

THE 21ST CONFERENCE OF THE SOCIETY FOR PHILOSOPHY AND TECHNOLOGY

TECHNOLOGY AND POWER

MAY 20-22, 2019
COLLEGE STATION, TX



LIBERAL ARTS
TEXAS A&M UNIVERSITY
PHILOSOPHY

Welcome to SPT 2019

On behalf of the local organizing board, I am pleased to welcome you to Texas A&M University and to the Bryan/College Station area of Texas. The conference brings together about 200 scholars from around the globe; I expect your diverse backgrounds, experiences, and insights will create a conversation that will enrich all of the participants, one that is both intellectually invigorating and pleasant as well.

The conference theme is “Technology and Power,” and a large number of presentations will address different aspects of this relationship; many talks and panels focus on ethical, political, economic, environmental, and informational aspects. The conference is not limited to this theme, however, and a number of talks address longstanding veins of discussion in the SPT literature, while many others develop new lines of research.

I hope you are able to experience a little bit of the “Spirit of Aggieland.” We are pleased that you will be able to see some parts of our campus. The conference will take place in the Integrated Life Science Building (ILSB) and the YMCA Building, the home of the philosophy department, on Monday. On Tuesday and Wednesday, conference events will occur in the Memorial Student Center (MSC), named to remember former students who were killed in military conflicts. In the MSC, the Flag Room and the wooden mural that shows the history of Texas A&M, from its origins as an agricultural and mechanical school to its present as a 68,000 student, Tier 1 research university, are worth visiting. We have scheduled buses to take you from campus to Bryan on Monday and Tuesday nights, which will give you the opportunity to see a paradigmatic downtown of a Texas town.

The success of the conference depends on our sponsors (the Sue G. and Harry E. Bovay Foundation, the Texas A&M Department of Philosophy, the Melbern G. Glasscock Center for Humanities Research, and Rowman & Littlefield International), the assistance of our graduate students (Rob Reed, David Anderson, Denise Meda Calderon, and Michael Portal), and to the extensive work of our administrative experts Jamie Bosley and Lauren McAuliffe, who managed so many of the details of the conference. Thanks to all!

Have a great conference!

Martin Peterson, Conference Director, and the local organizing board (Deb Banerjee, Jonathan Coopersmith, Glen Miller, Gregory Pappas, and Linda Radzik)

Practical Information

- The conference program includes an *SPT at a Glance* overview, a schedule listing parallel sessions and plenaries, a list of abstracts organized by presentation time, and an index of presenters and chairs. There are two maps of campus at the end of the program.
- On Monday, May 20th, registration will be held open 8:00 AM–5:00 PM in the first floor lobby of the ILSB Building. On Tuesday and Wednesday, registration will be available from 9:00 AM–4:00 PM in the hallway outside of MSC 2400.
- Gender neutral restrooms are available in the YMCA Building in the narrow corridor opposite of YMCA 113 and several places in the MSC. Look for signs indicating family restrooms.
- Please help us recycle packaging material by using the recycling bins.
- All of the conference rooms are equipped with projectors and laptops. Ask one of the graduate assistants, whom you should be able to find near the registration table, if you need help.
- Wifi: Eduroam is available in all buildings. If you do not have access to Eduroam, you can find information on an alternative at the registration table.
- On Monday, May 20, charter buses will depart from the ILSB Building between 6:20 and 6:30 PM. They will arrive in downtown Bryan near the LaSalle Hotel about 15 minutes later. They will leave from in front of the LaSalle Hotel to return to the Texas A&M Hotel and Conference Center at 9:00 PM and 10:00 PM.
- On Tuesday, May 21, charter buses will depart from the MSC to Ronin Restaurant in downtown Bryan for the conference dinner. Buses will leave between 6:20 and 6:30 PM. They will depart from the restaurant for the Texas A&M Hotel and Conference Center at 9:00 PM and 10:00 PM.
- Public transportation in Bryan and College Station is unfortunately limited. Lyft and Uber are usually better options if you do not have a car.
- Convenient parking for the conference is available in the Cain Parking Garage and the University Center Parking Garage, both across the street from the MSC and a short walk from the ILSB and YMCA Buildings. Note that you must pay to park in either garage.
- Dining options around campus are somewhat limited. Northgate is good for pub food and drinks; better options can be found in Century Square, located across campus from the conference events (parking is available for a fee). Downtown Bryan has many independent restaurants and bars. For those looking for a fancier meal, Veritas, Christopher's World Grille, The Republic Steakhouse, and Porters are good options. Parking is readily available and free in downtown Bryan and in most other restaurants.

SPT 2019 at a Glance

Welcome reception May 19th, Sunday at 7:00PM at the University Club in Rudder Tower

Monday, May 20th	Tuesday, May 21st	Wednesday, May 22nd
9:00am-10:30am Parallel Session 1 YMCA & ILSB	9:00am-10:30am Parallel Session 4 MSC	9:00am-10:30am Parallel Session 8 MSC
10:30am-11:00am Coffee Break (ILSB)	10:30am-11:00am Coffee Break (MSC 2400)	10:30am-11:00am Coffee Break (MSC 2400)
11:00am-12:30pm Parallel Session 2 YMCA & ILSB	11:00am-12:30pm Parallel Session 5 MSC	11:00am-12:30pm Parallel Session 9 MSC
12:30pm-1:30pm Lunch (ILSB)	12:30pm-1:30pm Lunch (MSC 2400)	12:30pm-1:30pm Lunch (MSC 2400)
1:30pm-2:45pm Opening: Emily Brady and Mark Coeckelbergh Plenary Session: Deborah Johnson, University of Virginia ILSB Auditorium	1:30pm-2:45pm Plenary Session: Colleen Murphy, Illinois Urba- na-Champaign MSC 2400	1:30pm-3:00pm Plenary Session: Andrew Feenberg, Simon Fraser University MSC 2400
3:00pm-4:30pm Parallel Session 3 YMCA & ILSB	3:00pm-4:30pm Parallel Session 6 MSC	3:00pm-3:15pm Coffee Break (MSC 2400)
4:30pm-5:00pm Coffee Break (ILSB)	4:30pm-4:45pm Coffee Break (ILSB)	3:15pm-4:45pm Parallel Session 10 MSC
5:00pm-6:15pm Plenary Session: Michael Bratman, Stanford ILSB Auditorium	4:45pm-6:15pm Parallel Session 7 MSC	4:45pm-5:45pm Presidential Keynote: Mark Coeckelbergh, University of Vienna MSC 2400
6:20pm-10:00pm Dinner Explore Downtown Bryan	Conference Dinner @ Ronin, Bryan	5:45pm-6:00pm Closing Announcements MSC 2400

Sunday, May 19, 7 -9 PM: Welcome Drinks in University Club, Rudder Tower
(Top floor, the tall, gray concrete building next to Kyle Field Football Stadium)

Monday, May 20th
Session 1: 9:00-10:30am

YMCA 109 / International Engineering Ethics

<p><i>“Walking a Fine Line between Engineering and Technology: A Perspective of Engineering Ethics from Taiwan and Japan”</i></p> <p>Po-Jen Shih Virginia Tech</p>	<p><i>“The Moral Foundations of Chinese Engineering Students: A Preliminary Investigation”</i></p> <p>Rockwell Clancy, Horst Hohberger Shanghai Jiao Tong University</p>	<p><i>“Using integrative technology to ensure chance-inspired innovations maintain human values”</i></p> <p>Dave King Exaptive, Inc.</p>
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YMCA 113/ Track: Developing Meeting Points Between Environmental Ethics and Philosophy of Technology
Chairs: Per Sandin, Vincent Blok

<p><i>“Technology and Experiencing the Natural World: Restoring Nature Values”</i></p> <p>Charles Harris Texas A&M</p>	<p><i>“GMOntology: Nature, Narrative, and Genetic Engineering Technologies”</i></p> <p>Per Sandin Swedish University of Agricultural Sciences</p>	<p><i>“Focal Places and the Technological Enclave of Home”</i></p> <p>Brooke Rudow-Abouharb Georgia College and State University</p>
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YMCA 115 / Social Construction of Technology

<p><i>“A SCOT Analysis on the U.S. Post-shuttle Technology Policy Choices”</i></p> <p>Fangzhou Chen, Hanlin You, Naiqian Zhang, Zheng Xu National University of Defense, China Qi Li, Space Engineering University, China</p>	<p><i>“Making Innovation Public: Imaginaries and Metamorphoses”</i></p> <p>Udo Pesch TU Delft</p>
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YMCA 401 / Bitcoin and Blockchains

<p><i>“What is Bitcoin?”</i></p> <p>Craig Warmke Northern Illinois</p>	<p><i>“Blockchain governance – Decentralized control in a digital platform”</i></p> <p>Juho Rantala, Mirka Muilu University of Tampere</p>	<p><i>“The empowerment model of blockchain technology and its effects on trust”</i></p> <p>Yan Teng TU Delft</p>
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ILSB Auditorium

Panel: New Agricultural Technologies and the Environment—Case Studies in Japanese Agriculture

Chair: Toshihiro Suzuki

<p><i>“Adapting Technologies and Isolating Technologies for Agriculture”</i></p> <p>Tsuyoshi Teramoto Chuo University</p>	<p><i>“Through Forks to Fields: Using the Lens of Food Consumption to Design Sustainable Agriculture and Technologies”</i></p> <p>Kazuhiko Ota Research University for Humanity and Nature</p>	<p><i>“Smart Agriculture and Agricultural Expertise”</i></p> <p>Toshihiro Suzuki Sojo University</p>	<p><i>“A Third Way for Agriculture: Between Economic Efficiency and Environmental Values”</i></p> <p>Yoshiyuki Saito, Chuo University Shinya Takenaka, Chuo University</p>
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Coffee Break 10:30-11:00am

Session 2: 11:00am-12:30pm

YMCA 109 / Track: Philosophy, Technology, and Education

Chairs: Jacob Pleasants, Joanne Olson, Michael Clough

<p><i>“The Development of Web-Based Educational Modules in Engineering Ethics”</i></p> <p>Rockwell Clancy, Manuel Charlemagne, Yan Ge Shanghai Jiao Tong University</p>	<p><i>“The responsible engineer: the role of moral, epistemic, and poetic virtues”</i></p> <p>Michael Poznic, Karlsruhe Institute of Technology Erik Fisher, Arizona State</p>	<p><i>“Philosophy of technology for engineers: educating the ‘unacknowledged legislator of the world’”</i></p> <p>Andres Santa-Maria Universidad Tecnica Fed. Santa Maria</p>
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YMCA 113 / Track: Developing Meeting Points Between Environmental Ethics and Philosophy of Technology Cont

Chairs: Per Sandin, Vincent Blok

<p><i>“Expanding Environmental Justice to the Urban Wild in the Data-Driven Cities of the Future”</i></p> <p>Diane Michelfelder Macalester College</p>	<p><i>“The Ontology of Wind Turbines: Are they sustaining?”</i></p> <p>Roisin Lally Gonzaga University</p>	<p><i>“Socio-Technical and Ecological Systems (STES) in the Urban Resilience Agenda”</i></p> <p>Jose Carlos Canizares-Gaztelu TU Delft</p>
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YMCA 115 / Contemporary Issues

<p><i>“Parental narratives of Smartphones in the Family: Negotiating children’s privacy, safety and autonomy”</i></p> <p>Maja Sonne Damkjaer, Clare Southerton, Anders Albrechtslund Aarhus University, Denmark</p>	<p><i>“Data Literacy Education: An Underground Movement”</i></p> <p>Kandrea Wade NYU Steinhardt</p>	<p><i>“The Responsibility of Business Leaders for Ethical Use of Technology”</i></p> <p>Kathleen Wilburn, Ralph Wilburn St. Edwards University</p>
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ILSB Auditorium / Track: Technological Pragmatism / Chair: Gregory Pappas

<p><i>“Paul Romer’s New Growth Economics: A Paradigm Shift in Philosophy of Technology”</i></p> <p>Terry Bristol Portland State University</p>	<p><i>“From the extended mind to the distracted mind: How pragmatist philosophy of mind can help us to think about the ethics of addictive technologies”</i></p> <p>Joshua August Skorburg Duke University</p>	<p><i>“Platform Technologies as Metaphor and Artifact: A Pragmatist Interpretation”</i></p> <p>Paul Thompson Michigan State University</p>
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Lunch 12:30-1:30pm

Official Opening of SPT 2019:
ILSB Auditorium 1:30-2:45

Emily Brady, Director of the Glasscock Center for Humanities and Mark Coeckelbergh, SPT President
Deborah Johnson, “Challenging the Promises and Perils Framework for Emerging Technologies”, University of Virginia

Session 3: 3:00-4:30pm

YMCA 109 / Track: Philosophy, Technology, and Education

Chairs: Jacob Pleasants, Joanne Olson, Michael Clough

<p><i>"Technologies of Teaching Philosophy"</i></p> <p>Eric Kerr National University of Singapore</p>	<p><i>"Multidimensionality of the Nature of Emerging Technology"</i></p> <p>Hillel Rosensweig, Tel Aviv University Dina Tsybulsky, Technion Ilya Levin, Tel Aviv University</p>	<p><i>"Conceptualizing Engineering for Educational Purposes"</i></p> <p>Jose Aravena-Reyes Universidade Federal de Juiz de Fora</p>	<p><i>"Educating the public for informed technological decision-making: Key issues for technology education"</i></p> <p>Jacob Pleasants, Iowa State Michael Clough, Joanne Olson, Texas A&M</p>
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YMCA 113/ Developing Meeting Points Between Environmental Ethics and Philosophy of Technology Cont

Chairs: Per Sandin, Vincent Blok

<p><i>"Reassembling the environmental and the technological: hybrids, or revisiting the idea of functionality"</i></p> <p>Magdalena Holy-Luczaj, University of Information Technology Rzeszow Vincent Blok, WUR</p>	<p><i>"Genetically engineered mosquitoes, the gendered dimension of public health problems among the poor, and inequitable power relations"</i></p> <p>Zahra Meghani, University of Rhode Island Christophe Boëte, Université de Montpellier</p>	
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YMCA 401 / Surveillance & Social Control

<p><i>"Pictures or it didn't happen' Technology, Surveillance, and Social Control"</i></p> <p>Claire Katz Texas A&M University</p>	<p><i>"The Role of Expertise in Governing the Society: Comparing Mohism and Technocratic Governance"</i></p> <p>Lishan Lan, Renmin University China Qin Zhu, Colorado School of Mines</p>	<p><i>"Continuity or Rupture? A historical perspective on value dynamics in smart lighting"</i></p> <p>Taylor Stone TU Delft</p>
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YMCA 115 / Enhancement and Augmented Worlds

<p><i>"Mixed Reality and Augmented Worlds"</i></p> <p>Ian Werkheiser University of Texas Rio Grande Valley</p>	<p><i>"Unnatural people, unnatural planet? Human enhancement, climate engineering, and the role of natural base-lines"</i></p> <p>Marion Hourdequin Colorado College</p>	<p><i>"Representationalism & Power: The Individual Subject and Distributed Cognition in the Field of Educational Technology"</i></p> <p>David Shutkin John Carroll University</p>
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ILSB Auditorium / Track: Technological Pragmatism Cont. / Chair: Gregory Pappas

3:00-4:45 PM

<i>"Parsing Pragmataic Technology"</i> Larry Hickman Southern Illinois Univ. Carbondale	<i>"Pragmatism, Genomic Editing, and Biosecurity"</i> Jesse Kirkpatrick George Mason University	<i>"Peirce, Posthumanism, and the Summum Bonum"</i> Aaron Wilson South Texas College	<i>"Pragmatist Aesthetics and the Experience of Technology"</i> David Hildebrand CU Denver
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Coffee Break 4:30-5:00pm

Plenary Session: 5:00-6:15pm

ILSB Auditorium: Michael Bratman,

"Plans and the Organization of Human Action," Stanford University

Explore Downtown Bryan (buses will be provided, no group meal)

Please see the practical information page for departure times and locations

Tuesday, May 21st
Session 4: 9:00-10:30am

MSC 1400 / Robots

<p><i>"Ethical Reflection on Robot Emotion-Based on Post-Humanism"</i></p> <p>Xu Xu, Northeastern University, China Fan Chen, Northeastern University, China</p>	<p><i>"The Value and Relevance of Human Dignity and Robots' Ability to Respect It"</i></p> <p>Linda Johansson Swedish Defence University</p>	<p><i>"A "Powerful" relationship between Human and Robot. A philosophical inquiry "</i></p> <p>Laura Corti University of Florence</p>
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MSC 2401 / Panel : Hostility, Infrastructure, Data, and Bias

Chair: Robert Rosenberg

<p><i>"What's Wrong with Machine Bias?"</i></p> <p>Clinton Castro Florida International University</p>	<p><i>"Hostile Information Architecture"</i></p> <p>Gordon Hull UNC Charlotte</p>	<p><i>"Any Sufficiently Advanced Neglect is Indistinguishable from Malice: Assumptions and Bias in Algorithmic Systems"</i></p> <p>Damien Williams Virginia Tech</p>
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MSC 2404 / Track: Multicultural Philosophies of Technology

Chair: Qin Zhu

<p><i>"Responsible non-action (wu-wei) in technological design: The Dao of Laozi"</i></p> <p>Shan Jing, Southeast University Neelke Doorn, Delft University of Technology</p>	<p><i>"Xamanism and the Concretization of the Human"</i></p> <p>Jose Aravena-Reyes Universidade Federal de Juiz de Fora</p>	<p><i>"Technological politics of designing focal life in China"</i></p> <p>Tan Taicheng Renmin University of China</p>
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MSC 2405 / Images of Technology

<p><i>"Returntocinder.com: How The Machine Promises Philosophical Thought a Future"</i></p> <p>Jake Reeder Marist College</p>	<p><i>"Picturing Power"</i></p> <p>Stanley Kranc University of South Florida</p>	<p><i>"Power in the making: From hand tools to 3D printing"</i></p> <p>Mike Martin Liverpool John Moores University</p>
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MSC 2502 Track: Luck as a Challenge for Responsible Governance of Science and Technology

Chairs: Martin Sand and Samantha Copeland

<p><i>"Beyond Luck: A Lesson from Titanium Dioxide and Philostratus of Athens"</i></p> <p>Alexei Grinbaum CEA-Saclay</p>	<p><i>"Tools for Serendipity: Missions, Open Science, and Responsible Research and Innovation"</i></p> <p>J Britt Holbrook New Jersey Institute of Technology</p>	<p><i>"Luck Post-Invention: A Brief History of Genomic Research Platforms in the Early Days"</i></p> <p>Scott Cole University of California, Davis</p>
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MSC 2503 / Track: Value Change and Technology

Chairs: Steffen Steinert and Ibo van de Poel

<p><i>"Values and Ethical Affordances: Insights from Anthropology"</i></p> <p>Michael Klenk Delft University of Technology</p>	<p><i>"Considering the role of technologies in value dynamism"</i></p> <p>Olya Kudina TU Delft</p>	<p><i>"Cultivating Ourselves Online: Technologies of the Self for Contemporary Life"</i></p> <p>Matthew Dennis The University of Warwick</p>
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MSC 2504 / The Engineered Life

<p><i>"Is an Engineered Life Worth Living for Humans?"</i></p> <p>Carl Mitcham Renmin University, China</p>	<p><i>"The Psychopolitics of Cognitive Enhancement"</i></p> <p>Jessica Imanaka, Gareth Green Seattle University</p>	<p><i>"Under the skin technological power: notes on Deep Brain Stimulation and Parkinson's Disease in Greece"</i></p> <p>Marilena Pateraki University of Athens</p>
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MSC 2505 / Panel : Postphenomenology and the Pull of Technology

Chair: Don Idhe

<p><i>"Power, Coping, and the Taming of Technology"</i></p> <p>Jesper Aagaard Aarhus University</p>	<p><i>Trust and the Smell of Data: a Postphenomenological Experiment</i></p> <p>Esther Keymolen Tilburg University</p>	<p><i>"It's About Time: Developing Temporal Relation within Postphenomenology"</i></p> <p>Richard Lewis Vrije Universiteit Brussel</p>	<p><i>"Postphenomenology and Affordances"</i></p> <p>Kirk Besmer Konsaga University</p>
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Coffee Break 10:30-11:00am MSC 2400

Session 5: 11:00am-12:30pm

MSC 1400 / Robots Cont.

<p><i>"BCI's, Robots, and War: An Anticipatory Ethical Analysis"</i></p> <p>Richard Wilson, Towson University Michael Nestor, The Hussman Institute For Autism</p>	<p><i>"Power and vulnerability of artificial beings in romantic affairs with humans"</i></p> <p>Tonu Viik Tallinn University</p>	<p><i>"Beyond the biopolitics of automobility"</i></p> <p>Robert Braun Institute for Advanced Studies</p>
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MSC 2401 / Contemporary Issues

<p><i>"Punishing cyborgs. Criminal law in the era of extended cognition"</i></p> <p>Kamil Mamak Jagiellonian University The Pontifical University of John Paul II, Cracow</p>	<p><i>"Autonomous Systems: a source of good? Towards an ethical analysis of the relation between humans and new technologies"</i></p> <p>Marianna Capasso Sant'Anna School of Advanced Studies, Pisa</p>	<p><i>"Technology and Power, Technology as Power. The Neoenvironment"</i></p> <p>Agostino Cera Università della Basilicata (Italy)</p>
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MSC 2404 / Track: Multicultural Philosophies of Technology

Chairs: Qin Zhu

<p><i>"Tao Te Ching and Design Culture for Good"</i></p> <p>Enrong Pan, Zongling Sun, Jiajia Lin Zhejiang University</p>	<p><i>"On Technical Classification Of The Tibetology"</i></p> <p>Lina Zeng Renmin University, China</p>	
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MSC 2405 / Contemporary Issues

<p><i>"Media as modifier of the time structure: form the stable line of time to populism"</i></p> <p>Nelson Camilo Bielefeld University</p>	<p><i>"Interface as an apparatus: Interaction Patterns and anti-utilitarianist heuristics"</i></p> <p>Igor Fred. Cabral Ferreira da Silva Aaeso</p>	<p><i>"Mapping the Apartment Home in Milwaukee, Wisconsin 1875-1939"</i></p> <p>Benjamin Teel Wisconsin-Milwaukee</p>
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**MSC 2502 / Track: Luck as a Challenge for Responsible Governance of Science and Technology Cont
Chairs: Martin Sand and Samantha Copeland**

<p><i>“Did Alexander Fleming deserve the Nobel Prize?”</i></p> <p>Martin Sand TU Delft</p>	<p><i>“Kierkegaard and the Digital Crowd”</i></p> <p>Jeremy Weissman University of South Carolina</p>	<p><i>“Texted to Suicide: Anomie and the New Narcissus in the U.S.”</i></p> <p>Megan Collins Prairie View A&M</p>
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**MSC 2503 / Track: Value Change and Technology
Chairs: Steffen Steinert and Ibo van de Poel**

<p><i>“Reprogenetic Technologies and Biogenetic Valuing”</i></p> <p>Inmaculada de Melo-Martin Weill Cornell Medicine, Cornell University</p>	<p><i>“Adapting to Changing Values in Smart Cities: A Framework for Responsible and Inclusive Decisions”</i></p> <p>Udo Pesch Tu Delft, Marjolein Heezen Ministry of Internal Affairs (NL), Aad Correlje TU Delft, Janneke Ten Kate Platform 31, Liesbet Van Zoonen Erasmus University Rotterdam</p>	<p><i>“Between crumbling values and a crumble of old values – About the possible influence of digital revolution on the pre-discursive consent of moral discourses”</i></p> <p>Sabastian Nahr University of Siegen</p>
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MSC 2504 / Technology and Power

<p><i>“Technology, equality, and power”</i></p> <p>Sven Ove Hansson KTH Royal Institute of Technology</p>	<p><i>“The Joys of Life and their Gradual Destruction by the Powers of Technology”</i></p> <p>Kristian Cantens Texas A&M University</p>	<p><i>“Artificial power and artificial morality: the multi-objective approach”</i></p> <p>Ioan Muntean UNC Asheville, Western Carolina</p>
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**MSC 2405 / Panel: Postphenomenological Theory: Normativity, Discourse, and Power
Chair: Don Ihde**

<p><i>“Postphenomenology and Normativity”</i></p> <p>Don Ihde Stony Brook University</p>	<p><i>“Talking the Walk, Walking the Talk: A New Look at Materiality and Discursivity in Postphenomenology”</i></p> <p>Yoni Van Den Eede Vrije Universiteit Brussel</p>	<p><i>“But That’s Not Phenomenology!”: A Phenomenology of Discriminatory Technologies</i></p> <p>Robert Rosenberger Georgia Institute of Technology</p>
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Lunch 12:30-1:30pm MSC 2400

Plenary Session 1:30-2:45 MSC 2400

Colleen Murphy, "Technology and Transitional Justice," University of Illinois Urbana-Champaign

Session 6: 3:00-4:30pm

**MSC 1400 / Panel: Coexistence of Humans and Robots:
Body, Intentionality, and Knowledge in the Age of Robots
Chair: Kidekazu Kanemitsu**

<p><i>"Technologically mediated intersubjectivity: A consideration of robots as other"</i></p> <p>Hidekazu Kanemitsu Kanazawa Institute of Technology</p>	<p><i>"The effects of having robots in health-care as companions: A postphenomenological analysis"</i></p> <p>Nicola Liberati University of Twente</p>	<p><i>"Rethinking 'Mediation' through Radiation: Can the Use of Robots in Fukushima Change the Way Our Existence Is Mediated?"</i></p> <p>Takao Koga Kobe University</p>
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MSC 2401 / Democracy & Technology

<p><i>"Digital Civil Disobedience and the Transnational Public Sphere"</i></p> <p>Wulf Loh University of Tuebingen</p>	<p><i>"Democracy on Tap?: On the Techno-Politics of Point-of-Use Filters"</i></p> <p>Ben Pauli Kettering University</p>	<p><i>"Government Whistleblowing as Sousveillance: Scientific Journalism and the Maintenance of Democracy in a Digital Age"</i></p> <p>Patrick Anderson Grand Valley State</p>
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MSC 2404 Contemporary Issues

<p><i>"Windows and Glasses: On Two Concepts of Transparency"</i></p> <p>Daniel Susser Penn State</p>	<p><i>"Couplings and Interfaces: Connecting Postphenomenology and Cognitive Science"</i></p> <p>Peter Rantasa University of Vienna</p>	<p><i>"The Special Obligations of Engineers"</i></p> <p>Per-Erik Milam University of Twente</p>
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MSC 2405/ Panel : Postphenomenology and Technological Mediations**Chair: Peter-Paul Verbeek**

<p><i>“Therapeutic Technologies: A Postphenomenological Analysis”</i></p> <p>Nolen Gertz University of Twente</p>	<p><i>“The Everlasting You: How Digital Avatars of the Dead Mediate the Living”</i></p> <p>Olya Kudina University of Twente</p>	<p><i>“Listening to the World: Techno-sonic Mediations of Reality”</i></p> <p>Lars Botin Aalborg University</p>
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MSC 2503 / Track: Value Change and Tech**Chairs: Steffen Steinert and Ibo van de Poel**

<p><i>“Values embedded in sociotechnical systems”</i></p> <p>Ibo van de Poel TU Delft</p>	<p><i>“Ethics, Action, and the Space of Technological Possibility”</i></p> <p>Patrick Gamez Missouri University of Science and Technology</p>	<p><i>“Study on the Ethical Intentionality of Technology Design”</i></p> <p>Chengwei Wen Northeastern University, China</p>
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MSC 2504 / Smart Systems and Algorithms

<p><i>“Smart Systems: From Prediction to Prescription”</i></p> <p>Sabine Thuermel Technical University of Munich</p>	<p><i>“Algorithmic transparency as a disciplinary technique: Opening the black box of algorithm and finding its disciplinary power”</i></p> <p>Hao Wang University of Amsterdam</p>	<p><i>“Algorithmic Agents as Consumers and Producers of Neoliberal Economy”</i></p> <p>Juho Rantala Tampere University</p>
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MSC 2505 / Levinas and Heidegger

<p><i>“Consumption and Enjoyment in Contemporary Techno-society – Levinas, Stiegler and the Bio-Based Economy”</i></p> <p>Roel Veraart, Wageningen Univ Vincent Blok, Wageningen Univ Pieter Lemmens, Radboud Univ</p>	<p><i>“A Levinasian Human(ism) for Mediation Theory: Reclaiming Ethics”</i></p> <p>Jan Peter Bergen University of Twente</p>	<p><i>“Learning by Getting Lost: A Return to Hypertext Pedagogy and Heidegger’s Holzwege”</i></p> <p>Michael Portal Texas A&M</p>
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Coffee Break 4:30-4:45pm MSC 2400

Session 7: 4:45-6:15pm

MSC 1400 / Panel Discussion: Coexistence of Humans and Robots: Body, Intentionality, and Knowledge in the Age of Robots Cont

Chair: Hidekazu Kanemitsu

<p><i>“Designing approaches addressing dilemma in relating to robots”</i></p> <p>Shigeru Wesugi Waseda University</p>	<p><i>“Who knows?: Artificial intelligence and transformation of science”</i></p> <p>Ninao Kukita, Nagoya University Makoto Kureha, Osaka University</p>	<p><i>“Trust in Human - Robot - Interaction”</i></p> <p>Kiyotaka Naoe Tohoku University</p>
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MSC 2401 / Social Media Politics

Chair: Sandra Brama

<p><i>“Social Media, Misinformation, and Inquiry: Using Dewey’s Tools to Disrupt Today’s Propaganda”</i></p> <p>Mark Tschaepe Prairie View A&M</p>	<p><i>“Rethinking the relations of power in parental sharing on social media”</i></p> <p>Maja Sonne Damkjaer Clare Southerton, Anders Albrechtstlund, Ask Risom Bøge Aarhus University, Denmark</p>	<p><i>“Power to the people? A new approach to deliberative democracy and technology”</i></p> <p>Michael Hoffman Georgia Institute of Technology</p>
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MSC 2404 / Multicultural Perspectives

<p><i>“Humanizing Technology for Human and Social Well-Being: An Ubuntu Humanistic Approach to Human-Technology Interaction”</i></p> <p>Odumayak Okpo University of Uyo, Nigeria</p>	<p><i>“Humanizing Technology: The African Communalism Perspective”</i></p> <p>Samuel Otu Ishaya University of Uyo, Nigeria</p>	<p><i>“African States and Technological Power”</i></p> <p>Augustine Farinola Dominican University, Ibadan</p>
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MSC 2405 / Panel: Postphenomenology and Technological Mediations Cont

Chair Peter-Paul Verbeek

<p><i>“Artificial Intelligence and Moral Mediation “</i></p> <p>Peter-Paul Verbeek (M) University of Twente</p>	<p><i>“Bourdieu and Postphenomenology”</i></p> <p>Alberto Romele, Benjamin Bourcier Lille Catholic University</p>	<p><i>“Heidegger's Reflection on Ancient Greek Ontology of Naturality and Artificiality</i></p> <p>Tomas Mickevicius Vilnius University</p>
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MSC 2502 / Contemporary Issues

<p><i>“The Deskilling Hypothesis”</i></p> <p>Ken Archer Survata</p>	<p><i>“Nature and dynamics of trust in the risk society”</i></p> <p>Jose Antonio Lopez Cerezo University of Oviedo</p>	
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MSC 2503 / Technology and Innovation

<p><i>“How to Bring AI for Good into Reality?”</i></p> <p>Enrong Pan, Jiafan Yang Zhejiang University</p>	<p><i>Technological Innovation in the Public Sphere: Towards a Political Concept of Responsible Innovation</i></p> <p>Lucien von Schomberg, WUR Vincent Blok, WUR</p>	<p><i>“The power of storytellers: Representation of innovation in medical series”</i></p> <p>Eszter Nádasi Budapest University of Technology and Economics</p>
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MSC 2504 / Smart Technologies

<p><i>“The Smart Resurfacing of Wicked Problems”</i></p> <p>Pieter Vermaas TU Delft</p>	<p><i>“The Great Wall of Happily Ever After: The Digital Divide between Users and the Ideal Smart Home”</i></p> <p>Yueh-Jung Lee Arizona State</p>	<p><i>“Smart Speakers in the age of Super-surveillance”</i></p> <p>Joseph C. Pitt Virginia Tech</p>
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MSC 2505 / Track: Powerful Humans and More Powerful Technologies / Chair: Laura Drake

<p><i>“Abducting Intelligence: Psychedelic Research Methods and The Epistemic Limits of Machines”</i></p> <p>Emma Stamm Virginia Tech</p>	<p><i>“Frictionless Technologies: The Innovation of Human Obsolescence”</i></p> <p>Laura Drake Independent Scholar</p>	
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Conference Dinner @ Ronin, Bryan (buses will be provided)
Please see the practical information page for departure times and locations

Wednesday, May 22nd
Session 8: 9:00-10:30am

MSC 1400 / Cyborgs

<p><i>"Cyborg Maintenance: A Phenomenology of Upkeep"</i></p> <p>Joshua Earle Virginia Tech</p>	<p><i>"Body Enhancement Technologies: Cyborgs, Demigods and New Political Order"</i></p> <p>Auguste Dementaviciene Vilnius University</p>	<p><i>"iZombies Cyborgs: On Compulsive Smartphone Use"</i></p> <p>Joshua Hall William Paterson University</p>
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MSC 2401 / Machines and Ethics

<p><i>"Analysis on Human-Machine Relations (HMRs) from the Perspective of Philosophy of Organism"</i></p> <p>Xue Yu, Qian Wang Dalian University of Technology</p>	<p><i>"A new framing for technology ethics"</i></p> <p>Mark Bourgeois Notre Dame</p>	<p><i>"Hans Blumenberg on Technology and the Consequences of Invisibility"</i></p> <p>Bruce Krajewski University of Texas Arlington</p>
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MSC 2404 Contemporary Issues

<p><i>"Predicting Proportionality"</i></p> <p>Vincent Chiao University of Toronto</p>	<p><i>"Disentangling Military, Extractive, and Environmental Narratives in Earth Remote Sensing"</i></p> <p>Samantha Fried Virginia Tech</p>
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MSC 2405

Debate: Should We Treat New Technologies as Social Experiments?

<p>Ibo van de Poel, TU Delft</p>	<p>Martin Peterson, Texas A&M University</p>	<p>John C. O'Day, Texas A&M University</p>
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MSC 2502 / Panel: Postphenomenology and Architectural Design

Chair: Peter-Paul Verbeek

<p><i>“Approaches from Urban Aesthetics to New Urban Technologies”</i></p> <p>Sanna Lehtinen University of Helsinki</p>	<p><i>“Building Dwelling and Stop Thinking: Subtle Domestication and Sensing Architecture”</i></p> <p>Soren Riis Roskilde University</p>	
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MSC 2503 / Big Data

<p><i>“Ethics analysis of assisted reproductive technology based on big data”</i></p> <p>Lyu Yang, Yin Wen Juan, Lin Jin Ru Northeastern University, China</p>	<p><i>“What We Informationally Owe to Each Other”</i></p> <p>Adam Pham, Wisconsin-Madison Clinton Castro Florida Internaitonal</p>	<p><i>“Underdetermination in the Era of Big Data Science: The Power of Observation”</i></p> <p>Don Berkich Texas A&M Corpus Christi</p>
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MSC 2504 / Contemporary Issues

<p><i>“Strategic foresight and analysis of autonomous technologies”</i></p> <p>Darryl Farber Penn State</p>	<p><i>“Understanding technologies at various levels”</i></p> <p>Mariska Bosschaert TU Center for Ethics and Technology</p>	
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MSC 2505 / Panel: Alienating Apps

Chair: Josh Dohmen

<p><i>“Developmental Space: What Navigation Apps Get Wrong about Our Experience of Movement”</i></p> <p>Michael Butler University of Texas Rio Grande Valley</p>	<p><i>“Intimate Revolt and Social Media”</i></p> <p>Josh Dohmen Mississippi University for Women</p>	<p><i>“Foucault, Technology and the Attention Economy”</i></p> <p>Jordan Liz San Jose State University</p>
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Coffee Break 10:30-11:00am
Session 9: 11:00am-12:30pm

MSC 1400 / Human Enhancement

<p><i>“Technology and Human Perception: A Kantian Dissection of Sensory Enhancement”</i></p> <p>Adekunle Ibrahim University of Uyo</p>	<p><i>“Socratic Ignorance: A More Promising Approach to Virtue Ethics for Our Future Technohuman Society”</i></p> <p>Santiago Mejia Fordham University</p>	<p><i>“How should we treat human enhancement technology: acceptance or rejection?”</i></p> <p>Xiaoju Dong Tsinghua University</p>
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MSC 2401 / Algorithms, data, politics, Mass Culture

<p><i>“A black market for upvotes and likes: manipulating masses on social media”</i></p> <p>Mihály Héder Budapest University of Technology and Economics</p>	<p><i>“Using Big Data Algorithms to Make Big Decisions”</i></p> <p>Diane Michelfelder Macalester College</p>	<p><i>“The Ethical Impact of Reputation Systems in the Sharing Economy”</i></p> <p>Thijs Slot TU Delft</p>
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MSC 2405 / Sociotechnical Issues

<p><i>“The Political Anatomy of Computer Architecture”</i></p> <p>Jens Burger, Andres Laguna-Tapia Universidad Privada Boliviana</p>	<p><i>“Ambiguity-based failure in sociotechnical systems”</i></p> <p>Eric Kerr, National University of Singapore Vivek Kant, India Institute of Technology Bombay</p>	<p><i>“Technical Artefacts and the Problem of Malfunction”</i></p> <p>Alexandra Karakas Eötvös Loránd University</p>
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MSC 2502 / Contemporary Issues

<p><i>“The Experiment is Power: A Perspective on Francis Bacon’s Philosophy of Technology”</i></p> <p>Yefei Wang, Dazhou Wang Chinese Academy of Sciences</p>	<p><i>“Sociocultural Effects and Challenges of Digital Technologies: An anthropological and Multi-scenario Analysis”</i></p> <p>Jacob Cordoba Jaquez, Jose Refugio Romo Gonzalez Autonomous University of Chihuahua</p>	<p><i>“At the Push of a Button: Automation, Autonomy and Skill”</i></p> <p>Mark Thomas Young University of Bergen</p>
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MSC 2503 / Contemporary Issues

<p><i>“How the ‘I’ might die or: How the rise of socially interactive artificial assistants might affect the expressive self-relation of human beings”</i></p> <p>Sabastian Nahr University of Siegen</p>	<p><i>“‘Value-inertia’ in risk assessments”</i></p> <p>Per Wikman-Svahn KTH Royal Institute of Technology</p>	<p><i>“Human Fulfillment In The Contemporary Technological Era: Values, Emotions and Engagement”</i></p> <p>Joanna Fumey Texas A&M</p>
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MSC 2504 / Technology and Social Media

<p><i>“From Sexual Explicitness to Invisibility in Resistance Art: Coloniality, Rape Culture and Technology”</i></p> <p>Chloe Georas University of Puerto Rico Law School</p>	<p><i>“Technological Worldliness of 2010’s: Hannah Arendt’s contribution for Science and Technology Studies”</i></p> <p>Mirka Muilu Tampere University</p>	<p><i>“The Retrieval of Civility in Cyberspace”</i></p> <p>Patrick Flanagan St. John’s University</p>
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MSC 2505 / Assessing Technological Change

<p><i>“The Rhetorical Public Sphere as an Ideal Model for Democratic Assessment of Emerging Technologies”</i></p> <p>Shalom Chalson National University of Singapore</p>	<p><i>“Revolutionary Dreams: Epochalism, Inevitability, and Future Essentialism in Imagining the Fourth Industrial Revolution”</i></p> <p>Kasper Hedegård Schiølin Harvard</p>	<p><i>“Knowledge in the Making: Towards a value-sensitive design vocabulary for measuring and detecting technologies”</i></p> <p>Holly Robbins, Taylor Stone TU Delft</p>
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Lunch 12:30-1:30pm

Plenary Session 1:30-3:00

MSC 2400: Andrew Feenberg, recipient of the SPT 2019 Lifetime Achievement Award, “Technoscience: Nature Enters History,” Simon Fraser University

Coffee Break 10:30-11:00am

Session 10: 3:15-4:45pm

MSC 1400 / Transhumanism

<p><i>“The Utopia of Universal Control. Technology and Power in the Transhumanist Paradigm”</i></p> <p>Janina Loh University of Vienna</p>	<p><i>“Teilhard and Transhumanism: What They Have to Teach Each Other”</i></p> <p>Timothy Clancy Gonzaga University</p>	<p><i>“Inventing New Modes of Being Human for the Digital Age”</i></p> <p>Johannes Schick Universität zu Köln</p>
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MSC 2401 / Technology and Warfare

<p><i>“Drones, UAV’s, and the Phenomenological Reconfiguration of Space”</i></p> <p>Richard Wilson, Towson University Michael Nestor, The Hussman Institute For Autism</p>	<p><i>“Tools of imperial power: a politically non-neutral assessment of weaponized drones”</i></p> <p>John C. O’Day Texas A&M</p>	<p><i>“Technologically Assured Doom: Simulations of Increasing power”</i></p> <p>Mihály Héder Budapest University of Technology and Economics</p>
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MSC 2405 / Contemporary Issues

<p><i>“Design for values in architecture: the question of trade-offs”</i></p> <p>Sara Eloy, Instituto Universitário de Lisboa Pieter Vermaas, TU Delft</p>	<p><i>“Technolgy, Power and Nihilism”</i></p> <p>William Maker Clemson</p>	
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**MSC 2502 / Panel: Field Philosophy East and West
Chairs: Adam Briggie and Robert Frodeman**

<p><i>“A Chinese Field Philosophy Initiative: the Emergence of Philosophy of Gong Cheng”</i></p> <p>Yin Wenjuan</p>	<p><i>“The Genesis of a Field Philosopher”</i></p> <p>Robert Frodeman University of Texas</p>	<p><i>“Field Philosophy as Liberation Philosophy”</i></p> <p>Jeff Gessas and Adam Briggie University of Texas</p>	<p><i>“Field Philosophy and China Environmental Philosophy Localization”</i></p> <p>Fan Yangcheng</p>
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**MSC 2400 / Panel: Paul Durbin and the SPT Legacy
Chair: Carl Mitcham**

This panel is intended as something like a posthumous author meets critics session for Durbin’s *Philosophy of Technology: In Search of Discourse Synthesis*. **All SPT presidents (former and current), anyone referenced by Durbin in the book, and former students and collaborators are invited to participate in the panel or offer written comments.**

Confirmed panelists include Carl Mitcham, chair, Alex Michelos (2nd president of SPT), Joe Pitt (5th president), Larry Hickman (7th president), Paul Thompson (12th president), and Don Ihde (who promises comments “Since 2005”), and Deborah G. Johnson. Ana Cuevas, Albert Borgmann, and Langdon Winner have promised written comments.

Contact Carl Mitcham (cmitcham@mines.edu) if you are interested in participating in the panel or submitting written comments.

MSC 2505 / Cognitive Technology

<p><i>"Technology and Technique: The Technology of Thinking and Acting"</i></p> <p>Bob Burch, Texas A&M Ling LI, Central China Normal University</p>	<p><i>"Metaphysics as a Cognitive Technology"</i></p> <p>Shane Wilkins USDA</p>	<p><i>"Technics and Agency: the pluralism and diversity of technē"</i></p> <p>Jason Tuckwell Western Sydney University</p>
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Presidential Keynote: 4:45-5:45

MSC 2400: Mark Coeckelbergh, SPT President, University of Vienna

"The Tech Philosopher's Tools: Media, Metaphor, and Performance"

Closing Announcements: 5:45-6:00

Monday May 20th
Session 1: 9:00-10:30am
YMCA 109 / International Engineering Ethics

“Walking a Fine Line between Engineering and Technology: A Perspective of Engineering Ethics from Taiwan and Japan”

Po-Jen Shih
Virginia Tech

This paper takes a linguistic approach to “engineering” and “technology” and shows that unlike the United States and other Western countries, where engineering ethics is professionalized and often separate from ethics of technology in general, both the two places I study—Taiwan and Japan—have embodied a closer link between engineering and technology. Because of the close relationship, I further show that the intended readers of “engineering ethics” in Taiwan and Japan would involve all the practitioners in technology and are not limited to professionally qualified engineers. I then discuss its implications for Western philosophers/ethicists of engineering and technology.

“The Moral Foundations of Chinese Engineering Students: A Preliminary Investigation”

Rockwell Clancy, Horst Hohberger
Shanghai Jiao Tong University

Concerns regarding the safety and ethics of Chinese industries and practitioners, as well as record number of Chinese STEM graduates both in China and abroad, highlight the importance of ethics education for Chinese. Since culture influences ethical perceptions, and China has a unique culture, simply importing ethics curricula into China would be inappropriate. To better understand the ethical perspectives of Chinese engineering students, and improve ethics education on this basis, a study was conducted examining the “moral foundations” used by this demographic in assessments of right and wrong, and the relation of these foundations to socioeconomic status and previous education.

“Using integrative technology to ensure chance-inspired innovations maintain human values”

Dave King
Exaptive, Inc.

Can we use integrative technology not to eliminate chance, but rather to ensure chance-inspired innovations are in keeping with human values? Exaptive has created a virtual environment where teams can collaborate around data. The goal is to facilitate innovation. We have found in focus group experiments that giving a small group an artifact about which to find commonalities and differences leads to new understanding in several ways: increased productivity, innovative ideation, and knowledge transfer.

Monday May 20th

Session 1: 9:00-10:30am

YMCA 113 / Track: Developing Meeting Points Between Environmental Ethics and Philosophy of Technology

Chairs: Per Sandin and Vincent Blok

"Technology and Experiencing the Natural World: Restoring Nature Values"

Charles Harris

Texas A&M

Despite the benefits of many technologies, they can diminish or eliminate important values in our experience, which I designate as "nature values." These are the experiences of natural beauty, human embodiment, human finitude, and trans-human reality, which Thoreau called "the wild." Possible ways of restoring natural values are modifying technologies (e.g. redesigning buildings and cities) and modifying lifestyles (e.g. spending more time hiking in the wilderness). Are these modifications enough? Can tradeoffs and substitutions for nature values be found? If not, what should be done?

"GMOntology: Nature, Narrative, and Genetic Engineering Technologies"

Per Sandin

Swedish University of Agricultural Sciences

This paper attempts to clarify what narratives have been prevalent in the academic discussions about genetically modified organisms (GMOs), in particular in the European Union, and their repercussions for legislation of such technologies. It is tentatively concluded that many of the differing opinions about the moral and legal status of GMOs are best understood as characterizations of whole stories, rather than of specific instances of technologies. This complicates the idea of a "process-based" legislation versus a "product-based" legislation. Finally, an empirical study of what elements in the narratives of GMOs and non-GMOs track morally relevant characteristics is outlined.

"Focal Places and the Technological Enclave of Home"

Brooke Rudow-Abouharb

Georgia College and State University

In this paper, I show that our relationships with technology, along with the number and the character of those technologies, detach us from others and especially the natural world, limiting the relationships we can have with them. I explore promising suggestions for overcoming such a technological paradigm. These solutions advocate engaging focal things, focal practices, and focal sites. I embrace these solutions but propose certain amendments. Specifically, I argue that homes as primary sites of subjectivity, belonging, and responsibility must stand at the center of focal practices.

Monday May 20th
Session 1: 9:00-10:30am
YMCA 115 / Social Construction of Technology

"A SCOT Analysis on the U.S. Post-shuttle Technology Policy Choices"

Fangzhou Chen, Hanlin You, Naiqian Zhang, Zheng Xu
National University of Defense, China; Qi Li, Space Engineering University, China

Technology policy making is a dynamic process in which technology and social factors interact to optimize engineering efficiency. Based on that, Social Construction of Technology concept was proposed to explain the technology choice mechanism. One of the typical examples is the long-range launch vehicle technology decision process in the U.S. post-shuttle era whose technology transitions have been widely determined by the evolution law of theory, the constructive role of politics and the adjustment function of commercial liberalism. More specifically, government institutions and temporary committees act as guardians while private companies act as a kind of new power to reshape future aerospace technology and industry as well. In this framework, technology choices are well balanced to meet the demands and interests from all those sectors that should be discussed under the principles of SCOT.

"Making Innovation Public: Imaginaries and Metamorphoses"

Udo Pesch
TU Delft

This paper argues that innovation processes are exempted from public scrutiny, both in terms of having designated accountability arrangements and of being discussed as an issue of a public debate. This exemption is undesirable because of the societal impact of new technology. By presenting the innovation process as a series of 'metamorphoses' that are inspired by a range of implicit and explicit expectations that pertain both to the technology and to society, it becomes possible to rearticulate the innovation process in such a way that it can become a public issue, facilitating passive and active responsibility in technology development.

"Democratization and sociotechnical change: the neglected role of aesthetic values, collections of images, and structured procedures in the designing process"

Cristiano C. Cruz
University of Sao Paulo

It is well established the impact of ethical-political values on technology and how such values conform the sociotechnical order technology creates or reinforces. Because of that, there are multiple methodologies that can be used to democratize this process of (socio)technical construction. Nonetheless, another category of elements is still largely neglected on the reflection about, and the practice of, engineering design: aesthetical values, collections of images, and structured procedures. This makes their diversification harder to get. And that may undermine the innovativeness of the designing process and, as a consequence, the very possibility of building these other possible worlds we might be seeking.

Monday May 20th
Session 1: 9:00-10:30am
YMCA 401 / Bitcoin and Blockchains

"What is Bitcoin?"

Craig Warmke
Northern Illinois

Although bitcoin has become a staple of popular culture, few understand how it works or what it is. In fact, bitcoin experts themselves routinely make philosophical errors when they describe what bitcoin is, and these errors bleed into their descriptions of how bitcoin works. In this paper, I clear away these errors and offer a metaphysical account of bitcoin. Free of these errors, we see more clearly how the bitcoin network functions, how bitcoin mining relates to the First Amendment, and why one popular argument for bitcoin cash as the real bitcoin ultimately fails.

"Blockchain governance – Decentralized control in a digital platform"

Juho Rantala, Mirka Muilu
University of Tampere

The digital technologies, especially digital platforms, provide new ways of digital governance and control. One of these platform technologies, blockchain, embodies mechanisms which could be called "practices of decentralized control". Through complex mechanisms of control on the level of technology itself and on the level of network of humans, devices and software, human beings are governed through his or her parts "as a whole" (dividual). On the other hand, this network of control provides paths or possibilities to escape control precisely because there are no points of total governance. The possibilities of blockchain casts challenge to the traditional modes of control and governance.

"The empowerment model of blockchain technology and its effects on trust"

Yan Teng
TU Delft

Blockchain technology has captured attention in numerous potential fields of implementation since its inception. This paper focuses on the notable intention of substituting the technical features of blockchains for the trust placed in intermediaries. By investigating the mechanism of trust in institutions, I scrutinize the power network underlying such trust relations. I then explore the extent to which the empowerment model of blockchain technology reflects and deviates from the power-relations of the incumbent mechanism. I contend that trust in public blockchains highly resembles trust in institutions, yet its decentralized socio-political power structure can reconfigure our understanding of trust.

Monday May 20th

Session 1: 9:00-10:30am

ILSB Auditorium / Track: New Agricultural Technologies and the Environment—Case Studies in Japanese Agriculture / Chair: Toshihoro Suzuki

“Adapting Technologies and Isolating Technologies for Agriculture”

Tsuyoshi Teramoto

Chuo University

Smart agriculture has the potential to reduce environmental impacts in production processes, as well as to save labor and improve productivity. For example, an autonomous drone with a bug zapper enables chemical-free pesticide control. This autonomous drone can also trace the locations of insects based on visual data, such as the colors of leaves, and spray pesticide on them with pinpoint accuracy. Using this device, farmers can exterminate harmful insects more efficiently and in an environmentally friendly way. Besides, sensing technologies with wireless communication systems acquire and store large quantities of environmental data, such as on air temperature, humidity, ground temperature, water temperature, soil water content, solar radiation, and CO₂ concentration, which make it possible to assess more precisely, when, where, and how much fertilizer or pesticide crops need. With these technologies, some farmers reduce the use of chemical materials successfully and contribute to the progress of biodiversity and the mitigation of greenhouse gases.

“Through Forks to Fields: Using the Lens of Food Consumption to Design Sustainable Agriculture and Technologies”

Kazuhiko Ota

Research University for Humanity and Nature

This paper clarifies the significance of using the lens of food consumption to design sustainable agriculture and technologies. After reviewing the core arguments of weak sustainable food consumption, we present the case for an approach to food consumption that challenges three overlapping conceptual perspectives that are predominant in discourses on agrifood sustainability. We categorize these perspectives in terms of “Production First,” “Growth First,” and “Sustenance First.” Production First is the argument that sustainability gains for agrifood are achieved through greater efficiencies in production to “feed the world.” The Growth First perspective understands that trends toward homogeneous food consumption patterns, especially high-impact foods such as red meat and oils, will continue as a function of economic growth. Thirdly, the Sustenance First perspective sees “food as fuel,” a world in which all food calories are equal. Drawing upon literature on sustainable consumption and associated fields, as well as examples in areas such as food security, sustainable diets, and food sovereignty, we contend why each of the three mainstream perspectives should be rejected.

“Smart Agriculture and Agricultural Expertise”

Toshihiro Suzuki

Sojo University

The purpose of the presentation is to consider how smart agriculture, especially agriculture using Information and Communication Technology (ICT), changes our understanding of farm fields, agricultural crops, and food products. Along with AI technology and robotics, the most active aspect of the smart agriculture movement is the introduction of ICT into agriculture. Using ICT, we can control farm fields (supplies of water and fertilizer) more easily and precisely, and manage crop distribution more efficiently. Agriculture with precise management of farm fields and crop distribution using ICT is often called “precision agriculture (PA).” Management of farm field and crop distribution is closely related to agricultural expertise. The focus on agricultural expertise is one of the most important elements in traditional Japanese agriculture. On one hand, it results in the sensitive form of farming

that makes Japanese agricultural products superior, but, on the other hand, it hinders new entrants from among young people; therefore, it causes labor shortage and aging problems. In PA, where ICT is introduced to substitute for agricultural expertise, we can solve problems such as labor shortages and aging, while maintaining a sensitive form of farming based on agricultural expertise.

"A Third Way for Agriculture: Between Economic Efficiency and Environmental Values"

Yoshiyuki Saito, Chuo University

Shinya Takenaka, Chuo University

Simply speaking, we can divide agriculture into two types. One is agriculture as an activity focusing on economic efficiency and the other is that which emphasizes environmental values. Surely, activities in agrarian agriculture have a friendly relationship with some environmental values, but could be criticized from a strong environmentalist view. Irrespective of this, agricultural activities change native wildernesses and ultimately result in the loss of some environmental values. At the same time, from an economic point of view, it is less efficient than industrial agriculture. However, environmental values and economic efficiency are not necessarily incompatible. We can find a third way in agrarian agriculture. As an example of agrarian agriculture, where economic efficiency and environmental values are compatible, we would like to present the case of the "White Stork Friendly Farming Method" pursued in Toyooka, Japan.

Monday May 20th

Session 2: 11:00am-12:30pm

YMCA 109 / Track: Philosophy, Technology, and Education

Chairs: Jacob Pleasants, Joanne Olson, Michael Clough

"The Development of Web-Based Educational Modules in Engineering Ethics"

Rockwell Clancy, Manuel Charlemagne, Yan Ge

Shanghai Jiao Tong University

Ethics has long been recognized as crucial to engineering education, although the form this education should take and objectives it should adopt are open questions. Our presentation describes the nature of and motivations for the development of a website to host educational modules and collect information related to applied ethics. The contents and form of the site result from previous research regarding what students know and think about ethics, in conjunction with work from behavioral ethics and moral psychology, to collect further information and develop ethics curricula and foster work environments that lead to more ethical behaviors in the long-term.

"The responsible engineer: the role of moral, epistemic, and poietic virtues"

Michael Poznic, Karlsruhe Institute of Technology

Erik Fisher, Arizona State

Increasingly, new developments in science, technology, and engineering are being seen by publics and policy makers to entail risks, uncertainties, and societal concerns. Accordingly, there is an increasing demand for "responsible" forms of engineering research and technological innovation that both benefit society and minimize unintended side effects. In line with this, Responsible Research and Innovation (RRI) has become an influential concept in the recent decade. In the following we will speak of the "RRI framework" in order to denote political implementations but also theoretical work on the concept of RRI.

“Philosophy of technology for engineers: educating the ‘unacknowledged legislator of the world’”

Andres Santa-Maria

Universidad Tecnica Fed. Santa Maria

This communication aims to contribute to a debate already illuminated by the contributions of Mitcham (1998), Grimson et al. (2008) and many others, about the fundamental role that theoretically plays or should play the teaching of the philosophy of technology in the training of future engineers, but, above all, how it should be taught in order to effectively play that fundamental role. To illustrate this, I will propose that the different themes and authors worked and methodologies used in one or more courses on philosophy of technology should be articulated by the goal of cultivating among future engineers a kind of ‘philosophical attitude’, in a sense not very far from that defended by Pierre Hadot (2001) when he defines philosophy as a ‘way of life’. Indeed, insofar as the work of the engineer can be described as the design of technology at the service of the diagnosis and solution of complex problems, philosophical considerations about the possibilities and consequences of a technological design should be incorporated as a key element among the variables to be considered and that precisely make these problems so complex.

Monday May 20th

Session 2: 11:00am-12:30pm

YMCA 113 / Track: Developing Meeting Points Between Environmental Ethics and Philosophy of Technology

Cont Chairs: Per Sandin, Vincent Blok, Karin Edvardsson Björnberg, Zoe Robaey

“Expanding Environmental Justice to the Urban Wild in the Data-Driven Cities of the Future”

Diane Michelfelder

Macalester College

The push toward “smart cities” opens up new ways for enhancing environmental justice and so promoting social equity through embedding ICTs within urban environments. Urban engineering initiatives that place toxicity sensors in a city’s water supply system can for example help to reduce the chances of another Flint Michigan in the future. This paper explores the need to take environmental justice a step further by looking at some ways that the development of technologies for smart cities creates disproportionate risks for urban wildlife. The primary point of focus will be on ways disproportionate risks are created by means of the introduction of driverless vehicles and ways that transportation systems (including sidewalks and bike lanes) may be redesigned around them. Good planning for the data-driven city, this paper argues, calls for a need to work with such an expanded concept of environmental justice.

“The Ontology of Wind Turbines: Are they sustaining?”

Roisin Lally

Gonzaga University

This paper argues that our ambiguity to wind energy, specifically wind turbines, is a result of our ambiguity to technology in general. This ambiguity can be traced back to Aristotle and developed by Gilbert Simondon in, *On the Mode of Existence of Technical Objects*, a work that is slowly surfacing with thinkers such as Bernard Stiegler and Andrew Feenberg. This paper will show how both Aristotle and Simondon’s ontology of technology can help to think through our challenges of creating new technologies sensitive to the needs of the earth and to find more creative ways to harvest wind energy.

"Socio-Technical and Ecological Systems (STES) in the Urban Resilience Agenda"

Jose Carlos Canizares Gaztelu

TU Delft

Climate change mitigation (CCM) follows a predict-and-prevent approach to climate change governance: after forecasting the effects of anthropogenic carbon emissions on future climate scenarios, those forecasts are used to set emission targets that should guide policy and action aimed at emission reduction. Yet, some climate change is already unavoidable, and the challenges of climate change adaptation (CCA) and CCM differ substantially. My argument stresses the philosophical relevance of the urban resilience agenda. First, it reviews some problems in this domain, and describes a framework for identifying and categorizing them. Then a research question is posed, followed by the layout of a research plan with which to address it.

Monday May 20th

Session 2: 11:00am-12:30pm

YMCA 115 / Contemporary Issues

"Parental narratives of Smartphones in the Family: Negotiating children's privacy, safety and autonomy"

Maja Sonne Damkjaer, Clare Southerton, Anders Albrechtslund

Aarhus University, Denmark

Smartphones intersect with many anxieties for parents about their child's increasing autonomy, their child's safety and privacy. However, we know relatively little about parents' perceptions of, experiences with and attitudes toward the role of smartphones in their children's lives. Based on findings from in-depth interviews with 17 Danish families conducted in 2017, this paper examines and discusses parental narratives and beliefs about children's appropriation of smartphones, in order to foster nuanced discussions of how smartphones may challenge power structures and contribute to reconfiguring social relations. The analysis draws on affordance theory, the domestication perspective, surveillance studies and parental mediation theory.

"Data Literacy Education: An Underground Movement"

Kandrea Wade NYU Steinhardt

Digital identity is not completely in the hands of the individual user because governments and social/criminal justice systems have the ability to see, sort, and make life altering decisions based off of that data, currently free of any nationally or internationally imposed rules or regulations to protect the user. Although there has been a great deal of research conducted on data surveillance and its implications, far less academic work has been conducted on the efforts to educate the individuals affected most by the lack in regulations on data mining and handling. This research intended to uncover the underground leaders of the data literacy education movement and bring their efforts to light as a framework for the creation of policies, regulations and standardized data education for all citizens.

"The Responsibility of Business Leaders for Ethical Use of Technology"

Kathleen Wilburn, Ralph Wilburn

St Edward's University

Academic and scientific researchers are warning that technology is creating a Wild West environment where no one is accountable for the source or accuracy of the data collected, the correlations and predictions made, or the ethical use of the data by third parties who purchase it. Business leaders can identify the ethical issues that technology raises, and thus must be involved in developing these guidelines. Five strategies are proposed for business leaders to use in making ethical decisions using technology: Ensure the accuracy of data, Know the

variables in algorithms, Use a stakeholder lens, Engage with technology leaders, Identify intended and unintended Consequences.

Monday May 20th

Session 2: 11:00am-12:30pm

ILSB Auditorium / Track: Technological Pragmatism Cont. / Chair: Gregory Pappas

"Paul Romer's New Growth Economics: A Paradigm Shift in Philosophy of Technology"

Terry Bristol
Portland State University

Paul Romer received the 2018 Nobel Prize in Economics for contributions to a paradigm shift in our understanding of the growth and evolution of economic systems. In New Growth Economics, it is the growth of knowledge, embodied in technology, that drives economic growth. The theoretical debates leading to New Growth Economics should be of particular interest to philosophers of technology. Real growth is qualitative and recursively enabling. The improvement of socio-economic designs suggests an emerging moral agenda. Romer's shift to a participant perspective constitutes a philosophical advance in our understanding of the evolution of reality and our role in it.

"From the extended mind to the distracted mind: How pragmatist philosophy of mind can help us to think about the ethics of addictive technologies"

Joshua August Skorburg
Duke University

This paper connects Deweyan philosophy of mind with contemporary discussions of addictive technologies. I begin with recent accounts of the addictive nature of smartphones, social media, and gaming. Next, I summarize some neuroscientific work on distractibility. Then, I show how these rely on traditional internalist views of the mind. I argue that adopting a Deweyan view yields three benefits: It provides an empirically supported account of psychological vulnerabilities that make addictive technologies possible, it is well-positioned to elucidate the ethical and epistemic harms caused by addictive technologies, and it provides a novel framework to conceptualize strategies for mitigating these harms.

"Platform Technologies as Metaphor and Artifact: A Pragmatist Interpretation"

Paul Thompson
Michigan State University

Platform technologies (or technical platforms) are material constructions that can support multiple applications, sometimes in quite varied socioeconomic domains. Familiar examples include the coding and hardware that supports internet browsing (Google), social networks (Facebook) or computing (Microsoft Windows, Apple OS), but biologically based platforms are also in development. Indeed, genes and neural nets can be understood as technical platforms that have emerged through evolution. Arguably, the platform concept is implicit within pragmatist philosophers C.S. Peirce, William James and John Dewey's appropriation of Darwin. As such, the emergence of familiar technical platforms (such as those listed above) provides a technological metaphor that can make key elements in pragmatist ontology and epistemology more readily available. Once grasped, artifactual platforms can themselves be understood as components of organism-environment interaction that shape the trajectory of habit formation and institutional growth.

Monday May 20th
Plenary Session: 1:30pm-2:45pm
ILSB Auditorium

"Challenging the Promises and Perils Framework for Emerging Technologies"

Deborah G. Johnson
University of Virginia

Recent work in the philosophy of technology draws attention to the connection between technology and the good life. Discourse around emerging technologies also often makes this connection when it focuses on the promises and perils of going forward with a nascent technology. New technologies are touted for their potential to bring about increased safety, health, convenience or enlightenment. These promises are typically counterbalanced by claims about the perils - diminished freedom, erosion of privacy, new vulnerabilities to nature. The promises and perils framework is commonplace and rarely challenged. Challenging the framework reveals a good deal about emerging technologies.

Monday May 20th
Session 3: 3:00-4:30pm
YMCA 109 / Track: Philosophy, Technology, and Education
Chairs: Jacob Pleasants, Joanne Olson, Michael Clough

"Technologies of Teaching Philosophy"

Eric Kerr
National University of Singapore

The relationship between teaching and technology has been much explored in pedagogical theory and by scholars of education but has received comparatively little attention from philosophers of technology or science and technology studies. This is lamentable because these disciplines and traditions are particularly well-placed to analyse and reflect on possible innovations in technology and teaching. In this presentation, I reflect on half a decade of teaching philosophy of technology and STS within a residential college at the National University of Singapore and what these experiences reveal about the potential for philosophers to contribute to studies of technological innovation in pedagogical settings.

"Multidimensionality of the Nature of Emerging Technology"

Hillel Rosensweig, Tel Aviv University
Dina Tsybulsky, Technion
Ilya Levin, Tel Aviv University

Digital technologies are seen as having a deep conceptual impact on society. Education in the 21st century should include classes which teach an appreciation of the 'nature of digital technology'. This paper describes basic concepts which outline the fundamental nature of digital technologies and a basis for a possible class curriculum. We propose to consider the nature of digital technologies on a number of dimensions: (a) digital technologies as 'technology' per se; (b) digital technologies as informational technologies. Digital technologies are described in terms of virtualization and reification, and the impact of data abundance and growing inter-connectivity on society.

"Conceptualizing Engineering for Educational Purposes"

Jose Aravena-Reyes
Universidade Federal de Juiz de Fora

The idea of an interdisciplinary approach to engineering's problematic situations fails due to the weak basis on social sciences of students. The most important part of the time, the engineering object is produced under the

domain of economy and natural science. For overcoming these limitations, we propose that Engineering should be interpreted differently from the problem-solving dominant paradigm. To promote a more socially engaged perspective of students, we should move to a broader understanding of Engineering as an inventive and productive existential mode of living which is culturally ordered. Through this approach, we want to rescue some philosophical contributions that show that the inventive aspect of engineering (its *métis*) is as powerful as its current order based on external factors like economic and natural sciences (its *lógos*) and must be included in the educational processes of engineers.

"Educating the public for informed technological decision-making: Key issues for technology education"

Jacob Pleasants, Iowa State

Michael Clough, Joanne Olson, Texas A&M

Multiple voices have called for members of the public to be more involved in decisions about technological design and development, but this requires that the public be sufficiently educated for this task. In this paper, we outline a set of essential questions that we argue should inform public education efforts about technology. We developed these questions via a wide-reaching review of books and articles within the Philosophy and Technology literature. Our resulting list of ten questions identifies key issues within Philosophy and Technology that we argue are also of great relevance to public education.

Monday May 20th

Session 3: 3:00-4:30pm

YMCA 113/ Developing Meeting Points Between
Environmental Ethics and Philosophy of Technology Cont

Chairs: Per Sandin, Vincent Blok

"Reassembling the environmental and the technological: hybrids, or revisiting the idea of functionality"

Magdalena Holy-Luczaj, University of Information Technology Rzeszow

Vincent Blok, Wageningen University

The emergence of new types of beings – hybrids – which establish an extra, separate, “third” ontological category that goes beyond the dichotomy between nature and technology, calls for bridging the gap between environmental philosophy and philosophy of technology. They have taken divergent paths despite their common interest in examining the human modification of the natural world. This is truly unfortunate since philosophers from each field have a lot to offer to the other (Kaplan, 2017: 1). The transitive character of hybrids as neither fully natural beings nor pure artifacts is the perfect example how much we need to combine insights from these two disciplines if we wish to grasp this phenomenon comprehensively.

"Genetically engineered mosquitoes, the gendered dimension of public health problems among the poor, and inequitable power relations"

Zahra Meghani, University of Rhode Island

Christophe Boëte, Université de Montpellier

Genetically engineered mosquitoes with heritable traits of interest are presented as public health tools by their advocates. The plan is to use them to reduce the incidence of mosquito borne diseases. This presentation will evaluate that approach to resolving public health problems among the poor of low income countries. It will be argued that the use of this narrow, technologically sophisticated approach is likely to obscure and possibly compound the inequitable power relations between groups that are partially responsible for public health problems. The gendered impact of the use of the biotechnology on female caregivers will also be considered.

Monday May 20th
Session 3: 3:00-4:30pm
YMCA 401 / Surveillance & Social Control

"Pictures or it didn't happen' Technology, Surveillance, and Social Control"

Claire Katz
Texas A&M University

This paper will consider several questions related not only to understanding how surveillance operates but also suggestions for resistance offered by three twentieth-century philosophers: Louis Althusser (1918–1990), Michel Foucault (1926–1984), and Theodor Adorno (1903–1969).

"The Role of Expertise in Governing the Society: Comparing Mohism and Technocratic Governance"

Lishan Lan, Renmin University China
Qin Zhu, Colorado School of Mines

This paper compares two approaches to social governance and public policymaking that both emphasize the role of expertise and experts: Mohism (originated in the teachings of the ancient Chinese philosopher Mozi) and technocratic governance (derived from the Western movement in scientific management). It conducts such comparative philosophical investigation of the two schools of thought in four different dimensions.

"Continuity or Rupture? A historical perspective on value dynamics in smart lighting"

Taylor Stone
TU Delft

This paper will investigate questions of value change in a ubiquitous infrastructure – streetlights – via the current development and adoption of “smart” systems. Emerging smart city trends are spurring a new generation of streetlights, with lampposts being fitted with sensors, cameras, and a host of other novel technologies aimed at monitoring and data collection. While these innovations may offer improvements in efficiency and safety, they raise concerns about privacy, surveillance, and power relations. More fundamentally, smart systems seemingly extend the technical functions and ontological boundaries of streetlights. No longer simply providing illumination, they actively monitor their environment and those who inhabit it, creating a vast network of nodes encompassing urban spaces. Combined, the novel functions and capabilities of streetlights arguably create a new terrain of moral values.

Monday May 20th
Session 3: 3:00-4:30pm
YMCA 115 / Enhancement and Augmented Worlds

"Mixed Reality and Augmented Worlds"

Ian Werkheiser
University of Texas Rio Grande Valley

“Augmented reality” or “Mixed reality” technologies, in which a person’s normal visual field is added to with virtual elements, are becoming increasingly realistic and subtle. It also seems plausible that they are on the cusp of widespread adoption in technologically developed countries. The effects of these technologies and the issues to which they give rise have been only briefly considered thus far in academic contexts, yet even this early look at intended and unintended consequences gives us reason to think there will be profound implications to the spread of

these technologies. Some of the resources in environmental philosophy, including environmental phenomenology and environmental justice, can be usefully applied to thinking through this emerging technology, and I will begin this project here.

"Unnatural people, unnatural planet? Human enhancement, climate engineering, and the role of natural baselines"

Marion Hourdequin

Colorado College

The concept of the natural is both problematic and persistent. The idea of the natural has been widely critiqued, particularly when deployed as a normative guide: when it is suggested, for example, that "natural" forms of human reproduction are preferable to "unnatural" ones or that ecosystems should be left in, or returned to, their "natural" state. Arguably, much of human technology aims to intervene to ameliorate conditions that might be described as, in some sense, natural, whether hurricanes, earthquakes, fires, and floods, or aging and disease. At the same time, the idea that certain technological interventions are "unnatural" is frequently used to argue against technologies such as human enhancement or climate engineering, and natural baselines continue to play a critical role in both medical practice and environmental management. This paper seeks to explore the role and normative weight of natural baselines in two arenas: human enhancement and global-scale climate engineering.

"Representationalism & Power: The Individual Subject and Distributed Cognition in the Field of Educational Technology"

David Shutkin

John Carroll University

Distributed cognition considers how technologies augment cognition. Most educational technologists interested in distributed cognition assume a representational theory of mind. Alternatively, the theory of extended mind concerns dynamic interactions between people and technologies. Across the cognitive sciences, debates between these theories have implications for student subjectivity. However, part of a political and commercial assemblage benefiting from representationalism, distributed cognition in educational technology ignores these debates. My analysis concerns power relations in educational technology productive of a student subjectivity that embraces representationalism. Thus, whether the extended mind is ever ascendant, because of these power relations, educational technology can not embrace it.

Monday May 20th

Session 3: 3:00-4:45pm

ISLB / Technological Pragmatism Cont.

Chair: Gregory Pappas

"Parsing Pragmatic Technology"

Larry A. Hickman

Southern Illinois University-Carbondale

Over the past three decades, the works of prominent philosophers of technology have begun to exhibit some of the core insights of pragmatism. In most cases it would be a mistake to attribute a direct lineage from the founding pragmatists. Regardless of pedigree, however, it is undeniable that some of the field's most influential voices now espouse positions similar to those that John Dewey held during the first half of the 20th century. After commenting on some of these similarities, I consider some further possibilities.

"Pragmatism, Genomic Editing, and Biosecurity"

Jesse Kirkpatrick

George Mason University

This presentation draws from the two-year study, *Editing Biosecurity*, which assembled a multi-disciplinary team of researchers with backgrounds in philosophy, the life sciences, public policy, and political science. The team explored the benefits and security dimensions of genome editing technologies, with an emphasis on CRISPR. The presentation will explore (1) how the study serves as a representative example of how, in the spirit of pragmatism, philosophers can contribute to the study of security implications of emerging technologies; (2) the study's findings; (3) concluding thoughts on how the study's process could be used as a possible model for future studies of emerging technologies.

"Peirce, Posthumanism, and the Summum Bonum"

Aaron Wilson
South Texas College

This talk will examine how Charles S. Peirce's views concerning logic, ethics, and theism motivate a uniquely metaphysical and pragmatist form of posthumanism. His writings suggest that our highest logical good, truth (which he identifies with "the final opinion"), involves a communal approach toward omniscience, and that our highest ethical good, the summum bonum, involves taking an active role in the process of creation. While Peirce did not write a whole lot about the role of technology in approaching these ends, I will discuss how his writings are favorable to a technological and posthumanist interpretation of ultimate ends.

"Pragmatist Aesthetics and the Experience of Technology"

David Hildebrand
CU Denver

This paper investigates Personal Information Technology's (PIT) effects upon our basic practices; it argues that it is fundamentally changing the experience underlying practice. In effect, technology has created a "problematic situation" for much of ordinary experience. What is that problem? How should it be described? What might be done? The main theories consulted include pragmatist accounts of experience and aesthetics. My answer has four parts. (1) Sherry Turkle's work illustrates facts, impacts, and concerns with PIT. (2) Pragmatists differentiations between primary and secondary experience offer nuanced ways to analyze technological experiences. (3) The foregoing is then assessed using pragmatist aesthetics. Finally, (4) pragmatist aesthetics is consulted for new norms to guide technologies altering experience in contemporary life.

Monday May 20th
Plenary Session: 5:00-6:15pm
ISLB Auditorium

"Plans and the Organization of Human Action"

Michael E. Bratman
Stanford University

In a series of publications, I have explored ways in which our capacities for planning agency lie behind our capacities for organized, temporally extended individual agency – as in growing food in a garden – and for organized, small-scale shared agency – as in painting a house together. I have recently been exploring ways to extend these ideas about the underlying roles of planning to our capacities to create and to sustain organized institutions such as a neighborhood association, a professional association, a modestly sized business, a limited-liability corporation, a legal system, or a democratic state. Taken together, these investigations support the conjecture that the best explanation of a wide range of basic aspects of our human practical lives – ones involving distinctive forms of organization over time, socially, and institutionally – will make a fundamental appeal to our planning agency. In this lecture I outline these ideas about the foundational roles of our planning agency. I turn at the end briefly to the question whether this planning model can help us understand significantly decentralized forms of human social organization– for example, protest movements that are spontaneously organized by way of the internet.

Tuesday May 21st
Session 4: 9:00-10:30am
MSC 1400 / Robots

"Ethical Reflection on Robot Emotion--Based on Post-Humanism"

Xu Xu, Northeastern University, China

Fan Chen, Northeastern University, China

Emotions, which are the basic characteristics of human nature, are based on the natural attributes of biology. Emotions not only represent the human response to the object and the experience of the formation of the evaluation state affects the human cognition system but also bridges the integrity of the ethical logic attribute to build the boundary of human and non-human. However, the emergence of post-humanism blurs the boundary of this attribute and change human's attitude of technology from ontology and epistemology which provided background environment for robot emotion set. Obviously, the robot does not have the natural attributes of human being, nor can they meet the ethical logic like a human. However, The advent of post-human age is irresistible. Maintaining humanity in this era and controlling the threshold of robotic emotional design are the two effective way to solve the emotional and ethical dilemmas between human and robot.

"The Value and Relevance of Human Dignity and Robots' Ability to Respect It"

Linda Johansson

Swedish Defence University

There are suggestions in the UN to ban even the development of lethal autonomous weapon systems (LAWS). Two common arguments in the debate against LAWS are the need for meaningful or appropriate level of human control, and the argument from dignity. The argument from dignity concerns the idea that robots are unable to respect human dignity, practically and/or in principle, and therefore should not be allowed to make decisions on killing. The purpose of this paper is to investigate the argument from dignity in terms of restricting or even prohibiting LAWS for ethical reasons. The conclusion is that the argument from dignity is not as strong or convincing as many in the debate seem to believe and that the utilitarian argument overrides it. As long as the LAOC are followed, numbers are crucial.

"A "Powerful" relationship between Human and Robot. A philosophical inquiry "

Laura Corti

University of Florence

Film and public imagination have proved the possibility to interact with technology in a special way and the chance to create a relationship with a robot. The aim of this presentation is to try to analyse the architecture of robotics. The main problem is: what kind of relationship is it possible to establish? What trails do a robot need in order to create a connection? Is interaction a way of a relationship? Is an emotional bond a way to create the relationship?

Tuesday May 21st
Session 4: 9:00-10:30am
MSC 2401 / Panel : Hostility, Infrastructure, Data, and Bias
Chair: Robert Rosenberger

“What’s Wrong with Machine Bias?”

Clinton Castro
Florida International University

Data-driven decision-making technologies used in the justice system to inform decisions about bail, parole, and prison sentencing are biased against historically marginalized groups. But these technologies’ judgments—which reproduce patterns of wrongful discrimination embedded in the historical datasets that they are trained on—are well-evidenced. This presents a puzzle: how can we account for the wrong these judgments engender without also indicting morally permissible statistical inferences about persons? I motivate this puzzle and then attempt an answer.

“Hostile Information Architecture”

Gordon Hull
UNC Charlotte

This paper develops the concept “hostile information architecture” to describe technological systems that are designed to structurally favor the preferences of corporate property owners over (other) users by regulating the architecture or code of the information environment. I borrow the term from literature on hostile urban architecture, an interdisciplinary body of work that explores the way that urban spaces are often designed to disfavor specific uses, often those disliked by nearby property owners. For example, anti-homeless architecture involves such strategies as inserting seat dividers onto benches at bus stops, making it difficult for the homeless to sleep there. I pursue two examples in the paper. One is the current legal framework for privacy, especially with regard to the difficulties posed by the intersection of data analytics and social media. The other is the FCC’s recent decision to rollback net neutrality rules.

“Any Sufficiently Advanced Neglect is Indistinguishable from Malice: Assumptions and Bias in Algorithmic Systems”

Damien Williams
Virginia Tech

This paper explores the concepts of bias and hostility through examples of algorithmic and other digital systems which are programmed and trained towards ends that were never interrogated by their designers, trainers, or programmers. Algorithmic advertising systems get trained on advertising using models to maximize profit via ad clicks and platform engagement, based on assumptions about the inherent good of those models. Too often, designers, users, and programmers deploy their constructions and training sets without recognition of or consideration for the social and ethical implications of racism, disableism, misogyny, or other forms of bigotry or prejudice at play in the individuals and groups to which they belong. By describing and examining the instances in which these events occur, we may come to fully appreciate the stakes and scope of their impact, and begin to trace a path to counteract them.

Tuesday May 21st
Session 4: 9:00-10:30am
MSC 2404 / Track: Multicultural Philosophies of Technology
Chair: Qin Zhu

"Responsible non-action (wu-wei) in technological design: The Dao of Laozi"

Shan Jing, Southeast University

Neelke Doorn

Delft University of Technology

In American and European academic and policy circles, the concept of "responsible innovation" has emerged as an important lens through which to assess the societal impact of new technological developments. A closer look at "re-sponsible innovation" reveals an absence of the non-Western philosophical considerations. We suggest that wu wei, with its orientation on natural value and seemingly inaction, reflects both respect for technical objects in design and innovation, while also sustaining social harmony.

"Xamanism and the Concretization of the Human"

Jose Aravena-Reyes

Universidade Federal de Juiz de Fora

The technical development signalizes that the next stage of human evolution will be promoted by a set of emerging technologies that could produce a new human or post-human condition. This new stage, highly technologized, is characterized by some authors as the homo-deus stage, where, people will live much more than now, without any illness and using a high efficient intelligence. When transhumanism approaches the dichotomy body-mind, the focus is for finding the necessary material support (hardware) to enhancing mind capabilities, but by considering the matter as energy, Xamanism could represent another perspective to think how overcoming the limitations of the human body to expand mind capabilities without losing the human condition. We argue that that is possible by redirecting the technological evolution from body technologies to spirit/mind technologies.

"Technological politics of designing focal life in China"

Tan Taicheng

Renmin University of China

Albert Borgmann devotes to proposing a version of focal life by focal thing and practice, speaking of focal reality and communal celebration. What we necessarily have to consider in terms of focal life in techno-social era concerns more key factor, such as the technical, cultural, political and moral. Our proposal considers the concrete circumstance and trend of focal life in China, which devotes to expanding the version of Borgmann's focal life, including focal life with Chinese traditional culture, urban space, AI, and responsibly techno-social design and governance.

Tuesday May 21st
Session 4: 9:00-10:30am
MSC 2405 / Images of Technology

"Returntocinder.com: How The Machine Promises Philosophical Thought a Future"

Jake Reeder
Marist College

In the following paper, I will discuss the pedagogical applications and theoretical promises of the deconstructive digital concordance returntocinder.com. Specifically, I would like to show how the website responds to Derrida's injunction that we must learn to think the event and the machine together. I will argue that Derrida is one of the more affirmative thinkers of the digital age, since he erases any sense of privilege bestowed on conceptual insight—arguing instead that there is no concept without technical invention. By describing the present and current applications of returntocinder.com, I hope to exemplify this assertion or sensibility.

"Picturing Power"

Stanley Kranc
University of South Florida

Depictions of hydroelectric installations frequently project an aura of power, the sense of dynamic energy production at large scale. Two questions then arise: first, how is the sense of power present in the image and secondly, what is the relevance of this content to the philosophy of technology? This study suggests that such imagery can offer a means by which beholders can reflexively situate themselves within a technologized culture. This perspective however, calls into question the political power, the autonomy and authority associated with the system producing and distributing power. Who benefits ultimately, at what risks and unintended consequences?

"Power in the making: From hand tools to 3D printing"

Mike Martin
Liverpool John Moores University

The use of technology as tools, and how we relate to them, has quite rightly received much attention for generations of philosophers of technology from Heidegger to Ihde. The availability of 3D printing technology, capable of producing high quality outcomes, presents empowering possibilities for individuals and potentially changes the relationships that we have with artefacts. In order to understand the experience of using different tools and manufacturing processes, the author explored how the making of a simple candle (t-light) holder can be done by an individual using hand tools, power tools and 3D printing. This was contrasted with mass manufactured products and the resulting power/knowledge relationships are discussed.

Tuesday May 21st
Session 4: 9:00-10:30am
MSC 2502 Track: Luck as a Challenge for Responsible Governance of Science and
Technology Chairs: Martin Sand and Samantha Copeland

"Beyond Luck: A Lesson from Titanium Dioxide and Philostratus of Athens"

Alexei Grinbaum
CEA-Saclay

I illustrate the role of luck in ethics of technology on the example of food additive E171 and, on the same example, I demonstrate significant shortcomings of this interpretation. Building on lessons from the ancient narratives of luck,

I then suggest that, for autonomous actors such as AI systems, luck is a misnomer for the inability to detect a

future ethical conflict implicating the user. In this context, implementable chance stands as a cure for the philosophical ‘moral luck’.

“Tools for Serendipity: Missions, Open Science, and Responsible Research and Innovation”

J Britt Holbrook

New Jersey Institute of Technology

This presentation argues that there is a difference between blind luck – to which we might all, at any point, be passively susceptible – and active serendipity, defined as ‘sagacity regarding opportunity’. It might be counterintuitive to suggest that it is easier to design policies to account for blind luck, which is out of our control, than for active serendipity, which is within our control; yet this is the position I will defend. Designing policies to account for blind luck is relatively simple – build in room for judgment and the possibility to change course in light of new information or unexpected events. The more difficult challenge is how to design policies to encourage serendipity.

“Luck Post-Invention: A Brief History of Genomic Research Platforms in the Early Days”

Scott Cole

University of California, Davis

Serendipity often plays a role in innovation. But an innovation’s trajectory also depends on serendipitous factors that come into play post-invention. Here I present a historical case highlighting how serendipity can influence a technology after it is born. Specifically, I explore how other new technologies arising contemporaneously with a new technology can influence that technology’s ultimate form and impact. The case focuses on three genomic research technologies launched in the 1980s: automated DNA synthesis, polymerase chain reaction (PCR), and automated DNA sequencing. Had they not been launched around the same time their trajectories might have been very different.

Tuesday May 21st

Session 4: 9:00-10:30am

MSC 2503 / Track: Value Change and Technology

Chairs: Steffen Steinert and Ibo van de Poel

“Values and Ethical Affordances: Insights from Anthropology”

Michael Klenk

Delft University of Technology

Some anthropologists have recently taken an “ethical turn” and begun to systematically theorize about and document the moralities of different cultures. This literature promises to shed new light on the emergence and change of moral values. Several anthropologists find that signs in social interactions, such as words and gestures, function as affordances, as insufficient but necessary conditions for moral interpretation and thus for regarding actions or things as value-laden. This talk aims to link the insights from anthropology’s ethical turn to questions about techno-moral change.

"Considering the role of technologies in value dynamism"

Olya Kudina
TU Delft

This presentation will elaborate on the phenomenon of value dynamism and suggest that technologies actively mediate it. To this end, I will present the practice-based take on values. The pragmatist scholarship of Dewey will help to formulate a relational and dynamic account of values, sensitive to their sociomaterial embedding. I will suggest that technologies can resurface a moral infrastructure for decision-making, reconfiguring the meaning of values and exposing their dynamism. The interrelated nature of values and sociomaterial practices suggests that values have a profound hermeneutic dimension. I will end with suggestions on how to explore value dynamism and moral hermeneutics.

"Cultivating Ourselves Online: Technologies of the Self for Contemporary Life"

Matthew Dennis
The University of Warwick

Philosophers have long reflected upon technology, but the rapid development of online technologies has now outstripped adequate philosophical reflection on this topic. This research paper offers an analysis of how app-based technologies have recently been deployed to promote the cultivation of human flourishing, asking whether so-called technologies of "self-care" live up to their emancipatory promises. This will be followed by a set of proposals for how emergent online technologies could be harnessed in more protracted and meaningful processes of self-development, using the resources of character-based practical philosophy.

Tuesday May 21st

Session 4: 9:00-10:30am

MSC 2504 / The Engineered Life

"Is an Engineered Life Worth Living for Humans?"

Carl Mitcham
Renmin University, China

This is an effort to think about both the engineering life and the engineered life. The argument, first, is that the life of the professional engineer and the lives of all of us who live in the world being progressively designed, constructed, operated, and maintained by engineers are closely related. Second, critical philosophical reflection on the engineering-engineered life has primarily taken two forms: externally (among non-engineers) this way of life has been assessed in social justice terms; internally (among engineers) reflection has focused on celebratory apologetics in conjunction with some attention to professional ethics. What is missing is a philosophical anthropological examination of engineering life, a sketch of which will be developed here.

"The Psychopolitics of Cognitive Enhancement"

Jessica Imanaka, Gareth Green
Seattle University

This paper will explore the light and dark sides of cognitive enhancement technologies regarding values and power. Byung-Chul Han's theory of psychopolitics explains how neoliberal technologies of power exploit and co-opt the cognitive abilities of the privileged to produce, consume, and communicate ceaselessly to the point of exhaustion and to the detriment of contemplative capability. Technologies that move toward direct neural enhancement amplify some of these concerns while problematizing approaches that serve to disrupt psychopolitical technologies. We consider whether authentic autonomy is amplified or undermined, and the degree to which a market based conception of freedom of choice comes to supplant autonomy.

"Under the skin technological power: notes on Deep Brain Stimulation and Parkinson's Disease in Greece"

Marilena Pateraki

University of Athens

On the basis of a qualitative study that led me to observe and interview persons with Parkinson's disease (PD), caregivers, *and* medical professionals, I develop a philosophical investigation of the under the skin technological power in the case of the implementation of deep brain stimulation (DBS) in Greece. As DBS is an invasive neuromodulation technology, I focus on two kinds of power reflected under the patients' skin.

Tuesday May 21st

Session 4: 9:00-10:30am

MSC 2505 / Panel : Postphenomenology and the Pull of Technology

"Power, Coping, and the Taming of Technology"

Jesper Aagaard

Aarhus University

In this talk, I want to look at the laptop as a kind of 'quasi-other', an unruly entity that students seek to tame through the use of different techniques. The talk presents the preliminary results of an empirical study that investigates what students do when they need to sustain focus: How do they do to cultivate attention and to give a desirable shape to their technologically mediated existence? By laying out these empirical results, the talk responds to recent calls to investigate the dynamic interactions between technological mediation and human appropriation.

"Trust and the Smell of Data: a Postphenomenological Experiment"

Esther Keymolen

Tilburg University

In collaboration with the Smell of Data project of artist and designer Leanne Wijnsma, we will conduct a small-scale experiment to see whether adding a warning smell to networked artefacts that leak data might change the trust perception of users. The hypothesis is that: (1) perceptions of trust are shaped by the technologies at hand. (2) If we alter the design of the technology, the perception of trust will change as well. The concept of multistability (the openness of artefacts to incorporate different meanings/identities) will be the starting point of this experiment. The aim of this research is twofold: we want to test whether changing the design of the interface by adding smell indeed has an effect on the trust perception of users (empirical stance) and we want to use these results to flesh out key concepts in post-phenomenology, in particular the interaction between micro and macro perceptions (conceptual stance).

"It's About Time: Developing a Temporal Relation within Postphenomenology"

Richard Lewis

Vrije Universiteit Brussel

Postphenomenology focuses on technological objects and successfully describes how they co-constitute both our selves and our lifeworld. However, as we focus on giving material objects agency, what actually happens within the human subject? I develop a temporal relation that captures how the human is transformed by technology through two aspects: the past (through the already established notion of sedimentation) and the future (through Asle Kiran's notion of potentiality). Through this new intra-subjective relation we can better understand the broader mediating and constituting effects of technologies that enter into our lifeworld.

"Postphenomenology and Affordances"

Kirk M. Besmer

Gonzaga University

The concept of "affordances" is important in STS approaches (broadly conceived) to technology. In their analyses, affordances often bear significant descriptive and explanatory weight. While there are debates about just what an affordance is, it remains a powerful concept in STS approaches, especially when describing our perceptual and practical engagement with technologies and the context in which they are found. Since postphenomenology likewise seeks to describe perceptual and practical engagement with technologies, one might expect to find many references to "affordance(s)," but they are rare. This is likely due to the fact that the concept originated from and remains embedded in social science approaches to technology, while postphenomenology emerges from phenomenology and pragmatism, thereby drawing on a different conceptual economy and methodology. I believe that articulated in the right way, affordance(s) can become useful in postphenomenology as well. In this paper, I will seek to demonstrate this by examining the conceptual heritage of affordances. J.J. Gibson introduced "affordances" in his seminal work, *The Ecological Approach to Visual Perception*. Gibson acknowledges that the concept was inspired by the work of early twentieth-century Gestalt psychologist. Merleau-Ponty's account of perception likewise borrows much from Gestalt psychology. Given this common intellectual legacy, I suggest that the best way for a postphenomenologist to understand and integrate affordances into her descriptions and analyses is to look to Merleau-Ponty's appropriation of Gestalt psychology along with his criticisms of it. Doing so can contribute to a postphenomenological account of affordances.

Tuesday May 21st

Session 5: 11:00am-12:30pm

MSC 1400 / Robots Cont.

"BCI's, Robots, and War: An Anticipatory Ethical Analysis"

Richard Wilson, Towson University

Michael Nestor, The Hussman Institute For Autism

This paper will present an analysis of Brain Computer Interfaces (BCI's) that emphasizes the need for an interdisciplinary approach that employs a variety of perspectives on the subject. The discussion will conclude with an anticipatory ethical analysis discussing the future promises and barriers to the future development of BCI's, Robotics, and potential uses in war.

"Power and vulnerability of artificial beings in romantic affairs with humans"

Tonu Viik

Tallinn University

The paper uses phenomenological method to compare the experience of love towards a real human being with the experience of love towards an artificial partner. The differences in experiencing these objects of love will serve as a ground to make some proposals about power and vulnerability of artificial beings over humans in romantic relationships. While vulnerability of the artificial partner stems mainly from human attitude towards the artificial alterity regarded as not being human, not being alive, and perhaps not being reflective; its power in maintaining and becoming a ruling partner of these relationships consists in the machine's capability to exceed the potential of human attention and affection in the long term.

"Beyond the biopolitics of automobility"

Robert Braun

Institute for Advanced Studies

Conceptualizations of automobility employ a realist ontology that makes the democratic (re)politicization of automobility impossible. The paper argues that ‘automobility’ (the entirety of technologies, infrastructures, discourses, rulebooks and subjects) is an imaginary or ‘illusion’ and deconstructs it via an Agambenian interpretation of apparatus and oikonomia. This is to show that in the biopolitics of automobility the techno-social ‘nomos of modernity’ is manifested. Deconstructing automobility imaginary as an Agambenian biopolitical apparatus (and also as the oikonomia of technology) may help open up our societies for post-automobility (and post modern) imaginaries.

Tuesday May 21st
Session 5: 11:00am-12:30pm
MSC 2401 / Contemporary Issues

“Punishing cyborgs. Criminal law in the era of extended cognition”

Kamil Mamak
Jagiellonian University

In my work I will bring an application of Extended Mind Thesis (EMT) to the domain of criminal law. The analyses showed that we are strongly dependent on technology but this fact seems to be ignored in the area of criminal law. This ignorance is notably visible in the punishment of incarceration. I am looking at the current punishments from the perspective of EMT. This part of the work is providing new arguments against the punishment of imprisonment. I am also focusing on the possibilities of creating new punishments on the base of described philosophical perspective.

“Autonomous Systems: a source of good? Towards an ethical analysis of the relation between humans and new technologies”

Marianna Capasso
Sant’Anna School of Advanced Studies, Pisa

In this paper I will analyse the interaction between progressively autonomous technologies and human deliberation, by reflecting on the consequent re-shaping of the moral and public space. I will use Kant’s distinction between application (Anwendung) and realization (Ausübung) and the EGE (2018) distinction between “self-autonomy” and “operational-autonomy” to cover actions mediated by autonomous technologies. My thesis is: an ethical analysis should assess the relation between these two different forms of autonomy and I will call this relation “the agent/machine nexus”. Then, I will ground a theory of “meaningful human control” (MHC) as the fundamental aspect of the nexus.

“Technology and Power, Technology as Power. The Neoenvironment”

Agostino Cera
Universita della Basilicata

My paper exposes the basic lines of a Philosophy of Technology in the Nominative Case (TECNOM). TECNOM finds out the essential character of contemporary technology in its rise to the status of Neoenvironment, namely in its capacity to produce a Feralization of Human Being. Such an interpretation of technology as epochal phenomenon derived from an Anthropological Hypothesis (grounded on the idea of an Anthropic Perimeter), that is itself based on a Pathic Presupposition. The peculiarity of human being is here ‘oikologically’ characterized, namely based on its relationship with its own vital space (oikos). TECNOM suggests itself as a countermovement with regard to the ‘ontophobic’ attitude of the so-called “post-phenomenological” approach to technology.

Tuesday May 21st
Session 5: 11:00am-12:30pm
MSC 2404 / Track: Multicultural Philosophies of Technology
Chair: Qin Zhu

"Tao Te Ching and Design Culture for Good"

Enrong Pan, Zongling Sun, Jijia Lin
Zhejiang University

In the context of modern design culture, it is difficult for human beings to resonate with their products, but merely use them as a tool, and this impoverishes the relationship between man and artifact. In this paper, we argued that in Daoism philosophy technology is the useful state of art while art is the useless state of technology. The dialectics of the useful and useless is the crucial feature of Daoism, and we hold that this helps to build up a design culture which unifies technology and art.

"On Technical Classification Of The Tibetology"

Lina Zeng
Renmin University, China

The classification of technology is one of the important problems in the philosophy of technology, but it is difficult to form a unified view. According to its own particularity, tibetology gives a unique view on the classification of technologies. The technical classification of tibetology is largely influenced by Tibetan Buddhism, which can be traced back to India, this is not only very different from the current view of major technical classification, but also much richer. Therefore, it is of great significance to analyze it and study the classification of technology and the philosophy of technology.

Tuesday May 21st
Session 5: 11:00am-12:30pm
MSC 2405 / Contemporary Issues

"Media as modifier of the time structure: from the stable line of time to populism"

Nelson Camilo
Bielefeld University

The high flux of information and the possibility of developing new channels of information allow a constant critique to the narratives constructed for the traditional institutions of power as the mass media, the academy or the governments. This change in the monopoly of information makes a construction of a stable past for the subject unable. Thus, it is also impossible to create long expectations. Moreover, this uncertainty produces an instability or transformation in the dynamics of power. The old institutions are unable to maintain the line of time, and a new phenomenon emerges, namely, populism. One of the main claims of the so-called populists is the stabilization of the line of time. This new reconfiguration of power is produced by the introduction of a new media. The following paper describes how the new media, internet and computer, transformed the structure of time. According to this description, I argue how this introduction is the condition of possibility for the new reconfiguration of the power in politics.

"Interface as an apparatus: Interaction Patterns and anti-utilitarianist heuristics"

Fred. Cabral Ferreira da Silva
Aaeso, Brazil

The article proposes interfaces, while mediators between users and layers of software, as essential to the establishment of neoliberal/utilitarianist apparatus. Examines how this agenda is effected through the use of dark patterns of interaction design, and investigates the effectiveness of counterposing it by incorporating, amongst the heuristics of interface design, Hans Jonas' "heuristic of fear". Finally it looks to validate "privacy by design" as solution for privacy-concerning problems and to open a dialogue with multi sectionalism approach, embodied on the Brazilian and European laws of personal data protection, as consequences of the aforementioned incorporation of Jonas heuristics.

"Mapping the Apartment Home in Milwaukee, Wisconsin 1875-1939"

Benjamin Teel
University of Wisconsin-Milwaukee

This paper reports my experience mapping apartment buildings built before 1939 in Milwaukee, Wisconsin. Apartment buildings are understudied in architectural historiographies outside cities like Paris, New York City, and Chicago; and are almost entirely unstudied in Wisconsin alongside local focuses on Frank Lloyd Wright's life and style, Milwaukee's historic mansions - Victorian remnants of brewing barons, and Milwaukee's proximity to Chicago (once called 'the flat city'). My map allows historians to stratify Milwaukee's built environment, to see how, where, and why Milwaukee responded to housing shortages alongside rapid population growth; an extensive, early streetcar system; local, powerful industries in brewing and manufacturing; and immoral redlining practices. I place a particular focus on reading vernacular architecture as a lineage of styles and forms while exploring the forms and meaning of home under shared roofs and between shared walls - a digitally humanistic study of the shared spaces we call home. I conclude that digital humanities projects such as mine are crucial for identifying crucial gaps in humanities research and literature, acknowledging the cultural importance of the apartment building, and holding accountable the unethical, immoral, and unjust.

Tuesday May 21st

Session 5: 11:00am-12:30pm

MSC 2502 / Track: Luck as a Challenge for Responsible Governance of Science and
Technology Cont

Chairs: Martin Sand and Samantha Copeland

"Did Alexander Fleming deserve the Nobel Prize?"

Martin Sand
TU Delft

Penicillin is a serendipitous discovery par excellence. But, what does this say about Alexander Fleming's praiseworthiness? Fleming would not have received the Nobel Prize had not a mould accidentally entered his laboratory. This seems paradoxical, since it was beyond his control. In my presentation, I will discuss Fleming's discovery of penicillin as an instance of moral luck in science. I will defend the Control Principle, which implies that people are not praise- or blameworthy for things beyond their control. By distinguishing different meanings of praiseworthiness, I will justify why differential treatment of people with the same moral standing is not unfair.

“Kierkegaard and the Digital Crowd”

Jeremy Weissman

University of South Carolina

The social media generation is often characterized as being on the one hand highly individualistic, obsessed with self-ies, but at the same time hyper-connected to one another in a “global community”. I argue that the conditions created by the widespread compulsive use of smartphones and social media are actually leading to neither strong individuality nor strong community. Using Kierkegaard’s analysis of “the present age” from *Two Ages: A Literary Review*, I argue that social media is helping to fulfill his disconcerting prophecy of “the public” and its nefarious effects for assimilating individuals into a phantom-like crowd of conformity.

“Texted to Suicide: Anomie and the New Narcissus in the U.S.”

Megan Collins

Prairie View A&M

In 1897, sociologist Emile Durkheim’s book *Suicide: A Study in Sociology* challenged the popular perception that suicide was simply the fault and weakness of the individual but instead reflective of a broader societal issue: society was failing to provide individuals with the necessary means to experience social solidarity. As of 2016, suicide has reached a 30-year high for all age groups except older adults (75+) in the United States. Suicide is the second leading cause of death for all individuals age 15-24 and 25-34 in the state of Texas and the third leading cause of death for young people age 10-14. Rural areas experience even higher rates of suicide in comparison to urban areas. As social media usage continues to increase under the guise of connectivity little research has explored the dangers of this illusion. How does suicide act as an example of the effects of social disconnectedness in an age that glorifies connectivity through a medium in which we are increasingly becoming disconnected? This research explores case studies of individuals who have committed suicide and the impact of social media and technology in pushing individuals to permanently remove themselves from our social world.

Tuesday May 21st

Session 5: 11:00am-12:30pm

MSC 2503 / Track: Value Change and Technology

Chairs: Steffen Steinert and Ibo van de Poel

“Reprogenetic Technologies and Biogenetic Valuing”

Inmaculada de Melo-Martin

Weill Cornell Medicine, Cornell University

Despite compelling arguments supporting the value-ladenness of technological innovations, many of the evaluations regarding reprogenetic technologies treat them as mere value-neutral tools, and thus limit their concerns to risk and benefit considerations narrowly understood. There are many reasons for such value-neutral evaluations. Here I explore one of them. The ways in which reprogenetic technologies, and the social and institutional practices that surround them, affect particular values is ambiguous. I focus here on the value of biogenetic connectedness. I show that reprogenetics technologies have the capacity both to transform biogenetic ideal and to reinforce the value that biogenetic connectedness has in many societies. Recognizing the opportunities and obstacles that these technologies offer is essential to direct their use constructively.

“Adapting to Changing Values in Smart Cities: A Framework for Responsible and Inclusive Decisions”

Udo Pesch TU Delft, Marjolein Heezen Ministry of Internal Affairs, Aad Correlje TU Delft, Janneke Ten Kate Platform 31, Liesbet Van Zoonen Erasmus University Rotterdam

Technologies used in smart city applications are likely to experience changes in perceived value conflicts. This requires methods that allow decision-makers to increase their capacity to reflect and anticipate on changing values. Therefore, this paper presents a framework that enables decision-makers to analyse possible/plausible value shifts due to technology. Using the framework, a technology can be characterized by using axes that forward various value-laden functions. For thirty-seven projects in Rotterdam, possible values shifts have been studied seen as a move in an axial system that plots the dimensions personal/impersonal data on one axis and a service/surveillance purpose on the other.

“Between crumbling values and a crumble of old values – About the possible influence of digital revolution on the pre-discursive consent of moral discourses”

Sabastian Nahr

University of Siegen

Does the rise of digital technologies change values and, if so, to what extent? To shed light on these questions this talk first suggests a specific concept of value, which states that values are shared moral preferences which have become habit. Specific values of society might then be understood as a set of moral preferences shared by sufficiently large parts of society, which is reflected in the normally implicit pre-discursive consent of moral discourses. According to Aristotle in particular, the rules for setting up this consent might be called topical rules. In order to understand the potential value change caused by the digital revolution, this talk finally asks for topical rules of moral discourses and their possible change caused by technological innovation, e.g. digitalisation.

Tuesday May 21st

Session 5: 11:00am-12:30pm

MSC 2504 / Technology and Power

“Technology, equality, and power”

Sven Ove Hansson

KTH Royal Institute of Technology

Some technologies empower the underprivileged and tend to reduce social inequalities. Important examples are oral contraception and various technologies that reduce the handicaps associated with disabilities and diseases. Other technologies have the opposite effect of disempowering the underprivileged. Many technologies for surveillance and marketing are examples of this. This paper will show how we can distinguish between the different types of impact that technologies can have on the distribution of power and resources.

“The Joys of Life and their Gradual Destruction by the Powers of Technology”

Kristian Cantens

Texas A&M University

We tend to think that technology empowers us. For one, it provides us with the knowledge needed to master and manipulate our environment according to our will. In turn, we rely on this know-how and on this mastery to procure the commodities that we most desire in the least burdensome way possible. I don't disagree that this is an instance of empowerment. However, I want to explore whether this power comes at the cost of anything else. Ultimately, I want to argue that while technology has made us plentiful in very significant ways, this plenty has distracted us from a very serious deprivation. What we've been deprived of is nothing less than the joys of being alive.

“Artificial power and artificial morality: the multi-objective approach”

Ioan Muntean

UNC Asheville, Western Carolina

Can we attribute power to artificial agents? We define power as a multi-dimensional form of rationality that includes factual reasoning (approached here in a Decision Theory framework) and as a moral reasoning. We define a powerful agent in terms of an optimization front in a decision making process. We argue that multi-objective reasoning is a fruitful and promising way of defining powerful agents, for both human and artificial agents.

Tuesday May 21st

Session 5: 11:00am-12:30pm

MSC 2405 / Panel: Postphenomenological Theory: Normativity, Discourse, and Power

Chair: Don Ihde

“Postphenomenology and Normativity”

Don Ihde

Stony Brook University

Postphenomenology is frequently criticized for low levels of concern for normative concerns. One source of this lack, if it is that, is the descriptive priority which is implicit in all phenomenological approaches. But the other problem lies in the complexity, multistability and unpredictability of embedded technologies. This paper will address this presumed problem and suggest a somewhat Merleau-Pontean solution.

“Talking the Walk, Walking the Talk: A New Look at Materiality and Discursivity in Postphenomenology”

Yoni Van Den Eede

Vrije Universiteit Brussel

Philosophy of technology has a special relation with materiality—postphenomenology not in the least. One of the founding moves of the field was Ihde’s establishment of a ‘material hermeneutics,’ situated widely within a ‘material turn’ characterizing the humanities and social sciences. Decades of involvement with language and discourse morphed into a focus on material practices—with as a result, probably, the eventual almost total disregard for language and discourse, as Coeckelbergh (2017) has argued. Postphenomenology, Coeckelbergh points out, is prone to that kind of disregard (despite its hermeneutics), but even within the domain, Verbeek has pleaded for ‘one more turn’ beyond the material turn: namely, a turn toward a renewed interest in human meaning-making processes. This paper seeks to untangle the threads, and cast the material-discursive pair anew as deeply interrelated, offering the beginnings of a systematic exploration of that interrelation’s characteristics.

“But That’s Not Phenomenology!”: A Phenomenology of Discriminatory Technologies

Robert Rosenberger

Georgia Institute of Technology

After some opening reflections about the time an audience member shouted “But that’s not phenomenology!” during one of my presentations, I consider the ways that patterns of discrimination can become built into our technologies. Using ideas from the postphenomenological perspective, buttressed by critical theory and feminist epistemology, I develop an account of how objects can function to discriminate. This account will be built around the postphenomenological notion of multistability, the conception of technology which understands any device to always be open to multiple meanings and uses. From here we can think of the ways that the particularities of individual designs can in effect make certain things possible for some people but not others, and to do so in ways that we would criticize as “discriminatory.” In particular, we can consider how specific design choices work to shut down specific stabilities.

Tuesday, May 21st
Plenary Session: 1:30-2:45pm
MSC 2400

"Technology and Transitional Justice"
Colleen Murphy
University of Illinois Urbana-Champaign

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 1400 / Panel: Coexistence of Humans and Robots:
Body, Intentionality, and Knowledge in the Age of Robots
Chair: Hidekazu Kanemitsu

"Technologically mediated intersubjectivity: A consideration of robots as other"
Hidekazu Kanemitsu
Kanazawa Institute of Technology

As robots become more autonomous and interactive, we seem to be approaching the point of experiencing technology not only as a "quasi-other" but also as a real other. To describe such a situation, I introduce a concept of "another-other" and "technologically mediated intersubjectivity". In fact, robots can be experienced as another-other in physical, mental, and personal dimension. In the first part of the presentation, I will pick up some cases and describes the state of current robotics. The description will reveal that what is really happening in current robotics. Then, I will introduce a philosophical framework to view technology and a new configuration caused by the development of robotics, using postphenomenological investigations. We cannot discuss the development of robotics or societal change from an external position. Instead, we must consider how to accompany its development. Mediation theory will provide plentiful vocabularies for this. Finally, I will point out a new philosophical issue concerning coexistence of humans and robots and examine how to deal with this issue.

"The effects of having robots in healthcare as companions: A postphenomenological analysis"
Nicola Liberati
University of Twente

It is not clear what kind of "intimacy" it is developed between users and robots. It is not clear even what does it mean to be in such a relation with a machine. The first part of the presentation will analyse the co-existence between robots and users focusing on the new relations generated by this technology. Following postphenomenology, it will be able to analyse the way the users are together with robots and how they develop a novel way of being "intimate" with these technologies. The second part will focus on mediation theory and how the very idea of "being with someone" is shaped by the presence of these technologies. It is not merely a technology which becomes intimate, but even the understanding of what to be in intimacy with someone is shaped through the potentiality of using of these technologies as companions.

"Rethinking 'Mediation' through Radiation: Can the Use of Robots in Fukushima Change the Way Our Existence Is Mediated?"
Takao Koga
Kobe University

Verbeek (2005) argues that post-phenomenology concerns not only the way the things are perceived but also the way our "existence", or our agency, is constituted in relation to technology. In this light, using the documents by Japanese ex-nuclear plant workers in the 1970's and 1980's, I will explore how their "existence" was mediated

through the use of material devices and equipment. And then, I will turn to the present situation in Fukushima: can the use of re- mote-control robots change the way it is mediated and if it can, how?

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 2401 / Democracy & Technology

“Digital Civil Disobedience and the Transnational Public Sphere”

Wulf Loh

University of Tuebingen

In this talk, I will argue that acts of digital civil disobedience (DCD) as illegal, entirely web-based forms of protest (e.g. DDoS actions, website defacement, leaking, doxing etc.) make essential contributions to the control as well as translation function of digital publics. Therefore, DCD can be a legitimate – albeit illegal – form of political contestation, as long as it meets certain formal conditions. Employing Rawls’ four central criteria for traditions physical forms of civil disobedience (publicity, nonviolence, political aim, illegality within fidelity to law), this talk explores whether and to what extent different types of DCD meet these criteria.

“Democracy on Tap?: On the Techno-Politics of Point-of-Use Filters”

Ben Pauli

Kettering University

Using Flint as a case study, this paper examines the implications of the growing reliance on POU filters in Flint and other cities for matters of water governance and the politics of technology and expertise. It challenges the portrayal of filters as politically-neutral technologies and suggests ways in which their use can be better reconciled with considerations of popular empowerment and social justice in at-risk communities.

“Government Whistleblowing as Sousveillance: Scientific Journalism and the Maintenance of Democracy in a Digital Age”

Patrick Anderson

Grand Valley State

Though WikiLeaks has caused much controversy over the last decade, it has been little understood. In this presentation, I argue that WikiLeaks’s philosophy of “scientific journalism” is best understood as a form of what Steve Mann calls “sousveillance,” the citizen practice of contesting the state’s monopoly on surveillance (from the top of the power hierarchy) by recording the state in return (from the bottom of the power hierarchy). WikiLeaks’s publication of classified government documents extends Mann’s notion of sousveillance beyond audio-visual technology to Signals Intelligence while retaining its democratic spirit and aims.

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 2404 Contemporary Issues

"Windows and Glasses: On Two Concepts of Transparency"

Daniel Susser
Penn State

The idea of "transparency" is central to discussions in technology ethics, law, and policy, as well as to discussions in philosophy of technology. Yet the term means something different in each context. In ethics and policy contexts, providing transparency means providing a window into the inner-workings of a system. I call this transparency as "in-sight." In philosophy of technology, transparency means having such facility with a tool that it withdraws from conscious attention. I call this transparency as "through-sight." I argue that these two senses of transparency are deeply interrelated and that understanding this interrelationship helps advance discussions in both fields.

"Couplings and Interfaces: Connecting Postphenomenology and Cognitive Science"

Peter Rantasa
University of Vienna

In this paper I propose the conceptual refinement of Don Ihde's original set of human-technology-world relations in postphenomenology by adding tools from cognitive science in the paradigm of „4E“ embodied, extended, embedded, enacted (and affected) cognition (4ECogSci). It reviews the conceptual compatibility of postphenomenology and 4ECogSci, integrates human-technology-world relations with the "4Es" and discusses the notion of interfaces at the "enigma positions" in the analytical framework of postphenomenology. I conclude the boundaries of human, technology, and world themselves are multistable. Adding methodology from cognitive science to the techniques of postphenomenology makes them available for analysis.

"The Special Obligations of Engineers"

Per-Erik Milam
University of Twente

Philosophers and engineers believe that an engineer has particular responsibilities solely in virtue of being an engineer. However, as Smith et al (2014) note, there are few accounts of what these responsibilities are. In this paper, I suggest that existing accounts of the responsibilities of engineers, including the view proposed by Smith et al., are inadequate. I argue that engineers do have special obligations, but that they derive from the unique abilities of engineers to fulfil more general moral obligations that agents in many professions have—e.g. to protect the public from harm and promote the public good.

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 2405 / Postphenomenology

"Therapeutic Technologies: A Postphenomenological Analysis"

Nolen Gertz

University of Twente

In this paper I aim to advance our understanding of the ways in which technologies can impact mental health. Its focus will be on investigating therapeutic technologies being developed by tech companies that are intended to promote mental health through apps, devices, and smart city projects. It will address the following research questions: In what ways can therapeutic technologies shape how users experience the world? What is the political significance of such technological mediation? What impact could therapeutic technologies have on mental health when used in combination with each other?

"The Everlasting You: How Digital Avatars of the Dead Mediate the Living"

Olya Kudina

University of Twente

Digital afterlife has become a booming business. Rapid AI developments now allow immortalizing people from the simplest forms of a text or voice chatbot to the more sophisticated walking and talking 3D holographic models currently used in Hollywood. The paper explores the mediating effect of the digital avatars on the living and scrutinizes different types of human-technology relations they enable and challenge, while accounting for the drive of the companies and the customers behind the digital avatars. The approach of technological mediation will help to (post) phenomenologically explore the ethical considerations of digital immortality. When people want to have immortal digital selves, what does it say about and mean for being human in the digital age? How does the technological promise to overpower death, to be remembered and to help the loved ones to let go mediate the normative understandings of people? The paper will explore how the digital avatars challenge the relationship with the deceased, the grieving process and the role of digital scholarship in keeping the memory of the deceased alive.

"Listening to the World: Techno-sonic Mediations of Reality"

Lars Botin

Aalborg University

The American philosopher of technology Don Ihde has elaborated on the importance of sound as a way to cope with, navigate in, and understand the world. In *Listening and Voice Phenomenology of Sound* (2007) he introduces to what he coins as "Auditory Imagination" and in this paper, I shall try to bridge Merleau-Ponty's ideas on bodily 'skhema' and the 'auditory imagination'. Bodily 'skhema' is a pre-noetic and axiomatic competence of the body, which means that we as humans are born with aesthetic, ethic and mystic capacities for understanding our being-in-the-world. This being-in-the-world through and with our bodies and senses, has through humanity been supported and enhanced by technology, where a decisive focus has been placed on the eye and vision. As such there is a lack, both theoretically, conceptually and technologically, on the other senses that intimately relate us to the world, and Ihde's elucidations on the 'polyphony of experiences' and the 'auditory imagination' open up for new ways of being/becoming in the world through acoustic devices. This paper focuses on how acoustic devices can mediate new understandings of our being-in-the-world, and furthermore how art could/should partake in technological innovation and development on that behalf.

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 2503 / Track: Value Change and Tech
Chairs: Steffen Steinert and Ibo van de Poel

“Values embedded in sociotechnical systems”

Ibo van de Poel
TU Delft

This contribution discusses how values may be embedded in sociotechnical systems. Various authors have proposed accounts of how technology may embody values. I will build on the characterization of Van de Poel and Kroes, according to which a technical artifact x embodies a value G “if the designed properties of x have the potential to achieve or contribute to G (under appropriate circumstances) due to the fact that x has been designed for G ” (Van de Poel and Kroes 2014: 119). They further distinguish between the intended, the embedded and the realized values of a technical artifacts. The intended values are the values intended by the designers of the artifact. The realized value may be different from the embedded value, for example because a technology is used differently than intended.

“Ethics, Action, and the Space of Technological Possibility”

Patrick Gamez
Missouri University of Science and Technology

This paper has 2 main goals. The first is to explore what might be particularly philosophically interesting about the ethics of emerging technologies, providing a friendly amendment to Shannon Vallor’s recent work on the ethics of technology and, in particular, her claim that the contemporary condition of “technosocial opacity” raises insuperable problems for deontological and utilitarian moral theories. The second is to elucidate some connections between the design of technological devices and what might be called “the space of possible action”. I conclude by making two suggestions: first, that the ethics of emerging technology is first and foremost an ethics of design, and second, that Vallor may well be right that the best way to frame the ethics of design is in terms of what it is to flourish.

“Study on the Ethical Intentionality of Technology Design”

Chengwei Wen
Northeastern University, China

Facing the challenge and difficulties brought by modern technology, we need to change our angle of view and construct a virtuous technology from the technology process. We should put the technology in certain realm of ethical intentionality from the formation of the beginning. Technology design is the source and basic of technical process, which will finally point to the forming products. Its ethical intentionality mixed not only person’s ethical intentionality and technology’s ethical intentionality but also the collective ethical intentionality of the life-world. At last, ethical intentionality of the technical design should be an ecological technology, which has its own negative and has the external negative, so as to realize the harmony between the technology and the nature. Only such technology, which has its own purpose, is the virtuous technology.

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 2504 / Smart Systems and Algorithms

“Smart Systems: From Prediction to Prescription”

Sabine Thuermel

Technical University of Munich

Smart Systems offer intelligent infrastructures where resources are to be optimally regulated and controlled. The focus is on streamlining processes towards enhanced efficiency. Context-specific, adaptive micro-directives may be incorporated in order to nudge or even coerce the human participants towards the desired behavior. Even if these environments restrict human autonomy, they may also open up possibilities for undermining such systems. Thus, they are “dispositifs” in the Foucauldian sense possessing the dual structure of manifestation of power and the possibility of subverting it.

“Algorithmic transparency as a disciplinary technique: Opening the black box of algorithm and finding its disciplinary power”

Hao Wang

University of Amsterdam

The public sphere has a cult of the idea of algorithmic transparency, as if opening the black box can solve all problems related to algorithms. But this is not true. Based on a case study of FICO Score, I will argue that algorithmic transparency itself can be a disciplinary technique to reinforce capital exploitation and political dominance, which is often neglected by algorithmic transparency believers. Hence, we have to realize a dilemma regarding algorithmic transparency: algorithmic transparency is the democratic ideal of publicity, but it can also lead to discipline and domination.

“Algorithmic Agents as Consumers and Producers of Neoliberal Economy”

Juho Rantala

Tampere University

The present neoliberal economic condition is a combination of classical economics, cybernetics, game theory, behavioural economics and economic planning. Key element of this economic condition is a production, circulation and capture of information. This “information narrative” has become to represent the economy as a whole and has led to the dream of reconstructing markets by calculation of digital technologies. The increase in number of applications in artificial intelligence, big data capturing and decentralized digital platforms has brought forth possibilities to construct complete market environments, including producers and users, that work autonomously.

Tuesday, May 21st
Session 6: 3:00-4:30pm
MSC 2505 / Levinas and Heidegger

*"Consumption and Enjoyment in Contemporary Techno-society –
Levinas, Stiegler and the Bio-Based Economy"*

Roel Veraart, WUR

Vincent Blok, WUR, Pieter Lemmens, RU

In this paper we investigate the fundamental conceptuality of technology in the Bio-Based Economy (BBE) as it currently exists, aiming to make consistent the BBE's main ideal: basing economy upon ecology. We discuss the BBE's problematic thematization of the damaged biosphere as a market-failure and the consequential tendency to manage and control the biosphere with biobased technologies. We propose an alternative semantic for the topical issue by taking seriously the micro-perspective of the Self immersed in biobased technologies to encounter environmental problems. We unfold and demonstrate this idea by focussing on two major concepts: consumerism and human enjoyment.

"A Levinasian Human(ism) for Mediation Theory: Reclaiming Ethics"

Jan Peter Bergen

University of Twente

Verbeek's mediation theory owes much of its explanatory strength to its rejection of modernity and modern humanism. However, while discarding humanism's metaphysics, it wishes to retain humanist values. I argue that its ontological commitments (based on Heidegger, Latour, Foucault et al.) do not provide the axiological resources to satisfactorily do so. With Levinas, I provide an alternative posthumanism that rejects modern humanism for not being human enough, radicalizing the latter's ethical focus. I also investigate the compatibility of this radical posthumanism with technological mediation, with its model of subjectivity, and the consequences for our appropriation of technologies.

"Learning by Getting Lost: A Return to Hypertext Pedagogy and Heidegger's Holzwege"

Michael Portal

Texas A&M

Students cannot begin to question technology without first making intelligible the technologies of everyday life. In an attempt to make technology again intelligible, this paper revisits the early years of computers, when users first found themselves awkwardly interacting with virtual text. During this period, electronic writing using "hypertext" that linked together nodes to create open-ended network-like texts flourished. This paper will explore and expand upon the phenomenological value of this antiquated technology and defend its reintroduction into modern pedagogy, building upon the work of Joyce (1998) and Mangen (2008) while responding to contemporary criticisms of hypertext exemplified by Carusi (2006).

Tuesday, May 21st
Session 7 4:45-6:15pm
MSC 1400 / Panel: Coexistence of Humans and Robots:
Body, Intentionality, and Knowledge in the Age of Robots Cont
Chair: Hidekazu Kanemitsu

"Designing approaches addressing dilemma in relating to robots"

Shigeru Wesugi
Waseda University

When humans exploit technologies, they receive the benefits by extending functions. Meanwhile, variety of problems including deskilled and overtrust come up due to excessively using technologies. Such dilemmas are often started to be addressed after things go serious. Due to the multistability of technology, all of possibilities in technology use cannot be anticipated. However, the speaker considers that a barely predictable dilemma can be addressed in design process before using the technology in a real life. Therefore the speaker has focused on a viewpoint of "continuity of using the technology", that comes from analyzing dilemma in technology use based on Shibata's extension theory.

"Who knows?: Artificial intelligence and transformation of science"

Ninao Kukita, Nagoya University
Makoto Kureha, Osaka University

Scientific knowledge should provide us with deeper understanding of the hidden structures and/or mechanisms of the world. If what AI brings us is a mere correlation for which we don't know the reason, it is not, according to this view, scientific knowledge. In this presentation, we will see what effect AI will have on the way scientific researches are carried out, as well as how this may transform the concept of scientific knowledge. Thereby, we will consider why understanding is thought to be essential in human science, and examine our original question: whether and how earthly science is dependent on the human cognitive and communicative capacities.

"Trust in Human - Robot - Interaction"

Kiyotaka Naoe
Tohoku University

Interpersonal trust is based on the intention of an agent A to make herself vulnerable to other agent B by relying on B's fulfillment of a given action, and vice versa. Interpersonal trust is fundamentally mutual. But apparently, trust in human-robot interaction cannot meet the conditions articulated in this account of interpersonal trust. What is re-quired here is a description of trust with conditions weaker than this: a description beyond alterity and personhood of robots. A clue to the solution is N. Luhmann's concept of "personality trust." He says "Trust is to anticipate the future in anticipation of her own expectation." (N. Luhmann, Trust and Power, 2017) "Personality trust" is the trust formed against the personality of others in the relationship with others, that is, the trust in the personality system (others.) Thus without assuming the personality of interaction partners, and without negating "trust" in human-robot interaction, we can develop another kind of description of trust.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2401 / Social Media Politics

"Social Media, Misinformation, and Inquiry: Using Dewey's Tools to Disrupt Today's Propaganda"

Mark Tschaepe
Prairie View A&M

Much work has been devoted to John Dewey's writings and debates concerning the war and issues of public information pertaining to democracy, but little analysis has been devoted to his struggles with problems of propaganda. Given current discussions focusing on social media, propaganda, and digital democracy, Dewey's evolving understanding of communication and propaganda in relation to democracy is useful for our own time. Using Dewey's theory of inquiry and Larry Hickman's pragmatic philosophy of technology, I sketch how we may use these tools to help solve current issues concerning misinformation masquerading as information through social media.

"Rethinking the relations of power in parental sharing on social media"

Clare Southerton, Maja Sonne Dankjaer, Anders Albrechtstlund, Ask Risom
Bøge Aarhus University, Denmark

As sharing information about ourselves and others online becomes more embedded in social life, surveillance studies has analysed this practice both in relation to structure powers that profit from data, as well as sharing norms. Understandings of power remain largely oriented towards the macro level and do not account for the ways micro-level habits both inform and are formed by power relations. Drawing on findings from in-depth interviews with 17 Danish families in 2017, we argue that habits and desires create conditions of sharing, whilst also being informed by and influencing broader processes such as big data economic logics.

"Power to the people? A new approach to deliberative democracy and technology"

Michael Hoffman
Georgia Institute of Technology

This contribution argues that political philosophy needs to catch up with the potential of social media technologies to ignite large political movements and with the corresponding threat of large-scale manipulation. It introduces the notion of "coalescent democracy" as a new form of deliberative democracy that builds on this technological potential. As Fishkin showed in many studies on Deliberative Polling, deliberation stimulates reflection, learning, and changes of opinions. What is new in coalescent democracy and the corresponding method of Deliberative Coalescent Planning and Policy Making is the idea to use deliberation for the formulation of problems and for building consensus on evolving proposals for solving these problems.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2404 / Multicultural Perspectives

"Humanizing Technology for Human and Social Well-Being: An Ubuntu Humanistic Approach to Human-Technology Interaction"

Odumayak Okpo
University of Uyo, Nigeria

The Ubuntu humanistic approach acknowledges both the right and the responsibilities of every person in promoting individual and social well-being. It argues that technologists must recognise the harm that results when the power of technology is not managed responsibly. They should know how technology affects people's health, comfort, safety, finances and welfare – physical, social and emotional. The paper contends that as technologists gain vast technical knowledge to benefit society, they must also develop their sense of ethics and professional skills to protect human life and society from the dangers and threats of increasingly powerful technologies – to apply their great power to their great responsibilities. It concludes that the ethical and political challenges related to today technology are not mere technical ones to be handled by particular experts, but are about issues requiring the evaluation of value-judgements and value-systems for a future human society is capable of living in solidarity.

"Humanizing Technology: The African Communalism Perspective"

Samuel Otu Ishaya
University of Uyo, Nigeria

Humanism as a philosophical doctrine gives primacy to human beings; it holds that human beings have the right and responsibility to give meaning and shape to their lives, a devotion to the interests of human beings wherever they are and whatever their status. This paper argues that technology is gradually but speedily is taking away the humanity and the communalism that unites man and man and man and nature. Technological products; the Internet, Ict, robotics, nuclear weapons and so on seem to be taking man back to the solitary state from which the modern states emerged.

That is, a reconfiguration of social relations. Using African communalism as a framework, the paper submits that communal technology should be the new thinking by technologist to give technology a human face by making its processes and products communalistic rather than individualistic.

"African States and Technological Power"

Augustine Farinola
Dominican University, Ibadan

With regards to the rapid technological advancement across the globe, this paper locates the status of African states amidst this 'technological globalization'. It identifies three major problems in this regard. First is that of 'technological dependence' – a situation in which almost all the technologies that we boast of in Africa have their root in America and Europe, and an indication that we have no total control of the technologies our lives are currently built upon. The second problem has to do with the level of technological consciousness in Africa – a situation in which most of the African nations are backward in the use and understanding of the dominant 21st century technologies. And the third points to what is often called 'the politics of technology' – a situation in which the contributions of Africans to tech- nological advancement has been ignored in the history, thereby forming a kind of mindset that Africans can't create technology but can only 'imitate' or 'use' them. The paper limits its scope of reference to 'computer and digital tech- nologies' and observes that failure to address these problems could set African states centuries far behind civilization and become less powerful.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2405/ Panel : Postphenomenology and Technological Mediations
Chair: Peter-Paul Verbeek

“Artificial Intelligence and Moral Mediation“

Peter-Paul Verbeek
University of Twente

In order to be humanlike and to be able to interact adequately with human beings, the learning process of artificially intelligent systems is now starting to include a dimension of vulnerability that is typically associated not with being a moral agent but with being a moral patient - which can, in turn, be a condition for moral agency. This paper will investigate how these two new dimensions of artificial intelligence (technological intentionality and technological vulnerability) require a new conceptualization of the moral significance of artificial intelligence, and explores how the postphenomenological notion of moral mediation - linking human and technological intentionality via the concept of ‘material hermeneutics’ - can contribute to this discussion.

“Bourdieu and Postphenomenology“

Alberto Romele, Benjamin Bourcier
Lille Catholic University

We hypothesize that the sociology of Pierre Bourdieu offers the occasion to overcome some exaggerations of the so-called “empirical turn” that characterized most of philosophy of technology, included postphenomenology, from the 1980s on. We will propose to overcome two limits of a merely Bourdieusian approach to technology: 1) Firstly, we will stress that for us it is not a matter of renouncing to an empirical perspective, but rather of articulating it with a transcendental or symbolic-oriented one; 2) Secondly, while in a pure Bourdieusian framework symbolic forms are ideological, we will also insist on their utopic potential.

Heidegger's Reflection on Ancient Greek Ontology of Naturality and Artificiality

Tomas Mickevicius
Vilnius University

New understanding of nature is emerging with new biotechnologies as synthetic biology with its attempt to create artificial life forms - the old Aristotelian dichotomy between natural entities and artificial entities is being challenged and questioned. With biomimetic technologies technology itself becomes somewhat natural and in accordance with natural processes, while, on the other hand, our technoscientific capabilities of understanding nature reveals natural phenomena themselves as being somewhat highly sophisticated technological creations. If we attempt to think at the intersection of philosophy of technology and environmental philosophy, a qualitative conceptual apparatus combining these fields is of utmost importance. One of the strategies to gain one is to direct our attention to Ancient Greek thought which already largely grounds Western perspective on reality as such. Martin Heidegger offered a convincing and revealing interpretation of the origin of Ancient Greek thinking. According to Heidegger, Ancient Greek understanding of reality arises from basic experience of production (Herstellung) or producing an artifact. Hence the all-encompassing and well familiar notions of matter, form, cause and others. Indeed, we can see that Aristotle, despite the fact that he grounded the distinction between natural and artificial entities, sometimes described even the exemplary instance of nature (phusis) - that is, a living entity or an organism - through this structure of technical behavior (techne). Thus I propose the reconsideration of the Ancient Greek understanding of reality as one of the means for developing a general ontological framework of naturality and artificiality (and possibly a hybrid union of these) which is needed for articulating the mentioned emerging new situation of hybrid reality. I consider the controversy surrounding the Heideggerian interpretation: while he claims that it is the basic structure of production

that grounds Ancient Greek thinking, many Ancient Greek scholars, on the contrary, argue that it is the basic features and structures of natural entity that ground Ancient Greek conceptuality and understanding of reality. I am willing to reconsider these intersections of conceptual and ontological frameworks of, on the one hand, production, artificiality, and, on the other hand, nature, naturality and life in Ancient Greek thinking as being potentially useful for articulating the emerging new reality.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2502 / Contemporary Issues

"The Deskilling Hypothesis"

Ken Archer
Survata

This paper takes a thorough look at the deskilling hypothesis, the theory that the introduction of technology since the dawn of the industrial revolution has in fact resulted in a less-skilled population than existed in pre-industrial times. The notion of deskilling strikes many observers as obviously wrong, considering the levels of illiteracy and technical education in pre-industrial societies. But the evidence brought forth by numerous historians of deskilling - most notably Braverman, Noble and Illich - has yet to receive a thorough critique.

"Nature and dynamics of trust in the risk society"

Jose Antonio Lopez Cerezo
University of Oviedo

The food, health and industrial crises of the last decades have produced a gradual deterioration of trust in the industry and regulatory authorities regarding the safety of technological products and systems. In this contribution we will analyze the nature and social dynamics of trust in the current society, highlighting its strong parallels with regard to the notion of risk. We conclude that a healthy distrust towards the social agents that are at the origin of these risks is today a valuable resource for democratic governance in the risk society.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2503 / Technology and Innovation

"How to Bring AI for Good into Reality?"

Enrong Pan, Jiafan Yang
Zhejiang University

Oftentimes, human beings are caught in the panic over the AI (Artificial Intelligence) technology and cannot find an effective solution. In this paper, we propose a new model of origin of technology to support the design of AI for Good so that human beings and AI could coexist in harmony and develop with joint efforts. According to Aristotle's three approaches to knowledge, the relationship between human and AI involves the practical knowledge (praxis) of politics and ethics, and the productive knowledge (poiesis) of AI. Karl Marx argued in *Das Kapital* that the rules and regulations applied in the production process could be solidified into technology. Similarly, we argue that good rules and regulations, formal (legislation) or informal (moral ethics), could be solidified into an AI technology for Good.

"Technological Innovation in the Public Sphere: Towards a Political Concept of Responsible Innovation"

Lucien von Schomberg, Wageningen

Vincent Blok, Wageningen

Even though the concept of technological innovation is generally understood in light of an intrinsic relation between technology and the market, ongoing research under the heading of Responsible Innovation (RI) calls for a political discourse of innovation in which emerging technologies should be concerned with generating the right impact rather than commercial value, particularly with regard to global issues such as climate change and epidemics related to lifestyle diseases. In its implementation, however, the political discourse of innovation remains intertwined with a commercial discourse of innovation, which ultimately hinders the societal purpose of RI (von Schomberg & Blok 2018). This brings into question whether RI is perhaps in need of a real political concept of innovation that is separated from economic ends. In light of this question, in this paper we philosophically reflect on what such a political concept of innovation precisely entails, and how it can contribute to the societal purpose of RI. To this end, we particularly consult *The Human Condition*, in which Hannah Arendt distinguishes between the private sphere and the public sphere (Arendt 1998). As a first step, we analyze tensions between the private sphere and the public sphere found in the RI literature. In this respect, we discuss to what extent technological innovation still adheres to the imperative of economic growth, and whether it therefore remains profoundly undemocratic. As a second step, we rethink the concept of innovation in light of Arendt's conception of the public sphere. In doing so, we show that in order for the concept of innovation to be truly political, it needs to be rooted in what Arendt calls natality. This relates to the idea that while each individual promises political significance in the introduction of something new, this can only truly be carried out in the public sphere. The public sphere essentially constitutes a plurality which is to be actualized through speech and action (Loidolt 2015). Therefore, as a political concept, technological innovation needs to first and foremost take place in the public sphere, in which it thus contributes to the actualization of plurality.

The actualization of plurality ultimately endows the democratization of innovation processes that RI continuously calls for. That is say, while the deliberation in innovation processes is often conceptualized in terms of common goals and value frames, a political concept of innovation that contributes to the actualization of plurality essentially allows for own interests and value frames. This means that in the very design of every innovation plurality is served in such a way that it, for instance, encourages intervention to prevent power concentrations that negatively impact plurality, such as Google and Amazon, or prevent that design requirements are monolithically orientated to one particular group, such as the European male population. Accordingly, we ultimately attempt to operationalize natality in a political concept of responsible technological innovation.

"The power of storytellers: Representation of innovation in medical series"

Eszter Nádas

Budapest University of Technology and Economics

Brain mapping, three-dimensional printing, robotic limbs and thought controlled prosthetics: how lay people become aware of these technologies? Popular culture is a powerful medium for showcasing emerging technologies and medical drama series are chroniclers of medical innovations. As studies show, these series not only present the technologies itself, but also provide framing for their ethical considerations and affect the opinion of the lay audience about their creators. Is the power of storytellers wielded responsibly? This presentation, relying on content analysis, attempts to demonstrate the potential influence creators have, furthermore, the checks and balances on that power.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2504 / Smart Technologies

"The Smart Resurfacing of Wicked Problems"

Pieter Vermaas
TU Delft

In this contribution I revisit the challenge of wicked problems as introduced by Rittel and Webber in the 1970s. I argue that this challenge has resurfaced in engineering in part due to approaches, such as smart technologies, to address wicked problems. The resurfaced wicked problems still fit Rittel and Webber's characterization; there is at most a gradual deepening in wickedness. Yet they may require a different response: rather than finding methods to address them, engineering approaches may aim at avoiding the resurfaced wicked problems.

"The Great Wall of Happily Ever After: The Digital Divide between Users and the Ideal Smart Home"

Yueh-Jung Lee
Arizona State

"Smart home" is a combination of the Internet of Things (IoT) systems plus other cutting-edge devices and perfectly fits into our consumer culture. However, the digital divide intensifies inequality between people regarding the accessibility of technology. I examine this divide through the structures of psychology and actor-network theory (ANT), and by bringing together previous research in communication studies, interaction design, and cultural studies. I analyze smart homes from three perspectives of users, information and communication technologies (ICTs), and housing and reconstruct seven elements for inclusion in smart homes: cultural knowledge, sociality, time, mentality, technical skills, privacy waiver, and extra investment.

"Smart Speakers in the age of Super-surveillance"

Joseph C. Pitt
Virginia Tech

Should NPR be urging you to "or just ask your smart speaker to dial NPR"? What kind of a potential totalitarian monster device have we introduced into our culture? It is alleged that using a smart speaker will allow you to hook up all the appropriately configured items in your home so you can control them by voice commands. But it is also the case that these devices are linked to the internet and that makes them vulnerable to control from outside. It also means that your privacy is potentially violated on a continual basis. It is quite possible that everything you do and say in your home will be recorded and stored in the FBI's database on potential threats to national security.

Tuesday, May 21st
Session 7: 4:45-6:15pm
MSC 2505 / Track: Powerful Humans and More Powerful Technologies
Chair: Laura Drake

*"Abducting Intelligence: Psychedelic Research Methods and
The Epistemic Limits of Machines"*

Emma Stamm
Virginia Tech

This paper reads qualitative and non-digital research methodology in contemporary psychedelic science as a challenge to the epistemic fundamentalism of artificial intelligence. I argue that this research problematizes certain positivist principles of machine learning, the structural basis for artificial intelligence. I introduce the "psychedelic renaissance," the recent revival of interest in the medical application of psychedelics, highlighting a turn toward qualitative and non-digital methods here. I then review the inductive, generalizing and predictive functions of A.I. Ultimately, I indicate that psychedelic science methodologies contain an immanent critique of the notion that machines can produce intelligence.

"Frictionless Technologies: The Innovation of Human Obsolescence"

Laura Drake
Independent Scholar

Technological innovations around frictionlessness, which extend beyond convenience and have begun cutting into human agency, have assumed a trajectory of promoting the obsolescence of all but increasingly small numbers of powerful humans. Human life is about doing things (action), not merely having experiences (streaming). The first is active, the second is passive. This paper explores the functional mechanisms by which two meta-trends in frictionless technology are depleting, and deleting, human agency. In building technologies that promise the ultimate in frictionless life, humanity may become the first species to engineer its own obsolescence.

Wednesday, May 22nd
Session 8: 9:00-10:30am
MSC 1400 / Cyborgs

"Cyborg Maintenance: A Phenomenology of Upkeep"

Joshua Earle
Virginia Tech

The lived experiences of those who live lives as cyborgs are generally ignored by those who most wish to be cyborg. In this presentation, I will push back against the utopic, teleological imaginaries of the Transhumanist movement using a daily concern for actual cyborgs: maintenance. I will merge the work done on maintenance around large technological systems with the biopolitical work done by disability studies scholars and activists, all through a Baradian phenomenological lens. I will show that the large, entangled networks of technicians, infrastructures, and medical organizations produce a cyborg body much different than the sleek, sexy images that adorn transhumanists' rhetoric.

"Body Enhancement Technologies: Cyborgs, Demigods and New Political Order"

Auguste Dementaviciene

Vilnius University

The new technologies of body enhancement are rapidly transforming cultural and political understanding of body, normality, sexuality and interaction between each other. The main question is how these processes are changing the understanding of human and how it will affect the understanding of politics. I want to present the concept of the demigod (hero) and what kind of reality it will create by referring to D. Haraway understanding of politics (through the eyes of cyborg). The concept of demigod is fruitful to merge different aspects and fears coming from philosophy of technology and political philosophy.

"iZombies Cyborgs: On Compulsive Smartphone Use"

Joshua Hall

William Paterson University

Today's compulsive smartphone users' psyches are increasingly directed away from their bodies and onto their devices. This phenomenon has now entered our global vocabulary as "smartphone zombies," or what I will call "iZombies." Given the importance of mind to virtually all conceptions of human identity, these compulsive users could thus be productively understood as a kind of human-machine hybrid entity. Assuming for the sake of argument that this hybridization is at worst axiologically neutral, I will construct a kind of phenomenological psychological profile of the type of entity which engages in these patterns of behavior. I follow Judith Butler in seeing this identity as the result of performance practices, which as such can be modified or replaced using other performances, to facilitate more enabling ways of being.

Wednesday, May 22nd

Session 8: 9:00-10:30am

MSC 2401 / Machines and Ethics

"Analysis on Human-Machine Relations (HMRs) from the Perspective of Philosophy of Organism"

Xue Yu, Qian Wang

Dalian University of Technology

From the perspective of Philosophy of Organism, if the development of human-machine relation will damage biological organisms, social organisms and mental organism, it should be restrained ethically. It shouldn't set up a changeless limitation of the intelligent development of artificial organisms, but it should take into full consideration of the harmonized relationship among all kinds of organisms. In this respect, the idea of "Grand Tao" in traditional Chinese culture plays a curial role on inspiring and leading the development of it. The future of human-machine relation should make human life more beautiful, more harmonious and more energetic, rather than bringing about more troubles and conflicts.

"A new framing for technology ethics"

Mark Bourgeois
Notre Dame

The most important aspect of technology is not the power it holds over the physical world, but the power it holds to shape who we are, for good and for ill. For this reason, "How will this technology change us?" is a salient question we must learn to ask better and more often. This presentation will examine how this question might be more systemically approached in research, what implications it holds for the debate around values in design, and argue for why this framing is the most vital for the overall project of technology ethics.

"Hans Blumenberg on Technology and the Consequences of Invisibility"

Bruce Krajewski
University of Texas Arlington

Philosopher Hans Blumenberg, author of the 2009 collection "Intellectual History of Technology" (Geistesgeschichte der Technik), writes about technology's invisible operations and effects. His primary example in one of his essays is the push buttons inside elevators. "Behind every such activator there is a long prehistory of human discoveries, an entire complex of inventive accomplishment; but the activator is so 'packaged' that its abstract uniformity removes and conceals all of that from our view." In the digital era, these activating buttons have become skeuomorphs in web design, as we click rather than push on buttons to activate hidden source code.

Wednesday, May 22nd
Session 8: 9:00-10:30am
MSC 2404 Contemporary Issues

"Predicting Proportionality"

Vincent Chiao
University of Toronto

A basic principle in sentencing offenders is proportionality. However, proportionality judgments are often left to the discretion of the judge, raising familiar concerns of arbitrariness and bias. This paper considers the case for systematizing judgments of proportionality in sentencing by means of an algorithm. The aim of such an algorithm would be to predict what a judge in that jurisdiction would regard as a proportionate sentence in a particular case. A predictive algorithm of this kind would not necessarily undermine justice in individual cases, is consistent with a particularistic account of moral judgment, and is attractive even in the face of uncertainty as to the legitimate purposes of punishment.

"Disentangling Military, Extractive, and Environmental Narratives in Earth Remote Sensing"

Samantha Fried
Virginia Tech

This presentation will invoke Habermas's theories on communicative action, as well as Ihde's treatment of hermeneutics, to explore connections between earth remote sensing satellite technology (and its corresponding digital earth images), funding for scientific research, and institutional commitments. By way of these theoretical perspectives, I argue that digital photos of earth are not only multistable technologies, but technologies that blurs boundaries between narratives within environmentalism, national security, and resource extraction. These narratives' entanglements -- and all corresponding forms of expertise -- are extensions of institutional entanglements outside of the imagery itself: to be sure, these narratives pre-date satellite technologies and their resultant imagery. Finally, I will discuss ways in which earth remote sensing satellites further extend and blur environmental, military, and extractive narratives -- and how we ought to use satellite technologies to disentangle and clarify these narratives.

Wednesday May 22nd

Session 8: 9:00-10:30am

MSC 2405 / Debate: Should we treat new technologies as social experiments?

Ibo van de Poel, TU Delft

Martin Peterson, Texas A&M University

John C. O'Day, Texas A&M University

Should we conceive of new technologies as social experiments? Ibo van de Poel and Martin Peterson have debated the merits of this moral framework in the pages of *Ethics, Policy & Environment* since 2011, when the former introduced his seminal argument. In this panel discussion, participants will bring the audience up to speed on the debate thus far while introducing new considerations, including a novel contribution from John C. O'Day, who believes he can neutralize Peterson's counterargument while extending the social experiment analysis beyond the scope of van de Poel's original proposal. You be the judge!

Wednesday May 22nd

Session 8: 9:00-10:30am

MSC 2502 / Panel: Postphenomenology and Architectural Design

Chair: Peter-Paul Verbeek

"Approaches from Urban Aesthetics to New Urban Technologies"

Sanna Lehtinen

University of

Helsinki

The paper investigates how the aesthetic experience and evaluation of the city are affected by the implementation and use of new and emerging technologies. Technology shapes human knowledge of the world in the sense that our every-day experience is already necessarily interwoven with and by it. This paper sheds light to how relatively new fields of everyday and urban aesthetics, both in their traditional philosophical and more applied senses, could help in understanding human-technology relations from the experiential perspective.

"Building Dwelling and Stop Thinking: Subtle Domestication and Sensing Architecture"

Soren Riis

Roskilde University

Key to the idea of "the Internet of things" is the integration of various sensors into things. These sensors are technological filters or mediators, that will increasingly define and help regulate the world we are living in. Based on a postphenomenological framework, I will show what these technologies can do and sense when they operate in and create so-called "smart houses". In view of this case I will proceed to offer an assessment of how smart houses experience their in- and exteriors and thereby try to articulate the subtle kind of technological domestication practices likely to develop in new smart houses. In the third and final part of the presentation I will unfold the underlying larger concern which has to do with how ontology transforms in the age of the Internet of things. The presentation ends by connecting the above to some of the grand visions for the internet of things and stipulate ways in which ontology is likely to be revisited and revived in the near future.

Wednesday May 22nd

Session 8: 9:00-10:30am

MSC 2503 / Big Data

“Ethics analysis of assisted reproductive technology based on big data”

Lyu Yang, Yin Wen Juan, Lin Jin Ru

Northeastern University, China

The tentacles of big data have extended to reproductive medicine. Today, there are some sparks between assisted reproductive technology (ART) and big data technology. Driven by big data technology, the clinical success rate of assisted reproductive technology has been improved, the risk of many genetic diseases has been alleviated, the cost of reproductive medicine has been reduced, and the field of reproductive medicine has undergone major changes. However, the progress of technology needs to balance ethical judgment and value analysis. Big data technology and assisted reproduction technology have their own ethical disputes. Such interdisciplinary combination will inevitably lead to a series of potential ethical risks. For example, technological risk -- accuracy of big data technology and popularization of precision medicine; Privacy risks -- “cheap data” problems in the medical field and leakage of reproductive and genetic information; Commercial risks, etc. When assisted reproductive technology takes advantage of big data, it is necessary to make ethical judgment and value analysis from the perspective of deontology, utilitarianism and power ethics, so as to escort the assisted reproductive technology with ethics in the new era.

“What We Informationally Owe to Each Other”

Adam Pham, Wisconsin-Madison

Clinton Castro Florida International

As of recent, there has been much discussion of the right to an explanation (the right to have algorithmic decisions made about oneself explained). Much of this discussion has been descriptive, centering around questions of whether legal doctrines, such as the EU’s General Data Protection Regulation, contain a right to an explanation. There has been much less discussion of what the moral basis of such a right might be. This paper fills that gap. We offer a conception of autonomy that, if true, explains the moral grounds of the right to an explanation. We then offer an abductive argument for our account. Our minimal account of agency is able to explain a number of intuitive algorithmic rights, such as the right to correct misinformation in one’s file and the right to appeal flawed decisions. That our account can explain this suite of rights in a simple way is powerful abductive evidence in favor of it.

“Underdetermination in the Era of Big Data Science: The Power of Observation”

Don Berkich

Texas A&M Corpus Christi

In this paper I argue that computability theory is problematic for broad varieties of scientific holism since its implementation in observation is at the outermost periphery, yet computability theory itself is, like mathematics and logic, central to every scientific theory and thus unrevisable without massive repercussions. The upshot is that holism broadly conceived is untenable unless science is entirely unmoored from what, today, counts as observation. I conclude by suggesting that that is no mere reductio: The use of computational methods in inferentially analyzing sensor data should raise serious concerns about what counts as scientific observation.

Wednesday May 22nd
Session 8: 9:00-10:30am
MSC 2504 / Contemporary Issues

“Strategic foresight and analysis of autonomous technologies”

Darryl Farber
Penn State

This essay explores alternative futures of autonomous vehicle technologies. Part 1 describes scenario planning as a tool for strategic foresight. Part 2 examines the multiple socio-cultural and political economic factors on the one hand, and the scientific and technological on the other that converge to shape the adoption and diffusion of autonomous vehicle technologies. Part 3 develops scenarios of the future that describe alternative futures and explains how those future worlds come to exist. The essay concludes with a reflection on the broader societal impacts of autonomous vehicle technology in the context of the future scenarios.

“Understanding technologies at various levels”

Mariska Bosschaert
TU Center for Ethics and Technology

Ever since the empirical turn there is disagreement about whether technologies can be best understood at the micro-level of technology itself, the meso-level of user practices, or the macrolevel of technologies in science, society, politics, etc. In this paper it is argued that none of these levels provide the best way to understand technologies. It will be elaborated on what can be learned about technology at each of these levels and how they can be combined in order to answer various research questions. This broader perspective on the various levels will empower philosophers with more possibilities to study technologies.

Wednesday May 22nd
Session 8: 9:00-10:30am
MSC 2505 / Panel: Alienating Apps
Chair: Josh Dohmen

“Developmental Space: What Navigation Apps Get Wrong about Our Experience of Movement”

Michael Butler
University of Texas Rio Grande Valley

In this paper I will contend that certain forms of electronic technology, namely navigation apps like Waze or Google Maps, misunderstand the experience of movement, and thus serve to alienate us from our lived environments. They transform places that could be engaged with bodily according to what I call the developmental experience of space into transitional environments. My argument is based on the idea that to move through space is to develop within it in a way that enriches both our experience of the places we inhabit as well as our own sense of ourselves as agents within them. In order to make this claim, I appeal to Maurice Merleau-Ponty’s phenomenology and the implicit logic of development it contains.

"Intimate Revolt and Social Media"

Josh Dohmen

Mississippi University for Women

Especially in the wake of the 2016 election in the United States, filter bubbles have become a subject of great concern for political and technology commentators. Briefly, these bubbles insulate us from interacting with those who have different beliefs and interests and from confronting news or information that contradicts our own convictions. While these bubbles are surely not historically novel, they do seem to be intensifying as a result of technologies and algorithms designed to suit the preferences of users. How should we understand the consequences of these bubbles, and what if anything can be done to resist them? In this paper, I will argue that Julia Kristeva's concept of "intimate revolt" can help answer these questions.

"Foucault, Technology and the Attention Economy"

Jordan Liz

San Jose State University

The purpose of this paper is not to criticize Harris' proposal. After all, one may reasonably argue that a society disciplined towards engaging in meaningful relationships is preferable to one in which such relationships do not exist. Still, regardless of the desired outcome, the disciplinary power relations that underlie our technology remain constant. To examine these power relations in more detail, I turn to Michel Foucault and his analysis of disciplinary power. The goal will be to understand, first, how our technologies render users into 'docile bodies' - regimented bodies that may be subjected, used, transformed, etc.; and second, what steps may be taken to free ourselves from these power relations. If what we desire is technology that allows us to be freer and more autonomous, then understanding how those features of human subjectivity are restricted by technology is crucial. Merely changing the technology to produce a different kind of disciplinary subjectivity may not produce human subjects that are any freer than before.

Wednesday, May 22nd

Session 9: 11:00am-

12:30pm

MSC 1400 / Human Enhancement

"Technology and Human Perception: A Kantian Dissection of Sensory Enhancement"

Adekunle Ibrahim

University of Uyo

How would our world change if we had new means of perception in addition to the five senses? If technology creates new means of perception, what could be the social implications? This paper examines these issues against the backdrop of Kant's constructive analysis of knowledge. It establishes the epistemic ambivalence of sensory enhancement as it concerns the gap between the knower and the known. It extrapolates the social implications of technologically induced new perceptual powers. The paper submits that since perception is our most basic access to the external world, then, sense enhancement technology is an imperative engagement for man. However, the paper calls for the rationalization of technology in human perception. This entails a critical examination of technological applications to remove unreasonable elements that may be humanly self-defeating.

*"Socratic Ignorance: A More Promising Approach to Virtue Ethics for Our Future
Technohuman Society"*

Santiago Mejia
Fordham University

Technology scholars inspired by virtue ethics have typically drawn on Aristotle. Despite its many compelling features, the Aristotelian model tends to be parochial and conservative. Socrates, with his profession of ignorance, offers an attractive alternative, better suited to confront the radical changes caused by emerging technologies. Socrates provides us with valuable insights about how to flourish in the midst of the ambiguity and paradox that will result when our most fundamental capacities of meaning-making are threatened by new technologies, when our traditional conceptions of the virtues do not allow us to make sense of our world and our place in it.

"How should we treat human enhancement technology: acceptance or rejection?"

Xiaoju Dong
Tsinghua University

In recent years, the idea of human enhancement exists no longer just in science fictions and fictional films, but is actually supported by the related technology. More and more discussions have attracted extensive attention. Based on a detailed analysis of existing viewpoints about this technology, combined with the narrative theory and the embodiment theory, this paper attempts to illustrate that human enhancement technology will indeed have a negative impact on the personal identity, and further challenge the intrinsic nature of human. Therefore, in front of the development of human enhancement technology, we should hold a prudential and critical attitude.

Wednesday, May 22nd

Session 9: 11:00am-12:30pm

MSC 2401 / Algorithms, data, politics, Mass Culture

"A black market for upvotes and likes: manipulating masses on social media"

Mihály Héder
Budapest University of Technology and Economics

My presentation investigates the mechanisms of manipulating social media by paid puppets for gaining influence and thereby converting technological skills and some money to power in the digital realm. These techniques involve buying hundreds or thousands of fake social media items, such as likes on Facebook; Twitter and Instagram followers; Reddit upvotes; YouTube subscribers and likes. The findings are based on an analysis of 7,426 'campaigns' posted on a crowdsourcing platform over a year-long period, offering a combined 1,856,316 microtasks. The ethical implications and potential countermeasures of this phenomenon will be discussed as well.

"Using Big Data Algorithms to Make Big Decisions"

Diane Michelfelder
Macalester College

Driven by big data technology, the clinical success rate of assisted reproductive technology has been improved, the risk of many genetic diseases has been alleviated, the cost of reproductive medicine has been reduced, and the field of reproductive medicine has undergone major changes. However, the progress of technology needs to balance ethical judgment and value analysis. Big data technology and assisted reproduction technology have their own ethical disputes. Such interdisciplinary combination will inevitably lead to a series of potential ethical risks. When assisted reproductive technology takes advantage of big data, it is necessary to make ethical judgment and value analysis from the perspective of deontology, utilitarianism and power ethics, so as to escort the assisted reproductive technology with ethics in the new era.

"The Ethical Impact of Reputation Systems in the Sharing Economy"

Thijs Slot
TU Delft

The rise of sharing economy brings with it several ethical issues. These issues are generally analyzed either through the inadequacy of existing policies, or the difference between purported intentions and reality. This research makes the case for furthering understanding of the ethically charged impact of sharing economy by looking at the technical aspects that shape interactions. Through an analysis of the reputation systems in use, the prevailing perspectives on sharing economy's functioning will be enriched by looking at how biases and ethically charged decisions can become encoded. This elucidates current and projected issues and offers novel ways of addressing them.

Wednesday, May 22nd
Session 9: 11:00am-12:30pm
MSC 2405 / Sociotechnical Issues

"The Political Anatomy of Computer Architecture"

Jens Burger, Andres Laguna-Tapia
Universidad Privada Boliviana

Foucault introduced a notion of technology that describes the relationships between social systems, power and mechanisms of control. This is our first link between technology (as method) and power. We reinterpret Foucault's concepts to describe the functioning of computer architecture. This is our second link between technology (as artifact) and power.

"Ambiguity-based failure in sociotechnical systems"

Eric Kerr, National University of Singapore
Vivek Kant, India Institute of Technology Bombay

This paper explores possible approaches to failure in sociotechnical systems due to ambiguity. Currently, the literature on the philosophy of failures in artifacts and systems are underdeveloped. Consequently, we distinguish between function-based, specification-based, material-based failure on the one hand and expectation-based, and ambiguity-based failure on the other. Ambiguity-based failures occur in sociotechnical systems because of the interaction between people and their technological milieu. Therefore, these malfunctions are relational and emergent. We discuss several possible approaches to both analytically and normatively understanding failure and break-down that results from the ambiguity of a situation or process in sociotechnical systems.

"Technical Artefacts and the Problem of Malfunction"

Alexandra Karakas Eötvös
Loránd University

Most studies in the field of both philosophy of technology and design theory tended to focus on the problem of function and its varied nature, but has been little discussion on malfunction. The paper discusses this crucial feature of technological artefact, and clarifies that both function and malfunction are spatiotemporal terms that change according to circumstances. Together they compose a multidimensional concept in which artefacts are placed. To detect this phenomena, I discuss different case studies like Marcel Duchamp's Fountain, and the HP-25, an early programmable calculator by Hewlett-Packard that got distributed Lunar Lander, a moon landing simulator in 1975.

Wednesday, May 22nd
Session 9: 11:00am-12:30pm
MSC 2502 / Contemporary Issues

"The Experiment is Power: A Perspective on Francis Bacon's Philosophy of Technology"

Yefei Wang, Dazhou Wang
Chinese Academy of Sciences

It is arguable that Francis Bacon was a pivotal figure in establishing the scientific method of investigation, and is certainly that his notable saying "knowledge is power" has accurately characterized the modern societies more than four centuries. This paper aims to clarify Francis Bacon's ideas about experiments and further to help depict a new image of Francis Bacon as a philosopher of technology. The experiment in his philosophy has rather broad meaning, and is both a method of scientific exploration and a method of value creation. The former was called by him "the experiment of light", and the latter "the experiment of fruit". The aim of the former is to acquire reliable knowledge, and that of the latter is for mankind to attain immortality and continuity.

"Sociocultural Effects and Challenges of Digital Technologies: An anthropological and Multi-scenario Analysis"

Jacob Cordoba Jaquez, Jose Refugio Romo Gonzalez
Autonomous University of Chihuahua

In this paper we concentrate in addressing some of the many scenarios where technology, society and culture have had radical and significant changes and anthropology can and is being utilized to understand and analyze such changes. The challenge here is to keep up with the pace of the continuous transformations where technology and information has drawn a thin line; making it difficult to describe and analyze where technology ends and where information begins. Addressing these social, technical, cultural and technological knowledge from an anthropological methodological, theoretical and conceptual point of view can only enrich the understating of the affordances and hindrances of digital-media technology in society and culture. We strongly believe that this paper can contribute in this understating thus aligning both in a critical-analytical and empirical way.

"At the Push of a Button: Automation, Autonomy and Skill"

Mark Thomas Young
University of Bergen

Automation is often understood to be a technological phenomenon; the replacement of human labour with forms of technology that operate with minimal human intervention. This paper explores the limitations of this conception by demonstrating how it fails to account for the ways skills are conserved throughout the introduction of automating technologies. Drawing upon historical and sociological studies of automation, this study outlines reasons why automation is best understood as a socio-political phenomenon in which technology repositions labour in ways which render it invisible. It is these processes of erasure, I argue, that sustain common perceptions of automating technologies as autonomous.

Wednesday, May 22nd
Session 9: 11:00am-12:30pm
MSC 2503 / Contemporary Issues

“How the “I” might die or: How the rise of socially interactive artificial assistants might affect the expressive self-relation of human beings”

Sabastian Nahr
University of Siegen

Artificial assistants and intelligent agents are playing an increasingly prominent role in our everyday lives. In the (rather near) future, they will be designed to interact with humans in a socially appropriate manner – they will become increasingly socio-sensitive. The talk will provide a brief outline of various dimensions of social appropriateness in human-human interaction and their possible implementation into socially interactive artificial assistants. It will then be discussed how human interaction with socially interactive artificial assistants might affect one of the most fundamental human capacities, i.e. the capacity of taking an expressive self-relation and how the rise of socio-sensitive artificial assistants might lead to processes of self-reification.

“‘Value-inertia’ in risk assessments”

Per Wikman-Svahn
KTH Royal Institute of Technology

It is commonly claimed that risk assessments necessarily involve value judgments and that these should be transparent and context-sensitive. The present paper argues that these requirements are difficult to satisfy in practice and suggest a mechanism called “value-inertia” that contribute to this difficulty. Value-inertia is when values from other contexts influence the results in ways which are difficult to change. Value-inertia can influence risk assessments “upstream,” from previous scientific studies and syntheses, and “downstream,” from previous risk assessments made in other contexts. Examples of upstream and downstream value inertia are provided. Mitigating the influence of value-inertia might improve risk assessments.

“Human Fulfillment In The Contemporary Technological Era: Values, Emotions and Engagement”

Joanna Fumey
Texas A&M

Technological devices and social media change the way we see the world and the way in which we interpret reality, but are they compatible with the human desire for fulfillment? The deep yet somehow somewhat hidden values of technology – through the prioritization of efficiency, availability, quantification and ease – reshapes human existence, especially the inner life, by shaping emotions and how we attribute value to others, to things, and to our own actions. Using Christine Tappolet’s experientialist understanding of emotions and Albert Borgmann’s idea of focal engagement, I consider how recent technological developments impact genuine engagement. These reflections require rethinking technology, in terms of reconsidering its purpose and its effects on our lives and, at the same time, we may also redefine human fulfillment.

Wednesday, May 22nd
Session 9: 11:00am-12:30pm
MSC 2504 / Technology and Social Media

"From Sexual Explicitness to Invisibility in Resistance Art: Coloniality, Rape Culture and Technology"

Chloe Georas

University of Puerto Rico Law School

This article explores the dilemmas and tensions posed by sexually explicit and anti-surveillance resistance art in the context of debates on feminist/gender studies, visual culture, rape culture, postcolonialism and new technologies. Feminist performance artists making sexually explicit works that question the ubiquity and acceptance of sexual and gender violence is not new, but the integration of new technologies, social media and the internet to these artistic interventions raises novel questions regarding the intersectional phenomenon of rape culture, the deployment of the male gaze and its postcolonial incarnation in what I define as the techno-coloniality of vision. Anti-surveillance art, which explores strategies of technological invisibility, unreadability and purposeful interpretive malfunction, provides a rich space to interrogate how it responds differently to the hypersexualization and commodification of girls and women relative to sexually explicit activist art.

"Technological Worldliness of 2010's: Hannah Arendt's contribution for Science and Technology Studies"

Mirka Muilu

Tampere University

This paper examines, drawing from media studies and STS, the relationship between public action and contemporary technologies through philosopher Hannah Arendt's notion of world tying it together with current sociotechnical approaches. In Arendt's thinking, technology entwines with the world as fabricated by humans and thereby connects fundamentally with the question of politics as public action between humans. The paper shows that Arendt has more to contribute to debates on technology than is commonly understood. By applying her thinking, technology is not only a helpful tool, but it transforms conditions of life in several manners affecting our possibilities to act publicly.

"The Retrieval of Civility in Cyberspace"

Patrick Flanagan
St. John's

This paper is about getting entangled in technology in such a way that one's engagement manifests itself as an activity contrary to the common good and how a user might free oneself and get unstuck. This is not a diatribe concerning technology. It acknowledges the valuable nature of technology, but also offers an honest assessment about its seductive nature to engage in activity that eclipses possibilities for human flourishing and proposes a more positive response rooted in virtue.

Wednesday May 22nd

Session 9:

11:00am-12:30pm

MSC 2505 / Assessing Technological Change

"The Rhetorical Public Sphere as an Ideal Model for Democratic Assessment of Emerging Technologies"

Shalom Chalson
National University of Singapore

New technologies present 'uncertainty', or the notion that the effects of these developing technologies are not path dependent or deterministic (Brey, 2012). The trajectory of a device's social or political effects cannot, therefore, be easily predicted. Whereas Philip Brey attempts to construct a system to forecast these effects in spite of this uncertainty, I suggest that the rhetorical public sphere presents an ideal structure for a robust engagement with the, at times, unforeseeable ethical implications of emerging technologies.

"Revolutionary Dreams: Epochalism, Inevitability, and Future Essentialism in Imagining the Fourth Industrial Revolution"

Kasper Hedegård Schiølin
Harvard

This paper examines how The World Economic Forum has succeeded in rendering its vision of a 'fourth industrial revolution' into a powerful and influential sociotechnical imaginary shared and performed around the world by national governments as an innovation and development framework. By analyzing discursive strategies in the construction and reception of the fourth industrial revolution, the paper seeks to contribute to the conceptualizing of how visions of the future are made, how they travel and settle as policy frameworks in national contexts, and hence how defining the future becomes deciding it.

"Knowledge in the Making: Towards a value-sensitive design vocabulary for measuring and detecting technologies"

Holly Robbins,
Taylor Stone
TU Delft

Technologies that sense, quantify, and measure aspects of our environment are becoming more sophisticated and accessible. The benefits and challenges of these advancements are now moving beyond the lab and out into the world. This forces us to confront power dynamics underlying both the use of the technologies themselves and the information they produce, when considering how these technologies should transition out of the lab and become available for different publics. This paper considers the values at play in this transition by grounding its analysis on fieldwork, and offers a design vocabulary for how to responsibly innovate for this transition.

Wednesday May 22nd
Plenary Session: 1:30-3:00pm
MSC 2400

"Technoscience: Nature Enters History"

Andrew Feenberg
Simon Fraser University

Wednesday May 22nd
Session 10: 3:15-4:45pm
MSC 1400 / Transhumanism

"The Utopia of Universal Control. Technology and Power in the Transhumanist Paradigm"

Janina Loh University of Vienna

Trans- and posthumanism are two heterogeneous movements of the late twentieth century found in philosophical anthropology and philosophy of technology. At first glance, theorists in these fields, especially transhumanist thinkers, offer very attractive options regarding a potential transformation of the human being into something better: a smarter, happier, more beautiful person - in short, an all-around perfected version of oneself. Promises in this vein include assumptions concerning increased autonomy, power, and control over oneself and one's fate via technics. However, this transformation of man is dearly bought, owing to this idea of a universal power of control being accompanied by tendencies of oversimplification, passivation and category error.

“Teilhard and Transhumanism: What They Have to Teach Each Other”

Timothy Clancy

Gonzaga University

Both Teilhard and Transhumanism offer technophilic extrapolations of the co-evolution of humanity and technology. While sometimes conflated, Teilhard’s Omega Point and transhumanism’s Singularity have some instructive differences. Teilhard can learn from transhumanist extrapolations of extended cognition that intelligence and self-consciousness need not be co-extensive. On the other hand Transhumanism can learn a more expansive and positive attitude to matter and evil. Humanity’s material condition is not simply a limitation to be transcended and evil need not be eliminated but can be redeemed in a richer more meaningful life.

“Inventing New Modes of Being Human for the Digital Age”

Johannes Schick Universität zu

Köln

Technological development has produced a material and digital infrastructure that can be characterised as artificial body in the terminology of Henri Bergson. This body, however, is seemingly transcending human capabilities.

While formerly, as homo faber, human beings did hold their tools in their hands, automatisations have led to an externalisation of manual and mental operation and created a machinery that appears to be independent and out of control of human beings. Instead of (re)gaining control and power over the network, Gilbert Simondon suggests that human beings create a symmetrical relationship with technology. This form being human in the digital age – crystallised in the notion of a technological humanism – requires open forms of participation. This paper explores the skills, practices, human and non-human actors that are necessary to realise this positive utopia.

Wednesday, May 22nd

Session 10: 3:15-4:45pm

MSC 2401 / Technology and Warfare

“Drones, UAV’s, and the Phenomenological Reconfiguration of Space”

Richard Wilson, Towson University

Michael Nestor, The Hussman Institute For Autism

Phenomenological description and analysis is focused on the interpretation of lived experience. The aim of Phenomenology is to clarify human situations, events, meanings and experiences as they are experienced in everyday life but which are typically unnoticed while they lie below the surface of self-conscious awareness. The way in which drones and UAV’s condition and alter everyday lived experience of space and place, as well as our consciousness of space and place, has remained beneath the surface of much of the discussion and analysis of drones. The following analysis will be a phenomenologically based analysis of the lived experiences of users and targets of drones and their experiences of space and place as they are affected by drones and UAV’s. This Phenomenological analysis provides the foundation for an exploration of the ethical issues that arise due to the alteration of space and place created by the use of drones.

"Tools of imperial power: a politically non-neutral assessment of weaponized drones"

John C. O'Day

Texas A&M

I will attempt to break the logjam in debates over combat drones by articulating a position I refer to as anticolonial realism. Rather than assess drones in the abstract, either from a framework of the moral status of technology or

a positivist application of international humanitarian law, I argue that combat drones and the philosophical/legal questions they evoke must be evaluated in situ; that is, as tools designed for the furtherance of US empire. In so doing, intractable debates over whether drones are immoral or illegal give way to an account of the technology rooted in history and material conditions.

"Technologically Assured Doom: Simulations of Increasing power"

Mihály Héder

Budapest University of Technology and Economics

The essence of technological progress is that individuals and societies gain ever increasing level of control over their surroundings, their bodies and even over their own facts. Yet, the planet, our shared resource, is not getting bigger. This talk will present a multi-agent simulation to model the consequences of gradual increase in power

of individual agents to the environment that sustains them both physically and epistemically. The result of these simulations is an attempt to answer just how much more powerful we can get without a catastrophe. Also, it might help us find technological and non-technological answers to the situation.

Wednesday, May 22nd

Session 10: 3:15-4:45pm

MSC 2405 / Technology and the General Public

"Design for values in architecture: the question of trade-offs"

Sara Eloy, Instituto Universitário de Lisboa

Pieter Vermaas, TU Delft

In this paper we consider computer tools for architectural design based on shape grammar design systems and evaluate the advantages and disadvantages of handing over these tools to inhabitants for the design of refurbish-ments of their apartments. This evaluation is qualitative by considering the values of inhabitants, architects, and cities that are affected by this hand-over. We present shape grammar design systems as a technology that enables design for values in architecture. Such a system also presents a trade-off between the values of inhabitants, archi- tects and cities. We end questioning when to accept trade-offs between the values as tenable.

"Technology, Power and Nihilism"

Bill Maker

Clemson

Depicting our essence as laboring, the rational capacity to interact creatively with nature, the young Marx depicted history as our technologically effected liberation from all alienation through the elimination of alienated labor, thereby enabling abundance, peace and freedom. Nietzsche, and later Horkheimer and Adorno, saw a darker, dystopian fate in our technological instrumental powers. For Nietzsche, the Dionysian becoming of creative destruction, cosmic Will to Power, underlies the

twofold Apollonian illusion of a stable world of objective beings and an objective domain of rational moral guidelines. This illusion is doomed to collapse, plunging us into the nihilistic chaos of creative destruction fueled by technology geared to war. The neo-Marxists Horkheimer and Adorno articulated an insidious linkage of technological power effected by instrumental reason as turning humans into manipulable, commodified objects, things controlled and used to produce wealth and power under capitalism, rather than free persons. Missing from the picture is a Hegelian account which argues that reason can effect liberation from instrumentality and conceptualize a social, economic and political order of freedom and justice, one which we can attain through our own actions in the world.

Wednesday, May 22nd

Session 10: 3:15-4:45pm

MSC 2502 / Panel: Field Philosophy East and West

Chairs: Adam Briggie and Robert Frodeman

"A Chinese Field Philosophy Initiative: the Emergence of Philosophy of Gong Cheng"

Yin Wen Juan

Northeastern University, China

The philosophy of Gong Cheng (also translated as philosophy of engineering) is growing in importance in China. This essay will recount how Gong Cheng emerged in the first years of the 21st century, and what its methods and goals are. The article will offer a comparison between field philosophy and the philosophy of Gong Cheng, arguing that the philosophy of Gong Cheng is in some sense a Chinese version of field philosophy. Why have these two similar approaches appeared at approximately the same time? Is it because of the inner crisis of philosophy itself, or does it say something about the development of modern society? The article will end with a discussion of how and where field philosophy should go next.

"The Genesis of a Field Philosopher"

Robert Frodeman

University of North Texas

My efforts in field philosophy have fallen into two parts - the working out a distinct, non-disciplinary, philosophical approach to problems across society, coupled to attempts to institutionalize this approach within the academy. Field philosophy is a genuine innovation within the philosophical tradition. While having a number of antecedents, field philosophy provides a distinctive philosophical account of the history of philosophy. It highlights the disciplining of philosophy with the creation of the modern research university, and it offers a description of a distinctive form of philosophical practice. Now in dialogue with contemporary Chinese philosophy, the question arises of whether or to what degree field philosophy changes within different cultures.

"Field Philosophy as Liberation Philosophy"

Jeff Gessas and Adam Briggie, University of North Texas

In this essay, we think about field philosophy as a liberatory practice. We do so by drawing from the words and deeds of Paulo Freire and Martin Luther King, Jr. First, we use Freire's Pedagogy of the Oppressed as not only an example of field philosophy but also to draw attention to the concerns about power and liberation which field philosophers should think through. We argue that Freire's 'banking' model of education captures something crucial about disciplinary philosophy and his 'problem-posing' model offers new insights into field

philosophy as a mode of activity that problematizes expertise and authority. Then, we turn to MLK's four step process for nonviolent campaigns as a resource for conceptualizing both the methods and the normative commitments of the field

philosopher.

"Field Philosophy and China Environmental Philosophy Localization"

Fan Yangcheng

As a new philosophy, environmental philosophy in China doesn't belong to any specific disciplinary philosophy. That may let it have the advantage to develop a kind of field philosophy. Environmental philosophy development in China has several theoretical resources from western and eastern to depend on. But if it only focuses on theoretical abstraction and summarization, it will also face the crisis of traditional philosophy. This essay will discuss whether environmental philosophy localization in China can use field philosophy as a direction to face fact itself and what possible difficulties would be faced.

Wednesday, May 22nd

Session 10: 3:15-4:45pm

MSC 2400 / Panel: Paul Durbin and the SPT Legacy

Chair: Carl Mitcham

This panel is intended as something like a posthumous author meets critics session for Durbin's *Philosophy of Technology: In Search of Discourse Synthesis*. All SPT presidents (former and current), anyone referenced by Durbin in the book, and former students and collaborators are invited to participate in the panel or offer written comments. Confirmed panelists include Carl Mitcham, chair, Alex Michelos (2nd president of SPT), Joe Pitt (5th president), Larry Hickman (7th president), Paul Thompson (12th president), Don Ihde (who promises comments "Since 2005") and Deborah G. Johnson. Ana Cuevas, Albert Borgmann, and Langdon Winner have promised written comments.

Wednesday, May 22nd

Session 10: 3:15 - 4:45pm

MSC 2505 / Cognitive Technology

"Technology and Technique: The Technology of Thinking and Acting"

Bob Burch, Texas A&M

Ling Li, Central China Normal University

Discussions of technology have largely underestimated the importance of an extensive class of kinds of technology: the technology of thinking and acting. This paper focuses on this heretofore under-attended class of kinds of technology. Especially in a context devoted to the connections of technology with power, this focus is crucial: for the kinds of technology to which this paper attends have had and do have immense and often ill-understood power over human life, both to better the lot of humanity and to destroy our species. The types of technology examined (though they are discussed under separate headings and in separate sections) are not sharply distinct from one another: indeed, they mutually overlap and affect one another in manifold ways.

"Metaphysics as A Cognitive Technology"

Shane Wilkins

USDA

Technology extends our innate capacities, allowing us to do things we could not do otherwise. With a stout iron bar as a lever one can move boulder too heavy to lift with one's bare hands. A cognitive technology extends our innate cognitive capacities, allowing us to think about something we wouldn't be able to otherwise, e.g. understanding it, explaining it, predicting it, or so on. In this paper, I suggest that metaphysical concepts and theories are a kind of cognitive technology, which function to increase our power to make sense of our experience. Viewing metaphysics this way provides a powerful normative perspective from which to evaluate the success or failure of metaphysical theories. However, all technologies are culturally creations, so if metaphysics is a technology, metaphysics too is a cultural product. The conclusion of the paper outlines a new, historically-sensitive, culturally-aware methodology that will allow metaphysicians to distinguish the shared human features of experience from the powerful historical, political and cultural prejudices that masquerade as common sense.

"Technics and Agency: the pluralism and diversity of technē"

Jason Tuckwell

Western Sydney University

One of the orienting claims in Yuk Hui's *The Question Concerning Technology in China*, is that an adequate accounting for the pluralism of technicity remains forthcoming. Hui brings this to our attention by arguing that a cosmological dimension, animate in the evolution of technology, leads to distinct 'local' technicities; this should be contrasted to the consensus that technology is a universal phenomena. In this paper, I would like to consider another source for Hui's technical pluralism, by arguing that functional differences inhere within the technical, itself. What this implies, is not only a reconsideration of technic's 'universality', but a reconsideration of the anthropomorphism implied in the image of homo-faber: what defines technicity and technology as an immanent, extensive and human-exclusive prosthesis (Heideggerian 'to-handedness'). In order to do so, I return to Aristotle's primary (or primitive) centralisation of the technite, to argue that his causal accounting of technics should not have been restricted exclusively to the human, but rather considered as a general property of how agents deviate primary processes.

Wednesday, May 22nd

Presidential Keynote: 4:45-5:45

MSC 2400

"The Tech Philosopher's Tools: Media, Metaphor, and Performance"

Mark Coeckelbergh, SPT President,

University of Vienna

Philosophers of technology do not only think about technologies and media; they also use them. This talk invites us to reflect on the tools philosophers of technology use in and for their thinking. It considers transdisciplinary work, including collaborative projects with engineers and artists, and discusses the use of language and metaphors in thinking about technology. This leads up to a presentation of new work on performance metaphors for philosophy of technology and an exploration of its implications for thinking about the social and power dimensions of technology.

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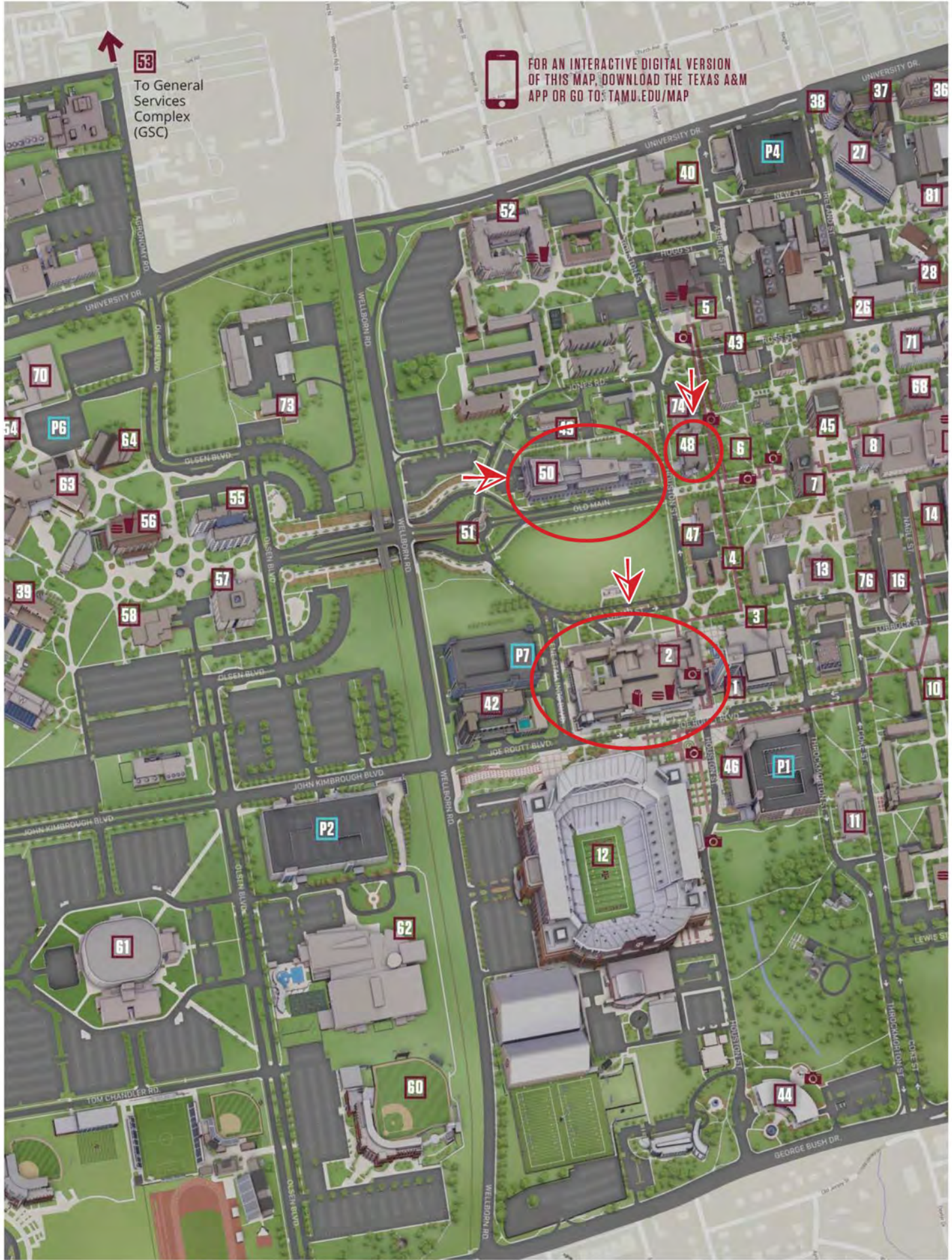
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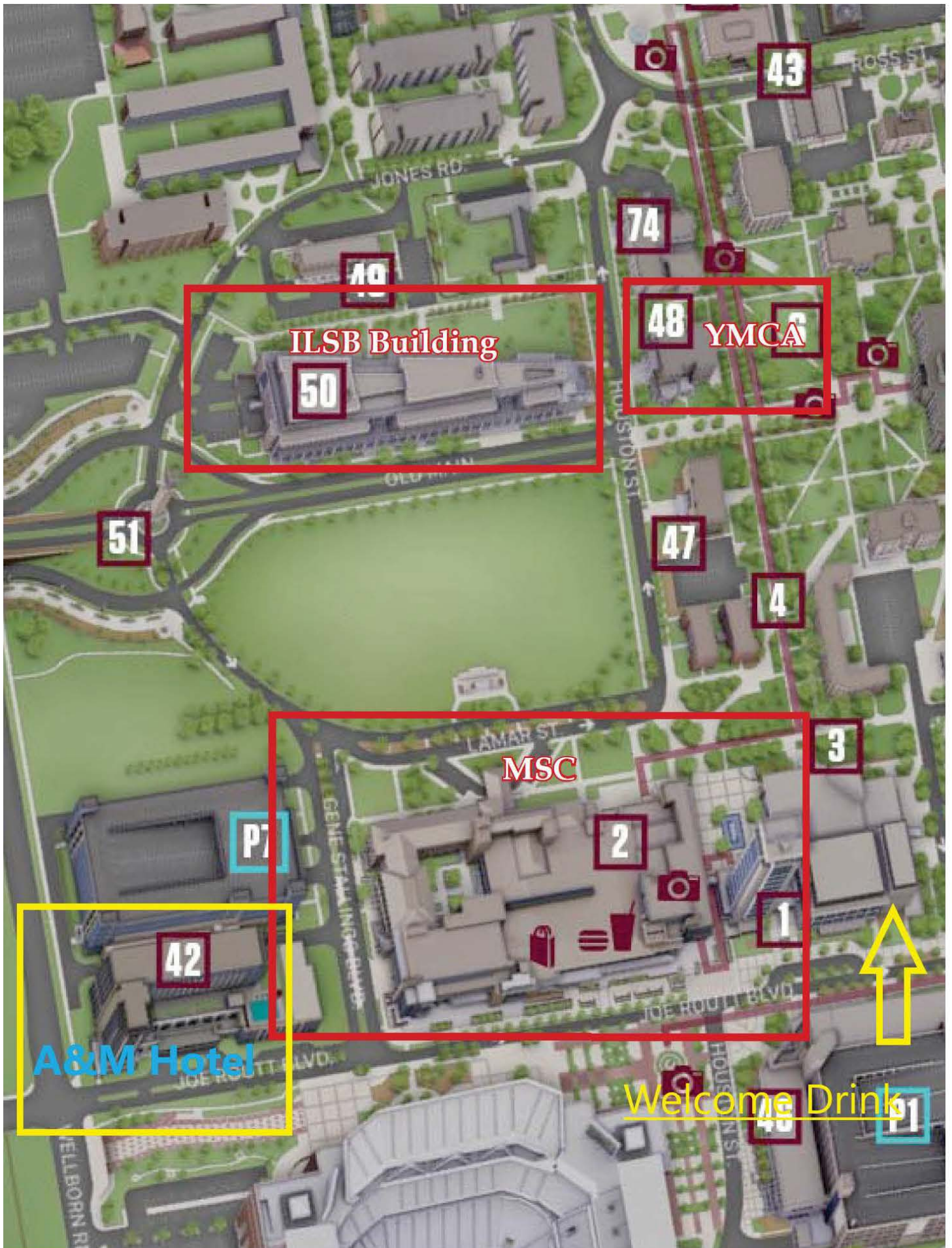


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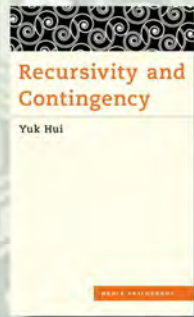
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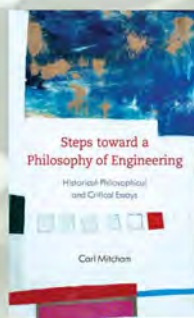
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