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Title	Great Leap into Famine
Author(s)	Ó Gráda, Cormac
Publication date	2011-01
Series	UCD Centre for Economic Research Working Paper Series; WP11/03
Publisher	University College Dublin. School of Economics
Link to online version	http://www.ucd.ie/t4cms/WP11_03.pdf
Item record/more information	http://hdl.handle.net/10197/6378

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UCD CENTRE FOR ECONOMIC RESEARCH

WORKING PAPER SERIES

2011

Great Leap into Famine

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WP11/03

January 2011

**UCD SCHOOL OF ECONOMICS
UNIVERSITY COLLEGE DUBLIN
BELFIELD DUBLIN 4**

GREAT LEAP INTO FAMINE¹

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GREAT LEAP INTO FAMINE

Frank Dikötter's *Mao's Great Famine: The History of China's Most Devastating Catastrophe, 1958-62* is the longest and most detailed study of the Great Leap Forward (GLF) famine to appear in English to date. Much of the story will be already familiar to western readers from works by Roderick McFarquhar (1983), Jasper Becker (1996), Ralph Thaxton (2008), and others, but Dikötter adds a lot that is new and valuable. For the past decade or so Chinese scholars have been publishing works based on public records, including party archives, formerly closed to historians. Most prominent of these are Yu Xiguang, Cao Shuji, and Yang Jisheng. Yang's *Tombstone* created a sensation when it appeared in Hong Kong in 2008, and its English translation is eagerly awaited (see Yang 2010). Dikötter, a prolific writer, has been quickest off the mark among western scholars in accessing these records, and *Mao's Great Famine* [henceforth *MGF*] is informed by an 'against the grain' reading on 'well over a thousand' documents from cities and provinces spread across China (although excluding Anhui and Henan, two of the worst-hit provinces). Harrowing images of brutality and suffering based on these documents (rarely, however, quoted directly) give a vivid and graphic character to *MGF*, although whether the end result fundamentally 'transforms' our understanding of the GLF and accompanying famine is moot.

Dikötter begins with a broadly chronological narrative of the Great Leap Forward and accompanying famine (Chapters 1-16). The remainder of the book

describes the impact on the economy and the environment (Chapters 17-21), and the cost in terms of lives ruined and lost (Chapters 22-37). It begins in 1953 with the death of Stalin, which Chairman Mao Zedong saw as an opportunity for asserting his independence of Moscow, and ends in 1962 when Mao was confronted by his own Khrushchev in the person of Liu Shaoqi. The tone throughout is one of abhorrence and outrage, and sometimes *MGF* reads more like a catalogue of anecdotes about atrocities than a sustained analytic argument. In style and approach it recalls Jung Chang and Jon Halliday's controversial *Mao: The Unknown Story* (2005); indeed, Chang leads the 'praise' for *MGF* on the back-cover.

MGF may become the best-known account of the GLF famine for a while. But should it? It is not a comprehensive account of the famine; it is dismissive of academic work on the topic; it is weak on context and unreliable with data; and it fails to note that many of the horrors it describes were recurrent features of Chinese history during the previous century or so. More attention to economic history and geography and to the comparative history of famines would have made for a much more useful book. In what follows I focus on the economic context of the famine, review features of the famine treated by Dikötter but worth further study, and conclude by discussing the role in these events of Mao and the party elite.

POOR CHINA

Famines are a hallmark of economic backwardness. It bears remembering that China on the eve of the Great Leap Forward was one of the poorest places on earth, if not the poorest. According to the late Angus Maddison's reconstructions, Chinese real GDP per head in 1957 was only one-quarter of the global average in the 1950s and one-twelfth of today's global average. Despite having been (by Maddison's reckoning) the 12th fastest-growing economy on the globe since 1950, China in 1957 was still ranked 120th out of the 140 economies included. Alternatively, only ten of the same 140 economies were poorer in 1970 (and only eight in 1980) than China had been on the eve of the Great Leap Forward. The Penn World Tables (Heston *et al.* 2009) paint much gloomier picture of the Chinese economy in this period. Their coverage is much narrower for the 1950s, and their earliest data for China refer to 1952. In each year between 1952 and 1957, the Penn World Tables reveal China's GDP per head as the lowest in the world (Table 1). They imply that Chinese GDP per head in 1957 was 3.9 per cent that of the USA; by Maddison's reckoning the ratio was 5.8 per cent. Low GDP per head was compounded by very unequal land and income distributions (Brandt and Sands 1992: Table 6.3), low life expectancy, and high infant mortality.

China's extreme poverty was also reflected in its recent famine history. For at least a century before 1949, major famines were probably frequent enough to warrant Walter Mallory's depiction of China in 1926 as the 'land of famine'. The Taiping Rebellion is routinely reported as costing twenty million

lives, mostly from famine and disease. Neither R. H. Tawney's report that the famine of 1849 'is said to have destroyed 13,750,000 persons' nor contemporary claims that the Great North China Famine of 1876-9 took a further 9.5 million to 13 million should be taken literally, but such estimates accurately underline the apocalyptic nature of those famines. Famine mortality probably declined thereafter. Yet Yang (2010) claims that China's most severe famine before the GLF famine occurred in 1928-30, killing ten million people. Between 1920 and 1936, he added, 'famine due to crop failures took the lives of 18.36 million people'. Again, these numbers seem too high. Still, Tawney witnessed the devastation that followed in the wake of the famines of the late 1920s, and famine in Anhui province in 1929 inspired Nobel laureate Pearl Buck's *The Good Earth*. Nor did it end there. Famine in the Yellow River region in 1935 resulted in significant female infanticide in 1935-6, while the Henan famine of 1942 produced its own catalogue of atrocities. Again and again, what Dikötter dubs 'traditional coping mechanisms' (p.179) had failed to prevent famine.

It also bears noting that the impact of the famine was greatest in China's poorest regions, and in those regions where harvest shortfalls were greatest in 1959-61. Proxies for the harvest and regional income alone explain about half the variation in excess mortality during the GLF (Ó Gráda 2008).² Had Dikötter focused more on the implications of northern China's 'dry and

² A caveat: this result assumes that the proportional shortfalls in official data are reliable.

dusty countryside [and] an alkaline soil that hardly yielded enough grain for villagers to survive on' (p. 46) he might have produced a more rounded account of the tragedy. This, it hardly bears stressing, is not to deny the role of human agency, however, since the harvest shortfall, if not the poverty, was endogenous to policy (see below).

China's extreme backwardness on the eve of the Leap matters because it greatly increased its vulnerability to disequilibria, man-made or other. Had Chinese GDP per head been, say, twice as high as it was, the devastation wreaked by the Leap would presumably have been much less. Nor, on the other hand, does *MGF* take sufficient account of how conditions improved between 1949 and 1958. If the standard estimate of grain output of 200 million metric tons in 1958 is taken at face value (p. 132), then there was enough food to provide an average daily intake of about 2,170 kcals (Ashton *et al.* 1984: 622; compare Meng *et al.* 2010). If, however, the output data are contaminated by Leap-style 'winds of exaggeration' and refer to unhusked grain, then the picture is much less rosy, and the margin for error by central planners much narrower. Nonetheless, the achievements of the pre-Leap years prompted a false optimism that much faster growth was feasible—catching up or overtaking Britain 'in fifteen years' (pp. 14, 15, 73).

TABLE 1. CHINESE GDP PER HEAD IN COMPARATIVE PERSPECTIVE						
Year	1952	1953	1954	1955	1956	1957
Poorest	China (468)	China (483)	China (490)	China (504)	China (552)	China (568)
2 nd	Ethiopia (730)	Ethiopia (759)	Malawi (558)	Malawi (571)	Malawi (562)	Malawi (587)
3 rd	India (840)	India (870)	Ethiopia (583)	Ghana (662)	Ghana (769)	Ethiopia (750)
4 th	Pakistan (921)	Uganda (905)	Uganda (867)	Ethiopia (759)	Ethiopia (777)	Ghana (783)
5 th	Uganda (989)	Thailand (955)	India (882)	India (882)	India (883)	India (876)
<i>N</i>	60	62	65	69	69	69
<p>Source: Heston <i>et al.</i> (2009).</p> <p>Note: the Chinese estimates are averages of the two estimates given each year. <i>N</i> is the number of economies included in the database in any year. The numbers in brackets are 1996 PPP-adjusted U.S. dollars.</p>						

WHAT DID THE VICTIMS DIE OF?

Throughout history most famine victims have succumbed to disease, not to literal starvation. Weakened immune systems and social disruption allowed diseases present in normal times to play havoc during famines. Pre-1949 China was no exception: economic backwardness made infectious diseases such as cholera, typhus, and malaria endemic and most famine deaths were from such diseases and from dysentery. So what did the victims of the Great Leap famine

die of? Most accounts imply death by starvation rather than by disease; Thaxton links most deaths in the village of Da Fo in 1960 to 'edema', and this is corroborated by the most detailed study of the causes of death to date, Yixin Chen's analysis of public health gazetteers from Anhui province (Thaxton, 2008: 209, 253; Chen 2010). Although Chen argues convincingly that the faulty data in the gazetteers underestimate the death toll from diseases such as dysentery and malaria, he nevertheless concedes the primary role of oedema and literal starvation. Dikötter (p.286) concurs, and wonders why disease did not carry off more 'before terminal starvation set in'.

The primacy of starvation as the cause of famine deaths is rather striking, and poses a conundrum for famine demographers. Before the 1950s only war-famines in economies with effective public health regimes, such as the western Netherlands in 1944-45 or Leningrad in 1941-43, followed such a pattern. Does this imply that the Maoist public health campaigns of the early and mid-1950s influenced the causes of deaths during the Great Leap famine, if not the death toll itself? Could it be that the authorities' attempts to control migration limited, even albeit unintentionally, the spread of infectious diseases? Chen (2010) gives due credit to achievements registered before the Leap; by then three major killers—smallpox, plague, and cholera—had been virtually eliminated, and large-scale immunization campaigns carried out. Reluctant to allow public health improvements a role, Dikötter surmises, albeit without supporting evidence, that the Chinese peasantry succumbed to

starvation quickly, 'reducing the window of opportunity during which germs could prey on a lowered immunity' (p.286).

THE DEMOGRAPHIC IMPACT

MGF is full of numbers but there are few tables and no graphs. Quantification is not its strong point. So we read that 'between one and two million took their lives by suicide' during the GLF (p. 304); that in Xinyang in Henan province '67,000' were clubbed to death by militias (pp. 117, 294); that in some unspecified location 'forty-five women were sold to a mere six villages in less than half a year' (p. 261); that 'at least 2.5 million ... were beaten or tortured to death' during the Leap (p. 298); and that delays to shipping in the main ports during some unspecified period cost '£300,000' (p. 156). An estimate of 0.7 million deaths from starvation and disease in labor-correction camps between 1958 and 1962 is obtained by applying an arbitrary 'rough death rate' of two-fifths to a guess at the camp population at its peak (p. 289). The main basis for the claim that 'up to two-fifths of the housing stock turned into rubble' (p. xi) seems to be a report describing conditions in Hunan province from Liu Shaoqi to Mao on 11 May 1959, after Liu had spent a month in the region of his birth (p. 169).³ On page after page of *MGF*, numbers on topics

³ Elsewhere, however, Liu is described as visiting his home region for the first time in four decades in April 1961 (p. 119).

ranging from rats killed in Shanghai to illegal immigration to Hong Kong are produced with no discussion of their reliability or provenance: all that seems to matter is that they are 'big'.

The cost of famines in terms of lives lost is often controversial, because famines are nearly always blamed on somebody, and excess mortality is reckoned to be a measure of guilt. It is hardly surprising, then, that *MGF's* brief account (pp. 324-34) of the famine's death toll arrives at a figure far beyond the range of between 18 million and 32.5 million proposed hitherto by specialist demographers (e. g. Yao 1999; Peng 1987; Ashton *et al.* 1984; Cao 2005). Rather than engage with the competing assumptions behind these numbers, Dikötter selects Cao Shuji's estimate of 32.5 million and then adds fifty per cent to it on the basis of discrepancies between archival reports and gazetteer data, thereby generating a minimum total of 45 million excess deaths.

Much hinges on what 'normal' mortality rates are assumed, since the archives do not distinguish between normal and crisis mortality. The crude death rate in China in the wake of the revolution was probably about 25 per thousand. It is highly unlikely that the Communists could have reduced it within less than a decade to the implausibly low 10 per thousand adopted here (p. 331). Had they done so, they would have 'saved' over thirty million lives in the interim! One can hardly have it both ways.

Famines invariably also result in fewer births. Sometimes the births are lost, sometimes (as to some extent in China in 1959-61) they are postponed.

Surprisingly, perhaps, Dikötter has little to say on this aspect, but his attempts at quantification again lack conviction. Elementary human biology means that the drop in the number of births in one region of Yunnan province from 106,000 in 1957 to 59,000 in 1958, which Dikötter mentions twice (pp. 68, 254), refers mainly to conditions before the Leap. And his implied claim (pp. 260-61) that marriage rates rose during the famine would, if verified, represent a first in the global history of famine.⁴

Another feature of the famine's demography touched on only in passing is its disproportionately rural dimension. Data collected from Anhui gazetteers by Cao Shuji (2005: Appendix 3), although probably subject to under-recording, are highly revealing on this aspect. Anhui's proportionate population loss was the highest in China, but whereas the death rate in urban areas rose by 260 per cent, in rural areas it rose almost eightfold. Note too the very different rates of population change in rural and urban Anhui and the dramatic rebound in births in both rural and urban areas in the wake of the famine.

⁴ The number of marriages in the 1982 Chinese fertility survey sample fell from 3,998 in 1958 to 3,393 in 1959, and then rose to 4,219 in 1960 (China Population Information Centre 1988: vol. 1, pp 78-79).

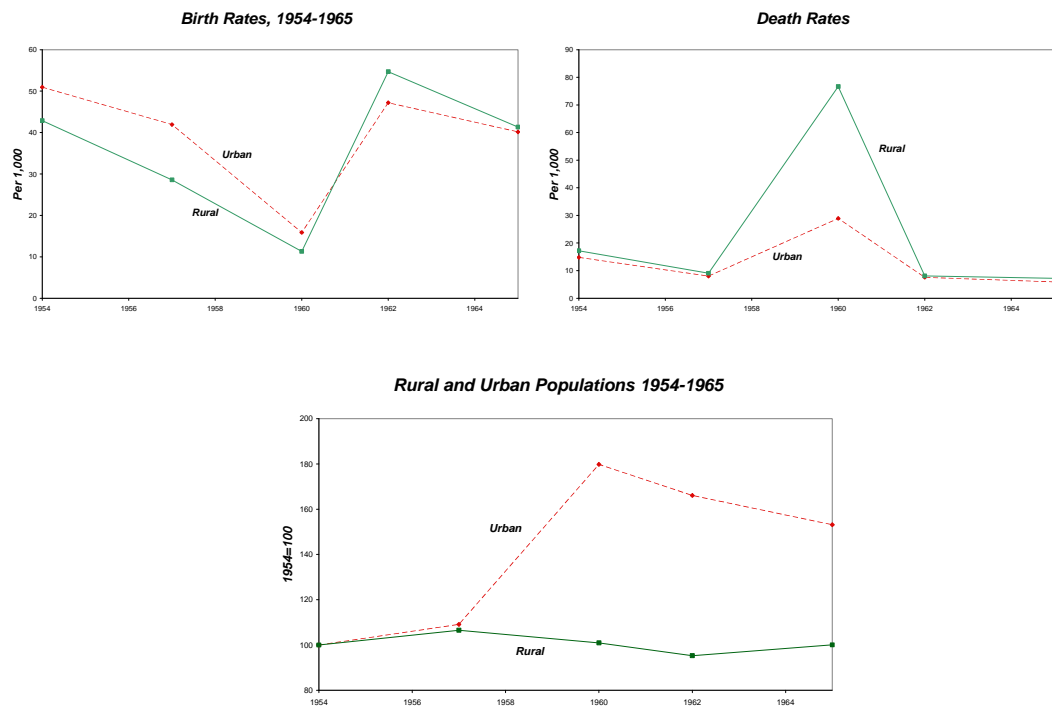


Figure 1. Population Change in Anhui 1954-1965

Finally, as Dikötter highlights, not all Leap deaths were famine deaths. His anecdotal evidence on the terror campaigns waged by local cadres is compelling, although his figures for deaths in the 'gulag' ('at least 3 million'), by suicide ('between 1 and 3 million'), and from torture and beatings ('at least 2.5 million') are just weakly-supported guesses (pp. 291, 298, 304).

HORRORS OF FAMINE:

Anthropologist Kirsten Hastrup (1973: 730) has argued that when a famine results in cannibalism it has gone 'far beyond mensurational reach' to a level of 'hardship so extreme that humanity itself seems at stake'. Dikötter's

account of cannibalism during the 1959-61 famine (pp. 302-23) helps to underline its apocalyptic character, but famines resulting in cannibalism were much more common in the past than either he or Hastrup imply. While never responsible for more than a minuscule fraction of famine deaths, the evidence for famine cannibalism recurs throughout history (Ó Gráda 2009: 63-68), not least in late Qing and Republican China. Three stock phrases regarding cannibalism recur in gazetteers' accounts of the 'Incredible' North China famine of 1876-78: 'people ate each other', 'exchanging children and eating them', and variants of 'people ate each other to the point that close kin destroyed each other' (Edgerton-Tarpley 2008: 223). Theodore White's reports from Henan in 1942-3 described parents tying children to a tree 'so they would not follow them as they went in search for food'; 'larger' children being sold for less than ten dollars; and a mother who was charged with eating her little girl merely denying that she had killed her. Kathryn Edgerton-Tarpley (2008: 225) surmises that such accounts were 'primarily metaphorical expressions of the catastrophic destruction of the family unit wrought by the famine'; alas, the evidence presented by White, Becker, Yang Jisheng, and now Dikötter argues otherwise.

THREE PARTS NATURE?

The role of the weather in 1959-61 remains contested. Is Dikötter right to dismiss it? Contemporary Chinese sources highlighted *ad nauseam* the difficulties caused by drought and flooding, while denying the existence of

famine conditions. Western journalists and historians echoed this view. *Time Magazine* repeatedly reported adverse weather⁵, and an eminent Harvard sinologist declared as late as 1969 that conditions such as those experienced in 1959-61 'would have meant many millions of deaths in the areas most severely affected' but for the effectiveness of public policy and the transport network (Perkins 1969: 303). MacFarquhar's pioneering account of the famine also highlighted adverse weather a factor (MacFarquhar: 1983: 322).

Dikötter acknowledges the challenges posed by the weather but blames harvest shortfalls instead on the environmental destruction caused by the GLF, which magnified damage caused by adverse weather shocks. Perhaps, but here anecdotes are an inadequate substitute for more rigorous meteorological analysis. Research on the impact of the weather hitherto has relied on indirect measures such as the proportion of the grain crop damaged by the weather or reported grain production. Using this approach Y. Y. Kueh found that droughts and flooding accounted for the bulk of the shortfalls in 1960 and 1961, although he also insisted 'even without natural disasters, the agricultural depression was inevitable' (Kueh 1984: 80-81, 1995: 224). Researchers have only begun to use some abundantly available direct measures that are not subject to mis-reporting.⁶ In the absence of systematic analysis of these data, all one can say is that several weather stations show signs of exceptional adverse weather

⁵ E.g. July 6 1959; August 24 1959; August 22 1960; January 6 1961; April 21 1961; May 26 1961.

⁶ E.g. Garnaut (2009); Meng et al. (2010)

shocks in 1959-61, though hardly enough to account for the regional variation in harvest shortfalls.⁷ Dikötter's sense that the weather did not matter much may well be correct, but his failure to nail the issue is a lacuna.

HUMAN AGENCY

Malthus and his followers underestimated the role of human factors in exacerbating and mitigating famine in the past, even in very backward economies. As John Post pointed out in his classic account of famine in northwestern Europe in the 1740s, 'even very poor economies ... could escape famine conditions and crisis mortality by importing grain supplies, adequate welfare programs, and effective public administration' (Post 1984: 17). This message is also an important implication of Amartya Sen's entitlements approach to famine analysis (Sen 1981). Malthusian interpretations of famine in China begin with Malthus himself, and most analyses of pre-1949 Chinese famines continue to be strictly Malthusian. Consider the following from Thaxton (2008: 26):

⁷ Chinese weather station data are conveniently summarized at http://www.famine.unimelb.edu.au/weather_stations.php. Weather stations reporting exceptionally adverse weather conditions in this period include Chengdu, Sichuan (four wet summers in succession in 1958-61); Baoding, Hebei (drought in August 1960); Yiehang, Hubei (drought in July-August 1959); Beijing (heavy rainfall in July-August 1959); Nanning, Guanxi (heavy rainfall in June 1959, drought in June 1960); Lanzhou, Gansu (heavy rainfall August 1959); Jinan, Shandong (a very dry 1960); Zhengzhou, Henan (very dry in July 1959).

In the spring of 1920, a severe drought gripped the lower part of the North China Plain, settling over northern Henan, western Shandong, and southern Hebei provinces. This long drought extended into the spring of 1921. As a result, several million farmers perished in what came to be called the North China Famine of 1921.

No room for human agency there! Dikötter's stance is the polar opposite. He repeatedly cites variants of Liu Shaoqi's quip (picked up by Liu from peasants in his native Hunan) that the GLF famine was three parts natural and seven parts man-made (pp. 121, 178, 335), but only to reject Liu's 'three-tenths Malthusian' interpretation in favor of one that rests entirely on human agency.

As Ireland and Ukraine attest, the temptation to turn famines into genocides is strong. Dikötter, perhaps rightly sensing that this can distort reality, does not go quite as far as Chang and Halliday's claim that Mao 'knowingly' allowed millions to starve. Indeed, one plausible reading of *MGF's* narrative chapters is that it took a long time for the leadership in Beijing to grasp the scale of the catastrophe at its height. Utopian euphoria and a revolutionary impatience to catch up quickly had prompted the Great Leap. They also neutered defence minister Peng Dehuai's interventions at the Lushan 'think-in' in July 1959. Peng's protests, in any case, were less about the famine *per se* than the follies of the Leap in its first phase. Dikötter's depiction of the follies is excellent, and corroborates the more theoretical case previously

advanced by economists and economic historians such as Yao (1999), Tao and Yang (2005), Bernstein (2006), and Wheatcroft (2010).

How much did Beijing know when the famine was at its height? Despite *MGF's* relentless anti-Mao stance, it accepts that nobody at the top realized beforehand how murderous the economic war against the peasantry would be. Mao's private physician, repeatedly invoked by Dikötter as a reliable witness (p. 346), 'doubted that [Mao] really knew' what was happening (Li 1994), and we are told that Mao was 'visibly shaken' when presented with graphic reports of famine from Xinyang in Henan province in late October 1960 (p. 116). Reliable information was at a premium; even the 'fabled Sinologists' in the British Embassy had no clue about what was going on (p. 345). Blaming the tragedy on the usual counterrevolutionary suspects, Mao nonetheless had 'abusive cadres' removed. The news from Xinyang set in train moves that would mark 'the beginning of the end of mass starvation' (p. 118). In that same month Mao, under pressure from critics of the Leap, ordered the redeployment of a million workers from industry to agriculture in Gansu province, citing the truism that 'no one can do without grain' (MacFarquhar 1983: 323). Various concessions to the peasantry followed, and in January 1961 Mao told the 9th central committee plenum 'that socialist construction...should take half a century' (Barnouin and Changgen 2007: 188). For the millions who died in 1959 and 1960, it was already too late.

China lacked an all-seeing, all-knowing Soviet-style secret police during the Leap. Too much reliance was placed on poorly monitored regional agents

and thuggish local cadres. Why else would it take a visit to his home village in Hunan for Liu Shaoqi to discover the dimensions of the disaster? What he saw converted him overnight from supporter to 'blistering' critic of the GLF (pp. 119-121). Central planner-in-chief Li Fuchun's reaction to the reports from Xinyang was that misguided policies (which he had championed) had cost lives (pp. 116-17, 122). In a speech in Hunan to party planners in mid-1961 he summarized what have become textbook criticisms of central planning: 'too high, too big, too equal, too dispersed, too chaotic, too fast, too inclined to transfer resources' (p. 122). But thanks to a form of 'closed' governance of their own creation, Mao and the party leadership seem to have discovered 'destruction on a scale few could have imagined' rather late in the day (p. 123).

None of this absolves Mao from responsibility for the policies that caused the greatest famine ever. But reckless miscalculation and culpable ignorance are not quite the same as deliberately or knowingly starving millions (Jin 2009: 152). Few of the myriad deaths in 1959-61 were sanctioned or ordained from the centre in the sense that deaths in the Soviet Gulag or the Nazi gas chambers were.⁸

MGF's reliance on fresh archival sources and interviews and its extensive bibliography of Chinese-language items are impressive, but its bite-size chapters (thirty-seven in all) and breathless prose style—replete with

⁸ On the comparison with Soviet planning in the 1930s see Wheatcroft (2010).

expressions like 'plummeted', 'rocketed', 'beaten to a pulp', 'beaten black and blue', 'frenzy', 'ceaseless', 'frenzied witch-hunt'—are often more reminiscent of the tabloid press than the standard academic monograph. If Yang Jisheng is destined to be China's Alexander Solzhenitzyn, Frank Dikötter now replaces Jasper Becker as its Anne Appelbaum. The success of *MGF* should not deter other historians from writing calmer and more nuanced books that worry more about getting the numbers right and pay due attention to geography and history.

WORKS CITED:

Barnouin, Barbara and Yu Changgen. 2007. *Zhou Enlai: A Political Life*. Hong Kong: Chinese University Press.

Becker, Jasper. 1996. *Hungry Ghosts: Mao's Secret Famine*. New York: Free Press.

Bernstein, Thomas. 2006. Mao Zedong and the famine of 1959-1960: A study in willfulness. *China Quarterly*, no. 186: 421-445.

Brandt, Loren and Barbara Sands. 1992. 'Land Concentration and Income Distribution in Republican China', in Thomas G. Rawski and Lillian M. Li, eds. *Chinese History in Economic Perspective*. Berkeley: University of California Press, pp. 179-206.

Cao, Shuji. 2005. *Dajihuang - 1959-1961 nian de Zhongguo renkou (The Great Famine - The Population of China from 1959 to 1961)*. Hong Kong: Dangdai guoji chubanshe gongsi.

Chen, Yixin. 2010. 'Politicization of sickness: diseases and the failure of public health response during China's Great Leap Forward Famine', paper presented the International Workshop on Famines of the Twentieth Century, University of Melbourne, June 8-11.

- China Population Information Centre. 1988. *Female Fertility in China: a One Per Cent Population Survey*. Beijing: New World Press.
- Dikötter, Frank. 2010. *Mao's Great Famine: The History of China's Most Devastating Catastrophe, 1958-1962*. New York: Walker & Co.
- Edgerton-Tarpley, Kathryn. 2008. *Tears from Iron: Cultural Responses to Famine in Nineteenth-Century China*. Berkeley: University of California Press.
- Garnaut, Anthony. 2009. 'What role has bad weather played in modern Chinese famines?' Paper delivered at the World Economic History Congress, Utrecht, August.
- Hastrup, Kirsten. 1973. 'Hunger and the Hardness of Facts'. *Man*, n.s. 28[4]: 727-739.
- Heston, Alan, Robert Summers, and Bettina Aten. 2009. *Penn World Table Version 6.3, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania* [available at: http://pwt.econ.upenn.edu/php_site/pwt63/pwt63_form.php].
- Kueh, Y.Y. 1984. 'A weather index for analyzing grain yield instability in China, 1952-81', *China Quarterly*, 97: 68-83.
- Kueh, Y.Y. 1995. *Agricultural instability in China, 1931-1990: Weather, Technology, and Institutions*. Oxford: Clarendon Press.
- Jin, Xiaoding. 2009. 'A critique of Jung Chang and Jon Halliday, *Mao: The Unknown Story*', in Gregor Benton and Lin Chun, eds. *Was Mao Really a Monster?* London: Routledge, pp. 135-62.
- Li, Wei and Dennis Tao Yang. 2005. 'The Great Leap Forward: Anatomy of a Central Planning Disaster', *Journal of Political Economy*, 113[4]: 840-877
- Li, Zishui. 1994. *The Private Life of Chairman Mao*. London. Chatto & Windus.
- MacFarquhar, Roderick. 1983. *The Origins of the Cultural Revolution: The Great Leap Forward 1958-1960*. NY: Columbia University Press.
- Maddison, Angus. 2009. *Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD* [available at: <http://www.ggdc.net/MADDISON/oriindex.htm>].
- Mallory, Walter H. 1926. *China: Land of Famine*. New York: National Geographic Society.
- Meng, Xin, Nancy Qian, and Pierre Yared. 2010. 'The institutional causes of China's Great Famine', NBER Discussion Paper No. 16361.

Mokyr, Joel and C. Ó Gráda. 2002. 'What do people die of during famines? The Great Irish Famine in comparative perspective', *European Review of Economic History*, 6(3): 339-64.

Ó Gráda, C. 2008. 'The ripple that drowns? Twentieth century famines in China and India as economic history', *Economic History Review*. 61(supplement): 5-37.

Ó Gráda, C. 2009. *Famine: A Short History*. Princeton: Princeton University Press.

Peng, Xizhi. 1987. 'Demographic consequences of the Great Leap Forward in China's provinces'. *Population and Development Review*, 13: 639-70.

Perkins, D. H. 1969. *Agricultural Development in China, 1368-1968*. Edinburgh: Edinburgh University Press.

Post, John D. 1984. 'Climatic variability and the European mortality wave of the early 1740s'. *Journal of Interdisciplinary History*, 15[1]: 1-30.

Sen, Amartya K. 1981. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Clarendon Press.

Tawney, R.H. 1964. *Land and Labour in China*. New York [1st edn. 1932].

Thaxton, Ralph A. Jr. 2008. *Catastrophe and Contention in Rural China: Mao's Great Leap Forward Famine and the Origins of Righteous Resistance in Da Fo Village*. Cambridge: Cambridge University Press.

Wheatcroft, S. G. 2010. 'Explaining the similarities between the Chinese and Soviet Leap famines', paper presented at the international workshop on famines of the twentieth century, University of Melbourne, June 8-11.

Yang, Jisheng. 2010. 'The fatal politics of the PRC's Great Leap Famine: the preface to *Tombstone*'. *Journal of Contemporary China*, 19[66]: 755 - 776.

Yao, S. 1999. 'A note on the causal factors of China's famine in 1959-1961', *Journal of Political Economy*, 107: 1365-69.

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