

Toward Equitable ArtScience Collaborations

Synthesizing Performance Art and Social Psychology for Social Change

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ABSTRACT

The article proposes a novel model for ArtScience collaborations that is based on more equal roles. With better power balance, artists and scientists can together create projects that truly synthesize their fields. Additionally, it is suggested that these collaborations can significantly contribute to social change through socially engaged research. The article focuses on the transformative potential of the collaboration process itself. The presented case study is the authors' collaboration in creating hybrids of participatory performance art and social psychology experiments. It contributes new methodological approaches to the expanding field of ArtScience collaborations.

In our reality of interconnected societal and environmental issues, the scope and complexity of the layered, severe problems we face are beyond the capacity of a single discipline to manage [1]. Better problem-solving methods that embody diverse ways of processing, conceptualization, and creativity are required. It is time to join forces and work interdisciplinarily [2]. The term *interdisciplinarity* is interpreted here as a synthesis of various domains to create new forms of knowledge that result in a new, complex understanding of the problems of our times [3]. The authors use *interdisciplinary* in a broad sense, transcending collaborations that are common and almost inevitable due to market needs (e.g., between chemists and physicists or marketing experts and designers). It is becoming evident that to achieve novel solutions for today's problems and make much-needed discoveries, inventions, and interventions, artists (of all kinds) and scientists (of all kinds) should join forces [4].

Indeed, many scholars have already realized that their research could be advanced by collaboration with other disciplines. Additionally, a growing number of (mostly Western)

institutions and centers dedicated to ArtScience collaborations provide innovative frameworks and foster advanced interdisciplinary exchange between artists and scientists. This includes well-established entities like MIT Media Lab, the University of Western Australia's SymbioticA, and UCLA's Art|Sci Center, along with initiatives by the Leonardo network [5]. Newer initiatives are also on the rise: e.g., the SEADS Collective, the CAA Contemporary Art Archipelago, and CNRS Labodanse.

However, within less informed contexts, many ArtScience collaborations are still led by the motivations of one part of the equation and mainly serve one-sided interests [6]. To face today's complex problems, more equitable ArtScience collaborations—in which all sides participate in socially engaged research as equal leaders and can experiment outside their disciplines—are required. In such cases, innovation is almost inevitable, and the outcome's potential is greater than the sum of its parts.

This article first provides a brief review of *socially engaged art and science* to lay out relevant background for the socially engaged ArtScience projects that are later presented. We will then focus on the collaboration between the authors, social psychologist Yossi Hasson and participatory performance artist Einat Amir, which started as part of a long-term artist membership at Eran Halperin's Psychology of Intergroup Conflict and Reconciliation laboratory [7,8]. Our work has contributed to social change by increasing empathy toward marginalized groups in various societies and provided socially engaged research outputs in both the scientific and artistic fields [9]. The scientific results of the performance-experiments have been previously published [10]. Recently, there has been a growing demand for additional research into ArtScience methodologies [11]. In response, this article centers on the collaborative process itself from an artist's and scientist's points of view. Our work will serve as a case study of an *equitable ArtScience collaboration* that aims to create a synthesis between artistic and scientific disciplines. The following section provides future directions for research with a focus on "nonbinary research": an innovative research approach that we believe can contribute to

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a better Anthropocene. Finally, for context, we have included an annex with descriptions of our performance-experiment productions. We also include a link to *a list of guidelines for artists and scientists who wish to collaborate*.

SOCIALLY ENGAGED ART AND SCIENCE

The presented ArtScience collaboration aims to contribute to social change. As such, it can be defined as socially engaged research (e.g., applied research, participatory action research, and social justice research) wherein researchers and community members collaborate to create innovative knowledge and research methods and contribute to social change. Researchers who engage in this practice hold themselves accountable for the social outcomes of their research. The authors' disciplinary backgrounds—applied social psychology and socially engaged art—could both fall under this category [12].

Applied social psychology (ASP) leverages social psychology's theories, principles, research, and methods to analyze societal phenomena and propose practical solutions to various social problems. Based on the belief that many societal challenges emanate from human behavior, ASP focuses on analyzing and understanding behavioral patterns to bring about significant changes in society. ASP's primary purpose is to develop psychological interventions to improve the way people function in relation to social and practical issues and overcome societal challenges. Scientifically, five objectives must be fulfilled: description, prediction, causation, explanation, and control [13].

The term Socially Engaged Art (SEA) mainly refers to actions and projects by artists who decide to step out of their studio and engage with timely issues through artistic interactions with the public [14]. "SEA is a hybrid, multi-disciplinary activity that exists somewhere between art and non-art... SEA depends on actual—not imagined or hypothetical—social action" [15]. Similar (but not identical) terms include *relational aesthetics*, *social justice art*, *social practice*, and *community art*.

SEA shares characteristics with participatory performance art. Participatory performance art (PPA) is a practice that directly engages the audience so that they become participants in the artistic process, rather than simply viewing it, and influence the outcome [16]. Commonly, PPA works (such as the presented case study) would also meet the definition of SEA, as a frequent form of SEA is audience-engaged performances [17].

Socially engaged research in ArtScience collaborations is yet to be a widely accepted practice. As seen in the following section, an ArtScience collaboration is a uniquely complex and nuanced effort, and its impact should be intentional and carefully planned.

AN EQUITABLE ARTSCIENCE COLLABORATION

Many research projects have already implemented interdisciplinary collaborations and methods, and in recent years, a substantial amount of large-scale international funding has been offered to interdisciplinary societal and environmental initiatives [18]. Interdisciplinary approaches are also encouraged in ministries and university strategies. But even when such funding is granted, often the interdisciplinary aspect ex-

cludes artists; if it includes them, they are not equal collaborators with the scientists [19]. Many ArtScience collaborations are still driven by the interests of one of the collaborators and predominantly serve the motivations of one party. Examples of this phenomenon are many. Numerous books and websites that showcase ArtScience collaborations provide examples of projects that are clearly "using" artistic work for scientific research or creating art that "uses" existing scientific findings rather than aiming for a true merge of disciplines [20].

Traditionally, artists have been confined to the role of providing visual aids to scientists and, even at present, are often relegated to a subordinate role and told what output is expected of them [21]. Even when artists are framed as equals, such as in the case of artists' residencies in science labs [22], the collaboration's outcome often still focuses on how the artist has enhanced the (more) important scientific research [23]. *A possible explanation for this phenomenon* could be related to scientists' uncertainty regarding the artists' ability to produce knowledge claims or clearly demonstrable expertise [24]. Other factors that contribute to this power imbalance are gender and professional status. Most scientists in senior positions are male, professors who hold a senior and permanent position, while the artists who apply for such opportunities are typically female, have earned a master's degree, and are funded by a short-term residency or temporary work-grant [25].

We propose an equitable ArtScience model of collaboration in which all sides take equal leadership. They guide each other through a pedagogical experimental process where the artist steps into the scientist's shoes—and the scientist into the artist's. In the processes of attaining openness and welcoming creativity, innovation emerges, and the potential of the outcome exceeds the sum of its parts. To achieve this, all sides should be willing to go beyond their disciplinary boundaries.

Working in an interdisciplinary team should not mean one must be an expert in all participating disciplines, but one is expected to attain openness and understand the basic principles and the potential value of the other contributing fields. Communication and willingness to share your ideas and explain elements that are basic to you, but new to your collaborator, are key. When we, the authors, started working together, Yossi prepared a folder for Einat where he included essential articles about empathy from a social psychology perspective. This was helpful in the formation of our dialogue around empathy. After reading, Einat could better articulate her views using these references; Einat, in turn, shared links to documentation of seminal participatory performance works, which helped Yossi to gain a wider understanding of the artistic context, and use these references in our discussions. Providing each with context and vocabulary from the other's discipline gave us the ability to have a professional discussion where both of us understood the differences and similarities in our work processes. It is recommended that each collaborator become familiar with the languages, concepts, and methodologies from outside their field and dedicate time and effort to also share their own.



Fig. 1. Einat Amir and Yossi Hasson, *Basic Assumption*, 2017. Still image from performance-experiment. (© Einat Amir. Photo © Michal Fattal.)

The collaborative case study presented in this article is based on our seven years of experience in synthesizing art and science. Our collaboration succeeded in expanding both our practices and contributing to social change [26]. We document and share this case study in the hope that by reading it, others will gain useful insight into their own collaborative practices. We completed three large-scale performance-experiment hybrids: *Basic Assumption* (2017) [27] (Fig. 1), *As Much as You Want* (2018) [28] (Figs 2 and 3), and *Relative Distance* (2021) [29], all of which examine ways of increasing empathy among members of dominant groups toward those of minoritized groups in different societies. *Basic Assumption* explored the empathy levels of Jewish Israelis toward Palestinians; *As Much as You Want*, of Americans toward Syrian refugees in the U.S.A.; and *Relative Distance*, of Germans toward Muslim refugees in Germany. These projects have been displayed at performance and theater venues around the world and attracted audiences numbering in the hundreds. The projects were funded by combined artistic and scientific grants [30].

In all projects, the audience also acted as research participants and were later interviewed by the performers (who doubled as research assistants) about their empathic traits and experiences. We chose to share the results of our experiments with the participants via a link or text message to provide them with further knowledge about their own empathy in relation to the other participants.

Most parts of our projects serve multiple ArtScience functions and purposes. For example, we worked with performers who conducted one-on-one interviews with audience members about their empathic feelings. We used an online survey to collect and analyze scientific data, but also as an artistic tool: The performers interviewed audience members, instantly typing their replies as numeric responses on 1–8 scales. Based on a respondent's score, we programmed the software to suggest different theatrical actions for the performers: one kind of action for a lower score, and another for a higher score. Our experience demonstrates that in a successful ArtScience synthesis, the scientific experiments



Fig. 2. Einat Amir and Yossi Hasson, *As Much as You Want*, 2018. Still images from performance-experiment. (© Einat Amir. Photo © Chuck Przybyl.)

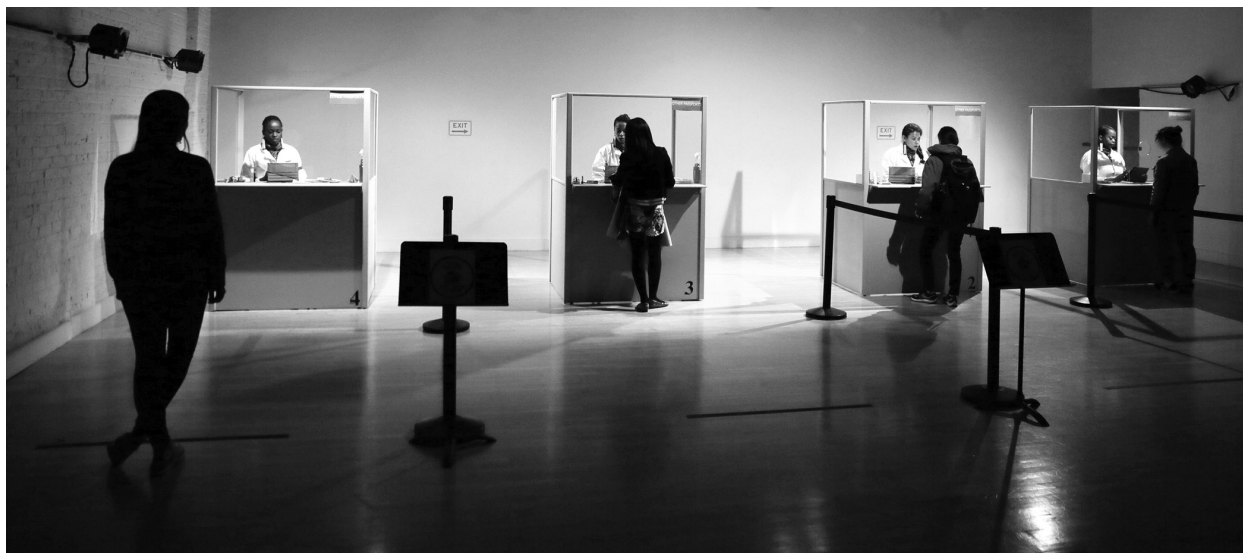


Fig. 3. Einat Amir and Yossi Hasson, *As Much As You Want*, 2018. Still image from performance-experiment. (© Einat Amir. Photo © Chuck Przybyl.)

can inform the way the artistic components are constructed and vice versa. This way, the two fields can work together to create a more cohesive and integrated outcome.

Through our collaboration, we have discovered artistic solutions to scientific challenges. Traditionally, social scientific studies are conducted under laboratory conditions that control for every element that can affect the research participants. However, we opted to use live performers in a theater setting instead. This format meant that we needed to find creative ways to avoid potential bias, since each actor's appearance, identity, and performance could affect the experiment's results. Ensuring performers had the same gender, race, and age attributes and spoke in a similar tone maintained the experiment's integrity. As expressiveness and authenticity are vital from an artistic viewpoint, we created a unified-creative act with an engaging set design and performers who spoke with a similar tone and tempo but also maintained emotional expression.

Our actor-based methods, which replaced the traditional lab experiments, can potentially increase the research's external validity. For instance, our process of creating the stimulus text included a critical conversation with the performers around it. We discussed the presented personal stories of minoritized group members and reflected on the texts' authenticity, delivery method, use of language, etc. As a result, the texts improved in delivery and authenticity, and the normally impersonal experimental process became personal and educational. The artistic methods provided a critical reflection on the scientific methods and exposed underlying assumptions that had gone unnoticed. From an artist's point of view, it was interesting to find new ways to work with performers that included restrictions and limitations posed by the scientific experiment design. By collaborating with the performers on the texts, we were able to balance both scientific integrity and artistic expression, resulting in exciting, creative research. This project required novel and unexpected ideas and solutions, which in retrospect may have made the performances more artistically interesting.

In this kind of interdisciplinary work, it is essential to involve the participating disciplines in every phase of a project, verifying that their perspectives are considered in all formulating and planning stages [31]. For example, a costume design decision (allegedly a purely artistic project aspect; e.g., allowing actors in the same role to wear different shirt colors) can greatly impact the scientific experimental outcome by introducing bias.

An artist's unique perspective can lead to innovative scientific representation methods [32]. Such a case can be seen in our use of debriefing—a fairly technical and dry experimental procedure in which the researcher provides participants with information about the research typically after their involvement has ended. In our projects, we transformed the debriefing into an artful conclusion, enriching the audience's understanding of empathy. As the debriefing component comes at the end of the experiment after all the data collection has been complete, it allows for artistic freedom in building context and meaning for the entire experience. This is important since during the experimental part, we can only provide limited information on the narratives, images, and questions. In *Basic Assumption*, for example, we produced a video artwork that doubled as a debriefing (Color Plate D). It was screened to the audience/participants at the end of the performance-experiment, featuring dozens of performers, specialized choreography, designed costumes, and dialogue discussing empathy-related social psychology experiments, concluding with the one they just participated in, acted out in three languages. This transformed the debriefing procedure into an emotional, cathartic artistic creation that, in turn, benefitted from the interesting scientific content.

The artistic aspect of a collaborative project can enable participants to reflect on their thoughts and feelings, which can manifest perspectives, and yet-to-be-explored research topics that can become valuable information for future research. In *Relative Distance*, we created a performance-experiment that aimed to increase the level of empathy among



Fig. 4. Einat Amir and Yossi Hasson, *Relative Distance*, 2021. Still image from a Zoom-based performance-experiment. (© Einat Amir)

German citizens toward Muslim refugees in Germany. Due to COVID-19 quarantine restrictions in Germany, the performance was conducted online through one-on-one conversations between Chicago-based performers and German participants (Fig. 4). In the final and most intimate moment of the performance-experience, a performer from Chicago and a German participant discussed their COVID experiences, both answering the question: “What did you lose this year?” This moment allowed an emotional outlet for both sides, revealing personal struggles and fostering intercontinental solidarity. In this case, the artistic aspect of the project enabled participants to reflect on their feelings amidst the pandemic while creating content that can potentially be used in future COVID-related research. These outcomes thus offer insight into perspectives, questions, and research topics that had not been explored by science at that point. In our projects, the artistic aspect enabled the audience to have an emotional and intellectual experience rather than only participating in a scientific experiment designed for gathering data. The scientific experimental aspect enabled the audience to take part in actively examining their own empathy and being a part of social change-related research rather than just experiencing an artistic reflection on the subject.

Such profound and committed interdisciplinary work also includes bridging specialized language and being open to nonconventional practices. There are epistemological and methodical differences that need to be explained and questioned. It is almost inevitable to reach a point where each collaborator asks core questions about their own disciplinary practice: Why am I working this way? Why is this important? Is it possible to work differently? What can I adopt from my partner’s way of thinking/working?

Despite the positive outcomes that arise in the collaborative process, some outcomes come about with harder labor. Interdisciplinary collaborations are an experimental learning process of trial and error. Many challenges can, and will, arise from an ambitious interdisciplinary collaboration. In our case, a major challenge occurred while rehearsing with performers: Since we designed a double-blind study, we had to actively hide from the performers information about their

roles and about their characters’ motivations. As the performers doubled as research assistants, knowing the research question and hypothesis might have created a bias in the way they interacted with participants. This notion of hiding information was foreign to the artistic venues’ marketing teams, so they kept incorporating the “forbidden” information in social media and PR drafts; “This performance will potentially elevate your empathy levels” seemed to them like an obvious marketing point. We also negotiated the different meanings certain items carry in a scientific/artistic environment. From the scientists’ perspective, for instance, once you have the participants’ consent, placing cameras in the experiment space is important to make sure the collected data is well documented. However, from the artist’s perspective, filming the audience while they participate in a performance could be problematic even if their consent is granted, since it could make them self-conscious and distracted. It can also have ethical implications in terms of using the audience as material for a future audience. We found different solutions to this issue in different projects, such as filming from a distance and from a back angle in a way that doesn’t invade the private experience of each participant.

As seen through this section, both art and science can benefit and evolve as a result of a balanced collaborative process. Science can provide access to specialized data and resources that artists may not have and enable the development of new ways of thinking and problem-solving techniques, leading to innovative artistic approaches. Art can provide unexpected insights into both the subject of study and the study itself. It is an effective way of producing innovative and scientifically meaningful outcomes [33]. Artists should be sought-after participants at policymakers’ and problem-solvers’ tables side by side with scientists because they are experts in the open-ended, experimental practice of fictioning, which foregrounds subjectivity and subjective experience while creating or anticipating new modes of existence [34]. “New problems” that are widely discussed today, such as the world after climate change and rapid AI development, were already imagined and discussed by artists decades ago [35]. Artists are capable of envisioning

research questions and predictions that we have not yet realized or been able to articulate [36].

FUTURE DIRECTIONS: NONBINARY RESEARCH

As discussed in this article, equitable interdisciplinary collaborations have a great potential to make a difference, whether in the confines of academia or the world. To face the challenges of our complex reality, data of all kinds is needed and can be collected via a variety of methods, both current and yet to be created. We must find ways to work together to better all forms of life. This necessitates using all existing knowledge (human, machine, animal, and plant), as well as forms of knowledge of which we are currently unaware [37]. Moreover, better tools of evaluation capable of thoroughly analyzing complex ArtScience projects and fully appreciating the diversity of their components are needed [38].

There is something the human rights movement and related scholarly disciplines have taught the world that the academic institutional structure is still struggling with—that identity is fluid and that binary definitions do not apply to all cases [39]. Breaking through such dichotomies in the academic world is long overdue—between art and science and between quantitative and qualitative research. Therefore, we propose the term *Nonbinary Research* as an inspiration for a nonessentialist research model in which the arts and sciences are no longer viewed as “either-or” entities. Similar concepts have been articulated: e.g., “liminal spaces” that address the institutional framework and *anti-disciplinary* [40,41], which seems especially relevant. However, we argue that Nonbinary Research is not “anti” its origin disciplines, but rather an in-between: It respects and draws from the systems that enabled

its creation, but it also acknowledges that today’s problems require more fluid formations of knowledge—knowledge that does not let disciplinary restrictions define or oppress its creative expressions. In such research, collaborators could have the liberty to experiment outside their disciplinary expertise while working on all aspects of the project together.

CONCLUSION

This article introduces new methodological approaches to the expanding field of ArtScience collaborations. Additional methodological literature is needed [42], as the enthusiasm for engaging in such collaborations often faces significant hurdles such as misconceptions about what such collaborations practically entail. By presenting concrete examples of collaborative and intervention methods, this article contributes to the navigation of these complex intersections. Through our extensive experience in synthesizing art and science, we have come to believe that equal partnerships between these fields can produce innovative solutions to contemporary societal and environmental issues. However, equal collaborations between artists and scientists are still not normalized. Enhanced ArtScience methods and improved cross-disciplinary assessment tools are necessary as practical knowledge to aid in creating a healthier, more sustainable Anthropocene. Researchers from all disciplines can together create “Nonbinary” systems of thinking, with diverse components that can be read multiple ways. In continuation of the ongoing efforts to expand ArtScience knowledge, we composed a list of guidelines for artists and scientists who wish to collaborate: <https://www.einatamir.com/recommendations>.

References and Notes

- 1 Institute of Medicine, *Facilitating interdisciplinary research* (Washington, DC: National Academies Press, 2005).
- 2 R. W. Proctor and K.-P. L. Vu, “How psychologists help solve real-world problems in multidisciplinary research teams: Introduction to the special issue,” *American Psychologist*, **74**, No. 3, 271–277 (2019).
- 3 Robert Frodeman, Julie Thompson Klein, and Carl Mitcham, eds., *Oxford Handbook of Interdisciplinarity* (Oxford: Oxford Univ. Press, 2017) p. 4.
- 4 National Academies of Sciences, Engineering, and Medicine, *The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education: Branches from the Same Tree* (Washington, DC: The National Academies Press, 2018) p. 12.
- 5 Claudia A. Schnugg, *Creating ArtScience Collaboration: Bringing Value to Organizations* (London: Palgrave Macmillan, 2019) p. 235.
- 6 U. Kuchner, “The Value of ArtScience,” *Writing Visual Culture* **10** (2022) p. 6.
- 7 For five years, Einat Amir was an artist member (a position she initiated) at PICR lab, led by Eran Halperin at the Hebrew University.
- 8 Eran Halperin, “Home:” www.eranhalperin.com (accessed 10 August 2023).
- 9 Our performance-experiment *Relative Distance* was peer-reviewed as an artistic component of Amir’s Doctoral studies, and the scientific results of two performance-experiments were described in Y. Hasson, E. Amir, D. Sobol-Sarag, et al., “Using performance art to promote intergroup prosociality by cultivating the belief that empathy is unlimited,” *Nature Communications* **13**, 7786 (2022).
- 10 Hasson et al. [9].
- 11 See National Academies of Sciences, Engineering, and Medicine [4] p. 173.
- 12 S. Harding and K. Norberg, “New Feminist Approaches to Social Science Methodologies: An Introduction,” *Signs: Journal of Women in Culture and Society* **30**, No. 4, 2009–2015 (2005).
- 13 A comprehensive review of the history and evolution of applied social psychology can be found in Larry M. Coutts, Jamie A. Gruman, and Frank W. Schneider, *Applied Social Psychology: Understanding and Addressing Social and Practical Problems* (SAGE Publications, 2016).
- 14 For elaboration on SEA, see G.H. Kester, “Conversation pieces: The role of dialogue in socially-engaged art,” in *Theory in Contemporary Art since 1985* (Wiley-Blackwell, 2005) pp. 76–88.
- 15 Pablo Helguera, “Definitions,” in *Education for Socially Engaged Art: A Materials and Techniques Handbook* (New York: Jorge Pinto Books, 2011) pp. 1–8.
- 16 A review of the practices of PPA can be found in Claire Bishop, *Artificial Hells: Participatory Art and the Politics of Spectatorship* (London: Verso, 2012).

- 17 More on the different practices of SEA can be found in Helguera [15].
- 18 Such as Creative Europe, Horizon Europe, NIH USA, etc.
- 19 I. Koskinen, "Miksi tieteilijöiden kannattaa tehdä yhteistyötä taiteilijoiden kanssa [Why scientists should collaborate with artists]," *Ajatus* 75, No. 1 (2018) p. 97.
- 20 See for example: Siân Ede, *Art and Science* (London: I. B. Tauris, 2005); Brett Wilson, Barbara Hawkins, and Stuart Sim, eds., *Art, science, and cultural understanding* (Champaign, IL: Common Ground Publishing LLC, 2014); Stephen Wilson, *Art+Science Now* (London: Thames & Hudson, 2013); Bergit Arends and Davina Thackara, *Experiment: Conversations in science and art* (London: Wellcome Trust, 2003).
- 21 See Schnugg [5] p. 236.
- 22 M. Kemp, "Culture: Artists in the lab," *Nature* 477 (2011) pp. 278–279.
- 23 For example: MC. Rillig and K. Bonneval, "The artist who co-authored a paper and expanded my professional network," *Nature* (27 February 2020).
- 24 See Koskinen [19] p. 104.
- 25 H. Docter-Loeb, "White men still hold the majority of US science and engineering jobs," *Nature* (22 March 2023); "Artist-in-Residence Demographics," Zippia: www.zippia.com/artist-in-residence-jobs/demographics (accessed 10 August 2023).
- 26 See Hasson and Amir et al. [9].
- 27 *Basic Assumption*, Jerusalem, Israel, 2017. A performance-experiment by Einat Amir and Yossi Hasson. Location: YMCA, Jerusalem. Directors of Mekudeshet festival: Naomi Bloch Fortis, Itay Mautner. Producer: Omer Alsheich. Space Design: Shay Id Aloni. Light Design: Yair Vardi. Costumes: Hila Shapira. Performers: Bar Altaras, Sahar Damoni, Tovit Semay, Adi Nizan, Anat Federschneider, Bahat Calatchi, Hana Vazana Grunwald, Bar Elyakim, Rotem Goldenberg, Mouna Hawa, Lamis Amar, Omer Perlman Striks, Gassan Ashkar, Hanan Asraf, Murad Hassan. Supporting performers: Students of the School of Visual Theater, Bezalel Academy of Arts and Design and Sapir College.
- 28 *As Much As You Want*, Links Hall, Chicago, USA, 2018. A performance-experiment by Einat Amir and Yossi Hasson. Curator: Megha Ralapati. Performers: Risha Tenae, Charm Tims, Margaret Morris, Eliza Myrie. Documentation: Chuck Przybyl. Set Fabrication: Peter Reese. Organized by: Hyde Park Art Center.
- 29 *Relative Distance*, online, 2021. A performance-experiment by Einat Amir and Yossi Hasson. Visuals: Lali Fruheling. Text contributions and performative consulting: Risha Tenae. Performers: Krystel Mcneil, Nevada Montgomery, Eliza Myrie, Risha Tenae. Hosts: Janika Heun, Lee Cockshott, Sophie Pulkus. Production assistance: Vidushi Lohia, supported by Körber-Stiftung, Kampnagel Hamburg, Artport Tel Aviv, Hyde Park Art Center.
- 30 The projects were funded by an ERC grant (Eran Halperin); Levy Eshkol Institute grant (Yossi Hasson); and Kampnagel Theater Hamburg, Körber Foundation, Arison Family Foundation, CEC ArtsLink Independent Projects award, Collaborative Research Grant IDC Herzliya and Bezalel Academy of Art Jerusalem, Artis, Israeli Pais Art and Culture Council (Einat Amir).
- 31 B. Morales and C. Muñoz, *Handbook of Interdisciplinarity* [Center for Climate and Resilience Research (CR)2, (ANID/FONDAP/15110009), 20 (2021)].
- 32 See Koskinen [19] p. 105.
- 33 H. Borgdorff, "The Production of Knowledge in Artistic Research," in *The Routledge Companion to Research in the Arts* (London: Routledge, 2011) pp. 44–63.
- 34 David Burrows and Simon O'Sullivan, "Introduction," in *Fictioning: The Myth-Functions of Contemporary Art and Philosophy* (Edinburgh: Edinburgh Univ. Press, 2019) pp. 1–10.
- 35 A.D Hudson, E. Finn, and R. Wylie, "What can science fiction tell us about the future of artificial intelligence policy?" *AI & Society* 38 (2023) pp. 197–211.
- 36 See Schnugg [5] p. 109.
- 37 Nathan Snaza and John A. Weaver, "Introduction," in *Posthumanism and Educational Research* (New York and London: Routledge, 2016) p. 10.
- 38 E.A. Shanken, "Artists in Industry and the Academy: Collaborative Research, Interdisciplinary Scholarship and the Creation and Interpretation of Hybrid Forms," *Leonardo*, 38, No. 5,) 415–418 (2005) p. 418.
- 39 E. Matsuno and S.L Budge, "Non-binary/Genderqueer Identities: A Critical Review of the Literature," *Current Sexual Health Reports* 9 (2017) pp. 116–120.
- 40 See Schnugg [5] p. 55.
- 41 S.J. Rosow, "Toward an Anti-Disciplinary Global Studies," *International Studies Perspectives* 4, No. 1, 1–14 (2003).
- 42 Z. Birsell, L. Marques and E. Loots, "Daring to disentangle: towards a framework for art-science-technology collaborations," *Interdisciplinary Science Reviews* 48, No. 1, 109–128 (2023) p. 123.

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COLOR PLATE D: **TOWARD EQUITABLE ARTSCIENCE COLLABORATIONS:
SYNTHESIZING PERFORMANCE ART AND SOCIAL
PSYCHOLOGY FOR SOCIAL CHANGE**



Einat Amir and Yossi Hasson, *Basic Assumption*, 2017. Still image from the "debriefing" video.
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