2015 and the Rise of China: Power Cycle Analysis and the Implications for Australia

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Research undertaken at the University of South Australia has produced a reformulated power cycle theory which balances both military and economic capabilities of actors, producing a graphical representation of the relative distribution of power. For the period between 2000 and 2030, this model suggests that China will continue to rise in power at the expense of the United States, achieving power parity in 2014 and overtaking the sole remaining superpower in 2015. This article introduces the power cycle method, extrapolates forecasts from collected sampling and suggests implications for Australia of an international environment where its principal ally is no longer the predominant power.

Introduction

In the closing passages of *War and Peace*, Leo Tolstoy asks, 'what is power?'[1] It could be argued that no question is more central to the analysis of international relations than this. After all, an understanding of power is essential to any reading of realist thought, be it classical Morgenthau, offensive Mearsheimer or neorealist Waltz.[2] Power goes to the core of a realist's understanding of international politics: it is the motivation for choice, the reason for action and the determinant of outcome. Realists opine that international politics, like all politics, is simply a struggle for power, and that the character of power is the root cause of all war and peace.[3] But when asked to define power, these same realists lack the sure explanations which are so evident in their pronouncement of the centrality of power in understanding international relations. Hans Morgenthau's attempts to characterise power lead him to discuss self-styled elusive elements such as national morale and psychological trends, admitting that the calculations of power in international affairs often comes down to 'right and wrong hunches'.[4]

Theoretical liberals also find power a central concern in their understanding of international relations. Robert Keohane and Joseph Nye, for example,

[1] L Tolstoy, *War and Peace*, William Benton, Chicago, 1971, p.683.
[2] H J Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, 4th edition, Alfred A Knopf, New York, 1967; J J. Mearsheimer, 'Back to the Future: Instability in Europe after the Cold War', *International Security*, vol 15, no 1, 1990, pp. 463-510; K N Waltz, *Theory of International Politics*, Addison-Wesley, Reading, 1979.
[3] Morgenthau, p. 25; Mearsheimer, p. 464.
[4] Morgenthau, p.149.

note that it was only via US power that the post-WWII institutions that exemplify liberal institutionalism could come into being.[5] Keohane's investigations of the legitimacy, authority and sovereignty of international institutions concentrate on the role of power in securing each.[6] But again, in defining the concept of power, liberals broaden the discourse, incorporating not only 'hard power' – in the shape of military capabilities and economic strength – but also 'soft power', which includes 'the attractiveness of one's culture, political ideals, and policies'.[7] This is surely a more inclusive definition, but not necessarily a more useful one – particularly in light of the breadth of a term such as 'culture'. It would seem then, as Joseph Nye quips, that power in international relations is much like the weather: everybody talks about it but few people can claim to understand it.[8]

One group of theoreticians within the discipline who claim to have an understanding of power are the power cycle theorists. Writers such as Charles Doran, Wes Parsons, Andrew Parasiliti, Brock Tessman, Steve Chan and Sushil Kumar all claim that the conception of power, as expressed in power cycle theory, can account for and explain conflict in the international system or sub-system to which it is applied.[9] Furthermore, as a theory that relies on quantitative analysis of a series of national capabilities, power cycle theory is specific about what is included in the calculation of power. For power cycle theorists, it is only the measurable and mathematically comparable that is taken into account – liberal concepts of 'soft power', almost impossible to meaningfully quantify, remain excluded. With the theory's attention to historical trends, its measures of capability are such that they can be measured over a period stretching back to the last days of the 18th century.

Classic power cycle theory pays particular attention to a state's iron and steel production, the level of available military personnel, energy consumption, total population and also urban population.[10] In more recent applications of the theory – and where quality data is available – other indicators of state power have been introduced, including measures of gross

[5] R O Keohane and J S Nye, Jr., 'Globalization: What's New? What's Not? (And So What?)', *Foreign Policy*, vol. 118, 2000, p.115.
[6] R O Keohane, 'Ironies of Sovereignty: the European Union and the United States', *Journal of Common Market Studies*, vol. 40, 2002, pp. 743-65.
[7] J S Nye, Jr., 'The Velvet Hegemon', *Foreign Policy*, vol. 136, 2003, p. 74.
[8] J S Nye, Jr., 'The Changing Nature of World Power', *Political Science Quarterly*, vol. 105, 1990, pp.177-92.
[9] C F. Doran and W Parsons, 'War and the Cycle of Relative Power', *American Political Science Review*, vol. 74, 1980, pp. 947-965; A T Parasiliti, 'The Causes and Timing of Iraq's Wars: A Power Cycle Assessment', *International Political Science Review*, vol. 24, no. 1, 2000, pp.151-65; B F Tessman and S Chan, 'Power Cycles, Risk Propensity, and Great-Power Deterrence', *Journal of Conflict Resolution*, vol. 48, 2004, pp.131-53; S Kumar, 'Power Cycle Analysis of India, China, and Pakistan in Regional and Global Politics', *International Political Science Review*, vol. 24, no. 1, 2000, pp.113-22.
[10] Doran and Parsons, p.953.

national product and per capita assessments of military spending.[11] Increasingly the data sets of the Correlates of War project[12], which incorporate gross defence expenditure as well as the original five indicators of power cycle theory, have been assessed using the power cycle methodology.[13] Whatever the indicators chosen, the strength of power cycle theory lies in its explicit definition of the variable at the core of its investigation: power.

Power defined with reference to the material capabilities of states remains important in the analysis and forecast of state behaviour today. However, linear forecasting – by which the future is extrapolated from historical trend – has proven unable to overcome what Charles Doran calls, 'the problems of nonlinearity'.[14] Doran argues that such problems arise from a number of factors including the necessity for long-range forecasting extrapolated from a small data-set; statistical 'noise' affecting the trend line, and, most importantly, an emergence of nonlinearities in forecasts, particularly in relation to long-term forecasts.[15] Though linear forecasting is certainly the most simple of predicative methods, such drawbacks suggest that a better method must be found in order to guarantee the most accurate forecasts. It is here that power cycle theory, with its avoidance of linear methods, comes into its own.

This article uses a refined power cycle analysis technique to assess the rise and fall of the world's great powers over the last two centuries. The emerging results are then analysed in order to draw conclusions as to the current position and power trajectories of the great powers, particularly those active in the Asia-Pacific region, being the United States, China and Japan. From these conclusions, some implications for Australian strategy in regional power politics are outlined, particularly with an eye to the clearly evident rise of China.

[11] Parasiliti, 2003; Kumar, 2003.
[12] The Correlates of War (CoW) project emerged from the work of J. David Singer (University of Michigan) in 1963 with the project goal being the systematic accumulation of scientific knowledge about war. The CoW project has produced significant data sets which are hosted online by Pennsylvania State University (http://www.correlatesofwar.org) and available to researchers worldwide. See J D Singer, S Bremer & J Stuckey, 'Capability Distribution, Uncertainty and Major Power War, 1820-1965', in Bruce Russett, (ed), *Peace, War and Numbers*, Sage, Beverly Hills, 1972, pp.19-48; J D Singer, 'Reconstructing the Correlates of War Dataset on National Material Capabilities of States, 1816-1985', *International Interactions*, vol. 14, pp.115-32.
[13] B F Tessman, 'Role Deficit and Surplus in pre-World War One Europe: Comparing British, French and German Policy during the 1905 Moroccan Crisis', Paper presented at the 2004 International Studies Association Conference, Hawaii, 1st – 5th March 2005.
[14] C F Doran, 'Why Forecasts Fail: The Limits and Potential of Forecasting in International Relations and Economics', *International Studies Review*, vol. 1, no. 2, 1999, p.14.
[15] Doran, pp.14-5.

The Power Cycle Methodology

Classic power cycle theory is a method of comparing state actors within a system in terms of their relative power as defined with reference to a series of material capabilities. This paper applies a reformulation of power cycle theory developed at the University of South Australia during 2005 which broadens analysis to include globally significant non-state actors, such as the European Union, and which balances assessments of actor power equally between military capabilities and economic capabilities.[16] In order to undertake analysis of international actors and forecast their future rise or fall, power cycle theory demands that the analyst first define the system under examination, the constituent actors within that system (along with the years of their entry and exit) and, finally, the specific material capabilities included in the assessment of power.

The system to be examined consists of what might be termed the 'major' or 'great powers' of the international community, being the group of international actors that, between them, dominate international politics. The actors within this system are various, with system entry and exit points defined as in Figure 1, below:

Major Powers	Period in System
Great Britain	1816 - 2001
France	1816 - 2001
Germany	1816 - 2001
Russia	1816 - 2001
Austria-Hungary	1816 - 1918
Italy	1861 - 1943
United States	1898 - 2001
Japan	1894 - 2001
China	1950 - 2001
European Union	1999 - 2001

Figure 1: The Major Power System, 1816-2001

[16] D Kissane, *Curves, Conflict and Critical Points: Rethinking Power Cycle Theory for the Twenty-First Century*, unpublished, 2005, Chapter Five.

This system and the entry and exit dates are congruent with other power cycle theory analysis of the major power system, including the original work of Doran and Parsons in the *American Political Science Review*.[17] Turning to the material capabilities, however, Doran and Parsons' work serves more as inspiration rather than a model to be slavishly adhered to. The reformulated power cycle method to which this paper ascribes maintains a balance between military capabilities and economic capabilities, as demonstrated in Figure 2, below.

Military Capability	Economic Capability
Military Expenditure	Iron and Steel Production
Military Personnel	Energy Consumption
Military Expenditure per Soldier	Urban Population as a % of Total Population

Figure 2: Material Capability Indicators

Within the Correlates of War and power cycle theory literatures there is some debate as to whether the capability indicator of 'Iron and Steel Production' remains a useful and meaningful indicator of national power. Indeed, in the most recent *National Material Capabilities Data Documentation*, a guide produced by the Correlates of War project for users of their datasets, the potential problem is stated thus:

> Some might question the project's retention of steel to the present. Steel production is currently declining for some highly developed states, and many scholars argue that it is no longer a valid indicator of industrial activity.[18]

Suggestions for a replacement indicator have included computing power and technological innovation, aluminium, semi-conductors, personal computers, information or information technology.[19] There remain two principle reasons why such replacement indicators have not been introduced to this analysis of state power and power cycles. Firstly, power cycle analysis rests upon an assessment of historical trends and as such favours assessment of indicators for which data exists over a long period. The relatively recent rise of information technology and personal computers, for example, would not lend themselves to the long term assessment demanded by power cycle research. Secondly, any replacement capability would not necessarily be free of problems. For example, attempts to quantify soft power as an

[17] Doran and Parsons 1980.
[18] R Bayer, D Dutka, F Ghosn and C Housenick, *Correlates of War Project: National Material Capabilities Data Documentation*, Correlates of War Project, March 2005, pp. 33-4.
[19] Kissane 2005, Introduction; Chapter Five; Bayer *et al*, p.34; Anonymous reviewer.

element of national material capability have been unsuccessful as this element of national power remains almost impossible to measure.[20] As well, the replacement indicators most often suggested – computing power, PCs per thousand households, aluminium production – seem just as likely to become as anachronistic as critics claim iron and steel production to be. In the case of computing power, the rapid technological advances would see such a relevance problem emerge very quickly. As Bayer, Dutka, Ghosn and Houserick explain:

> The [Correlates of War] project has considered shifting to (or adding) materials such as aluminum, or semiconductors, or PCs, but each indicator brings with it its own problems, and such discussions have not been finalised.[21]

At the present time a replacement indicator for Iron and Steel Production has not emerged and, thus, that particular capability indicator remains a part of the power cycle analysis of this paper.

The data for each capability is extracted from the Material Capabilities dataset of the Correlates of War Project. In the case of the variable of 'Military Expenditure per Soldier', the information is obtained through a simple division of total actor military expenditure by the total number of military personnel. Urban Population is included as an economic indicator, drawing on research that suggests a positive correlation between economic development and the level of urbanisation within a state.[22] Where accurate data was unavailable – for example, in times of war or periods under foreign occupation – the missing data was estimated by extrapolating linear rises or declines between the known data either side of the unknown results. This is by no means ensures a correct result but it does allow for analysis to take place in spite of statistically minor (less than 2% of all data) missing links.

In analysing the collected data for each actor and for each year, the reformulated method bears some similarities to the classic power cycle approach. For example, all of the material capability indicators are weighted equally; that is, a relative dominance in, military expenditure, for example, is no more significant than the same dominance in energy consumption. Thus, for each of the material capability indicators an actor is awarded a relative share for that indicator within the system, and the resultant relative shares for all six indicators are then averaged to produce an annual *relative share of*

[20] Kissane 2005, Chapter 3.
[21] Bayer *et al*, p.34.
[22] F Carluer, G Mercier, I Samson and PTernaux, 'Quelles Politiques Structurelles pour les Nouvelles Regions d'Europe? La question de l'approche des disparités régionales présentes et futures', Paper presented at the XLème Colloque de l'ASRDLF, 1-3 September 2004; M Kwang, 'China seeks urbanisation as a way to boost growth' *The Straits Times*, 29 September 2000.

total system power. This relative share of total system power is then mapped on an x-y axis.

Finally, to the mapped relative shares of total system power, a cubic polynomial trendline is added. Using a least-squares regression method and aiming for the maximum R^2 result, this trendline is the 'power cycle' to which the theory refers. Indicating a rise and fall of the major powers over time, the various trendlines – for example, the French power cycle in Figure 3, below – are the basis of power cycle analysis of international affairs.

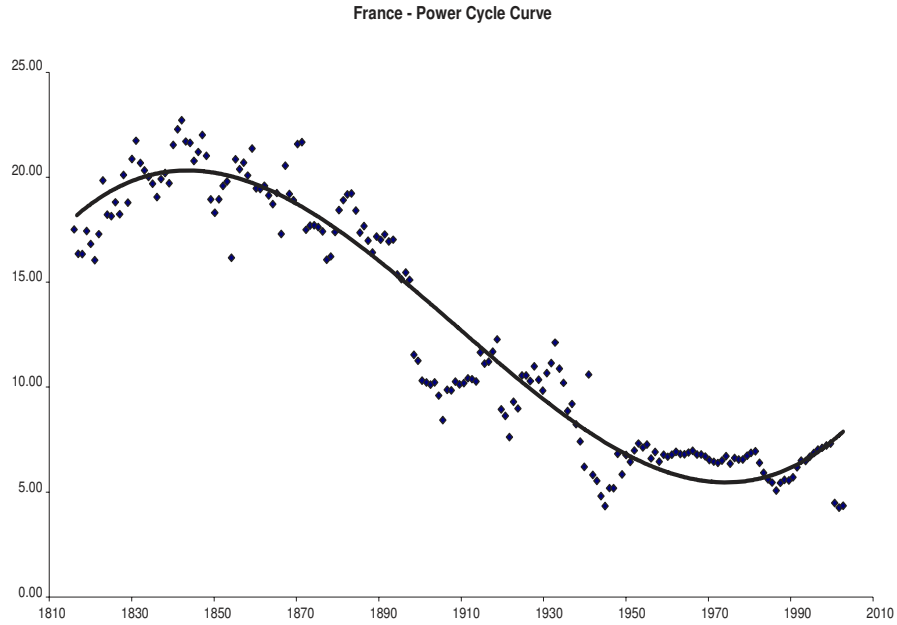


Figure 3: French Power Cycle Curve, 1816-2001

$$y = 0.000013453456902102 4x^3 - 0.0769951102495731x^2 + 146.712314643128x - 93064.4042008505$$

Equation 1: Equation of the French Power Cycle Curve, 1816-2001

Critical Points on the Power Cycle Curves

Doran and Parsons introduced the notion of critical points to the analysis of power cycle curves. There are four critical points on a state's power cycle: the high turning point (*H*), the low turning point (*L*), the rising inflection point (I_1) and the declining turning point (I_2). The position of the critical points is established by deriving the equation of the curve itself – that is, by

determining the derivative of the equation of the French power cycle curve (see Equation 1, above). The derivative, a measure of the rate of change or 'steepness' of the curve, will be maximised at I_1, minimised at I_2 and zero at *H* and *L*.

The critical points hold the explanatory power for power cycle theory as these points correlate most strongly with the initiation of conflict by a state. Indeed, application of the power cycle theory calculus to major conflicts, regional conflicts and even acts of deterrence toward rivals has continually found that this correlation holds true.[23] Though the 'window' within which the initiation of conflict is held to be influenced by a critical point varies on the period being studied, the result remains robust.[24]

Critical points on the power cycle curve represent significant problems for government officials and policy makers, as Tessman and Chan explain:

> Each of these [critical points present] difficult situations for formulating foreign policy. Officials are presented with an unexpected reversal, challenging those assumptions that have previously guided their decisions. At the same time, the future is clouded in uncertainty and, for a state experiencing downward mobility, fraught with alarming prospects. Seemingly opposite emotions (e.g., arrogance and anxiety, overconfidence and panic) can coexist. The theory of power cycles expects leaders to be most susceptible to miscalculations at the critical points. They may react impulsively or opportunistically to the new environment. The danger of a massive war is the greatest when several major states simultaneously experience the shocks introduced by the critical points.[25]

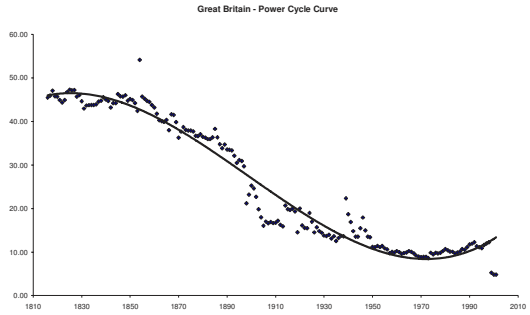
The critical points on the French power cycle curve in Figure 3 (above) are found at the years 1842 (*H*), 1908 (I_2) and 1973 (*L*). According to Doran and Parsons, the period directly following a critical point on an actor's power cycle is the most likely time for that actor to engage in extensive conflict.[26] Doran and Parsons also suggest that where two or more powers within the system which experience a critical point at the same time, the likelihood of extensive war is significantly greater. As the actors composing the examined system are all global powers, the likelihood that such an extensive war could be catastrophic is greatly increased. The effect of such a conflict on minor and middle powers such as Australia is also likely to be magnified as – for example, in Hwang and Kugler's example of a US-China conflict over

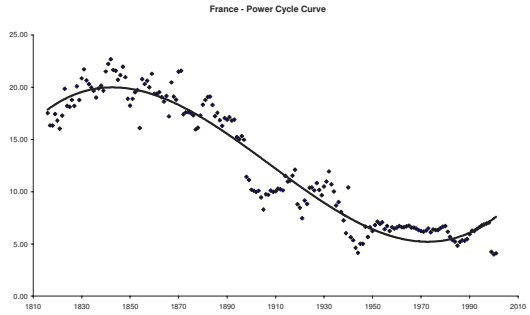
[23] Doran and Parsons 1980; Tessman and Chan 2004; Parasiliti 2003. Also H W Houweling and J G Siccama, 'Power Transitions and Critical Points as Predictors of Great Power War: Towards a Synthesis', *Journal of Conflict Resolution*, vol. 35, 1991, pp. 642-p58.
[24] Parasiliti 2003.
[25] Tessman and Chan 2004, p.133.
[26] Doran and Parsons 1980, p.963. This reformulation, as well as the classic power cycle approach, use a fifteen-year window as the critical period following a critical point.

Taiwan – allies of each actor are obliged to become a part of a major power struggle.[27]

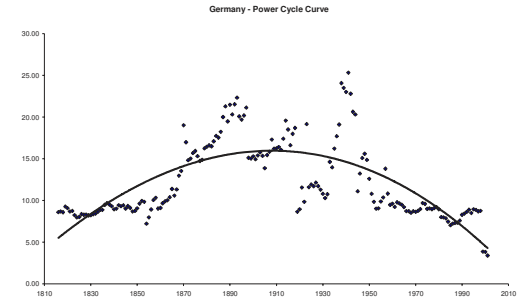
Power Cycle Curves of the Major Powers: 1816 – 2001

The power cycle curves for the major powers are shown below. As all are indicative of relative capabilities, it is essential that all should be included. However, in forecasting future Australian security challenges, it is self-evident that regional Asia-Pacific powers such as Japan, China and United States be at the forefront of analysis.





[27] Y-B Hwang and J Kugler, 'The Likelihood of a Major Conflict in East Asia and the Korean Penninsula', *World Affairs*, vol. 161, no. 2, 1998, pp.102-3.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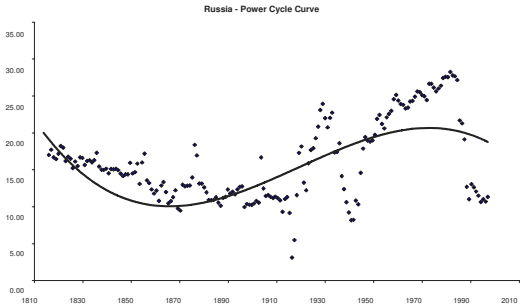
Russia - Power Cycle Curve
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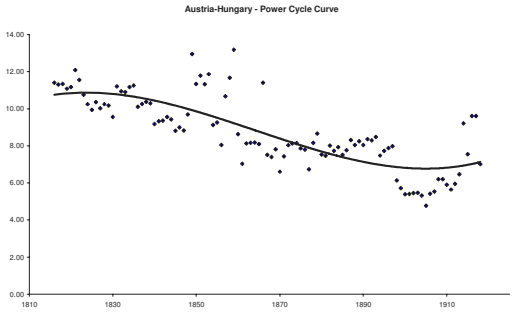
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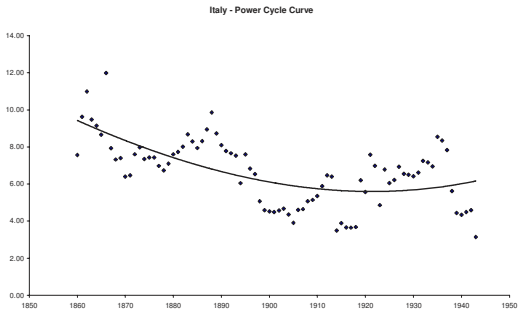
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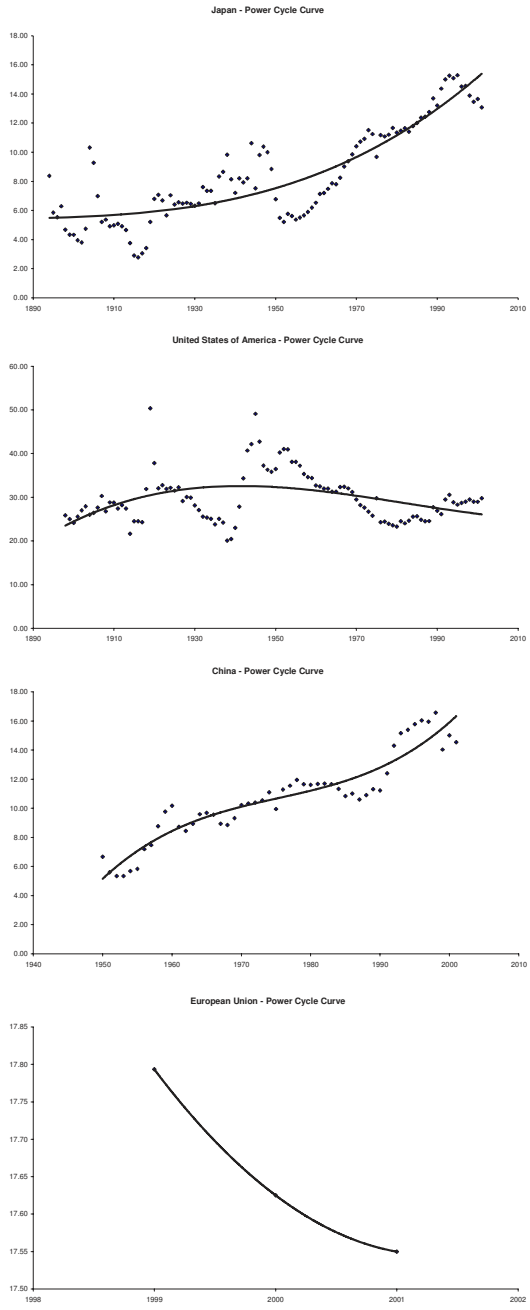

Figure 4: Power Cycles of the Major Powers

At this stage, it is helpful/necessary to make some brief points about the power cycles depicted above: (1) though it is clear that the cycles of Italy and Austria-Hungary no longer have any modern effects upon the relative power of the other actors, they are included because they have affected earlier distributions of power in all but the Chinese and EU curves; (2) the power cycle curves above, established using the reformulated power cycle method, are largely congruent with Doran and Parsons' results, though the Doran and Parsons data only subjected state actors to investigation, and only then up until 1975; and (3) though the euro-sceptics may consider the EU curve a validation of their position, with only three assessed data-points it is unlikely that this curve is anywhere near a true trendline from which to develop forecasts.

Power Cycle Trends, 2000-2030

Assessing the power cycle curves in Figure 4, some trends are immediately apparent and also significant in the consideration of Australian security strategy in the coming decades. Two of these are outlined below in more detail: first, the rise of the Asian powers and, second, the continuing decline in relative power of the United States of America.

THE RISE OF CHINA AND JAPAN'S (SLOW) RISE

As its power cycle depicts, China is continuing a rise in relative power that began upon its entry to the major power system in 1950. China has more than tripled its share of the relative power of the major power system since that time (5.16% to 16.34%) and continues to increase its share. The driving factor behind this rise has been increased military spending per soldier (from $639.50 in 1950 to $19 934 in 2001); a trend towards greater urbanisation (6.64% to 18.79%); and far greater energy consumption (29 555 000 coal-ton equivalents to 1 138 208 000). Widely predicted continuing economic growth is likely to assist China in continuing this trend.[28]

Like China, Japan's power cycle curve also rises. However, unlike China's rapid charge towards prominence within the system, Japan's rise has been more gradual. The influence of the World Wars and the necessity for reconstruction have clearly affected Japan's power cycle. Japan has again been assisted with a near ten-fold increase in the rate of urbanisation since its entry to the major power system (6.17% to 60.80%), greatly increased demand for energy (an increase by more than 50% in the last twenty years) and a military spending per soldier of $164 637.50, second only to the United States in the major power system.

[28] See T Abeysinghe and D Lu, 'China as an economic powerhouse: Implications for its neighbors', *China Economic Review*, vol. 14, 2003, pp.164-85; R Adhikari and Y Yang, 'What will WTO Membership Mean for China and Its Trading Partners', *Finance & Development: A Quarterly Magazine of the IMF*, vol. 39, no. 3, 2002, pp.1-9.

THE DECLINE OF THE UNITED STATES

The United States peaked in its share of system power mid-century (1941) and has been in decline since. The accession of China and the European Union to the major power system has further assisted in the decline in the relative share of system power maintained by the world's sole superpower. The decline remains slow but consistent, in stark contrast to the rising fortunes of China and even the relatively gentle rise in the Japanese power cycle. It would be a mistake, however, to interpret this decline as evidence of the United States experiencing any significant decline in any specific capabilities. Indeed, between 1981 and 2001 the US saw actual increases in four of the six capability indicators.[29] As Doran and Parsons note, it is not enough that a state experiences growth in the assessed capabilities in order to 'grow' their power cycle curve – the state must also 'out-grow' the rate of change of other states in the system under investigation.[30] In effect, a state must be 'running to stand still' else it will face a decline in relative power as the United States has in the period post-1941.

These somewhat superficial results, however, should not distract from the more integral and ultimately more significant implication which can be drawn from the power cycle curves of the United States, Japan and China. By extrapolating the polynomial power cycle curves over a longer time period, that is, continuing the current trend forward over time, the aforementioned critical points are seen to emerge within a short 'window' between 2015 and 2030. For strategists imagining future security challenges for Australia – and particularly those with an interest in Australia's position in the Asia-Pacific – this is the most important of the results which can be gained from power cycle analysis of international power politics. According to power cycle analysis, it would seem that the year 2015 is the beginning of the end for US predominance in international power politics.

Figure 5 (below) illustrates graphically the continuing rise and decline of the three Asia-Pacific powers in the coming decades. By the year 2015 China will have overtaken the United States as the predominant actor in the major power system. Between them, the US and China will account for more than 50% of the total major power systems relative power, with Japan accounting for almost another 20%. Thus, when Paul Krugman questions whether the United States can 'stay on top' of the world economically, the answer must be a clear 'no'.[31] Further, as the forecasts here are based upon a power cycle methodology that balances military and economic capabilities, it may not even be possible to claim that US military dominance will also continue.

[29] The two capability indicators which did not increase and, indeed, demonstrated declines were Iron and Steel Production and Military Personnel.
[30] Doran and Parsons 1980.
[31] P Krugman, 'Can America Stay on Top?', *Journal of Economic Perspectives*, vol. 14, no. 1, 2000, pp.169-75.

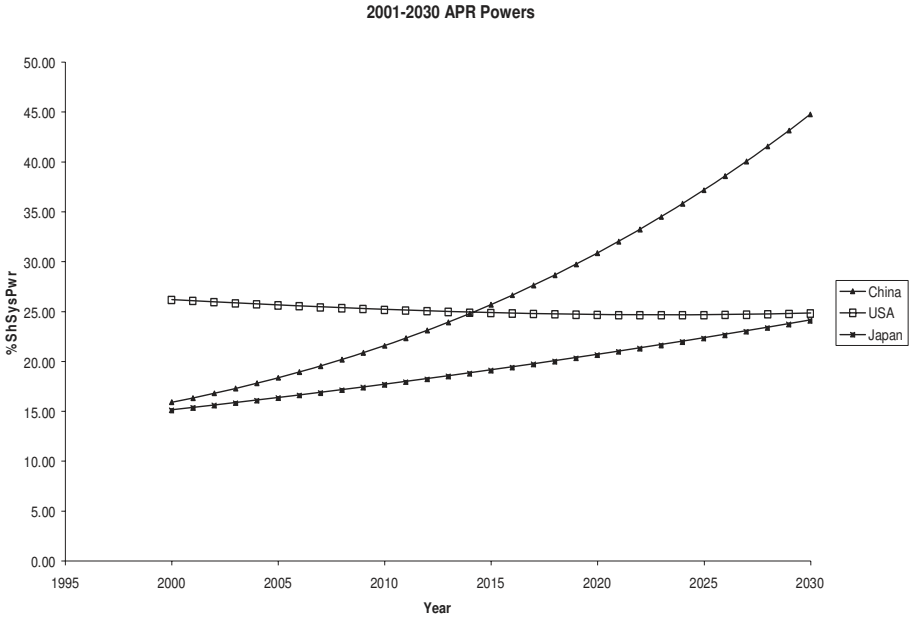

Figure 5: China, USA and Japan Power Cycles – 2000-2030

The reality is that a new 'Asian Century' will begin to emerge around 2015 with the West, including Europe and particularly the geographically close Australia, forced to realise that the centres of global politics will not be in London, Paris and New York but rather in Beijing, Tokyo and on the American west coast. The rise of China and the resultant – because in a relative system the rise of one is the fall of others – decline of the US will be the defining features of early twenty-first century power politics. The world will not turn to the West but rather the West will turn to the new heart of global politics: the Asia-Pacific.

The Implications for Australia

Australia is a middle-power with a strong military and, to some extent, cultural alliance with the United States. Australia also maintains a close trading relationship with Japan and a growing trade relationship with China (see Figures 6 and 7, respectively, overleaf). The emergence of China as a regional power forced Australian strategists to re-think their approach to the Asian region in the period following World War II. The forecasted rise of China to a position of world power predominance must in turn force a re-evaluation of Australian regional and grand strategy, possibly with more drastic implications for our country.

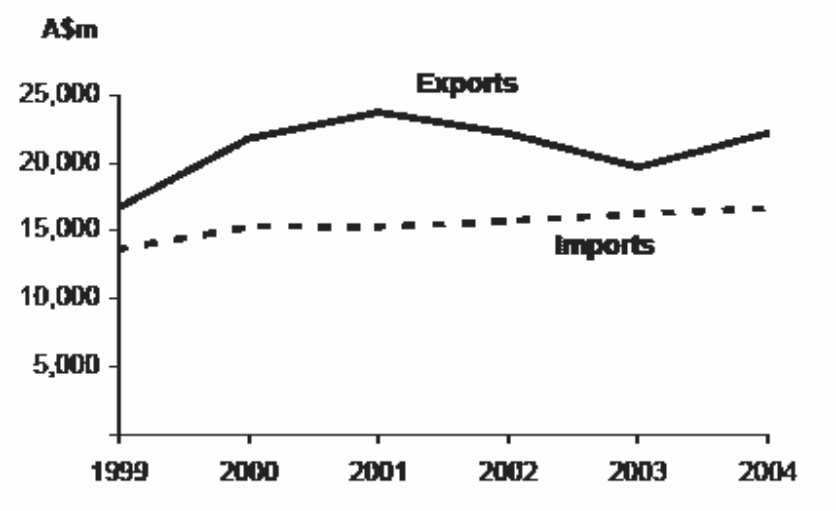

Figure 6: Australia's Trade with Japan[32]

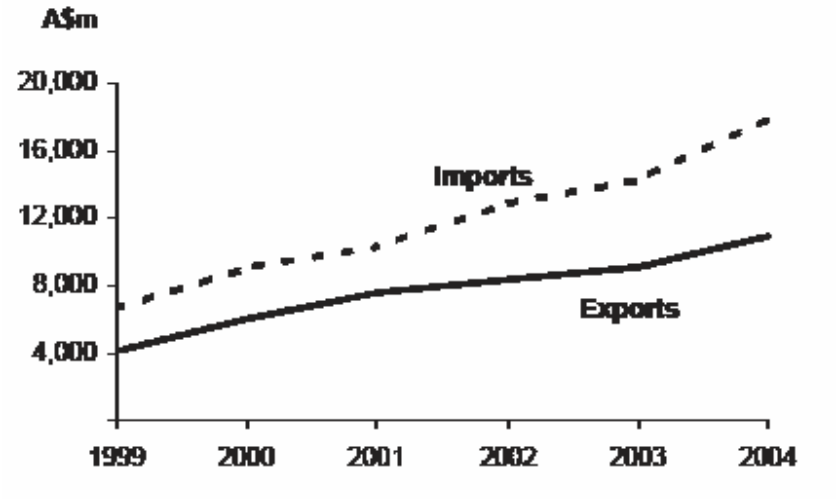

Figure 7: Australia's Trade with China[33]

[32] Department of Foreign Affairs and Trade, 'Japan: Fact Sheet', May 2005, viewed 26 August 2005, http://www.dfat.gov.au/geo/fs/jap.pdf.

It may be time for Australia to consider the military alliance of ANZUS for what it will undoubtedly become: an anachronism. It is all well to imagine that the world's sole superpower will aid Australia should it fall under attack, but do such feelings endure when that same sole superpower has been overtaken by near neighbours, especially those from which Australia derives so much of its economic wealth? Indeed, is it possible to consider the declining US a 'superpower' at all when in only a generation it may slip from its place as the predominant global power to a position behind Asian rivals Japan and China? In light of this emerging change in power polarity in the Asia-Pacific and the wider world, options such as leaving the ANZUS alliance should be considered.

Would it not, in the fashion suggested by Randall Schweller for example, be more effective for Australia to instead huddle beneath the Chinese security umbrella and, in effect, 'bandwagon for profit'?[34] Power cycle analysis of the major powers suggests that China will provide a more effective security partner than Australia's historical ally, the US. Perhaps if the Cold War mentality and the associated fear of the 'China threat' outlined by former Chinese Ambassador to Australia, Shi Chunlai, can be overcome, such a security partnership may become a possibility.[35] Indeed, a Sino-Australian security alliance might just be the culmination of more than 30 years of increasingly closer relations with China by successive Australian governments. Ambassador Shi calls for 'a more peaceful, stable and prosperous future for both of us [Australia and China]' and, as has been noted by others including a sitting US President, strong alliances allow just that style of stability. [36] Whether the Australian people would accept such a move remains debateable but, ultimately, Australia should seek the most security it can for its small population in a world that will emerge in only a decade's time as completely different to the present.[37]

[33] Department of Foreign Affairs and Trade, 'China: Fact Sheet', May 2005, viewed 26 August 2005, http://www.dfat.gov.au/geo/fs/chin.pdf.
[34] R L Schweller, 'Bandwagoning for Profit: Bringing the Revisionist State back in', *International Security*, vol. 19, no. 1, 1994, pp. 72-107.
[35] S Chunlai, 'China-Australia Relations', 2002, viewed 26 August 2005, http://www.aiia.asn.au/news/chunlai.html.
[36] *Ibid*; B Clinton, 'In His Own Words', *The New York Times*, 23 October 1996, p. 20. See discussion of institutions – including security alliances – as stabilising factors in international politics in R O Keohane and L L Martin, 'The Promise of International Institutions', *International Security*, vol. 20, no. 1, 1995, pp. 47-50.
[37] The debate over the US-Australia alliance in the light of a rising China has, in fact, already begun. See H McDonald and T Allard, 'ANZUS loyalties fall under China's shadow', 18 August 2004, viewed 26 August 2005, http://www.smh.com.au/articles/2004/08/17/1092508475915.html; M Malik, 'The China Factor in Australia-US Relations', *China Brief*, vol. 5, iss. 8, 2005, pp. 5-7.

Conclusion

Power cycle theory allows the analyst to draw together data on those material capabilities that are considered important in international affairs – that is, military and economic factors – and develop forecasts which reflect the relative distribution of power in an international system. In considering the global major power system and its constituent actors, it is clear that a change is emerging, something essentially different to the Cold War balance of the mid to late twentieth century as well as to the current post-Cold War hegemony of the United States. Put simply, China and Japan are rising and, in only a decade's time, will likely create a new epicentre for international power politics in the Asia-Pacific. Matched with a declining relative share of that system's power for the United States, this will have a revolutionary effect on international power politics. States and other actors will have to react to this change, including Australia.

Australia should begin to address this evolution in power polarity with consideration of its major security alliance, ANZUS. This article has suggested that it may be necessary for Australia, recognising the rise of the Asian states, to realign itself away from its traditional American friend. Whatever the government of Australia decides, these decisions must be made in the knowledge that the international system is changing and its current ally, the US, is in decline. Power cycle methods allow the analyst some forecasting capacity but it is the capacity of Australian strategists and policymakers which will ultimately decide the impact of the coming 'Asian Century' on Australia's future.

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