Different approaches to a shared goal

How variations in traditions, political and educational cultures, and the resulting conditions and strategies, differentiate the approach to building WCUs

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Everywhere research universities have a triple objective

1. Be a ‘World Class University’ by global standards
2. Sustain and develop own university identity and agenda in global setting
3. Ensure national government, employers and public are friendly, maintain autonomy, and keep the money rolling in
What is a WCU?

- ‘World Class University’ is an aspirational concept, very meaningful to all who reach towards it.
- It is norm referenced not criterion referenced. Subjective and variable: rankings provide common definition. But rankings set absolute and arbitrary limits on possible WCUs (50? 100? 200? 500?)
- The objective form that manifests the WCU, something we can recognize around the world, with characteristics that can partly be measured and analysed, is the Global Research University (GRU).
- Not all countries can have a WCU if the benchmark is ARWU top 50 (win/lose game). But all can have GRUs (win/win game) if necessary conditions are satisfied.

a WCU as Global Research U

- Has established global status and recognition, particularly:
- Research capacity and performance that enable globally significant output in the sciences and social sciences—this is the signature aspect of the WCU that enables it to position itself within worldwide knowledge circuits.
- It exhibits strong global connectivity in communications, collaboration, two-way flows of people, knowledge and ideas.
- Is embedded in local and national contexts as well as global.
- Commands resources, sets examples, makes things happen.
Conditions of the WCU as GRU

- **Drive:** Within the institution, and perhaps the nation-state, there must be strong desires for prestige and eminence in the form of the WC GRU
- **Economic capacity:** wealth sufficient to finance the WC GRU on a sustainable basis from a combination of public and private sources
- **Nation-state policies, programs and regulations:** including investment, favourable to (and not unfavourable to) evolution of the WCU as GRU
- **Human resources and physical capacity** that supports research, teaching, communications and institutional leadership and organization
- **Global connective capacity** especially in knowledge and people flows
- **Internal governance and organizational culture** that sustains openness and continually improving performance, and allocate resources on a merit basis
- **Institutional autonomy** sufficient to enable strategic decisions and initiatives
- **Academic freedom** sufficient for creative initiative and global connectedness
- **Time:** A build-up of achievement and status, especially in research. Impossible to become a sustainable WCU as GRU overnight – perhaps 12-15 years is minimum

Up to now American approaches to higher education system building, or Anglo-American models, have dominated the normative discussion of the WCU/GRU.

Yet the aspirational WCU concept actually emerged from outside the Western institutions—and it is now being pursued by a range of systems with political and cultural underpinnings that are different to those of the Anglo-American nations. These systems will not adopt same templates as the USA/UK.
In short, there are different pathways to the common WCU. A key source of variation is the nature and political culture of the nation-state. Educational cultures are partly shaped by this

- **United States** – first modern tradition of mass higher education and research university, partial role of federal government in research and student market, industry biomedicine, self-sustaining civil society that grounds the university in localities and also fosters Ivy League private sector with independent resources
- **Westminster systems** in the UK, Australia, New Zealand - finance sector-dominated polity and Treasury-driven government, more recent mass orientation, market equity model, state shapes outcomes, civil society, international education exports
- **Post-Confucian systems** in East Asia and Singapore - Japan first and others emerged more recently, enrolments tend to universal, household as well as state investment, accelerated research, state supervision and in some areas control
- **European social market/democracies** - common global ambitions, mixed funding emerging, state more obvious than in liberal English speaking polities, some like Finland give primacy to citizenship equity, some like Switzerland and Holland veer towards Westminster model, others work in the middle ground, e.g. Germany
- **Gulf States and Saudi Arabia** – top-down education zones financed by oil revenue, buy-in international research capacity, local nesting of higher education to follow?

There might be other pathways to the WCU/GRU. They tend to be not so much national, as regional or sub-regional, reflecting historical overlaps and clustered cultures. All of these pathways are waiting for more detailed research and comparison, e.g.

- The ‘Bonapartist Model’ traditional to France and Italy
- The Latin American variant (a ‘Bolivarian Model’ isn ow gaining traction?)
- The emerging Southern African road
- Emerging approaches in higher education systems in South Asia
- Emerging approaches to the GRU in Central Asia
- etc etc
Each such pathway to the WCU/GRU needs definition and analysis

- The differing roads to the WCU/GRU are distinguished by variations in
  - the character and role of the nation-state
  - educational culture in home and society
  - relations between state, institution and society
  - approaches to financing higher education
  - degree and type of global openness, engagement and initiative, including contribution to global architecture

- There is convergence in goals (e.g. building capacity in global science) but differences in the ways to achieve the goals

Let’s look at one such pathway to the WCU/GRU ...
e.g. the ‘Post-Confucian’ Model of higher education system

- Japan, Singapore, Korea, Hong Kong SAR, Taiwan China and mainland China – countries and systems with many differences, but all shaped by the 2200 year old comprehensive state tradition dating from the Ch’in and Han dynasties in China, and Confucian values and practices in education
- A dynamic system model able to grow tertiary participation, improve institutional quality, rapidly expand research at historically unprecedented rates, and build world class universities, all at the same time – within state budgets and education budgets lower than in many other countries
- Depends on high material standards and a prolonged period of dynamic economic growth: the GNIs (2010) are Singapore $55k, Hong Kong $47k, Japan $35k, Taiwan about $35k and Korea $29k. China GNI was $7570 in 2010 but was much higher in some districts like Shanghai, and China’s total economic size facilitates focused investment

When Western modernization encounters the long Confucian tradition in education, within the framework of comprehensive nation states of the Sinic type with a strong drive to ‘catch-up’ to the West, the outcome is accelerated modernization with Chinese (or Korean or Japanese or Singaporean etc) characteristics. There is more than one kind of modernity in play in a plural global setting, in higher education and in all other spheres

- The post-Confucian Model in higher education is a hybrid Model grounded in the potent encounter between two elements:
  1. Confucian tradition in education dating from the Song dynasty (originally partly sourced in Confucius and followers), including family-based commitment to self-cultivation via learning, strong social respect for education, and ‘institutionalized Confucianism’ in the competitive examinations used originally for meritocratic selection of state officials
  2. Western-driven modernization in general, and in particular mass higher education and leading edge scientific research universities of the US type
Post-Confucian dynamism in higher education: why and how?

- CONDITIONS: Rapid economic growth, Western European wealth, coherent state machine, Confucian family commitment to education and social sorting via examinations, private tutoring industry
- NATION-STATE SUPERVISION: Shaping of the education and innovation systems by strong smart state policy and administration that knows what it wants, is prepared to policy borrow and invest selectively, and is instrumentally strong, reaching targets and always moving forward
- TUITION: Participation tends to 50 per cent or more of young people, private households play a growing role in funding teaching especially through extra schooling underpinned by Confucian values
- RESEARCH: Within low tax fiscal regimes, private funding of tuition enables high public investment in science R&D with a applied research focus, scholarships for bright students, WCU/GRUs with improving performance (rankings, publications, citations, finance for research)

Private tuition

- The role of private tutoring (extra teaching outside formal schooling), especially in preparation for examination competition, is a distinctive feature of all post-Confucian systems.
- Nowhere else in the world is extra teaching pursued at this level of intensity. Many students in effect study in two schools at the same time. The resulting workloads are extremely heavy. Student achievement in high relative to other systems (e.g. the OECD PISA results)
- Tutoring is more affordable for middle class families but some even very poor families spend a high proportion of total household funding on education, in the form of tuition fees in formal education plus extra tutoring – as much as some Western families spend on housing
- In Korea private tutoring has been estimated at more than 3% of GDP, more than some nations spend on tertiary education as a whole
Post-Confucian performance in schooling
(OECD PISA 2009, mean student scores, Confucian heritage education systems in red)

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<thead>
<tr>
<th>Reading</th>
<th>Mathematics</th>
<th>Science</th>
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<td>Singapore 562</td>
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<td>Netherlands 508</td>
<td>Canada 527</td>
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<td>Australia 15th 514</td>
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<td>UK equal 25th 424</td>
<td>UK 28th 492</td>
<td>UK 16th 514</td>
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<td>USA equal 15th 500</td>
<td>USA equal 31st 487</td>
<td>USA 23rd 502</td>
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Number of Science papers per year, 1995-2007

![Graph showing the number of Science papers per year from 1995 to 2007 for Japan, China, India, and Korea.](image)
Still quality issues: World share of papers and highly cited papers, 2008

(USA National Science Board)

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<th>China</th>
<th>United States</th>
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<tr>
<td>Share of world science papers</td>
<td>5.9%</td>
<td>28.9%</td>
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<tr>
<td>Share of top 1% most highly cited papers</td>
<td>2.5%</td>
<td>51.6%</td>
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Comparing three different pathways

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<th>United States</th>
<th>Westminster (UK, Australia, New Zealand)</th>
<th>Post-Confucian (East Asia and Singapore)</th>
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<tr>
<td>Nation-state</td>
<td>Limited liberal state, separate from economy and civil order. Federal</td>
<td>Limited liberal state, separate from economy and civil order. Unitary</td>
<td>Comprehensive East Asian state, politics commands economy, top graduates to state</td>
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<td>Educational culture</td>
<td>Meritocratic, the common road to wealth/status within advancing prosperity</td>
<td>Egalitarian, state guaranteed road to social opportunity that is open to all</td>
<td>Confucian family value of self-cultivation. Social status via education competition</td>
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<td>State role in higher education</td>
<td>Frames hierarchical market and steps back. Autonomous university leaders</td>
<td>Supervises market competition, shapes outcomes indirectly. Managed autonomy</td>
<td>Supervises, expands, shapes and drives the sector. More managed autonomy</td>
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<tr>
<td></td>
<td>United States</td>
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<td><strong>Financing of higher education</strong></td>
<td>State funds research, students loans, falling teaching subsidies. Tuition varies high/low. Poor drop out. Largesse</td>
<td>State funds research, student aid, falling teaching subsidies. Household funding rising. Austerity</td>
<td>State funds infrastructure, research, merit aid, some teaching. Household funds tuition/private classes, even poor. Resources grow</td>
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<td><strong>Hierarchy and social selection</strong></td>
<td>Steep hierarchy. Race to top WCUs (= lifelong success) mediated by SAAT. Some plurality of routes to middle level</td>
<td>More moderate hierarchy but elite delivers. End of school selection, plurality of routes to middle level</td>
<td>Steep hierarchy, top WCUs provide lifelong success. Post-Confucian one chance universal competition based on examinations</td>
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<td><strong>Dynamics of research</strong></td>
<td>Strong federal program. Some industry money, philanthropy. Peer reviewed basic science, growing commercial IP</td>
<td>More stringently funded by unitary government. Applied research up, basic down, policy drives IP</td>
<td>Part household funding and focus on WCUs enable accelerated state funding. Strong applied emphasis, peer review in question</td>
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<td><strong>Politics of WCU/ building GRUs</strong></td>
<td>Entrenched hierarchy of Ivy League and state flagships unquestioned. Global pride and power</td>
<td>Ambivalence about elite (= ambivalence about status). Ceilings on public/private funds</td>
<td>Support for remake of top institutions, target of all family aspirations, as WCUs. New global agenda</td>
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http://www.cshe.unimelb.edu.au/people/staff_pages/Marginson/Marginson.html

Cambridge UP, Cambridge, May 2010

Springer, Dordrecht, September 2011

Edward Elgar, Cheltenham, September 2011

Routledge, New York, August 2011