is salutary, but his chosen figure may still be too high.

Why? Dikötter’s reaction (in Wemheuer 2011) to a critique of his ‘minimum of 45 million’ provides part of the answer. His response was to ask if ‘a one per cent rate of death is too low to be considered normal... would it really change that much if we doubled it to two per cent?’ The answer, most emphatically, is that it would. Given that China’s population on the eve of the famine was about 650 million, a crude death rate of 20 per 1,000 rather than 10 per 1,000 would have entailed 20 million fewer deaths during the ‘three difficult years’. But instead of attempting to answer his own question,

¹² Zhao and Reimondos (2012) came too late for Yang’s possible consideration.

¹³ Yang (p. 427) and Riskin (1998: 113) note that Chen Yizi’s estimate is unverifiable. Bramall (2011: 992fn9) rejects it on the grounds that it was part of a ‘remit of discrediting the Maoist regime’. Bramall also raises the possibility, plausible yet unverifiable, that some ‘officials exaggerated deaths to evade or diminish state-imposed grain procurements’.

¹⁴ Compare Becker’s ‘sputnik’ of 3 million excess deaths in North Korea in the 1990s—‘more victims than in Pol Pot’s Cambodia’—with Spoorenberg and Schekendiek’s estimate of between 240,000 and 420,000 in this *Review* (Becker 2005: 211-12; Spoorenberg and Schekendiek 2012).

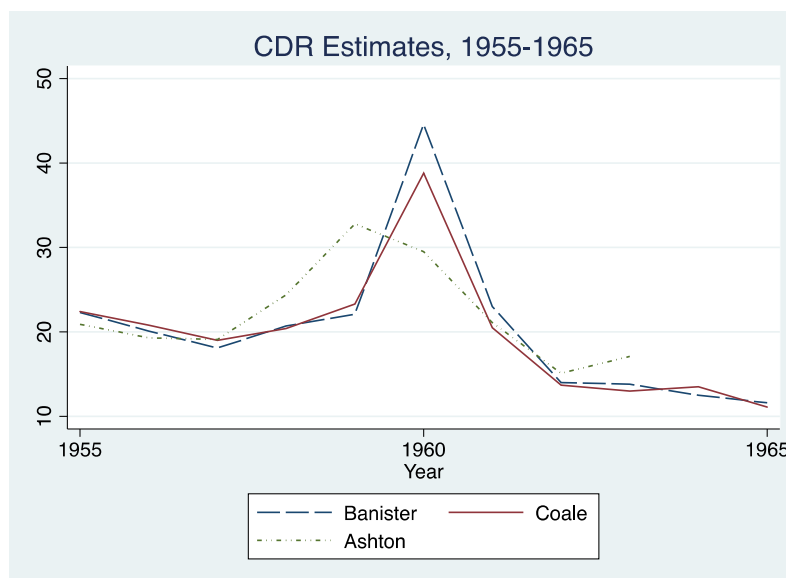
Dikötter pits 'every historian who has spent a long time in the archives' against those who have attempted to make sense of the patchy and fallible demographic data available. Yang is emphatically one of the latter, although he spent far more time in the archives than Dikötter.¹⁵ Still, a key weakness of the three estimates of excess mortality underpinning Yang's proposed 36 million is that they too rely on an implausibly low pre-famine death rate. Thus Ding Shu treated the 1957 mortality rate (10.8 per 1,000) as the non-crisis norm, while Jin Hui used the averages of 1956-57 and 1962-63 (10.6 per 1,000), and Cao Shuji used the averages of 1957 and 1962 (10.4 per 1,000). Such rates are too low, and western demographers such as Banister (1987) and Ashton *et al.* (1998: 637-42) have suggested corrections.

Under-recording was pervasive not just before the Great Leap famine, but also during it. Again, Ashton *et al.*, Banister, and others have proposed adjustments. However, estimates of infant and child mortality based on retrospective fertility surveys (Zhao and Reimondos 2012) imply that their corrections may have been on the high side. Banister's numbers—underpinned by what she candidly described as an 'arbitrary estimation process'—suggest that life expectancy at birth reached a minimum at 24.6 years in 1960 (Banister 1987: 116), whereas Zhao and Reimondos (2012: 342-43), using much higher quality data, produce a figure of 32.5 years for 1959-60. Since the latter's simulations refer only to six of the worst affected provinces (Anhui, Gansu, Guizhou, Henan, Qinghai, and Sichuan), the

¹⁵ Yang began work on *Mubei* in 1996. The 3,600 or so folders he collected in thirteen different archives filled his apartment; more were kept 'in the countryside at a friend's house for safekeeping' (Johnson 2010).

aggregate death toll implied by their results is lower than the 30 million proposed by Banister. While the death toll exacted by the Great Leap famine will never be known precisely, Zhao and Reimondos's results make the case for a total much lower—perhaps ten million lower—than that proposed by Yang. The cost in lives lost remains staggering, nonetheless.

An added consideration is that famines usually kill off many vulnerable and sickly people who would have died soon in any case. As a result, typically mortality in the wake of famines is lower than what it would have been in their absence.¹⁶ Both official data (p. 408) and the revisions of Coale, Banister, and Ashton *et al.* (Yang, p. 418; Ashton *et al.* 1984) suggest that this was a factor in China after 1959-61 (see Figure 2). The ensuing deficit in deaths, though hardly dramatic, should also be included in assessments of the famine's demographic toll.



¹⁶ This effect is evident in, for example, France after 1694 (Lachiver 1991: 480) and in Finland after 1868 (Mitchell 1975: 109).

Figure 2. 'Western' Estimates of the Crude Death Rate (per 1,000 population)

Meanwhile, famine amenorrhea, reduced libido, and spousal separation reduced the birth rate. The finding that women with no surviving sons on the eve of the famine experienced the lowest fertility decline during it (Zhao and Reimondos 2012: 340) also points to a preventive check at work. Retrospective fertility surveys reveal that there was a reduction too in the number of marriages and an increase in mean marriage age. Moreover, the big rise in marital fertility and the birth rate in the immediate wake of the famine—more than at any point during the 1950s or 1960s—also implies that some births were postponed rather than lost during the famine. This means that Yang's estimate of 40 million births lost is excessive.

Poverty and Context:

Yang tends to neglect the famine's historical context and China's economic vulnerability. Both Mao's popularity on the eve of the Great Leap and the extreme brutality of the Leap period followed more than two decades of murderous violence and misery for most Chinese. Estimates of the numbers of deaths caused by famines, droughts, and floods—80 million between 1810 and 1936 according to Deng Tuo, 18 million between 1910 and 1948 according to Xia Mingfang—may be exaggerated (compare Yang, p. 13), but they nevertheless add context to carnage of the Great Leap famine. China was the 'land of famine' because it was extremely poor (Ó Gráda 2011), and China in the 1950s was still extremely poor.

Regional economic disparities were wide, moreover: in the mid-1950s incomes per head in Heilongjiang and Liaoning were three times as high as in Sichuan or Guizhou, and daily calorie consumption per head is reckoned to have ranged from 1,700-1,800 kcals in Shanxi and Guizhou to over 3,000 kcals in Jilin and Heilongjiang (Walker 1984). Walker's national pre-famine average of about 2,000 kcals would translate into about 2,600/2,700 kcals per adult male equivalent, far short of the 3,400-4,000 kcals needed for the physically demanding farm work that was standard in China (p. 345). A casual glance at the data suggests that mortality was highest where incomes were lowest and where famines had been most common in the past (despite Yang's claims, p. 396). Yang concedes the precariousness of life in pre-1949 China, but perhaps not sufficiently.

Given doubts about both the reliability of production and demographic data and our earlier plea for more local analyses, estimates of the link between such data at provincial level must be treated with due skepticism. Nonetheless, in the following simple exercise Y is pre-famine gross provincial product per capita, $DPROD2$ is the square of $DPROD$, the percentage change in grain production between 1958 and 1960¹⁷, and $PCPROCUR$ is the percentage of provincial grain output procured in 1959 and 1960. The first four regressions in Table 1 rely on Cao Shuji's estimates of excess mortality (pp. 395-96), the second four on the 'unnatural deaths' reported by Yang, divided by population in 1957 (pp. 411-14). The reported coefficients are elasticities. The outcome suggests that in all cases excess

¹⁷ This produces stronger results than $DPROD$.

mortality was likely to be higher in provinces that were poor on the eve of the Great Leap, and in provinces suffering greater production shortfalls (since *DPROD* was uniformly negative). Using Cao's estimates, adding the procurement rate improves the explanatory power of the model although it does not change the size of the other coefficients much. The regressions employing Yang's mortality estimates pack a weaker explanatory punch. The impact of low incomes on death rates underlines the vulnerability of poor regions to misguided policy.

<i>Table 1. Accounting for Excess Deaths: the Cross-sectional Evidence Using Robust Regressions</i>								
	Using Cao death rate				Using Yang death rate			
<i>Y</i>	-1.648	-2.864	-1.238	-1.112	-0.952	<i>-0.454</i>	-0.806	<i>-0.458</i>
<i>DPROD2</i>	0.820		0.836		0.568		0.497	
<i>PCPROCUR</i>	<i>0.905</i>	2.191			<i>0.636</i>	<i>0.026</i>		
N	21	20	21	21	27	28	27	28
Prob>F	.0002	.006	.0001	.039	.0057	.166	.0039	.053
Source: using data from Yang (2011: 395-96, 399-402, 411-15) and estimates of provincial incomes per capita 1955-57.								
Note: Robust regression estimates to control for outliers; all coefficients except those italicized are statistically significant at 1%.								

The above analysis takes no account of the weather in 1959-61. *Tombstone's* verdict on the weather (pp. 453-56) is consistent with recent research that minimizes the role of extreme weather events (e.g. Dikötter 2010: 174-88), but that verdict is based on national averages across a

landmass the size of Europe. This makes little sense, since even within provinces the weather was subject to considerable variation.¹⁸ Bramall (2011: 1000) notes that during the famine rainfall at the median weather station in Sichuan was only 4 per cent higher than normal, but this conceals very high precipitation in some districts and serious drought in others. Still, Bramall reckons that in Sichuan as a whole the weather played only a subsidiary role; in 1959—the driest year—only one-eighth of Sichuan's food availability decline could be attributed to bad weather. This is small compared with Kueh's (1994: 195) estimate, based on rainfall-yield regressions using 1930s data, of an average annual shortfall of 36 per cent in Sichuan's rice yields in 1959-61. While the authorities doubtless greatly exaggerated the role of the weather, its true impact remains to be determined.¹⁹

Yang is silent on geography, but Garnaut (2013b) plausibly attributes the spatial variation in mortality in part to transportation networks; remote areas, where requisitioning grain was more costly, tended to escape relatively lightly, because the political leadership could risk putting local needs first. Measuring the impact of such interaction between politics and geography would be a useful exercise.

What Yang Did Not See:

Yang Jisheng's *Mubei* and *Tombstone* are landmark volumes. While

¹⁸ Yang refers in passing to adverse conditions in Xinyang (pp. 25, 27), Henan (pp. 72, 76), and Anhui (p. 305).

¹⁹ A useful source on weather station data is:
http://www.famine.unimelb.edu.au/weather_stations.php.

they may not add much reliable economic and demographic data, what they reveal about what really happened in 1959-61 will influence future analyses of the Great Leap famine. Their perspective on two of the abiding mysteries of the famine—how much did people know, and how come so many people, inside and outside China, seemed not to know—will not please everybody. Yang's damning account offers its own insights on these puzzles, as does his brief autobiographical intrusion at the beginning of *Tombstone*.

Yang grew up in Hubei, a province that features little in either *Tombstone* or Zhou's *Documentary History* (pp. 116-17), and which (unlike neighboring Anhui and Henan) escaped the Great Leap famine relatively lightly. His admission that, as an adolescent in the late 1950s, he was oblivious to the famine, even though his 70-year-old stepfather died of starvation, sustains *Tombstone's* broader narrative. Only during the Cultural Revolution, when Hubei's governor referred openly to the famine, did Yang realize that his 'family's tragedy was not unique' (p. 11). By suggesting that such ignorance was widespread within China, Yang's confession puts a new gloss on the failure of so many, like *engagé* American journalist Edgar Snow, the 'fabled sinologists' of Beijing's British embassy lampooned by Dikötter, and renowned Harvard scholar Dwight Perkins, to realize what was happening.²⁰ But it doesn't explain their ignorance. Just how the biggest famine in human history (in absolute, not in relative terms) remained 'hidden' within and

²⁰ Mirsky 2010; Dikötter 2010: 345; Perkins 1969: 166, 303-19. Snow, according to Mirsky, 'didn't bother to see' the famine, while Perkins declared almost a decade after the event that China had 'averted a major disaster' and that 'few if any [had] starved outright'.

outside China for so long is a question still awaiting a full answer.

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