

*The southern North faces the northern South:
The Rise of China and the Implications for Australian Security*

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ABSTRACT:

Australia is almost unique in international politics as it remains a Global North state geographically isolated in the south of the globe. Its northern borders fringed with states of the South, Australia has long looked to allies in its security seeking policies and in the formation of its alliances. Australia, however, is facing a choice. By using the power cycle methodology to forecast the future of global great power politics it is shown that the Global South's China is rising in power and will soon overtake the US as the dominant global power. 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 (the US) is no longer the predominant power.

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Introduction: A southern North

Australia is almost unique among the states of the Global North. It exists, alongside tiny New Zealand, as part of the industrialised, democratic North which, geographically, is far to the south of the Global South. Indeed, it is not unfair to describe Australia as the 'Southern North', an long-time outpost of democracy and western capitalism which, when facing its neighbours, finds itself surrounded by the 'Northern South', including all of South-East Asia and the behemoths of China and India. Unlike its European counterparts in the Global North, Australia has never worried over waves of migration from the south but has instead kept a keen eye on the Global South to its northern borders. At best a middle power in international politics, Australian analysts have had to maintain a keen eye on the international system, forecasting the rise and fall of regional and global powers in an effort to maintain its position in world affairs.

Long a British colony, Australia was quick to trade allegiances to the United States when, in the course of World War Two, Britain was no longer able to defend and support Australian interests in South-East Asia. Some sixty years

⁴⁰ The author acknowledges the advice and assistance of Dr David Lundberg, School of International Studies, University of South Australia.

later, Australia faces an emerging reality that will see it forced to again take sides as the balance of global power shifts once again. With the rise in power of the Global South, in the form of the People's Republic of China, and the decline in power of Australia's Global North ally, the United States of America, now imminent, it is now critical for Australia to set policy directions for a world that will no longer consist of a powerful North and a less-powerful South.

This article applies 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.

Measuring Power

George Bernard Shaw once wrote that that which is most important is the hardest to define. Power, in the context of international relations theory most surely fits this description. For example, an understanding of power is essential to any reading of realist thought, be it classical Morgenthau, offensive Mearsheimer or neorealist Waltz. Power goes to the core of a realists understanding of international politics: it is the motivation for choice, the reason for action and the determinant of outcome. Realists argue 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 (Morgenthau 1967:25; Mearsheimer 1990: 464). 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' (Morgenthau 1967: 149). Thus, the central concern of the dominant paradigmatical approach to international relations is decidedly amorphous in realist scholarship.

At the other end of the international paradigmatic divide, theoretical liberals also consider power a central concern in their understanding of international politics. A case in point can be found in a 2000 essay on globalisation in which Robert Keohane and Joseph Nye note that it was only via-US power that the post-WWII institutions that exemplify liberal institutionalism could come into being (Keohane and Nye 2000: 115). In a further essay, Keohane concludes that the legitimacy, authority and sovereignty of international institutions rely on the role of power for their realisation (Keohane 2002: 743-65). 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" (Nye 2003: 74). Surely a more inclusive definition, but not necessarily more useful – particularly in light of the breadth of a term such as

‘culture’. Indeed, as Jim Hoagland notes, so widely is the term defined that it takes on a certain elasticity that does not make for consistent theoretical interrogation (Hoagland 2004). It would seem then, as Joseph Nye quips, power in international relations is much like the weather: everybody talks about it but few people can claim to understand it (Nye 1990: 177-92).

If power is like the weather, then conflicts and war are the storms. There exists at least one group of theorists that are well placed to forecast these international storms: 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 (Doran and Parsons 1980; Kumar 2003; Parasiliti 2003; Tessman and Chan 2004). Working with a methodology that focuses on the quantitative analysis of a series of national capabilities, power cycle theory is extremely specific about what is included in the assessment of power. In applying the power cycle methodology, it is only the measurable and mathematically comparable that is taken into account – liberal concepts of ‘soft power’, almost impossible to meaningfully quantify (Hoagland 2004), remain excluded. The theory also maintains a focus on historical trends and its measures of capability are such that they can be measured over a period stretching back to the last days of the 18th century.

Maintaining this historical context, classic power cycle theory pays particular attention a state’s iron and steel production, the level of available military personnel, energy consumption, total population and also urban population (Doran and Parsons 1980: 953). More recently, applications of the theory other indicators of state power have been introduced, including measures of gross national product and per capita assessments of military spending (Kumar 2003; Parasiliti 2003). Increasingly the data sets of the Correlates of War project, which incorporate gross defence expenditure as well as the original five indicators of power cycle theory, have been assessed using the power cycle methodology (Tessman 2005). No matter the specific indicators selected for assessment, however, a key strength of power cycle theory – and what separates the method from other approaches to international relations – is its unambiguous definition of its key variable, power.

Despite a history stretching to the earliest days of international relations scholarship (Stoll and Ward 1989: 2), power defined with reference to the material capabilities of states remains important in the analysis and forecasting of state behaviour today. However, linear forecasting – by which the future is extrapolated from historical trends – has proven unable to overcome what Charles Doran calls, ‘the problems of nonlinearity’ (Doran 1999: 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 (Doran 1999: 14-15). 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. With a commitment to non-linear methods and a 'growth and decay' algorithm for fitting power cycle curves, power cycle theory offers a credible alternative to flawed linear analytical tools.

The Power Cycle Methodology

Classic power cycle theory is a method by which state actors within a defined state system are compared 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 as part of an Honours research project within the School of International Studies at the University of South Australia during 2005.⁴¹ This reformulated power cycle method broadens analysis to include globally significant non-state actors, such as the European Union, and balances assessments of actor power between military capabilities and economic capabilities. In recognition of the quickly changing globalised political environment, it also assesses all capabilities for all actors for every year that they maintained membership in the major power system. This marks a departure from classic power cycle method which assesses capabilities only every 5 years (Doran and Parsons 1980).

Prior to undertaking any analysis of international actors or attempting to 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 the entry and exit years defined as in Table 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

⁴¹ This reformulated power cycle theory methodology is the chief result of Honours research undertaken by the author. A full explication of the reformulated method can be found at the author's website <http://www.DylanKissane.info>.

United States	1898 - 2001
Japan	1894 - 2001
China	1950 - 2001
European Union	1999 - 2001

Figure 1: The Major Power System, 1816-2001

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 their essay ‘War and the Cycle of Relative Power’ (Doran and Parsons 1980) and broadly congruent with other significant assessments of the major power system (Levy 1983). 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, as mentioned above, maintains a balance between military capabilities and economic capabilities (see 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

The data for each capability is extracted from the Material Capabilities dataset of the Correlates of War Project. For the ‘Military Expenditure per Soldier’ indicator, 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 (Carluer, Mercier, Samson and Ternaux 2004; Kwang 2000). Where accurate data was not available – 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 (Kissane 2005a: Appendix A).

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, for example, military expenditure 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 total system power*. This relative share of total system power is then mapped on an x-y axis.

The major mathematical refinement, however, is contained in the fitting of curves to this raw relative share of total system power. Where previously power cycle theorists had endorsed a complex mathematical method, the reformulation simplifies the curve fitting process so that a simple spreadsheet program is all that is required by the analyst. Using the Microsoft Excel spreadsheet program, a trendline is fitted to the data using a least-squares regression method with the R^2 result maximised. This trendline is the critical '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, overleaf – are the basis of the reformulation's power cycle analysis of international relations.

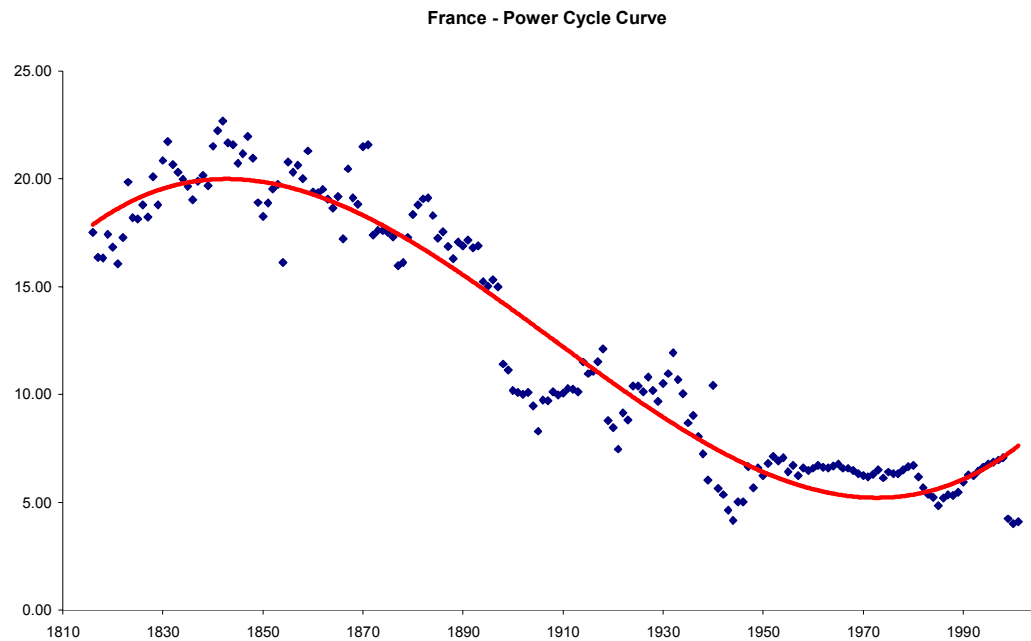


Figure 3: French Power Cycle Curve, 1816-2001

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 equation (4), 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 are essential as they maintain the key to the explanatory power of power cycle theory. These points on an actor's power cycle curve correlate most strongly and positively with the initiation of conflict by a state. Indeed, the 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 broadly holds true (Doran and Parsons 1980; Houweling and Siccama 1991; Parasiliti 2003; Tessman and Chan 2004). 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 (Parasiliti 2003). To return to Nye's weather analogy, critical points are the barometers of international forecasting: they coincide with shifts in global storm fronts.

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 (Tessman and Chan 2004: 133).

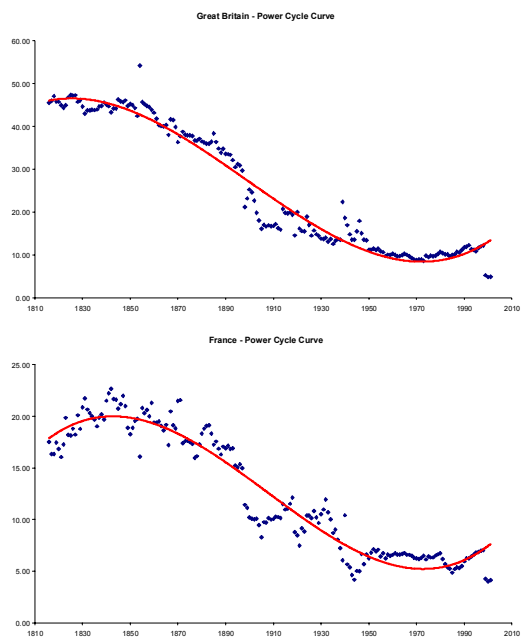
The critical points on the French power cycle curve in Figure 3 (above) are found at the years 1842 (H), 1908 (I_2) and 1973 (L) (Kissane 2005). According to Doran and Parsons, the period directly following a critical point on an actor's power cycle is the most likely time for that actor to engage in extensive conflict (Doran and Parsons 1980: 963).⁴² It is also suggested 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. In the system of actors under examination, because the actors are the major political players in the international system, there is a greater likelihood that such extensive war could

⁴² This reformulation, as well as the classic power cycle approach, use a fifteen-year window as the critical period following a critical point.

be catastrophic. This is particularly crucial with regards to middle powers such as Australia which find themselves involved in such conflicts at very regular intervals (Kitchin 2004: 5).

Power Cycle Curves of the Major Powers: 1816 – 2001

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



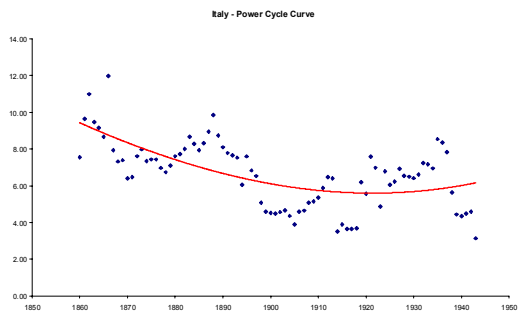
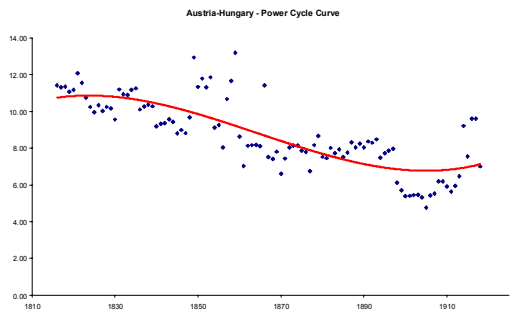
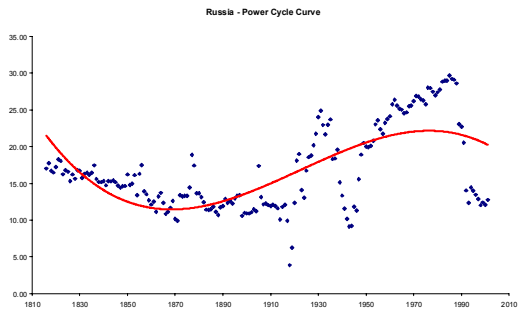
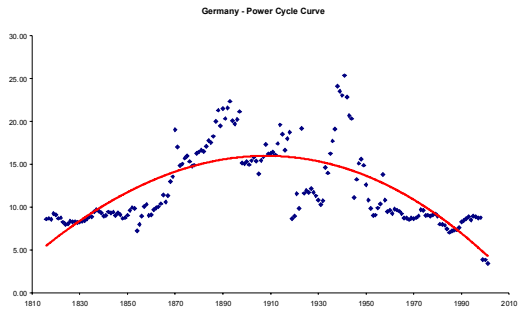


Figure 4: Power Cycles of the Major Powers

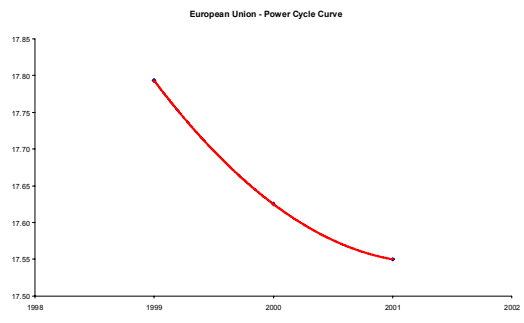
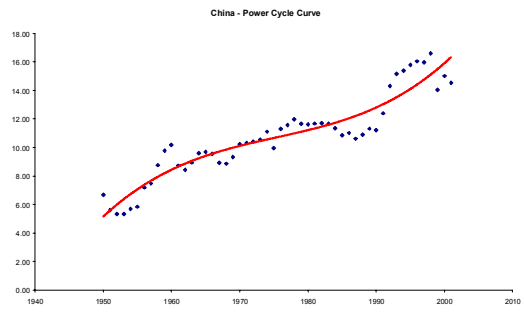
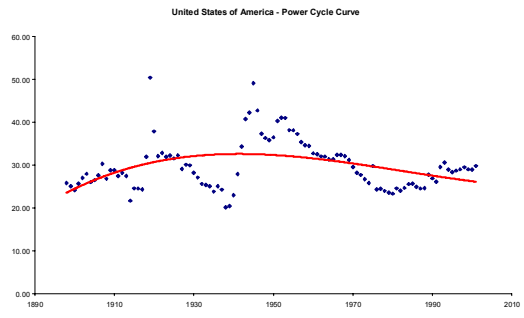
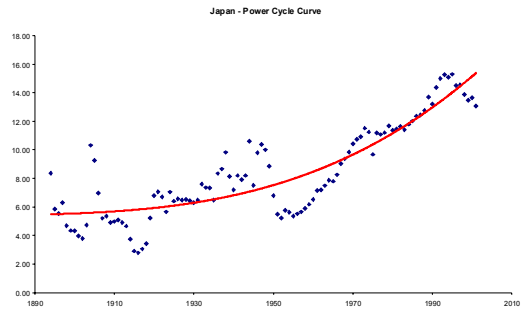


Figure 4 (cont.): Power Cycles of the Major Powers

Analysing the power cycle curves above allows the analyst to draw conclusions for the future of Global North-Global South relations in the Asia-Pacific in the coming decades. With a focus on the immediate region surrounding Australia, the following three trends can be considered significant in relation to Antipodean security:

The Rise of China

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 nearly tripled its share of the relative power of the major power system since that time and is growing that share still.

Japan's (slow) rise

Like China, Japan's power cycle curve also rises. However, unlike the 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 affected Japan's power cycle towards this end.

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.

Considering these trends together, and extrapolating the power cycle curves of the three powers into the future, a composite 'power cycle future' can be created for the Asia-Pacific powers, both North and South, in the first third of the twenty-first century. By extrapolating the polynomial power cycle curves over a longer time period, that is, continuing the current trend forward over time, the analyst can graphically represent the rise of the two Asian powers and the decline of the United States (see Figure 5, below).

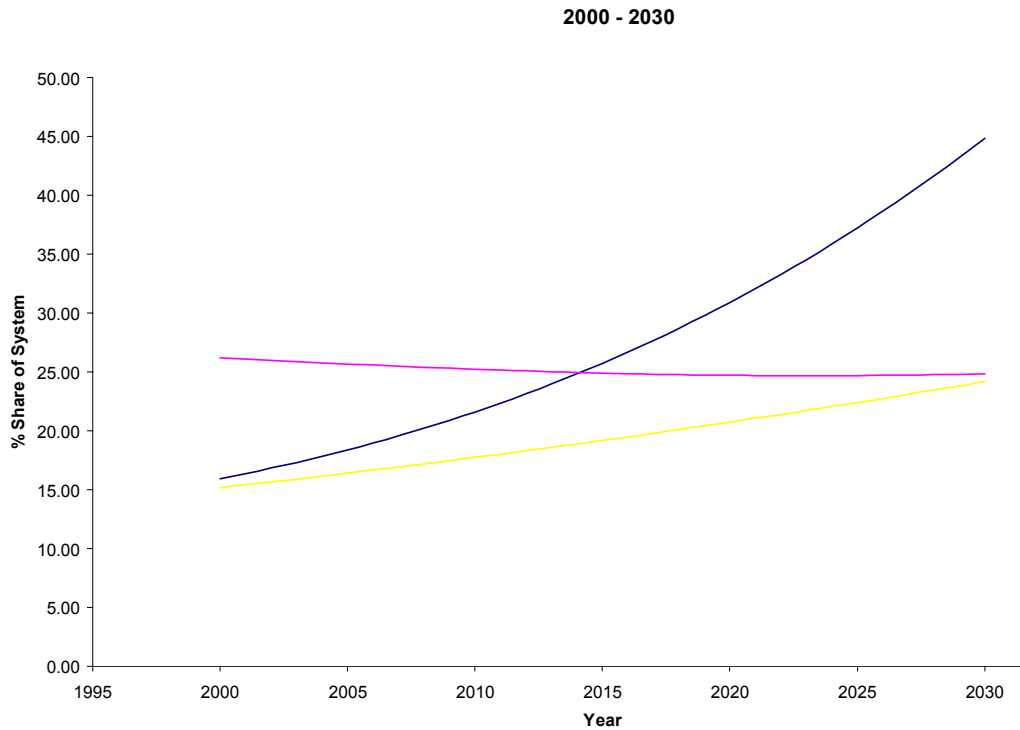


Figure 4: China, USA and Japan Power Cycles – 2000-2030

For strategists imagining future security challenges for Australia – and particularly those with an interest in Australia’s position *vis-à-vis* the rising Global South power of China – this is among most significant of the results which can be gained from power cycle analysis of international power politics. It seems clear that the year 2015 is the beginning of the end for US predominance in international power politics.

As illustrated in Figure 5 (previous), by the year 2015 China will have overtaken the United States as the power predominant actor in the major power system. 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’ (Krugman 2000). 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.

The reality of a new 'Asian Century' will become fact around 2015 with the Global North, 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 perhaps on the American west coast. The rise of China and the resultant and the relative decline of the United States will be the defining features of early twenty-first century power politics. No longer will the Global North define international power politics; the world will soon look to a rising, Southern behemoth as the principal and dominant actor in international affairs

The Implications for Australia

Almost alone as a Global North state in the Southern Hemisphere, Australia is a middle-power with strong military and cultural ties to the United States. Australia also maintains a close trading relationship with Japan and a growing trade relationship with China. 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, based on a reformulated power cycle method, must in turn force a re-evaluation of Australian regional and grand strategy, possibly with more drastic implications for that state.

As has been argued elsewhere, it may be time for Australia to consider the military alliance of ANZUS for what it will undoubtedly become: an anachronism (Kissane 2005b). It is all well to imagine that the world's sole superpower will aid the Australian state should it fall under attack, but will 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? Would it not, in the fashion suggested by Randall Schweller, be more effective for Australia to instead huddle beneath the Chinese security umbrella and, in effect, 'bandwagon for profit'? (Schweller 1994). Recent research suggests that the possibility of such a shift in strategic priorities may be more likely under a centre-left Australian Labor Party government (Shanahan 2005: 1) but the notion remains highly debateable. Ultimately, Australia should seek the highest level of security it can for its geographically large landmass and its numerically small population.

Further to moves in relation to security seeking, the power cycle curves also suggest a growth in the Chinese and Japanese economies to the demise of major Australian trading partner, the US. In this context, the Free Trade Agreement (FTA) discussions currently underway with China must be allowed to continue. Australia's economic success requires access to the Asian markets that are likely to grow. Power cycle analysis suggest that China and Japan – already close trading partners of Australia – are the states where Australia should focus its economic energies. By 'getting in early', as it were, Australia could guarantee an

economic benefit possibly unavailable to others who recognise the changing power structures in international society later.

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 balancing of the mid to late twentieth century as well as the current post-Cold War hegemony of the United States. Put simply, the North-South balance in the Asia-Pacific is changing and a new centre of global politics is emerging in the Asia-Pacific. States of the Global North – including, significantly, regional Northern states like Australia – must adapt their security and economic policies to reflect this new strategic reality. This article has suggested that with regards to the former it may be necessary for Australia, recognising the rise of the Asian states, to realign itself away from its traditional American friend. Furthermore, with regards to economic matters, it is suggested that Australia consider the FTA process with China of utmost importance, bearing in mind the obvious rise in economic power China will encounter in the coming years.

Australia is facing a realignment in the North-South balance the likes of which has never been experienced in the region before. Analysis of the power cycle curves of the major regional and global powers suggests that this realignment is but a decade away and, thus, the time for action by the Australian government has arrived. Being a Global North state geographically removed from like states in the northern hemisphere has tended to define Australian foreign policy in the past. It seems likely, however, that Australia's ability to engage with a rising Southern state to the north will define its foreign policy in the future.

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