

CV Flora Schilt

Name: Flora Cecilia Schilt

Nationality: Dutch

Education

08.11.2014-2022: PhD at the Institute for Archaeological Sciences, University of Tübingen. Supervisors: Christopher E. Miller, Jessica C. Thompson, and Nicholas J. Conard. Project title: "*A Geoarchaeological Investigation of Late Pleistocene physical environments and impacts on prehistoric foragers on the ecosystem in northern Malawi and Austria*", funded by the German Research Foundation. Defense on October 28th, 2022.

01.10.2009-05.12.2011: Master of Science in archaeological sciences, geoarchaeology, at the University of Tübingen, Faculty of Science, Institute for Archaeological Sciences. Title of thesis: "*Micromorphology of Upper Paleolithic and historic sediments from Boof Cave, Iran*". Supervisors C. E. Miller and N. J. Conard.

01.09.2006-25.08.2009: Bachelor of Arts in Archaeology at the University of Leiden, Netherlands.

01.10.2004-27.11.2006: Master of Arts at the Mozarteum University in Salzburg, Austria (summa cum laude).

01.04.2004-30.09.2004: Studies in Archaeology at Ludwig-Maximilian University (LMU), Munich, Germany, while working and living in Salzburg, Austria.

01.10.2000-29.01.2004: Bachelor of Arts at the Mozarteum University in Salzburg, Austria.

01.09.1999-29.08.2000: Propedeutic exam in European Archaeology at the University of Amsterdam, Netherlands.

Professional Experience

01-09-2021-31-08-2023: contract at the University of the Algarve through a **Marie Curie individual fellowship** (Horizon 2020 of the European Commission) at the Interdisciplinary Centre for Archaeology and the Evolution of Human Behavior, ICArEHB) in Portugal. Project titled "Pyrotechnologies of Middle and Later Stone Age foragers in central Africa: a micro-contextual approach – MicroAsh". Supervisor: Dr. Vera Aldeias.

01.09.2020-present: **Researcher and geoarchaeological technician** in the project "Neanderthals and early modern humans Pyrotechnology – FLAME: traces of Fire: Learning from Archaeological Microstratigraphic Evidence", University of Algarve.

19.02.2020-06.03.2020: Freelance work in **commercial archaeology**.

09.04.2018-30.11.2018: **Researcher** at Senckenberg Gesellschaft für Naturforschung.

2012-2017: Various jobs as academic assistant at the University of Tübingen. Including teaching through ESIT – Erfolgreich Studieren in Tübingen, Introduction to Scientific Archaeology – Geoarchaeology and Archaeometry.

2004-2019: In between academic appointments I worked part-time as a professional musician, primarily in Camerata Salzburg Chamber Orchestra (Austria).

Publications

Peer-reviewed

- 2022 **Schilt**, F.C., Miller, C.M., Wright, D.K., Mentzer, S.M., Mercader, J., Moss, Choi, J.-H., Siljedal, G., Clarke, S., Mwambwiga, A., Thomas, K., Barbieri, A., Kaliba, P., Gomani-Chindebvu, E., Thompson, J.C. Hunter-gatherer environments at the Late Pleistocene sites of Bruce and Mwanganda's Village, northern Malawi. *Quaternary Science Reviews* 292, 15 September 2022, 107638. <https://www.sciencedirect.com/science/article/pii/S0277379122002694>
- 2022 Burke, A., Bisson, M., **Schilt**, F., Tolan, S., Drapeau, M., Aleman, J., Peros, M. The archaeological potential of the northern Luangwa Valley, Zambia: the Luwumbu basin. *bioRxiv* 2022.05.18.492447; doi: <https://doi.org/10.1101/2022.05.18.492447>
- 2022 Lipson, M., Sawchuck, E.A., Thompson, J.C. et al. Ancient DNA and deep population structure in sub-Saharan African foragers. *Nature*. <https://doi.org/10.1038/s41586-022-04430-9>
- 2021 Thompson, J.C., Wright, D.K., Ivory, S.J. et al. Early human impacts and ecosystem reorganization in southern-central Africa, *Science Advances*, 7(9776):1–13. <https://advances.sciencemag.org/content/7/19/eabf9776>
- 2019 Nightingale, S., **Schilt**, F.C., Thompson, J.C., Wright, D.K., Forman, S., Mercader, J., Moss, P., Clarke, S., Itambu, M., Gomani-Chindebvu, E., Welling, M. Late Middle Stone Age Behavior and Environments at Chaminade I (Karonga, Malawi). *Journal of Paleolithic Archaeology* 2-3:258-397. <https://doi.org/10.1007/s41982-019-00035-3>
- 2017 **Schilt**, F.C., Verpoorte, A., Antl, W. (2017). Micromorphology of an Upper Paleolithic cultural layer at Grub-Kranawetberg, Austria. *Journal of Archaeological Science: Reports* 14:152-162. <http://dx.doi.org/10.1016/j.jasrep.2017.05.041>
- 2017 Wright, D.K., Thompson, J.C., **Schilt**, F.C., Cohen, A., Choi, J.-H., Mercader, J., Nightingale, S., Miller, C.E., Mentzer, S.M., Walde, D., Welling, M., and Gomani-Chindebvu, E. (2017). Approaches to Middle Stone Age landscape archaeology in tropical Africa. Special issue *Geoarchaeology of the Tropics of Africa*. *Journal of Archaeological Science* 77:64-77. <http://dx.doi.org/10.1016/j.jas.2016.01.014>

Conference presentations

- 2021 **Schilt**, F.C. Wright, D., Thompson, J., Miller, C., Mentzer, S., Gomani-Chindebvu, E., Kaliba, P. From wetland to terrestrial landscape: interpretation of open-air MSA sites in Malawi using micromorphology and stable isotopes of pedogenic carbonates. Presentation at the conference of the Society of Africanist Archaeologists (SafA), postponed and held online 14 September 2021.
- 2021 **Schilt**, F.C., Aldeias, V., Thompson, J., Wright, D., Kaliba, P.M. A micro-contextual approach to pyrotechnologies of Middle and Later Stone Age foragers in central Africa. Presenting the new MicroAsh project. Poster presented at the conference of Developing International Geoarchaeology (DIG), May 2021.
- 2020 Bertacchi, A., Cerezo-Roman, J., Thompson, J., Stock, J., Kennett, D., **Schilt**, F., Gomani-Chindebvu, E. A Partial Cremation from the Later Stone Age of Northern Malawi. Paper to be presented at the American Association of Physical Anthropologists (AAPA) Annual Meeting, Los Angeles, CA.

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- 2018 Nightingale, S., Thompson, J., Davis, J., **Schilt**, F. and Choi, J.-H. Evaluating the Effects of Human Disturbance on Middle Stone Age Surface Finds from Northern Malawi. Paper presented at the 83d Annual Meeting of SAA in Washington, United States.
- 2018 Thompson, J., Zipkin, A. Wright, D., Ambrose, S. and **Schilt**, F. Out with a Whimper or a Bang? Hunter-Gatherer Response to the End of the African Humid Period in Northern Malawi. Paper presented at the 83d Annual Meeting of the Society for American Archaeology in Washington, United States.
- 2018 Wright, D.K., Thompson, J.C., Ivory, S.J., Welling, M., Choi, J.-H., Cohen, A., **Schilt**, F.C., Heimsath, A., Arrowsmith, R.J., Mentzer, S.M., Miller, C.E., Gomani-Chindebvu, E. Large-Scale Anthropogenic Landscape Change in the Middle Stone Age of Malawi. Paper presented at Paleo-anthropology Society Meeting in Austin, USA.
- 2017 Thompson, J., Morris, A., **Schilt**, F., Zipkin, A., Sirak, K. The Forgotten Significance of the Later Stone Age Sites near Hora Mountain, Mzimba District, Malawi. Paper presented at the 82d Annual Meeting of the Society for American Archaeology in Vancouver, Canada.
- 2016 Barbieri, A., **Schilt**, F.C. Integrating Scales: micro to landscape. Paper presented at The Geoarchaeological Laboratories Network, Cambridge 26-27 January.
- 2016 Nightingale, S., Thompson, J.C., Mackay, A., Schilt, F.C., Gomani-Chindebvu, E. Is innovation always the solution? Examining non-specialized lithic technologies of the Malawian Middle Stone Age. Presented at the 81st Annual Meeting of the Society for American Archaeology, Orlando, Florida. 2016 (tDAR id: 403441).
- 2016 Thompson, J.C., Mackay, A., Nightingale, S., **Schilt**, F.C., Wright, D. The central African Middle Stone Age in context: Comparisons of technological adaptations. Presented at the 81st Annual Meeting of the Society for American Archaeology, Orlando, Florida. 2016 (tDAR id: 403438).
- 2015 **Schilt**, F.C., Mentzer, S.M., Wright, D.K., Thompson, J.C., Miller, C.E., and Gomani-Chindebvu, E. Reconstruction of the formation of iron-manganese nodule accumulations associated with Middle Stone Age artefacts in a lateritic profile in northern Malawi. Paper presented at Developing International Geoarchaeology meeting 2015 at Sassari University, Alghero, Sardinia.
- 2015 **Schilt**, F.C., Mentzer, S.M., Wright, D.K., Choi, J.-H., Thompson, J.C., Miller, C.E., and Gomani-Chindebvu, E. Micromorphology of Middle to Later Stone Age sites at Mwanganda's Village, northern Malawi. Paper presented at Society for American Archaeology meeting in San Francisco.
- 2015 **Schilt**, F.C., Mentzer, S.M., Wright, D.K., Thompson, J.C., Miller, C.E., and Gomani-Chindebvu, E. Micromorphology of Middle to Later Stone Age sites in northern Malawi. In Paleoanthropology Society Conference, A30. San Francisco, California, USA: PaleoAnthropology 2015.
- 2015 Nightingale, S., **Schilt**, F.C., Thompson, J.C., Davis, J.B., Wright, D.K., Choi, J.-H., and Gomani-Chindebvu, E. Lithic technologies of the Malawian Middle Stone Age: building a chrono-spatial framework for early modern human behavior in central Africa. In Paleoanthropology Society Conference, A21. San Francisco, California, USA: PaleoAnthropology 2015.
- 2014 **Schilt**, F.C., Mentzer, S.M., Wright, D.K., Choi, J.-H., Thompson, J.C., Miller, C.E., and Gomani-Chindebvu, E. Micromorphology of Middle to Later Stone Age sites at Mwanganda's Village, northern Malawi. Poster presented at meeting StEve 2014, Tübingen.
- 2013 **Schilt**, F.C., Mentzer, S.M., Wright, D.K., Thompson, J.C., Miller, C.E., and Gomani-Chindebvu, E. Micromorphology of the site of Mwanganda's Village Area I, northern Malawi. Paper presented at the Developing International Geoarchaeology conference and the International Workshop on Archaeological Soil Micromorphology (WASM), Basel, Switzerland.

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- 2013 Thompson, J.C., Zipkin, A., Nightingale, S., Wright, D.K., Choi, J.-H., Mackay, A., Welling, M., **Schilt**, F.C., and Gomani-Chindebvu, E. New Discoveries of Old Sites: The Legacy of J. D. Clark in Karonga, Malawi. Poster presented at the Paleoanthropology Society conference, Honolulu, Hawaii, USA. Abstract: PaleoAnthropology 2013: A36.
- 2013 Thompson, J.C., Welling, M., Wright, D.K., **Schilt**, F.C., Mentzer, S.M., Bravo Foster, M., Robinson, S., Mackay, A., Nightingale, S. Forman, S., and Gomani-Chindebvu, E. The Later Pleistocene Archaeological Landscape of Karonga, Malawi. Paper presented at the 78th annual Society for American Archaeology conference, Honolulu, Hawaii, USA.
- 2011 **Schilt**, F.C., Heydari-Guran, S., Ghasidian, E., Miller, C. E., and Conard, N.J. Micromorphological Analysis of the Early Upper Palaeolithic Cave Site of Ghar-e Boof, Iran. Poster presentation at the 8th annual meeting of the German Working Committee for Geoarchaeology (Arbeitskreis für Geoarchäologie) in Heidelberg, Germany.
- 2010 **Schilt**, F.C., Heydari-Guran, S., Ghasidian, E., Miller, C.E., and Conard, N.J. Micromorphology of Ghar-e Boof (poster). In Steguweit, L. Proceedings of the 52nd annual meeting of the Hugo Obermaier Society for Quaternary Research and Archaeology of the Stone Age.

Unpublished reports

- 2017 Thompson, J.C., Nightingale, S., **Schilt**, F.C., Mackay, A., Zipkin, A., Welling, M., Choi, J.-H., Mercader, J., and Gomani-Chindebvu, E. "Malawi Earlier-Middle Stone Age Project and Malawi Ancient Life-ways and Peoples Project"- 2016 Project Report. Unpublished report submitted to Malawi Department of Antiquities.
- 2015 Thompson, J.C., Nightingale, S., **Schilt**, F., Davis, J., Zipkin, A., Mackay, A., Welling, M., Wright, D., Choi, J.-H., Miller, C., Mentzer, S., Mercader, J., and Gomani-Chindebvu, E. "Malawi Earlier-Middle Stone Age Project – 2014 Project Report". Unpublished report submitted to Malawi Department of Antiquities.
- 2014 Thompson, J.C., Nightingale, S., **Schilt**, F.C., Wright, D. K., Zipkin, A., Mackay, A., Miller, C.E., Welling, M., de Moor, V. Choi, J.-H., Mentzer, S. M., and Gomani-Chindebvu, E. "Malawi Earlier-Middle Stone Age Project – 2013 Preliminary Project Report". Unpublished report submitted to Malawi Department of Antiquities.
- 2013 Thompson, J.C., de Moor, V., **Schilt**, F. C., Mentzer, S. M., Bravo Foster, M., Robinson, S. Nightingale, S., Mackay, A., Zipkin, A., Wright, D. K., Welling, Malijani, M. O. & Gomani-Chindebvu, E. "Malawi Earlier-Middle Stone Age Project – 2012 Preliminary Project Report". Unpublished report submitted to Malawi Department of Antiquities.

Other

- 2009 Schilt, F.C. Paradigms Lost: A reflection on "Out of Africa I" and the initial colonisation of Asia, 1983-2008, Interview with Robin W. Dennell. In: Ietswaart, A. and Scherjon, F. (eds.) Humans on the Move, Graduate School of Archaeology occasional papers 1: 38-43.

Field Experience

- 2022: Geoarchaeological and archaeological fieldwork in the Mzimba District and Nyika Plateau in Malawi (four weeks).
- 2020: Freelance work at archaeological excavations for ERA Arqueologia, Lagos, Portugal (two months).

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- 2019: Geoarchaeological fieldwork in the Upper Luangwa Valley near Sitwe, Zambia (three weeks).
- 2019: Geoarchaeological and archaeological fieldwork in the Mzimba District, Malawi, and in Sitwe, Zambia (four weeks).
- 2017: Geoarchaeological fieldwork in the Mzimba District, Malawi (six weeks).
- 2016: Geoarchaeological fieldwork and survey in Karonga, Nyika and Mzimba areas, Malawi (two months).
- 2014: Geoarchaeological fieldwork in Karonga, Malawi (seven weeks).
- 2013: Survey and excavations in Megalopolis Lignite Mine, Greece (one month).
- 2013: Archaeological and geoarchaeological fieldwork in Karonga, Malawi (one month).
- 2012: Geoarchaeological field work in Karonga, Malawi (one month).
- 2011: Flotation of botanical remains, lab work ,and excavation at the Middle Stone Age Site of Sibudu Rockshelter, South Africa (six weeks).
- 2009: Excavating at the Lower-Middle Paleolithic site of Schöningen, Germany (two months).
- 2008: Measurement training (Total Station and GIS AutoCad) and excavating at Middle Paleolithic site of Neumark-Nord, Germany (two months).
- 2007: Geomorphological investigation and coring around the city of Aardenburg (Netherlands). to reconstruct 13th and 17th century old city walls to advise the municipality on the planning of a nature reserve (desk research and 2 weeks of fieldwork).
- 2007: Excavation of a provincial Roman site in Naaldwijk, Netherlands (three weeks).
- 2000: Merovingian-Karolingian site at Kootwijk, Netherlands with the University of Amsterdam (two weeks).

Funding as PI

01-09-2021-31-08-2023: **Marie Curie individual fellowship** for project titled "Pyrotechnologies of Middle and Later Stone Age foragers in central Africa: a micro-contextual approach – MicroAsh". **147,815.04 EURO** (143,906 USD).

Funding as Research Team Member

01.01.2023–12.31.2024: **National Geographic Society** grant for SHARP - Testing hypotheses on the transition from Neanderthals to H. sapiens at the Paleolithic site of Sesselfelsgrotte with Alvis Barbieri. **96,021.00 USD**.

2019-31.03.2021: out of a Research Team Support Program grant (Les Fonds de recherche du Québec – Société et culture, FRQSC) to Ariane Burke for fieldwork in the Luangwa valley, Zambia. **14,000.00 CDN** (USD 10322.41).

01.07.2014-30.06.2017: **German Research Foundation** grant for my PhD research (DFG, MI 1748/3-1, MI 1748/1-1, and ME 4406/1-1). Project title: "A Geoarchaeological Investigation of Middle Stone Age Human Response to Environmental Change on the Shores of Lake Malawi". With Christopher Miller and Susan Mentzer. **176,820 EURO** (173,319 USD).

Ask Jess

Awards

2014 **Best poster**-award at StEvE meeting 2014, Tübingen University, Germany.

Teaching Experience

2021-2022: Lectures (for PhD students) on “Human Impact on Ecosystems” in the course series of Alvis Barbieri on “Environmental Changes, Human Behavior, and the Preservation of Cultural Heritage”, University of the Algarve, Portugal.

2021: Lecture (for PhD students) on “Soils and Preservation in Prehistoric open-air sites and Tropical Environments” in a course on “Site formation Processes” by Vera Aldeias, University of the Algarve, Portugal.

2018: Teaching and organization of materials for “Case Studies in Micromorphology” seminar, with Christopher Miller, Tübingen University, Germany.

2018: Module Introduction to Scientific Archaeology: Stratigraphy and Dating for bachelor students (within a course series of Christopher Miller, Tübingen University, Germany)

2017-2019: Modules in Introduction to Geoarchaeology for bachelor students (within a course series of Prof. Miller, Tübingen University, Germany).

2013-2015: Development and teaching during two semesters of the full module “Scientific Research” for master students with Dr Stahlschmidt at Tübingen University.

2013: Assisting Christopher Miller in training sessions for micromorphology (Übung) in his course “Introduction to Micromorphology” for master students, Tübingen University, Germany.

2012: Tutor in the laboratory training for “Introduction to Scientific Archaeology – Geoarchaeology and Archaeometry” for bachelor students, a course by Christopher Miller, Tübingen University, Germany.

2004-2006: Teaching assistant (violin) of Professor Mumelter at the Mozarteum University Salzburg, Austria.

Professional memberships

2020-present: Society of African Archaeologists (SAfA).

2014-2016: Society for American Archaeology (SAA).

since 2010: Hugo Obermaier Society for Quaternary Research and Archaeology of the Stone Age.

2009-2021: Society for Prehistory of the Prehistory Museum in Blaubeuren, Germany (GFU).

Languages

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Dutch (mother tongue); English and German (fluent); Italian, French and Portuguese (basic skills).

I have followed a course in scientific writing with Sharon Higby at the University of Tuebingen (2016): "Scientific Writing Improvements: Learning the Moves that Matter".

Synergetic activities

Organization of the Fourth **Virtual Micromorphology Meeting (ViMi)** to be held from Faro April 26th and 27th, 2023.

Organization of an interactive **workshop for high school students** on the use of fire in prehistory and how we investigate pyrotechnologies using the microscopic record within the framework of the "Programa Cientificamente Provável", an initiative of the Portuguese national funding agency for science research and technology (FCT) and the Portuguese network of school libraries (RBE). To be held in March 2023.

Participation with colleagues from the Interdisciplinary Centre for Archaeology and the Evolution of Human Behavior (ICArEHB) at the **international science festival "Festival Internacional de Ciência (FICA)"** in Oeiras, Portugal, with interactive games, information stands, and presentations on different aspects of archaeology and geoarchaeology, 12-17 October 2021.

Work in collaboration with Vera Aldeias and Shannon McPherron on an **online database** which hosts some project results from FLAME – Fire among Anatomically Modern Humans and Neandertals as revealed from Archaeological Microstratigraphic Evidence. <https://paleofire.eu>. 2021, ongoing.

Production of a **reference collection of marine resources in thin section**, consisting of ca. **30 marine mollusk and bivalve species** collected from lagoons and beaches near Faro, Portugal. The resulting thin sections are available to researchers interested in marine resources, for example when studying shell middens (2021-2022).

Organization of the conference of **Developing International Geoarchaeology (DIG)**, including production and publication of a program and book of abstracts, and moderating sessions. <https://dig2021.icarehb.com/wp/>. May 2021.

Assisting in text-writing and development of an **interactive exhibition** by Alvis Barbieri "**Hidden landscapes of the Ice Age: science to experience and touch**", held September 2017-January 2018 at the Prehistory Museum in Blaubeuren, Germany, for people of all ages on the outcomes of a geoarchaeological project and the workings of geophysical and microscopic techniques. <https://www.facebook.com/eiszeitall/>, <https://www.pressreader.com/germany/schwaebische-zeitung-ehingen/20181026/282342565830486>

Guiding a lab tour for high school students to give them an introduction to geoarchaeology: "Schnupperstunde" (German for "trial lesson"). 2015.

Techniques and skills

Use of petrographic microscope, stereo microscope, cathodoluminescence microscopy, and fluorescence microscopy.

Micromorphology and sample collection for various methods (OSL, pollen, phytoliths, geochemistry).

Processing of micromorphological samples including impregnation and cutting.

Use of hand-held XRF (HHXRF S1 TITAN Bruker), course followed on November 4th, 2021.

Micro- FTIR.

