

Curriculum Vitae

Professor Kristina Höök

Director, Interaction Design Team

Professor, Media Technology and Interaction Design (MID), Royal Institute of Technology (KTH)

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Areas of Specialisation

Soma Design

Soma design puts first person aesthetic sensory experience and expertise in the front seat during the design process. It builds on the theories of *somaesthetics* – a combination of *soma*—our subjective self, body, emotion, and thinking—and *aesthetics*—our perceptual appreciation of the world. Through engaging with and deepening your capacity to discern sensuous experiences, you can examine and improve on connections between sensation, feeling, emotion, and subjective understanding and values. Soma design is a path to imagine – through your senses, movements and material encounters – what could be during a design process. A soma design process thrives off the aesthetic potential of the sociodigital materials and the creative process of shaping these into dynamic gestalts, orchestrated experiences.

For a better account, turn to my book with MIT Press *Designing with the Body: Somaesthetic Interaction Design* from 2018.

Design Theory

Interaction design is a new discipline, still forming its epistemological claims. Knowledge is gained through the design process that leads to the final design – a process often referred to as *designerly explorations* to mark the open-ended explorative side to this inquiry. The result, the particular designs, embodies design knowledge, but taken together, different particular designs may together point to slightly more abstracted forms of design knowing sometimes referred to as intermediary knowledge forms. Those include knowledge forms such as strong concepts and experiential qualities.

Education

1987 MSc in Computer Science, Uppsala University

1996 PhD in Computer and Systems Sciences, Stockholm University

2002 Associate Professor, Computer and Systems Sciences, Stockholm University

Positions

2012- Chaired Professor, Interaction Design, KTH

2007-2017 Director, VINNex Mobile Life Centre

1990- (Part-time) Researcher at SICS – now RISE Research Institutes of Sweden

2016 Sabbatical visit at Florida Atlantic University US and University California Santa Cruz US

2003 – 2012 Chaired Professor in Human-Computer Interaction, Stockholm University

2008 Visiting Researcher at Microsoft Research, Cambridge, U.K.

Major distinctions and awards

2014 ACM Distinguished Scientist

2012 Best of ACM Journal Paper Award

2011 Continuation grant of the Future Research Leaders, Swedish Foundation for Strategic Research (8 selected amongst the prior Future Research Leaders)

2004 Future Research Leader, Swedish Foundation for Strategic Research (17 six-year grants awarded among over 400 applicants in all areas of sciences)

2004 SITI conference “attendants’ favorite award”

2003 SITI conference “attendants’ favorite award”

1997 Awarded the Cor Baayen Fellowship by ERCIM (European Research Consortium for Informatics and Mathematics)

Selected Publication Awards

1999 Top-paper award at the WebNet’99 conference:

Dieberger, A., & Höök, K. (1999). Applying Social Navigation Principles to the Design of Shared Virtual Spaces. In *WebNet World Conference on the WWW and Internet* (pp. 289-294). Association for the Advancement of Computing in Education (AACE).

2006 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Isbister, K., Höök, K., Sharp, M., & Laaksolahti, J. (2006, April). The sensual evaluation instrument: developing an affective evaluation tool. In *Proceedings of the SIGCHI conference on Human Factors in computing systems* (pp. 1163-1172). ACM.

2008 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference Höök, K., Ståhl, A., Sundström, P., & Laaksolahti, J. (2008, April). Interactional empowerment. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 647-656). ACM.

2011 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Ferreira, P. and Höök, K. (2011). Bodily Orientations around Mobiles: Lessons learnt in Vanuatu. In proceedings of CHI 2011: 29th ACM Conference on Human Factors in Computing Systems, Vancouver, Canada, May 2011, ACM Press.

2012 Best of ACM Journal Paper Award:

Höök, K., and Löwgren, J. (2012) Strong concepts: Intermediate-level knowledge in interaction design research. *ACM Transactions on Computer-Human Interaction (TOCHI)*. Volume 19, Issue 3, October 2012, Article No. 23.

2012 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Ferreira, P. and Höök, K. (2012). Appreciating plei-plei around mobiles: Playfulness in Rah Island. In *Proceedings of CHI 2012*, Austin, Texas, USA.

2016 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Höök, K., Jonsson, M., Ståhl, A., and Mercurio, J. (2016). Somaesthetic Appreciation Design. In *Proceedings of CHI 2016*, San José, California, USA.

2016 CHI 2016 Arts Awards Honorable Mention:

Šimbelis, V., Ferreira, P., Vaara, E., Laaksolahti, J., and Höök, K. (2016). Repurposing Bits and Pieces of the Digital. In *Proceedings of CHI 2016*, San Jose, California, USA.

2019 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Madeline Balaam, Robert Comber, Rachel E. Clarke, Charles Windlin, Anna Ståhl, Kristina Höök, and Geraldine Fitzpatrick. 2019. Emotion Work in Experience-Centred Design. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019)*, May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA.

2019 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Sara Eriksson, Åsa Unander-Scharin, Vincent Trichon, Carl Unander-Scharin, Hedvig Kjellström, and Kristina Höök. 2019. Dancing With Drones: Crafting Novel Artistic Expressions Through

Intercorporeality. In CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019), May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA.

2019 Best paper honourable mention award, ACM SIGCHI Computer Human Interaction Conference: Pedro Sanches, Axel Janson, Pavel Karpashevich, Camille Nadal, Chengcheng Qu, Claudia Daudén Roquet, Muhammad Umair, Charles Windlin, Gavin Doherty, Kristina Höök, and Corina Sas. 2019. HCI and Affective Health: Taking stock of a decade of studies and charting future research directions. In CHI Conference on Human Factors in Computing Systems Proceedings (CHI2019), May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA.

National and international assignments of importance

2018 Editor in Chief of ToCHI Transactions on Computer Human Interaction, ACM Press

2017- Chair of Scientific Advisory Board of the Einstein Centre for Digitalisation, Berlin, Germany

2013-2018 Associated editor of ToCHI Transactions on Computer Human Interaction, ACM Press

2014-2018 Serving on the board of Wireless@KTH, Sweden

2014-2016 Board of the SIP on Internet of Things funded by VINNOVA, Sweden

2013-2015 Elected VP at Large for ACM SIGCHI Executive Committee

2012 Technical Program Chair ACM SIGCHI Computer Human Interaction Conference

2012 – 2014 Serving on the board of Fo&Framsteg a popular science newspaper, Sweden

2011 – 2016 Visiting Professor at Northumbria University, Newcastle, U.K.

2011 – 2014 Member of IT-minister Anna-Karin Hatt’s IT council, Sweden

2009 – 2012 Management Team for Stockholm Strategic Research Area ICT TNG, Sweden

2008 – 2012 Vice chairperson of the Board of Stress Research Institute at Stockholm University, Sweden

2008 – 2010 Member of Infrastructure minister Åsa Torstensson’s IT council, Sweden

2005 Elected to the Swedish Royal Engineering Academy

Foresight committees:

- Microsoft’s HCI 2020
- Ericsson 2020
- Ambient Sweden by IVA

Leadership experience and funding

Höök has served as project manager for many research projects. Perhaps most notably perhaps, Höök applied for and started the Mobile Life centre, a so-called VINN excellence centre funded by VINNOVA, 2007 – 2017. Mobile Life engaged about 50 researchers and had strong contacts with industry.

Höök has also obtained funding for and lead:

- EU projects: Persona 1997 – 1999, SAFIRA 2000-2002, HUMAINE – WP-leader, 2008-2012, AffecTech – WP-leader, 2017-2021
- Strategic Science Foundation (SSF) financed projects: Mobile Services, Supple, INGVAR
- Two Swedish Basic Research Council (VR)-projects
- VINNOVA-funded projects
- industrially-funded projects: Microsoft, Google, Samsung, IKEA and others

Examples of funding:

Funder	Period	SEK
VR: A Somaesthetic Design Method	2016-2020	3.8 MSEK
SSF: Smart Implicit Interaction	2016-2021	33 MSEK
KAW: ICI 2015.0080	2016-2021	5 MSEK
EU ITN: AffecTech	2017-2021	527 KEURO = 5 MSEK
SRA: ICT TNG	2017-2019	6 MSEK

SRA: ICT TNG fakultetsanslag	2017 -	0.5 MSEK
VINNOVA: Mobile Life VINNex centre	2007-2017	70 + 70 + 70 = 210 MSEK

Keynotes

1. Höök, Kristina (2003) Social navigation: from the web to the mobile. In: Mensch-und-Computer conference, Sep 2003, Stuttgart, Germany
2. Höök, K (2004) Active co-construction of meaningful experiences: but what is the designers' role?, Keynote presentation at the NordiCHI conference, Tampere, October 2004
3. Höök, K. (2004) Invited session on *European HCI Research* at the Computer-Human Interaction (CHI) conference in Vienna, April 2004, organised by Gerd Szwillius and Philippe Palanque. Title: "A user-centred perspective on the design of affective interaction involving both body and mind"
4. Höök, K. (2008) Affective loop experiences – what are they? Keynote Persuasive Technology Conference 2008, June 4-6, Oulu, Finland, Springer Verlag
5. Höök, K. (2009) Mobile Life – innovation in the wild, Keynote presentation at Interact 2009, Uppsala, Sweden, August 2009
6. Höök, K. (2008) Mind, mouse and body: designing engaging technologies, Invited keynote presentation at the European Conference on Technology Enhanced Learning (EC-TEL), Maastricht, Holland, September 2008
7. Höök, K. (2009) Affective Loop Experiences: Designing for Interactional Embodiment, Invited talk at the seminar "Computation of Emotion in Man and Machine" at the Royal Society in London, April 2009
8. Höök, K. (2011) Move that body!, Keynote presentation at The International Assembly of Society for Design Researchers (IASDR), Delft, November 2011
9. Höök, K. (2014) Somaesthetics design, Keynote presentation at IndiaHCI, New Delhi, December 2014
10. Höök, K. (2015) Serious research on the unserious: playfulness, sociality and bodily engagements in the Internet of Things era, CHIItaly, Rome, Italy, 2017
11. Höök, K. (2017) Keynote presentation at BioStec, Portugal, February, 2017
12. Höök, K. (2017) Keynote at the Digital Disruption Conference on the 1st of September 2017, at the Northern Design Center in Gateshead'
13. Höök, K. (2017) Keynote presentation at ESWN conference, Uppsala, February, 2017
14. Höök, K. (2018) Keynote presentation at Mensch und Computer conference, Dresden, Germany, September 2018.
15. Höök, K. (2018) Keynote presentation at the Brazilian HCI-conference, Proceedings of the 17th Brazilian Symposium on Human Factors in Computing Systems, 2018
16. Höök, K. (2019) Keynote presentation, CHIRA, Vienna, Austria, September 2019
17. Höök, K. (2019) Keynote presentation, MOCO, Arizona, US, October, 2019
18. Höök, K. (2020) Keynote presentation, TEI conference, ACM SIGCHI, Sydney Australia, February 2020

Publications

Scholar profile: <https://scholar.google.se/citations?user=LZJ0YvAAAAAJ&hl=en&oi=ao>

Journal articles

1. Chalmers, M., Dieberger, A., Höök, K, and Rudström, Å. (2004). Social Navigation and Seamless Design, *Japanese Journal of Cognitive Studies*, No.11 Vol.3. Special issue: Social Navigation, 2004.
2. Fagerberg, P., Ståhl, A., and Höök, K. (2004). eMoto: emotionally engaging interaction, *Journal of Personal and Ubiquitous Computing*, 2004.
3. Höök, K. (1998). Evaluating the Utility and Usability of an Adaptive Hypermedia System, in *Journal of Knowledge Based Systems*, Volume 10, issue 5, 1998
4. Höök, K. (2000). Steps to take before IUIs become real, *Journal of Interacting with Computers*, vol. 12, no. 4, Pages: 409-426, February 2000.

5. Höök, K. (2008). Knowing, Communicating and Experiencing Through Body and Emotion. *IEEE Transactions on Learning Technologies* 1(4): 248-259.
6. Höök, K. (2009) Affective Loop Experiences: Designing for Interactional Embodiment, *Philosophical Transactions of Royal Society: Biological Sciences*, 364, pp. 3585-3595, Royal Society, London, 2009.
7. Höök, K. (2012): Affective Computing. In: Soegaard, Mads and Dam, Rikke Friis (eds.). "The Encyclopedia of Human Computer Interaction, 2nd Ed.". Aarhus, Denmark: The Interaction Design Foundation.
8. Höök, K. (2012). Commentary on: Shusterman, Richard (2012): Somaesthetics. In: Soegaard, Mads and Dam, Rikke Friis (eds.). "The Encyclopedia of Human Computer Interaction, 2nd Ed.". Aarhus, Denmark. The Interaction Design Foundation.
9. Höök, K., Baptiste Caramiaux, Cumhuri Erkut, Jodi Forlizzi, Nassrin Hajinejad, Michael Haller, Caroline C. M. Hummels, Katherine Isbister, Martin Jonsson, George Khut, Lian Loke, Danielle Lottridge, Patrizia Marti, Edward Melcer, Florian Floyd Müller, Marianne Graves Petersen, Thecla Schiphorst, Elena Márquez Segura, Anna Ståhl, Dag Svanæs, Jakob Tholander and Helena Tobiasson. 2018. Embracing First-Person Perspectives in Soma-Based Design. In *Informatics 2018*, 5(1), 8; doi:10.3390/informatics5010008
10. Höök, K., Karlgren, J., Waern, A., Dahlbäck, N., Jansson, C. G., Karlgren, K., and Lemaire, B. (1996). A Glass Box Approach to Adaptive Hypermedia, *Journal of User Modeling and User Adapted Interaction*, special issue on Adaptive Hypermedia.
11. Höök, K, and Löwgren, J. (2012) Strong Concepts: Intermediate-level knowledge in interaction design research, accepted to Transactions of Computer-Human Interaction (TOCHI). **Best of ACM in 2012.**
12. Höök, K., Persson, P., and Sjölander, M. (2000). Evaluating Users' Experience of a Character-Enhanced Information Space, *Journal of AI Communications*, Vol. 13, No. 3, Pages: 195-212, 2000
13. Höök, K., Taylor, J. and du Boulay, B. (1990). REDO Try Once and Pass : The influence of complexity and graphical notation on novices understanding of Prolog, *Instructional Science*, 19:337 360.
14. Isbister, K., Höök, K., Laaksohalmi, J., Sharp, M.. (2007). The Sensual Evaluation Instrument: Developing a Trans-Cultural Self-Report Measure of Affect. *International Journal on Human-Computer Studies*, Special issue on Evaluating Affective Interfaces, vol. 65, issue 4, pp. 315-328.
15. Isbister, K., Höök, K., (2007). Evaluating affective interactions. Editorial Introduction, *International Journal of Human-Computer Studies*, Special issue on Evaluating Affective Interfaces, vol. 65, issue 4, pp. 273--274.
16. Laaksohalmi, J., Isbister, K., Höök, K. (2009). Using the Sensual Evaluation Instrument, in *Journal of Digital Creativity* Volume 20, Issue 3 September 2009, pages 165 – 175.
17. Mentis, Helena M, Laaksohalmi, Jarmo, Höök, Kristina (2014). My self and you: Tensions in bodily sharing of experience, *ACM Transactions on Computer-Human Interaction (TOCHI)*, 21, 4, 20, 2014, ACM
18. Paiva, A., Andersson, G., Höök, K., Mourão, D., Costa, M., and Martinho, C. (2002). SenToy in FantasyA: Designing an Affective Sympathetic Interface to a Computer Game, *Journal of Personal and Ubiquitous Computing*, Springer-Verlag London Ltd, Volume 6, Numbers 5-6, Pages: 378 – 389.
19. Paiva, A., Costa, M., Chaves, R., Piedade, M., Mourão, D., Sobral, D., Höök, K., Andersson, G., and Bullock, A. (2003). SenToy: an Affective Sympathetic Interface, *International Journal of Human Computer Studies*, Volume 59, Issues 1-2, July 2003, Pages 227-235, Elsevier.
20. Sanches, P., Höök, K., Sas, C. and Ståhl, A. (2019). Ambiguity as a Resource to Inform Proto-Practices: The Case of Skin Conductance. *ACM Trans. Comput.-Hum. Interact.* 26, 4, Article 21 (July 2019), 32 pages. DOI: <https://doi.org/10.1145/3318143>
21. Sjölander, M., Höök, K., Nilsson, L-G., (2003). The Effect of Age-Related Cognitive Differences, Task Complexity and Prior Internet Experience in the Use of an On-line Grocery Shop, In *Journal of Spatial Cognition and Computation*, 3(1), 61–84, Lawrence Erlbaum Associates, Inc., 2003.
22. Sjölander, M., Höök, K., Nilsson, L-G., Andersson, G. (2005). Age differences and the acquisition of spatial knowledge in a three-dimensional environment: evaluating the use of an overview map as a navigation aid, In *International Journal of Human-Computer Studies*, Volume 63, Issue 6, Pages 537-564.
23. Ståhl, A., Höök, and Taylor, A. (2009). Experiencing the Affective Diary. *Personal Ubiquitous Computing* 13(5): 365-378.

24. Ståhl, A., Löwgren, J., & Höök, K. (2014). Evocative Balance: Designing for Interactional Empowerment. *International Journal of Design*, 8(1).
25. Sundström, P., Ståhl, A., Höök, K. (2007). In Situ Informants Exploring an emotional Mobile Messaging System in Their Everyday Practice, In a special issue of *International Journal of Human-Computer Studies* on Evaluating Affective Interfaces, vol. 65, issue 4, pp. 388 – 403, April 2007.
26. Svensson, M., Höök, K. and Cöster R. (2005). Designing and Evaluating Kalas: a Social Navigation System for Food Recipes, In *ACM Transactions on Computer-Human Interaction*, ACM Press, September Issue.

Books

1. Höök, K. (2018). *Designing with the Body: Somaesthetic Interaction Design*, MIT Press.
2. Höök, K., Munro, A., and Benyon, D. (2002). *Designing Information Spaces: The Social Navigation Approach*, Springer Verlag, November 2002.
3. Munro, A. J., Höök, K., and Benyon D. R. (1999). *Personal and Social Navigation of Information Space*, Springer Verlag, London, U.K.
4. Ferneus, Y., Höök, K., (Mobile Life Centre) Holopainen, J., (Nokia) Ivarsson, K., Karlsson, A., (Boris Design Studio), Lindley, S., (Microsoft Research Cambridge) and Norlin, C., (Ericsson Research). (2012). *Plei-Plei: A book on how we do play, socialize and have fun with mobile technology*. PPP Company Ltd; First Edition.

Book chapters

1. Fernaeus, Y., Höök, K., & Ståhl, A. (2018). Designing for Joyful Movement. In *Funology 2* (pp. 193-207). Springer, Cham.
2. Fernaeus, Y., Isbister, K., Höök, K., Laaksolahti, J., and Sundström, P. (2011). Understanding Users and Their Situation, In Paolo Petta, Catherine Pelachaud and Roddy Cowie (eds), *Emotion-Oriented Systems, The Humaine Handbook*, pp. 653-666, Springer.
3. Höök, K (2004). User-Centred Design and Evaluation of Affective Interfaces, In *From Brows to Trust: Evaluating Embodied Conversational Agents*, Edited by Zsófia Ruttkay and Catherine Pelachaud, Published in Kluwer's Human-Computer Interaction Series – volume 7, 2004.
4. Höök, K., Isbister, K., Westerman, S., Gardner, P., Sutherland, E., Vasalou, A., Sundström, P., Kaye, J.J., and Laaksolahti, J. (2011). Evaluation of Affective Interactive Applications, In Paolo Petta, Catherine Pelachaud and Roddy Cowie (eds), *Emotion-Oriented Systems, The Humaine Handbook*, pp. 683-700, Springer.
5. Höök, K., Karlgren, J., Waern, A., Dahlbäck, N., Jansson, C. G., Karlgren, K., and Lemaire, B. (1996). A Glass Box Approach to Adaptive Hypermedia, Adaptive Hypertext and Hypermedia, Peter Brusilovsky, Alfred Kobsa, Julita Vassileva (eds.), Kluwer Academic Publishers, Dordrecht, ISBN 0 7923 4843 5, 1997.
6. Höök, K., Persson, P, and Sjölander, M. (2003). Agneta & Frida: Merging Web and Narrative, in the *Narrative Intelligence* book edited by Michael Matheas and Phoebe Sengers, Benjamins.
7. Höök, Kristina and Persson, Per and Sjölander, Marie (2002). Measuring experience of interactive characters. In: *Pleasure with Products: Beyond Usability*. CRC Press, pp. 262-273.
8. Höök, K., and Svensson, M. (1999). Evaluating Adaptive Navigation Support, in A. Munro, K. Höök, and D. Benyon (eds), *Footsteps in the snow: personal and social navigation in information space*, Springer.
9. Isbister, K., Höök, K., Sundström, P., and Laaksolahti, J. (2011). Generating Ideas and Building Prototypes, In Paolo Petta, Catherine Pelachaud and Roddy Cowie (eds), *Emotion-Oriented Systems, The Humaine Handbook*, pp. 667-682, Springer.
10. Kaye, J., Laaksolahti, J., Höök, K., Isbister, K. (2011). The Design and Evaluation Process, In Paolo Petta, Catherine Pelachaud and Roddy Cowie (eds), *Emotion-Oriented Systems, The Humaine Handbook*, pp. 637-652, Springer.
11. Persson, P., Höök, K., and Sjölander, M. (2003). Agneta & Frida: Merging web and narrative? In: *Advances in Consciousness Research*. John Benjamins Publishing Company, pp. 245-258.
12. Saxin Hammarström, K., Ereback, A-L., Höök, K., and Sjölander, M., (2000). Convene - MUD Interfaces for Disabled Users, in an anthology by Britt Östlund *Users In Action!*.
13. Svensson, M. and Höök, K. (2002). Social Navigation of Food Recipes: Designing Kalas. In: *Designing Information Spaces: The Social Navigation Approach*. Springer Verlag, pp. 201-222.

14. Waern, A., and Höök, K. (2000). Interface Agents: A new metaphor for human-computer interaction and its application to Universal Accessibility, in S. Constantine (ed.) *User interfaces for all*, Lawrence Erlbaum Associates Inc., 2000.

Conference papers (selected list)

1. Andersson, G., Höök, K., Mourao, D., Paiva, A., and Costa, M. (2002). Using a Wizard of Oz study to inform the design of SenToy, exhibit at the conference on *Designing Interactive Systems*, London, 25 - 26 June, 2002.
2. Balaam, M., Comber, R., Clarke, R.E., Windlin, C., Ståhl, A., Höök, K. and Fitzpatrick, G. (2019). Emotion Work in Experience-Centered Design. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. ACM. **Honorable mention.**
3. Benyon, D., and Höök, K. (1997). Navigation in Information Spaces: supporting the individual, *Proceedings of Interact 97*, Sydney, Australia.
4. Benyon, David and Höök, Kristina and Nigay, Laurance (2010). Spaces of Interaction. In: *Proceedings of ACM/BCS Visions of Computer Science Conference*, 13-16 April 2010, Edinburgh, Scotland.
5. Bladh, M., and Höök, K. (1995). Satisfying User Needs Through a Combination of Interface Design Techniques, In: K. Nordby, P.H. Helmersen, D.J. Gilmore and S.A. Arnesen (eds.), *Human Computer Interaction INTERACT 95*, Chapman & Hall, Oxford, 1995.
6. Brown, Barry, Bleecker, Julian, D'Adamo, Marco, Ferreira, Pedro, Formo, Joakim, Glöss, Mareike, Holm, Maria, Höök, Kristina, Johnson, Eva-Carin Banka, and Kaburuan, Emil (2016). The IKEA Catalogue: Design fiction in academic and industrial collaborations, *Proceedings of the 19th International Conference on Supporting Group Work*, 335-344, 2016, ACM.
7. Bylund, M., Höök, K., and Pommeranz, A. (2008). Pieces of identity. In: *NordiCHI 2008: Using Bridges*, Lund, Sweden.
8. Dahlbäck, N., Höök, K., and Sjölander, M. (1996). Spatial Cognition in the Mind and in the World the case of hypermedia navigation, *The Eighteenth Annual Meeting of the Cognitive Science Society*, University of California, San Diego, July, 1996.
9. Dieberger, A., and Höök, K. (1999). Increasing awareness of browsing and editing activities in a virtual Web community, *Proceedings of WebNet 99*, Waikiki Beach, Honolulu, Hawaii, USA (top paper awarded).
10. Dieberger, A., Dourish, P., Höök, K., Resnick, P. and Wexelblat, A. (2000). Social navigation: techniques for building more usable systems. *ACM interactions*, 7 (6). ISSN 1072-5520
11. Sara Eriksson, Åsa Unander-Scharin, Vincent Trichon, Carl Unander-Scharin, Hedvig Kjellström, and Kristina Höök. (2019). Dancing With Drones: Crafting Novel Artistic Expressions Through Intercorporeality. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019)*, May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA, 12 pages. <https://doi.org/10.1145/3290605.3300847> **Honorable mention**
12. Fagerberg, P., Ståhl, A., and Höök, K. (2003). Designing gestures for affective input: an analysis of shape, effort and valence. In *Proceedings of Mobile Ubiquitous and Multimedia, MUM 2003*, Norrköping, Sweden, ACM Press.
13. Ferreira, P. and Höök, K. (2011). Bodily Orientations around Mobiles: Lessons learnt in Vanuatu. In *proceedings of CHI 2011: 29th ACM Conference on Human Factors in Computing Systems*, Vancouver, Canada, May 2011, ACM Press. **Honorable mention.**
14. Ferreira, P. and Höök, K. (2012) Appreciating plei-plei around mobiles: playfulness in Rah island, *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems*, Pages 2015-2024, ACM New York, NY, USA. **Honorable mention.**
15. Ferreira, P., Sanches, P., and Höök, K. (2008). License to chill!: how to empower users to cope with stress. In *Proceedings of Nordic conference on Human-computer interaction (NordiCHI)*, Lund, Sweden.
16. Friedman, B., Höök, K. et al. (2008). Personlig Integritet. A Comparative Study of Perceptions of Privacy in Public Places in Sweden and the United States. In *Proceedings of Nordic forum for human-computer interaction research (NordiCHI)*, Lund, Sweden. ACM Press.
17. Hagberg, L, Höök, K. and Hagert, G. (1987). Prolog o: a programming environment for children, In *Proceedings of the 3rd international conference on Artificial Intelligence and Education*, Pittsburgh, Pennsylvania.

18. Helmes, J., Taylor, A. S., Cao, X., Höök, K., Schmitt, P., Villar, N. (2011). Rudiments 1, 2 & 3: Design Speculations on Autonomy. In *Proceedings of Tangible and Embedded Interaction (TEI)*, January 2011, Portugal, ACM Press.
19. Holmquist, L-E., Höök, K., Juhlin, O., and Waern, A. (2007). Mobile Life: A Research Foundation for Mobile Services. In: *Proceedings of the 6th Global Mobility Roundtable*, 2007, Los Angeles, California.
20. Höök, K. (1997), Evaluating the Utility and Usability of an Adaptive Hypermedia System, In *Intelligent User Interfaces (IUI 97)*, held in Orlando, Florida, 1997.
21. Höök, K. (1998). Designing and evaluating intelligent user interfaces. In: *IUI '99: Proceedings of the 1999 International Conference on Intelligent User Interfaces*, 5-8 Jan 1998, Redondo Beach, Los Angeles, California, USA.
22. Höök, K. (2006). Designing Familiar Open Surfaces, In *Proceedings of NordiCHI 2006 Oslo*, Norway, October 2006, pp. 242 – 251, ACM press.
23. Höök, K. (2010). Transferring Qualities from Horseback Riding to Design. In: *Proceedings of the Nordic conference on HCI, NordiCHI 2010*, 16-20- October 2010, Reykjavik, Iceland.
24. Höök, K., Dahlbäck, N., and Sjölander, M. (1996) Individual Differences and Navigation in Hypermedia, in proceedings of ECCE 8 (*European Conference on Cognitive Ergonomics*), Spain.
25. Höök, Kristina, Jonsson, Martin P, Ståhl, Anna and Mercurio, Johanna (2016). Somaesthetic appreciation design, Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 3131-3142, 2016, ACM. **Honourable mention.**
26. Höök, K., and Karlgren, J. (1991) Some Principles for Route Descriptions Derived from Human Advisers. In: *Proceedings of the 13th Annual Meeting of the Cognitive Science Society*, Chicago, Illinois.
27. Höök, K., Laaksoaho, J., Svensson, M., and Waern, A. (2000) Designing for Social Navigation of Food Recipes, In *Proceeding of International Conference on Adaptive Hypermedia and Adaptive Web-based Systems*, Springer Verlag, Trento Italy.
28. Höök, K., Sengers, P., and Andersson, G. (2003) Sense and sensibility: evaluation and interactive art. In: *Proceedings of the SIGCHI conference on Human factors in computing systems*, 5-10 Apr 2003, Fort Lauderdale, Florida, USA.
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Research journey Kristina Höök

I defended my thesis on how to create an adaptive help system to help users navigate and find the most relevant information in a large on-line hypermedia manual in 1996 (rendering me the Cor Baayen Fellowship by ERCIM in 1997). While working on the thesis, I became more and more disappointed in the AI-solutions proposed at the time as automatic adaption seemed to lead to bad design. After finishing the thesis, I continued with the problem of information overflow and navigation, but I came up with the idea of *social navigation*, enabling users to find their way through the space based on what other users have done or are doing in that space. We created recommender systems and various interface designs that allowed users to thrive on the intelligence of other users, combining AI with human intelligence. Nowadays, social navigation is a well-established concept covering a family of techniques such as recommender systems, crowd-sourcing or simply seeing who else has visited the space.

Social navigation also became a means to express my concerns about how we can allow end-users to make their own choices, be autonomous, and *empowered*. Around 2000, I decided that I wanted to address the field of Affective Computing using the same philosophical concerns – looking for ways of designing for affect without reducing people to machines that can be sampled, measured and interacted with: designing for mind and body as a whole. In the years 2000-2010 we created a range of designs, such as: SenToy – a plush toy as an interactive device, eMoto – engaging gestures for mobile communication, Affective Diary & Affective Health - body-based diaries, FriendSense – communication between friends in an office, LEGA – for friends in a museum, and EmRoll – a game using breathing as input. Beyond the particular systems, we gained design knowledge, expressed as experiential qualities and strong concepts, exploration of new modalities, as well as new design methods. We used the concept Affective Loops to describe the kinds of interactions that were most successful.

But throughout all this design work, I was missing a firm theoretical basis, a design philosophy that would tie all of our design insights together. I finally found a theoretical home in the pragmatist movement, and in particular, in the theories of the philosopher Shusterman on *somaesthetics*. As we started to work from his theories, grounding our work firmly in various body-based practices, such as Feldenkrais or Dance Improv, interesting design qualities came to the fore. For example, together with IKEA we built the Soma Mat – an interactive mat using traveling heat to help users focus inwards and improve their body awareness, and the Breathing Light – an interactive lamp dimming in the same tempo as you breath, deepening your awareness of your respiratory system. Based on his work, I was able to tie together and begin to articulate our design philosophy, theory, values, methods, political and ethical concerns. During a sabbatical (spent partly with Professor Shusterman), I wrote a book on these insights: “*Designing with the Body: Somaesthetic Interaction Design*”, MIT Press, 2018.

My focus is on designing for experiences – beyond utility and usability. But instead of contributing to the grand theories of what it means to be human engaging with man-made artefacts, I encapsulate my insights into intermediary knowledge forms, such as what Professor Löwgren and I named *strong concepts* or in experiential qualities. My research method can be described a research through design (RtD). I employ a user-centred design practice, that is we always involve users at all stages of the design and evaluation, but often using novel innovative methods. We have, for example, created tools such as the Sensual Evaluation Instrument that allows users to express their experiences in physical

form while interacting with a system. As I am trying to address very personal, physical experiences, I have also sometimes employed first-person methodologies, that is, experiencing the interaction *yourself*, describing your own experience (auto-ethnography), and even designing with and for yourself (autobiographical-design).

Together with professor Brown at Stockholm University, I am currently exploring SW- and HW-heavy and interaction-intense “things” in the Internet of Things-era. As digital interaction has moved into our homes/gardens/cities, into all our things, we need to revisit the old dreams of ubiquitous interaction everywhere from a different design perspective. With the increasing thing-ness of the interaction surfaces offered, traditional interaction techniques such as buttons and screens are quickly being superseded by new interaction modalities, such as sound, touch, motion, heat, haptics and shape-changing materials – which is what I am interested in given my focus on Soma Design for body, emotion and sociality.