Medical professional practices, university disciplines and the state

A case study from Norwegian hygiene and psychiatry 1800–1940

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Introduction

In this article, we will explore the development of the hygiene and psychiatry disciplines within medicine and the changing relations between these fields of professional practice, university medicine and the state health authorities. We concentrate on the period from the early 1800s to the Second World War and address the following questions: What were the relations between actors in public health and mental asylums, the medical disciplines of hygiene and psychiatry, and the health authorities? How did the fields of hygiene and psychiatry contribute to the professionalization of medicine and to the emerging health administration, using Norway as a case?

The role of medicine in the processes of modernization and state building during the 1800s has been widely discussed.[1] Historical-sociological perspectives have inspired studies of the relations between professionalization and the European state-building processes[2] and analyses of medical professionalization in Norway add to this literature.[3] The political scientist Vibeke Erichsen introduced the term profession

1 Alain Desrosières: "How to make things which hold together: social science, statistics and the state", in P. Wagner, B. Wittrock and R. Whitley (eds), *Discourses on Society: vol. XV*, (Dordrecht, 1990); Michael Foucault: "About the Concept of the 'Dangerous Individual' in 19th Century Legal Psychiatry", *International Journal of Law and Psychiatry*, (1978),1, 1–18

2 Andrew Abbott: *The System of Professions, An Essay on the Division of Expert Labour*, (Chicago, 1988); MichaelBurrage, , Konrad Jarausch and Hannes Siegrist (1990): "An actor-based framework for the study of the professions", in Burrage, M and R. Torstendahl (eds.): *Professions in Theory and History*, *rethinking the study of the professions,* (London, 1980); Terry Johnson,: "Governmentality and the institutionalization of expertise", in T Johnson, G. Larkin and M. Saks (eds): *Health Professions and the State in Europe,* (London 1995), 7–24.

3 Jan Froestad: *Faglige diskurser, intersektorielle premisstrømmer og variasjoner i offentlig politikk. Døveundervisning og handikapomsorg i Skandinavia på 1800-tallet*, Dr.polit thesis,

state to label Norwegian development after 1945, during which there was a close integration of medical expertise into a health sector dominated by institutionally isolated policy definition.[4] She argues that this development must be understood in light of the 19th century processes by which medicine became integrated into the state at all levels and how the profession achieved important roles in health policy. Ole Berg coined the terms medicracy to characterize the changing influence of health authorities that was at its strongest in the decades after 1945, and semi-medicracy to label the latter part of the 19th century.[5] Her studies emphasize that physicians entered the Norwegian ministries and that public health dominated before hospitals took over as the core site for medical practice. Until the early 20th century, public positions were strongholds for Norwegian physicians and it was only after 1945 that clinical, somatic medicine became the foundation for the hospital-based medical elite, with close ties to the health authorities.[6]

This article aims to develop these analyses further by nuancing the notion of the professionalizing of medicine as a uniform process with a common knowledge base and common field of practice. We argue that our understanding of medical professionalization, and of the profession's contribution to the state, will benefit from comparing the relations between different segments of the medical profession, and focusing the role of practice, the scientific disciplines and the state. Such analysis will gain from studies that conceptualize medicine as composed of different and changing segments, with varying scopes of practice and methods, clients, socialization and career paths, identities and relations to the government, the university and the broader society.[7]

We will pursue this by examining the relations between two developing medical practices, namely academic actors and groups of actors within the health authorities during the 1800s and the first half of the 1900s. The analysis is based on our earlier works on Norwegian 19th century medical segments of hygiene and psychiatry.[8] By

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Department of Administration and Organization Theory, University of Bergen, 1995; Tor Halvorsen: *Sektorinteresser eller profesjonsinteresser*, Report, TMV series 10,1995.

4 Vibeke Erichsen, V. (ed.): *Profesjonsmakt. På sporet av en norsk helsepolitisk tradisjon*, (Oslo, 1996); Vibeke Erichsen: «Health care reform in Norway: the end of the 'profession state'"? *J Health Polit Policy Law*, (1995) 20(3): 719–37.

5 Ole Berg: «Den evangske orden og dens forvitring», *Mikael*, 2013, 10: 149–97.

6 Ole Berg (1986): «Verdier og interesser - Den norske lægeforenings framvekst og utvikling», in Larsen, Ø. et al. (eds): *Legene og samfunnet*, Oslo: Den norske lægeforening Erichsen, V. (1996) (ed.): Profesjonsmakt. På sporet av en norsk helsepolitisk tradisjon, (Oslo, 1986) Haave, P. (2007): «Da legene skulle autoriseres», *Tidsskr Nor Lægeforen* 24, 127: 3267–71.

7 Rue Bucher and Anselm Strauss: "Professions in Process", *American Journal of Sociology*, (1961), 66, 325-34.

8 Kari Tove Elvbakken: *Offentlig kontroll av næringsmidler, institusjonalisering, apparat og tjenestemenn, dr.polit.thesis*, (Department of Administration and Organisation Theory, University of Bergen, 1997), Kari Tove Elvbakken: *Hygiene som vitenskap, fra politikk til teknikk*, paper 35, Department of Administration and Organisation Theory, University of Bergen (1995); Kari

extending the empirical analysis and broadening of the theoretical framework, it is possible to grasp distinct patterns of relations and further develop our understanding of the inter-dependent processes of medical professionalization and the development of public health administration. We study relations between actors in these segments and the health authorities, focusing professional contribution to policy formulation and institution building, but also the use of professional competence in state bureaucracy. We show how segments of medicine played various roles and gained authority and legitimacy to medical knowledge and practice before clinical hospital medicine became the core of medicine, and before the "profession state" was established.

To capture these changing relations, we will use analytic tools for studying various actor groups in professionalization processes. Burrage, Jarausch and Siegerist have argued that to understand the political and societal conditions for professionalization processes, groups of actors in the process of professionalizing, their actions and their relations must all be analysed.[9] For our purposes, two groups of actors are particularly important, that is, actors in practice and actors in academia. The American sociologist Philip Elliott argued that professional practise in a particular field can provide power and trust that transcends the field's scope of practice. Thus, it is important to be open to differences between peripheral and central fields of medicine when it comes to groups of actors. Different areas of professional practice and core knowledge give access to different client groups.[10] Analyses should consider the clients, reference groups and contributions to policy, as well as the knowledge within different segments of a profession.

We pursue this notion by analysing the relations between groups of actors within the medical profession and the knowledge resources that they were able to offer political authorities. Our aim is to conceptualize the background for the profession's position and legitimacy. We argue that the medical profession must be understood as an amalgamation of segments that may contribute to the authorities with varying knowledge and methods.[11] First, we briefly present background information on the medical profession and the health authorities in Norway. Second, we present the cases of hygiene and psychiatry as fields of practice, and the development of medical disciplines relating to these fields. Then, we explore the relations between hygiene, psychiatry and the health administration, and discuss the contributions of these

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Ludvigsen: *Kunnskap og politikk i norsk sinnssykevesen 1820-1920*, dr. polit. thesis, Department of Administration and Organisation Theory, University of Bergen, (1998). Kari Tove Elvbakken and Kari Ludvigsen: "Hygiene og psykiatri- medisinske disipliner i statens tjeneste", *Norsk statsvitenskapelig tidsskrift* (2003), 1, 19: 3–27.

9 Michael Burrage, Konrad Jarausch and Hannes Siegrist: "An actor-based framework for the study of professions" in Burrage, M. and R. Torstendahl (eds): *Professions in Theory and History*, (London, 1990)

10 Phillip Elliott: *The Sociology of the Professions,*(London and Basingstoke, 1972).

11 Rue Bucher and Anselm Strauss: ibid. (1961) p. 326.

medical segments to the development of health authorities and the professionalization of medicine.

Norwegian medicine: practice, faculty and ministry

Medicine professionalized in the 1800s and early 1900s and grew enormously. These processes varied between countries and specializations, and the emergence of disciplines took different forms, as did the systems of health administration.[12]

After the Napoleonic Wars, Denmark lost Norway to Sweden and a union between these two countries lasted from 1814 to 1905, when Norway became independent. However, during the years of the union, Sweden accepted that Norway kept the1814-constitution, inspired by the French and American constitutions. That formed the legal framework for the raising of a Norwegian state bureaucracy. During the last decades of the 1800s, the Norwegian state-building process was strong, within a relatively democratic-minded context. . Among these state-building strategies was the practice of sending scholars abroad to learn from other states and scientific institutions.

Until the early 1800s, most Norwegian physicians were educated in Copenhagen, since the first Norwegian university was established in 1811. The University of Oslo[13] with its Faculties of Law, Theology and Medicine educated civil servants for the new state. The Faculty of Medicine opened with three professorships in 1814[14] and this number grew slowly during the 1800s. By 1866, four new professorships were appointed; after 1895, seven professorships were added, most of these branched from the one of surgery.[15] These professors held their positions for decades. They were clinicians, teachers and institution builders, who conducted research, engaged in scientific activity and represented the medical elite until the late 19th century.[16]

During the first half of the 1800s, opportunities for clinical instruction were limited to a few institutions, such as the military hospital, an obstetric ward and morgues. Professors of medicine were the driving force behind the National Hospital, which provided an arena for physician clinical education from its establishment in 1826.

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12 Andrew Abbott: ibid. (1988); Tony Becher,: *Academic Tribes and Territories. Intellectual Enquiry and the Cultures of Disciplines*, (Milton Keynes, 1990)

13 The Norwegian capital, Oslo, was named Christiana from 1670 to 1877, Kristiania from 1877 to 1925 and Oslo subsequently. We use Oslo throughout this article.

14 Isak Kobro: «Universitet og medisinske fagmiljø», in I. Reichborn Kjennerud, , F. Grøn and J. Kobro, *Medisinens historie i Norge,* (Oslo, 1936.)

15 Kari Tove Elvbakken and Kari Ludvigsen, Ibid. (2003).

16 Ole Berg: "Verdier og interesser" (1986), 158–9; Per Haave: «Legene», in Slagstad, R. and O. Messel (eds), *Profesjonshistorier,* 277–311, (Oslo, 2014).

Norway had few physicians at the beginning of the 1800s; the number grew significantly during that century but few had their main practice in hospitals.[17] Local authorities and private organizations built somatic hospitals; this expansion of hospitals was consistent with the increasing urbanization at the end of the 1800s. Local authorities also ran a number of mental asylums. In the mid-1800s, mental illness legislation made funding for mental health institutions a state issue and the government established four state asylums by 1902. The first decades of the 20th century saw an increase in smaller, county-based asylums. Beginning in the 1850s, state mental asylums provided positions for medically trained staff as directors and assistant doctors.

A growing segment of physicians ran private practices through the 1800s, at which time their vocation acquired the character of a liberal, middle-class occupation.[18] Haave points to the fact that the number of private practice physicians grew faster than the number of hospital physicians in the early 1900s.[19] Positions for the public employment of physicians grew after the Poor Law was enacted in 1845, and the 1860 Public Health Act required all municipalities to have health commissions, which were headed by a state-employed district physician or, in cities, the state physician.[20] Despite the state employment of physicians, the professional standing of doctors was quite low before the 1880s. The state-employed district doctors in the municipalities were essential to the health authorities until the 1940s.

The emergence of the Norwegian health administration can be linked to a temporary Sanitary Collegium for Norway and Denmark, which was temporary established in 1803. In 1815, (in the years of the union with Sweden) an office for medical questions was set up within one of the Norwegian ministries.[21] From that time, the professors of medicine were obliged to assist the ministry in medical issues. In 1833, professor of hygiene Frederik Holst proposed a programme for a permanent health commission of medical experts to advise the authorities.[22] Commencing in 1845, the Ministry of the Interior decided upon issues of health and was allowed to call on two medical experts as consultants.[23] In 1848, one of the professors took over this consulting position and an advisory committee for medical issues, reporting to the ministry, was set up. Parliament allowed the hiring of a medical expert as chief civil servant for the health administration in 1857 and the former asylum doctor Ludvig Dahl (1826–1890) was appointed as the first medical director.

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17 Øyvind Larsen: «Holdninger til helseproblemer», «Leger i Norge» and «Å være lege», in Ø. Larsen, O. Berg and F. Hodne, *Legene og samfunnet,* (Oslo, 1986).

18 Ole Berg, ibid. (1986), 172.

19 Per Haave, ibid: (2014)

20 Aina Schiøtz: *Folkets helse, landets styrke*, *Det norske helsevesenet 400 år*, (Oslo: 2003)

21 Anders Svalestuen: "Helsevesenet 1814–1940 En administrasjonshistorisk oversikt», *Norsk Arkivforum* (1988), 8, 7.

22 Edgeir Benum: *Sentraladministrasjonens historie,* 1845–1884 (Oslo: 1979).

23 Andres Svalestuen, (1988): ibid. 24–28.

In 1891, the Directorate of medicine was separated from the ministry, with few resources and limited duties, and the directorate remained outside the ministry until 1940. From 1891 to 1938, four physicians held the position of director: two recruited from positions as asylum doctors and two were hygienists. The directorate attached several medical competencies. Among these, beginning in 1893, the Chief Medical Officer in Oslo provided assistance in questions of hygiene; from 1908, a state chemist was employed at the university.[24] A state serum institute opened in 1916, which grew into the state public health institute, which opened in 1929 and housed the university department of hygiene. This system emphasizes the close connections between the ministry, university and practice fields of psychiatry and public health.

The case of hygiene

Hygiene and sanitary problems in the cities

Like other European countries in the first decades of the 1800s, Norway was affected by epidemics of typhus and cholera. Rooted in Middle-Age strategies, cholera commissions were set up during outbreaks.[25] During the 1830s, this strategy was implemented in some Norwegian cities. Experiences with such epidemics are considered important for leading to the development of the first legislation on public health in Norway in 1860, which was also inspired by legislation abroad, especially in Britain. City and district physicians employed by the state led the boards of health and were responsible for sanitation. The activities and resources, such as competencies, of the boards varied and changed over time.[26]

In the second half of the 1800s, public health faced challenges related to urbanization and industrialization, and hygiene became mainly a city issue. Although Norwegian cities were relatively small, they saw pronounced growth.[27] Housing, especially for workers, was often terrible, and food and water supplies and the disposal of refuse were inadequate. Meat and milk could cause disease and contaminated food contributed to high infant mortality rates. Meat was still butchered in the often chaotic and foul-smelling marketplaces of the growing cities, as has been described in Stockholm.[28]

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24 Kari Tove Elvbakken: Ibid. (1997).

25 Carlo Cippola,: *Miasmas and Disease, Public Health and the Environment in the Pre-Industrial Age*, (New haven and London, 1992).

26 Anne Lise Seip: ibid. (1984) p 229.

27 Egil Ertresvaag: "By, byvekst og helse", in Elvbakken, KT and G Riise (eds), *Byen og helsearbeidet*. (Bergen, 2003).

28 Yvonne Hirdman: *Matfrågan, Mat som mål och medel i Stockholm 1870–1920*, (Stockholm, 1983)

Beginning in the 1850s, the water supply and sewer systems were improved. As in other European cities, market halls opened in Norwegian cities to ensure the orderly and hygienic sale of food.[29] Towards the end of the 19th century, hygiene in schools became a focus of attention, especially in the Norwegian cities.[30] In the 1880s, efforts were made to control the sale of milk to avoid adulteration and fraud, and to reduce the increasing infant mortality rate, especially among infants of unmarried and poor mothers. This was one of the many topics on the agenda for the boards of health and the practice of hygiene.

Measures dealing with leprosy were also initiated. Legislation enacted in 1885 allowed for the internment of those sick with leprosy in hospitals, followed by tuberculosis legislation in 1900. Many physicians also advocated for healthy habits. As in other European countries, health education became part of medical practice.[31] Local district doctors, as heads of the boards of health, had an obligation to produce annual reports on the situation in their districts.

Hygiene, knowledge and the university

Internationally, hygiene was a subject within academic medicine from the early 1800s and the first international congress of hygiene was held in 1851. The concept of hygiene was synonymous with state medicine or politica medica internationally, illustrating the connections to the state. At the Norwegian university, hygiene received the fourth professorship of medicine in 1824; until 1940, only four professors held this chair.

Frederik Holst (1791–1871), formerly the chief health officer in Oslo, became the first professor in medical policy (state medicine), pharmacology and toxicology. Holst took his exams in Copenhagen in 1815 and in 1817 he was the first to defend a doctoral thesis at the newly established Norwegian university.[32] Holst played an important role in the development of medical science and health administration until the 1860s; he was also engaged in establishing the first Norwegian-language medical journal and a Norwegian Medical Society.

Holst represented a scientific and academic line.[33] He can be placed into the European surveying tradition within medicine, which was hygiene's first main methodology.[34] From the 1830s, studies demonstrated close links between illness and

29 Kari Tove Elvbakken: Ibid. (1997).

30 This concerned school buildings, with issues of light placement, school meals and air quality.

31 Aina Schiøtz: ibid (2003); Eva Palmblad, *Medicinen som samhällslæra* (Daidalos., 1990)

32 F. G. Gade: Fredrik Holst, in E. Jansen, E. : *Norsk biografisk leksikon*, (Oslo, 1934).

33 Ole Berg: ibid. (1986)

34 Kari Tove Elvbakken, Ibid. (1995).

mortality rates and the standard of living within different classes.[35] Holst used the census as a basis for similar discussions about the situation in Norway. With grants from the government, he studied medical institutions, among them prisons and mental health institutions, in Ireland, England, France and Germany, and initiated reforms when he returned to Norway. Holst argued for the establishment of a National Hospital, chaired and sat on a series of public commissions, and proposed new legislation in different fields.[36]

In 1865, Ernst Ferdinand Lochmann (1820–1891) was appointed as the second professor of hygiene. He was inspired by the radical German physician, Rudolf Virchow.[37] Like Holst, he was broadly oriented towards medical theory. In his later years, he opposed the specialization of medicine and was critical of the increasing dominance of laboratory medicine that began in the 1880s.

The paradigm shift represented by bacteriology from the 1880s contributed to considerable changes within medicine. This influenced the discipline of hygiene, changing its methodological approach. The laboratory and microscope became vital tools. However, the surveying of sanitary conditions and disease, mortality rates and epidemiological methods were nonetheless central. This new paradigm changed public health strategies against epidemic diseases, including reintroducing the old strategies of confinement against epidemics.

In 1893, a new age in medicine was initiated when Frederik Holst's grandson Axel Holst (1860–1931) became the third professor of hygiene and bacteriology. He came to the university from a position at the Board of Health in Oslo.[38] His doctoral thesis was on bacteriology but he was a typical hygienist of the time. For example, he surveyed the housing and hygiene conditions of the working classes in Oslo in the 1890s. He combined his professorship with service to the state and city health authorities and, as did his colleagues in the international hygiene discipline, he published scientifically and for the public throughout his career. Holst visited modern laboratories abroad such as Koch's laboratory in Berlin and the Pasteur Institute in Paris and attended a number of international conferences.

Internationally, nutrition was an important topic in the field of hygiene and Axel Holst participated in a vital international research network. In 1907, he published an article on ship beriberi, which is regarded one of the most important in identifying the cause of scurvy.[39]

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35 Georg Rosen: "The Evolution of Social Medicine", in Freeman, H., S. Levine and L. Reeder (eds): *Handbook of Medical Sociology*, (New Jersey, 1972).

36 Ole Berg: ibid. (1986)157–8.

37. Eivind Falkum and Øyvind Larsen : *Helseomsorgens vilkår Linjer i medisinsk sosialhistorie*, (Oslo, 1981).

38 Kari Tove Elvbakken, Ibid. (1995).

39 Axel Holstand Theodor Frølich : "Experimental studies relating to 'ship beri-beri' and scurvy. II. On the etiology of scurvy", *Journal of Hygiene*, (1907), 7(5):634–71.

The close relations between city health efforts and the university discipline of hygiene during this period are demonstrated by the career paths and co-operation between the state physician, the board of health, and the university department. Chemical analyses to serve the medical authorities were performed at the department beginning in 1907, which also strengthened the relations between the health authorities and the discipline of hygiene.[40] The Department of Hygiene housed personnel such as the chief physician for epidemics and laboratory services.

Carl Schiøtz (1877–1938) followed as the fourth professor of hygiene in 1932, after leaving a position as head of the School Health Services in Oslo. His doctoral degree, earned in 1918, was an analysis of the weight and height measurements of 10,000 schoolchildren. Schiøtz became well known, even abroad, for designing the Oslo breakfast, a meal to be served to all children in the morning before school.[41] Schiøtz changed the discipline of hygiene to include measurements of children's bodies, followed by actions such as providing extra fruit and vegetables or holiday visits to the countryside for those who needed to gain weight.[42]

Starting in the 1920s, and during the depression years of the 1930s, many countries experienced enormous problems and many cities launched programmes to support and feed the poor. The Norwegian government turned to the Faculty of Medicine and the Department of Physiology in 1927 to design a minimum diet needed for survival. Many European physiologists worked on the same question. In 1927 and 1933, professor of physiology Einar Langfeldt (1884–1966) devised lists of the minimal food necessary to sustain life. Beginning in the early 1930s, opposing views on minimum standards led to a deep split in the Medical Society, and at the university between the conservative physiologists and the more progressive hygienists.[43] The Department of Hygiene and socialist physicians performed the first Norwegian survey of the diet of the working classes.[44]

During the 1930s, physiology aimed at finding the minimum amounts of energy, nutrients, vitamins and minerals needed to sustain life. At the same time, the hygiene perspective focused on the optimum amounts of nutrients as the starting point, arguing that even poor people required a variety of foods and drink. Controversies between the perspectives of physiology and hygiene or social medicine were not unique to the Norwegian situation; this also occurred in Britain, for instance.

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40 Kari Tove Elvbakke: ibid. (1997).

41 Carl Schiøtz: "Om en fullstendig omlegning av skolebespisningen i Oslo", *Nordisk hygienisk tidsskrift*, (1927), 1–33.

42 Kari Tove Elvbakken, ibid. (1995).

43 Several have written about these conflicts within the Medical Society: Unni Kjærnes: "Ernæringspolitikk mellom helse og matforsyning", in: Elvbakken, K.T., S. Fjær and T.Ø. Jensen (eds): *Mellom påbud og påvirkning. Forebyggingstradisjoner, institusjoner, forebyggingspolitikk,* (Oslo, 1994).

44 Karl Evang and Otto Galtung Hansen: *Norsk kosthold i små hjem, virkelighet og fremtidsmål*, (Oslo, 1937).

The field of hygiene was central within academic and public medicine in the 1800s and the early 1900s. Professors represented changing perspectives on public health, changing methods and scientific perspectives. The professors were scientists and institution builders. Before bacteriology made the laboratory central, statistics and public institutions were the core. Beginning in the 1930s, body measurements became crucial. Norwegian hygiene related to the European survey tradition with contact to foreign medical and health administrations, and surveys became a crucial tool for the health authorities. This implied close co-operation with the government and that hygiene was at the core of medicine. The career paths of the professors led from the capital's board of health to university professorships. In turn, the professors were called back to serve on health commissions and committees.

The case of psychiatry

Practice and the growth of asylums

Public mental asylums became a field of practice for doctors employed by local or central authorities during the 19th and early 20th centuries in Norway. These institutions are considered important for understanding mental illness and the development of psychiatry as a field of medical practice.[45] As the poor population gradually became differentiated the mentally insane became defined as a distinct category. Until the mid-19th century, mental insanity as a societal problem lay within the criminal system and was associated with poverty relief. According to the criminal law of the time, people declared insane were not to be punished, and during the 18th century, some Norwegian cities established places to care for the mentally insane as part of the poor relief system. However, the majority of the mentally insane were still cared for by relatives.

Norwegian poverty policy reforms during the early 1800s can be seen as part of mercantilist strategies, where questions of health became part of the state's interest and the population became regarded a state resource.[46] Medical actors initiated reform plans for the handling of mental insanity, inspired by European reforms. To professor of hygiene Frederik Holst care for the insane was part of his engagement in state medicine. During his travels abroad, he visited mental asylums as well as hospitals and prisons. In the late 1820s, he carried out the first Norwegian census of the mentally insane and suggested a system of institutions differentiating between the curable and incurable mentally disturbed, based on medical principles. These

45 Kari Ludvigsen: Ibid. (1998); Svein-Atle Skålevåg: *Fra normalitetens historie. Sinnssykdom 1870–1920*, Dr. art. thesis, University of Bergen (2003).p. 67.

46 Anne-Lise Seip: ibid. (1984), 235.

comprehensive plans were not put into practice, but over the next two decades, some of the larger cities hired physicians to reorganize their institutions based on new ideas for the treatment of the mentally ill. Thus, municipal mental hospitals became a new field of practice for doctors, albeit on a small scale.[47]

During the second half of the 19th century, the number of institutions for the mentally ill grew and became increasingly important fields of practice for physicians employed by the state or municipal authorities. Holst's idea of making treatment of the mentally ill a state responsibility was also proposed later by Herman Wedel Major (1814–1854), a physician at Oslo's municipal mental hospital. Major initiated comprehensive reforms in the care of the mentally ill, including the 1848 legislation on the public treatment of the mentally ill and the planning of state-run psychiatric asylums.[48] The first of these, Gaustad asyl, opened near Oslo in 1855 as a prestigious project. Until 1902, three other state-run asylums were built. Then some of the old asylums in the cities were authorized according to the mental health act, and continued their activities with medical doctors in director positions.

The public asylums became an arena for specialized medical practice, inspired by leading European developments. The asylum directors needed expertise in the treatment of mental illness, from asylum work and studies abroad. They were responsible for admitting and discharging patients, observation, diagnosis and direction of treatment. The right patient classification was considered an important therapeutic device, combined with somatic and psychic remedies and work therapy.[49] Diagnostic classification systems also separated asylum clients from other groups in need of public care. Despite attempts to base the asylums on medical principles, the role of poor relief was important in defining the clientele.[50] However, the state asylums also had to accept the admittance of the criminally insane, contrary to the intentions of the legislation and against protests from doctors.

In the late 19th century, the demand for asylum services increased. Asylum doctors were optimistic about potential therapeutic outcomes until the 1870s. At that time, the ambition to cure patients was increasingly challenged by financial problems and a growing pressure to fill up the wards[51] asylum doctors were also challenged on their right to admit patients, yet strove to maintain the asylums as medical institutions.[52]

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47 Per Isdahl: "Historien til et øyeblikk. Herman Wedel Major og Oslo hospital", in Abrahamsen, P. (ed.), *Fra dollhus til moderne psykiatri. Oslo Hospital 1538–1988,* (Oslo, 1988).

48 Kari Ludvigsen, ibid. (1998).

49 Ole Rømer Sandberg: *Klinisk femtenaarsberetning fra Gaustad Asyl.* (Kristiania, 1872)

50 Kjersti Ericsson: *Den tvetydige omsorgen. Sinnssykevesenets utvikling – et sosialpolitisk eksempel,* (Oslo, 1974); Jan Bjarne Bøe: *De utsatte. Psykiatriske pasienter i privatpleie på Jæren, 1950–1970*, (Bergen: 1993).

51 Ibid., pp 174–82; Svein-Atle Skålevåg: *System i galskapen - teori og terapi i norske sinnssykeasyl, 1855–1915* (Master thesis in History, University of Bergen, 1998).

52 Jan Goldstein: *Console and classify: the French psychiatric profession in the nineteenth century,* (Cambridge, 1987); Kari Ludvigsen, ibid. (1998), pp. 143, 159–62.

Towards the turn of the century, critical attention arising from public debate and a public inquiry about the conditions of the mentally ill at Gaustad asyl added additional challenges.

The 1848legislation defined public institutions for the mentally ill as arenas for the development and exchange of knowledge on mental illness. Mental illness physicians pursued special education abroad, often with state scholarships and with an obligation to establish and develop medical institutions at home. However, scientific activity changed and decreased in the 1880s. Reports from public asylums became briefer and statistics replaced descriptions of medical histories and treatment. The asylums lacked both results and the courage to persevere with therapeutic innovation as the demand for their space grew. Asylums were increasingly filled with the chronically ill and the asylum doctors became administrators of large institutions with decreasing status. The number of somatic hospitals grew and was followed with increased optimism about curing somatic diseases.[53] In 1907, mental asylum doctors organized a psychiatric section of the medical association, and thus became engaged in mental health policy.[54]

After the turn of the century, a reformed funding system led to the expansion in asylum building initiated and run by the counties.[55] New principles of hygiene and medical care marked the asylums established from 1900 to 1926. The number of asylum beds grew quickly, from 1500 in 1894 to 2900 in 1912. In 1926, there were 23 asylums with 5368 beds.[56] The period up to 1940 hasbeen labelled the "nursing period" of mental institutions in Norway, with increased emphasis placed on educated care in mental hospitals.[57] Order and regularity of daily life were important, just like hygiene, fresh air and farm work. Although new somatic therapies were tested, including barbiturates and electrotherapy, observation of patients in guarded wardrooms combined with farm work remained important.

Mental illness, knowledge and the university

Internationally, psychiatry as a medical discipline originated in asylums for the mentally ill and in university psychiatry programmes, especially in the German

53 Kari Ludvigsen, ibid. (1998).

54 Per Haave: «Etterkrigstidens psykiatriske helsetjeneste og arkivet etter den sentrale helseforvaltningen», *Arkivmagasinet* (1994) 2, 7–12.

55 Kari Ludvigsen, ibid.(1998), pp. 217–8.

56 Per Haave: *Ambisjon og handling. Sanderud sykehus og norsk psykiatri i et historisk perspektiv*, (Oslo, 2008), p. 46.

57 Helge Waal: *Psykiatriske sykehus- muligheter og begrensninger,* (Oslo, 1978).

states.[58] In Norway, mental illness was not a mandatory topic for medical students until the 1890s, but some of the professors were interested in mental illness. Frederik Holst's work to reform mental health care has been described. In the 1820s and 1830s, mental insanity was a primary lecture theme. Interest in insanity can be linked to the consultative role of the authorities, but also to their engagement in broad health matters.[59]

Gaustad asyl was intended to provide doctors and medical students with clinical and theoretical knowledge of mental illness. Starting in the 1850s, the development of scientific knowledge and instruction was funded by the state mental health budget, anchored primarily at Gaustad and supported by the medical faculty. The faculty saw the education of asylum doctors and the teaching of mental illness as responsibilities of the authorities. The asylum director Ludvig Dahl (1826–1890) taught students theoretical and clinical pathology and therapy.[60] From 1868, lessons were also given at Oslo's municipal mental asylum and at the national hospital from 1880. The new director Axel Lindboe (1846–1911) took over in 1883. Teaching at Gaustad still included lessons and clinical demonstrations and Lindboe was formally responsible for this education until 1912. However, the system gradually changed from 1895 onwards.

Controversies over competence in questions of mental illness arose in the 1860s. Disputes between mental asylum doctors and faculty professors concerning competence in forensic questions became particularly crucial.[61] This may have led to a distancing between the medical faculty and the doctors who specialized in mental illness. The asylum directors were responsible for large institutions with budgets that took up a substantial portion of public medical expenditures. Additionally, the medical definition of asylums presented important obstacles to patient admissions. Although the 1848 legislation permitted asylum patients who were declared insane, it did not provide for the admittance of voluntary patients. Adherence to this legislation was seen as barring interesting cases, particularly patients with nervous diseases and milder mental afflictions.

Beginning in the 1880s, asylum doctors demanded an independent psychiatric clinic, outside the mental health system, to develop knowledge on a broader spectrum of mental health. Until the independent university clinic opened in 1926, the mental asylums and a few newly established hospital departments for the insane served as the basis for clinical psychiatric knowledge, along with new laboratories.

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58 Roy Porter: *The Greatest Benefit to Mankind – A Medical History of Humanity from Antiquity to the Present,* (London, 1997); Edward Shorter: *A History of Psychiatry,* (New York, 1997), 100.

59 Kari Ludvigsen : ibid. (1998)*;* Svein Atle Skålevåg, ibid, (1999): 180.

60 Anne Kirsten Austad and Ørnulv Ødegaard : *Gaustad sykehus gjennom hundre år,* (Oslo:1957), 152.

61 Kari Ludvigsen, ibid. (1998), 233.

In the late 1880s, due to international developments, scientific attention shifted from curing to pathological-anatomical studies, eugenics, neurology and experimental psychology in particular.[62] In turn, this shifted attention to the prevention of mental illness and efforts to cure milder forms of disease. The strengthening of psychiatry education for medical students gained support from medical and government actors starting in the 1890s, with links to reforms in criminal law and the mental health system. Within the faculty, psychology and neurology struggled over academic positions in the 1890s, at a time when faculty expansion was branching into new psychiatry teaching positions.

In 1889, the faculty funded a scholarship in mental illness for Harald Holm (1852–1926), who was appointed head at Oslo's mental asylum in 1887 and who defended his dissertation on pathological anatomy in 1893. When the faculty proposed a teaching position in psychiatry in 1895, the ministry resisted and initiatives to organize education in mental illness were led by other medical actors. Christopher Leegaard (1851–1921), professor in neurology and head of the new department of neurology at the national hospital from 1895, argued strongly for university positions. He had taught neurology to public physicians at the municipal mental asylum and saw psychiatry as part of neurology. He competed with Holm over a teaching position in 1896; Holm was given the position and he taught psychiatry on the faculty until 1905.

Teaching at Gaustad by the hospital leaders continued in the late 1890s, but the faculty was however resistant to this. The struggle between the faculty and authorities over psychiatry teaching continued until 1915, when Ragnar Vogt (1870–1943) was appointed the first professor of psychiatry. Vogt held a scholarship to study neurology, experimental psychology and psychiatry in Germany and Denmark and earned his doctorate in 1901. He was an assistant doctor at Gaustad and then its director from 1911. He took over teaching when Holm became head of a new municipal asylum in 1905. Few students attended the courses until 1907, when psychiatry became mandatory. He published his lectures.[63] In 1909, positions at the faculty and the national hospital were combined into a single position for Vogt, who was also to be a consultant for the authorities.

Vogt's combination of positions was the subject of dispute over the organizing and funding of psychiatry education. The faculty were reluctant to pay for teaching and saw the clinic as the health authority's responsibility. In 1914, Vogt was appointed professor and assistant physician at Gaustad, hecontinued to serve the ministry as a consultant. In 1918, psychiatry received the status as a medical specialty. When the Oslo psychiatric clinic opened in 1926, Vogt was its first head physician and professor until he retired in 1940.

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62 Kari Ludvigsen, ibid. (1998) 239-250.

62 Example: Ragnar Vogt: *Psykiatriens grundtræk. Første del* (Kristiania, 1905).

Psychiatric expertise was recognized as important for the prevention of crime and dangerous behaviour after a legislative reform around 1900. Vogt saw psychiatry as an area of expertise for solving social problems such as crime, prostitution, substance abuse, child welfare and mental deficiency. Insights into psychiatry and tools for classifying social problems were essential for advising the educational system and social services. The role of psychiatric expertise in prevention and the need for physicians to have mental health knowledge were important to the academic status of psychiatry. Vogt's programme linked the recognition of psychiatry as an academic medical specialty to their claim of expertise in surveying and monitoring citizens. Thus, the need for expertise to solve and prevent social problems became an important foundation for academic psychiatry in Norway.[64]

Hygiene and psychiatry – practice and university

Hygiene and psychiatry were fields of public practice for physicians outside of the somatic hospitals. Publicly employed physicians, hygienists and mental health doctors performed important functions for the state. The duties of hygienists consisted of tending to hygiene and surveying health conditions in cities and across the countryside, employed by the local or central administration. Psychiatry provided a medical rationale for mental or behavioural deviation. Asylum doctors conducted interventions in the difficult area between medical treatment and the state's need to control deviant groups. Hygienists contributed to the securing of health and order in the cities.

Norwegian physicians have been described as professional cosmopolitans, oriented towards international scientific communities, publishing internationally and participating at conferences.[65] Government grants often fund these travels, with the obligation to study medical conditions and institutions abroad and develop plans for Norway's medical institutions inspired by the experiences. Professors and state medical personnel took part in both general and more specialized international conferences starting in the mid-1850s, in the fields of hygiene, state medicine and psychiatry.

The Faculty of Medicine experienced considerable growth during the last decades of the 19th century, including branching into new disciplines and professorships. The field of hygiene received an early professorship and dealt with important state issues. As in other European countries, efforts to build medical institutions, legislation and health administration were important issues within the field of hygiene, and the discipline dealt with problems that threatened social order. When bacteriology made

64 Kari Ludvigsen, ibid. (1998).

65 Ulf Torgersen: *Profesjon og offentlig sektor*, (Oslo, 1994).

its breakthrough, this knowledge became part of the field of hygiene, underscoring the connection between hygiene and the state. The status of the field of hygiene first started changing when clinical medicine expanded, especially after 1945.

As a medical discipline in Norway, psychiatry received a professorship almost a century after that for the field of hygiene. Although the state institutions for the mentally ill provided arenas for research, and asylum doctors were active in publications, relations between the university and mental asylum doctors were marked by struggles over competence and resources. Asylum doctors, however, provided the health authorities with important information, through surveying and monitoring the population and the living conditions for the mentally ill, estimating the need for public care and planning public actions on these issues. The asylum directors were mental health experts and civil servants. Their roles as officials and their important competence within the state gave them status when curing was unsuccessful and the prestigious image of the asylums was tarnished.

Ministry and medicine

The Faculty of Medicine, along with the Faculties of Theology and Law, played important roles in the process of state building in Norway.[66] Studies of the medical profession often point to close connections between the authorities and the Faculty of Medicine.[67] University medicine dominance is linked to the professor's role as advisor to the authorities and positions on the city boards of health. What were the specific relations between the practice fields and knowledge bases of hygiene and mental asylum doctors and the medical authorities?

Both hygiene professors and mental asylum doctors had close relations with and served the health authorities. Medical statistics was a crucial part of the hygiene discipline, or state medicine, and represented a field of knowledge that was highly important to the state. This can be further highlighted by considering the close relations between the health authorities in Oslo and the faculty. Both Frederik and Axel Holst came to the university from Oslo's boards of health. Scientific work related to city public health was published in journals, both foreign and domestic. Career paths also went other ways. Assistants at the department of hygiene wrote doctoral theses and were employed by the city health authorities. State physicians gave lectures and demonstrations at the university when needed.

Legislation on the care of the poor and mentally ill began in 1848, emphasizing state and medical responsibility for the mental asylums. The government accredited institutions and appointed asylum inspection commissions. The state authorized and

66 Dag Østerberg: "Universitetets funksjonalitet. En vurdering", in Wyller, Egil A. (ed.), *Universitetets ide gjennom tidene og i dag,* (Oslo, 1991)

67 Ole Berg, ibid. (1986); Vibeke Erichsen: ibid. (1995)

employed asylum doctors who diagnosed mental illnesses, inspected private care facilities and made reports on asylum operations to the government. The asylum doctors carried responsibility for a large portion of the state health budget. Medical doctors with knowledge of mental health represented expertise for the health authorities. The government, the faculty and the asylum doctors shared a common interest in surveying mental illness in the population. These surveys became fundamental for the planning of the location, building and running of the state asylums, for which the asylum doctors took a leading role in the planning processes. Municipal asylum doctors made similar reports and served the government on commissions and committees.[68] In 1848, Herman Major was appointed government consultant for mental health care. After his death in 1854, the new director at Gaustad became inspector and advisor for mental health for the government.[69]

Despise these facts, there were no university positions in psychiatry until the 1890s, before which psychiatry was voluntary for medical students and the health authorities considered asylum doctors' competence important. In addition, from 1875 to 1918, asylum doctors dominated the position as director of health. In 1918, the position was taken over by Harald Gram (1875–1929), assistant professor at the Department of hygiene and chief medical officer of epidemic diseases. Subsequently, in the 1920s, the psychiatric expert and asylum director Karl Wefring took over.

Knowledge of hygiene and mental asylums was important in the state-building process in Norway. Medicine and health authorities saw the importance of population statistics for supervising the health situation and planning for medical institution building. Career paths can be identified from the state asylums to the ministry and the directorate, as well as from Oslo's boards of health to a professorship in hygiene.

Expertise for public health and social order

We started out by pointing to the fact that analyses of the relations between medicine and the state have often been based on a uniform picture of medicine. We wanted to discuss this issue, considering medicine as composed of different disciplines, each of which might have groups of actors with varying relations to the university and to the authorities. We see medicine as composed of different groups of actors, with varying relations with academia and the authorities, and we distinguish between actors in practice, university and health authorities.

We have studied actors related to two fields of medicine – two links between practice, university and health authorities – and have called attention to the bond

68 Kari Ludvigsen, ibid. (1998): pp. 133-35.
69 Kari Ludvigsen, ibid.(1998): pp. 102–6.

between the authorities and the representatives of practical and scientific actor groups within hygiene and mental health. Mental and public health physicians provided valuable knowledge to the state. Surveying, classifying and compiling statistics were a crucial part of the expertise of physicians in public and mental health. Professors of hygiene and the government shared an interest in statistics and institutions to deal with the threat of plague and chaos. In the asylums, classification based on medical knowledge systems, and on economic, social and practical criteria, was important. Knowledge of the prevalence of mental illness provided a basis for planning public budgets and building mental health institutions. Psychiatrists and hygienists had close relations with the government through practice, research and current issues. Health authorities used expertise from sections of medicine that today are no longer part of this field's core.

Studies of the relations between medicine and the state in Norway have largely concentrated on the role of actors at the university and of clinical and somatic medicine. We aimed instead at nuancing the understanding of the relations between medicine and the state in Norway through an analysis that emphasizes the variable roles and influence of medical practice fields and knowledge bases over time. Our discussion highlights the relevance of analytical perspectives that study various segments and groups within a profession to gain a clearer understanding of their changing roles and sources of legitimacy.

Our objectives have been elaborated through analysis of the medical fields of hygiene and mental illness. In particular, we considered the specific and changing relations between the medical practices, the scientific disciplines and the health administration. Based on this analysis, we argue that medical fields other than somatic, clinical medicine became generally important medical authorities in the state up to 1945. This also implies that there may have been variation over time regarding which fields make up the core of medical practice, as might have the competencies used in health policy. Characteristics related to the knowledge and fields of practice in hygiene and psychiatry, boards of health and asylums influenced the authority of the medical doctors in academia and in health administration. Practice for securing a healthy population, through monitoring and categorization, implied close relations with the authorities and became the foundation for career paths. Thus, authority of the Norwegian medical profession was achieved from knowledge and practice that were crucial for building institutions and expertise and maintaining a healthy population and society.

Studying the relations between actor groups related to different disciplines and with varying fields of practice, methods and scientific disciplines can contribute a nuanced picture of the professionalization of medicine as a unitary process. We argue that the officials related to public health and mental health institutions offered solutions to pressing problems of social order, and became important for the expert position of medicine in the state. Hygiene and psychiatry contributed to the

strengthening of medical authority and served as sources of legitimacy, not only for hygienists and psychiatrists, but also for physicians in general.

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