## We the Humanities (/)

(//fade/boidtecom/weth

Home (/) About (/about.html)

tml) Community (/community.html)

Meet Your Curators (/meet-your-curators.html)

For Curators (/for-curators.html)

Contact (/contact.html)

# The Perks And Perils Of Trespassing – The Making Of The Last Alchemist In Paris (Http://Www.wethehumanities.org/Community/-The-Perks-And-Perils-Of-Trespassing-The-Making-Of-The-Last-Alchemist-In-Paris)

3/24/2016 0 Comments (http://www.wethehumanities.org/community/-the-perks-and-perils-of-trespassing-the-making-of-the-lastalchemist-in-paris#comments)

Lars Öhrström's (@Larsohrstrom (https://twitter.com/Larsohrstrom)) popular science book The Last Alchemist in Paris was published by Oxford University Press in 2013, a Spanish edition came out in 2014, the Swedish translation in 2015 and an English pocket book edition was published in late 2015 with the title Curious Tales from Chemistry - The Last Alchemist in Paris and other Stories. A French translation will be out in fall 2016. When he is not making a nuisance of himself in other people's territories, Lars is Head of Programme in Chemical Engineering at Chalmers University of Technology, Gothenburg, Sweden, and does research on Metal-Organic Frameworks, materials that may help us in the transition to green chemistry and green chemical engineering.

It seems sometimes that knowing a lot about a particular subject disqualifies you of writing in other areas, whereas knowing nothing at all authorises you to be opinionated about almost anything. Partly this is in your own mind. Being academically proficient in one area usually, but sadly not always, means that you are aware of the depths of your ignorance in other subjects.

Some eight years ago I sat down to draw out a blueprint for a book that should tell stories about how the chemistry of individual elements of the periodic table had changed, for better or for worse, the courses of ordinary peoples' lives. Several things motivated me; I was sitting on a number of stories where literature and history intersected with chemistry that I would love to tell to a bigger audience, but I also found there was a lack of popular science books in chemistry that actually explained something, as opposed to just telling how things are. So, in short, it was a mixture of pleasure motivation and a pedagogical utility incentive springing from many years of undergraduate teaching that made me embark on this journey.

However, part of the idea was that there would be no scientist, no stories about the discovery of the elements and certainly no science history. What was then left for a chemical scientist to write about? My editor pointed out to me the benefits of having some more chemistry in the stories, adding that "we are, after all, a publisher with certain scientific ambitions" As always, she was right, and the science part got boosted up.

The chemistry was to be the firm ground from where I could make fishing expeditions into history for suitable protagonists and where I could anchor up with a set of characters I had already decided upon. Roughly half of the stories that ended up in *The Last Alchemist in Paris* are there because of a particular chemistry I though needed telling, and the other half because of my particular interests in history, literature and film.

Having no formal education above upper secondary school in any of these latter subjects of course made me somewhat nervous, but I got some very good advice from my editor. The first was to hook all facts firmly to first hand sources and reference them in the text. With any research training, first hand sources and original literature can easily be separated from second hand rewritings and interpretations in most disciplines. I found having to pin-point them with references made my writing and data collection much more meticulous and indeed I avoided a number of embarrassing mistakes. I know some think references in the text should be avoided in a popular science book, and in some cases I would agree; if the author is an authority on her subject that would mostly be fine, and I have very few references to chemical facts. However, I cannot assume being taken at face value on issues such as Parkinson's disease or what Mary Wordsworth thought about touring the Alps in the early 19th century.

The second advice was to avoid stories too close in time, as these are much harder to judge. First of all, crucial pieces of information may be missing because of official or self-imposed secrecy, and secondly deliberate misinformation may be spread by various groups and organisations. Obviously, somebody needs to write about these issues too, but if the point of your book is something else altogether the risks largely outweigh the benefits. Better leave this to someone who is an expert and has channels to non-official information as well as the doggedness and time to pursue them. The same goes for more sensational stuff. If you get it wrong then it may get quite visible and again distract the attention from what you are really trying to say.

Having said that, there were some more controversial stories that needed including, and where I had to dig deeper into the history discipline than I am perhaps formally qualified to do. Did Seretse and Ruth Khama (subject of Amma Asante's movie A United Kingdom (http://www.imdb.com/title/tt3387266/) to be released later this year) get exiled from

### Author

A collection of updates, publications and ideas from thinkers across the humanities.

#### Archives

January 2016 (/community/archives/01-2016) December 2015 (/community/archives/12-2015) November 2015 (/community/archives/11-2015) October 2015 (/community/archives/10-2015) August 2015 (/community/archives/08-2015) May 2015 (/community/archives/05-2015)

### Categories

All (/community/category/all) Academic Generosity (/community/category/acade mic-generosity) ACLS (/community/category/acls) Adjuncts (/community/category/adjunc ts) Call For Blogs (/community/category/callfor-blogs) Curating (/community/category/curatin g) Diarrhoea (/community/category/diarrh oea) ECR (/community/category/ecr) Facebook (/community/category/facebo ok) Factivism (/community/category/factivi sm) Fellowship (/community/category/fellow ship) Fern Riddell (/community/category/fernthe Bechuanaland protectorate because of South African blackmail over a uranium contract? Easy to believe if you just read the more popular stories of this, for some, very inconvenient marriage, but more problematic if you looked up what professional historians wrote in more scholarly texts. In this case, however, I do believe that I found a chemical angle not considered previously. In general, that is also what I did also for other stories; when things seemed dodgy or less clear-cut, I either asked people in the field or went to the original literature.



The neat and tidy kgotla in Serowe where, in 1949, Seretse Khama addressed the Bamangwato tribal court with unforeseen consequences, to be told in Amma Asante's coming movie, A United Kingdom. Photo © Lars Öhrström

As for the story of the SS Flying Enterprise and its mysterious cargo of zirconium, I think I convincingly debunked a persistent conspiracy theory, but interestingly enough found the engineering history behind the creation of the first nuclear powered submarine to be much more fascinating and equally complicated. Here I think I was able to contribute a small piece of original research by email-interviewing, as it turned out just before he died, Theodore Rockwell, technical director to the "Father of the nuclear navy" admiral Hyman Rickover during the development and construction of the USS Nautilus.

Finally I must mention the Napoleon's buttons story (also known as "Napoleon's trousers") where basic fact checking of the historical literature has been sadly lacking, both in chemistry textbooks and popular science books. Here I hit a dead-end after having dug up as many survivor diaries from the 1812 disaster I could find on the internet, and I had not the resources or the know-how to travel around Europe to look for original diaries deposited in university libraries all over the continent. So I had to rely on someone who had already done this, and the author of *1812 Napoleon's Fatal March on Moscow*, Adam Zamoysk, was very helpful. While there was nothing in his book about buttons, he replied promptly to my email with a surprised: "How very interesting" and answered my questions, also agreeing with my conclusion that this was yet another sensational story that could be filed away as a persistent myth.

GTAs (/community/category/gtas) History (/community/category/history ) KCL (/community/category/kcl) Morwenna (/community/category/morwe nna) Past Curator (/community/category/pastcurator) Past & Present (/community/category/pastpresent) PhDs (/community/category/phds) Publication (/community/category/public ation) Teaching (/community/category/teachi ng) THE (/community/category/the) Theology (/community/category/theolo gy) UCL (/community/category/ucl) UCU (/community/category/ucu) Verity Burke (/community/category/verityburke) Vlogs (/community/category/vlogs) YouTube (/community/category/youtub e)

riddell)

RSS Feed (/2/feed)



Professor Rimantas Jankauskas helps in the search for Napoleon's buttons in the storage facility of the Lithuanian National Museum in Vilnius. Photo © Lars Öhrström

In general I found asking people worked well, scholars of different disciplines were happy to provide help and feedback on anything from playwright August Strindberg to the 18th century use of pencils, and even a local CID officer and an ex-prime minister answered my question, the only category not responding being active professionals in the cultural field. But being a scientist I know better than to draw any other conclusions from this other than that people in general are very generous with their time and help. In fact, writing the book gave me access to some very mixed and stimulating company during my stays in a couple of artist-and-writers retreats, and presenting the work in various stages of completion always gave rise to interesting discussions and useful comments. The only odd remark coming from a retired professor of ethnology who expressed surprise that I spoke French as I "was an engineer".

While combining chemistry and history sometimes required hard work, you can be a little less stringent when it comes to literature and film where, after all, everybody is entitled to an opinion. I mix high and low in the book, which is just how I tend to read myself, but I also maintain that even literature that may be considered of less value might actually say important things and be based on sound research of the subject matter.

However, sometimes literature and history intersected, as with author Peter Høeg's idea of a German plan to occupy a Greenland mine during World War II, a sub-plot in *Miss Smilla's Feeling for Snow*, that I could find no trace of in other sources, as well as in the story of Napoleon's buttons. The latter involved two other world famous authors, Lev Tolstoy and Stendhal (Marie-Henri Beyle). In Tolstoy's famous novel *War and Peace* I could find no trace of any tin buttons, and Stendhal, who was there in person as a very prominent administrator in the French army, seems not to mention any tin buttons in his notes from the campaign.

I truly enjoyed the mixture of science and humanities in writing and working with *The Last Alchemist*, but the *melange* can apparently be seen as an aggressive trespassing by some people in some cultural contexts.

While the English edition received only good reviews from non-scientists, the Swedish edition provoked a reviewer in a big daily Swedish newspaper (an expert on alchemy and 18th century pornography) to ridicule the book in a distinctively unprofessional manner. It is a hard to know what set off this reaction, the inclusion of a few high-school level equations were apparently not a hit, and I suspect popular science books in English are allowed to have a somewhat higher intellectual level than what Swedish readers are used to. (But again, this is a guess; I lack data to back it up with other than noting the immense difference in the number of titles published.) The review in Fangirlnation (http://fangirlnation.com/2016/01/26/the-last-alchemist-in-paris-takes-a-tour-of-the-periodic-table/) puts it in a different way: "*The Last Alchemist in Paris* is recommended for those ... willing to take the time to slow down and follow the explanations..."

The cause of the negative reaction might also have been the addition of a chapter on a Swede that really did the most blunt trespassing by dropping out of his chemical engineering career to establish the Swedish Film Institute. Often the early chemical and engineering exploits of Harry Schein (https://en.wikipedia.org/wiki/Harry\_Schein), tennis partner of Prime Minister Olof Palme and associate of four-times Oscar winning director Ingmar Bergman, are dismissed as "he was only in it for the money," whereas I have found that his own words rather forcefully contradict such a notion.

So, I do not really believe in British scientist and novelist C. P. Snow's "Two Cultures", his famous 1959 Cambridge lecture adequately summarised in Wikipedia (https://en.wikipedia.org/wiki/The\_Two\_Cultures) as "Its thesis was 'the intellectual life of the whole of western society' slit into the titular two cultures — namely the sciences and the humanities — and that this was a major hindrance to solving the world's problems.'. Unfortunately there still seems to be people on both sides of this imagined border taking this as a recommendation rather than viewing it as a problem.

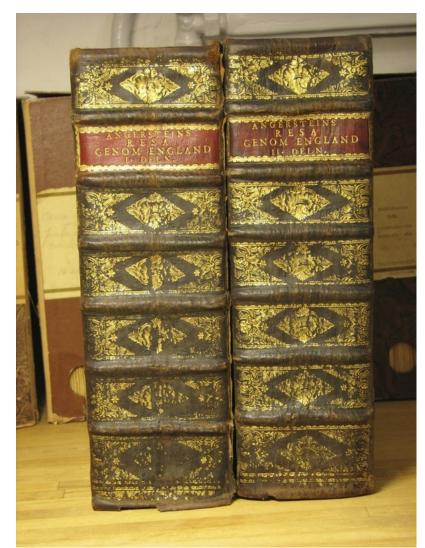
In reality, to understand ourselves and our world and finding ways out of the tight spot we are in, we need to consider and respect all aspects of the human endeavour, which was exactly fellow chemist Snow's point.

While the *The Last Alchemist in Paris* on the whole has a lighter tone, although some chapters deal with serious issues such as the world wide iodine deficiency (800 million people affected), or how to detect brain tumours, it also set off an unexpected side reaction. Since 2015, I teach and develop a Master's-level course called *Resources and Innovations in a Chemical and Historical Context* 

(https://student.portal.chalmers.se/en/chalmersstudies/courseinformation/Pages/SearchCourse.aspx? course\_id=22863&parsergrp=3), as this, completely unplanned, turned out to be a major theme of *The Last Alchemist in Paris*. The course can be taken to fulfil the required credits in the area "Humans, technology and society" needed for an engineering degree from Chalmers University of Technology, and it is a very exciting 1:1 collaboration with Patrik Ekheimer, a PhD in the History of Technology and Industry and a staff member at the Department of Technology Management and Economics.

I have also become conscious about how fast things change, and how difficult it may be to understand history, when key persons have passed away and the documentation is only fragmentary or restricted to official documents that do not always pass on the real reasons for decisions and actions. In my work for the International Union of Pure and Applied Chemistry (IUPAC), I have become closely involved with the confirmation and naming of new elements of the Periodic Table, and it occurred to me that the history of the three letter symbols and number-based names, used as temporary place-holders before the discovery and official naming, had never been told from the Union's perspective. Naming things, and why and how we do this, is of course very humanistic at its core, and as this particular episode of science history saw the Cold War being played out on the Periodic Table, this made it even more interesting. My conversation on this topic with IUPAC veteran and octogenarian Normal Holden can be found in the March 2016 issue of Chemistry International (http://www.degruyter.com/view/j/ci.2016.38.issue-2/ci-2016-0204/ci-2016-0204.xml? format=INT).

The only sad thing about this trespassing activity is that you turn up potential lines of research that you can never follow up. So please, if someone has the time and resources, do write a biography or make an 18th-century costume drama about Mary Bright, marchioness of Rockingham (http://oxfordindex.oup.com/view/10.1093/ref:odnb/68349), who once may have met with Swedish spy Reinhold Angerstein, but who's life is full of other, far more interesting episodes, among these begin close adviser to the UK Prime Minister.



Hand transcribed copies of the illustrated English travel diary of industrial spy Reinhold Angerstein in the library of the Swedish Steel Producers' Association in Stockholm. Perhaps the long lost originals contain more information on his meeting with the marchioness of Rockingham? Photo © Lars Öhrström