

## Christian Pfister turns 70

by Franz Mauelshagen\*

What would climate history be today without Christian Pfister? In the 1970s, he picked up the thread from the pioneering work of Emmanuel Le Roy Ladurie and Hubert Horace Lamb. At the time, Le Roy Ladurie, following advice by Braudel, who doubted that an academic career in France could be built on climate history, had more or less suspended climate history after publishing *Histoire du climat depuis l'an mil* in 1967. He returned to the passion of his youth only after his retirement. More than once I have heard him joking: "Climate history is only for old pensioners!"

Christian Pfister was not at all an old pensioner when he dedicated himself to climate history, body and soul. Trained as both a historian and a geographer and inspired by Le Roy Ladurie's work, he went to the university of East Anglia's Climate Research Unit to receive training from Hubert Lamb and his crew in the 1970s. His dissertation *Agrar-konjunktur und Witterungsverlauf im westlichen Schweizer Mittelland 1755–1797* ("Agrarian Cycles and Weather Conditions in the Swiss Midwest, 1755-1797"), published 1975, was an in-depth regional study in climate impacts. Though published in German, this work together with John Dexter Post's book *The Last Great Subsistence Crisis in the Western World* (1977) fueled an international debate on history and climate peaking in the late 1970s and early 1980s.<sup>1</sup>

Although climate history had never been more visible in historians' circles, even open-minded historians continued to express doubts about the value of the study of past climatic changes for social and economic history. Most telling of all was a commentary on Pfister's and Post's books by Berkeley economic historian Jan de Vries in which the latter stated that unless the crises dealt with by these authors "can be shown to be something other than unique, exogenous shocks, a sceptic might feel justified in concluding that short-term climatic crises stand in relation to economic history as bank robberies to the history of banking."<sup>2</sup> To better understand the underlying assumptions of this comment, it is worthwhile reading de Vries's recent review of Geoffrey Parker's seminal book *Global Crisis: War Climate Change and Catastrophe in the Seventeenth Century*.<sup>3</sup> De Vries, still doubting that climatic fluctuations had a significant share in the making of a global crisis, called for a "sustained investigation of any actual long-term cooling and its cumulative effects."<sup>4</sup> I find this suggestion striking, because it rests on the same old assumptions with which the founding fathers of historical climatology (e.g. Hermann Flohn) had once started their efforts in reconstructing past climates from documentary evidence. They would look for data

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\* Rachel Carson Center for Environment and Society, Munich. — Christian Pfister turned 70 already in August. This is the English version of a speech delivered at his birthday party with colleagues on 18 October 2014.

from which they could calculate temperature and precipitation averages, and they intentionally ignored extremes. Working with the resulting climate data inspired some speculation about the coincidence of climatic and economic cycles. But most studies in this area remained speculative at best; the results were disillusioning. Regional studies such as Pfister's were already the dawn of new approaches to climate impacts. However, a clear paradigm shift occurred no earlier than the 1990s, when the IPCC began recognizing that extremes are more important than averages.

Now as much as thirty years ago, de Vries's comments reveal the expectations of an economic historian of his generation, obsessed with a desire to explain economic cycles. Pfister made his most ambitious attempt at solving the puzzle of economic long-term effects of LIA climate fluctuations in the late 1980s, in an article published in the famous French journal *Annales*. It is an analysis of temperature series and European prizes for cereals from the 16<sup>th</sup> to the 20<sup>th</sup> century.<sup>5</sup> The complexity of the study is impressive still today. Pfister developed a model of the effects of meteorological variables on harvests, which allowed him to simulate cumulative effects. Anyone experimenting with simple correlations between temperature series and price series for cereals (in fact, something that economic historians have done time and again in the last twenty or thirty years) will learn from this article, why such an approach must fail invariably.

Despite its progressiveness (or maybe: because of it), Pfister's 1988 article resonated little among economic and climate historians. The reasons are by no means clear. However, in the late 1980s the odds were beginning to turn against efforts of climate historians to convince their colleagues to study Europe's pre-industrial economies, crises, and famines in the light of climatic changes. Amartya Sen's *Poverty and Famines* (1981), in particular, changed the discourse, drawing attention away from food production and its environmental circumstances to the struggle for food entitlements and their unequal distribution. Important as this new perspective was, the opposition against approaches that smacked of Malthusianism became increasingly vicious and ideological. Looking back, it is striking to see how Sen's insights, which earned him the 1998 Nobel Prize in Economic Sciences, became a barrier to further innovative thinking once Sen's approach became fashionable and loaded with political implications in a post-colonial world — thus, one might say, experiencing the same fate Malthusianism had experienced in the age of liberalism. In the end, it took nothing less than the recognition of anthropogenic global warming as a scientific fact to break up the absurd opposition between “natural” and “man-made” famines. In the last decade or so, this has brought famines back on the agenda of climate history, and Christian Pfister proved up the challenge.<sup>6</sup>

Pfister's work had been moving forward for two decades. Even before his article in the *Annales* came out, Pfister had published *Klimageschichte der Schweiz 1525-1860* (The Climate History of Switzerland, 1525-1860).<sup>7</sup> It is a *histoire totale* of a small nation's cli-

mate and its effects, based on a collection of data from documentary evidence that was unprecedented at the time. It inspired other “national” histories of climate that soon followed in Germany and Czechoslovakia. In the decade that followed, Pfister established himself as the master of historical climatology based on his subtle interpretation of written evidence and the index system he had developed to start the process that lead from qualitative information to quantification. In the 1990s, the use of regression analysis with Pfister’s indices and the mapping of the resulting reconstructions of temperature, precipitation and air pressure data were breakthroughs that, in the long run, helped historical climatology to overcome the skepticism that it had always been confronted with in the context of paleoclimatology. *Wetternachhersage*, published in 1999, was Pfister’s most complete account of the methodology of historical climatology.<sup>8</sup>

This was about the time when the “second miracle of Bern” occurred. Only my fellow Germans will understand immediately what this refers to, as we are used to calling Germany’s victory in the 1954 World Cup the “miracle of Bern,” because the German team beat the Hungarian favorites in the final match played in Bern. Even according to Christian Pfister himself, it was a miracle that he got tenured in 1997. He had already resigned himself to the idea of returning to his former job as a schoolteacher, when his position as a research professor, funded by the Swiss National Fund was about to terminate in 1996. Difficult as it had been to get tenure, the interdisciplinary cooperation between a historian and geographers, in particular with Heinz Wanner, had born fruit, so that their cooperation had been well established—well enough to apply for funding for the next and larger project in historical climatology. However, convincing the reviewers at the Swiss National Science Foundation required the support of the weather gods. The program, from which later emerged the Oeschger Centre for Climate Change Research (OCCR), had been rejected. It was saved in an unexpected turn of events: The enormous damage left behind by the winter storm Lothar on 26 December 1999, helped convincing a group of influential people at the Swiss National Science Foundation to reassess the potential value of historical reconstructions in climatology. Press reports had created enormous pressure. From this experience, Christian developed an almost superstitious belief in the press to aid the cause of climate history. Looking back, it is also remarkable to see the coincidence between a meteorological disaster, its public perception, and the turn in historical climatology from the reconstruction of averages to extremes. The latter had already gained increasing attention throughout the International Decade of Natural Disaster Reduction (IDNDR) in the 1990s.

It should not be forgotten that Christian Pfister is an economic historian who has left his mark in this branch of historical study beyond the overlap between economic and climate history. While his deep understanding of pre-modern agrarian economies in Switzerland did indeed help him to better understand where climatic fluctuations interfere with the complex process of food production, his contributions to historical demography, for ex-

ample, stand by themselves. Probably his most important and lasting contribution to economic history came in the early 1990s, when he developed and explained his concept of the “1950s syndrome.” Pfister suggested that the unprecedented long boom of Western economies that started around 1950 and continued until the Oil Crisis in 1973 had been fueled by cheap energy, namely oil. This not only explained why and when those economies had become oil-dependent; cheap oil had also enabled private households to spend money on other things than energy, creating space for the emergence of consumerism. Thus cheap energy also became key in Pfister’s account of the emergence of post-WWII consumer society. Of course, his far-reaching conclusions did not pass without resistance, but they have proved solid until today. Pfister’s ideas triggered a debate that would go on for years urging him to continuously improve his argumentation and the evidence supporting it. His most recent (and up-to-date) account of the “1950s syndrome” was published in 2010.<sup>9</sup> This in itself is proof of Pfister’s never resting and inquisitive mind. He included new data and extended the argument in a way that connects the “1950s syndrome” with the “Great Acceleration”—a term coined in the recent debate on the Anthropocene to describe the post-WWII period of rapid economic growth.

I first met Christian personally in 1999. I was poring over my dissertation when his new book, *Wetternachhersage*, came out. After reading the book, I wrote a lengthy email to him explaining my findings about the crisis of the early 1570s, its climatic circumstances, and its local peculiarities in Zürich. Within hours I received an incredibly detailed response full of good advice (including a reading list), encouragement, and obvious excitement about the fact that a young historian was considering climatic fluctuations as an essential part of the story he was writing. Christian’s passion for climate history was truly contagious, not only for me, but for many of his students, and even some of his senior colleagues. I wonder, however, if any of his efforts would have persisted had he not been gifted with this natural enthusiasm—a trait that eased his way through the uncertainties of his academic career. Many of his most talented students shied away from the adventure of an academic career after their dissertations, seeing no future as climate historians. In that regard, the second miracle of Bern had changed very little. Braudel’s skepticism unfortunately still proved justified. Success and recognition did not come easily. I hesitate to call it patience—Christian is too energetic to be patient—but breaking through the barricades erected against climate history required perseverance, maybe even stubbornness, and certainly strong belief in his research. Implicitly or explicitly, most of his fellow historians shared Jacob Burckhardt’s view that “climate” was a subject only for philosophers of history, not for “proper historians.” Meanwhile, his colleagues in the natural sciences would not easily accept that reconstructions from documentary evidence—the genuine playground of historians—often produce better, more reliable, and higher resolved data than reconstructions from natural

proxies. Moreover, historical reconstructions connect much better to the cultural contexts of societies than even dendroclimatological reconstructions.

It seems that Christian's struggles with tenure have helped his mind to stay young and open towards new approaches. To this very day he has conserved his outstanding ability to absorb and transform ideas in a way allowing his work to bear fresh fruit time and again. I am sure we will be hearing from Christian Pfister for many more years to come. To me, his work stands out as one of the most original and innovative ones of the last forty years. And I am not alone: More than once, I have had the opportunity to discuss the history of climate history with Emmanuel Le Roy Ladurie and Christian Pfister's role in it. Emmanuel Le Roy Ladurie only speaks with the greatest respect of him, and on various occasions referred to Christian simply as "the great man."

## Annotations

The following annotations only give the references of those works of Christian Pfister mentioned in the text. A complete list of publications can be found on his webpage, where also a lot of his articles are available for download. Just go to [http://www.hist.unibe.ch/content/personal/pfister\\_christian/index\\_ger.html#e326](http://www.hist.unibe.ch/content/personal/pfister_christian/index_ger.html#e326).

<sup>1</sup> The results are documented in two volumes: The now famous special issue 10.4 of the *Journal of Interdisciplinary History on History and Climate: Interdisciplinary Explorations*, edited by Theodore Rabb and Robert Rotberg in 1980 (also published as a book by Princeton University Press in 1981); and *Climate and history: Studies in past climates and their impact on man*, edited by Wigley, Ingram and Farmer (Cambridge University Press: Cambridge/MA, New York/NJ, 1981).

<sup>2</sup> De Vries, Jan. "Measuring the impact of climate on history: The search for appropriate methodologies." In *Climate and history: Studies in interdisciplinary history*, edited by Rotberg, Robert I. and Theodore K. Rabb. Princeton University Press: Princeton, N.J.: 1981, 23.

<sup>3</sup> New Haven: Yale University Press, 2013.

<sup>4</sup> De Vries, Jan: "The crisis of the seventeenth century: The Little Ice Age and the mystery of the 'Great Divergence'." *Journal of Interdisciplinary History* 44.3 (2014): 369-377.

<sup>5</sup> Pfister, Christian. "Fluctuations climatiques et prix céréalières en Europe du XVIe au XXe siècle." *AESC* 43 (1988): 25-53.

<sup>6</sup> Pfister, Christian and Rudolf Brázdil. "Social vulnerability to climate in the "Little Ice Age": an example from Central Europe in the early 1770s." *Climate of the Past* 2 (2006): 115-129.

<sup>7</sup> Pfister, Christian. *Klimageschichte der Schweiz 1525-1860*. Das Klima der Schweiz von 1525-1860 und seine Bedeutung in der Geschichte von Bevölkerung und Landwirtschaft. 2 ed. 2 vols. Bern / Stuttgart, 1985.

<sup>8</sup> Pfister, Christian, Jürg Luterbacher, and Daniel Brändli. *Wetternachhersage. 500 Jahre Klimavariationen und Naturkatastrophen (1496-1995)*. Bern: Haupt, 1999.

<sup>9</sup> Pfister, Christian. "The "1950s Syndrome" and the Transition from a Slow-Going to a Rapid Loss of Global Sustainability." In *Turning Points in Environmental History*, edited by Frank Ükötter. Pittsburgh: University of Pittsburgh Press, 2010, 90-118.