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University rankings and international academic relations – A bridging tool or a hindrance?  
Session 1: The impact of rankings on internationalisation

## **Global university ranking and performance improvement**

### What kind of international academic relations are created by rankings?

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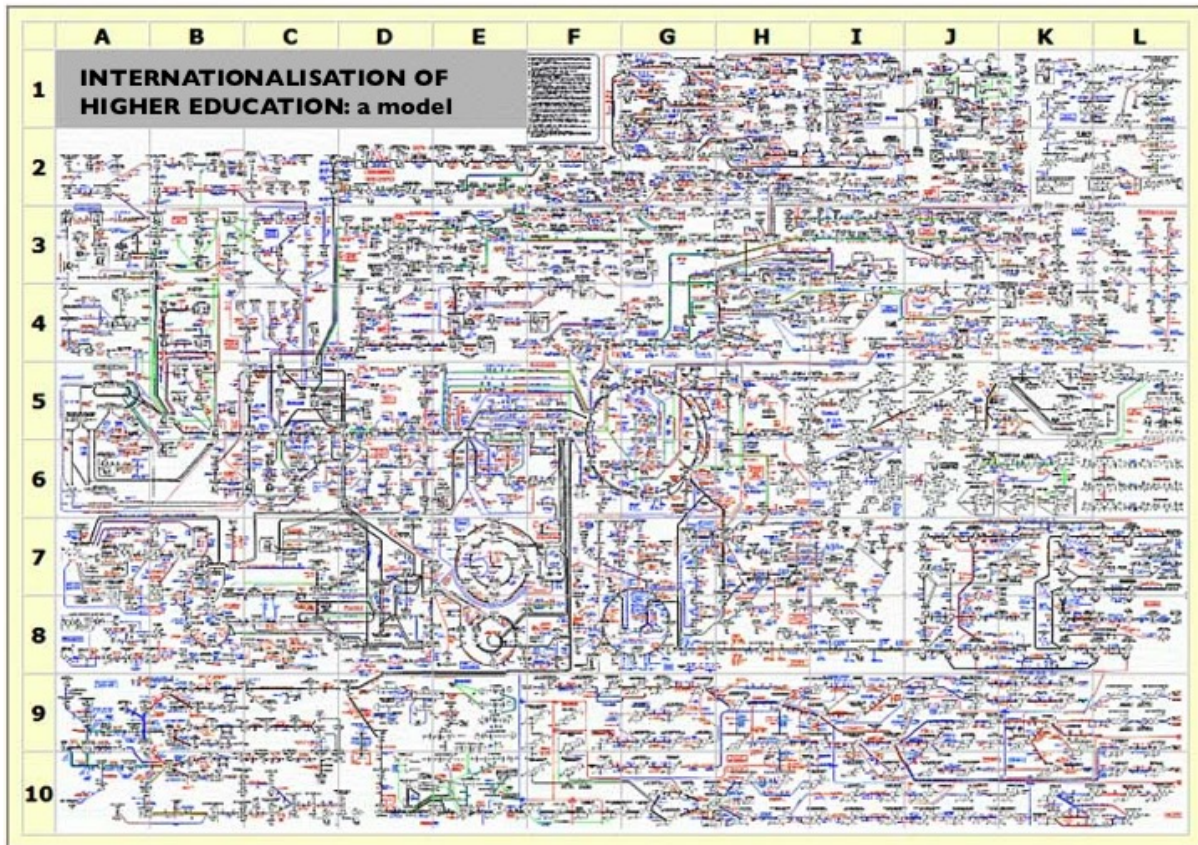
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**Abstract.** Stakeholders inside and outside higher education want comparative data, they enjoy comparative data, and they need to understand the global higher education setting. Ranking provides a clear-cut mapping of ‘who’s who in the zoo’ and at best, an objective guide to the main concentrations of research capacity and reputation, though it does not tell people where they will learn the most or the best. By identifying leading institutions and providing comparative data, ranking facilitate ‘internationalization’ in the simple sense of cross-border relations between nations, and between institutions within nations. For example, ranking informs university partnership strategies, guides student choices and enables investors in research to target funding and capacity building strategies. But internationalization takes many different forms and can express a range of purposes, from learning, swapping knowledge and building the global public good to making money and taking control of the world. The more interesting question is that contained in the title of the conference. What kind of ‘international academic relations’ are created by ranking?

The paper will argue that global ranking has been powerful in shaping global higher education as a relational environment, in three ways. In doing so it has seized on certain potentials in the environment, magnifying and institutionalizing those potentials, and this has blocked other possibilities. First, competition. Ranking has constituted higher education as a market-like global competition of leading universities and of nations. Second, hierarchy. Ranking is a core element of the system of valuation that has developed in higher education, whereby unequal weights are assigned to knowledge and credentials. Third, performance. Ranking has installed a performance economy that shapes behavior. Once we recognize that ranking shapes international academic relations in these ways, we can then evaluate ranking schemes in terms of the effects that they have. For example, how accurate is the system of valuation? Is there sufficient scope for innovation, for recognition of new value? Does the performance regime drive improvement, in terms of stakeholder goals and public goods?



Colleagues

Thank you for the opportunity to speak with you today.

Let me begin by acknowledging my own involvement in university comparison. First, as a scholar who analyzes global higher education, I make extensive use of those comparative data sound in terms of social science. In fact, I found the combined data from the world's ranking systems helpful very helpful when designing my simplified model of internationalization in higher education. I'm happy to unveil that model of internationalization today, at this conference. Here you are. Jane Knight eat your heart out!

Hmmm... it still needs a bit of work. Perhaps I should leave out Multirank.

Second, I contributed to the development of the Universitas 21 ranking of national higher education systems. I'm not sure Universitas 21 succeeded in bringing in non-research universities, and the ranking has the usual problems of a multi-indicator based on heterogeneous criteria, with weights. But the idea of system comparison is a good one. Third, I have a happy association with Shanghai ARWU as an International Advisory Board member. From the

beginning in 2003 ARWU has had positive effects, by objectifying the field of comparison, using transparent data, and focusing attention on performance and capacity in basic science. I am also on the Advisory Board of *Times Higher Education*, but that relates to the publication rather than the ranking.

But my main work has not been to rank, but to critique ranking, and analyze the effects of ranking in higher education, knowledge flows and geo-political relations of power. In writing about ranking, my normative framework is my own version of the public good. We all have our own idea of the public good.

I started becoming internationally active not long before ARWU started. The era of global ranking is still only 13 years old. The sector has been changed fundamentally in that time, by ranking. I want to reflect on that today.

From the beginning in 2003 and 2004 it was apparent that global ranking was a necessary evil. It was (and is) 'necessary', because stakeholders inside and outside higher education want comparative data, they enjoy comparative data, they want to know about order and relativity as well as difference, and they need to understand the global higher education setting. Competent ranking provides a mapping of 'who's who in the zoo'. At best it provides an objective guide to the main concentrations of research capacity and reputation. Though it does not say where the most effective teaching and learning are to be found, only where the most prestigious credentials are produced. Because ranking is necessary, like many others, I want ranking to work as well as possible, in the interests of stakeholders and the public good, and to change ranking where necessary to minimize the downsides, the 'evils' contained in the phrase 'necessary evil'. I will expand on this later, for those who like the dark side!

This session's title is 'internationalization and ranking'. Actually, it is easy to turn this into a positive story. Ranking identifies and sorts the leading institutions. This facilitates 'internationalization' in the most straightforward, least loaded sense of the word—by which I mean 'internationalization' defined simply as cross-border relations between nations, and between institutions within nations. Ranking informs university partnership strategies, guides student choices, targets research funding. But internationalization can fulfill many purposes, from learning, to swapping knowledge, to building global public goods, to making money, and taking control of the world, or at least building market share. The more interesting question is that contained in the title of the conference. What kind of 'international academic relations' are

created and institutionalized by university ranking? That's the topic that I want to unpack this morning.

All the research evidence, summarized by Ellen Hazelkorn, tells us that global university ranking has been powerful in shaping global higher education as a relational environment, to an extent that is remarkable, given that ranking is a largely an informal and unofficial form of regulation. Those who develop ranking systems rarely set out to shape 'international academic relations'.

But together, global rankings have done this. They have seized on certain potentials in the environment, bringing those potentials to life, and this has blocked other possibilities. Rankings have done this in three ways.

1. Competition. Ranking has constituted higher education as a market-like global competition of leading universities and of nations.
2. Hierarchy of value. Ranking is a core element of the system of valuation that has developed in higher education, whereby unequal weights are assigned to knowledge and credentials, and universities are connected to the economy, the labour markets and the social pecking order.
3. Performance. Ranking has installed a performance economy that shapes behavior.

Once we see how ranking shapes international academic relations, we can consider particular ranking schemes in terms of the effects they have, and think of ways to tweak them to change the effects. For example, is competition in higher education too intensive? Do universities compete about the right things? How accurate is the system of valuation embodied in ranking? Does the performance regime fostered by ranking really drive improvement, in achieving stakeholder goals and public goods?

I'll look at each in turn—competition, hierarchy of value, performance.

First, competition. Ranking has burned into the global consciousness the idea of higher education is a competitive market of universities and countries. The competition is fundamentally about research performance, which is the strongest single driver of ranking outcomes, and about reputation. It is not about teaching and learning. We don't have comparative metrics on learning, and proxies, such as staffing, or reputation, or research, don't achieve that.

‘But so what?’ you might say. ‘Higher education always was a competition’. Ranking works with what is already there. Yes, there are competitive elements in higher education—in research and innovation, in the standing of degrees, and also at the intersection between universities, policy and global economic competition. But ranking gives competition a more powerful and pristine form. It installs it thoroughly in indicators, in incentives, in what everyone does, in their imaginations. It makes competition more compelling and more complete, so it becomes the principal driver of action. Many university rectors, presidents and vice-chancellors say that improving the institution’s ranking is their main strategic objective. Solidarity and cooperation within systems has been weakened. We continue to cooperate regardless of ranking. We still work in collegial fashion and help with capacity building in emerging countries. The metrics include joint publication. Intellectual collaboration is recognized, though often explained in terms of self-interest—joint publication expands individual citation rates. But the point is that a large and increasing share of our remarkable collective resources is now allocated to mutual conflict.

Competition is so thoroughly installed that we can’t imagine any other mindset. In the Worldviews Lecture in Toronto last month Rajani Naidoo talked about ‘the competition fetish’. ‘There is a modern day magical belief that competition will provide the solution to all problems,’ she said. Naidoo pulls apart the assumptions that competition is always just, or a level playing field, or always more efficient and effective, or the inequality it generates is always justified, or that self-interest has to be paramount. Ranking-led competitions are ‘battles that are fought between the most elite universities in the most powerful countries. In highly stratified systems few benefits trickle down... the system as a whole is sacrificed to the national competition fetish.’ ‘The competition fetish is nation bound’, she said. ‘This hinders the great potential that universities have to work together to solve the global problems that threaten us’. National governments are stuck on global competition. Universities don’t have to share the tunnel vision. But ranking locks them in.

Second, hierarchy of value. In the global setting, research and learning flow freely across borders, but research and learning are not equally valued. There is a defined status hierarchy. What defines this hierarchy is not a global system for valuing credentials or learning. There is no global system for credentials. We don’t measure learning on a comparative basis. What systematizes the global hierarchy is the process of codifying, rating and ranking knowledge. Imagine two journal articles of exactly equal scientific merit, one produced at Princeton and the other at Polytechnic Lisboa. They are equal in use value and

in the long run. But for some years into the future, the article from Princeton is more valuable and recognised than the article from Polytechnic Lisboa.

Once produced knowledge is vectored by a system of status production that arranges it in ordered patterns, and assigns value to it. Some knowledges are more equal than others. The system begins with the global information companies and the global journals. It is structured by journal metrics and hierarchies, publication metrics, citation metrics and hierarchies, and it is crowned by university rankings. Ranking is largely based on research. Research performance provides the whole content of the Shanghai ARWU, and the Leiden ranking and Scimago. Research performance and reputation provide the bulk of the Times Higher ranking, and plays heavily into the QS surveys, in addition to the citation metrics.

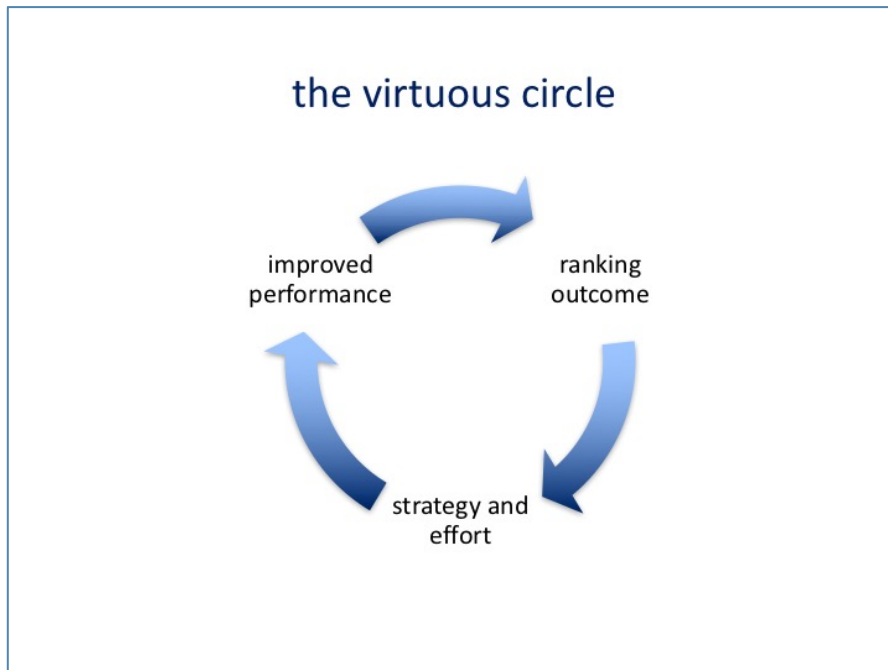
Rankings are the lynchpin of the global system of valuation. They translate the status economy in research into an institutional hierarchy. Rankings determine the value of each knowledge producer and that colours the value of what they produce. This hierarchy systematizes the value of degrees, guides investment in commercialisable research, and regulates the standing of universities and countries in the international student market. It shapes mergers and alliances, and the potential of thousands of careers. In some countries QS, Times Higher and ARWU are used to determine decisions about applications for skilled immigration status. This system of valuation, held in place by the heroic simplification that is global league tables, guides the choices of families, universities and investors, and at the same time it determines their fate.

There was a research and institutional hierarchy before ranking, but it was more informal, looser, less iron-bound and systematic. Less closed and more open to question. For that reason, less conservative and more meritocratic. Knowledge metrics and ranking recycle strong university dominance. As you know it is possible to rise up but this takes much money, focus and effort.

So this is 'international academic relations' post 2003. Competition installed as the leading principle, though fortunately we find ways of working around it. A system of valuation which regulates knowledge, people and countries in an ordered hierarchy, which in practice is harder to avoid. The third element is the effects of ranking in institutional and academic performance.

In a way, performance is the most interesting of the three. Here we find the rationale for competition, and part of the rationale for better information.

Competition should improve responsiveness, outcomes and innovation. If ranking is grounded in real university performance, and measures the important things about universities, then a better ranking means improved performance. If every university strives for a higher rank then everyone should be lifting performance. Is that how it happens? The answer is 'yes and no'.



As I said before, we know that ranking shapes executive decisions and less completely, faculty behaviours, though more in some countries than others. So the potential is there, for a virtuous circle between ranking, strategy and effort for improvement, better performance, and then back to better ranking.

In building this virtuous circle, there are three threshold difficulties that we all know. First, only some kinds of university activity are included in ranking, so there is no virtuous circle in relation to teaching and learning. That's a sad gap in the performance driver. Second, many research fields are inside the circle, but there is no ranking-driven virtuous circle for humanities, the humanistic social sciences and most professional disciplines. (I have not forgotten survey-based ranking in the humanities, I'll come to ranking surveys in a minute). Third, scholarly work outside English language cannot be effectively factored into global comparison. So if there is a virtuous circle based on ranking, it is decoupled from much of what non-English speaking universities do. And ranking pulls effort away from that work, further weakening performance.

There's no ready solution to those problems. However, they do not block the possibility of a virtuous circle between ranking, improvement and performance in relation to English-language science. And we know that scholarly and research competition has long been one driver of new ideas and more productive intellectual outputs. Scientists strive to emulate and exceed each other, to be first discoverer. Creative work has always combined embeddedness, engagement and cooperation with isolation and competition.

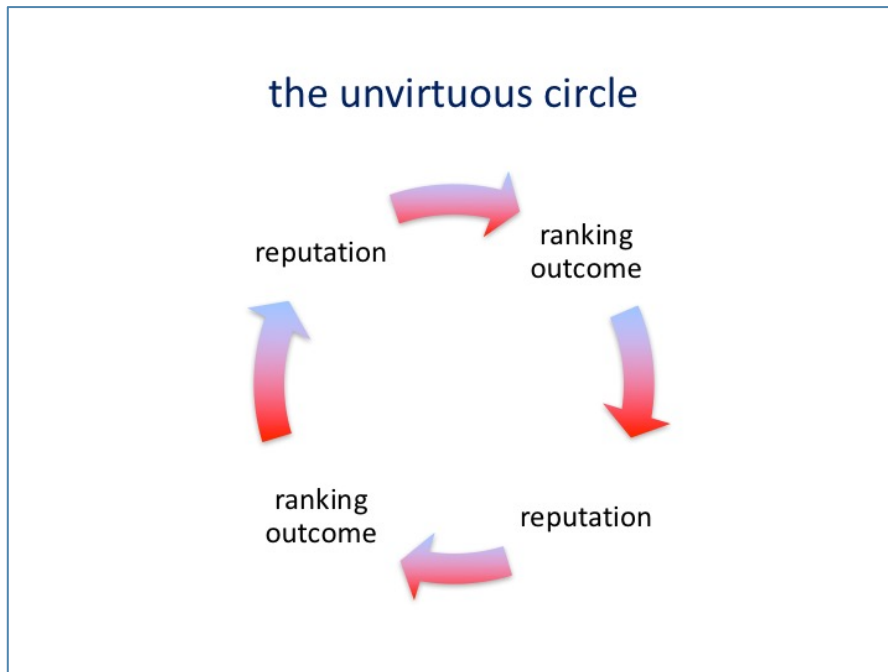
The reality is that some rankings and some aspects of ranking drive this virtuous circle in consistent fashion, reliably improving performance in specific areas, but not other rankings. Rankings that rest on coherent metrics for publication and citation tend to drive more and better research outputs, all else being equal (assuming that high citation is a valid proxy for high quality).

That means that all else being equal, Leiden, Scimago, ARWU, and others grounded solely in research metrics or ratings, promote better performance, though not better general university performance—so-called 'best university' performance—rather, better performance in selected areas of research. There's not much doubt that since 2003 research-based rankings have contributed to both increased investment in university scientific capacity and the elevation of research outputs within institutional strategy.

This has played a particularly important role in some emerging countries, where the World-Class university movement has driven impressive rates of growth in the volume of published science, and in high citation papers.

The picture is more mixed when we come to the Times Higher and QS ranking. To the extent that they draw on strong research metrics, there is the potential for a virtuous circle that drives performance. Taken alone, the QS indicator for citations per faculty, and the Times Higher indicators for citations and for research volume, potentially have this effect. I say 'potentially' because the incentives are blunted and the driver loses precision, due to the other elements within the multi-indicator ranking. Likewise, the internationalization indicators generate incentives to increase students and faculty from abroad, and joint publications, but these are minor within the total ranking and again the performance incentive is blunted by the other elements in the ranking.





The problem is this. A university may improve its citation per faculty performance, or improve its internationalisation numbers, but watch its ranking go down because of what happened in the reputational surveys, which are not performance based. The link between effort, improvement and ranking, essential to the virtuous circle, is broken. Changes in the weightings between indicators can change rankings positions without a change in actual performance. Again the circle is broken. The same happens when the ranking position changes because of small shifts in methodology. The link between effort, performance and ranking is lost. Competitive ranking cannot coherently drive improvement unless all extraneous elements are removed, all methodological noise, all fluttering up and down because of tiny changes. And of course if negotiations between universities and rankers affect the outcome, this again violates the performance logic of the virtuous circle.

In our efforts to establish the virtuous circle in these two rankings, the main fly in the ointment is the reputational surveys. Not only are they likely to constitute poor data—academics, and also employers, rarely know enough about more than a handful of institutions—they introduce a large element into ranking that is not grounded in performance. Institutions can improve their reputation without improving their performance (except perhaps the performance of their marketing department, or their rankings managers!). However, gains in reputation that do not rest on real improvement in capacity and performance are unsustainable because they are decoupled from the

virtuous circle. A further problem is that reputational ranking is highly conservative, recycles the same old hierarchy, and makes it harder for new players to break into the higher ranks—and it was hard enough anyway.

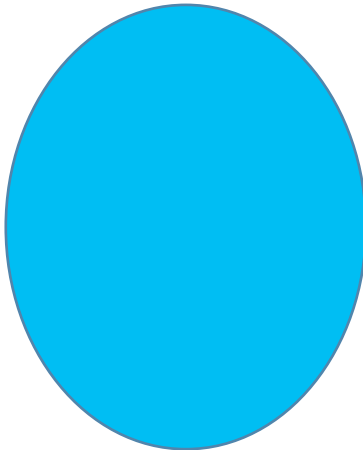
Wait on, you might say, reputation matters to students, and everyone else. The value of degrees is partly determined by the pecking order. That's right. And a reputational hierarchy based on surveys, by itself, uncontaminated by data on other factors, is useful. It tells us something important. But a reputational ranking alone, while interesting, cannot drive continually improving performance. It can only drive a position-and-marketing game for its own sake. That's fun for the rankers and for those who specialise in working the rankings. But it does nothing much for the stakeholders or the public good.

A reputational ranking cannot tell us which university is the 'best' university, whether at research or anything else. Most of us want that kind of reputation to be grounded in real performance, and improved reputation to be grounded in better performance. Real performance, expressed in a league table, should drive reputation, not reputation driving reputation in circular fashion. Let me make the point by way of analogy.

The winner of the World Cup in football is determined by who scores the most goals within the allotted time on the field. That's a simple metric. All can aspire to it. All else being equal, if a team prepares better and spends more on players and plays better, all of those things, it will score better and win more games. But the only metric that matters is winning.

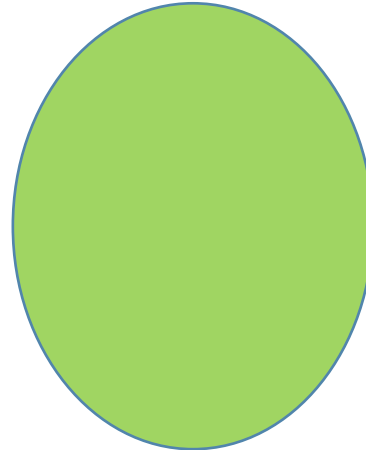
Now what if FIFA changes the rules. Instead of rewarding the final performance alone—who scores the most goals in the allotted time—it decides to give 50% to the most goals, 20% to the size of the team's fan base, 10% to total player product endorsement income, and 20% to the volume of team media coverage, maybe in webometrics format.

**WORLD CUP**  
Single indicator ranking



100% whoever scores  
the most goals

**WORLD CUP**  
Multi-indicator ranking



50% whoever scores  
the most goals  
20% size of team's fan  
base  
10% player product  
endorsement  
revenues  
20% media coverage  
of team

Or maybe, being FIFA, it could cut the most goals back to 40% and throw in 10% in bribes for FIFA delegates and officials.

We would all have less trust in the result wouldn't we? Especially as the winner could be re-tweaked by moving fan base down to 10% and raising media up to 25% and throwing another 5% onto bribes and so on.

More seriously. Multi-indicator rankings provide a rich data set, and call up multiple incentives, but because the link between effort in a particular area and rankings outcome is not transparent, they cannot drive a coherent performance regime. The incentives pull in different directions and the specific effects are invisible. ARWU gets away with it because the different indicators correlate fairly well, they are homogenous. they pull in the same direction and share common performance drivers. QS and Times Higher use heterogeneous indicators. On the other hand, if multi-indicator rankings are disaggregated, the individual indicators effectively drive performance improvement.

So these are the post-2003 effects of rankings on international academic relations. More extensive and intensive competition. A tighter hierarchy of value, which translates research knowledge, and the institutions that produce that knowledge, into status pyramids. And a performance system that partly works in research, but is incoherent or conservative in most other areas, especially when it replaces performance with reputation.

Why should be done? If I could choose? That's not going to happen. But what would we all choose, if we could, if we could start again?

Personally I would disaggregate multi-indicator rankings, and develop new comparisons and rankings in many areas. Both moves expand the information available to stakeholders. I would separate reputational surveys from objective measures. I would introduce comparisons and league tables based on collaborative activity, and on the contributions of universities to local, national and global public goods. I would collect all data from third party sources, not universities. All this would generate better international academic relations.

*Lisboa, 5 May 2016*