

# Curriculum vitae

## Personal information

Catherine Willems, ° November 6, 1971, Belgium.

<https://orcid.org/0000-0001-8565-764X>

[www.futurefootwearfoundation.com](http://www.futurefootwearfoundation.com)

## Education

- 2009 - 2015 PhD in Visual Arts, Ghent University (BE) (15.09.2015) *The birth of feet, the rebirth of footwear. Design, Anthropology, Biomechanics* (supervisors: D. De Clercq, K. D'Août, G. Stassijns, D. Van Gogh; jury: T. Ingold, R. Pinxten, K.Verhaert, P. Roosen)
- 1998 Certificate in design, modelling and pattern making of footwear - Ars Sutoria Milano (Italy)
- 1995 Professional degree in shoe making and repairing - Brucemo Brussels (Belgium)
- 1994 - 1995 Specialized master in Cultural Studies - Universitat Autònoma de Barcelona (Spain)
- 1990 - 1994 Master in Comparative Cultural Studies - Ghent University (Belgium)

## Current positions

- 2023 - 2025 UKRI (United Kingdom Research Institute Grant), Biomechanical and anthropological impact of footwear (DynPadAge), 10% position as co-investigator, University of Liverpool (UK)
- 2022 - 2028 Advanced Research Grant (30%), Department of Design, KASK & Conservatorium, HOGENT (BE)
- 2022 - 2024 PI Future Footwear 2.0 (20%), Department of Design, KASK & Conservatorium, HOGENT (BE)
- 2019 - present Tenured Lecturer (50%), Department of Design, KASK & Conservatorium, HOGENT, (BE)
- 2017 - present Founding director of Future Footwear Foundation, externally funded
- 2016 - present Honorary Lecturer, University of Liverpool (UK)

## Previous positions

- 2020 - 2022 PI, 3D2WALK (50%), IOF, Industrial Research Fund, Ghent University, HOGENT, University of Applied Sciences and Arts (BE)
- 2016 - 2019 PI research project 'Future Footwear 2.0' (70%), Department of Design, KASK & Conservatorium, HOGENT (BE)
- 2016 - 2017 Consultant for Soul of Africa, London (UK), high quality barefoot shoes, Addis Ababa (E)
- 2009 - 2015 PhD in the arts at HOGENT, University College Ghent, (BE)
- 2013 Visiting doctoral researcher Aberdeen, Dept. Social Anthropology, Prof. Tim Ingold (03/04-2013)
- 2003 - 2019 Part time lecturer, Dept. of Design, KASK & Conservatorium, HOGENT (BE)
- 2005 - 2009 Founder and designer of a brand of handmade summer footwear collections for children in collaboration with Toehold Artisans, India (IN).
- 2004 - 2005 Founding member of the Footwear Department, Fine Arts Academy Sint-Niklaas (BE)
- 1999 - 2004 Freelance footwear designer for several brands and fashion designers
- 1996 -1998 Researcher project 'Art & Education', Centre for Intercultural Education, Ghent University

## Grants, fellowships and awards

2023 - 2025	UKRI (United Kingdom Research Institute Grant), Biomechanical and anthropological impact of footwear (DynPadAge), University of Liverpool (UK)
2022 - 2028	Advanced Research Grant, (30% position), KASK & Conservatorium, HOGENT (BE)
2019 - 2023	Project: On weaving migrating heritage. PI: Catherine Willems, PhD researcher: Sofie Verclyte, KASK & Conservatorium, HOGENT (BE)
2022	FWO grant for a long stay abroad at the Diné College and Archaeological Center, Four Corner Region, US
2020 - 2022	Start TT-project, 3D2WALK, Industrial Research Fund, Ghent University (BE)
2019 - 2020	Province of East Flanders, Global Project support 'Sheltering the Kalahari', funding for Future Footwear Foundation: construction of community building in Namibia
2019 - 2023	Belgian representative COST, CA181136, European Forum for Advanced Practices
2017 - present	Vlir-UOS Travel grants for students (n=6), promotor: Catherine Willems
2016 - 2023	Vivobarefoot, UK based barefoot company providing research funding
2009 - 2015	PhD Scholarship, HOGENT (PhD in the Arts scholarship)
2016 - present	Project: Future footwear 2.0., PI Catherine Willems, KASK & Conservatorium, HOGENT (BE)
1998	Research and artistic internship, Academia Belgica, Rome (IT)
1994 - 1995	Erasmus: Master in Cultural Studies. Universitat Autònoma de Barcelona (E)

## Supervision

### PhD's & Postdoc

2016 - 2020	Rory Curtis, Doctoral Research, University of Liverpool (UK) 'Influence of sole properties on the biomechanics of walking on hard and soft terrains'. Supervisors: Dr. K. D'Août (U. of Liverpool), Dr. C. Willems (KASK), Dr. P. Paoletti (U. of Liverpool) – defended 09/2020
2018 – 2023	Golnesa Rezanezhad Pishkhani, Doctoral Research, Ghent University, 'Weaving the past into the present: rug production in Northern Iran'. Supervisors: Dr. A. Kreil and Dr. C. Willems – defended 02/2023
2022 - 2024	Wanda D'Onofrio, Doctoral Research, University of Liverpool (UK), 'Weaving Through Science'. Supervisors: Dr. A. Buchanan (UK), Dr. K. D'Aout (UK), and Dr. C. Willems (BE)
2020 - 2024	Sofie Verclyte, Doctoral Research, 'On Migrating Heritage', Ghent University. Supervisors: Dr. C. Willems and Dr. T. Destrooper
2023 - 2026	Adam Rowlat, Doctoral Research, 'Walking on ageing feet: heel impact and forefoot deformation throughout the life course'. Supervisors: Dr. K. D'Aout (UK), Dr. A. Sharp, Dr. C. Bocket and Dr. C. Willems (BE)
2024 - 2026	Omar Elnaggar, Postdoctoral Research, Associate in Musculoskeletal Biomechanics (UK). Supervisors: Dr. K. D'Aout (UK), Dr. A. Sharp, Dr. C. Bocket and Dr. C. Willems (BE)

### PhD committees

2018 - present	Member doctoral advisory committee of Marius Janusauskas, PhD student at Ghent University. 'Fashionable and Transgressive: Queer Style Effects on Masculinities in Contemporary Indian Fashion'. Supervisor: Dr. Katrien De Graeve (Ghent U.)
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### Masters

2015 - present	Scientific supervision of master theses stemming from different departments. Artistic supervision of master student projects, Dept. of Design, KASK & Conservatorium, HOGENT (BE)
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### Bachelors

2005 - present	Artistic supervision of student projects, Dept. of Design, KASK & Conservatorium, HOGENT (BE)
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## Teaching activities

- 2019 - present Towards Regenerative Design. Master seminar, KASK & Conservatorium, HOGENT (BE)
- 2018 - 2023 Social Design: theory, in BA Autonomous Design, KASK & Conservatorium, HOGENT (BE)
- 2009 - present Metier Footwear: A practice-based course. In BA Design Dept, KASK & Conservatorium, HOGENT (BE)
- 2020 - 2022 Guest lecturer in Master of Arts in Development Studies - University of Namibia (NA)
- 2015 - 2021 Guest lecturer in MA Footwear Design. London College of Fashion LCF (UK)

## Organization of Scientific Meetings (selection)

- 08/02/2020 Organizer Implementation Meeting, COST, European Cooperation in Science and Technology Action CA181136 – European Forum for Advanced Practices. Ghent, BE
- 17/06/2017 Organizer International scientific Conference on Future Footwear, Ghent, BE
- 17/11/2014 Member scientific committee Global Fashion Conference, KASK & Conservatorium, HOGENT (BE)

## Institutional responsibilities (selection)

- 2019 - present Member Research Council KASK & Conservatorium, HOGENT (BE)
- 2015 - 2019 Member representative for KASK & Conservatorium, HOGENT (BE) in VLIR-UOS selection commission
- 2011 - 2017 Member training program commission visual arts, KASK & Conservatorium, HOGENT (BE)

## Reviewing activities (selection)

- 2019 External examiner master students, KU Leuven, Faculty Architecture.
- 2023 - present Referee for MDPI journal Societies and for Current Anthropology
- 2023 - present External reviewer for newly submitted COST actions
- 2023 - present External adviser for Cyanotypes, <https://cyanotypes.website/>

## Editorial Board Membership

- 2023 - present Member of the editorial board, Journal of Posthuman & Design Anthropology, ASP.

## Major Research, Educational and Artistic Collaborations (selection)

- 2022 Nizhónígo Yíikado - We Walk in Beauty. A collaboration of Native American, American, and artists, performers, scientists, painters, sculptors, and researchers working in Belgium. Exhibition at Pilar, VUB, November and December 2022)
- 2019 - 2024 Initiator of bilateral agreement HOGENT with Master of Arts in Development Studies, University of Namibia (UNAM) for staff and student exchange
- 2017 FLAM3D and Materialise: [www.flam3d.org/family-of-the-future](http://www.flam3d.org/family-of-the-future)
- 2016 - 2018 Kickstarter 'The Original Sandal': decentralized production unit in Namibia with the Ju'Hoansi to re-create their traditional sandal for a city environment.
- 2016 - present Dr. K. D'Août, Univ. of Liverpool. Data gathering and protection (several joint publications, and common talks at various international events)
- 2015 - present Initiator of ERASMUS with MA footwear design London College of Fashion (UK), Fashion design KASK HOGENT, (1 joint exhibition, Arnhem, 2018)

2005 - 2010 Artistic and scientific collaboration with Kolhapuri Artisans of Toehold, India (2 joint exhibitions, Design Museum Gent 2016 and C-Mine Genk 2014)

### **Career breaks**

1998 - 2005 I worked in the creative design industry to refine and develop my artistic skills

2000 & 2001 I took two five-month pregnancy leaves for my daughters Helena and Marta

### **Profile**

After finishing my second masters in 1995, I started researching as an anthropologist. A few years later I felt the urge to focus more on my artistic and crafts capacities, studying shoe design in Milan (1998) and entering the professional field as a shoe designer for international fashion designers, later creating my own brand. This experience was rewarding, but didn't satisfy my passion for research and critical reflection on design practices. I then found the perfect combination of research and design practice in 2009; re-entering academia through a combination of teaching and PhD and follow-up research, living and working with cobbler communities in India (Kolhapuri), Finland (Sami), Namibia (Jul'hoan San), the USA (Diné Navajo), Colombia (Muina-Muira) and working on urban cases in Belgium and the UK.

My academic research and artistic activities merged in 2017 when I founded Future Footwear Foundation (FFF). FFF is mainly externally funded and works at international level with different cobbler communities, organizations, artistic and academic institutions. FFF aims to stimulate progress in the understanding of human locomotion and sustainable footwear for body and environment by studying and working with indigenous cobblers. In general my research activities reflect my rather unique combination of expertise as an anthropologist, a shoemaker/designer, knowledgeable in biomechanical studies and with more than a decade of experience working and researching with cobblers.

### **Scientific and artistic networks**

My international networks stem from my various global work contexts, both academic, artistic and professional. I am active within international academic organizations (e.g. as Belgian representative in a COST Action) and developed close working relations with world class design schools in London (London College of Fashion), New York (Parsons), Den Haag (Royal Academy of Arts). I personally initiated institutional collaborations with the University of Namibia, London College of Fashion and the University of Liverpool. My regular working relations with globally prominent scholars on the communities I intend to study, allowed me to bring together these academics with local crafts persons in an International Advisory Board. Besides academia, I have direct contact with high level executives of various multinational companies involved in R&D on sustainable 3D printing: BASF (Heidelberg, Barcelona) and a working relation with world leading 3D companies Materialise (Leuven) and Sculpteo (Paris).

### **Leadership and supervision**

I am the founding director of Future Footwear Foundation, coordinating all financial, research, artistic, and personnel issues, currently managing eight employees/researchers. As a supervisor, I have guided two PhDs to a successful defense and am currently supervising 3 PhD students. Furthermore, I take on responsibilities in high level research policy of the KASK HOGENT as member of the research board and recently one of five selected members of a working group developing the overall research vision of KASK HOGENT.

### **Evidence of scientific and artistic recognition**

I have been a frequent keynote speaker and invited speaker at academic conferences (e.g., Global Fashion Conference, Universidad Complutense, Madrid; Wardrobe Conference Copenhagen Business School; Congress of the Portuguese Anthropological Association; Footwear and Wearable Tech Symposium, London) at summer schools (e.g., London College of Fashion) and workshops (e.g. Central Leather Research Institute Chennai, IN, Manchester Metropolitan University, UK). I also submit papers to highly competitive international conferences (e.g., American Association of Physical Anthropologists, Calgary, CA). Besides academia, I am regularly invited as a (main) speaker at international professional conferences (GDS International Shoe Fair Düsseldorf) and events for a wider audience (e.g., Whataboutery @ State of Fashion, Arnhem NL, Fashion as Activism at Antwerp Responsible Fashion Series).

My artistic and research work has been shown at international exhibitions (e.g., Fashion India Spectacular Capitalism, Oslo S; State of Fashion, Arnhem NL; Why the world needs design anthropologists, Lisbon P; 7th Design Triennial –Conflict and Design, Genk BE). I co-curated an exhibit-performance event, at VUB Brussels in Oct-Nov 2022 (and next year in USA), bringing artists from Navajo Nation and Belgium together.

## Publications

My publications cover a wide range of journals and edited volumes linked to the disciplines I work in: biomechanics, design and design anthropology.

## Milestone publications

1. Allen, A., Pinheiro, M., Schoenmaekers, R., D'Août, K. and **Willems**, C. (2023) Walking with individualized 3D-printed minimal footwear increases foot strength and produces subtle changes in unroll pattern. *Front. Ecol. Evol.* 11:1270253. <https://doi.org/10.3389/fevo.2023.1270253> [Based on a 5-month follow-up study 3D2WALK, involving 66 subjects this article evaluates the biomechanics of walking while wearing bespoke, 3D-printed footwear.]
2. Verclyte, S. & **Willems**, C. (2023). A design anthropology of collaborative making: Exploring shoemaking and embroidery practices. *Design Studies*, Vol. 87. [Based on collaborations with the San community in Namibia on shoemaking and with Syrian refugee women through embroidery, this article explores the added value of this tactile engagement through making to bridge theory and practice.]
3. **Willems**, C., Littleben, C., Toadlena, B and Anderson, E. (2022) Alternative dimensions behind making and walking. In: *Pluriversal Worlds in a Grain of Sand*, eds. Pinxten & Boden, (pp. 213-224), EPO. [Article describing the collaboration between artists and scientists of the Four Corner Region (USA) and Belgium and on how this dialogue and interaction got visualized in the exhibition Nizhonigo Yiikado – We Walk in Beauty at VUB, Pilar (2022).]
4. Curtis, R., **Willems**, C., Paoletti, P. et al. Daily activity in minimal footwear increases foot strength. *Sci Rep* **11**, 18648 (2021). <https://doi.org/10.1038/s41598-021-98070-0> [This study shows that foot strength increases by, on average, 57.4% after six months of daily activity in minimal footwear. This research was made possible by the funding of KASK & Conservatorium (HoGent–HoWest) and supervision by FFF.]
5. **Willems**, C. Savage, R., Curtis, R. and D'Aout, K., (2020). Plantar pressures in three types of indigenous footwear, minimal shoes, and Western shoes, compared to barefoot walking. *Footwear Science*, Published online: 13/10/2020. 1-17. [This study assesses whether indigenous footwear can be considered 'minimal' by analyzing spatial and temporal aspects of plantar pressure distribution. In combination with previous research on the Kolhapuri footwear, we conclude that the indigenous footwear and commercial minimal shoes, can all be considered 'minimal footwear', but with some differences to barefoot walking.]
6. **Willems**, C. (2018). Feet and how to shoe them. In: **Willems**, C. and Roelandt, E. (Eds.), *Do you want your feet back? Barefoot cobblers* (pp. 26-56). Ghent: APE. [The chapter gives an overview of my long-lasting work with cobblers. I co-edited the book, with chapters written by experts in the field of biomechanics and anthropology.]
7. **Willems**, C. Stassijns, G., Cornelis, W., and D'Aout, K. (2016). Biomechanical implications of walking with indigenous footwear, *American Journal of Physical Anthropology*, 162(4), 782-793. Citations: 15 (Google Scholar); WoS IF: 2.414. 2019 Journal Citation Reports: 14/91 (Anthropology). [This study investigates biomechanical implications of walking with indigenous Kolhapuri footwear compared to barefoot walking among a population of South Indians. Walking in Kolhapuri resembles barefoot gait and might be considered 'minimal'. Primary author, based on my fieldwork data.]
8. **Willems**, C. (2015). Nuvttohat, perfect for feet. Shoe design as cultural heritage, *Volkskunde*, p. 371-382. WoS A&H Index. [Saami reindeer boots, nuvttohat, are part of traditional cultural expressions, seen from the point of the Saami as indigenous people. I raise questions on safeguarding intangible cultural heritage and the protection of traditional cultural expressions, based on my fieldwork data.]
9. **Willems**, C. (2013). 100% bag tanned: action research generating new insights on design processes. *Critical Arts: South-North Cultural and Media Studies*, 27(5), Special Issue: Revisiting the ethnographic turn in contemporary art, 474-489. Citations: 8 (Google Scholar); WoS IF 2019: 0.204. [This article discusses two examples of my experimentation with design and anthropology using action research as a method, combining observations and engagement through making. I describe the use of action research on handmade footwear in two communities in India, to better understand the design process in its context.]

## Evidence of impact of publications, designs and exhibitions

My academic work has gained international visibility and is appreciated by eminent scholars. I was recently among eight authors invited by top-tier journal *Current Anthropology* to write a comment on an article on Tarahumara running (North-Mexico) by Daniel Lieberman, world-renowned biomechanics researcher. My comments were positively received in the 'Reply to comments'. My academic and artistic work was featured in a UK online short documentary 'Shoespiracy' (2019) and a BBC podcast 'The heel and the Sneaker' (2020). My research and designs get regular attention in (inter)national magazines and newspapers. My work



is featured in *Footwear Design* (2012) by A. Choklat. Art curator Glenn Adamson dedicates a chapter to my work in *Fewer, Better Things* (2018), DAMN Magazine<sup>79</sup> highlighted the 3D research (2020) and EOS recently published 'Beter Blootvoets' on my research and vision. I am one of the inventors under research by the 'Politics of Patents' project (ERC Consolidator grant) on patents and skills. Most meaningful and rewarding are my engagements with the international cobbler groups, and the difference my work has made to local communities. This sense of meaning—and pride—is beautifully summarized in the following quote:

*"Maybe for you people from overseas, our footwear looks unique. For us it is what our elders, our ancestors were making. Today, for us, now that we have access to skins again, it seems we have got something back that we thought was in the past and lost."* (from IU !Kunta, a San cobbler)