

Research & Occasional Paper Series: CSHE.5.99
Center for Studies in Higher Education
UNIVERSITY OF CALIFORNIA, BERKELEY
<http://ishi.lib.berkeley.edu/cshe/>

ON THE CHALLENGE OF WRITING A UNIVERSITY HISTORY: THE UNIVERSITY OF OSLO

October 1999

Edgeir Benum

e.r.benum@hi.uio.no

CSHE Visiting Scholar Fall 1999

Professor of History – University of Oslo

*This working paper is not to be quoted without the permission of the author.
Copyright Edgeir Benum all rights reserved.*

ABSTRACT

This paper discusses the task of writing university history. While recognizing universities as institutions with universal features, the author stresses that important insights may be gained by assessing carefully the significance of the local and national circumstances within which universities have developed. He further argues for an integrative approach - the need to illuminate the dynamics of change through studying the interplay between various spheres of activity in universities, as well as the interplay between the university and its broader social context. Finally, he makes a case for analyzing the universities as suppliers of knowledge for society not only in terms of instrumental usefulness – as today seems fashionable – but also in terms of knowledge that has served to create cultural identities and "world views".

What I would like to share with you today are some thoughts on the challenge of writing a university history. These thoughts have been developed within the framework of a project at the University of Oslo, called Forum for university history. According to the mandate of this project we face a double challenge: to develop greater competence and interest in university history, as well as to produce a major work on the University of Oslo spanning its entire history. This work, to consist of some five to six volumes, is to be completed by 2011 to mark the university's two-hundred-year anniversary. At present the project is financed almost completely by our Academic Collegium.

Before turning to a number of thematic issues, let me try to provide some details that can provide some sense of the scope of our activities. Our scholarly resources consist of permanent and temporary researchers. We have a so-called 'leading researcher' at the full-professor level held by Robert Marc Friedman, who has a background in history of science. Associate professor John Peter Collett, who has earlier worked on the history of Norwegian research policy, now

holds a teaching and research position defined as university history. Since I, as leader of the steering committee for Forum, work closely with these two colleagues, much of what I will present here derives from our collective efforts. We also have a number of doctoral fellows as well as an additional post doc research fellow. Furthermore we have about fifteen so-called 'hovedfag' students, who are expected to write dissertations of about 150 pages. The level of maturity in these dissertations may come close to that of an American Ph.D.

In addition to this we enjoy the part-time attention of two professors of history who are now both retired. One of them was the initiator and first leader of the project. In their research these two professors have specialized respectively in social history, and in intellectual history and the history of social welfare. My own professional interests have focussed partly on the history of public bureaucracies and partly on urban history, as well as synthetic national history. I have been relieved of half of my teaching duties in order to direct the project.

Our teaching program entails courses and seminars on three levels: that which might be equivalent to advanced undergraduate, masters, and doctoral. In addition we have an open colloquium with guests from other milieu and from abroad.

None of us have come to the task with much experience as historians of universities. We therefore may not have much to offer at present, other than a rather eclectic vision of what we might attain. We have been, and still are, more than anything else interested in learning from others and in obtaining counsel from those who are more experienced. Suggestions and advice on literature and on good models for university histories are very much welcome.

Our impression so far is that it is not altogether clear how university history might be defined as an academic enquiry. Even though we are well aware that the Center of Studies in Higher Education here in Berkeley has been in the business for a much longer period than we have, we wonder whether you may still be asking some of the same questions as we are. We wonder what are the present contours of this entity called university history and, maybe more importantly, how it ought to be developed in the future. And of course we hope that our work eventually might in some modest way contribute to the shaping of the field.

THOUGHTS ON BELONGING TO THE PERIPHERY

Although our university admittedly is situated in a periphery of Europe, we would like to believe that the history of our university is not merely of local, provincial interest. Historians tend to focus on key institutions in major centers of culture. However, studies on the periphery may, I think, offer significant insights of interest to others than the local flag-wavers. Perhaps more so than in histories of Oxford or Berlin or Paris, studies of universities on the periphery must confront issues related to the meaning and significance of being "local" or "national". Of course we should keep a comparative eye on central institutions and try to understand how developments on the periphery were linked to the university models in the major centers of learning. But much can be gained from comparing universities in geographical peripheries with each other. Of particular interest are the many nineteenth century universities founded in roughly the same period and largely in similar phases of nation-building. Looking at Europe, Oslo and the University of Athens may be cases in point. Although founded under roughly similar circumstances, the disciplinary development in the two institutions seem to have been strikingly different in the nineteenth century. To what extent could local or national circumstances explain such differences?

Let me dwell a few minutes on this theme of the periphery. However, since I am now speaking at the University of California, let me also leave Europe and try to bring in some points of comparison between Oslo and this university. In fact, in some respects and during limited periods of their histories, the Universities of Oslo and of California seem to share a number of features. Both at the outset were located in a geographical periphery, and both developed at the same time that they played crucial roles in the growth of their local state. The University of Oslo

was founded in 1811 and began functioning in 1813, toward the end of the Napoleonic Wars. These wars in fact proved critical. In 1814 the 400-year-old union between Denmark and Norway ended. The simultaneous birth of a modern nation and of a new university naturally resulted in a tight connection between them.¹ The importance of the interconnected growth of a nation and of a university was all the more heightened by the fact that Oslo remained the only Norwegian university until after World War II. Although the University of California is some fifty years younger than Oslo, it too emerged, it seems, as an institution in a newly emerging state. Both institutions shared an early development as universities on the geographical and cultural periphery: one on the northern outskirts of European civilization, the other on the western perimeter of a national culture based on its eastern states. Also when we look at this constellation, it seems meaningful to try to confront issues related to "local" or "national" significance.

To what extent, for example, can the early UC be appreciated as a specifically "western" institution, just as Oslo might be understood as particularly "Norwegian"? To what extent might we analyze how universities along with their disciplinary units and teaching programs, their identities and internal cultures, developed as part of local variations? For example, what is the connection between the social landscape in these peripheral outposts and the early features of these universities? Norwegian society was considerably more socially open and egalitarian than those in continental Europe and even as compared to its Scandinavian neighbors. I would imagine that California at the end of the nineteenth century was similarly more fluid socially and more egalitarian in outlook than eastern society. Can this help us explain for instance why women emerged so early as a large student group at the University of California or why women students at the University of Oslo experienced their local institutional culture as being freer and more supportive than those found in German universities? Even Norwegian professors, not exactly a very radical group at the turn of the century, criticized the authoritarian power relations they found pervading German universities, which they otherwise so admired.

Might the social landscape of a periphery society contribute toward explaining also the strong political attacks that both the University of California and the University of Oslo experienced in the late nineteenth century? Radical democratic movements marked by calls for practical usefulness and for anti-elitist changes evidently rocked both institutions. Whereas Kerneyites and Grangers spearheaded populist agitation in California,² agrarian influenced liberal and radical members of Norway's parliament attacked the university there. In the 1880s that university, and especially its schools of theology and law, had backed the so-called 'old regime' in the bitter struggle between the ministerial cabinet and parliament over the question of the King's veto right on constitutional matters. This conflict not only opened the way for parliamentary rule in Norway, but also had profound impact on the university's internal and external affairs.

To its critics, the university was a bulwark for a classical cultivation that was alien to their own program of national and more "voelkisch" cultivation. Law, theology, philosophy, and classical language along with other components of what might be called classical liberal education were attacked as belonging to and sustaining privileged élites. On the other hand, natural science, modern languages, and nationally oriented fields of study such as folklore and rural dialects emerged as more democratic, patriotic, and practical.³ I tend to believe that the unusually weak aristocratic and high-bourgeois components of Norwegian social and political structures contribute to explain why such attacks could attain such strength and impact.

Perhaps the perspective of the local conditions on the periphery may explain also particular disciplinary profiles. Norwegian natural science as it developed in the second half of the nineteenth century certainly seems informed by its local circumstances. At this time Norwegian middle classes developed an interest for outdoor life to a degree quite different from elsewhere in Europe. As cross-country skiing and hiking in mountains emerged as nationalist bourgeois recreation, disciplinary cultures founded upon fieldwork, in which women also

participated on the sidelines, came to dominate the sciences. Moreover, Norway was relatively impoverished, and funds for academic laboratories were scarce, partly because of the conflict with parliament, which I just mentioned. Moreover, the general political climate favored supporting those scientists who offered a relatively democratic and patriotic mode of pursuing science. By the 1920s Norway was perhaps alone in being a nation in which professors were more at home in the field than in the laboratory. Representatives from the Rockefeller Foundation who came to survey European science, expressed surprise at how rather than in most places more prestigious sciences of physics and chemistry, Norway supported geophysical and earth sciences. In this way, the political and economic imperatives toward utilitarian concerns as well as the culture of hearty outdoors life enter into the explanatory equation of the manner by which science developed as an academic activity in Norway.⁴

Of course local conditions enter into the history of all universities, but the tendencies to assume that the developments in mainstream institutions are somehow "natural" provides opportunities for studies of peripheral institutions to force us to explore the local and provincial as informing elements in our histories. Without, I hope, overburdening this perspective I would like to note one additional reason why we need to take seriously studies of universities on the periphery.

Models for explaining the rise of research universities and the attainment of excellence tend to build upon the German and American experiences. Historical sociology in the tradition of Joseph Ben-David emphasizes the importance of competition between German states and postulates a free competitive market among universities. Similarly, studies of the rise of American prestige universities seem to give weight to the role of competition in the rapid development of institutionalized research in those universities. Although we should appreciate the value of such studies and grant the importance of competition for giving shape to new institutional cultures, study of the peripheral University of Oslo tends to indicate that such a perspective has its limits.

The process of introducing research as a fundamental academic activity in Oslo did not occur significantly later than in many other universities, including the University of California. During this period ranging roughly from the 1880s through the 1920s we even find a number of remarkable internationally prominent breakthroughs by Norwegian scientists. These scientists included Vilhelm Bjerknes – the so-called father of modern meteorology – whose disciples later colonized and transformed American meteorology, including the department at UCLA ; marine biologist Johan Hjort; physical oceanographers Fridtjof Nansen, Bjørn Helland-Hansen, and Harald Ulrik Sverdrup, the latter transformed UC's Scripps Institution in San Diego into a world-leading oceanographic research facility based on Norwegian antecedents; cosmic geophysicists Kristian Birkeland and Carl Størmer revolutionized the study of the northern lights; Victor Moritz Goldschmidt transformed the foundations for geochemistry and crystal chemistry, among others. And yet this blossoming of first-rate research that both placed Norway on the international scientific map and prompted major changes in this map occurred in a situation where competition within a national system did not exist. Moreover, even with respect to other European or even Nordic universities, little opportunity arose for direct competition. Oslo could not and did not compete with respect to salary, working conditions, or prestige as did German and American universities. True, a desire to show the civilized world that Norway was worthy to be considered a cultivated nation permeated the local culture, but this motivation entailed little or no direct competition with other universities. Although much more study and reflection will be necessary before coming to more definitive conclusions, I feel nevertheless that the role of competition as a crucial factor for transforming universities toward research-based institutions and toward first-rate accomplishments may well be exaggerated.

INTEGRATIVE AMBITIONS

Forum for university history has from the start declared as its explicit goal to construct an integrated history.⁵ That is, we will seek to illuminate the dynamics for change through studying the interplay among the university's various spheres of activity as well as the interplay between the university and its broader social context. On one level we seek to explore the interconnectedness between the university's intellectual history and its institutional history. How has the growth of differing disciplines impacted on one another; how have pedagogical and research activities influenced the institutionalization and development of given disciplines? Moreover, we hope to include a number of cultural perspectives, bringing academic values into focus.

A sensitivity to gender perspectives, for example, may help appreciate the forms of male cultures informing life in the laboratory and seminar room. In addition, we hope to include in our studies groups who frequently do not enter into analyses of universities, such as students and non-academic personnel. And rather than simply placing such groups in their own compartmentalized chapters, we hope to appreciate the extent that they have made a mark on the institution as well as to explore how institutional and disciplinary changes have impacted on them. Naturally these perspectives cannot be adequately understood without systematically studying the institution as a whole and its various parts and groups in broader local, national, and international contexts.

In short our modest, but perhaps actually rather ambitious, goal is to get a handle on how these differing factors interact and thereby hopefully come closer to understanding the driving forces and dynamics for change and for continuity. Toward this goal we are benefiting from the contextualized history of science that increasingly during the past couple of decades have yielded studies of disciplines, research schools, and institutes that provide clues for such integration. But as far as examples of university histories that have been systematically studied in this manner, we have so far not been able to find them. We still hope they may exist. We hope that our own isolation, our newness to the field, and our limited library facilities have kept us from finding them. Therefore, information on such histories or on on-going research projects along such lines will be most welcome. Let me then touch upon some aspects of this theme of integration.

Students and pedagogy

One important lesson from recent history of science entails how fruitful it can be to integrate students and pedagogy into the study of disciplinary development. Studies that integrate scientific and institutional growth in context reveal the significance of reforms in pedagogical ideals and practices for the establishment of academic laboratories and institutes, and this in turn enabled research and disciplinary renewal. I am thinking of the anthology edited by William Coleman and Frederic Holmes on nineteenth century German physiology and Katheryn Olesko's study of Prussian physics. Such studies also show what is perhaps obvious, but sometimes forgotten in studies of universities: once a research ethos was established, students emerged as crucial resources for disciplinary growth. Only through adequate advanced training of students could the disciplinary reproduction and further development of the university as a research institution be secured. Such studies remind us that to appreciate the emergence of the so-called research university we need to analyze the interconnections between the needs of pedagogy and research, between students and disciplinary growth.⁶

As has been noted by historians of science and education, the rise of the nineteenth century research university should be seen equally as the rise of the modern teaching university, and of course reforms in the content and manner of studying and teaching – including required reading lists, seminars, and laboratory exercises – had their impact on

universities and disciplines. But we should also broaden the perspective further and include the rise of modern professions and their impact on universities. Patterns of professional growth and social roles varied of course from nation to nation. In Norway until the 1870s the traditional professions trained at the university largely entered government service as officials. After that time academically trained professionals increasingly embarked on careers outside of government. They sought expertise and legitimation through newer notions of being scientific, especially the model profession of medicine. The growth of strong organizations to represent the free-practicing professionals established an additional dimension to the social world to which the university related.

In short, we believe that to understand the transformation of the university to an institution largely identified and engaged with research, we cannot ignore the concurrent transformations related to pedagogy and professional training.

Here allow me to discuss an example from Norway. A number of reforms at the University of Oslo around the turn of the century can perhaps point to how pedagogical and research concerns, together with the interests of students, of professions, of professors, and of political authorities played with and against one another.

A Norwegian Example

One starting point into this rather complex maze was the strong desire by the nation's leading political party, the social liberal so-called "Left" party, to create a common schooling for all. A new law in 1889 for elementary schooling was followed by a law in 1896 reforming secondary education. A double motive underlay these laws: on the one hand to make the road to higher education more accessible, and on the other hand to diminish the importance of classical subjects to make way for modern ones, such as the sciences, Norwegian language, history, and modern foreign languages. These reforms naturally posed new challenges to the university, which trained teachers for these schools.

Another starting point for understanding these changes entails the conflict between parliament and the university, to which I have alluded. Social liberal and agrarian members of parliament desired a new law that would give Parliament considerably greater control over the university's internal affairs. After several years of considerable antagonism and strangled budgets in the 1890s, the major threat of direct political steering was sidestepped. But, importantly, the political initiatives for reform also created political arenas in which a number of different actors were able to seek greater influence within the university. Through the creation of these arenas for establishing alliances and recruiting support, students carved a position of influence by the late 1890s that enabled them to demand major educational reforms. These included more individual teaching, more seminars and group exercises, and fewer lectures. They claimed the necessity of instituting formal plans of study, which would specify the framework for study and the requirements for examinations. Many of these demands reflected a desire for greater contact between teaching and research. Some of the professors, especially younger ones, readily supported them. But when organized student influence finally won acceptance against the wishes of the university's internal governing bodies, it came as a result of the support from radical political groups, where "democratization" was already a well entrenched political value.

Another source of support that proved crucial for change came from the academic professions. Medical doctors and gymnasium teachers, among others, joined the movement calling for pedagogical reform in the university. Professional groups built alliances with each other, with political authorities, with students, and with factions among the professors.

Reform of the secondary schools prompted actions to reform the university training of teachers. The university had to meet the task of finding a solution within the framework of the new law. This could take on a number of possible forms, both those that dovetailed with other

agendas within the university and with academic values, and those that did not. In the end, the solution that was adopted for training teachers proved important also for furthering the research university. Future teachers for the advanced secondary schools would now specialize in fewer subjects, but one of these subjects would be developed into a so-called 'major field' – to include a dissertation based on original research. Professors now had the opportunity to offer more advanced instruction as well as a better means to recruit research assistants and to find promising candidates for doctoral research.

Parallel with and intertwined with these processes, the university re-organized itself. New disciplines, new organizational structures such as laboratories and institutes, new experimental methods in natural sciences, a critical empiricism in humanistic fields, and an ideology of "free" research were introduced. Reforms and innovations came about through conflict, sometimes bitter, among groups of professors, who in turn sought to achieve their goals by seeking alliances with differing groups of students, professionals, and political authorities.⁷

This rather messy and of course only partial framework for explaining a sequence of the transformation of the University of Oslo may not share the heroic model often appearing in celebratory anniversary histories that tend to stress inevitability and the causal role of a will to research. Ambivalence over academic goals and disagreement on the place of research in the university are often not explored. The visions and concerns of the apparent losers are also worthy components of the history; indeed they cannot be ignored in any meaningful attempt to appreciate the processes underlying change. Perhaps by attempting to analyze a more realistic, contingent, and conflict-filled process for the emergence of a research university, we might also attain a more nuanced picture of just what characterizes this institution.

Integration of gender perspectives

A gender perspective in university history will of course in part entail the formal regulations that have disadvantaged women in the pursuit of higher education and scientific work, and also how discriminatory practices have changed and ultimately have to a large extent been broken down. But what attracted men and women to universities – or held them out – clearly differed according to country, state, institution, and discipline. As far as I understand, women had access to the University of California from the start in 1870. The University of Oslo gradually opened its disciplines during the course of the 1880s, or more precisely, politicians opened the university, for initiative and decisive support did not come from within. By the turn of the century women constituted a larger percentage of the student enrollment in Berkeley than in Oslo. But it seems that a large percentage of the women in California were concentrated in such feminized fields as home economics and in studies preparing them for being teachers.⁸ Women in Oslo, on the other hand, were at this time spread more evenly over broad areas of natural science, medicine, humanities, and law.

To explain such differences certainly entails more than accounting for formalized discriminatory practices. Did those women in California and Norway who sought a university education, and whose families supported them, have different social backgrounds and different aspirations? Did their social contexts have different notions of what was suitable for women of particular social background, or even different notions of what women were capable of achieving? Or did very different institutional cultures at the universities play roles in attracting and steering women into particular avenues within higher education? Naturally, these questions cannot easily be answered, but we feel they need to be asked and kept in focus.

Exploring gender perspectives in university history, we should also aim at understanding how gender – including notions of masculinity – has played a role in shaping academic cultures and behavior. Although there exists only a small literature on this theme in history of science, it seems that the number of university histories including such a perspective is even smaller.

As we know, throughout much of modern history gender, race, and social class have all been comprehended as more or less determinative for intellectual ability. In some nineteenth century cultures, objectivity was understood as being attainable most readily by individuals belonging to a particular race, gender, or class. Focussing for now just on gender, to what extent can gender ideals and biologically legitimized beliefs help us understand the shaping of a variety of academic practices and cultures? Bringing the question down to the level of disciplines might here be meaningful. How did notions of feminine and masculine get stamped onto given fields, and how did this in turn impact recruitment of women and men?

We know that in some countries botany as an academic discipline in the nineteenth century attempted to define itself consciously as a rugged masculine science in contrast to the broader amateur traditions that were cultivated by women from upper classes.⁹ Why did for instance leading American physicists believe well into the middle of this century that hiring a woman as professor, regardless of her qualifications, would give their milieu a reputation of being “soft” and thereby somehow lesser worth?¹⁰ In Norway it would seem that expedition-based sciences such as oceanography and polar research cultivated particular masculine cultures that resonated with broader nationalist cultural-political visions, which in turn attracted some of the best young science students as well as financial support.

Might our appreciation of laboratory and seminar cultures be enriched by taking as problematic the values and behavioral patterns in these social institutions? Attitudes toward cooperation and competition, relations between professor and students, among other features of daily life, surely were embedded in notions of manliness. Ira Remsen’s chemistry laboratory at the new Johns Hopkins, where men were not to roll up their sleeves and where the gas was turned off at 5 pm, entails a pedagogical vision of cultivation for young upper-class men that differed from more contemporary laboratory cultures based on winning the race for prizes, prestige, and even patents.¹¹ In Oslo the breakthrough of experimental biology and laboratory-based instruction in that field was achieved through the efforts of the first woman professor (1913). Did the daily life of this institute differ from others at the university and from other zoological institutes at other universities? We do know that zoology subsequently attracted additional women students and researchers; moreover, both men and women noted the nurturing culture in the laboratory and in field trips that characterized the discipline during the pre-war years. Why in fields such as geology in which women frequently participated as serious amateurs, few studied the subject and even fewer were recruited to academic positions?

If such cultural patterns played roles in the early phases of women’s participation in universities, it will be even more important to investigate the impact on academic culture of the large influx of women in the 1960s, the 1970s and the 1980s into new fields as students and as scientific staff. To what extent does it make sense to speak of a feminization of particular disciplinary cultures? And what is the present significance of, at least in Norway, that women have emerged as the best student groups in secondary schools and are entering the university with stronger academic credentials than are men?¹²

To see disciplines in context

If disciplinary cultures at a given university can differ as a consequence of gender attitudes and values, a broader question arises of how to treat disciplines in a university history. Most often we find that each discipline, family of disciplines, department or school is treated separately, usually written by a practitioner in that field, and rarely offering much perspective beyond each compartmentalized chapter. To some extent this practice may well be a reflection that the university is itself so fragmented into highly autonomous specializations that the only meaningful manner to treat them is by taking them one by one.

Still I find this practice of organizing a university history problematic. We know that departments and institutes are social and cultural worlds that do differ and these differences

need to be brought into relief and understood. In fact, some opportunity for comparison is necessary. Yet another problem should be addressed that many traditional histories find difficult to tackle. If the university is assumed simply to be the sum of its parts, as the term "multiversity" seems to imply, then we by such an organizing principle lose the possibility of exploring systematically when and how such a fragmentation actually took place. And if the notion of the multiversity is to be critically examined, then the research program should not be so organized as to make it difficult to capture thought patterns, values, practices, and other attributes that linked disciplines and academic units in the past. What has held parts of the university together, what provided a sense of belonging to more than one's own little mini-state?

Is it possible for example that during the emergence of the research university, when specialization and disciplinary formation became intense, various methodological, epistemological and cultural ideals enabled a shared sense of identity across boundaries? The introduction of experimental ideology in a number of descriptive sciences such as zoology, botany, and geology; or the use of quasi-Darwinian modes of explanation in human and social sciences may offer clues to a sense of intellectual community. Similarly in today's academic world there seems to be movements toward re-integration of formerly fragmented disciplines, such as in the rise of cognitive science that brings together elements of neurobiology, psychology, linguistics, philosophy, mathematics and other fields.¹³ I suppose an entity like Integrative Biology at Berkeley is a result of such a movement, whereas the impulse toward Environmental Sciences may be societal rather than cognitive needs. Do the rise of such multi-disciplinary entities foster communal values and a greater sense of identity as belonging to a particular university? Again, these are questions that are not easily answered, but clearly by organizing university history in terms of a string of autonomous scholarly fields we have little chance to study the processes and significance of specialization and fragmentation as well as of re-integration and trans-disciplinarity.

INSTRUMENTAL AND "EXPRESSIVE" KNOWLEDGE

A final problem that I would like to dwell upon in the treatment of disciplines in university histories is the tendency to limit discussion of the motivation for supporting research to present-day notions of instrumental usefulness. Naturally, to appreciate the university's role for economic development and social welfare such a perspective is essential. But if we want to achieve an integrated historical analysis that relates university and broader society, other forms of knowledge must also be brought into focus.

I introduce here what I will call "expressive" knowledge.¹⁴ By this I mean – unlike, I think, the English use of the term expressive – knowledge that serves to create cultural identities and different types of "world views". Such knowledge produced in universities have also proved of great significance to society. Research and teaching related to cultural identity, be it class, ethnic, regional, or national, as well as to fostering notions of proper citizenship and of a just society cannot be readily quantified as to its usefulness. Nevertheless it must be appreciated for assessing the university's social importance. In Norway for much of the period prior to World War II a major contribution of university activity entailed its role in building a national identity. From the 1830s onward, research in fields such as linguistics, history, folklore, and art theory were especially critical in this respect. These studies received various ideological shadings as different groups and their allied social networks on the outside strove to shape the developing notions of Norwegian nationhood. Studies of Norwegian traditions, dialects, folklore, and history were used by the public as building blocks to construct nationalist utopias and programs for cultural renewal.¹⁵ Populist and democratic movements supported and made use of such academic studies. Even as late as the inter war years a very influential school of historical thought, that of professor Halvdan Koht, illustrates this tendency. For Koht modern Norwegian history was a series of sequences in which new social groups successively demanded and

attained their just place in society and thereby gave the nation its character: first the bourgeoisie, then the farmers and peasants, and finally the working class. Through such academic work with its powerful ideological, cultural, and political ramifications the university had a profound impact on Norwegian society.

Even the natural sciences, which are commonly thought of for their instrumental purposes, assumed significant expressive functions. Around the turn of the century, those scientific fields that were developed as strong Norwegian disciplines were precisely those that promised both some practical and economic usefulness as well as gave expression to nationalist sentiments. Research on the northern lights, meteorology, oceanography, and broader polar research could win broad national support at the time when the country was breaking out of the union with Sweden (1905). Appeals to proving that Norway had a right to stand among the civilized nations of the world by accepting the task of exploring the harsh and perplexing nature in the Arctic and sub-Arctic brought funds and prestige to these fields. A polar explorer, such as Fridtjof Nansen, could simultaneously be a manly hero, a scientist, and a contributor to national identity. That Sweden had previously been a world leader in such fields as polar research and studies of the northern lights, made the promise of Norwegian success all the more attractive to politicians, members of the university, and broad segments of educated society.

In the Norwegian case a sharp division between instrumental use and fundamental research makes little sense, at least in this area. Most of the internationally significant research programs, at least prior to World War II, managed to combine the quest for new knowledge, the need to solve practical problems, and the desire to raise the nation's prestige.¹⁶ The expressive function of academic research is perhaps more difficult to identify than the instrumental, but that does not make it any the less important for understanding the relation between the university and broader society.

CONCLUSION

In these brief remarks I have tried to give a sense of a few of the questions and themes with which we are working in our university history. We seek, then, a general, integrated history. This goal requires not simply that we think about university history in a relatively untraditional manner, but that we organize the work accordingly. We will resist the practice of farming out portions of the history to alleged specialists for each aspect of the university's history. We do not want somebody to write a narrow institutional history to which is added in separate chapters the students, the women, the natural sciences or even each discipline in turn, and so forth. The organization of the project should strive to provide a unified handle for the broad history in a given period. This entails, I think, a formidable challenge to the authors and to the editors. But the question is whether we have any other choice, if we want to attain an understanding of the university as a social institution. We are under no illusion that we will actually achieve our goal in full, but that does not mean the resulting work will not be informed by our ambitions. Even if the goal is not completely attainable, it does not mean it is not worth pursuing.

¹ Suggestions of different types of interaction between the new university and the new state in the first part of the nineteenth century: John Peter Collett: *Historien om Universitetet i Oslo*. Oslo 1999. Edgier Benum: *Sentraladministrasjonens historie 1845 – 1884*. Oslo 1979. Sivert Langholm: "The New Nationalism and the New Universities – The Case of Norway in the Early 19th Century." In Märtha Norrcack and Kristina Ranki (eds): *University and Nation. The University and the Making of the Nation in Northern Europe in the 19th and 20th Centuries*. Helsinki 1996. Anne-Lise Seip: *Nasjonen bygges*. Oslo 1997.

² Henry F. May: *Three Faces of Berkeley. Competing Ideologies in the Wheeler Era, 1899-1919*. Berkeley 1993.

³ Collett, op. cit.

⁴ Robert M. Friedman: "Civilization and National Honour: Geophysical and Cosmic Science." In John Peter Collett (ed): *Making Sense of Space. The History of Norwegian Space Activities*. Oslo 1995.

⁵ An early expression of this ambition: Sivert Langholm: "Den nye historien om Universitetet i Oslo – valget av hovedkonsept." In A.F. Andresen and Guri Hjeltnes (eds): *Universitet, samfunn og politikk*. Oslo 1997.

⁶ William Coleman and Frederic L. Holmes (eds): *The Investigative Enterprise. Experimental Physiology in Nineteenth Century Medicine*. Berkeley/Los Angeles/London 1988. Kathryn M. Olesko: *Physics as a Calling: Discipline and Practice in the Königsberg Seminar for Physics*. Ithaca 1991.

⁷ Collett, op. cit.

⁸ May, op.cit.

⁹ Ann B. Shteir: *Cultivating Women, Cultivating Science. Flora's Daughters and Botany in England 1760 to 1860*. Baltimore/London 1996.

¹⁰ Margaret W. Rossiter: *Women Scientists in America. Struggles and Strategies to 1940*. Baltimore/London 1982.

¹¹ Owen Hannaway: "The German model of chemical education in America: Ira Remsen at Johns Hopkins," *Ambix*, 23 (1976).

¹² Edgier Benum: *Overflod og fremtidsfrykt*. Oslo 1998.

¹³ Jens Erik Fenstad: "Vitenskapens enhet og forskningens mangfold. En diskusjon." In Egil A. Wyller (ed): *Universitetets idé gjennom tidene og i dag*. Oslo 1991.

¹⁴ The expression is inspired by Rune Slagstad: *De nasjonale strateger*. Oslo 1998.

¹⁵ Seip, op. cit.

¹⁶ Collett, op. cit. Friedman, op. cit.