

JOHN S. SEBERGER

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Faculty Appointments

09/22- **Assistant Professor** Philadelphia, PA
Department of Information Science
College of Computing and Informatics
Drexel University

Postdoctoral Appointments

10/21-08/22 **Postdoctoral Research Associate** East Lansing, MI
Supervisor: Prabu David, Dean
College of Communication Arts & Sciences
Michigan State University

03/20-09/21 **Postdoctoral Fellow** Bloomington, IN
Department of Informatics
Luddy School of Informatics, Computing, and Engineering
Indiana University Bloomington

07/19-02/20 **Postdoctoral Scholar** Irvine, CA
Department of Informatics
Donald Bren School of Information and Computer Sciences
University of California, Irvine

Education

2019 **PhD, University of California, Irvine** Irvine, CA
Information and Computer Science
Committee Chair: Geoffrey C. Bowker
Committee Members: Peter Krapp, Simon Penny, Tess Tanenbaum

2011 **MLIS, University of Pittsburgh** Pittsburgh, PA
Library and Information Science

2008 **MSc, Keele University** Staffordshire, UK
Psychological Research Methods (Music Psychology)

2005 **BA, Kenyon College** Gambier, OH
Psychology

Funding

Grants Awarded

G1. \$105k (PI) – Open-Ended Grant, Internet of Things Group, Intel, 2014-2019

Awards and Honors

AH12. €10k – NOMIS Fellowship, Bauhaus University Weimar, 2022
AH11. CHI'22 **Best Paper Award** (Top 1% of Submissions), 2022
AH10. ASIS&T SIG SI Social Informatics **Best Paper Award**, 2021
AH9. \$1k – Open Access Publishing Award (IU), 2021
AH8. CHI'21 **Best Paper Honorable Mention** (Top 5% of Submissions), 2021
AH7. US Department of Education GAANN Fellowship (AY2018-2019)
AH6. US Department of Education GAANN Fellowship (AY2017-2018)
AH5. US Department of Education GAANN Fellowship (AY2016-2017)
AH4. Rob Kling Memorial Fellowship (2014-2015)
AH3. Intel Science and Technology Center for Social Computing Fellowship (2014-2015)
AH2. Intel Science and Technology Center for Social Computing Fellowship (2013-2014)
AH1. \$5k – Chair's Award (UCI), 2012

Publications¹

(* denotes peer-reviewed; ^ denotes lightly reviewed; † denotes presentation, poster, or panel; ° denotes workshop paper; #COVID-Cancelled; * denotes award)

Archival Articles (e.g., Journal Articles, ACM Proceedings)

AA11.* **Seberger, J. S., Shklovski, I., Swiatek, E., & Patil, S. (2022).** Still Creepy After All These Years: The Normalization of Affective Discomfort in App Use. In CHI Conference on Human Factors in Computing Systems (CHI '22) (**Best Paper Award**) (Accepted outright, acceptance rate: 14%)

AA10.* **Seberger, J. S. & Shaffer, G. (2021).** Changing the Rules of Play in Long Beach, California: Smart Cities, Infrastructure, and the Well-Played Game. *International Journal of Human-Computer Interaction*.

AA9.* **Seberger, J. S. & Patil, S. (2021).** Post-COVID Public Health Surveillance and Privacy Concerns in the United States: Scenario-Based Interview Study. *JMIR mHealth uHealth*. (IF = 4.72) DOI: <https://doi.org/10.2196/30871>

AA8.* **Seberger, J. S. (2021).** Into the Archive of Ubiquitous Computing: The Data Perfect Tense and the Historicization of the Present. *Journal of Documentation*. <https://doi.org/10.1108/JD-11-2020-0195>

AA7.* **Seberger, J.S. (2021).** Reconsidering the user in IoT: the subjectivity of things. *Personal & Ubiquitous Computing*, 25(3), 525-533. <https://doi.org/10.1007/s00779-020-01513-0>

AA6.* **Seberger, J. S., Llavore, M., Wyant, N., Shklovski, I., & Patil, S. (2021).** Empowering Resignation: There's an app for that. In CHI Conference on Human Factors in Computing Systems (CHI '21), May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 18 pages. (**Best Paper Honorable Mention Award**) <https://doi.org/10.1145/3411764.3445293>. (Acceptance rate: 26.3%)

AA5.* **Seberger, J. S., & Patil, S. 2021.** Us and Them (and It): Social Orientation, Privacy Concerns, and Expected Use of Pandemic-Tracking Apps in the United States. In CHI Conference on Human Factors in Computing Systems (CHI '21), May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 19 pages. <https://doi.org/10.1145/3411764.3445485> (Acceptance rate: 26.3%)

¹ ACM conference publications (e.g., CHI, CSCW) undergo a rigorous, multi-stage peer review process and are considered top tier journal publications in HCI. Where appropriate, acceptance rates are included above.

- AA4.* **Seberger, J. S. & Slaughter, R. A. (2020).** The Mystics and Magic of Latent Space: Seeing the Unseen. *Membrana – Journal of Photography*. <https://doi.org/10.47659/m8.088.art>
- AA3.* **Seberger J. S. (2020)** Bridging DH and Humanistic HCI. In: Sundqvist A., Berget G., Nolin J., Skjerdjngstad K. (eds) Sustainable Digital Communities. iConference 2020. Lecture Notes in Computer Science, vol 12051. Springer, Cham. https://doi.org/10.1007/978-3-030-43687-2_72. (Accept rate: 30%)
- AA2.* **Seberger, J. S. & Bowker, G. (2020).** Humanistic Infrastructure Studies: Hyper-Functionality and the Experience of the Absurd. *Information, Communication and Society*. <https://doi.org/10.1080/1369118X.2020.1726985> (**ASIS&T SIG SI Social Informatics Best Paper Award, 2021**)
- AA1.* **Seberger, J. S. (2018).** The affordances of inscribed mediation: Troubling the subject/object dichotomy in knowledge production. Proceedings of A Body of Knowledge – Embodied Cognition and the Arts Conference CTSA UCI, December 8 – 10 2016, Irvine, California. <https://escholarship.org/uc/item/5pq1d76d>

Book Chapters

- BC1.* **Seberger, J. S. & Bowker, G. (2021).** ‘Values’ in *Uncertain Archives*, Nanna Bonde Thylstrup, Daniela Agostinho, Annie Ring, Catherine D’Ignazio and Kristin Veel (Eds). MIT Press.

Workshop Papers

- WP3. ^°# **Seberger, J. S. (2020).** Towards the Preservative Present: Living in the Future Perfect of Data. iConference Workshop: About Time. Boras, Sweden.
- WP2. ^° **Seberger, J. S. (2019).** Big Data, the Archive, and the Preservative Present. Position Paper. Workshop on Fostering Historical Research in CSCW & HCI. CSCW 2019, Austin, Texas. Available at: <https://www.dropbox.com/s/6pbi2byun2slo5r/CSCW%20Preservative%20Present%20Final.docx?dl=0>
- WP1. ^° **Seberger, J. S. (2019).** (They’re All) Eve’s Things. Workshop on Ubiquitous Privacy: Research and Design for Mobile and IoT Platforms. CSCW 2019, November 9, 2019. Austin, Texas. Available at: <https://www.dropbox.com/s/15ovfly375jb000/6-CSCW%20IoT%20Privacy%20Position%20Paper%20v6.pdf?dl=0>

Non-Archival Conference Materials

- NACM7.* **Shaffer, G., & Seberger, J. S. (2021).** Negotiating smartness: How Long Beach, California residents perceive their city’s increasing use of smart city technologies. 71st Annual International Communication Association Conference (ICA’21), May 27-31, 2021, Denver, CO (Virtual).
- NACM6.^ **Seberger, J. S. (2019).** Gathering Again Anew: Subjects, Objects, and the Body-as-Media in IoT. Media Ecology Association 2019, June 27-30, 2019. University of Toronto and St. Michael’s College, Toronto, Ontario.
- NACM5.^† **Seberger, J. S. & Bowker, G. (2018).** Towards the Infrastructural Absurd. “Translating the Unbearable” University of California – Irvine, Department of Comparative Literature, March 1, 2018.
- NACM4.* **Seberger, J. S. (2015).** How long is now? The ‘digital’ in DH. DH2015, June 29 – July 3, 2015. Sydney, Australia.
- NACM3.* **Seberger, J. S. (2014).** Generative troubling in emerging archival forms. DH2014, July 8-11, 2014. Lausanne, Switzerland.
- NACM2.† **Seberger, J. S., Echenique, A., & Lustig, C. (2013).** Music for labs. Society for the Social Study of Science (4S). October 9-12, 2013, San Diego, CA
- NACM1.† **Sylvester, N. M., Slota, S., & Seberger, J. S. (2013).** Leveling the stage? Performance curation and embodied knowledge as knowledge infrastructure. Society for the Social Study of Science (4S). October 9-12, 2013. San Diego, CA.

Chaired Conference Panels

- CCP2.^{^†} **Stark, L., Seberger, J. S., Lemus, O. (2021).** (Co-Chair) Panel: Future Histories of Data and Databases. Society for the Social Study of Science.
- CCP1.^{^†} **Seberger, J. S. (2019).** (Chair.) Panel: STS Meets Media Studies. Society for the Social Study of Science. Panelists included: Heather Wiltse, Garnet Hertz, Sebastian Giessmann, and Melissa Gregg. September 4-7, 2019. New Orleans.

Theses

- T2. **Seberger, J. S. (2019).** Becoming Objects: IoT, the Archive, and the Transformation of the Human. Doctoral Dissertation, University of California – Irvine. Irvine, CA.
- T1. **Seberger, J. S. (2008).** The song remains the same: An adapted systems model of songwriting. M.Sc. Thesis, Keele University. Staffordshire, UK.

Technical Reports

- TR1. **Knobel, C., Bowker, G., Larsen, R., & Seberger, J. (2012).** Emerging configurations of knowledge expression: A digital report of a National Science Foundation workshop on “Emerging Configurations of the Virtual and the Real.” Chicago, IL. March 20-12, 2011. NSF Grant #1042697.

Media Appearances

- MA2. Albergotti, R (Aug 12, 2021). “He predicted the dark side of the Internet 30 years ago. Why did no one listen?” Washington Post. <https://www.washingtonpost.com/technology/2021/08/12/philip-agre-ai-disappeared/> (quoted)
- MA1. **Seberger, J. S. (2021).** Guest, “The Science Before the Storm” NSF-sponsored Podcast. (Recorded June 17, 2021).

Invited Talks

- IT19. **Seberger, J. S. (2022).** If You Don’t Like the Weather, Wait a Minute: IoT and The Climatization of the Self. Bauhaus University Weimar. June 22, 2022.
- IT18. **Seberger, J. S. (2022).** Digital infrastructure, affective privacy, and the experience of being a user: An agenda for existentialist and dignity-driven computing. CCI, Drexel University. January 20, 2022.
- IT17. **Seberger, J. S. (2022).** IT and the experience of being a user: An agenda for dignity driven technology. SoIT, University of Cincinnati. January 10, 2022.
- IT16. **Seberger, J. S. (2021).** Affective privacy and an agenda for dignity-driven informatics. CEHC, The University at Albany. November 16, 2021.
- IT15. **Seberger, J. S. (2021).** Hyper-functionality and the Experience of the Absurd, or Infrastructural Alienation as a Common Call to Justice. Best Paper Award Presentation, 17th Annual ASIS&T SIG SI Workshop. October 29, 2021.
- IT14. **Seberger, J. S. (2021).** Power and Justice in the App Culture: Furthering the Agenda for an Existentialist HCI. Syracuse University, March 22, 2021.
- IT13. **Seberger, J. S. (2020).** Things are People, Too: The Ontological Complexity of Things in IoT. Guest Lecture: Eloquent Objects (ART 160, ART 246, & ICS 190). Claire Trevor School of the Arts, University of California, Irvine. February 4, 2020.
- IT12. **Seberger, J. S. (2020).** Imagining Ourselves Happy: Towards the Aspirational Data Doppelgänger. Security and Privacy in Informatics, Computing and Engineering Colloquium. Indiana University – Bloomington. January 16, 2020.

- IT11. **Seberger, J. S.** (2019). The Ethics of the Data Doppelganger. 4th Annual UCI Postdoctoral Scholar Research Symposium. (One of ten invited speakers from all postdocs across campus.) CalIT2, University of California, Irvine. September 13, 2019.
- IT10. **Krapp, P., & Seberger, J. S.** (2019). Dumb Things. Questions from the Prehistory of the Smart Home. SURF-IoT Symposium. CalIT2, University of California, Irvine. August 1, 2019.
- IT9. **Seberger, J. S.** (2019). Move to the Beat of You: FitBit, Temporality, and the Ontology of the Self. In Sync Closing Colloquium, Center for Advanced Study, Norwegian National Academy of Science and Letters, Oslo, Norway. June 27-30, 2019.
- IT8. **Seberger, J. S.** (2019). Analyzing the Imaginary of IoT Through Advertisements. Guest lecture for IN4MATX 161. Donald Bren School of Information and Computer Science, University of California – Irvine. February 5, 2019.
- IT7. **de Bolla, P., Jordheim, H., Warner, W., Bowker, G., Bender, J., & Seberger, J.S.** (2018). RxDex & RexPro: Possibilities for Blockchain Technology in Representing the Provenance of Online News. Seventh Annual Re:Enlightenment Exchange (Praxis). April 5-8, 2018. Stanford University, Palo Alto, California.
- IT6. **Seberger, J. S.** (2018). Scale, Enlightenment Mediation, and IoT. Seventh Annual Re:Enlightenment Exchange (Praxis). April 5-8, 2018. Stanford University, Palo Alto, California.
- IT5. **Seberger, J.S.** (2018). Intellectual Generosity. Introduction to Geoffrey C. Bowker’s Donald Bren Professorship of ICS Lecture. Donald Bren School of Information and Computer Science, University of California – Irvine.
- IT4. **Seberger, J.S.** (2018). Introduction to the Social Analysis of Internet of Things. Guest lecture for IN4MATX 161. Donald Bren School of Information and Computer Science, University of California – Irvine. March 20, 2018.
- IT3. **Seberger, J. S.** (2015). *Sapere aude* in a contemporary context. Fifth annual Re:Enlightenment exchange. May 17, 2015. University of Oslo, Oslo, Norway.
- IT2. **Bowker, G., Knobel, C., & Seberger, J. S.** (2013). Emerging modes of knowledge expression. Annual meeting of the Western Humanities Alliance (WHA). November 1, 2013. San Diego, CA.
- IT1. **Seberger, J. S.** (2013). Music for labs & Feverbook. Intel Science and Technology Center for Social Computing, University of California, Irvine, November 26, 2013. Irvine, CA.

Teaching

- T6. **Guest Instructor**, Claire Trevor School of Art & Donald Bren School of Information and Computer Science, University of California, Irvine. ART 160, ART 246, & ICS 190 “Eloquent Objects.” Professor: Dr. Simon Penny. Winter 2020.
- T5. **Instructor**, Donald Bren School of Information and Computer Sciences, University of California, Irvine. IN4MATX 161, “Social Analysis of Computerization (Discussion Group 2)” (Fall 2016).
- T4. **Instructor**, Donald Bren School of Information and Computer Sciences, University of California, Irvine. IN4MATX 161, “Social Analysis of Computerization (Discussion Group 1)” (Fall 2016).
- T3. **Teaching Assistant**, Donald Bren School of Information and Computer Sciences, University of California, Irvine. IN4MATX 161, “Social Analysis of Computerization.” Professor: Dr. Geoffrey C. Bowker. (Fall 2016).
- T2. **Teaching Assistant**, Donald Bren School of Information and Computer Sciences, University of California, Irvine. I&C Sci 4, “Human Factors/Web.” Professor: Dr. Matthew Bietz. (Winter 2015).
- T1. **Teaching Assistant**, Donald Bren School of Information and Computer Sciences, University of California, Irvine. I&C Sci 3, “Internet Technologies and Society.” Professor: Dr. Judith Gregory. (Fall 2014).

Diversity-Centered Mentoring

- M6. **Mentor**, Center of Excellence for Women & Technology, Indiana University. AY2021-22.

- M5. **Student:** Emily Swiatek (4th Year Undergrad)
Student: Sarah Robertson (2nd Year Undergrad)
Student: Amangul Hydyrova (2nd Year Undergrad)
Mentor, PROST Lab, Department of Informatics, Indiana University, AY2020-2021, 2021-2022.
Student: Dalia Khan (PhD Student)
Student: Tania Ghafourian (PhD Student)
- M4. **Mentor,** GROUPS STEM Summer Research Experience, Indiana University. Summer 2021.
Student: Sariah Fincher (1st Year Undergrad)
- M3. **Mentor,** Center of Excellence for Women & Technology, Indiana University. AY2020-21.
Student: Emily Swiatek (3rd Year Undergrad)
Student: Sarah Robertson (1st Year Undergrad)
Student: Amangul Hydyrova (1st Year Undergrad)
- M2. **Mentor,** GROUPS STEM Summer Research Experience, Indiana University. Summer 2020.
Student: Jenny Zual (1st Year Undergrad)
- M1. **Mentor,** SURF-IoT. Summer Undergraduate Research Fellowship. UC- Irvine. Summer 2019.
Student: Akif Khan (2nd Year Undergrad)

Workshops & Retreats

- W9. **Re:Enlightenment Exchange** (8th Annual Exchange) (Co-Organizer). Long Beach, California. May, 2020. (Conducted virtually re: COVID-19).
- W8. **Fostering Historical Research** in CSCW & HCI. CSCW 2019, Austin, TX, USA.
- W7. **Ubiquitous Privacy: Research and Design for Mobile and IoT Platforms.** CSCW 2019, Austin TX, USA.
- W6. **In Sync Closing Colloquium,** Center for Advanced Study, Norwegian National Academy of Science and Letters, Oslo, Norway. June, 2019.
- W5. **CSST Summer Research Institute.** Rutgers University. June 2019.
- W4. **Re:Enlightenment Exchange** (Praxis). Stanford University. May 2018.
- W3. **Re:Enlightenment Exchange** (5th Annual Exchange). University of Oslo, Norway. May 2015.
- W2. **SoCal STS Retreat.** Anza-Borrego, California. February, 2013.
- W1. **Values in Design Summer Workshop.** University of California, Irvine. September 2012.

Academic and Relevant Professional Appointments

- ARPA13. **NOMIS/International Fellow,** Bauhaus University Weimar. Sponsor: Bernhard Siegert. (June-July 2022).
- ARPA12. **Postdoctoral Research Associate,** College of Communication Arts & Sciences, Michigan State University. Supervisor: Prabu David (Dean). (October 2021-Present)
- ARPA11. **Postdoctoral Fellow,** PROST Lab, School of Informatics, Computing, and Engineering, Indiana University – Bloomington. Supervisor: Sameer Patil. (March 2020-September 2021).
- ARPA10. **Postdoctoral Scholar,** Department of Informatics, Donald Bren School of Information and Computer Sciences, University of California, Irvine. Supervisor: Geoffrey C. Bowker (July 2019–February 2020).
- ARPA9. **GAANN Fellow** (Graduate Student Researcher), Donald Bren School of Information and Computer Sciences, University of California, Irvine. (Fall 2016-Spring 2019).
- ARPA8. **Rob Kling Memorial Fellow** (Graduate Student Researcher), Donald Bren School of Information and Computer Sciences, University of California, Irvine. Supervisor: Geoffrey C. Bowker (2014-2015).
- ARPA7. **ISTC-Social Graduate Research Fellow,** Intel Science and Technology Center for Social Computing, University of California, Irvine (2013-2015).
- ARPA6. **Graduate Student Researcher,** School of Information Sciences, University of Pittsburgh. NSF Grant #1042697. Supervisors: Drs. Geoffrey C. Bowker and Cory Knobel (Winter-Summer 2012).
- ARPA5. **Analyst,** Behavioral Measurement Database Services (Producer of the HaPI database), Pittsburgh, PA. Supervisor: Dr. Evelyn Perloff. (2010-2011).

- ARPA4. **Archivist**, Theodore M. Finney Music Library, University of Pittsburgh, Pittsburgh, PA. (2010).
 ARPA3. **Research Supervisor (Undergraduate Projects)**, Department of Psychology (Music Psychology), Keele University (Winter 2008)
 ARPA2. **Research Apprentice**, Department of Psychology, Keele University. Factors contributing to the development of public opinion regarding civilian casualties in armed conflict. Supervisor: Prof. John Sloboda. (Winter-Summer 2008)
 ARPA1. **Project Assistant**, Case File Management for former Asst. US Att. Anthony R. Valukas, Jenner & Block, LLP. Chicago, IL. (2006-2007)

Reviewer Service

- S23. Peer Reviewer for IEEE Pervasive Computing (2022)
 S22. MS Reviewer for Routledge
 S21. Peer Reviewer for CHI'22
 S20. Peer Reviewer for Membrana (Journal)
 S19. Application Reviewer for CSST'21
 S18. MS Reviewer for Routledge (Environment, Sustainability & Product Design)
 S17. AC for CSCW'21
 S16. Peer Reviewer for Fafnir: Nordic Journal of Science Fiction and Fantasy Research
 S15. Peer Reviewer for Personal & Ubiquitous Computing (Journal)
 S14. Peer Reviewer for CSCW'20
 S13. Peer Reviewer for Convergence (Journal)
 S12. Peer Reviewer for International Journal of Human-Computer Studies
 S11. Peer Reviewer for iConference 2016 - 2020
 S10. Peer Reviewer for Information, Communication, and Society (Journal)
 S9. Peer Reviewer for International Journal of Communications
 S8. Peer Reviewer for Big Data & Society (Journal)
 S7. Peer Reviewer for CHI'18
 S6. Peer Reviewer for CSCW'17
 S5. Organizer, Evoke Lab & Studio Reading Group, AY2016-2017
 S4. Peer Reviewer for Science and Technology Studies (Journal)
 S3. Peer Reviewer for East Asian Science Technology and Society: An International Journal
 S2. Organizer, ANT Reading Group @ UCI, AY2012-2013
 S1. Peer Reviewer DIS'2014

Research Groups and Professional Memberships

- RGPM9. 'The New Real,' Bauhaus University Weimar (2021-Present)
 RGPM8. PROST Lab, SICE, Indiana University (2020-2021)
 RGPM7. Society for Philosophy and Technology (2019-Present)
 RGPM6. Transformative Play Lab @ UCI, Member (2018-2020)
 RGPM5. Re:Enlightenment Project (2015-Present)
 RGPM4. Intel Science and Technology Center for Social Computing (ISTC-Social) (2013-2015)
 RGPM3. Evoke Lab and Studio @ UCI (Founding member, 2012-2020)
 RGPM2. American Society for Information Science and Technology (ASIS&T) (2010-Present)
 RGPM1. American Library Association (ALA) (2010-Present)

Sonic Works

- SW3.^ **Seberger, J. S.** (2014). Music for labs: Musical sonification of presence and absence at EVOKE Lab and Studio.
Arranged, compiled, recorded, and mixed using Logic Pro 9. The piece is comprised of found sounds, programmed MIDI instruments, and VST effects. All instruments programmed or played by John S. Seberger.
- SW2.^ **Seberger, J. S.** (2012). “Kurtosis (music for page 1)” In C. Knobel, G. Bowker, R. Larsen, & J. Seberger (Eds.) Emerging configurations of knowledge expression: A digital report of a National Science Foundation workshop on “emerging configurations of the virtual and the real.” Chicago, IL. March 20-12, 2011. NSF Grant #1042697. <http://econfigs.ics.uci.edu>
“Kurtosis (music for page 1)” is a programmatic piece of music that is structured according to the shape of a kurtotic bell curve. It was composed, arranged, recorded, and mixed using Logic Pro 9. The piece is comprised of found sounds, MIDI instruments and lap steel guitar. Legato violin parts were constructed from heavily edited found sounds derived from rehearsal tapes of the violinist Philip Roach. All other instruments programmed or played by John S. Seberger.
- SW1.^ **Seberger, J. S.** (2012). “Insertion/deletion (music for page 7)” In C. Knobel, G. Bowker, R. Larsen, & J. Seberger (Eds.) Emerging configurations of knowledge expression: A digital report of a National Science Foundation workshop on “emerging configurations of the virtual and the real.” Chicago, IL. March 20-12, 2011. NSF Grant #1042697. <http://econfigs.ics.uci.edu/7.php>
“Insertion/deletion (music for page 7)” is a programmatic piece of music, algorithmically composed to illustrate the effects of data insertion and deletion in biological and technological replication. It was composed, arranged, recorded, and mixed using Logic Pro 9. All pitch manipulation of found sounds was achieved using Celemony Melodyne. The piece is comprised of found sounds, MIDI instruments, and VST effects. Pizzicato violin parts were constructed from heavily manipulated found sounds derived from rehearsal tapes of the violinist Philip Roach. All instruments programmed or played by John S. Seberger.