

University Management in a time of Market-Society Conflict Crisis

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Abstract

Market dynamics is mostly dictated by a capital-intensive logic; it thrives on well-regulated circumstances generating momentum for those well-informed players that wish to profit from economic estimates of certainty & uncertainties. On the other hand, Society must always be a wider pool of free-coming resources, including the possibility of conscious decisions for relaxed regulations & a more democratic type of free-style management. Market-oriented thinking quite often contradicts the very essence of targeted non-commercial knowledge & researching freedom, centuries-old vested human/academic principles. These comprise two different conflicting worlds at their most extreme, that university administrators are called in to compromise. Through tools such as “multidimensional utility functions”, SWOT & “mutual rankings”, university administrators attempt to rationalize the strategic management required for Universities to survive the crisis.

Changing-times or not, narrow economic rationale ever-tries to combat wider human principles by pressing for institutionalizing State regulation that deregulates in favor of free markets ! Academic institutions which offer humanistic & theoretic scientific tertiary education, --mainly in non-industrialized non-innovative countries--, are the ideal victims for international opportunizers to press for regulations freeing these types of “niche markets” by stressing on their non-effectiveness from an economics productivity point of view. The bottom line of university education is the thirst for knowledge and has nothing to do with either immediate professional rehabilitation or mainstreaming efforts to lead graduates to sectors of national economic specialization. A softer than privatization approach is, for the private sector, to demand for university co-management by representation into boards & councils as external permanent auditors, short-circuiting sound management efforts from within. This undermines all equilibrium attained in our bi-hierarchy world of faculty & administrative staff, as dictated by university self-government, a kind of legislative versus executive branch when it comes to university management through senatorial committees & inbred university officers.

Keywords :

university management, privatization of tertiary education, non-academic auditors, university self-government;
capital-intensive logic, brute-force market practices, market regulation, humanizing strategies, new social contract;
marketing mathematics, SWOT, DLT, MDS, TFM

Prologue (or on how Market Dynamics thrive on Globalization)

Market dynamics is mostly dictated by a capital-intensive logic; it thrives on well-regulated circumstances generating momentum for those well-informed players that wish to profit from economic estimates of certainty & uncertainties. This terrain becomes even fuzzier to the layman when confronted with an unprecedented attempt by large players to achieve global prevalence. In an article on the subject ¹, the author described five main forces on which **globalization** is based :

- (a). The internationalization of economic markets by enhancing the free mobility of capitals & spreading the idea of stock-markets on all types of primary & derivative values
- (b). The establishment of a “new order” in conducting business according to a uniform regulatory system dictated by multinational corporations & interests
- (c). The emergence of the “informational society” as a tool for homogenization of cultures, ideals & consumer tastes/desires
- (d). The negative effects on national economies that have invested heavily in the past on attaining some sort of self-sufficiency in basic needs through an extensive role of the State
- (e). The prevalence of “management science” as a free-lance executive branch in place of the traditional exercise of government.

The current paper comes ten years later, going deeper in the repercussions of these dynamics into tertiary education. Points (e) & (c) above have already become realities to lesser or greater extent; point (e) is the vehicle upon which the so-called “modern States” accept a *laissez-faire* version of market aims (a); point (c) is the “trojan horse” with which peoples decide that self-sufficiency (d) is not sufficient/modern enough for their new appetites; and that is where point (b) comes in: multinationals ready to expand everywhere in providing these extra/altered demands. What is left out of this equation is of course the bankruptcy of local economies, since importing for most nations becomes more immediately important than solid exports, and producing/exporting seems a more expensive option. Lesser production/productivity, larger imports ==> greater labor costs, greater unemployment, greater social security needs for the governments with lesser funds ==> overdrafting on international loans without prompt payments ==> eventually close to bankruptcy!

This may just look like an **operational deficit**, but it is not, it is deeper into the economy, termed “structural defficiency”. Till re-organization takes place & deficits limited, public property has to be sold, universities may not be the exception. So what lessens their selling value? A **bad ranking**, marketeers are pretty good in promoting outsourcing & doing downgrading for all sorts

of businesses & entire countries included. By open bidding on privatizing public property, market experts & appraisal firms retain the initial value of related stocks into low levels, then just when privatization has been attained at low costs, these stocks rise temporarily into “new bubbles”, in an effort supposedly to show to the rest of the world that something good came about ... for the Economy. It is a very vulgar sort of affairs. So this takes us back to point (a), it is a vicious cycle as shown in the *figure 1*.

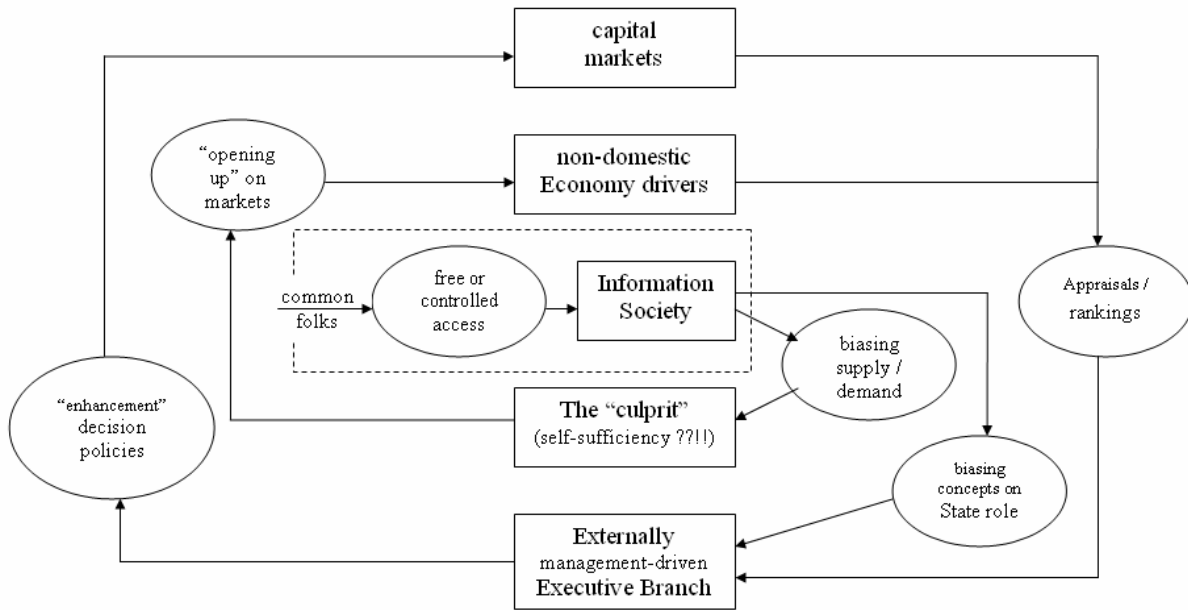


FIGURE 1
 THE INTERPLAY BETWEEN THE FIVE MAJOR FACTORS ENTANGLED IN GLOBALIZATION

This multiloop structure gives the impression that common folks are the determinants of change, the key-players in the center of action. **It is an utmost fallacy.** If it were not for these forced loops/feedbacks (shown as “vaness” in the diagram), there would be no momentum for change. Forcefully promoting change is not always desirable; it may in time lead the “input” (supposedly common folks) to background obscurity (non-controllable system); it may also hinder the determination of actual “outputs” (non-observable system). These are conditions leading to unstable systems. Instability does not mean freedom to escape some undesired dynamics; it means that, --irrespective of efforts to observe outputs & control inputs--, the system just runs on automatic evolutions of the feedback mechanisms, i.e. *in absentia* of both actors & observers.

1. Multitude of Market Actor Types

In a market-infiltrated world, grass-roots Society tends to re-organize in **pressure groups** than often have to resort into marketing tactics. On one hand we deal with marketeers as possibly undesired intruders into the free-style social mainstream, and on the other hand, ngo's & the civil society wish to retain on & fight for certain non-commercial values. Society must always be a wider pool of free-coming resources, including the possibility of conscious decisions for relaxed regulations & a more democratic type of free-style management. It is all but natural for such groups to ask in general for help via State intervention & institutionalized appraisal in order to combat market-induced negative effects on their benevolent activities/causes & social/informational liberation/emancipation needs. ^{2,3,4}

There are in fact, various negative effects that have been attributed to monolithic marketing practices. Explicit thematic markets are accused of producing **information assymetries** when there is a vacuum of other types of free markets, though the danger of overlapping markets lurks in the background to the contrary of obtaining a clear view of market boundaries ⁵. Even earnings differentiation between individuals is attributed to trends stemming from transformations in the labor market due to marketing efforts regarding the professions operating under more globalized conditions ⁶. The most systematic work done, by human resources marketing experts, is in linking studies with professions, looking at social stratification & mobility, mainly in postindustrial societies, such as ⁷.

Things get even more complicated when one analyzes the different origins of market actors :

- (a). **instinctive actors** (individuals or companies) working as loners solely in their own behalf,
- (b). **ideological actors** acting out driven by an off-mainstream high ideal, in their effort to partially/ totally resolve through market *rapprochement* a solution/amelioration of their supreme dictates,
- (c). **servient actors** raised & bred to only serve markets at any moral/ethical cost as a trait of a new class of empowered citizens.

According to this categorization ⁸, people striving for environmental, educational and other similar "traditional" values (second category), are seen as outsiders to the market community. The other two types of actors consider their practices as *ad hoc* & non-professional, i.e. outside true marketeering scope. In the University field of affairs, market-oriented thinking quite often contradicts the very essence of targeted non-commercial knowledge & researching freedom, centuries-old vested human/academic principles. These, Market *versus* Society, comprise in the *academia* two different conflicting worlds at their most extreme, that university administrators are called in to compromise with an *a priori* professional disadvantage at their hands.

2. Bipolar incompatibilities, endogenous inconsistencies & new institutional conflicts

Various conflicting terms are being used to denote the **inherent incompatibility** of market vs. social dynamics ^{9, 10, 11, 12}. Terms such as “democratic market society”, “new market socialism”, “in need of a new social contract due to markets”, “civilizing markets”, “non-intrusive markets are the ones that do not disturb/disable governance”, “topological invariance of competitive markets”, “sustainable competitive University strategies tuned for globalization”, “marketing for sustainable development”. Compromising over compromising, hoping to exorcise the demon ^{13, 14, 15, 16}.

Then come serious mathematical foundations looking at these market processes/systems, such as “theory of fair markets (TFM)” ¹⁷, and serious critiques blaming the concept of “fair market ideology”, such as ¹⁸. Incompatibilities, paradoxes & disagreements are loved items to the *academia* for ever-and-ever analyzing/resolving, but are a scarecrow when it comes to implementing such unstable entities in the *modus vivendi* of solid scientific disciplines and the *modus operandi* of inner governance.

Numerous references for the existence of **endogenous inconsistencies** are to be found within the realm of market-oriented reasoning, for both the public and private sectors. Perception on economy/markets by society & government along with their social/legal/cultural structure affect preferences and eventually the economic outcome ^{19, 20}. Succumbing to fashion, State institutions are often run by worries for resolving in a pseudo-market way some important market-worthless immaterial human needs. Economists/marketeers have persuaded the public & governments that anything may eventually be worth a certain value (worth function theory), you just need to measure it with some collective subjective judgement that will map qualitative aspects into quantitative scales through various marketing & cognitive engineering techniques.

Economic equilibria and central planning are more than often perturbed by random information flows due to erratically fluctuating market speculations and unanticipated marketing efforts ^{21, 22, 23}. Marketing efforts tend to “smoothly” twist product/service value of other competitors, including State-run enterprises. Markets often suggest the abolition of certain forms of human capital and traditional family/educational values ²⁴. Marketing efforts directly/indirectly resort to some human perception “terrorism” of sorts, while the financial/insurance markets do capitalize on any “danger”, including terrorism *per se* ²⁵. The continuous emergence of new market-induced forces/pressures further fragment societies based on diversifying individual/group preferences ²⁶. Last but not least,

fuzzy theoretical territory results when overlapping market structures contradict the basic premise for a totally free market based on non-coupled dynamics^{27, 28}. Any form of bayesian forecast on cross-correlations just does this.

Numerous references also exist on the direct confrontation between Markets (as a “fifth” branch of government, the Press being the “forth”) and the explicit forms of Government²⁹. Changing-times or not, narrow economic rationale ever-tries to combat wider human principles by pressing for institutionalizing State regulation that deregulates in favor of free markets ! This is a basic form of new **institutional conflict**. In addition, liberal thinkers refer to the marketplace as a basic human right for every individual, and thus in essence disagree on the capitalization of such basic human instincts/needs/rights by just a few professionals involved in the organizational/proprietary aspects of specific market formulations^{30, 31}. The same of course goes for the proprietization of information flows that lead to consumer preferences in a very guided narrow way.

Amidst this confusing scenery, Universities are continuously put into the corner: budget cut threats, bleak opportunities in promoting policies regarding the professions, etc, are magnified by public & governmental misconceptions led to by the Press & the Markets. Academic institutions which offer humanistic & theoretic scientific tertiary education, --mainly in non-industrialized non-innovative countries--, are the ideal victims for international opportunizers to press for regulations freeing these types of “cheap” “niche markets” by stressing on their non-effectiveness from an economics productivity point of view³². Art, Humanities, Psychology, etc *versus* Engineering, Medicine, Dentistry and the rest, these are for them more expensive options; investment may falter. The bottom line of university education is the thirst for knowledge and the advancement of science, and has nothing to do with either immediate professional rehabilitation or mainstreaming efforts to lead graduates to sectors of national economic specialization.

Research Universities and knowledge go together; this pair thrives only under open procedures that do not lead to **proprietization short-circuits**. Stating³³ :

“One of the most visible features of the Human Genome Project was the entanglement between “open science” and the proprietization of information. The well-intentioned but simple [*chic for naïve*] strategy of placing all data in the public domain has resulted in processes of proprietization, --such as the patenting of genes and the creation of privately-held databases--, from which the original researchers receive little or no benefit and over which they have no control.”

This really encapsulates it all: open academic-researching procedures are misappropriated by private interest, both at a level of proprietizing information & patenting innovations based on it. It is not that much a matter of extra longterm-lowlevel income for the academic researcher as much as

a matter of principle believing in his/her primary duty, obeying that is open-knowledge and scientific-followup mandates as important components for the responsibility of the scientist.

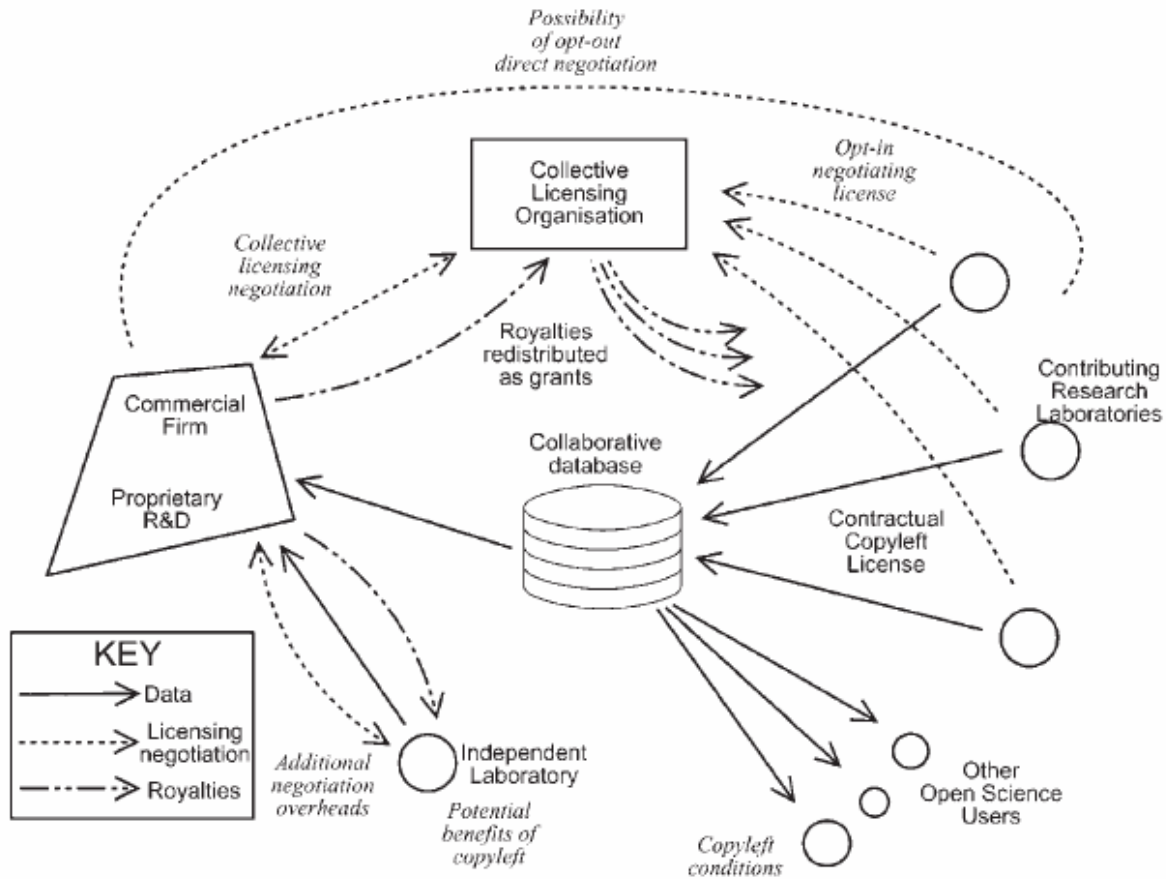


FIGURE 2 (from above reference)
STRUCTURE OF PROPOSED COPYLEFT/DUAL-LICENSING ARRANGEMENT
FOR SCIENTIFIC DATABASES

OECD, UN and other international regulatory agencies have numerous working groups dealing with such issues, trying to repair **functional/ethical irregularities**. These concern freedom of information, patent rights, auditing quality assurance, greenhouse trading, and so on and so forth. Is this whole effort worth it, just because financial/marketing giants are not regulated *in situ* ?? Doesn't the above regulatory framework (**figure 2**) look unnecessarily complicated ? Can any given Nation replicate such complex mechanisms within its own territory of scientific/entrepreneurial activity ? Don't such additional State-regulated bodies contribute to additional government spendings ? Thus, this is all a matter of institutional conflicts inflicted by free markets.

3. Rankings versus “intellectual vigilance”

Markets thrive on globalization (*prologue*), they involve a multitude of actors with diverse backgrounds and aims (*section 1*), and they are characterized by internal irregularities of various types (*section 2*). The overall effect on the economies, governments, citizens, int’l bodies, universities etc is tremendous. Their main analytical tool for handling/mishandling information, economic impact, technological change, professional profiles and the whole rest produced by the rest of the world is ... “appraisals/rankings” thrown at Government as supposedly representing Society’s interest (*the RHS of figure 1*). Markets short-circuit the Executive, require continuous midifications-recodifications by the Legislative, and are involved in scandals/misconduct pressing the Judicial for leniency based on experimentation/novelties with the human horizons (!), appealing on grounds of no malicious premeditation. Markets mainly use **international appraisals/rankings** as leverage to produce change via scaring nations/institutions with cross-country comparisons; self-assessment is an old obsolete instrument for them. It all leads to freely ask for even freer markets, this is the essence of their nature.

In the *academia*, over the last decades, there have been numerous efforts to assess their quality. In doing this, markets collaborate with college education boards, the press, peers judging peers, departments/ministries of education, manufacturers of citation indices, etc. Particularly the Press plays a dubious role, since quite often **publishing houses** are financially intermingled with all four publishing activities: newspapers/magazines, scientific textbooks/journals, economic weeklies/monthlies, specialized websites. The acceptance by default of int’l university rankings/ratings is the direct side-effect of brute-force market reasoning. We will attempt to disprove this panacea by first giving a capsule on the most prevailing ranking methodologies & their pitfalls. For a brief juxtaposition between instituting a “quality assurance system” and scrutinizing academic quality *per se*, consult ³⁴. For the basic question whether quality assurance is a purely academic duty *vis à vis* a frame for accreditation and acceptance by the markets, consult ³⁵. For scepticism concerning assessments as a governmental tool for penalizing under-performing departments/universities rather than as a vehicle to induce improvements, consult ³⁶.

The known tables produced by “**THE TIMES**”, use for the year 2010, 13 separate indicators grouped together in five categories ³⁷ as copied in *figure 3*. Pitfalls will be discussed later in this paper, now just a brief presentation along with the rest of the ranking systems used internationally.

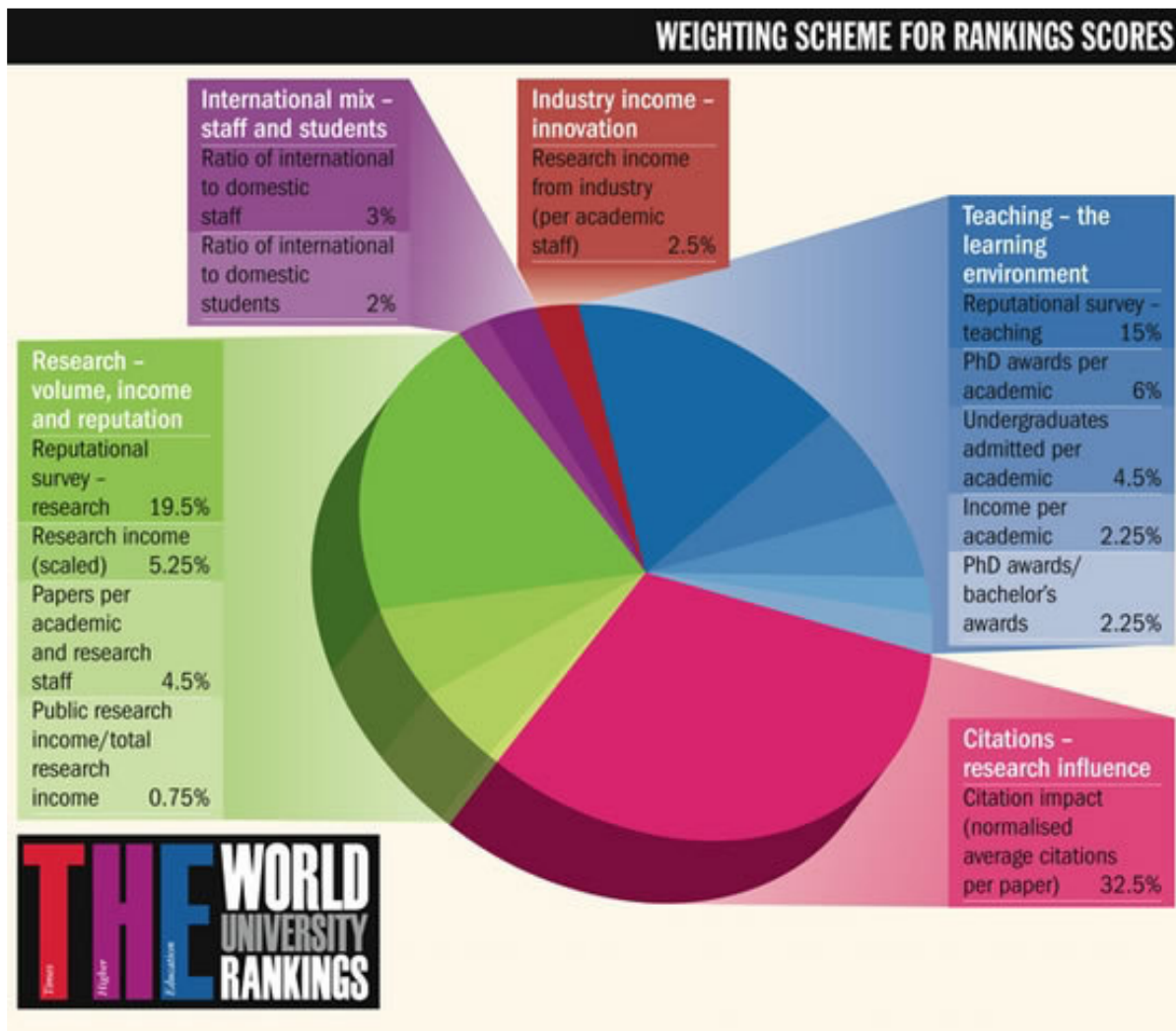


FIGURE 3 (from above reference)
 WEIGHTS PER INDICATOR USED BY “THE TIMES”

The **NEWSWEEK paradigm** ³⁸ utilizes six main categories: Most Desirable Schools, Most Desirable Urban Schools, Most Desirable Suburban Schools, Most Desirable Rural Schools, Most Desirable Large Schools, and Most Desirable Small Schools. This shift of presenting data in school categories by size & location type was based on remarks by progressive Deans about focusing on preference groups according to desired socio-geographic differentiations. An example of that is the intervention mentioned in ³⁹. These ranking lists are also resufflable so as to obtain cross-sorted “views” based on a secondary sorting index that fits particular interests and goals dependent on the “social type” of incoming students. These six new subcategories are : Best Schools for “Do Gooders”, Best Schools for “Future-Powerbroker”, Great Schools with Great Weather, Best Gay-Friendly Schools, Best Schools for “Braniacs”, Best Schools for “Jocks” !!!

This tends to become tediously hideous & funny. Just by glancing at the terminology used, the jargon is as far away from classical greek & latin vocabulary as possible; it's all a game of aglosaxon prevalence, "talking close" to english-speaking youth internationally. However, even this more refined categorization does not fit all, because specialized monothematic universities are out-of-line, such as mere technical universities, agrarian science, liberal colleges, singled-out medical schools, etc. Isn't this once again a form of managerial non-academic pressure for these types of universities to conglomerate with larger ones forming minor colleges according to the aglosaxon system? Wouldn't their board of directors/trustees ask then for professional help by market consultants in order to achieve market-sound proper decisions ?

The **U.S.News & World Report** exercise strictly differentiates between World's Best Universities ⁴⁰ and US Colleges ⁴¹, with separate ranking schemes each. This often leads to double-inclusions, since the best Universities of the domestic listing are also judged (with different criteria this time) and found overwhelmingly filling the list of the "Top 400 World Universities", as everyone would expect. In addition, the domestic case utilizes weights that differentiate between national & regional colleges. The table next page (**figure 4**) is a complete annotated list of all cases & subcases, using as much as possible the original phraseology encountered in the aforementioned documents.

The academic peer assessment for the domestic survey allows for, what they claim is, "top academics" (presidents, provosts, deans of admissions & high-school counselors) to account for "intangibles" (near-subliminal, indiscernible to the layman) at peer institutions; mainly curriculum/facilities degree of excellence and faculty dedication to quality teaching. This is also done by looking at the **utilization of Faculty resources** through six factors from the previous academic year to assess a school's commitment to instruction.

Another interesting facet of their methodology is to also include prospective-student website-based inquiries on various "partial views", such as : Liberal Arts Colleges, Schools with "Fewest Cars on Campus", "Great Schools at Great Prices, "A+ Schools for B Students", College Administrators' Most-Preferred Schools "on the up-move", Colleges with Highest Graduation Rates, MBA Schools, Campuses with significant Ethnic Diversity, Historically Black Colleges and Universities. One special category, worth-mentioning from a social point of view, is the one for **Public Affairs Schools**, defined as Schools on City Management & Urban Policy, Environmental Policy & Management, Health Policy & Management, Information & Technology Management, Nonprofit Management, Public Finance & Budgeting, Public Management Administration, Public-Policy Analysis, Social Policy.

Ranking Indicator	Weighting of Ranking Indicator			note
	World's Best Universities	US National Universities & National Liberal Arts Colleges	US Regional Universities/Colleges	
Academic Peer Review	40%			Composite 3-year score drawn from five subject areas with 15,050 responses
Employer Review	10%			3-year score based on 5007 responses to the employer survey
Student-to-Faculty Ratio	20%			
Citations per Faculty Member	20%			Score based on research performance factored against the size of the research body
International Faculty	5%			proportion of international faculty at the school
International Students	5%			proportion of international students at the school
Undergraduate academic reputation		22.5 %	25%	
Graduation and Freshman retention		20%	25%	6-year graduation rate (80%) 6-year freshman retention rate (20%)
Faculty resources % of classes with <20 students % of classes with >=50 students Faculty salary % professors with the highest degree in their fields student-faculty ratio % of faculty who are full time		20% (30%) (10%) (35%) (15%) (5%) (5%)		Class size has two components. Faculty salary is the average faculty pay, plus benefits, during the last 2 academic years, adjusted for regional differences in the cost of living (<i>using indexes from the consulting firm Runzheimer International</i>). Rest of factors from last academic year alone.
Student selectivity SAT & Composite ACT score % of top-enrolled students acceptance rate (<i>ratio of students admitted to applicants</i>)		15% (50%) (40%) (10%)		Top-enrollments measured by % of enrolled freshmen who graduated in the top X% of their HS classes : X=10 for <u>National</u> Universities & Liberal Arts Colleges X=25 for <u>Regional</u> Universities & Colleges
Financial resources		10%		last 2 years average spent by the Un. per student. Includes instruction, research, student services, and related educational expenditures. Spending on sports, dorms, and hospitals doesn't count.
Graduation rate performance		7.5%	---	comparing last year's rate with the predictions from the previous 6 yrs. Applies only to National Universities and National Liberal Arts Colleges.
Alumni giving rate		5%		average percentage of living alumni with bachelor's degrees who gave to their school during 2007-08 and 2008-09, which is an indirect measure of student satisfaction.

FIGURE 4
 RANKING INDICATORS FOR THE US NEWS 2010 SURVEY

The **European view** is actually different, even in GB where THE TIMES ranking methodology originates from. Finances and international prestige are certainly of less importance in the European context; the aim is **total quality improvement** and lifelong learning capabilities; the focus point is the idea of the EU ^{42, 43} to arrive at "Centers of Excellence", i.e. on solidifying, --through targeted

special organizational means--, an elite group of schools that perform well as “research universities”.

The **continental view** on the merits of research universities is best described by ⁴⁴. It suggests ratings based on scientific recognition (prestige by European peers), financing and resources (in a non-penalty way), research training and mobility (towards other HE Institutions), dissemination of research/innovation/patent results (in journals/institutions/industry), effectiveness of the specialized administrative units that indulge in the two-way transfer of technology (knowhow, laboratory equipment/techniques/self-modifications, exchange programs for experts).

The **British practice** ⁴⁵ for engineering departments is based on curriculum-related contextual documents, subject reviews, external examiners & institutional audits. The Joint Board of Moderators (national professional/scientific bodies of all related fields per Department of Study) reconvenes every six years for a total re-assessment per University School, based --beyond the obvious course-folders-- on : administrative changes since last institutional visit, staff contact details of the in-between period, refinements in student-entry selection, programme completion rates, log-books of industrial placements/achievements, academic staff development & training records, communication skills for both educators & educated, inter-departmental flexibility, research & consultancy of all staff members & postdocs, tune-ups of the financial system, recommendations by senate committees, institution-wide reports on future plans & intentions agreed upon by top management (any kind of board of directors, council of deans, etc, depending upon university structure).

Specifically, for the **lifelong learning** component, the following assessment/accreditation provisions are put forth by EU policy ⁴⁶, assessing how Universities with LLL capabilities safeguard : cooperation with social partners and other relevant stakeholders, recognition of non-formal and informal learning, evaluation of training methods & testing procedures, capability to scrutinize any form of prior learning, the incorporation of time-invariant dexterities/aptitudes while at the same time minimizing learning overlaps, the databasing of reliable stocks of scientific/professional competences, the issuing of recommendation reports (to local/regional/national authorities) on improvements to basic schooling (mandatory K-9, K-10 or K-12 systems accordingly) based on experiences/profiles/portfolios from incoming attendees, transferability guarantees for coherent modules attained with transparent pathways, attendance/performance records & certificates, the internal assessing of official certifications in both formative (links to educational standards) and summative (links to occupational standards & employment specs) aspects of LLL.

Finally, let us present a **worldwatch view** on higher education as put down in their 2010 report ⁴⁷. Every recommendation should be put forth in terms of measurable indices for the progress that will have to be made in the upcoming years. According to our interpretation of the

general guidelines outlined in the report, we propose the immediate implementation of the following academic goals/measures : incorporating initiatives of past worldwatch annual reports, emphasis on environmental education per se, interdisciplinary dissemination to related fields, new synergies between previously disjoint scientific disciplines, new disciplines/subfields to re-invent what is actually natural and what is not, developing core Curricula for a new discipline on “sustainable management”, professional ecological competencies, moral standards on natural capitalists – carbon traders – green entrepreneurs, changing the engineering/technical/experimental culture with Humanities from the natural & social sciences, re-orienting Schools of Law - Political Science - Public Affairs by gradual shifting on environmental concerns, affirmative eco-actions on Campus design & its daily operations, university administrative provisions for a permanent mechanism in following future initiatives of this nature.

We can easily see from these short descriptions (both european views, the LLL initiative and worldwatch) that emphasis is not on assessment/rankings but in **contents and aims**. They do reflect university ideals and intellectual vigilance; they constitute far different approaches than just publicizing rankings/reprimands in the privately-owned international press. Producing & publicizing rankings is a journalistic activity based on motives for their own survival/predominance, thus of no wonder that other international media try to immitate the british & american giants in the field. THE TIMES daily, NEWSWEEK magazine & US News & World Report are a prime example of that, as are nowadays Forbes, Fortune, Stern and others, either with raw-data of their own or with data-interloan between them.

Things get even worse if one looks at newer developments in who is processing raw-data for many of these rankings. **QS** is a multifaceted company whose strategic statement reads :

“ QS links high achievers from the graduate, MBA and executive communities around the world with leading business schools, postgraduate departments at universities and with employers, through websites, events, e-guides and technical solutions. QS organises the largest business education events in the world, the QS World MBA Tour, the QS World Executive MBA Tour and the leading postgraduate studies information event, the QS World Grad School Tour, amongst an extensive product range including print and online publications and software solutions. QS is the leading global career and education network for ambitious professionals looking to further both their personal and professional development. With extensive contacts in the field of higher education, our industry expertise and experience gives us the flexibility to adapt to the needs of our prospective clients. At QS we believe that education and career decisions are too important to leave to chance, so we want to ensure candidates have access to the best tools and the best independent expert information before making a decision. Our ambition is to be the world’s leading media, events and software company in the higher education field. ”

It takes pride in that it only looks at what it calls **academic criteria**, those being : academic peer review by academic reputation, employer review by employer reputation, citations per faculty, faculty student index, international faculty, international students. Isn’t this just a **marketing formula** based on reputation, prestige, internationality, prolific paper-writing researchers, etc???

4. Bypassing knowledge-irrelevant University indices (the “Introvert-Extrovert” trade-off debate)

“QS World University Rankings® 2010/2011” appraisals for greek universities are :

University of Athens Overall Ranking 286= Arts & Humanities 132 Natural Sciences 229= Engineering & IT 301-350 Social Sciences 301-350 Life Sciences 178=	Aristotle University of Thessaloniki Overall Ranking 401-450 Arts & Humanities 150 Natural Sciences N/A Engineering & IT 199= Social Sciences 351-400 Life Sciences 192=	National Technical University of Athens Overall Ranking 451-500 Arts & Humanities N/A Natural Sciences 301-350 Engineering & IT 114= Social Sciences N/A Life Sciences 273=
University of Patras Overall Ranking 451-500 Arts & Humanities N/A Natural Sciences N/A Engineering & IT 351-400 Social Sciences N/A Life Sciences N/A	University of Crete Ranking 401-450 Arts & Humanities N/A Natural Sciences N/A Engineering & IT N/A Social Sciences N/A Life Sciences 351-400	The rest of the 18 greek universities do not even exist on the listings, while a few local private branches of foreign universities do exist, thus inheriting ranking components from the mother-university! though not officially operating under greek law till just last year!

Is this anyway, what anyone would call, a serious database full of ... N/A's?! Does NTUA have departments of life sciences we don't know about?! Can Patras be ranked only on engineering?! What is the intent of a rater to downgrade local conditions that may look strange to market economies, but could be the ideological essence of some other societies? For example, the greek university system has the following **intended peculiarities** : it is all public & free, it tries to save the greek language from extinction, its departments spread on the entire geography in order to combat island isolation and metropolitan urbanization from extended de-regionalization, etc. ?How then can it attain good rankings (?), since these include items such as “faculty salary”, when greeks have one of the lowest EU monthly incomes anyway, “financial resources”, when we talk about a tuition-free system and a de-industrialized private sector that has nothing to do with promoting innovations-etc, “alumni funds”, when the average professional does not have enough to support basic needs due to the cost-of-life in relation to the average european income, “international faculty/staff”, when english is not the university working language, “influxes of large numbers of foreign students”, when the whole country & its language do not rate well on affluency & language ease, etc ?????

Most countries are like that, they have their own language, their own geomorphology, certain unique university-level disciplines based on their distinct history, natural environment & mineral resources, etc, even France faces problem in this regard. The main strong point of greek graduates is that they are amongst the most over-performing majorities of postgraduates & doctoral students

abroad, but no index measures this as an achievement which reflects sound curricula with a plentitude of basic analytical skills in the fundamental sciences which comprise the substratum of all further specializations. Greek postgrads abroad obtain ready-made credits for past knowledge & pass advanced placements on various postgrad courses even before starting their further study abroad, i.e. **excellence in fundamental disciplines** (depth & breadth in the mathematical/physical basis) and **individual growth potential**. Who is going to measure these ? Do these correlate at all with the slow graduation rates observed in the home Universities for example? NO. Does it have anything to do with international prestige of the *alma mater*? NO. What does “student selectivity” really refer to, when ~82% of greek youth attain tertiary education anyway? etc-etc-etc

In fact, an NTUA rectoral study for the period 1985-1999 ⁴⁸ had shown that top HS students entering Departments with high entrance-exams points (grades through the Panhellenic Un. Entrance Examinations) showed increased delay-time in the completion of the full cycle of the 5-yr nominal studies (courses, labs, thesis) compared to students that had underperformed in those entrance exams. Findings concerned mainly the Naval & Chemical Engineering Departments, two of the departments with the highest entry point-average in Greece. This reverse trend may need extended sociological & educational-psychology analysis, but has nothing to do with the final educational outcome, since these students still obtain better undergraduate grades and place into better Universities when they decide to study abroad as postgrads. Under **special socio-economic conditions**, graduation-in-time does not correlate well with either entrance or graduation performance.

Some of the processed raw-data for a portion of that period (1995-99) can be found in ⁴⁹, from where we extract a few conclusions tabulated in **figure 5**. The 8 (at the time) NTUA departments of study (engineering schools) are mentioned with abbreviations to be found in the explanatory note underneath the table.

Factor (which perturbs a straight-forward analysis of data)	Departments*
heavier course-load	MM, HM
most stagnant registrations	NMM, MM
most labwork overload	HM, XM
larger ratio of specialization electives over mandatory core subjects	MMM, MM
Departments with worse over-registrations per subject due to delayed-Term attendance	ATM, IIM-MM
worse grades on Thesis presentation	AM, IIM
worse point-average per Department	MM, ATM
extra workload by Professors due to incompletes, transfer students, re-registrants	MM, IIM
Departments with most exam failures	NMM, MM
best-when-delayed (!!!) [for students that postpone final examinations on subjects to subsequent Terms & Academic Years]	IIM, MMM
best with immediate re-examination (greek term used is “3-rd exetastiki”)	AM, XM
* IIM = civil engineering (includes also some transportation engineering) MM = mechanical engineering (includes nuclear division & some aeronautics) HM = electrical engineering & computer science AM = architecture (in Greece they are referred to as “architectural engineers”)	

XM = chemical engineering
 ATM = rural & surveying engineering (includes “agronomy science”, a completely different meaning to its english word-loan, and geo-informatics)
 MMM = mineral & metallurgical engineering (includes also most of Science of Materials and some Earth Sciences)
 NMM = naval architecture & marine engineering (ocean)

FIGURE 5
 NTUA’S ANALYTIC “STUDY INDICATORS” SHOW EXTREME COMPLEXITY

Data of the above type are often conflicting pieces of mysterious evidence, they can only make real sense with conjoint analysis, ANOVA and MDS. Are any raters mining to such data at all, ever trying to make sense with advanced analysis? NO. Universities can do this by themselves, these are scientific-natured instruments for avoiding bottlenecks and improve on graduation rates grades and times, irrespective of how students enter a specific University (selection by the State or Province rather than the University itself), on how good they were in irrelevant HS studies (learning ancient greek, latin, etc), on how they were driven in into studying a specific field (family pressures for social advancement, scientific curiosity of their own, employment prospects, or just a misfortune of not having been admitted on their most-preferred subject). Under **special historical-cultural conditions**, societies might choose more anthropocentric-cultural-egalitarian approaches on opportunities/resources than does marketing/marketeeing rationales.

Let us now look at the rankable version of “financial resources”. The finances table (**figure 6**) show a typical Engineering Sciences Research University in Greece. Follow the notes and then decide for yourselves on how do these revenues map onto the ranking scheme. They are not mappable, it is an another economic reality all together. Robust ranking schemes should have been able to decipher the situation by ingenious algorithms, they are not. Under **special fisco-economic conditions**, Univeristy resources may be close to indiscernible.

Resource type	explanation	note
TKΠ	Operating costs directly from the State Budget	figure stands alone w/o the TSMEDE component
ΠΔΕ	Public Investments on fixed assets	Programmed by the State solely on national funds
ΤΣΜΕΔΕ	Revenue from the Fund of Engineers/Contractors in Public Works	This is a kind of “return on money” spent by the State for their University education
ΕΛΚΕ	“special research-funding account” has its own Account-ing/Financing Office & Rules (since 1982 in all greek Un’s)	Research revenues irrespective of source (includes FP’s). The figure stands alone w/o the KPS/ESPA component.
ΚΙΠΣ/ΕΣΠΑ	Project contributions from EU funds & CSF programmes	Based on nation-wide competitive project proposals for improving hard/soft infrastructures

FIGURE 6
 NTUA’S TYPOLOGY OF FINANCIAL RESOURCES

For reasons of further understanding this peculiarity, here are some nitty-gritty details : TKP’s are always 1-2 years behind, they are given after persistent claims by university administrators re-

incorporating over-and-over again past unfulfilled promises into newer budget requests (greek term is “tropopoiitikes”). NTUA for example operates with a ~15M€ deficit continuously recycled year-after-year, which acts as “delay on payments” to third parties. It’s not a matter of exceeding expenses, it is a matter of a poor country that cannot deliver accruing costs ahead of time, always pays after the fact. PDE’s are not lump-sums, they are just approved total figures to be forthcoming yearly in portions till, buildings laboratories libraries and other facilities, are finished & put into operation, then there might be nothing again for quite some time. TSMEDE’s may seem as “returns” to *alma mater* but are not, they still originate from public money that goes into public works, there is no revenue from the private sector *per se*, only through mandatory insurance of any registered freelance-engineer with the Technical Chamber of Greece, even though he/she may have never attended the said school or any greek engineering school at that. ELKE proceedings are protected by laws on privacy (safeguarding on-going research projects), they are often concealed under other categories or never fully reported in annual statements, since some of this goes to supplement KPS projects that do not have enough money to continue, due to Greek insolvency delaying on payments of the so-called “national contribution” to EU Funds. Finally, a note on KPS’s. Though there is a background agreement between national authorities & the CSF that KPS-originated compensation to faculty/personnel cannot exceed 35% of their average regular salary during any KPS project phase they are actively involved in (cumulatively over all KPS’s), this cannot again be audited by the Comptroller’s Office without subpoena due, once again, to ELKE privacy-of-information internal regulations, part of which are the KPS’s.

Are all the aforementioned peculiarities (on selection process, graduation slow rates, faculty revenues, research resources, geographical dispersion of University Departments, close-to-zero alumni funds, difficult-to-decipher greek economics, auditing impediments) reasons enough for **international reprimand**, through publicized bad rankings or non-inclusion into them, when the used methodologies do not have the basic intelligence to discern, on purely academic grounds, between the good & bad in other types of operating circumstances ?

Then comes **webometrics** (ranking web presence of world universities), another yet tool in the arsenal of marketeers. Such private organizations, or intermediaries of EU policy, rate university-housed websites & webpages. The idea may at first sound OK, but it mainly concerns Universities who strive to be included in the ordinary world ranking and have not possibly made it way-up on the list. Little footnotes clarify : “*If your university appears on the Directory, but it is not included in the Ranking, please consider to make a strong effort to increase the number of international academic quality web pages at your website. If the web performance of an institution is below*

the expected position according to their academic excellence, university authorities should reconsider their web policy, promoting substantial increases of the volume and quality of their electronic publications.”. It says it all : “international academic quality” is a direct function of the english language. The prerequisite is to be already included in the “continent rank” or “world rank”, only then websize, link visibility, rich files & scholar webpages are scrutinized. No greek university is in-there, though multitudes of scientific papers, laboratory descriptions, curriculum analysis, online courseware, on-going postgraduate projects, research reports, etc, do exist on their sites, at least in NTUA.

CRITERIA	WR (webometrics)	ARWU (Shanghai)	
Univ's Analyzed	15000	3000	
Univ's Ranked	5000+	500	
Quality of Education		Alumni Nobel&Field	10%
Internazionalization			
Size	Web Size	20%	Size of Institution
Research Output	Rich Files	15%	Nature & Science
	(Google) Scholar	15%	SCI & SSCI
Impact	(Link) Visibility	50%	Highly Cited Res'ers
Prestige		Staff Nobel&Field	20%

FIGURE 7
 INDICATORS FOR UNIVERSITY WEB PRESENCE
 (Table directly from http://www.webometrics.info/about_rank.html)

This eventually leads to a **War of Indices**, where the early-starter gets a huge advantage, and those with introvert profiles cannot compete even if, at a later phase, they choose to publicize their efforts by adopting special PR tactics. It is **University globalized mainstreaming** at the works. The ulterior motive of the private organizations that engage in the **rankings & webometrics business** is only one : to enhance on **market’s hidden curriculum**, alliances that is with “the Big” of any economic category. This is the type of motivation given by the int’l market-research community to unranked Universities : use exclusively the english language, accept branches of foreign universities to show you the way, improve “mobility” as if this does not oftentimes lead to some kind of brain-drain, ask for web help from well-established private multinationals, upload all your stuff (even before papers are judged/approved by editorial boards of scientific journals); it’s all in the name of free market!! This is a global agenda. There is no doubt that international prominence plays a key-role, but this is not the everyday worry of the majority of Universities in the world. Each country, continent, culture, economy, has its own median type of University. Market versus Society.

In a recent french journal ⁵⁰, there is a *dossier* with the general motto : “*les nouveaux codes de la distinction [est] “parler pour exister” [au but de] se comparer aux autres*”. The conclusion drawn, from a small inset essay, is that the prime human drive (for both individuals & societies) is not to strive that much for knowledge *per se* (*connaissance, fr*) but rather for recognition (*reconnaissance, fr*). The talk is of course on **prestige & diversity**, both arise from comparisons, so you have to be extrovert as an individual or organization. It is spelled out as a mandate to tertiary education especially, as well as to a whole nation that would like to maintain cultural prominence, such as France, in view of negative appraisals ^{51, 52}.

Particularly, the second TIME mgzn article reads :

“France is increasing spending on higher education by \$2.4 billion this year [2010], a jump of about 5.3% from last year. However, experts caution that budget increases on this scale can't last in the economic downturn. Taxpayers are becoming increasingly aware of the high cost of France's higher-education system, which has little selectivity — virtually anyone who wants to study at a university can do so for about \$540 per year. The government subsidizes the remaining cost per student, which can be as high as \$16,160 per year. An increase in the number of students can also mask the growing unemployment problem in France.”

The markets love referring to this **cascade of economic catastrophies**: increased public spending ==> taxpayer burdens ==> net real income decreases ==> production of private goods & services may be hit ==> unemployment will rise ==> new students will have to live in more difficult times ==> this defies the humanitarian cause for inheriting to the younger generation a better planet ==> and so on and so forth. Markets are both “devil’s advocates” & supposed defenders of social values.

In the case of “*inégalités volontaires*” as the french journal proclaims (this is the case with most countries), one has to give sufficient arguments with intensity duration and enough variation in order to focus on those voluntarily targeted differences as an asset rather than deficit. *Parlez-parlez-parlez* using the same marketing means with which the marketing community designate “*assess-assess-assess*”. Spell out your difference with clarity and insistence, it is another way to attain **distinction**, a word that has after all the same two different meanings in both french & english (recognition, perceptual difference). If there is due structural reason (social-wise, culture-wise), stop succumbing to those external market forces, resist with self-persuasion and by persuading others. *On dit “assez” au acheter!*

Universities being too much of an introvert lead nowhere, it is as if science & knowledge can proceed being blind on practical issues of survivability & economics, these are social factors too. On the other hand, market-aligned Universities are becoming too much of an extrovert, almost boasting; their representatives in rectoral federations try to appoint peers (from smaller countries) who aspire to similar ideals as committee members in order to prove in unison; their webpages

“smell” advertising; their viewgraph powerpoint presentations are extravagantly designed while lacking considerably in context; their “centers of/for advanced study” operate as Universities within Universities, with their own rules away from faculty senate consensus; placement offices outsource their job to outside professionals; marketeers working for world-rank Universities scout for bright freshmen and expansion opportunities to foreign countries in order to establish private chapters, though most are public institutions themselves; lab utilization, after official certifications from independent agencies according to modern practice, start being underutilized by courses, non-academic administrators take in charge, gantt-charting for use-on-profit by third parties, true laboratory education moving to virtual reality. So then is the University ideal.

5. The Migration of Mathematical Marketing (or on how Universities may self-administer)

A softer than the full privatization approach is, for the private sector, to demand for university co-management by representation into boards & councils as permanent external decision-makers & auditors, thus short-circuiting sound management efforts from within. This undermines all equilibrium attained in our bi-hierarchy world of faculty & administrative staff, as dictated by centuries-old university self-government, a kind of legislative versus executive branch when it comes to university management through senatorial committees & inbred university officers. The author believes that reparation of the **quality & decision-making deficits** is forthcoming with the practice of sound scientific methods from within Marketing Science itself !

From an academic point of view, marketing & market-modelling theory have given rise to a number of interesting, highly useful, **mathematical abstractions of significant interdisciplinary osmosis**. MDS, Kruskal algorithms, multi-attribute utility functions, rating scales, etc. were all mathematically formulated since the late-60's bridging the gap from marketing/cognitive psychology & social dynamics into being permuated in various fields of economic theory. Historically important examples of these techniques are ⁵³ & ⁵⁴. The main notion is that subjective comparison judgements comprise multidimensional spaces, while distinct objective physical properties (i.e. orthogonal in nature) are represented, --by best-fit algorithms over clusters-- in approximately linear-vectorial fashion with interesting distortions of orthogonality. Thus these “perception spaces” are manifolds with a common undelying running variable “worth” *.

* “worth” is eventually measured in terms of “virtual money equivalents”, that is, directly or indirectly leading to some common basic attribute, a common denominator of sorts, housing every heterogeneous notion of costs & benefits “under the same roof”.

It resembles Physics! Time (worth, utility), trajectories (evolution of scenarios), conservation laws (worth balances), invariances (adiabatic policy shifts), nondimensional similarity rules (applicable for scaled-down experiments), sensitivity analysis (differential dependencies), perturbations (attenuatable local disturbances), quantized energy levels (levels of “dispensables” per social stratum, degrees of preference on discrete choices), etc. have eventually found economic/marketing equivalences. An extreme example of this is ⁵⁵, where there is talk & mathematical physics on such newly-defined concepts as “negative market entropy”, “measures of market inefficiencies”, “persistent & anti-persistent walks”, “intrinsic illiquidity cost” and “market impact equation”.

This interdisciplinary shifting of ideas constitutes a set of important analytical marketing tools that originated from mathematical psychology; they go by the collective name of “**conjoint analysis**”. They determine how people value different features that make up an individual product/service; their main practical aim is to determine what combination of a limited number of attributes is most influential on respondent choice or decision made. From an Operations Research point of view, these may also include extrapolation-correlation-regression techniques with embedded hierarchical Bayesian dynamics ⁵⁶, quite complex numerical formulations.

A new area recently formulated is that of TFM (Theory of Fair Markets), based according to ⁵⁷ on 6 premises on the human nature, 8 concerning markets themselves, 4 requirements for swift government action, 2 preconditions on the infrastructural framework, and 4 assumptions on the overall implementation. It resembles a kind of axiom-driven algebra that could produce fair results, in that the basis for analysis is **market fairness versus market efficiency**. In a recent IEEE award ceremony, the honored scientist (electrical engineering prof. at Berkeley) gave a talk on “Marketing versus Mathematics” finishing his acceptance speech by laughingly pleading: “*To all engineering products market representatives in this audience, please support graduate students at your local university’s Mathematics department!*” ⁵⁸

Irrespective thus of the pitfalls & fallacies related to brute-force market practices & aims, the author feels that there is an urgent due need to wisely utilize some of these managerial/marketing analytical techniques in favor of **sound University self-governance**. Identification of hidden advantages, total quality improvement specs, sustainability requirements, constraints on the exercise of specific strategies, etc., can be formulated using extensive SWOT analysis. After all **strengths-weaknesses-opportunities-threats** are identified, DLT’s can be devised as instruments for immediate implementation through inhouse university democratic collective bargaining (delphi method).

However, **decision-logic tables** must lead to unanimously approved actions between a multitude of SWOT inter-dependencies & strategic options. Therefore, there is something missing in-between SWOT’s & DLT’s: the pass-over, of the subjective rating of priorities from individual experts to “collective” (possibly senatorial and beyond) mandates. It must be the outcome of some

weighing mechanism between the severity of the various SWOT parameters identified & the degree of feasibility of the DLT options. Since this is an individual issue for each inhouse rater, the **similarity/dissimilarity of the opinions** (subjective judgements) within the University governing bodies & the rest of the academic community will have to be measured. This is where MDS techniques (**multi**dimensional **scaling**) pop in. Therefore, through a delphi cycle of the SWOT-MDS-DLT-MDS tools, we may eventually arrive at **scientific university management**. It is the only scutinously methodic attempt for university administrators to rationalize over the strategic management required for Universities to survive the economic/market crisis and resolve, in a scientific democratic way, the various aspects of the Society *versus* Market conflict. This applies to a lesser or greater degree for both University strategic & operational management and designation of required discipline modifications & specific subjects taught.

Epilogue (*or in order to avoid a dangerous turn*)

Let us close this presentation on a **funny note**. It is purported by the Press that a slogan-graffiti was posted during a recent spanish demonstration, approximately reported as :

“The poor work, the rich capitalize on them, the military homeseconds both, the taxpayer pays for all three, the vagabond lays back doing nothing for all four, the drunkard drinks for all five, the banker disappropriates all six, the lawyer mocks on all of them seven [for continuously finding clientele of all sorts], the doctor “kills” all eight [medical malpractice has somehow no preferred groups], the gravedigger buries at some point all nine, the politician lives on the lives & deaths of all ten.”

Paraphrasing & extending its rationale, we can say that :

“The manager/marketeer works for everybody above plus him/her-self; the impact may be felt [he/she thinks] deeper in time than any piece of Art! It concerns all, their conveyed messages are directed to everyone: how you work, how to exploit, how to guard, how to escape on most of taxes through innovative accounting, how to abstain from work & duties & still be kept “within the system”, how to sell & buy on those banking services, how to profit from the exercise of the Law, how to innovate dangerously on medicine w/o any repercussions, how to bury in the most optimum way, how to rule with all these pitfalls of society.”

One can thus expect the worst if the market rationale prevails on top of all other kinds of rationales, mostly in areas of basic human needs, both the material & immaterial (such as education, the environment & culture/arts), the latter being of the most important for us all. However, its legitimate scientific methodologies are indispensable to the task of University Management.

NOTE : As the author searched through rater-websites for info on this paper, at some point from within a specific rater came the following msg : “*In some dorms at MIT, students can have cats and can paint their walls*”. There was no other suggestion thrown in for all the hours browsing its webpages, it stayed on-and-on blinking till I exited the site. I pondered, then realized that based on my visible name-ID tagged in the background of my IP address (always fully declaring my IP’s by real name), some automatic wizzard “out there” was “putting things together”; my rare lastname was subsequently cross-searched for american institutions of higher learning, it found someone from their alumni registers RDBMS, with the same lastname (me!!!), and subsequently it thought “possibly related, let’s connect & suggest”. **This is some Marketing!!!**

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