

# Love, Joy, and Autism Robots: A Metareview and Provocatype

Andrew Hundt  
ahundt@cmu.edu  
Carnegie Mellon University  
Pittsburgh, PA, USA

Gabrielle Ohlson  
gohlson@cs.cmu.edu  
Carnegie Mellon University  
Pittsburgh, PA, USA

Pieter Wolfert  
pieter.wolfert@donders.ru.nl  
Radboud University  
Nijmegen, The Netherlands

Lux Miranda  
lux.miranda@it.uu.se  
Uppsala University  
Sweden

Sophia Zhu  
sophiazhu@andrew.cmu.edu  
Carnegie Mellon University  
Pittsburgh, PA, USA

Katie Winkle  
katie.winkle@it.uu.se  
Uppsala University  
Sweden

## ABSTRACT

Previous work has observed how Neurodivergence is often harmfully pathologized in Human-Computer Interaction (HCI) and Human-Robot interaction (HRI) research [66, 96, 102, 105]. We conduct a review of autism robot reviews and find the dominant research direction is Autistic people’s *second to lowest* (24 of 25) research priority [24]: interventions and treatments purporting to ‘help’ neurodivergent individuals to conform to neurotypical social norms, become better behaved, improve social and emotional skills, and otherwise ‘fix’ us—rarely prioritizing the internal experiences [83] that might lead to such differences. Furthermore, a growing body of evidence indicates many of the most popular current approaches risk inflicting lasting trauma and damage on Autistic people. We draw on the principles and findings of the latest Autism research, Feminist HRI [103] and Robotics [48, 49] to imagine a role reversal, analyze the implications, then conclude with actionable guidance on Autistic-led scientific methods and research directions.

### ACM Reference Format:

Andrew Hundt, Gabrielle Ohlson, Pieter Wolfert, Lux Miranda, Sophia Zhu, and Katie Winkle. 2024. Love, Joy, and Autism Robots: A Metareview and Provocatype. In *A3DE workshop at HRI*. ACM, New York, NY, USA, 6 pages.

## 1 INTRODUCTION AND BACKGROUND

Researchers have created a plethora of robots to ‘correct issues’ in Autistic people (Sec 2.1), and this motivated our joint team of neurotypical and neurodivergent researchers to ask: In place of designing robots for ‘Autism Spectrum Disorder (ASD)’, how might we design robots to address the understudied phenomenon of ‘*Neurotypical Spectrum Disorder (NSD)*’ [59]? We ask this question as a *provocatype*, a creative design provocation as per Bowles’ Future Ethics [22, p 24], to elicit conversations, recognise the lived and embodied experiences of neurodivergent individuals, and to improve research directions. We introduce key concepts, review Autism robot reviews and Autism research (Sec. 2), Autistic research priorities (Sec. 2.3), return to our Feminist HRI [48, 49, 103] provocatype (Sec. 3, 3.1), then conclude with scientific guidance (Sec. 3.2, 4).

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

A3DE@HRI’24, March 15, 2024, Boulder, CO

© 2024 Copyright held by the owner/author(s).

## 1.1 Neurodiversity and Disability Terminology

*Neurodiversity* can be defined as the full range of peoples’ neurotypes that exist in the world, including *nondisabled* (able-bodied) people; it is analogous to the biodiversity of living organisms, but for brains and *bodyminds* (body and mind as one). The term for individuals with neurologically-related disabilities is *neurodivergent*, while nondisabled people and non-cognitively Disabled people can be described as *neurotypical*. Berghs et al. [13] outlines the medical, social [72], human rights [37], and CDS [64] models of disability, which are crucial to research designs. Ashley Shew’s excellent book *Against Technoableism* [94] briefly introduces key terminology, concepts, the Autistic community, and analyzes both disability robots and the implications of *technoableism*, defined as follows:

“*Technoableism is a belief in the technology that considers the elimination of disability as a good thing, something we should strive for. It’s a classic form of ableism—bias against disabled people, bias in favor of non-disabled ways of life. Technoableism is the use of technologies to reassert those biases, often under the guise of empowerment.*” — Shew [94]

## 1.2 History

Researchers should be familiar with: Autism’s initial origins in 1911 [41], the 1925 Autism description by Jewish psychiatrist Grunya Efimovna Sukhareva [97]; the Nazi T-4 campaign to systematically exterminate Autistic people with high support needs (and Disabled people generally) and complicit physician Hans Asperger [34, 35] (who never cited Sukhareva); the historical abuse of Autistic people in research studies [18, 95], e.g. in ABA (Sec. 2.2.8); and today’s ableism crisis in Autism research [14, 15]. Positive events include knowledge from and about Autistic people’s lives [70, 73, 79]; the Disability Rights [27, 95], Disability Justice [50, 73, 92], Autism Rights [95], and Neurodiversity [95] movements; the Autistic Self Advocacy Network (ASAN) [3]; and Autistic Doctors International [2]. See *Neurotribes* [95] by Steve Silberman for details.

## 2 AUTISM RESEARCH AND HRI IMPACTS

Next, we cover research findings that impact HRI research and our metareview. Williams [101][105], Jackson et al. [51], Spiel et al. [96], and Keyes [54] are leading innovative and impactful perspectives on technologically-based Autism research. For example, the dominant approach to Autism robotics research risks creating *Disability Dongles* [51], or devices made without the population the research is about, leading to outcomes unfit for the intended purpose.

## 2.1 Review of Autism Robot Reviews

We consider 12 reviews related to Autism robots since 2020 [6, 8, 25, 53, 56, 57, 67, 80, 82, 85, 89, 91], highlighting standout papers and important findings. Exceptionally robust systematic Autism robot reviews are Wallbridge et al. [100], Salimi et al. [85], and Kewalramani et al. [53]. Wallbridge et al. [100] is coproduced with Autistic people and the absolute strongest review; covering the process of familiarizing Autistic people with robotic systems while noting withdrawals from studies and areas of limited evidence. Salimi et al. [85] observe significant faults in prevailing Autism research methods, stating that, “The main limitations of current studies [on Autism robots are the] shortage of [Randomly Controlled Trials (RCTs)], low power, and bias.” Kewalramani et al. [53] noted that more high-quality studies are needed, recognizes the agency of Autistic children, and minimizes the use of deficit language. Abu-Amara et al. [6] astutely observes potential benefits of low social risk, enjoyable, and predictable robot interactions. Some reviews [11, 80, 82] cover physical hardware.

Despite these strengths, we observe critical shortcomings in most reviews. With Wallbridge et al. [100] excepted, no review seriously considers the research priorities Autistic people set for themselves (Sec. 2.3). Some reviews accurately note the lack of high-quality efficacy evidence [6, 53, 56, 85] for these devices, but more inaccurately overclaim efficacy [8, 36, 53, 67, 80, 82]. Three use inclusive language [53, 82, 100] (Sec. 2.2.1), but all others use harmful deficit language [6, 8, 25, 56, 57, 67, 80, 85, 89, 91] and generally tend to promote research well-known to risk harm to Autistic people, without discussing or measuring those harms. For example, camouflaging via eye contact (Sec. 2.2.5) can be very uncomfortable or even painful for many Autistic people [40, 98], who rate the task as undesirable [28], which should preclude it from most HSR, yet its the most common application for these robots [36] and many reviews promote it [6, 8, 36, 56, 82]. Future research and reviews should be based on up-to-date Autism research.

## 2.2 Current Autism Research

Next we cover current Autism research findings that provide opportunities for actionable Autism Robot and HRI improvements.

**2.2.1 Language and Feedback.** Avoid ableist language [17, 18, 69] for positive, scientifically-backed research communication [19, 69], which is Autistic priority 5 of 25 [24] (Sec. 2.3). Onboard uncomfortable feedback [49] and avoid derailing it [7, 23, 51].

**2.2.2 Autistic Strengths.** Cope and Remington [29] find that Autistic strengths in the workplace tend to include “cognitive advantages such as superior creativity, focus, and memory; increased efficiency and personal qualities such as honesty and dedication; and the ability to offer a unique autism-specific perspective.” Our research priorities should not only consider, but actively seek out and emphasize common Autistic strengths in Autistic populations.

**2.2.3 Double Empathy Problem.** Milton [65] is a landmark paper proposing the theoretical framework for the two-way Double Empathy Problem—namely that Autistic-to-Autistic and neurotypical-to-neurotypical communication are each typically effective, but neurotypical-to-Autistic communication frequently involves miscommunication—elegantly demonstrated by subsequent papers Crompton et al. [33] and Jones et al. [52] who test communication among Autistic, neurotypical, and mixed groups. Another landmark

paper, Sasson et al. [90], concludes that *Neurotypical Peers are Less Willing to Interact with Those with Autism based on Thin Slice Judgments*. Non-Autistic people, e.g. researchers, clinicians, and parents, tend to demonstrate a *lack of reciprocity* [42, 44], or symmetrical exchange as equals where neither Autistic nor non-Autistic people have a dominant position. This merits interventions [81] and addressing within research teams.

**2.2.4 Triple Empathy Problem—Negative Communication Impacts on Autistic People in Healthcare Settings.** Doherty et al. [39] and Shaw et al. [93] crucially demonstrate how gaps in healthcare providers’ methods represent a novel postulated *triple empathy problem* that denies Autistic people access to essential healthcare support. Research and Development (R&D) protocols for Autism robots as health interventions need to be updated accordingly, as per Hundt et al. [49]. We recommend Doherty et al. [38]’s **SPACE: ‘Sensory needs, Predictability, Acceptance, Communication and Empathy’** framework for actionable guidance to address core Autistic needs and mitigate negative outcomes.

**2.2.5 Autistic Camouflaging (Masking).** Autistic people tend to seek genuine connections with others, but in adverse or unsafe environments, many Autistic people must hide Autistic traits to appear ‘more neurotypical’—a process known as *camouflaging* or *masking* [74, 79]. Masking is not necessarily a choice [74] and has known mental health impacts [46, 78]. Human Subjects Research (HSR) and clinical research require principles of *beneficence* and *nonmaleficence* be respected, so the known adverse impacts [46, 78] preclude most robotics and HRI research from encouraging masking or camouflaging, broadly construed (e.g. eye contact [98] training), including through play-based and naturalistic methods [81].

**2.2.6 Diversity of Autistic People and Support Needs.** Describe specific support needs and include Autistic people who are diagnosed and self-assessed [60], nonspeaking, children [28], adults, as well as the range of identities with respect to race, gender, sexual orientation, co-occurring disabilities e.g. Intellectual Disabilities (ID) and wheelchair users, plus other identities [81]. For example, 37% (95% CI 28–46%)[63] of Autistic people have co-occurring ADHD. Use ASAN accessibility guides [9, 10] and the book *Research Involving Participants with Cognitive Disability and Difference* [26].

**2.2.7 Autistic Joy.** Autistic Joy [76, 79] comes in countless forms, e.g. engaging deeply with our special interests, and stimming, or self-stimulation, as a joyful self-regulating activity. Many Autistic people find joy in sharing information, knowledge, and resources (infodumping). Many respond to others who share personal experiences with ones of their own to relate and build bonds.

**2.2.8 Applied Behavioral Analysis (ABA).** A controversial [58, 61, 88, 95] range of treatments mainly lacking rigorous empirical evidence, aside from some support for Naturalistic (NDBI) and technology-based interventions [86, 87]. Adverse (negative) events are largely unmonitored and may be common [16, 20, 21, 87]. A low Autistic priority at 24 of 25 (Sec. 2.3). We suggest research alternatives next.

## 2.3 Autistic Priorities for Autism Research

Next, we highlight Autistic-led priority shifts [28, 31, 32, 75, 77, 84, 99] needed for Autism Research. Pukki et al. [81] is leading work. Autistic people from Scotland ranked their research priorities across 25 topics in Cage et al. [24]. The **top six Autistic priorities** were: (1) Mental health and well-being [68]; (2) identifying or

diagnosing Autistic people, including post-diagnosis support; (3) Services and support across the lifespan, including social care and healthcare; (4) knowledge and attitudes towards Autistic people and how we view and talk about Autistic people; (5) issues that impact Autistic women; and (6) employment. Autistic Joy is ranked 16 of 25. **Autistic people rank Treatments and Interventions as their second to lowest (rank 24 of 25) research priority**, encompassing Applied Behavioural Analysis (ABA), Positive Behaviour Support (PBS), low arousal approach, social skills training, etc. [24] These findings, together with current research (Sec. 2.2), constitute substantial evidence that Autism Robot research should adapt to meet Autistic people's actual priorities and needs.

### 3 METHODS AND DISCUSSION

Next, we summarize Neurotypical Spectrum disorder, describe our provocatype, then provide reflections and finally recommendations on improving the implementation of Autism Robots.

*Neurotypical Spectrum Disorder (NSD)*: Visit Lowry and Winn [59] to read their DSM-V style NSD criteria reframing research-backed differences. For example, neurotypical people with NSD, including researchers and clinicians, are *characterized by deficits* in: (1) understanding and participating in direct communication (verbal, nonverbal, or text), tending to invent implied content when it is not present; (2) sustaining specific topics of interest for an extended period of time, leading to expertise; (3) providing sufficient detail; (4) adherence to moral principles; (5) ability to speak up in unjust social and workplace situations; (6) social interactions with neurodivergent people; (7) avoiding negative assumptions and judgments about harmlessly divergent people and behaviors; (8) flexibility about social conformity; (9) recognizing neutral neurodivergent faces, voices, and descriptions, with a tendency towards confident misinterpretations as anger, sarcasm, or condescension; (10) respecting people they perceive as lower in a social hierarchy and developing a theory of their minds; (11) restricted, repetitive need for small talk (*e.g.* the weather). No one *deficit* is sufficient for an NSD diagnosis, not everyone has NSD, and people with NSD may not have all *deficits*, but together the presence of enough traits at a sufficient degree of intensity can help identify *NSD sufferers*.

#### 3.1 Robot Provocatype Method and Reflections

Some people might find the above NSD preface to our *provocatype* upsetting to read. This feeling is one Autistic people reading Autism research are deeply familiar with because we must routinely read extremely crass language written about us, without us [17, 69].

Furthermore, we consider continuing, pausing, reworking, and winding down (ending) this project to each be serious, actionable options [48, 49]. We have *Theory of Mind (ToM)* [45] (we can imagine being in others' shoes), we are *empathetic* [55] people, and we are willing to *reciprocate* [42, 44] (Sec. 2.2.3). We have considered the perspective of a potentially neurotypical reader and/or researcher who might find this NSD approach offensive, *e.g.* by swapping role names in the text [43, 44], and it seems like it could be quite unpleasant. Thus, we conclude that our hinted NSD *Robot Provocatype's* risk of harm is too high.

In place of designing a provocatype 'social robot for NSD', we decide we *will not* use this opportunity to create assistive robots that address all of the symptoms of NSD that make our current

world a difficult place to live in as an Autistic person. We *will not* start designing a robot to 'cure' NSD with repeated exercises to: sustain interests, speak up about moral dilemmas at work, practice empathy, overcome their thin slice judgments of others, and so on.

Instead, we *will* draw on Begel et al. [12], a project for AI-based emotion recognition with a fantastic outcome, specifically, they ended the experiment once they received negative feedback from Autistic people. *Therefore, our real Research Provocatype is to take responsibility and end this experiment before it even starts. We hope that those working on 'robots for Autism' will reflect on when it might be best for them to reciprocate and do the same.*

#### 3.2 Recommendations and Guidance

We seek research that advances the state of empathetic understanding and creates resources that Autistic communities actively request. We advise researchers to shift research priorities and project designs to address Autistic people's priorities for Autism Research (Sec. 2.3, [24, 81]). Autism-related robots should be carefully and inexpensively designed to address top Autistic priorities, then be rigorously evaluated against robot-free alternatives *e.g.* with Randomly Controlled Trials (RCT) or high-quality qualitative studies.

Studies need to explicitly follow frameworks like SPACE [38] (Sec. 2.2.4) to ensure Autistic people's individual needs are supported in system designs and during the research process. Also respect Autistic agency [62, 96]; record assent, consent, and withdrawals [62]; and describe adverse (harmful) events, *e.g.* due to research methods [62]. Read Cascio and Racine [26] for "*suggestions for research design, research ethics, and best practices that empower people with cognitive disabilities and differences to participate in research while respecting and managing potential coercion or undue influence.*" We suggest keeping up with the journal *Autism in Adulthood* and Autistic-led resources [1–5, 40, 61].

Furthermore, research and design methods matter. *Robots Won't Save Japan* [104] and its review [47] share insights on assumptions and limitations all roboticists and HRI researchers should consider. Notably, all of the disability-related robots Wright [104] evaluated aimed to reduce the workload and burden of support personnel, but actually *added* to it. Hundt [47] connects it to Autism research.

Adopt participant-led [15, 49], co-design, participatory, Design Justice [30, 103], and/or Equitable Agile [49] methodologies. Better frameworks for project governance [49] can improve research and development outcomes. Project performance can be evaluated with participant-led research scorecards [49, 71]. Ground research in, and cite, current Autism research (Sec. 2), including critiques. Use inclusive language [17]. Consider internal experiences [83]. Always ensure Autistic adults or Autistic Autism scholars review proposals, experiment designs, and papers; are offered authorship accordingly, and are *paid* whenever possible. Finally, onboard inconvenient findings and feedback; it could lead to path-breaking outcomes.

### 4 CONCLUSION

In summary, we laud the best of recent Autism research and reviews, but find the bulk of research on Autism robots ranges from cases where there is substantial room for improvement up through cases where there is a high risk that harm has occurred. Finally, we reviewed actionable resources, findings, and methods to meet Autistic needs and research priorities in HRI and robotics.

## REFERENCES

- [1] [n. d.]. AASPIRE. <https://autismandhealth.org/>.
- [2] [n. d.]. Autistic Doctors International (ADI). <https://autisticdoctorsinternational.com/videos>
- [3] [n. d.]. Autistic Self Advocacy Network. <https://autisticadvocacy.org/>.
- [4] [n. d.]. Neurodiverse Connection UK. <https://ndconnection.co.uk/blog>.
- [5] [n. d.]. The Thinking Person's Guide to Autism. <https://thinkingautismguide.com/>.
- [6] Fatima Abu-Amara, Abdelmoumen Bensefia, Hisham Mohammad, and et al. 2021. Robot and Virtual Reality-Based Intervention in Autism: A Comprehensive Review. *International Journal of Information Technology* 13 (2021), 1879–1891. <https://doi.org/10.1007/s41870-021-00740-9>
- [7] Sara Ahmed. 2021. *Complaint!* Duke University Press, Durham. <https://doi.org/10.1515/9781478022336>
- [8] Amal Alabdulkareem, Noura Alhakhani, and Abeer Al-Nafjan. 2022. A Systematic Review of Research on Robot-Assisted Therapy for Children with Autism. *Sensors* 22, 3 (2022). <https://doi.org/10.3390/s22030944>
- [9] Autistic Self Advocacy Network (ASAN). [n. d.]. Holding Inclusive Events: A Guide to Accessible Event Planning. <https://autisticadvocacy.org/wp-content/uploads/2019/05/Accessible-Event-Planning.pdf>
- [10] Autistic Self Advocacy Network (ASAN). [n. d.]. One Idea Per Line: A Guide to Making Easy Read Resources. <https://autisticadvocacy.org/wp-content/uploads/2021/07/One-Idea-Per-Line.pdf>
- [11] Katrin D. Bartl-Pokorny, Malgorzata Pykala, Pinar Uluer, Duygun Erol Barkana, Alice Baird, Hatice Kose, Tatjana Zorcec, Ben Robins, Björn W. Schuller, and Agnieszka Landowska. 2021. Robot-Based Intervention for Children With Autism Spectrum Disorder: A Systematic Literature Review. *IEEE Access* 9 (2021), 165433–165450. <https://doi.org/10.1109/ACCESS.2021.3132785>
- [12] Andrew Begel, John Tang, Sean Andrist, Michael Barnett, Tony Carbary, Piali Choudhury, Edward Cutrell, Alberto Fung, Sasa Junuzovic, Daniel McDuff, Kael Rowan, Shibashankar Sahoo, Jennifer Frances Waldern, Jessica Wolk, Hui Zheng, and Annuska Zolyomi. 2020. Lessons Learned in Designing AI for Autistic Adults. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (Virtual Event, Greece) (ASSETS '20)*. Association for Computing Machinery, New York, NY, USA, Article 46, 6 pages. <https://doi.org/10.1145/3373625.3418305>
- [13] Maria Berghs, Karl Atkin, Hilary Graham, et al. 2016. *Implications for public health research of models and theories of disability: a scoping study and evidence synthesis*. Number 4.8 in Public Health Research. NIHR Journals Library, Southampton (UK). <https://www.ncbi.nlm.nih.gov/books/NBK378951/>
- [14] Monique Botha. 2021. Academic, Activist, or Advocate? Angry, Entangled, and Emerging: A Critical Reflection on Autism Knowledge Production. *Front. Psychol.* 0 (2021). <https://doi.org/10.3389/fpsyg.2021.727542>
- [15] M Botha and E Cage. 2022. "Autism research is in crisis": A mixed method study of researcher's constructions of autistic people and autism research. *Frontiers in Psychology* 13 (2022), 1050897. <https://doi.org/10.3389/fpsyg.2022.1050897>
- [16] Kristen Bottema-Beutel, Shannon Crowley, Micheal Sandbank, and Tiffany G Woyrnarowski. 2021. Adverse event reporting in intervention research for young autistic children. *Autism* 25, 2 (1 Feb 2021), 322–335. <https://doi.org/10.1177/1362361320965331>
- [17] Kristen Bottema-Beutel, Steven K. Kapp, Jessica Nina Lester, Noah J. Sasson, and Brittany N. Hand. 2021. Avoiding Ableist Language: Suggestions for Autism Researchers. *Autism in Adulthood* 3, 1 (2021), 18–29. <https://doi.org/10.1089/aut.2020.0014> arXiv:<https://doi.org/10.1089/aut.2020.0014>
- [18] Kristen Bottema-Beutel, Steven K. Kapp, Noah Sasson, Morton Ann Gernsbacher, Hannah Natri, and Mia Botha. 2023. Anti-ableism and scientific accuracy in autism research: a false dichotomy. *Frontiers in Psychiatry* 14 (2023), 1244451. <https://doi.org/10.3389/fpsyg.2023.1244451>
- [19] Kristen Bottema-Beutel, Steven K. Kapp, Noah Sasson, Morton Ann Gernsbacher, Heini Natri, and Monique Botha. 2023. Anti-ableism and scientific accuracy in autism research: a false dichotomy. *Frontiers in Psychiatry* 14 (2023). <https://doi.org/10.3389/fpsyg.2023.1244451>
- [20] Kristen Bottema-Beutel, Shannon Crowley LaPoint, So Yoon Kim, Sarah Mohiuddin, Qun Yu, and Rachael McKimmon. 2023. An evaluation of intervention research for transition-age autistic youth. *Autism* 27, 4 (2023), 890–904. <https://doi.org/10.1177/13623613221128761> arXiv:<https://doi.org/10.1177/13623613221128761> PMID: 36189778.
- [21] Kristen Bottema-Beutel, Micheal Sandbank, and Tiffany Woyrnarowski. 2023. Overview of Issues in Autism Intervention Research: Research Design and Reporting. *Perspectives of the ASHA Special Interest Groups* 8, 6 (2023), 1238–1247. [https://doi.org/10.1044/2023\\_PERSP-23-00104](https://doi.org/10.1044/2023_PERSP-23-00104) arXiv:[https://pubs.asha.org/doi/pdf/10.1044/2023\\_PERSP-23-00104](https://pubs.asha.org/doi/pdf/10.1044/2023_PERSP-23-00104)
- [22] Cennydd Bowles. 2018. *Future ethics*. NowNext Press.
- [23] Kim Burchett, Fish Novosad, Jonathan Reid, Margaret Mitchell, and Anonymous People. 2018. *Derailing*. <https://speak-up.org/derail/>
- [24] Eilidh Cage, Catherine J Crompton, Sarah Dantas, Khiah Strachan, Rachel Birch, Mark Robinson, Stasa Morgan-Appel, Charlie MacKenzie-Nash, Aaron Gallagher, and Monique Botha. 2024. What are the autism research priorities of autistic adults in Scotland? *Autism* 0, 0 (2024), 13623613231222656. <https://doi.org/10.1177/13623613231222656> arXiv:<https://doi.org/10.1177/13623613231222656> PMID: 38311602.
- [25] Sandra Cano, Carina S. González, Rosa María Gil-Iranzo, and Sergio Albiol-Pérez. 2021. Affective Communication for Socially Assistive Robots (SARs) for Children with Autism Spectrum Disorder: A Systematic Review. *Sensors* 21, 15 (2021). <https://doi.org/10.3390/s21155166>
- [26] M. Ariel Cascio and Eric Racine. 2019. *Research Involving Participants with Cognitive Disability and Difference: Ethics, Autonomy, Inclusion, and Innovation*. Oxford University Press. <https://doi.org/10.1093/oso/9780198824343.001.0001>
- [27] James I. Charlton. 1998. *Nothing about us without us: disability oppression and empowerment*. University of California Press, Berkeley.
- [28] Kate T. Chazin, Jennifer R. Ledford, Jane M. Wilson-Moses, Adithyan Rajaraman, and A. Pablo Juárez. 2024. Centering Autistic Perspectives: Social Acceptability of Goals, Learning Contexts, and Procedures for Young Autistic Children. *J Autism Dev Disord* (2024). <https://doi.org/10.1007/s10803-024-06242-4>
- [29] Rachel Cope and Anna Remington. 2022. The Strengths and Abilities of Autistic People in the Workplace. *Autism Adulthood* 4, 1 (March 2022), 22–31. <https://doi.org/10.1089/aut.2021.0037>
- [30] S. Costanza-Chock. 2020. *Design Justice: Community-Led Practices to Build the Worlds We Need*. MIT Press. <https://mitpress.mit.edu/books/design-justice> open access: <https://design-justice.pubpub.org/>.
- [31] Australian Autism Research Council. [n. d.]. Research report on focus groups to identify research questions for community informed priority areas. <https://www.autismrc.com.au/aarc>. Accessed February 2, 2022.
- [32] Australian Autism Research Council. 2019. Draft Research Priorities for Consultation 2019. <https://www.autismrc.com.au/aar>. Accessed February 2, 2022.
- [33] Christopher J. Crompton, Danielle Ropar, Claire V. Evans-Williams, Elizabeth G. Flynn, and Sue Fletcher-Watson. 2020. Autistic Peer-to-Peer Information Transfer is Highly Effective. *Autism* 24, 7 (2020), 1704–1712. <https://doi.org/10.1177/1362361320919286>
- [34] H. Czech. 2018. Hans Asperger, National Socialism, and "race hygiene" in Nazi-era Vienna. *Molecular autism* (2018). <https://doi.org/10.1186/s13229-018-0208-6>
- [35] Herwig Czech. 2023. Herwig Czech: To assess Asperger's knowledge on the Nazi 'child euthanasia' programme, his own words should matter (response to Tatzert et al.). *Acta Paediatr* (2023), 1–2. <https://doi.org/10.1111/apa.17068>
- [36] D. Damianidou, A. Eidsels, and M. Arthur-Kelly. 2020. The Use of Robots in Social Communications and Interactions for Individuals with ASD: A Systematic Review. *Advances in Neurodevelopmental Disorders* 4 (2020), 357–388. <https://doi.org/10.1007/s41252-020-00184-5>
- [37] Theresia Degener. 2016. *A Human Rights Model of Disability* (1st ed.). Routledge, London. 19 pages. <https://doi.org/10.4324/9781315612881>
- [38] Mary Doherty, Sue McCowan, and Sebastian CK Shaw. 2023. Autistic SPACE: a novel framework for meeting the needs of autistic people in healthcare settings. Published Online. *British Journal of Hospital Medicine* 84, 4 (2023). <https://doi.org/10.12968/hmed.2023.0006> Open Access.
- [39] Mary Doherty, Stuart Neilson, Jane O'Sullivan, Laura Carravallah, Mona Johnson, Walter Cullen, and Sebastian C K Shaw. 2022. Barriers to healthcare and self-reported adverse outcomes for autistic adults: a cross-sectional study. *BMJ Open* 12, 2 (2022). <https://doi.org/10.1136/bmjopen-2021-056904>
- [40] Natalie Engelbrecht and Eva Silvertant. [n. d.]. Embrace Autism. Website. <https://embrace-autism.com/> <https://embrace-autism.com/autistics-and-eye-contact-its-asynchronous/>
- [41] Bonnie Evans. 2013. How autism became autism: The radical transformation of a central concept of child development in Britain. *History of the Human Sciences* 26, 3 (2013), 3–31. <https://doi.org/10.1177/0952695113484320> arXiv:<https://doi.org/10.1177/0952695113484320> PMID: 24014081.
- [42] Morton Ann Gernsbacher. 2006. Toward a Behavior of Reciprocity. *J Dev Process* 1, 1 (2006), 139–152. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4296736/>
- [43] Morton Ann Gernsbacher. 2018. More Shared Responsibility for "More Appropriate Communication". *Perspect ASHA Spec Interest Groups* 3, 1 (Apr 2018), 58–67. <https://doi.org/10.1044/persp3.SIG1.58>
- [44] Morton Ann Gernsbacher. 2021. Who Lacks Reciprocity? Challenging Precarious Assumptions about Autistic People. YouTube video. <https://www.youtube.com/live/59uCz13mNvc?t=1075>
- [45] Morton Ann Gernsbacher and Melanie Yergeau. 2019. Empirical failures of the claim that autistic people lack a theory of mind. *Archives of Scientific Psychology* 7, 1 (2019), 102–118. <https://doi.org/10.1037/arc0000067>
- [46] Laura Hull, Lily Levy, Meng-Chuan Lai, KV Petrides, Simon Baron-Cohen, Carrie Allison, Paula Smith, and Will Mandy. 2021. Is social camouflaging associated with anxiety and depression in autistic adults? *Molecular autism* 12, 1 (2021), 1–13. <https://doi.org/10.1186/s13229-021-00421-1>
- [47] Andrew Hundt. 2024. Can 'Robots Won't Save Japan' Save Robotics? Reviewing an Ethnography of Eldercare Automation. *Under review* (2024).
- [48] Andrew Hundt, William Agnew, Vicky Zeng, Severin Kacianka, and Matthew Gombolay. 2022. Robots Enact Malignant Stereotypes. In 2022 ACM Conference on Fairness, Accountability, and Transparency (Seoul, Republic of Korea). *FAccT*,

- 743–756. <https://doi.org/10.1145/3531146.3533138> website: <https://sites.google.com/view/robots-enact-stereotypes/home> PDF with appendix: <https://arxiv.org/pdf/2207.11569.pdf>.
- [49] Andrew Hundt, Julia Schueller, and Severin Kacianka. 2023. Towards Equitable Agile Research and Development of AI and Robotics (Draft). [https://youtu.be/Um\\_sqDEYM\\_U&t=3367](https://youtu.be/Um_sqDEYM_U&t=3367). In *We Robot*. <https://www.bu.edu/law/engagements/we-robot-2023/>.
- [50] Sins Invalid. 2019. *Skin, tooth, and bone: The basis of movement is our people: A disability justice primer* (2nd ed.). Sins Invalid. <https://www.sinsinvalid.org/news-1/2019/11/12/skin-tooth-and-bone-2nd-edition-available-now>
- [51] Liz Jackson, Alex Haagaard, and Rua Williams. 2022. Disability Dongle. *Platypus* (April 2022). <https://blog.castac.org/2022/04/disability-dongle/>
- [52] Desiree R Jones, Monique Botha, Robert A Ackerman, Kathryn King, and Noah J Saxon. 2023. Non-autistic observers both detect and demonstrate the double empathy problem when evaluating interactions between autistic and non-autistic adults. *Autism* 0, 0 (2023). <https://doi.org/10.1177/13623613231219743> arXiv:<https://doi.org/10.1177/13623613231219743> PMID: 38149622.
- [53] Swati Kewalramani, Katherine A. Allen, Emily Leif, and et al. 2023. A Scoping Review of the Use of Robotics Technologies for Supporting Social-Emotional Learning in Children with Autism. *Journal of Autism and Developmental Disorders* (2023). <https://doi.org/10.1007/s10803-023-06193-2>
- [54] Os Keyes. 2020. Automating autism: Disability, discourse, and Artificial Intelligence. *Journal of Sociotechnical Critique* 1, 1 (2020), 1–31. <https://doi.org/10.25779/89bj-j396>
- [55] Lesley Kimber, Diarmuid Verrier, and Stephen Connolly. 2023. Autistic People's Experience of Empathy and the Autistic Empathy Deficit Narrative. *Autism in Adulthood* (2023). <https://doi.org/10.1089/aut.2023.0001> Ahead of Print.
- [56] Manu Kohli, Arpan Kumar Kar, and Shuchi Sinha. 2022. Robot Facilitated Rehabilitation of Children with Autism Spectrum Disorder: A 10 Year Scoping Review. *Expert Systems* (2022). <https://doi.org/10.1111/exsy.13204> First published: December 8, 2022.
- [57] Athanasia Kouroupa, Keith R Laws, Karen Irvine, Silvana E Mengoni, Alistair Baird, and Shivani Sharma. 2022. The use of social robots with children and young people on the autism spectrum: A systematic review and meta-analysis. *Plos one* 17, 6 (2022), e0269800. <https://doi.org/10.1371/journal.pone.0269800>
- [58] Henny Kupferstein. 2018. Evidence of increased PTSD symptoms in autistics exposed to applied behavior analysis. *Advances in Autism* 4, 1 (2018), 19–29. <https://doi.org/10.1108/AIA-08-2017-0016>
- [59] Matt Lowry and Stephanie Winn. 2021. *Neurotypical Spectrum Disorder*. <https://web.archive.org/web/20220114165409/https://realtalktherapypdx.com/neurotypical-spectrum-disorder/> Original text by Matt Lowry, shared with permission from the author. Item C-5 added by Stephanie Winn, LMFT.
- [60] T. A. M. McDonald. 2020. Autism Identity and the “Lost Generation”: Structural Validation of the Autism Spectrum Identity Scale and Comparison of Diagnosed and Self-Diagnosed Adults on the Autism Spectrum. *Autism in Adulthood* (Mar 2020), 13–23. <https://doi.org/10.1089/aut.2019.0069>
- [61] Ann Memmott. [n. d.]. Ann Memmott's Autism Blog. <https://annsautism.blogspot.com/>.
- [62] Ann Memmott. 2023. Ethics and Autism: Rights and Responsibilities within Applied Behaviour Analysis. Blog post. <https://annsautism.blogspot.com/2023/01/ethics-and-autism-rights-and.html>
- [63] Martina Micai and et al. 2023. Prevalence of Co-Occurring Conditions in Children and Adults with Autism Spectrum Disorder: A Systematic Review and Meta-Analysis. *Neuroscience & Biobehavioral Reviews* 155 (2023), 105436. <https://doi.org/10.1016/j.neubiorev.2023.105436>
- [64] Damian Milton and Sara Ryan (Eds.). 2023. *The Routledge International Handbook of Critical Autism Studies* (1st ed.). Routledge. 326 pages. <https://www.routledge.com/The-Routledge-International-Handbook-of-Critical-Autism-Studies/Milton-Ryan/p/book/9780367521073>
- [65] Damian E. M. Milton. 2012. On the Ontological Status of Autism: The ‘Double Empathy Problem’. *Disability & Society* 27, 6 (2012), 883–887. <https://doi.org/10.1080/09687599.2012.710008>
- [66] Lux Miranda, Ginevra Castellano, and Katie Winkle. 2023. Examining the State of Robot Identity. In *Companion of the 2023 ACM/IEEE International Conference on Human-Robot Interaction*. ACM, Stockholm Sweden, 658–662. <https://doi.org/10.1145/3568294.3580168>
- [67] Fazah Akhtar Hanapiyah Mohammed A. Saleh and Habibah Hashim. 2021. Robot applications for autism: a comprehensive review. *Disability and Rehabilitation: Assistive Technology* 16, 6 (2021), 580–602. <https://doi.org/10.1080/17483107.2019.1685016> arXiv:<https://doi.org/10.1080/17483107.2019.1685016> PMID: 32706602.
- [68] Palwasha Najeeb and Lisa Quadt. 2024. Autistic well-being: A scoping review of scientific studies from a neurodiversity-affirmative perspective. *Neurodiversity* 2 (2024), 27546330241233088. <https://doi.org/10.1177/27546330241233088> arXiv:<https://doi.org/10.1177/27546330241233088>
- [69] Heini M Natri, Oluwatobi Abubakare, Kassiane Asasumasu, Abha Basargekar, Flavien Beaud, Monique Botha, Kristen Bottema-Beutel, Maria Rosa Brea, Lydia XZ Brown, Daisy A Burr, et al. 2023. Anti-ableist language is fully compatible with high-quality autism research: Response to Singer et al.(2023). *Autism Research* 16, 4 (2023), 673–676. <https://doi.org/10.1002/aur.2928>
- [70] Sarah O'Brien. 2023. *So, I'm Autistic: An Introduction to Autism for Young Adults and Late Teens*. Jessica Kingsley Publishers. 256 pages. <https://us.jkp.com/products/so-im-autistic>
- [71] Council of Medical Specialty Societies (CMSS) and Patient-Led Research Collaborative (PLRC). 2023. Patient-Led Research Scorecards. (2023). [https://cmss.org/wp-content/uploads/2023/01/11231\\_CMSS\\_Plybk\\_Scorecards\\_FINAL.pdf](https://cmss.org/wp-content/uploads/2023/01/11231_CMSS_Plybk_Scorecards_FINAL.pdf) <https://patientresearchcovid19.com/storage/2023/02/Patient-Led-Research-Scorecards.pdf> <https://cmss.org/patient-led-research-integration/>.
- [72] Union of the Physically Impaired Against Segregation. 1976. *The Union of the Physically Impaired Against Segregation and the Disability Alliance Discuss Fundamental Principles of Disability: Being a Summary of the Discussion Held on 22nd November, 1975 and Containing Commentaries from Each Organisation*. Union of the Physically Impaired Against Segregation.
- [73] Kala Allen Omeiza. 2024. *Autistic and Black: Our Experiences of Growth, Progress and Empowerment*. Jessica Kingsley Publishers. 224 pages. <https://us.jkp.com/products/autistic-and-black>
- [74] Amy Pearson and Kieran Rose. 2021. A Conceptual Analysis of Autistic Masking: Understanding the Narrative of Stigma and the Illusion of Choice. *Autism in Adulthood* (Mar 2021), 52–60. <https://doi.org/10.1089/aut.2020.0043>
- [75] E. Pellicano, A. Dinsmore, and T. Charman. 2014. What should autism research focus upon? Community views and priorities from the United Kingdom. *Autism* 18, 7 (2014), 756–770. <https://doi.org/10.1177/1362361314529627>
- [76] Elizabeth Pellicano, Umber Fatima, Geoff Hall, and et al. 2022. A capabilities approach to understanding and supporting autistic adulthood. *Nat Rev Psychol* 1 (2022), 624–639. <https://doi.org/10.1038/s44159-022-00099-z>
- [77] L. Pellicano, A. Dinsmore, and T. Charman. 2014. *A Future Made Together: Shaping Autism Research in the UK*. Centre for Research in Autism and Education (CRAE), Institute of Education, University of London.
- [78] Ellie Perry, William Mandy, Laura Hull, K V Petrides, Simon Baron-Cohen, Carrie Allison, Paula Smith, and Meng-Chuan Lai. 2022. Understanding camouflaging as a response to autism-related stigma: A social identity theory approach. *Journal of Autism and Developmental Disorders* 52, 2 (2022), 800–810. <https://doi.org/10.1007/s10803-021-04987>
- [79] D. Price. 2022. *Unmasking Autism: The Power of Embracing Our Hidden Neurodiversity*. Octopus Publishing Group. <https://books.google.com/books?id=t41pzgEACA>
- [80] Alfio Puglisi, Tindara Capri, Loris Pignolo, Stefania Gismondo, Paola Chilà, Roberta Minutoli, Flavia Marino, Chiara Faila, Antonino Andrea Arnao, Genaro Tartarisco, Antonio Cerasa, and Giovanni Pioggia. 2022. Social Humanoid Robots for Children with Autism Spectrum Disorders: A Review of Modalities, Indications, and Pitfalls. *Children* 9, 7 (2022). <https://doi.org/10.3390/children9070953>
- [81] Heta Pukki, Jorn Bettin, Avery Grey Outlaw, Joshua Hennessy, Kabie Brook, Martijn Dekker, Mary Doherty, Sebastian C.K. Shaw, Jo Bervoets, Silke Rudolph, Thibault Corneloup, Kylieanne Derwent, Onemoo Lee, Yadira Garcia Rojas, Wenn Lawson, Monica Vidal Gutierrez, Kosjenka Petek, Myria Tsiakirou, Annikka Suominen, Jo Minchin, Rainer Döhle, Silke Lipinski, Heini Natri, Emma Reardon, Giovanna Villarreal Estrada, Ovidiu Platon, Nick Chown, Ayaya Satsuki, Damian Milton, Nick Walker, Ondrej Roldan, Bárbara Herrán, Citlali Limón Cañedo, Sue McCowan, Mona Johnson, Eleanor Jane Turner, Jessy Lammers, and wn-ho Yoon. 2022. Autistic Perspectives on the Future of Clinical Autism Research. *Autism in Adulthood* 4, 2 (2022), 93–101. <https://doi.org/10.1089/aut.2022.0017> arXiv:<https://doi.org/10.1089/aut.2022.0017>
- [82] Luca Ragno, Alberto Borboni, Federica Vannetti, Cinzia Amici, and Nicoletta Cusano. 2023. Application of Social Robots in Healthcare: Review on Characteristics, Requirements, Technical Solutions. *Sensors* 23, 15 (2023). <https://doi.org/10.3390/s23156820>
- [83] Allison B. Ratto, Julia Bascom, Sharon daVanport, John F. Strang, Laura G. Anthony, Alyssa Verbalis, Cara Pugliese, Nicole Nadwony, Lydia X.Z. Brown, Mallory Cruz, Becca Lory Hector, Steven K. Kapp, Morénike Giwa Onaiwu, Dora M. Raymaker, John Elder Robison, Catriona Stewart, Ren Stone, Emma Whetsell, Kevin Pelphrey, and Lauren Kenworthy. 2023. Centering the Inner Experience of Autism: Development of the Self-Assessment of Autistic Traits. *Autism in Adulthood* (Mar 2023), 93–105. <https://doi.org/10.1089/aut.2021.0099>
- [84] L. Roche, D. Adams, and M. Clark. 2021. Research priorities of the autism community: A systematic review of key stakeholder perspectives. *Autism* 25, 2 (2021), 336–348. <https://doi.org/10.1177/1362361320966780>
- [85] Zohreh Salimi, Ensiyeh Jenabi, and Saied Bashirian. 2021. Are social robots ready yet to be used in care and therapy of autism spectrum disorder: A systematic review of randomized controlled trials. *Neuroscience & Biobehavioral Reviews* 129 (2021), 1–16. <https://doi.org/10.1016/j.neubiorev.2021.04.009>
- [86] Micheal Sandbank, Kristen Bottema-Beutel, Shannon Crowley, Margaret Cassidy, Kacie Dunham, Jacob I Feldman, Jenna Crank, Susanne A Albarran, Sweeya Raj, Prachy Mahbub, et al. 2020. Project AIM: Autism intervention meta-analysis for studies of young children. *Psychological bulletin* 146, 1 (2020), 1. <https://doi.org/10.1037/a0050000>

//doi.org/10.1037/bul0000215

- [87] Micheal Sandbank, Kristen Bottema-Beutel, Shannon Crowley LaPoint, Jacob I Feldman, D Jonah Barrett, Nicolette Caldwell, Kacie Dunham, Jenna Crank, Suzanne Albarran, and Tiffany Woynaroski. 2023. Autism intervention meta-analysis of early childhood studies (Project AIM): updated systematic review and secondary analysis. *BMJ* 383 (2023). <https://doi.org/10.1136/bmj-2023-076733> arXiv:<https://www.bmj.com/content/383/bmj-2023-076733.full.pdf>
- [88] Aileen Herlinda Sandoval-Norton, Gary Shkedy, and Dalia Shkedy. 2019. How much compliance is too much compliance: Is long-term ABA therapy abuse? *Cogent Psychology* 6, 1 (2019), 1641258. <https://doi.org/10.1080/23311908.2019.1641258>
- [89] Sunağül Sani-Bozkurt and Gulden Bozkus-Genc. 2023. Social Robots for Joint Attention Development in Autism Spectrum Disorder: A Systematic Review. *International Journal of Disability, Development and Education* 70, 5 (2023), 625–643. <https://doi.org/10.1080/1034912X.2021.1905153>
- [90] Noah J. Sasson, Daniel J. Faso, Jessica Nugent, Sharon Lovell, Daniel P. Kennedy, and Ruth B. Grossman. 2017. Neurotypical Peers are Less Willing to Interact with Those with Autism based on Thin Slice Judgments. *Scientific Reports* 7 (2017), 40700. <https://doi.org/10.1038/srep40700>
- [91] Brian Scassellati, Henny Admoni, and Maja Matarić. 2012. Robots for Use in Autism Research. *Annual Review of Biomedical Engineering* 14, 1 (2012), 275–294. <https://doi.org/10.1146/annurev-bioeng-071811-150036> arXiv:<https://doi.org/10.1146/annurev-bioeng-071811-150036> PMID: 22577778.
- [92] Sami Schalk. 2022. *Black Disability Politics*. Publisher. <https://doi.org/10.2307/j.ctv2vr9d7z>
- [93] Sebastian CK Shaw, Laura Carravallah, Mona Johnson, Jane O'Sullivan, Nicholas Chown, Stuart Neilson, and Mary Doherty. 0. Barriers to healthcare and a 'triple empathy problem' may lead to adverse outcomes for autistic adults: A qualitative study. *Autism* 0, 0 (0), 13623613231205629. <https://doi.org/10.1177/13623613231205629> PMID: 37846479.
- [94] Ashley Shew. 2023. *Against Technoableism: Rethinking Who Needs Improvement*. W. W. Norton. <https://wwnorton.com/books/9781324036661>
- [95] Steve Silberman. 2016. *Neurotribes: The Legacy of Autism and the Future of Neurodiversity* (paperback ed.). Avery. 560 pages. <https://www.penguinrandomhouse.com/books/310415/neurotribes-by-steve-silberman-foreword-by-oliver-sacks/> Foreword by Oliver Sacks.
- [96] Katta Spiel, Christopher Frauenberger, Os Keyes, and Geraldine Fitzpatrick. 2019. Agency of Autistic Children in Technology Research—A Critical Literature Review. *ACM Trans. Comput.-Hum. Interact.* 26, 6, Article 38 (nov 2019), 40 pages. <https://doi.org/10.1145/3344919>
- [97] Grumia Efimovna Ssucharewa and S Wolff. 1996. The first account of the syndrome Asperger described? Translation of a paper entitled "Die schizoiden Psychopathien im Kindesalter" by Dr. GE Ssucharewa; scientific assistant, which appeared in 1926 in the *Monatsschrift für Psychiatrie und Neurologie* 60: 235-261. *European child & adolescent psychiatry* 5, 3 (1996), 119–132. <https://doi.org/10.1007/BF00571671>
- [98] Dominic A. Trevisan, Neil Roberts, Chia Lin, and Elina Birmingham. 2017. How do adults and teens with self-declared Autism Spectrum Disorder experience eye contact? A qualitative analysis of first-hand accounts. *PLoS ONE* 12, 11 (2017), e0188446. <https://doi.org/10.1371/journal.pone.0188446>
- [99] K. Van den Bosch and D. Weve. [n. d.]. Report of the Autism Research Agenda: Mapping research needs of three interest groups the field of autism: adults, parents and legal representatives. <https://onderzoeksagenda-autisme.nl/rapport.pdf>. Accessed January 27, 2022.
- [100] Cassandra D. Wallbridge, Coralie McGregor, Nathan Drozd, and et al. 2024. A Systematic Review of Familiarisation Methods Used in Human–Robot Interactions for Autistic Participants. *International Journal of Social Robotics* 16 (2024), 37–53. <https://doi.org/10.1007/s12369-023-01015-y>
- [101] Rua M. Williams. 2018. Autonomously Autistic: Exposing the Locus of Autistic Pathology. *Canadian Journal of Disability Studies* 7, 2 (Jul 2018), 60–82. <https://doi.org/10.15353/cjds.v7i2.423>
- [102] Rua M. Williams. 2021. I, Misfit: Empty Fortresses, Social Robots, and Peculiar Relations in Autism Research. *Techné: Research in Philosophy and Technology* 25, 3 (2021), 451–478. <https://doi.org/10.5840/techne20211019147>
- [103] Katie Winkle, Donald McMillan, Maria Arnelid, Katherine Harrison, Madeline Balaam, Ericka Johnson, and Iolanda Leite. 2023. Feminist Human-Robot Interaction: Disentangling Power, Principles and Practice for Better, More Ethical HRI. In *Proceedings of the 2023 ACM/IEEE International Conference on Human-Robot Interaction* (Stockholm, Sweden) (HRI '23). Association for Computing Machinery, New York, NY, USA, 72–82. <https://doi.org/10.1145/3568162.3576973>
- [104] J.A. Wright. 2023. *Robots Won't Save Japan: An Ethnography of Eldercare Automation*. Cornell University Press. <https://books.google.com/books?id=LJ5tEAAAQBAJ>
- [105] Anon Ymous, Katta Spiel, Os Keyes, Rua M. Williams, Judith Good, Eva Hornecker, and Cynthia L. Bennett. 2020. "I Am Just Terrified of My Future" – Epistemic Violence in Disability Related Technology Research. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (Honolulu, HI, USA) (CHI EA '20). Association for Computing Machinery, New York, NY, USA, 1–16. <https://doi.org/10.1145/3334480.3381828>

Received 16 February 2024; accepted 23 February 2024; camera ready 7 March 2024