Research organizations: Are we witnessing an enchantment?

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Abstract:
The classical ideals of science can be seen as an example of the drive towards rationalisation in modern capitalistic societies. It is a specialized activity, based on *sine ira et studio*, modernism and a production orientation. Based on a case - the Holistic Learning Centre [name changed] situated in Copenhagen - we argue that a post-rational form of research activity is emerging which revert these features. We term this new type of research *"enchanted research", "sciencetainment"* and *"Mode2-b research".* The factors that facilitate this development include the boring style of conventional research, growing competition for research funds, more project funding compared to institutional funding and a demand for accountability. Countervailing forces also exist, however.

Max Weber's interest in science was mainly normative. Had he made a sociological analysis he would have concluded that science or at least the ideals of science are a prime example of the drive towards rationalisation in modern capitalistic societies. A first sign that science is such a rationalised activity is that the "sphere of science" in modern society has been differentiated and separated from other societal spheres such as that of politics, religion, production, the family and consumption. Science is in modern society taking place in a special sector of society and performed by people who have been trained for this role and who seldom perform other activities (except for teaching). In the 17th century we saw that natural science were done by rich gentlemen as a hobby. We have historically also seen it performed by monks on a more or less part-time basis. This "amateurish" past is over. Modern scientists are professionals. For Weber is was important that the values associated with science were specific for its sphere and that values from especially politics were not allowed to enter. The scientist should - in history for instance - describe what *were,* not what should have been or what we should do today. The German "Historikerstreit" in the second half of the 19th century was about this separation of history from the sphere of (nationalistic) politics.

Science is internally also a highly specialized activity, not least today. Even a relatively new subject like "organization theory" has multiple specialities and it is hardly possible, for instance as a researcher, to be a "specialist" in all these. And a specialist in organization theory is certainly not likely to be also a specialist of, say, macro economics or general anthropology or sociology or a number of other fields around organization theory. And any connection with other specialities further away is strictly coincidental and evidence of a double career. Each sub-speciality has its own competent professionals as every office in a bureaucracy is staffed with people with a relevant background and nobody else.

In his analysis of bureaucracy Weber pointed to the use of rules as one central mechanism of decision-making. The bureaucrat compares the case or the situation with the rule and follows the decision that it specifies. We, as scientists, also to a large extent follow rules, not only those originating in the universities where we are employed but also rules of conduct that has originated inside the scientific community. Such rules

regard, for instance, the proper composition of an empirical paper for a journal, or how to perform reviews of papers for journals, or how to handle data etc. To the degree that our sub-speciality have certain paradigms in the Kuhnian sense - as how-to-do-rules and exemplars - we might choose to follow these and are often induced to follow these. And when rules and paradigms are not available, the professional training of the specialist is supposed to result in consistent decision-making. The decisions and results should be replicable and not depend on the persons. This lead us to the next feature.

Sine ira et studio

These words Weber uses to describe the ideal functioning of the bureaucracy - without anger and enthusiasm. These are also relevant words to describe the ideals of scientific style. Our journals should look - and does look - as if they were written by science as a superperson. No pictures. Rarely any illustrations. Few colours. We admonish our students not to use "I" and we do not allow irony, humour or unnecessary adjectives to intrude. We might explain this to our students by saying that it is the "facts" and the arguments that should lead to a conclusion, it should not stem from the author and his or hers opinions. The idea is congruent with Bruno Latour's and Steve Woolgar's argument (1979) that what is conceived as scientific "facts" are stripped of information of their human and practical origin. A scientific fact starts its career as something that somebody has noticed and ends as something that is taken for granted as part of nature and not discovered by anybody.

The verbal style is in other ways also strictly regulated and only professional. Only "sachliche" - matter of fact - arguments are allowed. As mentioned, the structure of papers are also subject to norms, in the form of the conventional structure containing sections on the problem, theory, method, data, analysis-discussion, conclusion, and perspectives. These norms and this structure also demonstrate the wanted progression from theory via data (not via opinions) to conclusions.

The impersonal and objective ideals are also embodied in the practices around examinations, review of papers and theses. These activities should be performed in an objective way where the ideal is that any professionally competent examinator or reviewer should reach the same conclusions as any other. Correspondingly, the same data should lead to the same conclusions in relation to given hypotheses regardless of who are making these inferences.

For some traditions and in some periods, quantification has been a scientific ideal. Even qualitative social science and the humanities see a modern fascination with (large) numbers: Long papers are better than short words of wisdom, more data are better than fewer data, and long reference lists better that short lists or none.

Science as modernism

Science as such is traditionally seen as part of the modernistic project: It aims at the generation of "new" knowledge, i.e. it should add to the growing stock of knowledge, making us perpetually richer in knowledge. This knowledge is supposed to ultimately to lead to a better society - a richer society, a more technologically advanced society, and a more democratic society. The idea of progress is also embodied in conceptions of the internal functioning of science. Research and contemporary science is or at least should be based on earlier contributions so that science become cumulative or at least

progressing from less adequate theories and paradigms to more adequate theories and paradigms. Also the individual paper or book should have "progression", i.e. proceed from its initial understandings and formulations and add something to them.

Production-orientation - Protestant work ethic
Science in a traditional sense has a production orientation. It is not primarily concerned with any customers or users or societal results whether these are beneficial or the opposite. The scientific work is institutionalised as something requiring hard work and diligence. It is only in a modern discourse that creativity and luck plays a role. It is not surprising that Robert Merton can show how 1600-century psychical science was stimulated by the same protestant ethic that Weber saw as a driving force behind the capitalistic development and the establishment of bureaucracy (1973). "If Puritanism demands systematic, methodic labor, constant diligence in one's calling", Merton refers a 1700-century historian of science as saying, "what [is] more active and industrious and systematic than the Art of Experiment… " (p. 236). Science for these gentlemen-researchers should reveal the glory of God and promote the welfare of men. But even if it thus had aims outside itself, the main cultural impact on science was to stress how perpetual labour and diligence was needed. "Here [in science] is employment enough for the most indefatigable industry since even those hidden treasure of Nature which are farthest from view may be uncovered by pains and patience," Merton refers another 1700-century author as saying. Pains and patience. No easy and early solutions and benefits. "Further research is needed …" as we tend to conclude our research reports. It is a (nearly) never-ending work where the end-results and the gratifications they might contain are deferred to a later age - a preferred prison to the person with a protestant work ethic whose pleasures are in the (work) process and not in any premature consumption of the benefits thereof.

Iron cage and disenchantment
It is well known that Weber had some reservations towards the general rationalisation trend. It creates an "iron cage" for modern man - a place where only rational arguments, analysis, facts, formal competencies and professionalism, speed and efficiency are ruling. Through this process the world becomes "disenchanted" - the magic that was residing in alternative and traditional forms of authority and in religion disappears. It is a flat, one-dimensional world as Herbert Marcuse became known for saying. For science it is, in a pessimistic view, a vision of a growing number of specialized journals, of papers you should read but cannot find the time to read and when you read them you feel it was not worth your time, of professionals specialized in nearly nothing and incompetent beyond that, a vision of mountains of data, of more Sisyfosian work, and more (pseudo-) objectivity, i.e. façade, of research for the researchers and for nobody else. Or, in a more optimistic view, a continued progression of science, truth, and social criticism, of new knowledge and effective technology.

We will not presently discuss the desirability of these classical norms or whether these norms are perhaps already changing. Whether, for instance, the original production orientation has receded in favour of a discourse of societal benefits of research. We will - in conformance with classical norms - defer that discussion until we have presented our data.

Ritzer and the re-enchantment of consumption
George Ritzer, well-known for his McDonaldization hypothesis, has argued (1999) that
at least in the field of consumption we are witnessing a process of re-enchantment. The
"means of consumption" or "cathedrals of consumption" whereby Ritzer means, for
instance, shopping malls, supermarkets, theme parks, hotels and tourist sites as well as
cruise ships are undergoing a process of rationalisation consisting of the elements of
efficiency, predictability, calculability, replacement of humans by non-humans, and the
"irrationality of rationality" (p. 78). This process involves a disenchantment of the
means of consumption - these are to a growing degree soulless machines, buildings and
some programmed human behaviour that are similar all over the world and to all
customers. But, "[t]he cathedrals of consumption must be re-enchanted if they are to
maintain their ability to attract a sufficient number of consumers." (s. 104). The cold
machines are simply not selling enough. Re-enchantment is a necessary reaction.[1] Ritzer
borrows the term (a book title) "the romantic ethic and the spirit of modern
consumerism" from the English writer Colin Campbell. Campbell argues that the later
protestant ethic was different from the earlier more ascetic and production-oriented
ethic and therefore also had a role in stimulating this need for re-enchantment:

> "The later Protestant Ethic led, albeit unintentionally, to the spirit of modern
> *consumerism*. Defining this spirit was what Campbell calls "autonomous, self-
> illusory hedonism." This hedonistic spirit stood in stark contrast to the
> asceticism of the early Protestants as well as of the spirit of modern capitalism.
> It also was individualistic and involved illusions, day dreams, and fantasies; in
> other words, it was a world of enchantment […] disappointment inevitably
> occurs when people are able to fulfil their fantasies, especially with a variety of
> consumer goods and services. Each time they venture forth into the marketplace,
> people delude themselves into believing that this time is going to be different."
> (Ritzer, 1999, p. 68-9).

Ritzer also connects the process of re-enchantment with the concept of post-modernity,
which he describes as a rejection of rationality and more associated with the ideas of
non-rationality or even irrationality. Relevant to our argument he says:

> "This means that postmodern social theorists reject the careful, reasoned style of
> modern academic discourse. The author's objective is often more to shock and
> startle readers than to win them over with logical reasoned argument.
> Postmodern social theory also tends to be more literary than academic in style."
> (p. 72)

This "irrationality" that some thinkers assume is characteristic of a post-modern world
comprises emotions, feelings, intuition, drives, impulses, magic, religion, and mystical
experience (p. 72-4). It is a world of symbols and symbolic exchange, where the strict
technical and factual side of things are not the only one. In short, "postmodernists hold
out the possibility of the re-enchantment of the world." (p. 73).

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[1] A similar reaction can be observed concerning the workplace where further rationalization is "covered
up" or encountered by a process of re-enchantment (Casey, 2004) and pseudo-Gemeinschaft. It seems,
however, that the sphere of consumption is leading this race for re-enchantment.

The concrete re-enchantment of the consumption takes place through a number of mechanisms. First of these is *spectacle*. The means of consumption (supermarkets, malls etc.) get more and more spectacular in themselves and they are populated by more and spectacles - opening offers, sales, events, fashion shows, children activities, activities and spectacles connected with different seasons and holidays. *Extravaganzas* are the next mechanism and method. "In the retail business the increasing need to put on an exstravaganza is known as "retailtainment" or "entertaiment retailing" which involves the "use of ambience, emotion, sound and activity to get customers interested in the merchandise and in a mood to buy." (p. 111). *Simulation* is another method. Simulation means to Ritzer (with a reference to Baudrillard) that something imaginary, artificial are presented instead of something original. Disneyland is given as a prime example where you can "travel" to different carefully sanitized lands and experience plastic replicas of animals in the jungle. Other examples are museums that build replicas of dead cultures, animals or artefacts for their exhibitions. "Simulated people" are people dressed up (as e.g. in Disneyland) or more or less automated and service personnel following standardized scripts in their interaction with costumers. *Theming* refers to the effort to "carry a particular motif throughout all aspects of a cathedral of consumption." (p. 124). An example is the Hard Rock café chain. Finally, Ritzer points to the processes of *implosion* in function, time or space (again with reference to Baudrillard). "[I]mplosion refers to the disintegration or disappearance of boundaries so that formerly differentiated entities collapse in on each other." (p. 132). Examples are fusions of airports and shopping centres, of museums and shopping and restaurants, of mall and theme park, of concert halls and shops, of cruise and mall, or films that are clubs, Internet sites and shops in one. Relevant to our argument, Ritzer also sees universities becoming a form of shopping centre for the students and including actual shopping centres. These former separate and specialized institutions are more and more becoming meshed and similar. In this way implosion is a re-integration of the functional different spheres (politics, family, consumption, production) that rationalisation has differentiated. Implosion in space is exemplified by the home becoming a shopping site (via, e.g., the Internet, home shopping on TV). Implosion in time is, for instance, that shopping now is possible 24 hours a day, and that past, present and future earnings can be used.

The question that we now raise is if such a (re-)enchantment takes place not only in universities seen as teaching institutions (as Ritzer briefly indicates) but whether the system of research as such also might be coloured by this trend towards re-enchantment. In a world where research to a growing degree, and not only in private research-institutions, is a commodity that must be sold to and financed by sources external to e.g. universities this could perhaps be expected. "Of course", these buyers of research are more serious and professional, whether they are private companies or governmental institutions investing in research, than private consumers living out their fantasies in shopping malls. Or, are they? Another trend (besides the need for external financing) is the trend towards more short term financing of research. Research is more often organized in temporary projects where the participants must seek refinancing at the end of the project. This shorter term financing means that there are more selling and buying transaction per dollar or Euro financing.

The question of the possible enchantment of research and its possible forms are also motivated by a case that has come to our knowledge and which at least in some ways

and dimensions represent a deviation from the classical rationalized-bureaucratic form of research. We will present this case now and defer the further discussion of the question until this has been presented.

The Holistic Learning Centre
The Holistic Learning Centre (HLC) was established in Copenhagen in the summer of year 2000 as an independent research institution aiming at studying "learning" as opposed to "teaching" in all settings, whether schools, universities, on the job learning, private and personal learning. The central argument for the establishment was that learning was and is a central process in modern knowledge societies. If a country like Denmark could place itself in a leading position regarding knowledge of and research on learning this would help sustain the Danish welfare society.

The background
The idea of investing in a new research centre focussed on learning seems to go back to 1997. It did not originate with the ministries, the political parties, the universities (where such centres, albeit with a lower public profile, already existed) or the public debate. But it originated with a person, Marius Hansen [name changed] whom we can perhaps best characterize as an independent entrepreneur and trendspotter in the market between public and private activities. He had formerly been a development director at a public technical service institute. It has been said about him that he can "sell sand in Sahara". At a public conference on the development of Copenhagen he was invited to make a speech. He had not, he tells us[2], prepared himself very well but when he listened to the previous speakers he felt that their views on the possibilities of Copenhagen were far to timid and un-ambitious. So he went to the pulpit and said that "we" can do far better. We need an institution that can be, he said, for the learning and science community, what the Niels Bohr institute was for physical science. Niels Bohr is perhaps the best-known Danish scientist of the 20th century and he is in a (proud nationalistic) Danish discourse often used to describe the ultimate standard. After the speech, one of the participants of the conference, the permanent under-secretary of the Ministry of Industry and Commerce, also well-known for his entrepreneurial skills, approached Marius Hansen and said: "Yes, this is what we should do." Shortly after, another permanent under-secretary - from the Ministry of Education - was convinced - when meeting Marius Hansen aboard an airplane - of the need for establishing a learning centre. Conducive to these two civil servants acceptance of the idea was perhaps also the prevalence and popularity of the discourse of the "knowledge society" that was more or less at its apex at that time. Also the need for the Social Democratic Liberal government to bee seen doing something active and positive to enhance the Danish competitiveness and not only to tax and spend money on social welfare was a latent drive behind the interest shown by the two under-secretaries.

With these influential persons onboard, the decision to establish the centre was in practice taken. The rest was good footwork by these experienced operators. As a first step the two under-secretaries recruited two young civil servants from their systems to help them. They also contacted a possible adversary of the project, the under-secretary for the Ministry of Science, and let him in on their plans. This group of 6 persons now sat down to plan *how* to do it, whom to convince first, how to assure the funding etc.

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[2] We have interviewed a number of key persons around HLC, including him. Se our book (Larsen og Aagaard, 2003).

The next step was to convince the ministers of the respective ministries. Even the minister of finance who had a reputation as one not easily to be charmed was (partly) convinced to support the idea. At this stage the 6-man group decided that it was time to produce a document that can be useful in convincing "the rest" (the parliament, the somewhat sceptical researchers, different interest groups) of the validity of the idea. This was called the "work-group report".

The arguments
The work-group report contains the main arguments for the establishment of HLC. There are no arguments against.

The main point of the 52-pages text is the distinction between teaching and learning. Teaching is seen as a normally one-way process that a teacher is responsible for. Teaching leads to knowledge, which is seen as something barren. Learning, on the other hand, is what a pupil or a student is doing. It leads to competency, which is seen as something positive. Learning can take place everywhere, in the school, at home, at work etc.

It is argued that knowledge of the functioning of these learning processes is distributed in society and we have no overview of it. From this lack of overview it is argued - as in other proposals to establish "knowledge centres" - that this knowledge need to be collected, systematized and disseminated to other learners. It is not really argued that there is a need for such "synoptic knowledge" to use Charles Lindblom's expression (1965), that such systematic knowledge can be produced or that it will be used. "Systematic", "integrated", "synthesis", and "holistic" are frequently used in the text. For instance:

> "It is the clear opinion of the work-group that neither in Denmark nor abroad is there systematically established an integrated knowledge of learning across educational and business sectors and across disciplines and professional lines." (p. 6)[3]

Not only should HLC work "trans-disciplinary and cross-disciplinary" (p. 6) they also have to draw on very many professions and knowledge areas, including "brain research, psychology, pedagogy, sport psychology, organisation theory, cultural sociology, rhetoric/communication theory, anthropology, and technology." (p. 14).

HLC should be a research centre of a new type, an "experimentarium". The authors do not define this word but it seems to imply that "companies, users and interested parties are involved in the establishment of knowledge of learning in a broad sense." (p. 2)

The authors are very careful to relate the benefits of the new research institution to high-level values relevant to the Danish society as a whole and therefore to the politicians who should finance the project. Denmark and Danish is mentioned often and in places where it does not add any important information - any competent reader knows that the analysis regards Danish matters:

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[3] All translations from the work-group report are made by us.

"The knowledge society poses new demands but also provides new opportunities for the individual, companies, institutions, and organizations - yes, for the whole Danish society." (p. 4)

"The challenge to the Danish society is […] an increased ability to learn and develop competencies all through life." (p. 2)

The repeated, in a "technical sense" unnecessary use of "Denmark" and "Danish" must be understood as aimed at giving the reader the feeling that the project is connected to the "whole Danish" nation and of vital national importance.

The investment in HLC is also related to the total level of innovation in Denmark and the educational budget of Denmark:

"A systematic collection, distribution and development of a holistic type of knowledge about learning might lead to a faster rate of innovation in the whole educational sector so that the 86 billion Danish Crowns, which the public is spending on education, can work in new ways." (s. 4)

And they have high ambitions in line with Marius Hansen's reference to Niels Bohr:
"It is the vision of the work-group that The Holistic Learning Centre within 5 years should become an internationally leading research and development institution that should assure that Denmark will be placed in a front position regarding development, collection and test of the most advanced knowledge in the area and that this knowledge shall be communicated fast and efficiently between private and public companies, research and teaching institutions." (p. 7)[4]

The work-group report *was* convincing. Together with the political footwork made by the entrepreneurs (meetings with politicians from all parties, with interest groups) a law was passed supporting the establishment of HLC in the summer of year 2000. A grant of 60 mio. Danish Crowns was given for the first 4-year period.

The structure and the activities
The law stipulated that HLC should have offices at the Danish University of Education. HLC arranged a rather intensive rebuilding of the premises. Many small rooms were collapsed into a big and 3-story high, impressive hall type of structure surrounded by curved wooden panels. The actual office space was concentrated in a very small open area on a sort of balcony at the (original) first floor where the employees/researchers were supposed to sit on a type of bar stools at high tables with their lap top computers and mobile telephones a few meters from each other. We have talked to two former accountants at HLC who told us that the price for the rebuilding exceeds that of building a new building.

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[4] The evaluation report 2004 says about this: "HLC's presence in the international arena is not very significant. The stated goal for HLC was to be a leader among international organizations, and with respect to conventional publications this is certainly not the case." (Levin, 2004 p. 18). The report does not mention other ways in which HLC are leading internationally.

Two directors were hired, a specialist in handling cultural projects was made the director, and a professor from a business school became the research director. The work was divided into several "Consortia", e.g. The Creative Alliance, Math and Science, Play and Learning, Neuroscience, Cognition and Learning. Researchers were hired. Often with an unconventional background, e.g. an education in art and social science, but not necessarily with a very long publication list to their CV. Wages offered were considerably above normal researcher wages. A relatively high number of non-researchers were also hired: Communication and culture consultants (with titles as "communication manager", "cultural manager", "cultural coordinator", titles were in English), "research managers", "project managers", "messengers" and advisers. Approximately half of the staff was of this type, the idea being that these persons should form links to other researchers and to users.

A web site, a quarterly journal as well as a web newsletter was established. The web site contains information on the projects in each of the Consortia, announces conferences and meetings for researchers and users. Officially HLC was opened with a mammoth conference with 600 participants on November 6, 2000.

In January 2005 HLC describes itself in this way on its English language web-site:

"Our vision
In terms of research, organisation and communication, Holistic Learning Centre [name changed] aims to be at the forefront in both national and international contexts. In order to do so, two principles are particularly important to us: our Holistic Learning Centre style of research and our ambition to put communication at the centre of everything we do.
Combining theory and practice
As for research we aim to closely integrate theory and practice. With a focus on 'action research' in method, Holistic Learning Centre will constantly seek to build bridges across different sectors. Our aim is to work intensively with both the business community and other groups of society. We see the different participating parties more as equal partners in a development process than as mere research objects.
Communication
Communication-wise, we see it as our task to engage the public in an on-going dialogue on learning at all levels of society and at all levels of abstraction. We wish to break down the notion that research has a clearly identifiable 'beginning' and 'end', and aim to communicate the research process rather than – as is usually done – simply the findings."

Discussion: Is HLC different from the rationalized conception of research?
In the following we will discuss two questions. First, is HLC "deviating" from the rational conception of science we described in the beginning of this paper? And second, is a deviation going in the direction of enchantment?
We will discuss the question of "deviating" from the rationalized conception under the subheadings we used above when describing "classical science", i.e.:
- Specialization
- Sine ira et studio

- Science and modernism
- Production-orientation - Protestant work ethic

Specialization
Regarding the "macro" specialization in society between "spheres" HLC does not represent a clear break. The research is mainly done by full time employees. But all the same there are a few indications of an alternative discourse and perhaps practice. HLC write in their vision "We see the different participating parties more as equal partners in a development process than as mere research objects." This might be interpreted as if they intend to see "participating parties" as a form of "co-researchers". This implies a break down of classical role specialization around research between researchers with the main responsibility for research, "objects", i.e. those persons that social science studies, supporters, financers, and users. This specialization is upheld quite strongly in classical conceptions of science including books on methodology. The researcher is there seen to have the main responsibility for data collection, theory development and for drawing conclusions. Financers/users of research are traditionally not seen as somebody who should influence any aspect of research except perhaps the most general questions regarding the area of research, the "what" of research. It would certainly be a basis for criticism if a financer/user, say a pharmaceutical company wishing a university institute to test some of their products, had any say in how data was collected and treated and in what conclusions were drawn. Newer ideas on the role of financiers/users allow a little more leeway than the classical view. Michael Gibbons et. al. (1994) ideas of "Mode-1" and "Mode-2" research are an example. Mode 1 research is research that is motivated by problems and questions derived from theory, that is, internally in science. According to the ideas of Mode-1 research financers are just allowed to foot the bill and perhaps hope that the results will be useful. In Mode-2 research the starting point of research is a problem that a user/financer has or is defining. The researchers are using theory (theories), including theories from different specialities, as a resource for solving the problem but not as a basis for defining the problem. The "HLC style" is indicating a move beyond Mode-2 research by not only accepting the financiers/users as stakeholders but also as co-researchers who have a role in not only formulating the problem but also in analysing it, including using "theory" originating outside academia. This is more congruent with the arguments in a follow-up book by Gibbons and his colleagues (Nowotny, Scott og Gibbons, 2001) that Mode-2 science is today complemented by a "Mode 2-society" consisting of well-educated users and interest groups that "speaks back" to science and give it valuable input leading to more "robust science" (as users has already been involved) and perhaps in an epistemological sense even better science. It seems that the vision statement of HLC that we quoted above are influenced by the view of Gibbons and colleagues.

Regarding the internal specialization in different academic specialities, HLC also seems to be breaking new ground. It is unusual that a research institute with around 5-10 senior researchers (post doc) claims to be able to do *research* across the many specialities ("brain research, psychology, pedagogy, sport psychology, organisation theory, cultural sociology, rhetoric/communication theory, anthropology, and technology") that HLC says it covers. It is also a deviation from classical norms that they hire researchers with a "double" background (in a research speciality and e.g. the arts) or researchers with a broad background rather than specialised persons. Here they go against well-developed traditions and revert to a renaissance ideal of the well-

rounded courtier, gentleman - and researcher. This is naturally not something special if they claimed to be a general "knowledge centre" that aims to facilitate contact with different milieus or if they were a consultant company. But they claim to be a research centre. That makes it a notable deviation from classical norms (that are also consistent with the Mode-2 idea).

The cross-disciplinary focus also means that disciplinary paradigms and rules come to play a lesser role in HLC's research. The unorthodox publication and communication methods go in the same direction of freeing the HLC researcher of bureaucratic constraints.

Sine ira et studio
Clear signs of deviations from the sine ira et studio can be seen in the arguments presented in the so-called work-group report that led to the establishment of HLC. As described it was an enthusiastic text underlining the national benefits of an institution like HLC. The institution was placed in the context of the discourse of the "knowledge society" and connected to important national values like the development of the "whole" Danish society, the development of the educational system, bridging an alleged gap between the educational and the business sector of Danish society, innovation, productivity, and democracy. HLC was further seen as a possible continuation of the "world's first public school" (that supposedly was Danish) and the education of workers initiated by the workers movement (p. 12). The institution was not seen as "just" something technical and professional.

But enthusiasm was not limited to the text. The way the initiators were selling the project was also characterised by enthusiastic arguments to such a degree that several who were the object of such sales efforts have told us how immediately convincing it was: The permanent under-secretary who exclaimed "Yes, this is what we have to do" tells us in an interview: "To me it sounded true that we do not know a thing about how we learn. And I thought, what does it matter if we use 75 mill. Danish Crowns on that […] there are really nobody who knows anything about learning. A former minister told us: "[I]t seemed impossible to reject […] it made one ask: "Yes, why haven't anybody thought of this before."" There was an immediate feeling of logic to it, of necessity, of being connected with something at the same time very fun, "weird" (sic in Danish), and important. It was something extraordinary.

The individual research projects at HLC, when it became established, have to some extent been examples of "ordinary" research that has ended up being published in "normal" scientific journals following the conventional format. The evaluation report estimates, however, that HLC is publishing fewer papers in ordinary scientific journals compared to conventional research institutes. On the other hand HLC seems more active in alternative forms of publication. Often this "publication" takes the form of conferences, training courses, press briefings, papers in the press, papers on their web page or in their quarterly web and paper based journal. These activities surround the start of many projects. But these activities also surround many projects along their life or when they are finished.

This points to the fact that the ordinary of distinction between initiation (of a research project), production and communication of results to some degree has been collapsed in

HLC. "Results" are communicated up front as interesting research proposals and promises, along the way and in the end as "results". And where the classical system (if at all) focuses on the results coming out at the end of the production process, the focus in the HLC-projects seems to be at the beginning and at the first part of the projects. The proposal of a project tends to be more exciting than the results.

The very readable quarterly journal mentioned is worth studying for its format. It might be seen as a quite ordinary semi-professional magazine but it might also be seen as a quite unorthodox scientific journal. The journal is bi-lingual Danish and English. The paper length is 1-2 pages. The papers are usually illustrated and the authors' pictures are printed. The titles are of a journalistic type and/or with typographic effects (one is taking up 1/3 of a page, another is using different font sizes). The language is direct and concrete with examples. "A truckload of pens and paper is called for, when the Holistic Learning Centre consortium Play and Learning and thirteen Centres for Higher Education and Local Governments in Denmark collaborate on providing post-vocational training in educational plans to some 17.000 day-care workers," starts a paper. (Holistic Learning Centre Quarterly [name changed], issue 10). This is not an ordinary "learned" journal for the select few.

A final feature in this connection is a certain love affair with art including popular art. Some of the researchers were chosen for their (partly) artistic background. Film, computer games and art performances are used as media for communication to young children and other users, as metaphors for the learning experience and perhaps as signs that give a hip tone.

Science and modernism
The argument was here that science in modernism is connected with progress in different forms. It does not seem possible to argue that HLC does not build on the idea of progress. If anything then HLC's tacit ideology is connected with a form of super-modernism or turbo-modernism where development is seen as going so fast that knowledge and views of yesterday has become obsolete. It is a world where "we" everyday have to develop in order not to fall behind. There is an urgency to what HLC is doing. It can also be said that their focus on the past is small, on the present and especially on the future is high. "Many of the challenges we face today can be understood as learning challenges […] These challenges are neither simply local nor abstractly global. They require accelerated learning ….". "Global competition and constant innovation makes learning a top economic priority. As employers, employees, students and teachers, we need to be creative, committed and constantly developing human resources and competencies." "Educate, develop, innovate." (Sentences from Holistic Learning Centre Quarterly, issue 10). These pressing needs also can be seen as an explanatory factor behind the "alternative" and continuing communication from the projects mentioned above - user cannot wait many years to get to the results. They need them now, even if they are only promises.

Production-orientation - Protestant work ethic
In relation to the production-orientation of classical research HLC presents another (beginning) deviation. Hard, solitary and long work is not in focus. And the results are not deferred to later gratification. As in a modern kitchen, production and consumption are collapsed. The results are there to be eaten from the beginning in the form of

promises and expectations, during the research where continual "results" are communicated, and in the end. It is as if the middle phase - the supposedly hard and lonely (or concentrated team-based) work between the promising start and the glorious end - is continually shrinking. This is reflected in the (low) ratio of researchers to communicators, consultants and teachers. It is also reflected in the type of researchers that HLC sought to employ. They were not chosen on the merit of a long publication list - the fruit of former toil - but by their creative and varied background. Finally the low focus on the production side of research as different from the communication side of research can be seen in the original office layout of HLC. Here the "researchers" were placed in ways that maximized their communications potential (open space, close together, intense use of mobile phones) but minimized the work of data collection and writing.

Enchantment of research
It might be argued that HLC is not really a research institution but rather a knowledge and development centre. In that case their features are perhaps not very surprising.

By its own definition, however, HLC *is* a research centre and it *is* placed at a "proper" university. In that case HLC must be seen as a research centre of a new kind - a kind that might become more prevalent in the future. As an institution that "modernize" research and research institutions or perhaps "post-modernize" or enchant them. In that case their features are more interesting and telling and let us therefore dwell with these features for a moment. Extrapolating from the HLC case the features of enchanted research as contrasted with rationalised research are described in figure 1.

Figure 1: Rationalised research and enchanted research/sciencetainment

	Rationalised research	**Enchanted research, sciencetainment, Mode-2b research**
Role differentiation	Role of researchers, persons to be studied, financers and users are separate	These roles are collapsed
Background of researcher	Specialised	Broad
Emotions	Sine ira et studio	Researcher and user enthusiasm, engagement, and involvement expected; use of the arts
Focus	Production focus	Communication focus, more communicators than researchers employed, researchers expected to be communicators and have "political sense"
Timeframe	Continuous	Projects, short and limited timeframe, urgency
Phases of research	Initiation, production and consumption of research activities separated	These functions and phases are collapsed; research is communicated and consumed in all phases; projects "always

		open" 24-7
Media for publication	Journals and books in rationalised format	New types of publications - shorter, more popular, more personal, pictures, web based
Role differentiation in communication of results	Specialization between science, conference organizers (for non-professionals), consulting, training organizations and magazine publishing	These institutions and functions are collapsed

These features of enchanted research can be seen as a kind of malign development of Mode-2 research. Gibbons and his colleagues portray Mode-2 research as a benign and perhaps needed development where research is performed in a sort of equal interaction between researchers on the one side and well-educated users and an interested society on the other, whereas Mode-1 research is described as performed in a more closed scientific community that treats users and society as passive recipients of research or not recipients at all. Mode-2 research is in this way, in Gibbons and al.'s portrayal, a more democratic activity than Mode-1 research. We might term Gibbons' benign concept "Mode-2a" research. And we could call the ideal type sciencetainment that we have described above "Mode-2b" research. In Mode-2b research financers/users are treated equally (compared to the research organization) only in the sense that consumers are treated equally in a shopping mall (compared to the sellers). Rather the financers and users are treated as objects for sales efforts and manipulation regarding what the research projects can achieve and the high values it will serve. The main task and focus of this Mode-2b "research" is (in its ideal typical form) not to produce any type of new knowledge but to sell projects and create enchantment for whoever have got money. Therefore the productive core has been reduced or even removed and the selling and communicating staff maximized just as the functional core and production of the goods sold in the shopping mall are reduced in importance and value in relation to the enchantment-creating features.

(Another, and "opposite", critique of Mode-2 research could be called "Mode-2c" research where the commercial interests of financers are taking over and determining research results, e.g. when pharmaceutical companies buy research that is discreetly manipulated to come out in favour of their products (Markowitz og Rosner, 2002; Krimsky, 2003). Whereas Mode-2b describes research as the villain, i.e. the strong and commercial partner relative to the financers/users, Mode-2c describes research as being the weak victim. The two models might apply depending on the actual strength of the financers/users. They both deviate malignantly from classical research and represent a corrective to the optimistic Mode-2 assumptions of Gibbons et al.)

Most of the features of sciencetainment/Mode-2b research have a potential for enchanting in the sense Ritzer speaks of. The collapse of the distinction between researcher and e.g. financers and users enables the latter to get what we must hope and assume is an exciting look into the back regions of research. It is like seeing the French chef prepare the meal and even participate a little and learn a little from him or to be offered a tour of the film studio's back lot. The reduced specialization makes research more understandable and interesting for the user. The use of the arts might give a magic touch to matters of learning that might otherwise be seen as rather dry. Communication

and a newer journal formats allows for a much more exiting way of presenting research than ordinary research journals where one have to be motivated by the content in a strict sense to find it interesting. In the more communication and consumption oriented mode where project initiation, production and delivery of results are meshed, users are always informed and entertained. The modern project is in a 24 hours 7 days communications and entertainment mode during its whole life. There is no long wait for results and there are no silent, back stage periods, where a user cannot reach them, at least by the interactive website. Conferences and training in a face-to-face format is naturally more enchanting - or have to be if they function - than reading. What we see here is an integration of functions that were not earlier associated with research at least seldom in a single organization. Just as retailing is enchanted with spectacles, festivals, extravaganzas and a little art, science is becoming difficult to distinguish from conference and training organizations as well as from the media.

Ritzer mentions, as we have noted, the expression "retailtainment" or "entertainment retailing" to denote the use of re-enchanting activities to get customers to buy the merchandise. Thus inspired we have invented the term *sciencetainment* to describe the features described above seen as an *ideal type*. HLC has not gone all the way in that direction. They have just in this paper served as the inspiration to formulate these features that can be seen to form an ideal type in contrast to what we have above termed *rationalised research* that represents an opposite pole, an opposite ideal type.

The reader will agree, we think, that the features described are not unique to HLC. Seen in isolation they can be recognized in many of today's research institutions. Most institutions have websites (even if not as extensive and updated as HLC's), some arrange not only research conferences but also conferences for "users" and lay-people (but few can muster the number of participants that HLC can), some publish journals (but few in the journalistic format HLC uses). Many have experienced the need for sales efforts to raise money for projects and the eloquent and promising project descriptions that this entails (but few have reached the level of expertness that the HLC's work-group report exhibits). And many know that it is not possible for the researcher to sit still and quiet for several years before he or she communicates back to the constituency around the project. But these individual developments are small steps when they are seen in isolation. Seen together and seen as a beginning of a development they might be seen to form an important pattern that deserves to be given a name, to be understood and debated.

Why - facilitating factors
A question that naturally raises itself is why this assumed development towards sciencetainment is taking place. We will point to four possible factors:

First, as in the case of retailing, rationalised (social) science might simply be too irrelevant and *boring* to sell enough tickets. Very few outside the academic world seems to read and appreciate research journals, at least in the social sciences. It is on that basis very difficult to convince users to spend money for research.

Second, it is difficult not to see this assumed development as a result of a *competition* for attention, support and money in the broader society. Readers and users of science are offered so many other sources for "experiences" - popular books, the media, popular

arts, sports and old-fashioned consumption. We as scientists would like to believe that investors in science - e.g. government, business etc. - do not have other places to go than to academic research institutions if they want "certified true knowledge". We might be right, but the new development might be that such alternatives exist or at least are perceived to exist by potential users e.g. in narrow sense of knowledge in the form of think tanks and consultants. What seems to be happening is that science to a growing degree is competing not only with think thanks and consultants but also with popular magazines, the general media, freelance authors and trade schools and publications. The distinction between highbrow and lowbrow culture seems - as Georg Ritzer is pointing out - to vanish. Museums are coming to look like shopping malls. The same seems to happen with highbrow and high status knowledge producers (like rationalised science) and formerly lowbrow and low status knowledge producers. If investors in science are out to get a symbolic value by being connected with exiting causes, then the arts, sport or the media offer competitive alternatives for sponsorships. And when these competitors use retailtainment - when every film and football club has a website and a fan club where you can interact or pseudo-interact with the stars - science might have to keep up.

Inside science there is also an increased competition for attention, support and money. Even if "globalisation" in many scientific specialities is an old reality, the competition for students and research funding has only recently started to cross regional and national boundaries. In these new competitive markets the old rationalized science might not "sell enough tickets".

Third, the share of the *funding* that is basic and long term in research seems to be reduced relative to the funding for time-limited projects. An OECD study of funding of public research institutions in Australia, Canada, the Czech Republic, Finland and the United Kingdom shows a uniform trend towards gradually lower "institutional funding" and higher "grants and contracts funding" even if the levels are different in the different countries (OECD, 2003). It is, for instance, also the official policy of the Danish 2005 Government to reduce basic founding for research institutions and increase free and competitive funding. A concomitant "*projectization*" of research seems to be taking place. The combination of researchers, research aims, theory and methods is changed at shorter intervals when the funds are renewed. The projectization means, at least, that for the same amount of money more sales effort has to be made. The reason, at least as the situation seems to be in Denmark, is that the financers - government and business - in this way try to gain more influence on research. If they make a basic grant ("institutional funding" in the OECD study terms), the research might over the years develop in directions that is not conformant with the wishes of the grant giver. To introduce a market system where the researchers have to apply for or seek grants for specific purposes increases - or seem to increase - the grant givers' influence. For the researchers it means writing more project proposals, participating in more sales meetings, producing more arguments that the projects are relevant, and being subject to more evaluations.

Fourth, the amount of money that government today uses for science has reached a substantial level. A further increase can be foreseen. In the Danish parliamentary election campaign that took place as this was written first time, the parties competed in promising more funds for science. Science and education is posited as the main avenue

to survive globalisation, here and everywhere. But this central place in society for research comes at a price. And the price is *accountability*. Research has to explain itself. It has to explain its projects in writing and in relation to dominant societal goals. The whims or even the informed decisions of the researcher are not satisfactory as reasons for choosing research directions. Researchers need to a growing degree to communicate and explain themselves to the rest of society or to individual grant givers.

Hindering factors
But as there are factors that facilitate and cause this development, there might be factors that hinder or limit such a development. In the case of HLC we saw that they did not get the full funding they wanted (several hundred millions of Danish Crowns), they were evaluated and found lacking in academic performance and they were changed in their status from full independence to being an institute at The Danish Educational University.

These hindering forces can be divided into those *in* the scientific community and those *outside*. Regarding the internal forces, members of the traditional scientific community might still evaluate members of the sciencetainment community by conventional criteria. If they have influence through formal evaluations and on hiring and advancement, conventional rationalised norms may prevail. These norms might, on the other hand, in time come to include the criteria of sciencetainment - ability to communicate and enchant - but this has perhaps not fully happened yet. One might also argue that the production of enchantment takes time from the production of what for the rational view are the important activities and results of science. When the scientists are busy making Internet sites, writing sexy project proposals, going to sales meetings, conducting popular conferences, and writing papers for popular media not much old-fashioned research is produced. And in case that is a functional necessity it might weaken research, which in turn *might* reverse the process. Further, it is difficult to sustain enchantment, as Ritzer points out (1999 p. 174). In consumption it is a reaction to the "cold" rationalised features of production and logistics, but it is or needs to be rationalised itself in order to be competitive. If researchers are arranging conferences, publishing newsletters and need to produce a stream of research proposals these productions also have to be streamlined and more or less mass-produced. They might thereby loose the individuality that made them enchanting or the "individuality" will be mass-produced. Further, what was new and enchanting yesterday is commonplace today. If 600 participants is a large number of participants for a conference (in Denmark), then 1.000 is needed to enchant next time. And to have an interactive Internet site might bring a research institution in front, but not for a long time. And the same goes for an "interactive real time research project" where users are also researchers and the beginning and end is fused.

Regarding the outside factors, investors might also to some degree prefer old-fashioned science at least in hard areas of research where sciencetainment cannot produce a useful output. So, in this way sciencetainment might not win the battle in hard technological research, but in "soft" sciences like organization theory and leadership research it might be much more competitive.

The argument in this paper *is* that we are witnessing a trend towards more sciencetainment. But it is not a development without countervailing forces. Therefore

we do not expect to see sciencetainment take over the whole "market". What we might see is a market shared between classical rationalised research, different types of Mode-2 research and different types of sciencetainment (which might be seen as Mode-3 research) depending on the field and the preferences of the users. Perhaps we will also see some interesting combinations. Old-fashioned research modes might experience a resurgence as simulations like old-fashioned forms experience a resurgence in the "artificial" environment of temples of consumption as simulation (artificial animals in museums, old shop types recreated in the malls, musicians in Mozart-era attires playing to tourists, Irish inns in plastic). Ritzer indicates in an aside remark that we would not accept a university that was made on the "Disney model" where the area was modelled as a theme park a la Old Oxford. This, we imagine, can be depicted by rooms with malfunctioning heating, open stoves, a lot of dusty books and "professors" clad in traditional university attire including hats and looking and acting as some cross between mentally deranged and genial. Other conventional and mythological representations of research would be that of Indiana Jones or Frankenstein. The question is, however, if this is not a possibility. Actually, the research director and only full professor at HLC is shown in such a conventional English academic attire (which is not conventionally used in Danish academic institutions) on their web site thus both poking fun at traditional academic mores and performing them. Even if consumers may demand sciencetainment they also expect there to be some traditional core or at least a quotation of such a core – if it is all entertainment and communication, it will not be believed. Sciencetainment knowledge institutions might have to stage a little classical and rational research to be believed. Science must be performed.

The consumer side
George Ritzer does not distinguish between the process of selling/buying and the process of consuming. A meal in a restaurant is usually consumed at the same time as it is bought. The same applies generally to services. But for many goods one can distinguish between the process of selling/buying and the process of consuming. For instance, clothes are bought at a shop but consumed when one wears them. One can look in the wardrobe to see the difference: Clothes that you have hardly if ever used. Intellectuals or researchers may be prone to a similar process regarding books: They buy them and relieve their bad conscience (they know they need to read these books) but often they do not read them. Besides soothing their conscience they might "use" them for their symbolic value - the titles look good on the shelves in the office.

A similar symbolic use of the products of the new enchanted research institutions may be expected. Customers go to exiting conferences, buy the proper books and CDs, interact on the Internet sites, wear the bags with the famous university label on, use the fashionable concepts in their company's internal memoranda but do not really understand or in any serious sense use the content of the knowledge distributed (if any such content can be said to exist). Knowledge with certain features (e.g. quantitative, from the proper source, with the proper words) symbols and signals (Feldman og March, 1988). One might see a pattern of hyperconsumption or rather hyperbuying taking place in some quarters of the results of knowledge. It is not uncommon today that managers - like researchers - display a row of more or less academic books and conference binders in their offices. But are they (we) reading them? And using them? We do not know. (And perhaps they do not have a core that *can* be used). Knowledge and the new enchanted knowledge forms might be on the way to become an object of

consumption that is not much different from what we get in the shopping malls. Entertaining to buy but not really consumed.

References

Casey, Catherine (2004). Bureaucracy Re-enchanted? Spirit, Experts and Authority in Organizations, *Organization*, 11, (1), s. 59-80.

Feldman, Martha S. & March, James (1988). Information in Organization as Signals and Symbols. I March, James (red.), *Decisions in Organizations*, New York: Blackwell.

Gibbons, Michael m.fl. (1994). *The new production of knowledge. The dynamics of science and research in contemporary societies.* London: Sage.

Krimsky, Sheldon (2003). *Science in the Private Interest. Has the Lure of Profits Corrupted Biomedical Research?* Oxford: Rowman & Littlefield.

Larsen, Bøje & Aagaard, Peter (2003). *På en bølge af begejstring.* København: Nyt fra Samfundsvidenskaberne.

Latour, Bruno & Woolgar, Steve (1979). *Laboratory Life. The Social Construction of Scientific Facts.* Beverly Hills: Sage.

Levin, Morten (2004). *Learning in Learning Lab Denmark. Evaluation of Learning Lab Denmark 2000-2004.* Copenhagen: Learning Lab Denmark.

Lindblom, Charles (1965). *The Intelligence of Democracy. Decision Making Through Mutual Ajustment.* New York: The Free Press.

Markowitz, Gerald & Rosner, David (2002). *Deceit and Denial. The Deadly Politics of Industrial Pollution.* Berkeley: University of California Press.

Merton, Robert (1973). *The Sociology of Science. Theoretical and Empirical Investigations.* Chicago & London: The University of Chicago Press.

Nowotny, Helga, Scott, Peter & Gibbons, Michael (2001). *Re-Thinking Science. Knowledge and the Public in an Age of Uncertainty.* Cambridge: Polity.

OECD (2003). *OECD Study: Steering and funding of public research institutions.* http://www.iea.org/textbase/work/2003/linking/masstext.pdf.

Ritzer, George (1999). *Enchanting a Disenchanted World. Revolutionizing the Means of Consumption.* Thousand Oaks: Pine Forge Press.

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