Joint proposal to the 2020 SHOT and HSS Annual Meeting, New Orleans, October 7-10, 2020.

Proposal was accepted as F24 for the 2020 conference. Resubmitted only to SHOT for the 2021 conference.

1. Description of the session's theme

Patents as Scientific Information. Four Translations.

Patents represent an especially challenging, important, and rewarding access-point, not only into the formation of the modern intellectual property regime during the twentieth-century, but also as a way to understand the consolidation of information as a valuable commodity during the same time. However, it is perhaps less important whether or not patents actually *do* contain scientific information and more important to understand how and by what means patents circulate and are used as a marker of a certain value.

This panel brings together scholars working in the European Research Council (ERC) funded project "Patents as Scientific Information, 1895-2020," (PASSIM) www.passim.se. All papers consider various aspects of translation in the circulation of patents as scientific information, focusing on different stages ("four moments of translation") or "processes" (and not outcomes) in this circulation. For instance, it is not the patents themselves that are translated but the patents as legal form. Rather than being understood in the literal sense, the panel considers a set of shape-changing translations in the story of patents 'as' documentary processes. Patent documents translate words into claims; microfilms translate patent documents into images; exhibitions translate (flatten) institutions into displays; patents can also be documents through which views of the world are rendered (maps), a world in which forced labor can be translated also into prestigious awards. Translation also works as a metaphor for understanding the processes of interdisciplinary exchange within the project, adding an extra meta-level dimension to the panel as a whole.

2. List of presentations

José Bellido
Patents Translated: Microfilm as a Legal Technology

Focusing on microfilm, the paper investigates the ways in which copying technologies, concepts and practices affected the perception of the role of (and space for) patents: storage, file integrity, duplication costs and the development of patent search centres. Processes of translation not only related to patents, but also to a different configuration of law in relation to the dissemination of **scientific information**.

Mattis Karlsson
Distorted Dimensions in a Patent Document: A (mis)Translation of Earth

Scientific information can be used and abused. Relying on the Buffalo-based inventor and mapmaker Alexander Gleason's patent of a "Longitude and Time Calculator," this paper discusses how the 1892 patent and the accompanying "flat circular map of the world showing the outlines of the several continents," later came to be appropriated by present-day flat earth agitators, resulting in a potential (mis)translation between **images and objects.**

Isabelle Strömstedt
Translating an Institution: the Swedish Patent Office on Display

Images and objects of an institution stands at the center of this paper on the 50th anniversary exhibition of the Swedish Patent and Registration Office in 1941, exploring how the patent office displayed itself and the patent system within a museum space. Translation prefigures here in the dialogue between the patent office and the museum, as well as in the strategies used to celebrate **national inventiveness.**

Johanna Dahlin
Translating the Inventor: Forced Labor as Intellectual Property

National inventiveness can also be the result of forced conditions. In the Soviet Union. Lev Theremin's inventions were translated from music to espionage and put to use by the regime. During the time he was a political prisoner, Theremin's work was also acknowledged and rewarded. This presentation will discuss how he and other prisoners retained some rights to their intellectual labour in these forced conditions.

3. Individual abstracts and CVs.

Patents Translated: Microfilm as a Legal Technology

Jose Bellido, Kent Law School, University of Kent

By the late 1960s, microfilms had become part of the administrative machine of patent offices in order to fulfil reference, copy and search demands. All issued patents in the US Patent Office were on microfilm, as they were a complete set of indexes covering original classifications and cross-references. The orders for copies were made from microfilm copies too. That meant that a patent document running to as many as 8 pages had been reduced to a two-inch rectangle of 35 mm film, mounted in a punched card. Further attempts to introduce microfilms as an essential part of the patent 'examination' process also emerged. Following 'modernization plans' that affected patent offices, the value of microfilm was not –according to some managers- merely in the reduction of patent records. The real savings came from its use as a tool to simplify and advance all patent operations and routines. Microfilm had been acknowledged as a popular medium not only for storage but also for retrieval and processing of patent files. When examiners and readers performed patent thorough searches, patent files 'in use' were not available for others to consult. In other words, both the examiner and the searcher had to do some searching in areas remote from their desks. Microfilms came to be seen as a way to set up circulation policies designed to alleviate such use problems as they permitted simultaneous use of patent files.

Letting each examiner have his own individual file of the patent classes assigned to him sounds like a naïve and obvious characteristic of patent routines, to know what the status of applications might be, it was a significant breakthrough at the time. The National Bureau of Standards went even further, and became interested in the effect of film polarity over patent examiners. Such interest was prompted by the resistance perceived in patent personnel to change the ways in which the office operated. While early attempts to automate the patent office were criticized later by information entrepreneurs for being really primitive, they were however really innovative in their attempt to develop management tools and to create an information system that began to resemble the patent system we have today. For instance, it is here where we can see the 'on demand', fast copy production system and the significant pressure to make files readily available to the public. It is here where an incipient information industry repackaging patent information to provide so-called 'value-added' services emerged. It is here where we can observe patents imagined as a sort of mechanized information, a step before they began to be converted into data. Focusing on the example of microfilms, the paper investigates the ways in which copying technologies, concepts and practices affected the perception of the role of (and space for) patents: storage space, file integrity, duplication costs and the development of patent search centers. The underlying point is that these changes were not only related to patents, but also to a different configuration of law in relation to the dissemination of scientific information.

Jose Bellido

Reader in Law
Kent Law School, University of Kent
Eliot College, Room E3E1-- Canterbury CT2 7NS -- United Kingdom – + 44 (1227) 823310
J.A.Bellido@kent.ac.uk

EDUCATION

- 2009: PhD, Thesis: Copyright Law in Latin America: Experiences of the Making (1880-1910). [University of London] (without amendments).
- 2003: MPhil- (DEA) UNED University, Spain. Thesis: Folklore & Copyright, (Distinction).
- 2002: L.L.M. (Intellectual Property) Queen Mary, University of London, (Distinction)
- 1999: L.L.B. (Universidad Autónoma de Madrid, Spain); Practicum Iuris [1999] (Distinction)

EMPLOYMENT

- 2019-..: Reader in Law, University of Kent. Co-Convenor and lecturer: Intellectual Property (LLB and LLM)
- 2014-2018: Senior Lecturer in Law, University of Kent. Convenor and lecturer: Intellectual Property (LLB and LLM)
- 2009-2014: Lecturer in Law, Birkbeck College, Univ. of London. Convenor and lecturer: Intellectual Property (LLB and LLM); Co-convenor and Lecturer: Tort (LLB and LLM); Convenor and lecturer: Introduction to Comparative Law (LLB).

PUBLICATIONS (selection)

Books

- [in progress] *Adventures in childhood: intellectual property, imagination and the business of play. Under contract* (Cambridge University Press) with Prof Kathy Bowrey.
- *Landmark Cases in Intellectual Property* (Hart, 2017). (Editor)
- *La prueba en el derecho de autor de las obras de arte,* Editorial Trama, Madrid, 2011. With Arroyo and Gómez.

Articles

- 'Experimenting with Law: Brecht on Copyright' *Law and Critique,* 2020.
- 'Lexical properties: Trademarks, dictionaries, and the sense of the generic'. *History of Science* (Special Issue: Technologies of the law / law as technology 2018) pp. 1-30. [with Prof. Alain Pottage].
- 'The constitution of intellectual property as an academic subject' *Legal Studies*, (January 2017) pp. 1-22

Book Chapters

- 'King Features Syndicate v Kleeman'. In: Bellido, Jose, ed. Landmark Cases in Intellectual Property Law. Hart Publishing (2017) pp. 205-230
- 'Sobre la crítica del derecho en el Reino Unido' in Martyniuk, C and Seccia, O (editors) La pasión de la cabeza: Crítica y nostalgia (Prometeo, Buenos Aires, 2016).

Distorted Dimensions in a Patent Document: A (mis)Translation of Earth

Mattis Karlsson, Department of Culture and Society, Linköping University

There is a growing movement of so called "flat earthers", people who are devoted to spreading the idea of a flat disk like shaped earth. This movement relies on an alternate body of "science" and are appropriating information to support a flat world view. This paper seeks to investigate how a patent document and a map related invention can be understood as a textual and two-dimensional translation of earth in order to better understand a use and abuse of patents as a scientific source of information. The Buffalo-based inventor and mapmaker Alexander Gleason patented a "Longitude and Time Calculator" in 1892. The patent includes a figure representing "a flat circular map of the world showing the outlines of the several continents, some of the larger islands […] The paper's point of departure, is the patented device "Gleason's New Standard Map of the World" (1892) and its related patent documents. The Gleason Map is a so called azimuthal equidistant (AE) projection map, a flat surface map of the entire world where all distances are proportionally correct in relation to the center of the map. The Gleason Map has become known as the favored "flat earth" world map, as it has been appropriated by the Flat Earth Society. Thomas Gieryn (1999) has suggested that "Sociologists of science have found lots of stuff that intervenes between reality and map, signified and signifier, object and image, referent and representation, nature and knowledge." Maps are representations of our surroundings; they are images of an object. Such representations demand translation. Similarly, a patent represents a device or an invitation; it is also an image of an object. It demands translation at least twice: one way to be created, and another to be understood. Maps and patents alike demand textual and/or image descriptions. However, no multidimensional object can be portrayed on a flat surface without distortion. The (mis)translation of such a distortion may have dire consequences for the understanding of the portrayed object, i.e., we understand a flat map as portraying a flat earth.

This paper aims to discuss how the Gleason Map and the accompanying patent - as a result of (miss)translation between image an object- came to be appropriated by present-day flat earth agitators.

Mattis Karlsson

Phd Candidate, Department of Culture and Society, Linköping University
Kopparhammaren 7: 535 – Kungsgatan Norrköping -- Sweden – + 46 (705) 533942
Mattis.karlsson@liu.se

EDUCATION

- **Phd Studies, Culture and Society (Tema Q):** *Linköping University 2015-2020 PG*
- **Gender, Intersectionality and Change***: Linköping University 2012 MA*
- **Master of Science, Sociology:** *Lund University 2010 – 2013 MA*
- **Society and Cultural Analysis:** *Linköping University 2007 – 2010 BA*

EMPLOYMENT

- Research Assistant, Patents As Scientific Information (PASSIM) (2017-)
- Phd Student, Division for Culture, Society, Design and Media, Linköping University (2015-)
- University Teacher in Sociology, The Institution for Welfare Studies. Linköping University (BA Level) (2017-)
- University Teacher in Media Studies, Division of Culture, Society, Design and Media. Linköping University, (BA Level) (2016-2019)
- Course coordinator, *The Use (and abuse) of Culture,* LIU Academy: (2018, 2019)
- Board Member, Department for Studies of Social Change and Culture. (2016-2018)
- Equal Opportunities Coordinator, Department for Studies of Social Change and Culture (2015-2017)
- Study Coordinator, Department of Social and Welfare Studies (May 2011 – Aug 2012)
- Conference Organizer, Advanced Cultural Studies Institute of Sweden (ACCIS), Mobilising Cultural Studies, (2017)

PUBLICATIONS and PAPERS

- [in progress] *Discovering Denisova,* (Phd Dissertation supervised by Prof Eva Hemmungs Wirtén)
- "On not being there", (Essay) *Culture Unbound: Journal of Current Cultural Research* 9(3): 342-344: 2017 On not being there; A Conversation on Methodology
- "Inside the Wikibox: Making Denisova Hold", Conference Paper and Research Poster: *AAAS annual meeting 2018*: Advancing Science. Austin, Texas.
- "Narrating Human Evolution", talk: TedXNorrköping 2018. Norrköping, Sweden.

Translating an Institution: the Swedish Patent Office on Display
Isabelle Strömstedt

At the end of 1941, the Swedish Patent and Registration Office organized an exhibition called *Idé - Patent - Produkt* [*Idea - Patent - Product*] at the Swedish National Museum of Science and Technology. The exhibition - a collaboration between the patent office and the museum - was part of the Swedish Patent office 50th anniversary. As an important element in the patent office' overall strategy to appeal for additional funding from the state while simultaneously demonstrating the virtues and advantages of the patent system, the well-visited exhibition was extensively covered in journals and national newspapers. Once displayed in a museum space, patent documents became aestheticized, whereby their legality became attenuated. In the same manner of translation and recontextualization, carefully designed graphs, photographs, murals, and physical objects, were chosen as representations for the patent system and the patent office.

By reconstructing the exhibition using photographs and written descriptions this presentation examines how the patent office was displayed to appeal to, and be understood by, the public. A "reading" (Bal, 1996) of the exhibition's narrative provide an understanding of the political, cultural, and social negotiations that took place in preparation of, and during the exhibition. That employees from the patent office worked closely with the museum to establish and design the exhibition further exemplify the impact they had on shaping the narrative and position the Swedish patent office in a public framework. It also gives insight into their underlying intentions and expectations.

Through a micro-historical study of how the Swedish Patent and Registration office was presented in a public space, this presentation outlines how the patent office, and the patent system, was translated by museum staff. The different narratives visible in the exhibition is described and deconstructed as this presentation seeks to understand the "glass-casing" (Macdonald, 1998) of the Swedish patent office along with the juxtaposition between how the patent office wished to present themselves, and how they were presented by others.

Isabelle Strömstedt

Ph.D. Candidate, Department of Culture and Society, Linköping University
Kopparhammaren 7: 542 – Kungsgatan Norrköping -- Sweden – + 46 (11)363021
isabelle.stromstedt@gmail.com

EDUCATION

- **Culture and Society (Tema Q):** *Linköping University 2018-2023 PG*
- **Culture and Media Production***: Linköping University 2015 MA*
- **Culture, Society and Media Production:** *Linköping University 2009 – 2012 BA*

EMPLOYMENT

- Phd Student, Division for Culture, Society, Design and Media, Linköping University (2018-)
- Board Member, Department for Studies of Social Change and Culture (2019-)
- Moderator, SACO student fair. Stockholm, Sweden (2019)
- Teaching: Media and Communication studies, Summer Academy: The Use and Abuse of Culture, Culture, Society and Media Representation, Linköping University (2018-)
- Grand Marshall at Linköping University's Doctor's Promotion (2016-2017)

PUBLICATIONS and CONFERENCE PRESENTATIONS/TALKS

- [in progress] *The Patent Office on Display: Intellectual Property in the Public Eye,* (Phd Dissertation supervised by Prof Eva Hemmungs Wirtén)
- "Celebrating Patents: the Swedish Patent Office's Jubilee Exhibition of 1941", conference presentation. ISHTIP 2019: Intellectual Property and the Visual. Sidney, Australia
- "The Swedish genius - Exhibiting the Swedish Patent Office during the 1940s", talk: TedXNorrköping 2019. Norrköping, Sweden.
- "The Display of Innovation at the 1939 New York World's Fair", conference presentation. Aboagora 2018: Burden/Skuld. Turku, Finland
- "En bild säger mer än tusen ord", (Essay) *Ett Humanistiskt Manifest,* 2017: Göteborgs Universitet
- " The Transformation of Knowledge and its Representation in Contemporary Crime Drama", conference presentation. 37th annual SWPACA conference, 2016. Albuquerque, US.

Translating the Inventor: Forced Labour as Intellectual Property
Johanna Dahlin

In 1947 Soviet inventor Lev Theremin (Termen) was awarded the Stalin prize. Theremin is famous as the creator of the termenvox or theremin, an early electronic music instrument, but the prize recognized his work with the *buran* (snowstorm) eavesdropping system. The Stalin Prize was the most prominent scientific award in the Soviet Union 1941–1954, and served as a 'glass-case' (Macdonald 1998) showcasing the achievement but also hiding the work behind it. While the prize in Theremin's case was not publicised due to the secret nature of the inventions, it is also glossed over the fact that Theremin developed the prized inventions as a prisoner.

As one of many victims of the Soviet Great Terror, Theremin was arrested in 1939. At the time, he was recently returned from a decade in the US. Theremin initially served in the infamous Gulag camp in Kolyma before he was transferred to a secret research and development laboratory in Moscow. These workshops known as *sharashki* were a special institution in the Gulag system. Here, scientists and specialists were incarcerated in special facilities and as prisoners worked under close guard supervision.

Compared to ordinary camps, life in the *sharashka* was a privileged existence with better food and absence of hard physical labour. An entire generation of scientists served in the *sharashki*, and this cast a long shadow on Soviet science and engineering, especially branches connected to the defence industry (Siddiqi 2015). In the TsKB-29 workshop Theremin served with among others aircraft designer Andrei Tupolev and Sergei Korolev who later became a key figure in the Soviet space program. While the credit for work done by inmates was often taken by others, it was also possible for the specialists working in the *sharashki* to be acknowledged as inventors and to receive patents and/or Soviet inventor's certificates for their work. The ultimate reward, of course, was freedom.

While the TsKB-29 was one of the most famous *sharashki*, little is known about the details of Theremins work here. The years in prison often appear as a gap in his biography, lost years, always mentioned, but rarely treated in works on his life. In goes famous inventor and musician, out comes a Stalin prize winner and espionage technician. This presentation will attempt to unpack the black-box of the *sharashka*, and see how Theremin's skills and knowledge were put to use and translated from music to espionage.

However, Theremin's inventions had been translated in the service of the communist party, and to US patents, in the 1920-30ies. Theremin was probably involved with the Soviet secret service already then, and continued to work with the KGB after his 1947 release. Scientists and inventors in the Soviet Union always operated under some constrains, but this turned extreme as an inmate under guard. Despite this, Theremin and other prisoners retained some rights to their intellectual labour in these forced conditions. Successful work was acknowledged, and rewarded. Even with the most prestigious state prizes.

Johanna Dahlin

Assistant Professor
Department of Culture and Society, Linköping University
Kopparhammaren, Room KH 544, 601 74 Norrköping, Sweden + 46 11 36 34 12
johanna.dahlin@liu.se

EDUCATION

- 2012: PhD, Thesis: *Until the Last Fallen Soldier is Buried: The Second World War, Remembrance and Community in St Petersburg and Leningrad oblast* (Culture Studies, Linköping University, Sweden)
- 2006: Master of Philosophy in Social Anthropology (University of Oslo, Norway).
- 2004: Degree of Bachelor of Science in Social Anthropology and International Relations (University of Gothenburg, Sweden)

EMPLOYMENT

- 2019– Assistant professor in culture and society, Linköping University, Sweden
- 2016–2019 Post-doctoral fellow at Department of Culture and Education, Södertörn University, Sweden
- 2014–2016 Post-doctoral fellow at Department of Social Change and Culture, Linköping University, Sweden

TEACHING

- 2008–2020: Convenor and lecturer in social anthropology, Linköping university (including the units People on the move: conflict and accommodation (7,5 ECTS), The economic human being: cultural perspectives on money, objects and status (7,5 ECTS), and Social Anthropological Perspectives on Human Situatedness (7,5 ECTS), Power, Memory, Resistance (7,5 ECTS), and supervision of undergraduate thesis work).
- 2018-2020 Convenor and lecturer on the Master´s Programme in Creative Media Practice and Studies of Society, Linköping university.

PUBLICATIONS (selection)

- "Now you have visited the war: the search for fallen soldiers in Russia" in Frihammar & Silverman (eds) *Heritage of Death* (Routledge, 2018)
- "Labour of Love and Devotion: the Search for the Lost Soldiers of Russia" in Smith, Wetherell & Campbell (eds.) *Emotion, Affective Practices and the Past in the Present* (Routledge, 2018)
- Extracting the Commons, *Cultural Studies* vol 30 (2017, with Martin Fredriksson)
- "On not being there", (Essay) *Culture Unbound: Journal of Current Cultural Research* 9(3): 342–344: (2017, with Mattis Karlsson)
- "'No one is Forgotten, Nothing is Forgotten': Duty, Patriotism and the Russian Search Movement", *Europe-Asia Studies*, vol 69 (2017), 1079-1089.

4. CV for the session organizer: Please see current page (11)
5. CV for the Chair: Please see current page (11).

Eva Hemmungs Wirtén

Professor

Department of Culture and Society, Linköping University
Kopparhammaren, Room KH 534, 601 74 Norrköping, Sweden + 46 700 89 60 50
eva.hemmungs.wirten@liu.se

EDUCATION

- 1998 PhD Comparative Literature, Department of Literature, Uppsala University, Sweden.
- 1987 BA Kulturvetarlinjen [Study Program in Humanities], Stockholm University, Sweden.

CURRENT EMPLOYMENT

- 2014- Professor in Mediated Culture at the Division Culture and Society [Tema Q], Department of Culture and Society, Linköping University, Sweden.

MAJOR GRANTS AND COLLABORATIONS

- 2017-2022. ERC (European Research Council). € 2.3 mil for the project "Patents as Scientific Information, 1895-2020" (PASSIM). ERC-AdG-741095. www.passim.se
- 2010-13. HERA (Humanities in the European Research Area). €166,542 for the project "Science and Innovation as European Cultural Heritage: The Intellectual Properties of Marie Curie." Swedish partner in CULTIVATE [Copyrighting Creativity: Creative Values, Cultural Heritage Institutions and Systems of Intellectual Property] total award 1 mil €.

PUBLICATIONS (selection)

Books

- *Making Marie Curie: Intellectual Property and Celebrity Culture in an Age of Information* Chicago*:* The University of Chicago Press, 2015. Paperback published 2016.
- *Terms of Use: Negotiating the Jungle of the Intellectual Commons.* Toronto: University of Toronto Press, 2008.
- *No Trespassing: Authorship, Intellectual Property and the Boundaries of Globalization*. Toronto: University of Toronto Press, 2004.

Articles

- "How Patents Became Documents, *or* Dreaming of Technoscientific Order, 1895-1937," *Journal of Documentation*, 2019. DOI: https://doi.org/10.1108/JD-11-2018-0193
- "The Pasteurization of Marie Curie: A (Meta)Biographical Experiment." *Social Studies of Science* 45 (4), 597-610, 2015.

Book Chapters

- "Swedish Fansubbers Call Off Strike! Fan-to-Fan Piracy, Translation, and the Primacy of Authorization." In *Amateur Media: Social, Cultural and Legal Perspectives*. Eds. Dan Hunter, Ramon Lobato, Megan Richardson and Julian Thomas. Routledge, 2012, 125-136.
- "Of Plants, Pills, and Patents: Circulating Kno wledge," In *Intellectual Property and Emerging Biotechnologies*, eds. Matthew Rimmer and Alison McLennan. Edward Elgar, 2012, 39-61.