Universities are changing (Göransson and Brundenius 2010). On the one hand, Universities are blamed for having all kinds of purported weaknesses and failures. On the other hand, Universities are identified and projected as the solution to many problems and challenges in our contemporary world. Universities are decried as self-centered, slow and conservative, ensconced in theory and abstract thinking, closed and elitist. They are called upon to become agile and open, to target the world and to propose concrete answers to mundane problems. Scholars are supposed to be the kingpin of this profound institutional revolution. But scholars themselves are at a turning point as they experience, and de facto actualize, a consequential change in identity.

Over the last thirty years or so, Universities have been reinvented as market actors. From “organized anarchies”, they are steered along towards becoming organized and managerial hierarchies. In the meantime, politics of accountability break open the “ivory tower”. Scholars have been left to discover a completely new world and to experience in concrete ways the “audit society”. The objective, in this paper, is to explore and assess this identity transformation, while underscoring the tight interplay between this individual and collective identity transformation and the institutional revolution that is redefining the higher education landscape across the world.

We start, first, by tracing and typifying the historical evolution of the university as an institution from its medieval origins to the contemporary “market university” (Berman 2012). In the second section of this paper, we then connect the more recent stages of this evolution to the broad societal trends associated with the progress of neoliberalism since the late 1970s. We show, in particular, how the “audit society” emerges in that context. In the third section, we describe in broad strokes how this profound
institutional transformation, in the university and its environment, reflects in consequential ways upon the scholar and her activities. We draw the relatively grim picture of a fast hardening “iron cage” and we ask, in the conclusion, where we might be going from there.

UNIVERSITIES – CHANGING ROLE AND MISSION

Universities are key institutional pillars of our contemporary knowledge society. On the one hand, they are old institutions – the first universities in the western world antedate the construction of the nation state. On the other hand, even a rapid exploration of the history of the university since the Middle Ages shows a profoundly fluid institution. The University, as an institution, has evolved and has been reinvented several times through that period in highly significant ways.

Universitas – The Changing Masks of a Resilient Institution

The term universitas was initially a medieval legal concept used to refer to the corporation. Medieval jurists defined the corporation/universitas as being both at the same time a collective abstraction (and hence a legal persona) and the sum or reunion of its individual members (Canning 1996: 172-3). This corporation doctrine was initially applied to the Church, to guilds, to cities but also to the University in the “narrow” sense of the term (Ekelund et al. 1996, Greif, Milgrom and Weingast 1994, Canning 1996). In the latter case, the term initially designated only the scholastic guild – the corporation/universitas of students and masters. From the 14th century on, it came to refer to the institution as a whole (Rüegg 1992). The University of Bologna is the oldest teaching institution in Europe to have been formally recognized as a universitas, somewhere around 1088. Paris, Oxford, Modena, Salamanca and others followed in close succession.

To the risk of simplifying, we can identify three main periods or regimes in the evolution of the University as an institution ever since. First, the “Medieval regime” extends well into the Renaissance and early modern period, more or less until the serious beginnings of state building in Europe. Then comes what we could call the “Westphalian regime” when the university became tightly connected to the expansive process of state and
nation building, first in Europe and then in other parts of the world. The third regime is still very much under construction. We label it here “Postmodern” for lack of a better world and it corresponds to a phase of transnational expansion and projection. Table 1 contrasts those three different and successive regimes:

**Table 1: University Regimes**

<table>
<thead>
<tr>
<th>REGIME</th>
<th>MEDIEVAL UNIVERSITY</th>
<th>WESTPHALIAN UNIVERSITY</th>
<th>POSTMODERN UNIVERSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERIOD</td>
<td>11th to 17th centuries</td>
<td>18th to mid-20th centuries</td>
<td>Mid, late 20th century forward</td>
</tr>
<tr>
<td>REACH</td>
<td>TRANSLOCAL</td>
<td>NATIONAL</td>
<td>TRANSNATIONAL</td>
</tr>
</tbody>
</table>

Each of those regimes is in turn associated with different understandings of the roles and missions of the University as an institution. In fact, we use five tag lines to suggest those different missions. In Table 2, we show how those different tag lines or missions articulate with the three broad regimes identified above.

**Table 2: Roles and Missions of the University**

<table>
<thead>
<tr>
<th>REGIME</th>
<th>ROLE AND MISSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDIEVAL UNIVERSITY</td>
<td>Serving God and Church</td>
</tr>
<tr>
<td></td>
<td>Serving Science</td>
</tr>
<tr>
<td>WESTPHALIAN UNIVERSITY</td>
<td>Serving Science</td>
</tr>
<tr>
<td></td>
<td>Serving State and Nation</td>
</tr>
<tr>
<td>POSTMODERN UNIVERSITY</td>
<td>Serving Society and Humanity</td>
</tr>
<tr>
<td></td>
<td>Serving the Market</td>
</tr>
</tbody>
</table>

The arrows in Table 2 show the points of continuity between two proximate regimes. Naturally, the move to a new regime does not necessarily mean that a pre-existing role or mission will completely disappear. It could endure and still be mobilized at times but in all likelihood in a more marginal manner. Even though it is possible to argue that there is a real continuity between the different regimes, it is also striking to see how profoundly the University as an institution has been redefined – from serving God at its origins to serving the Market today.
**Serving God and the Church**

The early Medieval European University served God and the Church. Originally, European universities were "ecclesiastical corporations founded by the authority of the Pope and instituted for the education of churchmen" (Smith 1776: Book V, cha. 1). By the mid-13th century, around half of the highest offices in the Catholic Church across Europe were held by clerics who had gone through a university education. The functional role, which medieval universities played for the Church, certainly explains why the latter granted them protection and privileges. A number of papal bulls issued in the 13th century established the independence of the university in Europe and its right to self-governance. Another set of papal bulls confirmed the transferability of licenses to teach, which meant that masters were part in fact of a broad, European-wide *studium generale* – an intellectual community that knew of no geographical borders. Masters could teach anywhere in European universities without further examinations and in fact the *universitas* as a whole could – and in a number of circumstances did – move around. The use of a single common language, Latin, obviously was an important facilitator of such mobility (Ridder-Symoens 1992).

Independence and self-governance played out in relation to the secular environment (in particular city authorities). As students and scholars were in principle not subject to secular law, tensions could easily emerge between universities and local communities. Conflicts could even lead to the dispersion of the *universitas* – as when the University of Paris went on strike and was *de facto* dissolved in 1229 for a period of two years or as when a group of Oxford scholars moved in 1209 to the city of Cambridge, where they ultimately created a new *universitas*. Independence and self-governance also played out, in fact, in relation to local church authorities. The *parens scientiarum* papal bull, issued in 1231, was a model of its type in this respect and clearly established the self-governing powers of the University of Paris (McKeon 1964). Following this bull, the power to bestow the license to teach was completely vested in the corporation of masters – and the Chancellor of Notre-Dame de Paris could not go against their decisions. This was very much the same for decisions concerning the contents or organization of teaching (Leff 1968).
Serving Science

While Theology was the core discipline in early medieval universities, the rediscovery of ancient texts soon generated an interest for natural philosophy. The 12th century in Europe has aptly been described as the early Renaissance (Haskins 1927). Universities played a key material role in the re-discovery, translation and dissemination of important Greek and Arabic works in mathematics, logic and natural philosophy (Benson et al. 1982). In the process, science and the scientific pursuit entered the University (Grant 1984, Huff 2003). Initially, logic, reason and scientific inquiry were justified as working in the support of faith and religion. Soon, however, tensions emerged, and the fear was palpable at times that the progress of science could threaten the theological mission of the university (Hannam 2011). In the centuries that followed, science detached itself step-by-step from its initial theological cradle and the Reform was an accelerator in that respect (Merton 1964, Greenfeld 1987). By the end of the Medieval regime, the scientific pursuit was becoming the core mission of the University (Hannam 2011).

Serving State and Nation

The focus on science as an intellectual pursuit in itself and for itself would combine in time with the old tradition of independence to produce the archetype of the modern university – the Humboldian University. Wilhelm von Humboldt, a Prussian scientist, civil servant and Minister of Education called for a university that would foster research and the pursuit of science and knowledge (beyond teaching) in the context of strict independence:

It should be a special feature of the higher scientific establishments that they treat science as a problem, which is never completely solved and therefore engage in constant research…. Education will be good to the extent that it suffers no outside intervention; it will be all the more effective, the greater the latitude left to the diligence of the teachers and the emulation of their pupils (von Humboldt 1793).

Humboldt had in view a higher "civilizing" role for the university that should foster the cultural construction and development of the individual (Bildung). He was, in that respect, personally wary of the possible interference of the State. The civilizing agenda, though, could easily combine with a nationalistic or nation building project. And in most cases, this is what happened. The Westphalian university characteristic of the late 19th
and early 20th centuries put a Humboldian structure to the service of each nation (in construction or consolidation). In reality, most contemporary universities did not exist before 1850. They were created and expanded dramatically in that period and context as important tools for a broader state- and nation-building project (Franck and Meyer 2007). We could find many diverse illustrations of this but it was particularly well expressed in the words of the President of the Republic of Ghana, in the early 1960s:

The whole future of Ghana depends to a very considerable extent on the success of our program for higher education and research…. We should set our eyes resolutely upon the main task, which is to produce a University which will serve the needs of national unity, will make practical and concrete contributions to the development of Ghana and the well-being of this country...an yet which will have a worldwide academic reputation (Nkrumah 1961).

**Serving Society and Humanity**

The increasing density of trans-national interconnections in the post World War II period and the multiplication of organizations with an international reach and clear preoccupation for culture and education (the United Nations or Unesco for example) have progressively triggered an inflexion in the definition of this mission. The postmodern university is (arguably) reconnecting with its early trans-local roots by reinventing itself as a transnational institution. In that context, the service to state and nation is increasingly being displaced and replaced by a broader service to society and humanity. According to the Council of Europe, in 1996, Universities should be “sites of citizenship”. The Association of African Universities coined in the late 1990s the concept of “developmental universities” that makes this important inflexion quite clear:

A general formulation of the mission of a university in Africa today would certainly contain the prime responsibility to provide men and women adequately trained to contribute to the development of the nation and of the community surrounding it. It would state that the university should also contribute to the advancement of the knowledge about the resources of the country, to protecting the environment and to bringing about long-term and sustainable human-centered development policies... It should contribute to the respect for human rights and promote social justice, equity and democratic values, as well as the rights of women, children, minorities and disadvantaged groups. It should contribute for peace, stability and harmony in the community, country, region and world-widely (Matos 1999).

**Serving the Market**
The philosophy behind the Humboldian University had been that a focus on science and research and a priority given to the development (*Bildung*) of individual human beings were two sides of the same coin. Those two dimensions together would define the mission of the university. Quoting John Stuart Mill, “men are men before they are lawyers, physicians or merchants…. The University is not a place of professional education” (Mill 1867). However, once the University had become an important tool of development – whether of a nation, a society or the human community as a whole – this strong principled position could not hold anymore. The “ivory tower” was under siege. It existed within a world (and not in isolation from it) and the pressure was on for the “ivory tower” to serve that world. Over the last thirty years of so, that world has changed to a significant extent. The neoliberal revolution has reinvented development as “progress of the market economy” (Campbell and Pedersen 2001). This suggests that the ivory tower “stands in a market place whose concerns it must share and whose interests it must foster” (Halls 1985). The tendency is quite clear and it is a transnational one. In Europe, the University will play a key role in achieving the strategic goal set at the Lisbon European Council, i.e. to make the European Union (EU) the most competitive and dynamic knowledge-based economy in the world (EU 2003).

In the United Kingdom, “universities exist to enable the economy to deal with the challenges posed by the increasingly rapid process of global change” (Clarke 2003). In the United States, the sustained capacity of the country to “transform knowledge into economic value” is seen to hinge on the system of higher education and its ability to...remain the world’s leader in generating scientific and technological breakthroughs and in preparing workers to meet the evolving demand for skilled labor (Greenspan 2000).

All throughout Asia, urgent calls to open the “Ivory tower” to business and the market economy are also being heard (Hershberg et al. 2007).

**How this Reflects on the Role of Scholars**

As the mission of the University was often and quite profoundly reinvented during this long period, the role and projected identify of the Scholar was also bound to evolve in parallel. The early medieval scholar was a Priest (granted an intellectual one) and the later medieval scholar was already a Humboldian Scientist. The Scholar in Westphalian Universities was also a scientist but she had to be an expert or even a policy maker as
well. In the Postmodern University, the Scholar should sometimes be an activist serving the cause of Humanity or of an “imagined” transnational Society. More often she should be an entrepreneur and a manager at the service of the market economy and its urgent needs.

**Figure 1: The Role of Scholars in a Changing University**

This categorization, naturally, is simply an analytical typology underscoring the correspondence between the different missions of the University and the associated roles those missions would/should imply for Scholars. Real scholars are generally much more complex than that and are not easily reduced to simple and uni-dimensional labels and categories.

**NEOLIBERALISM AND THE AUDIT SOCIETY**

The latest transformation of the mission of the University – towards *Serving the Market* – pertains to a broader trend. The powerful wave of neoliberalism that has reached across many shores has not stopped at the doors of the “ivory tower” (Campbell and Pedersen 2001; Dezalay and Garth 2002; Fourcade-Gourinchas and Babb 2002; Djelic 2006). Since the late 1970s, the progress of neoliberalism has fostered a “culture of markets” – where markets are understood to be of superior efficiency for the allocation of most if not all goods and resources, whether material or symbolic. Neoliberalism has also come together with a profound reinvention of the State and its role. It has generally implied privatization, liberalization and the move to a more hands-off “regulatory state”
The public sector as a whole has had to adapt to powerful pressures of marketization and managerialization, packaged within the label and tools of a policy reform program that soon had worldwide impact – *New Public Management* (Hood et al. 1999).

In contrast to what is often believed, neoliberalism has not fostered deregulation but rather a consequential process of re-regulation. Control mechanisms have often changed in nature but, if anything, the overall burden of control has only increased. We have entered, to use the words of Michael Power, an “Audit Society” (Power 1997). Audit, Power tells us, is “a particular manner of (re)presenting administrative problems and their solutions, one that is becoming universal” (Power 1994: 299). Initially associated with the control of financial accounts, audit has now become a broad technology of control that applies across many different spheres and fields of activity. Audit is “becoming a constitutive principle of social organization to such an extent that we can talk of an audit society” (Power 1994: 299). This particular and expansive technology of control has unmistakable affinities with the New Public Management revolution. Audit is a powerful “vehicle for the dissemination of distinctly ‘managerial’ values and ideas to all spheres of formerly professional autonomy” (Power 2008). The Audit Society comes together with a discourse on accountability and transparency. It suggests external scrutiny naturally but it is also dependent upon an ever thicker and denser web of internal mechanisms of self-control. Finally it implies that measuring and quantitative metrics become the basis of evaluation everywhere. This concretely means that activities should become or should be made “auditable”, measurable through certain quite specific tools. Ultimately, “what is counted” usually becomes “what counts” (Miller 2001: 382). We can easily forget, in the process, that in reality “not everything that counts can be counted and not everything that can be counted counts” as Einstein liked to remind his students through a visible post hanging in his Princeton office.

The University has not been able to withstand this powerful wave. In fact, quite to the contrary, it has been deeply impacted by it. Firstly, competition has become a reality for most universities and the many tactics deployed in that context differ little from those characteristic of private capitalism (Slaughter and Rhoades 2004). Universities are competing for money and resources. Public funding is stagnating at best and universities
are under strong pressure to search for complementary sources of funding in what is generally a highly competitive context. Universities are also increasingly competing for students and faculty on "markets" that tend to cross over local or national boundaries. They are, finally, competing for legitimacy and symbolic reputation or rewards. Symbolic reputation is an important resource in itself but also, more indirectly, as it conditions access to and the securing of other competitive resources such as students, faculty or funding.

Secondly, management has imposed itself as a technology that should rein in all aspects of university life. Most classic management tools and the more fleeting managerial fads and fashions are spreading across the world to many universities. Universities produce strategic plans and mission statements. They have introduced quality management, management by objective, balanced scorecard and the use of key performance indicators (Head 2011). Universities have worked on their governance, they have reshaped many of their processes to embed them in sophisticated IT systems, they have created marketing departments and closely monitor their "brand(s)", they have often launched fundraising campaigns and they have generally developed communication strategies in close association. The density of administrative hierarchies has increased significantly more or less everywhere. Universities are becoming more and more "organized" and less and less "anarchies" (Cohen, March and Olsen 1972). Not only do universities exhibit organizational features; the organizational model they follow is that of the private managerial firm. A management training or diploma is often the sesame today to a career in university administration. Universities across the world are calling upon various consulting firms to help them become "proper" and "efficient" organizations (McKinsey 2011). At the same time, students are increasingly being redefined as "consumers" (Tlili and Wright 2005). In many situations, an expansive management directly confronts the collective responsibility and traditional autonomy of the professional community. More often than not, management tends to win in this confrontation (Brenneis et al. 2005, Schuster and Finkelstein 2006).

Thirdly, the "ivory tower" won’t be left alone anymore. The old medieval (partial) reality and Humboldian dream of an independent university is long gone and increasingly becoming unacceptable. As the university has been reinvented as a major tool at the
service of the nation, society, humanity or the market, it has become enmeshed in dense "politics of accountability" (Brenneis et al. 2005). Excellence, relevance, efficiency, impact, responsibility, quality insurance, transparency, triple helix, knowledge society are so many terms that justify in different ways the opening up of the black box of university life to a scrutinizing gaze (Readings 1996). Within university life as elsewhere, these politics of accountability take the form of "coercive commensurability" (Shore and Wright 2000). These politics of accountability reveal the "compulsion to reduce complex social activities to simple numerical scores or ratings so that these, in turn, can be monitored, assessed, displayed and competitively ranked" (Brenneis et al. 2005: 3). Politics of accountability take the very concrete form, in higher education, of evaluation and audit processes, accreditation labels, rankings (the Shanghai ranking being the most (in)famous but far from the only one), open boards and transparent governance mechanisms, annual reports and strategies of communication, progress reports and accounts, strategic planning and definition of mission, excellence initiatives, identification of learning goals and research priorities.

THE AUDIT SOCIETY AND ITS IMPACT ON SCHOLARS

While neoliberalism and the progress everywhere of an audit society are clearly transforming the university as an institution, they are also reflecting upon the scholar and her activities in very concrete ways. As a general trend, the scholar is becoming increasingly accountable and to ever greater numbers of stakeholders. Naturally, the scholar as a scientist has long been accountable to her community of peers for the quality, the relevance and the ethical acceptability of her work. She remains accountable to this community, which has a tendency everywhere today to become transnational, but the nature of the "politics of accountability" in that context is changing fast. Accountability increasingly takes the form of "coercive commensurability" and translates into a multiplication of quantitative performance metrics. At the same time, the accountability of the scholar is expanding well beyond the boundaries of her community of peers. A scholar has become accountable today not only to her peers but also to her University department and administration, to students and their families, to research councils and other funders, to regional, national or international evaluation bodies, to the media and even to civil society.
Scholars have become permanent “auditees”, embedded in complex “institutionalized chains of accountability” (Power 2007) that link science to administration, politics and society. Everything scholars do becomes or should become identifiable, measurable, auditable and it should allow for easy comparison. We see a multiplication of measurement tools that make it possible to assess pedagogical performance or research output – quantity, quality at least as defined quantitatively, and even now relevance and impact. Measurement tools are also being used to control the contribution of scholars to academic administration and management but also to socio-economic development broadly defined. These politics of accountability are extremely concrete and they have a consequential impact on scholars and their careers. “Metrics do matter” indeed (Nature 2010). As figure 2 shows very clearly, metrics matter for hiring and tenure decisions, for salary and promotion, but also sometimes for the allocation of research resources.

**Figure 2: Metrics Perceptions amongst Scholars**

Results from an online poll organized by the Journal Nature – 150 respondents (Nature 2010).

Metrics, we should add, also matter for legitimacy and visibility within but also outside communities of scholars, with here again a concrete impact on access to different kinds of rewards and resources. The “profusion of measures” that comes together with such coercive commensuration leaves many scholars dubious (Van Noorden 2010). About
two thirds of respondents consulted by the Journal *Nature* expressed a strong or medium dissatisfaction with this evolution (Nature 2010). Power (2003) points to the roots of this perplexity:

The auditee has more filing cabinets now than she did a few years ago; she knows the past was far from being a golden age but despairs of the iron cage of auditing; she knows public accountability and stakeholder dialogue are good things but wonders why, after all her years of training, she is not trusted as an expert anymore (Power 2003).

While this evolution has been and remains a source of perplexity for many, scholars nevertheless readily acknowledge that it is having a profound impact on themselves, on their activities but also on their identities (Nature 2010). Let us explore here the nature of this impact – differentiating in somewhat schematic ways between the “good”, the “bad” and the “ugly”.

**The Good**

Certainly, one of the most visible and direct consequences of these transformations has been that, individually as well as collectively, scholars publish more. Looking only at journal based publications, we can estimate that the sheer number of published units has increased tenfold over the last ten years (von Noorden 2010: 866). This does not necessarily mean that scholars write or produce more (this would be more difficult to measure). It could simply mean that that, which is being produced, ends up in a published format more often than before. Interestingly, while tenure often used to represent a symbolic threshold in the career of a scholar, with a significant decrease in published output, this has clearly changed. Senior scholars remain highly active in the publishing game, even after they have secured tenure. The discussions around a possible weakening if not disappearance of the tenure practice would suggest that this pattern is not likely to be reversed any time soon. Scholars, in summary, publish more, more regularly and for a longer period of time in their active life. This could be seen on the whole as a welcome trend where individual scholars are stimulated to become more productive.

Another consequence of those developments is the relative homogenization and transparency of career management systems (Nature 2011, van Noorden 2011). The criteria for evaluation and promotion are becoming surprisingly similar across universities but also across nations and the key features of career management
processes are made explicit and transparent more or less everywhere. The secrecy and club-like atmosphere of former times is being de-legitimized. This can be seen as a positive evolution on the whole that should in principle have a meritocratic influence (Jolly 2005).

Increasing homogeneity and transparency in evaluation criteria and processes has an additional consequence. It is likely to render more fluid the market for scholars and this potentially at a worldwide level. Scholars can be compared. What they do, as revealed through the different metrics that are being used, can be understood across regional and national systems. At least for those who are on the “high achievers” end, this is likely to create more opportunities. As most market systems, though, this is also likely to come together with increasing inequalities. Localized career paths are bound to become all the more precarious and lackluster as a small global elite tends to reap an increasing share of resources (Di Giacomo 2005).

Finally, contemporary politics of accountability in higher education are likely to impose on individual scholars an increasing preoccupation for the relevance and external impact of research and publication. The ivory tower opens up and scholars, individually, also have to worry about a broader understanding of what is the audience for their work. The spread of knowledge to more constituencies, which this implies, can be seen as a positive development. A knowledge that diffuses is a knowledge that will have a broader and wider impact. The Bildung project can reach out well beyond the walls of the “ivory tower”.

**The Bad**

As suggested above, the pressure not only to do research and produce written work but even more to publish is clearly on. The mantra of the modern scholar is “publish or perish”. While increased quantities of published output might be a sign of increasing productivity, we should naturally never forget that there is an important intervening variable here – the quality of the work published. The injunction to publish might in effect lead scholars to trade quality for quantity in certain (if not all!) circumstances. The “publish or perish” mantra could also foster a short-term logic, where projects that need longer-term investment on the part of an individual scholar in fact become dangerous
from a career perspective and are postponed or even abandoned altogether as a consequence (Nature 2010).

Particularly as they relate to research output, the metrics that are imposing themselves today articulate with a clear hierarchy of publishing outlets. Journals are ranked in most disciplines and those rankings are stable on the whole. Surprisingly, they also tend to have a transnational reach. Elite categories, in each discipline, are quite small – which means that publishing in a journal that belongs to such an elite category is highly competitive and becomes all the more so that metrics and rankings homogenize across the world. This highly skewed and competitive context means that most of the power lies with the journals and the editorial teams. There are ongoing debates on the effectiveness and value of the double-blind peer review mechanism that characterizes those journals (Starbuck 2003, 2005, Jong-a-Pin and de Haan 2008). This highly structured process, in any event, functioning as it does with a relatively narrow community of reviewers and a powerful editorial team, has a tendency to be rather conservative (Reardon 2008). Top ranking journals generally have a clear editorial identity, which they work hard to nurture and sustain. This means that a prudential logic will be quite widespread. Top ranking journals will publish highly formatted research and they will be less receptive to bold and original ideas. For individual scholars, as a consequence, strategies of intellectual exploitation will have a tendency to be more rational than strategies of intellectual exploration (March 1991).

As research metrics and evaluation criteria are becoming homogeneous across the world, so is the definition of “good quality”, “valuable” research. A profound consequence of the evolution we describe here, and mostly a negative one, is the progressive reduction of intellectual diversity within the scientific world. This is true not only because, as we argued above, intellectual exploitation is often more successful in securing access to high value journals than intellectual exploration. It is also true because only articles in a very small pool of journals are deemed to be of value and high quality in this system. Most other intellectual products, whether published or not, are systematically undervalued according to dominant metrics – when they don’t disappear altogether. What cannot be counted, measured, compared, with the dominant tools simply does not exist anymore. Books, book chapters, policy reports, textbooks,
vulgarization pieces and newspaper articles have much less weight in if they do not disappear altogether from career management processes. The reduction of intellectual diversity, finally, is also shaped through the uncontested hegemony of a single language in scientific production – English. All things equal, those intellectual products that are published in languages other than English are much less likely to thrive or even survive (Engwall 1998, Paasi 2005).

Interestingly, we can see the deleterious effects of such a process already in the ancient history of the University as an institution. When Latin had completely taken over as the unique language of scholarship, in early medieval Europe, most scholars stopped reading and writing other languages than Latin. Those intellectual contributions that had not been translated in Latin were, as a consequence, purely and simply forgotten and this for many years. It would take a long time and many resources and efforts for some of those texts to be revived – amongst which powerful contributions by the greatest Greek thinkers such as Euclid, Ptolemy, Archimedes or Aristotle. This process took place during the 12th century Renaissance (Haskins 1927, Benson et al. 1992). We know, with hindsight, that the knowledge thus revived was instrumental to the flourishing of science and scientific inquiry that followed (Hanman 2011). The disappearance of those texts for decades and centuries could explain, may be, on the other hand, slower intellectual progress in early medieval Europe. We should remember that lesson from our own history. And modern means of communication and intellectual storage will not be enough to prevent the drastic reduction of intellectual diversity that is one of the consequences today of the global audit society for the scholarly and scientific world.

… And the Ugly

The contemporary transformation of the University and its associated politics of accountability generate significant pressure for scholars. This pressure can have a positive impact as well as a more negative one. There is also increasing evidence that this pressure can foster toxic games and situations, in that context, can easily derail. Individual performance, as measured through various quantitative metrics, is the key to promotion, remuneration, resources and even academic legitimacy and power. Hence, the stakes are high for individual scholars. Seventy-one percent of respondents in the
poll run by the Journal Nature were concerned that “the metrics can be skewed by people if they know that their performance will be evaluated on metrics alone”. Those scholars worried that “their colleagues could ‘game’ or ‘cheat’ the systems for evaluation in their institutions” (Nature 2010: 861).

There are different ways in which those dangerous and toxic games are played. First, there are many games being played around citations (Kapeller 2010). As the reputation of journals depends strongly on journal impact factors and as those impact factors depend directly upon citation counts, journals tend to extend the pressure downwards to potential contributors. To increase their chances of being published in a given journal, authors will be well advised to include in their work references to papers previously published in that journal – even if those might not be the most relevant from a substantive perspective. Individual scholars will also be thinking about trying to improve their own citation counts or h-factor. Citation “markets” or “clubs” hence could emerge more or less explicitly with give-and-take logics. A scholar might also use her reviewer role as an indirect means of improving her personal metrics. In the words of a respondent consulted by the journal Nature,

I am more likely to accept an article for review if I want to verify that it is citing a paper of mine that is near the cusp of being counted for my h-factor (Nature 2010: 861).

Second, self-plagiarism is likely to be an issue. When the pressure is on to “publish or perish” scholars will rationally exploit as much as possible a given project, producing in the process many different published units. Each of those units may be only marginally original relative to the others.

Authors face the incentive to split their contributions in as many articles as possible in order to maximize their impact-factor capital subject to the "least publishable unit" in a particular discipline (Kapeller 2010: 1378).

Thirdly, we might see an increased “exploitation” of PhD students and junior scholars. Senior scholars could “trade” their name, reputation and publishing experience against new publication opportunities. This “exploitation” might in fact be rational on both sides as PhD students or junior scholars could be willing to “trade” property rights on their work against a greater chance to enter the publication and citation game. A rational consequence of this will be that the number of publications with multiple authors will
increase significantly. Here again, this might reflect more "market"-like dynamics than a real evolution in the nature of scientific production.

**CONCLUDING REMARKS – WHERE DO WE GO FROM THERE?**

The old university of yesteryear is no more. During the medieval period, the university fought for its independence and became, in the process, a powerful institutional stronghold. Then, the Humboldian dream suggested a dedication to research, pure science and knowledge and seized upon the enlightenment project to target the development of the individual (*Bildung*) as a complete human being. Whether this dream was ever a reality is debatable as the formalization of a Humboldian university developed in parallel to the “nationalization” of the university as an institution. In the process, the legitimacy of the university came to be re-invented. It was not to be found within itself or even in pure science anymore but in the service it rendered to other institutions “external” to itself – the State, the Nation, Society, and in the more recent period Humanity or the Market.

As universities are understood today to be serving our new postmodern Gods – Humanity and the Market economy – they have become porous and subject to regular and intense scrutiny. The nature of the tools and mechanisms through which scrutiny is exercised is well-known. Like most other sectors of our societies, Universities have become powerfully embedded in an expansive “audit society” (Power 1997). The tools and mechanisms deployed to ensure a broad accountability of universities and scholars have been derived and adapted from the tool-box of business management and, more specifically even, financial accounting. Those tools and mechanisms are hardening at fast speed in our academic world and turning into a constraining “iron-cage” (Weber 1930). In a strange twist of logic, this process appears to be turning means into ends. The enforced commensuration, often of a quantitative nature, progressively seems to become an end in itself. Universities are transforming themselves, sometimes in profound ways, in order to be better positioned on rankings or to fulfill the criteria of accrediting bodies. Scholars are changing the way they work, often quite consequentially, in order to maximize their own “performance” as defined through the new metrics.
This is a peculiar situation. In a well-known joke, a drunk-man looks for his keys at night under a lamppost. Even though that’s not where he lost them, he chose to look there because that is where the light was. The Academic world of today is a bit like the drunk man of the joke. Our evaluation tool-box is the light. Why do we measure what we measure? Because this is indeed what we should measure or else simply because this is what we can measure with the tool-box at our disposal? Our iron cage is self-reinforcing. It becomes more constraining every day but also less and less comfortable and, some would even argue, increasingly meaningless. The Academic world is defined by increasingly precise and powerful systems of incentives. And those incentives have become ends in themselves rather than means. In fact, do we still know, agree upon the “ends” – the mission of the university, the role of the scholar? It is a bit as if we really do not remember where we have lost the keys. In that context, looking under the lamppost is in reality as rational as you can get.

Starting from there, there really are two possible paths. We could go on becoming more and more sophisticated in our search under the lamppost. The persistent scrutiny could certainly, in itself, reduce our anxieties even though this form of collective activism would become through time less and less meaningful. An alternative would be to actively launch a political debate on the Academic world, its mission and role. Let us first remember and articulate where we lost our keys. Then, we can construct the adequate tools to look for them in the right place. Arguably, such a debate on the mission of the university and the role of the scholar is overdue. We argue here that the Academic world should take the lead, while naturally such a debate is bound to reach well beyond. It would make sense to start the debate in Europe for at least two reasons. Firstly, the university as an institution was born in Europe. Secondly, Europe is the only transnational construction with enough structuring power and authority to pursue such a high stake political debate and move it forward. Concretely, we propose that an interesting configuration to start such a debate would be through the launch of a collaborative work process between the EUA (European University Association) and ALLEA (the European Federation of National Academies of Science and Humanities).
Bibliography


