work of the historian to map even some of the involved parties. Atkins does not try to sum things up. He is just describing particular historical persons, methods and events, while rethinking food history and doing a very empirical philosophy. He relates his findings on the material quality of milk to other texts from different fields (epistemology, history of science, history of food) and in so doing finds his own narrative. This is quite radical and thought provoking, arguing that the materiality of milk is not a given. Ontology is a quest of politics, and science is as multiple as reality in general.

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Anne Løkke, Patienternes Rigshospital, 1757–2007 (Copenhagen: Gads Forlag, 2007), pp. 119, Kr 229.00, hardback, ISBN: 978-87-12-04219-8.

It is fascinating to consider that Rigshospitalet in Copenhagen, the major hospital in Denmark's capital, has hosted patients day and night for the past 250 years. It is perhaps even more interesting to realise that glimpses of the four million patients who have used this facility over the centuries still exist in the archives. This unique source material underpins the narrative of *Patienternes* Rigshospital in which the historian Anne Løkke tells the long and changing history of the hospital, combining an institutional view from above with a patients' view from below. The book gives a detailed and vivid picture of life at the institution and how medical knowledge, skills and technology transformed it from a hospital that primarily offered shelter, food and care in the eighteenth century to a 'factory' that produced effective cures in the twentieth century.

Founded in 1757 by King Frederik V, it was named initially the Royal Frederik's Hospital. At this time the poorhouses in Copenhagen were overcrowded and produced an increasing

number of disabled people who were a charge on the state finances. The main purpose of the new hospital was, therefore, to provide medical and surgical treatment to the poor with the aim of curing them; patients with chronic disorders were not admitted. A maternity hospital and a children's home adjoined the institution. The people of Copenhagen were impressed by the palacelike facade of the building and the fact that they now had a hospital that matched the best in Europe, not only at an architectural level but also in terms of facilities and care. It also seems likely that the three meals a day, clean beds, and quiet surroundings on offer would have been appreciated by those patients who came from the slums of Copenhagen.

At the core of Løkke's history lie the case studies of the patients. Løkke chooses a kind of snapshot structure through which she investigates patients admitted to the hospital on 1 April in 1797, 1897 and 1997. Through these histories the reader gets a very fine picture of how diseases and medical care changed over the centuries.

In 1797, a twenty-year-old bricklayer's apprentice probably had his life and livelihood saved when he was admitted to the hospital with an old wound on his hand that would not heal. Untreated wounds were potentially fatal and made wound care one of the main tasks in the surgical department, whereas operations were rare. At that time, seventy per cent of the patients were poor and entitled to a 'free place'. The food was of good quality and represented a major expense. In order to stop staff pilfering food, patients were put in charge of the supply. Every ward had scales, which the patients could use to check that the meal contained '125 grams of beef' at lunch or '8 grams of butter' for the bread at dinner. Everyone was made aware of the dietary regulations printed on a poster in the ward.

Although the hospital had ostensibly been set up for the poor, it also took in fee-paying patients who could pay for a number of services that included better food, birth overseen by the chief midwife, exemption from participation in teaching, a private ward

or even a luxury flat that cost a small fortune. The hospital mirrored the class-based society of the period and it is thought provoking to consider that these divisions may once again be on the rise as private health insurance becomes more popular in Denmark, allowing those who can pay to jump the queue.

By 1897, the hospital was outmoded. The buildings were beginning to look worn and did not meet the new standards for hygiene in patient care. The arrangement of having a 'tea kitchen' in the ward was symptomatic. The small room served as a space for preparing food, dish-washing, the cleaning of spit cups and urinals, a wardrobe for staff, linen deposit, and privy. The wards were also overcrowded and patients often had to share beds. Still, the hospital was successful in one respect: new ideas about hygiene had revolutionised surgery and minimised puerperal fever. A wonderful photograph, one of many, captures this important change showing six doctors, each dressed in white shirt, waistcoat and tie, scrubbing their hands with soap and nailbrushes in front of a wash-basin.

In 1910, the hospital, now named 'Rigshospitalet', moved to a new site outside the old town. The new buildings had water, water closets and electricity. In 1970, these buildings were torn down and replaced by a high-rise block which experienced a short period of fame before the ongoing turmoil in the Danish healthcare system began. Healthcare and health politics became a main issue in the media. The image of the Danish healthcare system as the 'World's best' cracked and patients' rights became the order of the day. By the turn of the twenty-first century, Rigshospitalet was no longer considered a 'factory', but a 'service company' in which issues of quality control had become paramount. The hospital was now accredited according to international goals for patient care, including measurements of patient satisfaction and investigations of nearmiss situations designed to minimise hospital accidents. Despite the ongoing debate and changes in the structure of the hospital, it was evident that patient care had been

revolutionised over the previous hundred years. The average bed-stay was reduced from forty days to five, and the productivity of the hospital had increased fifty-fold. A lot of incurable and dangerous diseases had either been eradicated or their treatment had become routine, and several new treatments, some unthinkable in 1897, had seen the light of the day, for example, heart transplantation and artificial insemination.

Anne Løkke's very fine book is well written, beautifully illustrated and succeeds in telling a rich and varied history sensitive to the complex character of hospital life. The snapshots from each century seem to be chosen with care and are perfectly combined with descriptions of the different stages of the hospital's history. Twenty-one tables and figures of statistical information, primarily patient data, are introduced on relevant pages and explained thoroughly in the narrative. The book is a convincing and moving history.

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Gerald Kutcher, *Contested Medicine: Cancer and the Military* (Chicago: University of Chicago Press, 2009), pp. x + 247, £24.00, hardback ISBN: 978-0-226-464531-9.

Contested Medicine brings a fresh perspective to a notorious and important story. Drawing upon his experience as a radiation medicine specialist, the historian Gerald Kutcher examines Eugene Saenger's 1960s and early 1970s work with total-body irradiation (TBI) at the University of Cincinnati. Saenger and his colleagues traced the metabolic and psychological effects TBI had on patients with advanced cancers; this work was funded by the US Department of Defense, which wanted to know what would happen to the combat performance of American soldiers exposed to radiation. Kutcher uses the TBI story to anchor his consideration of two fundamental and intertwined elements of post-war biomedicine: