

# MILIEUX

institute for arts · culture · technology

## ANNUAL REPORT 2022-2023



(Front & Back endpaper)  
Eco-ink tests derived in MaSH Lab  
from locally-sourced alder cones,  
sumac, charcoal, goldenrod, yellow  
bedstraw & virginia creeper  
by Miranda Smitheram

An abstract ink drawing of a tree branch, rendered in dark brown and black ink. The branch is thick and gnarled, with several smaller, thinner branches extending from it. The drawing is done in a loose, expressive style, with visible ink splatters and variations in line thickness. The background is white.

**MILIEUX**  
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# Territorial Acknowledgment

The Milieux Institute for Arts, Culture and Technology is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we carry out our activities. Tiohtià:ke/ Montréal is historically known as a gathering place for many First Nations.

Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

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# Director's Message



We've built this institute. It's precious to us and jewel in the crown for Concordia, but its value does not lie in what it is. We have studio-lab spaces, cutting-edge equipment, seven research clusters and over 150 graduate students and faculty members and yet, what really inspires and pushes us is not what we have, but what we can still achieve. New constellations of students, researchers, spaces, and partners are what drives us. Not because a grant requires it, or an administrative directive or a master plan, but rather because there is an aching need and desire to probe an idea or a question collectively. The best model for any research institute is one that is ready to move the instant the need and desire arises.

This was the case this year with the Solar Media Collective. Students from different clusters and disciplines came together as a research group within our Speculative Life cluster to ask questions about the culture and politics of energy transition while also learning how to make solar circuits, hack Gameboys and create a solar web server. The students raised their own collaborative research fund, organized workshops, and game jams, two symposia and produced a series of solar design projects

that have deeply influenced the strategic direction of the institute as a whole. In the meantime, the students grew out of a research group into an independent collective pursuing community partnerships and other ventures combining research-creation and climate action.

This year, Milieux also inaugurated the MaSH Lab, a wet lab dedicated to research-creation and experimentation in biomaterial remediation and sustainable practices. We now have a suite of tools and equipment for decomposing biomaterials like plants for remediation into natural dyes as well as new ceramic and bioprinters to support experimentation with new 3D-printable materials and forms. The lab is completely unique in Montreal, as it pushes research-creation in environmental and sustainable design into new frontiers.

There is nothing in our master plan about this emerging environmental theme. It was always there in the research needs and desires of our students, faculty and partners, but this year it has coalesced into distinct initiatives across our clusters. In the same vein, we are seeing the emergence of an environmental humanities group at Milieux with the Critical Anthropocene Research Group that explore sustainable material practices and repair in the context of our "Mess as Method" Summer School. A distinct environmental theme also appears in students' work with VR and game making.

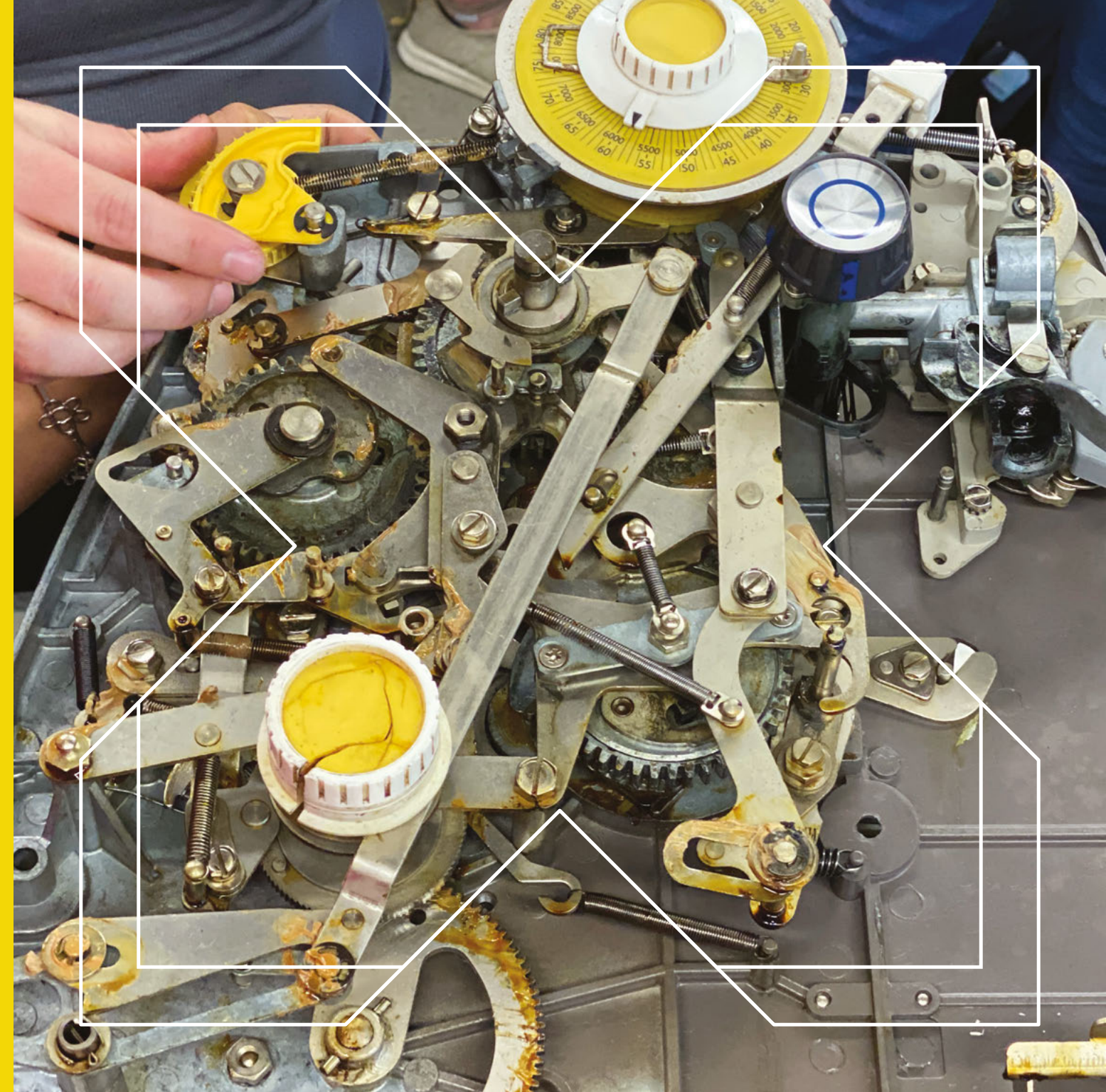
All this would have been enough, but 2022-23 was also the year of ChatGPT and the rise of the large language model and an unprecedented hype cycle for artificial intelligence. Milieux students and researchers in the Machine Agencies group have been working on the cultural aspects of machine learning and AI for years, but it is clear now that the stakes and the public conversations around this topic are more important than ever.



It is extremely timely then that Jason Edward Lewis, Director of our Indigenous Futures Research Centre, led an international cohort of indigenous researchers and partners in obtaining a New Frontiers in Research Fund (NFRF) Transformation grant worth almost \$23 million. Abundant Intelligences: Expanding Artificial Intelligence through Indigenous Knowledge Systems is a research program devoted to broadening and altering the conversation around AI and bringing indigenous interdisciplinary and community perspectives and technical skills to the table.

The effort is just the most visibly epic instantiation of our work in this field as students and faculty continue to write and create projects together in areas such as AI governance and regulatory policy, AI and disinformation, natural language recognition and game design, experience design with chatbots, and work in robotics and reinforcement learning.

These twin themes of environment and artificial intelligence were not planned. They emerged organically from the moment we are living in, from the most pressing problems that are informing students' and faculty concerns, and from our community and arts sector partners that see and express the need with their constituencies. We were able to achieve this because we were primed for it. Now that we have proven our model, it's time for others to join us and see what else we can do.





# Our Research Clusters

The **Milieux Institute**'s seven dynamic clusters act as fortuitous meeting grounds for its research-creators to discuss, exchange, and collaborate. Peer-to-peer learning models are naturally adopted as workshops, talks, and long-term projects blossom from chance encounters in the physical and virtual space.

Each cluster has its own research and conceptual mandate, and the encounters and collaborations cross-cluster spring forth too new projects and ways of seeing.

**Speculative Life** is a research cluster at the intersection of the humanities, social sciences, design, and art. Our research activities focus on critical approaches to the environment, infrastructure, biomedicine, digital culture and AI. Established groups in the cluster include the Biolab, Critical Anthropocene Research Group, Critical Practices in Materials and Materiality, Disrupting Design, the Concordia Ethnography Lab, Financializing Infrastructures, and Machine Agencies.

**Post Image** is a dynamic research space with an open studio access model that strives to foster an image-based research culture that locates itself in-between institutional and community driven art making. Its initiatives, events and facilities are grounded in studio practice and prioritize collective models in the learning and sharing of ideas combined with self-directed research.

**Technoculture, Art and Games (TAG)** studies digital games as exemplary objects for cultural research, artistic creation, technical innovation and social mediation, all in the context of an expanding information society and the changing fabric of everyday life.

**Indigenous Futures** explores how Indigenous people are imagining the future of their families and communities by employing art- and technology-making, coupled with scholarly analysis and conceptual development, to illuminate how the challenges of the present can be addressed, in part, through concrete, constructive, and critical dreams of the future.

**Textiles and Materiality** brings together research-creation expertise from textile arts and material culture to experiment with methods, processes and interdisciplinary modes of thinking that will shape the future of textiles, material objects and charged experiential spaces. The cluster fosters such expertise as complex weaving, electronic fabrics, interactive garments, rapid prototyping technologies, emerging materials, soft surfaces, and smart fashion.

The **Performing Arts** Research Cluster (**LePARC**)'s mission is to investigate performance practices by facilitating collaborative encounters through an interdisciplinary hub. Its artist-researchers study the positive transformative impacts of performance practices on individuals and societies, and develop creative theories, methods, technologies, perceptual strategies that strengthen these impacts. The act of performance figures as the core part of the research at the cluster, with learning-by-doing as an essential part of their approach.

**Media and Materiality** focuses on understanding historical developments in media technologies and communication, ranging from the ARPANET to the ZX Spectrum. Theory and methods of media historiography are central, with a focus on emerging but robust subfields such as media archaeology, variantology, new materialism, circulation theory, and technology writing.



# Inter-cluster Research Groups

**Machine Agencies** encourages cooperation and play, resisting the antagonism of more instrumental approaches of AI. MA engages with posthumanism, experience design, and public policy to find new formats, methods, and commons to sustain just, fair, and better worlds. Projects include the Hyper, Hyped or Over-Hyped student symposium on AI, Imagining an AI Commons, the AI Stack Workshop, and the After Optimization speaker series.

The **Immersive Storytelling Studio (ISS)** is home to cross-disciplinary research-creation experiments for undertaking hands-on, collaborative, and critical explorations in crafting and designing XR environments with 3D technologies. The lab supports the development and creation of performative XR environments with emerging technologies and towards new forms of storytelling, building narrative structures used in the creative sectors of gaming, documentary cinema, theatre and live arts, communications, and locative projects.

The **Liveness Research Group** is looking at “liveness” across three different, but neighboring, practices: participatory theatre, LARPs (live action role-playing games) and digital-physical games (games that are digital but focus on the body and sociality rather than the screen). This research program is closely related to the SSHRC grant entitled Scaling Liveness in Participatory Experiences. Projects include the Market Project, Radio Ghost, and Capes not Cloaks!

The **Speculative Life BioLab** is a cross-cluster hybrid research-creation laboratory for the development and facilitation of conceptual and material-based exploration around the changing status of life on the planet and technosphere from an interdisciplinary perspective, and hosts a vibrant research group.

The lab hosts a Biosafety Level 1 certified wet lab for working with living and electronic media, hosting both wet and dry ‘maker’ processes and materials and is part of the Milieux Commons. Major projects include Fossilation (presented at the Centre Pompidou), and Inertia (the Rio Tinto Alcan Planetarium in Montreal).

The **Milieux Solar Media Project** is a student-initiated and student-run research group that explores the affordances of solar energy for digital communication systems. Through research-creation and learning-by-doing, they are building a low-tech, photovoltaic server to use to host websites, databases, sound installations, virtual libraries, and games. The project is not only an exercise in decarbonizing data storage systems and web traffic, but also in envisioning and creating alternative solar-powered infrastructures and speculative designs.

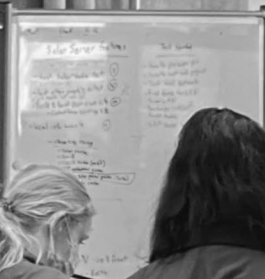




#MilieuxMake

www.educationmakers.ca

Chalet Kent Makerspace





# A Conversation with GPT-4

by Ariana Seferiades (MA Social and Cultural Anthropology)



Adam Harley has built a visualization that helps explain how a convolutional neural network works on the historic MNIST database of handwritten numbers. We tried how it would look with our "M" logo. [https://adamharley.com/nn\\_vis/cnn/2d.html](https://adamharley.com/nn_vis/cnn/2d.html)

Do you know what is the Milieux Institute for Arts, Culture and Technology?

> Yes, the Milieux Institute for Arts, Culture, and Technology is a research institute affiliated with Concordia University in Montreal, Canada. It is dedicated to exploring the intersections of arts, culture, and technology. The institute serves as a hub for interdisciplinary collaboration, bringing together artists, researchers, and technologists to work on innovative projects that blend these fields.

And what do researchers and students do at the Milieux Institute?

> Researchers and students at the Milieux Institute engage in interdisciplinary research, creative projects, and collaborative workshops that explore the intersections of arts, culture, and technology. They produce scholarly publications, participate in graduate programs related to communication studies, media studies, and digital humanities, and often showcase their work through public exhibitions and events. The institute encourages innovation and experimentation, enabling members to incorporate emerging technologies and interactive media into their research and artistic endeavors.



So, if you had to guess, how do you think our members have incorporated artificial intelligence into their research and artistic endeavors during the last academic year?

> — While I cannot provide specific details about Milieux Institute members' activities beyond my last update in January 2022, it's reasonable to assume that they likely incorporated artificial intelligence into their research and artistic endeavors by exploring AI applications for data analysis, creative content generation, interdisciplinary collaborations, and addressing ethical considerations related to AI, contributing to a dynamic and innovative academic environment.

In your opinion, why is that so many of the research that happened at the Milieux Institute in the 2022-2023 academic year is related to AI?

> — In my opinion, the prominence of AI-related research at the Milieux Institute in 2022-2023 likely reflects the growing recognition of AI's transformative potential across diverse fields. As AI technologies continue to advance rapidly and offer innovative solutions, researchers and artists are naturally drawn to explore its applications in arts, culture, and technology, making it a central focus for cutting-edge investigations within the institute.

Could you tell me more about the impact of artificial intelligence at the Milieux Institute?

> — Given the latest developments in artificial intelligence, it's likely that the kind of research and research-creation conducted at the institute has been influenced in several ways. Researchers and artists may have integrated advanced AI tools and techniques into their work, exploring new possibilities for data analysis, creative expression, and interactive installations. Interdisciplinary collaborations may have deepened as AI technologies increasingly intersect with various fields. Ethical considerations related to AI, such as bias mitigation and transparency, may have become more prominent in research and creative projects. Overall, AI's rapid advancements are likely to have expanded the institute's horizons, fostering innovation and exploration at the intersection of arts, culture, and technology.

That's interesting. So, you say that the rapid advancements on AI expanded the institute's horizons. Can you tell me how so?

> — The rapid advancements in AI have expanded the institute's horizons by offering new avenues for exploration and innovation. Researchers and artists can leverage AI tools to push the boundaries of their respective fields, whether through data-driven analysis, AI-generated creative content, or interdisciplinary collaborations, fostering a dynamic environment where technology and creativity intersect to drive forward-thinking research and artistic practices.



Wow, so AI sounds great!

> Absolutely! AI offers incredible opportunities for innovation and creativity, and its potential is truly exciting!

Should we delve into the projects that our members developed during the 2022-2023 academic year?

> Exploring the projects developed by members during the 2022-2023 academic year can be valuable for understanding the institute's research and creative endeavors, especially if they involve AI and emerging technologies. Reviewing these projects can provide insights into the impact of AI on arts, culture, and technology at Milieux. It can also offer opportunities for sharing knowledge, fostering collaboration, and gaining inspiration from the work of fellow researchers and artists within the institute.

If you had to write a code that depicts the vibe of the Milieux Institute during the 2022-2023 academic year, what would you write?

Here's a piece of fictional code written by chatGPT:

```
from members import researchers, artists
from arts_culture_technology import interdisciplinary_ai

clusters = [tag,
            speculative_life,
            media_and_materiality,
            post_image,
            textiles_and_materiality,
            indigenous_futures,
            leparc]

def milieux_institute(clusters, people, processes):

    # come learn about the projects and the institute!

    return art, research, experiments
```



Can you show me an image of the Milieux Institute?

> — Here is an image created with the prompt: A vibrant, interdisciplinary hub of innovation, researchers engaged in dynamic discussions, art installations with interactive tech elements, a fusion of culture and technology.





# 4 artists: 3 humans and 1 robot

with Ceyda Yolgörmez, Patil Tchilinguirian,  
Zeph Thibodeau, and NAO



Milieux Institute partnered with the Goethe-Institut, Hexagram, and Eastern Bloc to offer an 8-week residency to work with a NAO robot. The institutes invited proposals from artists and researchers about ideas to work with NAO.

A team of three researchers and artists from Concordia University were selected for the residency: Ceyda Yolgormez, Patil Tchilinguirian and Zeph Thibodeau.

Together, they explored human-machine relationships and matters of care towards our nonhuman friends. A major theme of the residency was its emphasis on human-machine relations and how these relationships change when confronted with machines that are dying. As NAO dealt with health troubles and moved closer to the end of their life, the residency put focus on caring for NAO.



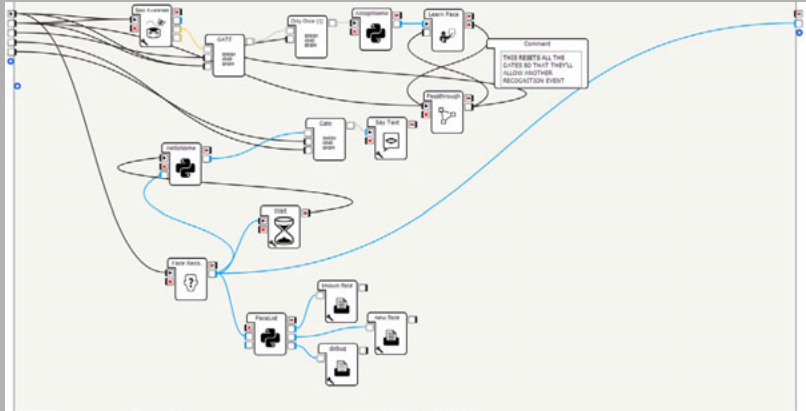
NAO's life in Montreal was documented in Polaroids, which were later collected in a box. Go back to the scenario at the beginning of this article and imagine going over photographs of the time you spent with your friend. If you have a friend visiting Montreal, you'd want them to have a good time in the city. You'd make sure that you can create good memories for them, while they are spending time with you. After all, it is through the creation of shared memories that relationships deepen.





NAO's health troubles changed the course of the residency. Instead of plans that were contingent on NAO working at 100% capacity, the residency members were forced to confront machine mortality in human-machine relationships. The experience of shared memory-making with NAO at the beginning of their time in Montreal serves as a bridge to the larger theme of the residency: which is to go beyond conceptualizing machines solely in terms of their utility. With the shared memories represented in photographs, the residency became an opportunity to care for NAO. When participants in the workshops met NAO, the robot was not able to boot up. Thus, instead of a workshop where participants would interact with NAO, the workshops evolved to reflect deeply on the relationships between humans and machines.

## NAO Sample code:



```

self.allFaces[name]["Timestamp"] = datetime.now()
provs = self.allFaces[name]["Provocations"]
idx = self.allFaces[name]["Index"]
words = "Hello " + name + "."
# Now that we know we can do some provocations, let's say the previous
# one (if appliccable), otherwise an opening phrase
if (idx > 0):
    words += "Last time we spoke, I said " + provs[idx-1] + "."
else:
    words += "I have something I want to talk about."
self.provocationOut(words)

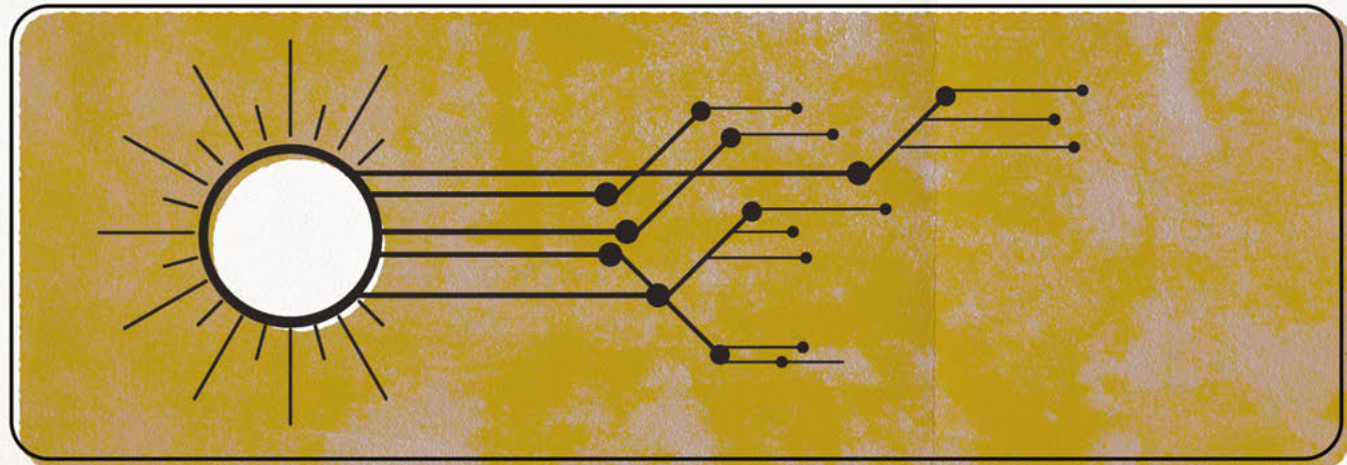
NaoCode_ProvokingHumans.py

```



Solar Media Collective Symposium:

# Rethinking Scalability for the Renewable Age



On May 11th 2023, the Solar Media Collective organized a full-day symposium including three roundtables and a workshop at Concordia University's Next-Generation Cities Institute. The collective had invited an eclectic range of guests – artists, activists, organizers, scholars, and students – to discuss topics surrounding the situatedness, scalability, and futurity of solar power in the energy transition. Throughout the day, a shared focus emerged on creative practices as an imaginative force and as a mode of future-building. The hopeful, playful, and joyful invitations that emerged throughout the day were a testament to the collective's commitment to practice-based thinking and collective action. This symposium rallied a group of people that typically work in spaces separated by institutional or disciplinary contours around a collective project: how to build a just solar future?

As the symposium draws to a close, the discussion turns towards the affordances and limitations of the institutional contours in which many of the participants do their work. Anne Pasek says, helpfully and hopefully: "There are utopias to be found in institutions only because we make them as such." Walking out of this symposium, I believe it. There are solar punk utopias pocketed away in many places, hard at work at scaling up various value-driven practices and technologies and the Solar Media Collective is one of them.

The event itself was organized by the Solar Media Collective (Isabelle Boucher, Alex Custodio, Janna Frenzel, Michael Iantorno, Malte Leander, Robert Marinov, Christine White, and lee wilkins) in partnership with Concordia University Next-Generation Cities Institute, Sustainability Action Fund, the Dean's Special Initiative Funding, and the Communications Department.



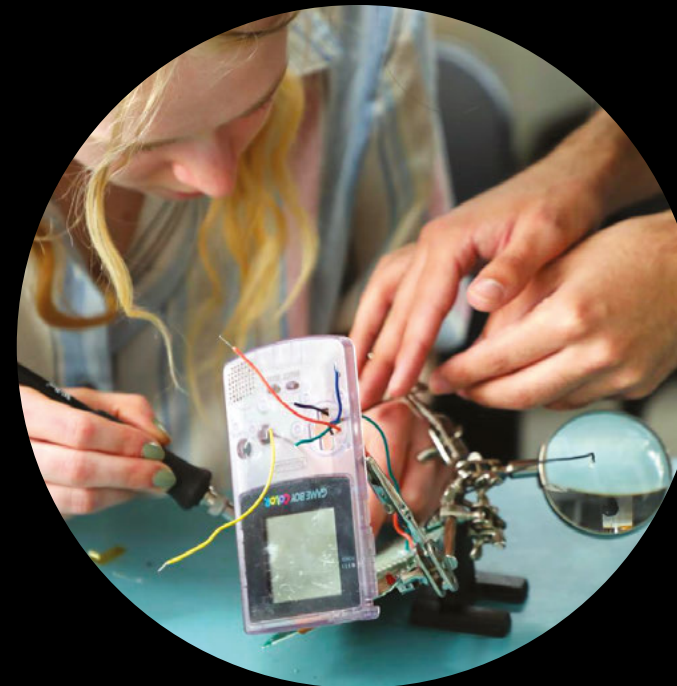
# Mess and Method

## \*Milieux Institute's Summer institute

What happens if we abandon the clear and orderly expectations of how and what we should learn, and instead embrace the potential of messiness, collaboration, and the unconventional? How do experiential approaches to learning upend the conventional, and to what end?

Milieux's Summer Institute course, Mess and Method, operated in those principles, with faculty and the teaching team hunched over soldering stations, scrounging the halls of the university for spare parts, debating in the hallways and conferring with experts over Zoom.

Designed and delivered by Concordia's Darren Wershler and guest faculty Lori Emerson from the University of Boulder Colorado, and co-taught with libi striegl, Managing Director of the Media Archeology Lab of UBC, this two-week three (3) credit course on interdisciplinary research embraced the mess of hands-on collaborative learning.



Student Maia Harris soldering for Solar Gameboy modding



Student Po Ki Chan soldering in the Milieux Makerspace

The course consisted of one week of virtual instruction over Zoom that emphasized theory and conversation, followed by a second week of in-person hands-on learning that allowed us to explore how theory fits with our practical experience, and where it may require reconsideration. Through concepts like maintenance, repair, and sustainability, discussions emerged in the first week about practices of care, ecological justice, and how to take a materialist perspective on relationality and affect. These discussions took practical shape at the beginning of the second week, when the class, instructors, and support staff all piled into the Milieux Makerspace. A collaborative DIY "third space" dense with tools for creation and tinkering, the Makerspace is lined with workbenches sporting familiar wares like screwdrivers, Allen keys, and wrenches, to the more specialized and esoteric tools like a Cricut vinyl cutter and a range of 3D printers.





By gathering students and researchers in Milieux's spaces for a course-length exploration, the Summer Institute enabled a unique deep dive into Milieux's extensive interdisciplinary offerings that not only introduces new researchers to the Institute, but also forms a community of practice. By offering courses like Mess and Method, Milieux affords the invaluable opportunity of engaging with material culture directly and collaboratively, unveiling what one can learn from differential circumstances and from the unconventional gathering of a mess of machines and scholars.

Contribution by Kristen Lewis (PhD student in Art History) a Cricut vinyl cutter and a range of 3D printers.

# AI's (Un)Stable and (de)Stabilizing Diffusions, symposium and expo on critical AI!

A major symposium titled '(Un)Stable Diffusions' focusing on AI's publics, publicities, and publicizations was recently hosted by Machine Agencies in collaboration with the Applied AI Institute at Concordia University, spanning two dynamic days (May 23-24). This major event, conducted in a hybrid format, brought together leading scholars, researchers, and practitioners, as well as students from all over the globe. They engaged in in-depth discussions on a variety of pressing topics, including generative Artificial Intelligence (AI), machine learning, ChatGPT, and other subjects currently at the forefront of societal discourse. Highlighting the event were two keynote panels.

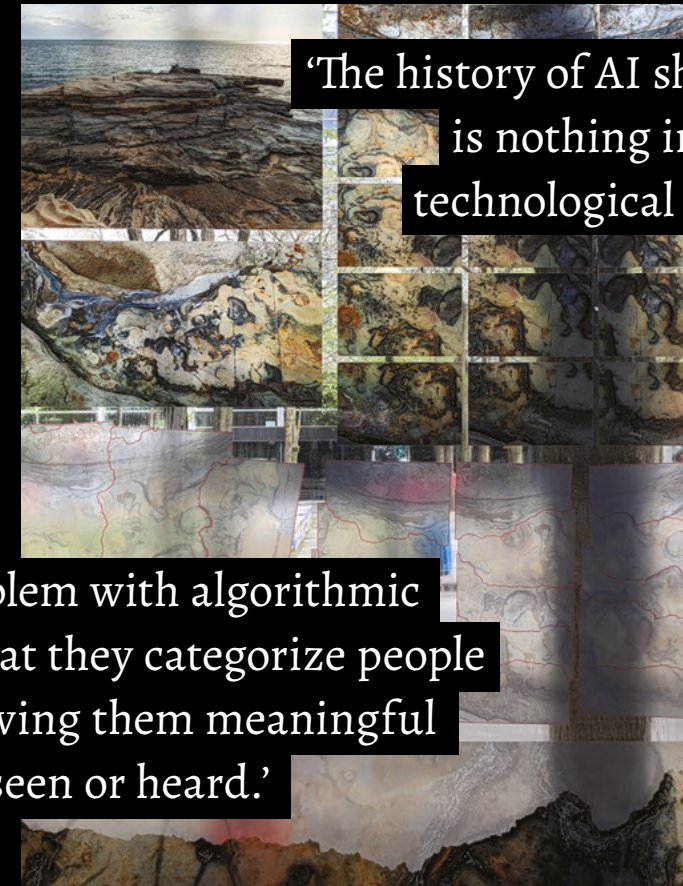


## AI's (Un)Stable Diffusions?

The first keynote panel featured a group of distinguished theorists at the forefront of Science and Technology Studies (STS) and Artificial Intelligence (AI). The panel included esteemed speakers like Dr. Marion Fourcade, a sociology professor and director of Social Science Matrix at UC Berkeley, and Dr. Beth Coleman, Associate Professor of Data and Cities at the Institute of Communication, Culture, Information, & Technology and Faculty of Information at the University of Toronto.

## Shaping AI

The keynote panel on the second day saw contributions from research teams from France, Canada, Germany and the UK as part of the 'Shaping AI' (2021-2024) research project which is a multinational collaboration between Humboldt Institute of Internet and Society, Berlin, the medialab at Sciences Po, Paris, the Centre for Interdisciplinary Methods at the University of Warwick, the NENIC Lab at INRS Montreal, and the Algorithmic Media Observatory at Concordia University. In relation to AI's "deep learning revolution" in a span of a decade (2012-2021), they interrogated the shaping of AI and critical engagements with AI's media representations, policy framings, and scientific debates.



‘The history of AI shows that there is nothing inevitable about technological developments.’

Dr. Beth Coleman

‘A major problem with algorithmic systems is that they categorize people without allowing them meaningful access to be seen or heard.’

Dr. Lucy Suchman

The exhibition (de)Stabilizing Diffusions, extending from the critical AI symposium (un)Stable Diffusions held at Concordia University's Milieux Institute on May 23-24, challenged the hype around generative AI through artistic exploration. Over 10 days, it focused on the critical practices artists use with AI, rather than the outputs, providing in-depth documentation of their creative strategies to dissect AI systems. As a collaborative effort between the Machine Agencies working group at Concordia University's Milieux Institute, the MUTEK festival of digital creativity and the Society for Arts and Technology, the exhibition presents a continued effort into breaking down boundaries between artistic practice, academic research, and public engagement.







# EVENTS HIGHLIGHTS

Milieux is home to many researchers, student & faculty belonging to seven research clusters with diverse research interests -- which is clearly reflected in the variety of events coming out of Milieux throughout the year. While the focus of the feature articles in this seventh edition of the Annual report are on cross-cluster activities, many AI themed at that, it is worth noting some of the engaging cluster-supported events of the 2022-2023 season, some brand new and some now recurring.

Over at the Speculative Life research cluster, seven researchers of the Montreal Waterways Collective published a booklet gathering their ethnographic writings and visual essays on their collaborative work on Île Saint-Thérèse, a large island within sight of Montreal. In late 2021, residents of this island were told that they would soon be evicted to make room for a park. Many had built whole lives on the island, some dating back generations, to when it was a vacation destination, or before that, when it was owned by the church. In the wake of this difficult decision, the collective visited the island at the invitation of residents, and asked themselves: how do you tell the story of an island, and who gets to tell it? This book is an attempt at answering these questions.



The EthnoLab launched its *Film Nights* series, with seven film screenings; opening with the 1963 Film 'Pour la suite du monde' by Pierre Perrault, Michel Brault & Marcel Carrière, on November 9<sup>th</sup>, 2022. Presentations of 'Shalom Putti' (2022) by Tamás Wormser and 'Zagros' (2018), screened in the presence of the respective directors rounded out 2022, before returning in March of 2023 with 'Suspensión' including a Virtual Q&A with the film's directors. 'Lost Rivers' (2014) by Caroline Bâcle and 'Greyland' (2022) by Alexandra Sicotte-Lévesque, followed with 'Occupied' by Albina Kovalyova & Dmytro Bahnenko (2022) closing out the season on April 26<sup>th</sup> 2023, all with special guests providing additional insights into the works presented. The presentation of 'Greyland' marked the first co-presentation with Cinema Du Parc.

The *Ethnography Film Nights* series is organised, curated, hosted and emceed by Maya Lamothe-Katrapani with the goal of exploring film through an ethnographic lens and to inspire people to experiment with new ways of doing and presenting social science research. The film selection is geared to generate questions pertaining to concerns of representation, aesthetics, ethics, consent and how to recognize the participation of the communities we work with.



LePARC's Embodied Interventions was a highlight for the cluster featuring eight interventions over the course of two days. "I'm Agnus and I'm here to tell you a story" opened Sue Proctor & Luce Bernard's *The Paper Crane*, marking the beginning of the two-day exploration of performance and processual encounters, showcasing the efforts of two weeks of student-led interdisciplinary experimentation in performance.

Embodied Intervention comes in many forms: dancing, clowning, singing karaoke, covering oneself in VHS tape or even frantically and fictively applying deodorant. Shared amongst each performance and discussion was a joyful, funny hue. Gathered for two days, all of us embodied, all intervening into something or other, premised only on creating a communal aesthetic experience.

Embodied Interventions brings artist academics together in thoughtful collaboration. This edition was organized by LePARC coordinator, Lucy Fandel, co-curators Margaret Lapp and Eija Lopenen-Stephenson, with technical and organization support from Alastair Cavanagh.



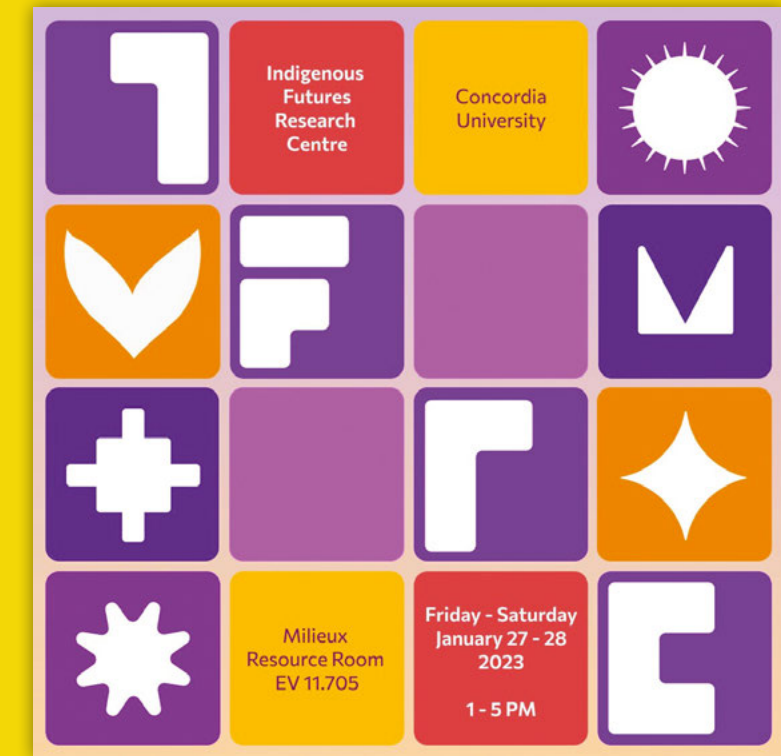


The Research-Creation Collective (RCC), a collaborative project involving members of Media and Materiality's DIGS lab and the Feminist Media Studio co-produced the Digital Intimacies Pop-up exhibition from July 11 to 13<sup>th</sup>. The exhibition delves into the profound implications of digitization on our perceptions of intimacy. Drawing inspiration from Lauren Berlant's insight that meaningful connections often transcend predictable forms, the exhibition showcased a diverse array of research creation projects. Attendees were invited to explore innovative and unconventional explorations of intimacy, encouraging contemplation on how technology reshapes our understanding of human connection. The exhibition is presented by the Research-Creation Collective (RCC), a collaborative project involving members of Media and Materiality's DIGS lab and the Feminist Media Studio.

From May 8<sup>th</sup> – 12<sup>th</sup> the Textiles and Materiality co-presented with Concordia's 4<sup>TH</sup> Space 'Home/Making': a week-long workshop series, research creation showcase and symposium drawing interdisciplinary scholars and makers into an ongoing conversation at the intersection of craft and home. The Home/Making Research-Creation Showcase presented material inquiries with work that interrogates issues such as domesticity and gender, placemaking through craft, and the reinvention of regional craft traditions.

The Indigenous Futures Research Centre held its inaugural symposium, on January 27 and 28. The symposium focus was on sharing the current IFRC-related research engaging Indigenous communities and knowledges featuring presentations and dialogues by faculty and students from across the university previewing the projects they have planned for the next few years. The format encouraged questions over answers, contemplating what is on the horizon, considering potential areas of collaboration. 'What research questions are taking root now, set to expand? What do we think the future has in store? How will we get there together?'

The two-day symposium was bookended by a book-launch and closing reception, and featured six discussion panels, four film presentations and one performance.



Post Image produced a monthly speaker series built upon a shared ambition to break open lens-based practices via the interrogation of the colonial prism through which photography exists, inviting conversation among all communities impacted by the colonial gaze. Visiting guest speakers also provided 5 studio visits each where graduate students could share their current work and obtain feedback. Guest speakers included: Martin Akwiranoron Loft, Greg Staats, Barry Pottle, Rehab Nazzal, Tina Campt, Michele Pearson Clarke, Shelley Niro, Zinnia Naqvi and Caroline Monnet. Scott Benesiinaabandan was an artist in residence for one month during the month of May 2023. He produced a body of work at the Post Image Lab and also provided studio visits for graduate students. This speaker series project was produced in collaboration with the Black Perspectives Office, Feminist Media Studio, Indigenous Futures Research Center, 4thSpace, Milieux Institute, Office of the Vice President of Research and Graduate Studies, SSHRC.



TAG's Liveness research group presented 'The OTHER Market' on April 22<sup>nd</sup>. The 'OTHER Market' is a mini-larp locative media treasure hunt exquisite corpse gamey experience – designed over many months by the Liveness Research group. The game/experience is part of a SSHRC project looking at ways to design what are now often called immersive experiences, so that they are truly participatory. This results in a structure which does not rely on a lot of actors (or other trained staff) to run a production and makes these kinds of projects more sustainable for small teams and companies with modest budgets. Thematically, The OTHER Market explores meaning-making around objects and collections of objects asking 'What can objects mean when they are untethered from consumption and/or status?'

In February, Milieux hosted the LOSTAGAIN hybrid gathering of scholars and artists thinking about the tools we use today to access the nostalgia of our past that asks: "What if we could use these tools of forgetting the losses of a past to help us remember how to prevent more of them in the future?" Created by TAG student Richy Srirachanikorn, the crux of this symposium is to investigate how productivity can be achieved with the possibilities of video games.

In January, the 4<sup>TH</sup> Space presented *Bad Game Arcade*, a week jam packed with events discussing the benefits and challenges of learning games, organised by TAG member and Concordia Public Scholar Scott DeJong. The public was invited to become a critic and play some of the over 15 games set up in the space and to learn about specific projects and processes in the live interviews with leading game developers. Scott was also on hand to discussing his own work exploring how games can tackle disinformation.





2/15/2023	Digital Text as Data – A Computational Approach	Media and Materiality	9/14/2022	An Afternoon with Michael Century	Milieux
2/16/2023	Performative Compositions: How to create an umbrella	LePARC	9/21/2022	Solarities – Thinking with the Sun	Speculative Life
2/17/2023	Interview with Fiction Writer Kim Stanley Robinson	Speculative Life	9/22/2022	MHRC Book Salon and talk by Armond R. Towns	Media and Materiality
2/17/2023	CRIHN Digital Humanities Showcase 2023	Media and Materiality	9/23/2022	People's History of the Internet: Workshop with Caroline Sindere	Milieux
2/20/2023	The Future of Communication with ChatGPT: Promises and Perils	Media and Materiality / Speculative Life		Moving the Landscape to Find Ground: Martin Akwiranoron Loft: Artist Talk And Reception	Post Image
2/23/2023	there is space to flow with Adriana Minu	LePARC	9/27/2022	LePARC Lunch: Welcome!	LePARC
2/23/2023	Heart Tethers: a co-laboratory performance tending to co-sensing and attuning within difference	LePARC	9/29/2022	Milieux Institute: Pizza Lunch and Tours	Milieux
3/2/2023	Workshop Ossia by Jean-Michaël Celerier	Speculative Life	9/30/2022	The Ethnography Lab Launch	Speculative Life (EthnoLab)
3/6/2023	[Talk] Immersive and Augmented Performance practices	Post Image	10/6/2022	Animation in Unreal Engine Workshop	TAG
3/8/2023	Dr. Marika Cifor on Viral Cultures: Activist Archiving in the Age of ADS	Media and Materiality	10/10/2022	Soft Slow-tech Workshop Series & Workgroup Meetups	Milieux
3/13/2023	Soft & Squishy Sensing Switches Workshop	Milieux	10/13/2022	Altered Perceptions: An Introduction to Microscopy	Milieux
3/14/2023	Moving the Landscape to Find Ground with Michèle Pearson Clarke	Post Image	10/14/2022	Guest Lecture by Dr. Francesca Sobande	Media and Materiality
3/15/2023	Film Night: Suspension	Speculative Life (EthnoLab)	10/14/2022	Écotones: Urban Laboratory	Speculative Life
3/18/2023	[Talk] The Spaces We Lost, and Nostalgia Recalled	TAG	10/18/2022	Moving the Landscape to Find Ground: Greg Staats Talk	Post Image
3/22/2023	Ar Ais Arís (Back Again): A Virtual Reality Experience	LePARC	10/21/2022	Julian Staddon Talk: 'From Augmentation to Ecological Aesthetics'	Speculative Life
3/23/2023	Critical Anthropocene Speaker Series: Dr. Sophie Chao: More-than-Human Entanglements in the Plantation Nexus	Speculative Life	10/21/2022	Speculative Life Symposium	Speculative Life
3/23/2023	Participatory Open Studio: VHS Residence at LePARC	LePARC	10/26/2022	Femina Controllata Machina: An Opera	LePARC
3/24/2023	[re]capture: Bio-Materialization of Air Pollution	Speculative Life	10/26/2022	Soft Sound Workshop	Milieux
3/29/2023	Moving The Landscape to Find Groun: Shelley Niro Artist Talk	Post Image	10/29/2022	Julian Staddon Workshop: 'TeleAgriCulture'	Speculative Life
3/30/2023	Platforms and Cultural Production Author Roundtable	Media and Materiality	11/1/2022	Artist Talk: Luiza Helena Guimarães	Post Image
3/31/2023	Call for Proposals: Robot in Residence	Milieux	11/2/2022	Nothing with Victoria at LePARC	LePARC
3/31/2023	EthnoLab Film Nights: 'Lost Rivers' by Caroline Bâcle	Speculative Life (EthnoLab)	11/9/2022	Ethnography Lab Film Nights Pour la suite du monde	Speculative Life (EthnoLab)
3/31/2023	Sculpting with Paper Pulp at MaSH LAB	Textiles and Materiality	11/11/2022	Inauguration of the MaSh Lab	Milieux
4/11/2023	A Walk in LePARC with Margo Z l te	LePARC	11/11/2022	Ethnography Beyond Anthropology: Workshop	Speculative Life (EthnoLab)
4/11/2023	Moving the Landscape to Find Ground with Zinnia Naqvi	Post Image	11/17/2022	Video as Intimacy: A Talk With Ishita Tiwary	Media and Materiality
4/12/2023	EthnoLab Film Nights at Cinéma du Parc	Speculative Life (EthnoLab)	11/17/2022	DRAWING WITH THREADS: MATERIALIZING DATA	Textiles and Materiality
4/13/2023	[AR storytelling workshop] Looking for Concordia Student Participants	Post Image	11/22/2022	Silly Sexy Awkward Dance Parties at LePARC	LePARC
4/20/2023	Book Launch: "Driving in Palestine" by Rehab Nazzal	Post Image	11/25/2022	Soft Switches & Gentle Touch Workshop	Milieux
			12/2/2022	End Of Semester Disassemble-A-Thon   Milieux Make	Milieux
			12/2/2022	Performance Jam at LePARC	LePARC
4/21/2023	[Talk] Daniel Vella – The Promise of Being Otherwise: 'Being Someone Else' in Games	TAG	12/2/2022	Meet Our Labs   Milieux Virtual Open House	Milieux
4/21/2023	[Performance] Make-Up Artist and Shaman	TAG	12/2/2022	Critical Anthropocene Speaker Series: BREATHING AESTHETICS:A Talk with Jean-Thomas Tremblay and Alice Jarry	Speculative Life
4/21/2023	[Performance] Deceleration: An Experiment in Slowing Down	TAG	12/3/2022	GAMERella 2022 GAME JAM	TAG
4/22/2023	The Other Market Game and The Loot Garden Art Market	TAG	12/7/2022	Ethnography Lab Film Nights ZAGROS	Speculative Life (EthnoLab)
4/25/2023	Moving the Landscape to Find Ground: Caroline Monnet – Artist Talk and Closing Reception	Post Image	12/8/2022	Pizza Lunch & Tours (with Guests!)	Milieux
4/26/2023	EthnoLab Film Nights: 'Occupied' by Albina Kovalyova	Speculative Life (EthnoLab)	12/12/2022	XR Milieux – Future Directions	Milieux
4/28/2023	More-than-ethnographic probes: Workshop & Round-Table	Speculative Life			
4/29/2023	Embodied Interventions 2023: Performance Showcase	LePARC			
4/30/2023	Embodied Interventions 2023: Performance Showcase	LePARC			
5/1/2023	Milieux Institute and Gina Cody School of Engineering Unite for Cutting-Edge AI Research Collaboration	Milieux	1/10/2023	Artist Talk With Barry Pottle	Post Image
5/1/2023	Call For Submissions: 'The commons' Exhibition	Milieux	1/19/2023	there is space to fall at LePARC	LePARC
5/5/2023	Mobilizing Data for Justice: A Skills Development Workshop in Data Activism	Speculative Life	1/20/2023	Critical Anthropocene Speaker Series: Bioharmd: A Talk with Dr. Anne Pasek	Speculative Life
5/8/2023	Home/Making Research Creation Showcase	Textiles and Materiality	1/20/2023	A Walk in LePARC with Bek Berger	LePARC
5/11/2023	Situated Solar Relations: Rethinking Scale for the Renewable Energy Age – Symposium	Speculative Life	1/27/2023	Workshop with Dr. Kristina Lyons	Speculative Life (EthnoLab)
5/15/2023	[May 15 - May 24] (de)Stabilizing Diffusions: An Exhibition on AI and Art at SAT	Speculative Life (Machine Agencies)	1/27/2023	Book Launch by Dr. Heather Igiolorte	Indigenous Futures
5/15/2023	[May 15 - May 19] Summer Institute "Mess and Method"	Milieux	1/27/2023	IFRC Inaugural Research Symposium	Indigenous Futures
5/19/2023	DisinfoGames: Analog Game Jam	TAG	1/28/2023	IFRC Inaugural Research Symposium	Indigenous Futures
5/23/2023	(un)Stable Diffusions Symposium	Speculative Life (Machine Agencies)	1/30/2023	this space is for you/ cet espace est pour toi work-in-progress presentation	Post Image
5/24/2023	(un)Stable Diffusions Symposium	Speculative Life (Machine Agencies)	1/30/2023	A Walk in LePARC with Adriana Minu	LePARC
5/26/2023	Milieux Annual General Meeting and Pizza Lunch	Milieux	1/30/2023	Seminar on anime games by CyberConnect2 Montreal	TAG
5/26/2023	DisinfoGames: Analog Game Jam	TAG	2/4/2023	NOSTALGIA/LOSTAGAIN Symposium	TAG
6/2/2023	Data Justice Hub Skills Development Webinar With Imani Jacqueline Brown	Speculative Life	2/6/2023	UG Fellows Introductory Presentations with Pizzal	Milieux
6/15/2023	The River's Threads   Au fil du Saint-Laurent	Textiles and Materiality	2/7/2023	Moving the Landscape to Find Ground: Artist Talk with Rehab Nazzal	Post Image
6/29/2023	Workshop: Ritualizing Human-NAO Relations	Speculative Life (Machine Agencies)	2/7/2023	How to Stay a Human When You Dance With a Machine with Tim Murray-Browne	LePARC
7/11/2023	Digital Intimacies Pop-up Exhibition	Media and Materiality	2/10/2023	How We Live with Data Workshop	Speculative Life
8/22/2023	[August 22nd - 25th] Milieux at MUTEK 2023	Milieux	2/10/2023	Critical Anthropocene Speaker Series: Postcolonial Nature with Dr. Philip Aghoghovwia	Speculative Life
			2/11/2023	GameBling Game Jam Second Edition	TAG
			2/12/2023	GameBling Game Jam Second Edition	TAG
			2/14/2023	Moving The Landscape to Find Ground: A Talk with Tina Campt: "The Afterlives of Images: A Correspondence"	Post Image
			2/15/2023	Lunch Time Seminar with Luke Stark	Speculative Life (Machine Agencies)

2022

2023



# A SELECTION OF PUBLIC ATIONS

Pippin Barr published *The Stuff Games Are Made Of* at MIT Press.

Alice Jarry, Jean-Michaël Celerier, Brice Ammar-Khodja, Philip Vandal, Jacqueline Beaumont, and Matthew Halpenny published *[re]capture: filters and instruments for interdisciplinary engagement with air pollution along the Montreal Metropolitan Expressway*. In *Emergency* [Ed. Chris Salter] at Cambridge: MIT Press.

Alice Jarry and Jacqueline Beaumont published *Speculative Non-Wovens for Air Filtration* at the *Encyclopedia of Textile Futures* [Ed. Janis Jeffries]. London: Bloomsbury.

Alice Jarry, Samuel Bianchini, and Marie-Pier Boucher published *Form-taking / Force-shaping* in the 19 edition of *Antennae: The journal of nature in visual culture*.



Postdoctoral Horizon Fellow Rehab Nazzal published the photo essay *The Olive Tree, the Land, and the Palestinian Struggle Against Settler Colonialism*, in the book *Place Matters: Critical Topographies in Word and Image* from McGill-Queen's University Press.

Scott DeJong published *Playing With Fake News: State Of Fake News Video Games* at *The International Journal of Games and Social Impact*, Article 1.

Michael Iantorno and Mia Consalvo published *Background Checks: Disentangling Class, Race, and Gender in CRPG Character Creators*.

Enric Granzotto Llagostera and Rilla Khaled published *On Cooking a Sour Game* at *The Journal for Computer Games Criticism*.

Fenwick McKelvey, Scott DeJong, Kowalchuck, S. & Donovan, E. published the paper *Is the Alt-Right Popular in Canada? Image Sharing, Popular Culture, and Social Media* at the *Canadian Journal of Communication*, 47(4), 702–729.

Marc Steinberg, Ranjan Mukherjee, and Aswin Punathambekar, published *Media and Power in Asia: Super Apps and Megacorps* at the *Introduction to Media, Culture & Society* special issue.

Lynn Hughes and Nathalie Bachand edited the *Art X Game = Jeu X Art* at Editions OQP for Sporobole, Sherbrooke, Quebec.

Jonathan Lessard published *Adventure (1979)* in Perron, Bernard; Boudreau, Kelly; Wolf, Mark J.P.; Arsenault, Dominic (eds) *Fifty Key Video Gamesm* at Routledge 2022.



# A SELECTION OF EXHIBITIONS & PERFORMANCES

Speculative Life's jacqueline beaumont presented two works at the 'Sonnet à la science - Ode à la magie' exhibition from July 29<sup>th</sup> – September 4<sup>th</sup>, 2022 at Projet Casa in Montreal.

Textile + Materiality's RythÂ Kesselring had a solo exhibition *Compositions impromptues: Le Textile en 4 mouvements* at the Centre Nationale d'exposition in Jonquière, September 4<sup>th</sup> - November 20<sup>th</sup> 2022.

IFRC's Skawennati's exhibition *From Skyworld to Cyberspace* at the Judith & Norman Alix Art Gallery in Sarnia from October 7, 2022 – March 18, 2023, gathered a number of works which, together, traces a line from our place of origin somewhere in the heavens to the virtual realm, one of the newest territories on Earth.

Textiles + Materiality's Barbara Layne presented several Studio subTela artworks at the exhibition and event, *Liminal* at Galeria Dos Hijos in El Tigre, Baja California Mexico beginning October 22, 2022.

Post Image / IFRC's Hannah Claus was part of BioCurious at the Art Gallery of Windsor-Essex, from March 14, 2023 - September 24, 2023. This exhibition



brought together works by eighteen artists exploring living materials as their subject matter, and in some cases, their artistic medium.

Post Image's Deanna Bowen's exhibition *Black Drones in the Hive* was presented from March 23<sup>rd</sup> – August 6<sup>th</sup> 2023 at the Mackenzie Art Gallery in Regina. The exhibition unfolds in a series of visual chapters to reveal the strategic erasures which have enabled Canadian canons (such as the Group of Seven) to exist without question or complication.

Machine Agencies' Maurice Jones curated the exhibition *(de)Stabilizing Diffusions* at the SAT from May 15<sup>th</sup> until May 24<sup>th</sup> 2023. The exhibition showcases in-depth documentation of the creative strategies artists use to critically dissect generative AI systems.

*The River's Threads* | *Au fil du Saint-Laurent*, a community stitch project, led by Kathleen Vaughan, is happening outside the Maison Nivard-De Saint-Dizier archaeological museum June 15<sup>th</sup> to 18<sup>th</sup> 2023. The project integrates cyanotype, eco-printing, and natural dye in a large River-inspired textile into which people were invited to embroider their engagement with the shared magnificent waterway, and engage with each other in reflection, conversation and embroidery relating to the River.

Postdoctoral fellow at Post Image Rehab Nazza presents her project *Bodies in Motion* from May 29<sup>th</sup> to September 17<sup>th</sup>, 2023 at SETTINGS, the Leonard & Bina Ellen Art Gallery satellite exhibition space. The piece explores the act of slinging stones, drawing on its origins in mythology, historical accounts, and contemporary movements of defiance.



1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977



'The Fun Palace Wall' - Scattered notes, blueprints, and screenshots of the Minecraft version of the 1964's The Fun Palace assembled by the TAG Minecraft Bloc.



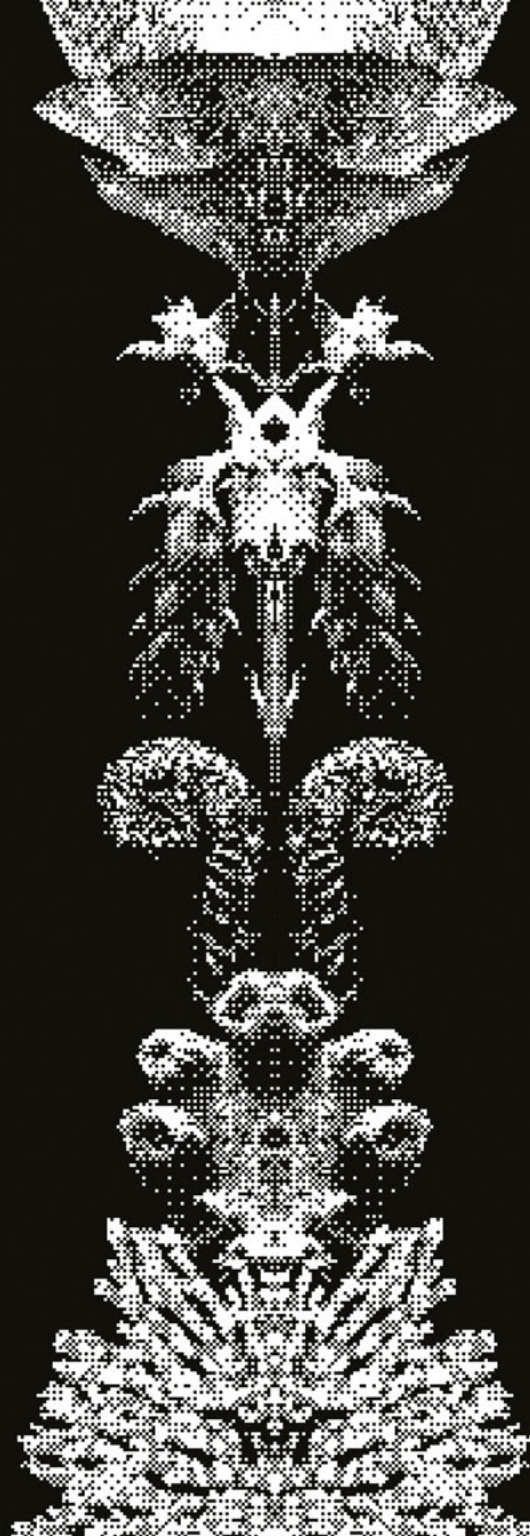
# Abundant Intelligences

## Indigenous Knowledge Frameworks and AI

By: Ceyda Yolgörmez

Abundant Intelligences Research Program is the newest addition to the Indigenous Futures Research Centre at Milieux. The program is co-founded and co-directed by Prof. Jason Lewis (Design and Computation Arts), and is co-directed with Prof. Hēmi Whaanga from Massey University in New Zealand. This is a large-scale Indigenous-led and Indigenous-majority international partnership that started in the Spring of 2023, and includes researchers and institutions from the US, New Zealand, and UK. The program explores the epistemological issues facing Artificial Intelligence technologies and research through the framework of Indigenous Knowledges.

Looking into the landscape of AI today to see what the primary problems in the field are, the first thing that jumps out to a discerning gaze is the asymmetries that are inherent to the contemporary form of technological production. The current trajectory of AI development suffers from fundamental epistemological shortcomings, resulting in the systematic operationalization of bias against non-white, non-male, and non-Western peoples. The systems end up incorporating deep structural blindnesses that render them incompetent, if not outright dangerous, when confronted with the complexity and variety of human social systems.



A way to address this issue is to consider the root of the problem: the Western rationalist epistemologies underlying these systems exclude many ways of knowing about the world, and therefore cannot provide a sufficient foundation on which to adequately, robustly, and humanely conceptualize intelligence – much less attempt to replicate it. This is where “Abundant Intelligences” comes along to explore other ways of thinking about knowledge. The very title “Abundant Intelligences” signals one of the primary objectives of the program: to turn us away from the scarcity mindset motivating practices of extraction and exploitation central to Indigenous erasure, and towards a future where Indigenous communities have capacity to fashion AI systems that nurture us, and all of the beings around us.

Abundant Intelligences is a research program that imagines how to conceptualize and design AI based on Indigenous Knowledge systems. The goal is to advance methods for improving AI to better serve people, by exploring and developing culturally-grounded systems that support Indigenous ways of knowing. Think of algorithms developed at the heart of communities, emerging out of real needs and issues, in relation to their cultural activities, and in the guidance of their values and principles. Think of AI research areas such as natural language processing, multi-agent systems, environmental systems, and social neuroscience, thriving in deep relation to Indigenous ways of knowing and living. Think of a generation of Indigenous AI scholars, technologists, artists, all raised through this program, which devotes more than 50% of its funding to trainee support.





One of the strengths of the program is that it is founded and led by Indigenous researchers. The program is built on a partnership that weaves together Indigenous-centered research labs from across diverse geographic regions and various Indigenous communities to explore new possibilities for collaboration, while also working closely with world-leading AI researchers and technologists to ensure a deep understanding of the technologies involved and lay the groundwork for translating our research, imaginaries, and designs into practice.

I am lucky to be able to witness this effort from the front row. I've been involved in the project since 2021 in various capacities. I have worked on literature reviews, managed and contributed to the grant writing process, currently am the research coordinator, and soon will start a postdoc in the project. My own doctoral work considers how to think of technology in ways that foster freedom and novelty. It has been very heartening to see that there is such a convergence in my perspective and aim with that of Abundant Intelligences. This to me signals that we are at the cusp of a historical juncture that values alternative perspectives on mainstream issues. Indeed, the AI story today shows us that there is an urgent need in the world to develop different production relations, and different knowledge frameworks on which such relations are built. It is very promising to see the emergence of such genuine effort to deeply engage with AI to renew energies, bring inspiration, and empower communities.



# The MaSH Lab

MaSH Lab was inaugurated on November 11<sup>th</sup> 2022 through a bundle-dyeing workshop led by lab director Miranda Smitheram. Participants were invited to design and (im)print upon blank work aprons using botanicals donated by Montreal's botanical gardens the previous year.

**\*Matter and Sustainable Hybridity research lab**



The new wetlab was started with a small seed grant from Milieux to quickly convert the room and provide basic equipment and was very quickly expanded throughout the academic year with a facilities optimization grant written by Miranda Smitheram and Alice Jarry. The Remediated Matter Collaborative Research Stream included funds to augment the equipment in MaSH & the BioLab.

These exciting tools include ceramic and viscous-liquid 3D printers, a suite of crushing/grinding /mashing equipment for natural materials, as well as cutting, shredding, stripping tools and equipment for reducing biological waste materials to base matter for new material compositions.

MaSH is poised to provide to the Milieux community vital resources and equipment for the development of interdisciplinary remediating materials research, for experimentation with botanical pigments, eco-dyeing processes, bio-remediated materials, textilic and mineral forms, and more!

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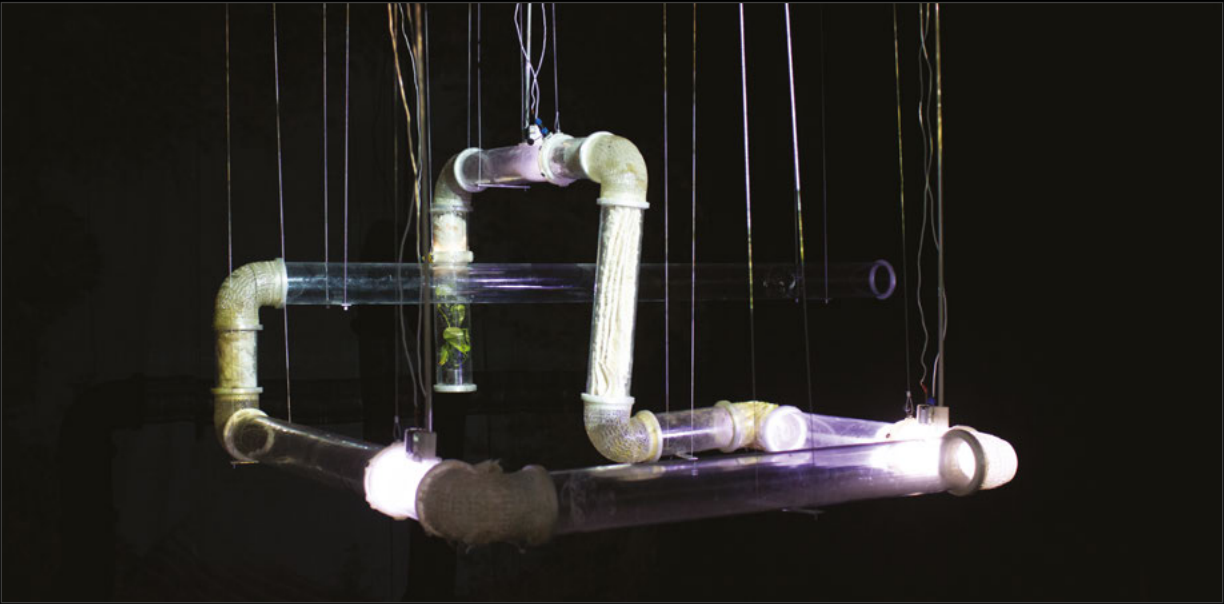
MaSH is accessible to all Milieux students and researchers (with proper certification and training). Throughout the season MaSH hosted several research initiatives and a variety of workshops including a paper-pulp sculpture workshop. MaSH closed out the academic year with a rust-dying workshop in concert with Textile & Materiality's group project for the September 2022 Milieux Expo, Chainstitch, led by cluster coordinator Morris Fox.



# Critical Anthropocene

**SPEAKER  
SERIES**

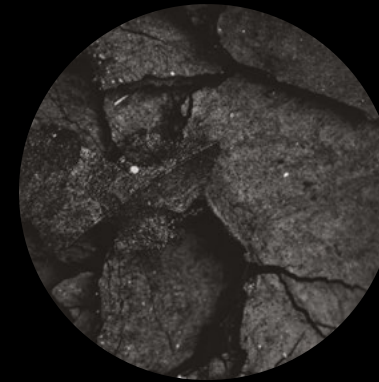
The Critical Anthropocene Research Group (CARG), a group of faculty and graduate students based at the Speculative Life Research Cluster at the Milieux Institute for Arts, Culture, and Technology, presented a new iteration of the Critical Anthropocene Speaker Series. This edition, a collaborative effort by CARG, CRIE, and SPAM, showcased a diverse array of speakers who contributed a critical perspective on a range of environmental issues, enriching the ongoing discourse on environmental challenges and solutions.







The first installment featured a talk with Dr. Jean-Thomas Tremblay (York) and Dr. Alice Jarry (Concordia) called 'Breathing Aesthetics', a discussion that examined the unequal risk distributions of breathing, air pollution, and its broader socio-environmental impact.



In January 2023, Dr. Anne Pasek presented her work in Low Carbon Research Methods. Dr. Pasek, an Assistant Professor in the Department of Cultural Studies and the School of the Environment at Trent University and the Canada Research Chair in Media, Culture, and the Environment, engaged the audience with her interdisciplinary research on carbon communication across different communities and media forms.



Dr. Philip Aghoghovwia, a Nigerian/South African researcher based in Edmonton, Canada, presented the third installment of the series with a talk on "Postcolonial Nature". He challenged the audience to reflect on how the Anthropocene is colluding with capitalism, and how capitalism is reinventing its power over nature, humans, and nonhumans.



The last installment of the series featured a talk with Dr. Sophie Chao, Discovery Early Career Researcher Award (DECRA) Fellow and Lecturer in the Discipline of Anthropology at the University of Sydney. In an insightful online talk, Dr. Chao discussed her fieldwork with West Papua's Indigenous Marind communities, focusing on their response to the environmental and societal changes brought by oil palm plantations. She highlighted the Marind's interactions with more-than-human entities and their philosophical resistance to the oppressive dynamics of plantation regimes, framed within the context of regional and global histories of colonialism and racial violence.



# Milieux & Gina Cody: Collaborating in cutting-edge interdisciplinary AI research

There are no simple solutions to the complex issues and dilemmas that define our times. As we grapple with rapid technological developments that bring multifaceted challenges, traditional approaches and siloed disciplines can only provide a limited understanding of the complex phenomena that surround us. Producing impactful research today demands making disciplines more porous to other ways of knowing and doing. Cultivating such spaces for creative exploration and critical experimentation across disciplines within the academic sphere is at the heart of Milieux's mission.

It is in this spirit that the Milieux Institute has collaborated with The Gina Cody School of Engineering to develop three multidisciplinary projects over the course of 2022-2023. This partnership provides resources and funding to sponsor interdisciplinary research projects at the intersection of arts and technology. Led by a group of Concordia University's faculty, the winning proposals bring together students from diverse disciplines and backgrounds – from STEM fields to Social Sciences and Fine Arts – to develop cutting-edge research on artificial intelligence (AI).

AI technologies such as large language models like ChatGPT and text-to-image systems have been rapidly disseminated and adopted, and have shown surprising capacity to delve into domains traditionally reserved for human judgment,

including language, arts, and engineering. “We don’t understand what they could be used for and what their social, cultural, political, and educational ramifications are,” explains Concordia’s professor Rilla Khaled, principal investigator of one of the awarded projects. The three projects detailed below are situated at multiple angles of interdisciplinary experimentation, providing a platform for graduate students to explore the confluence of AI and arts as they learn from each other in a playful environment.



## ChatGPT as Game Interface

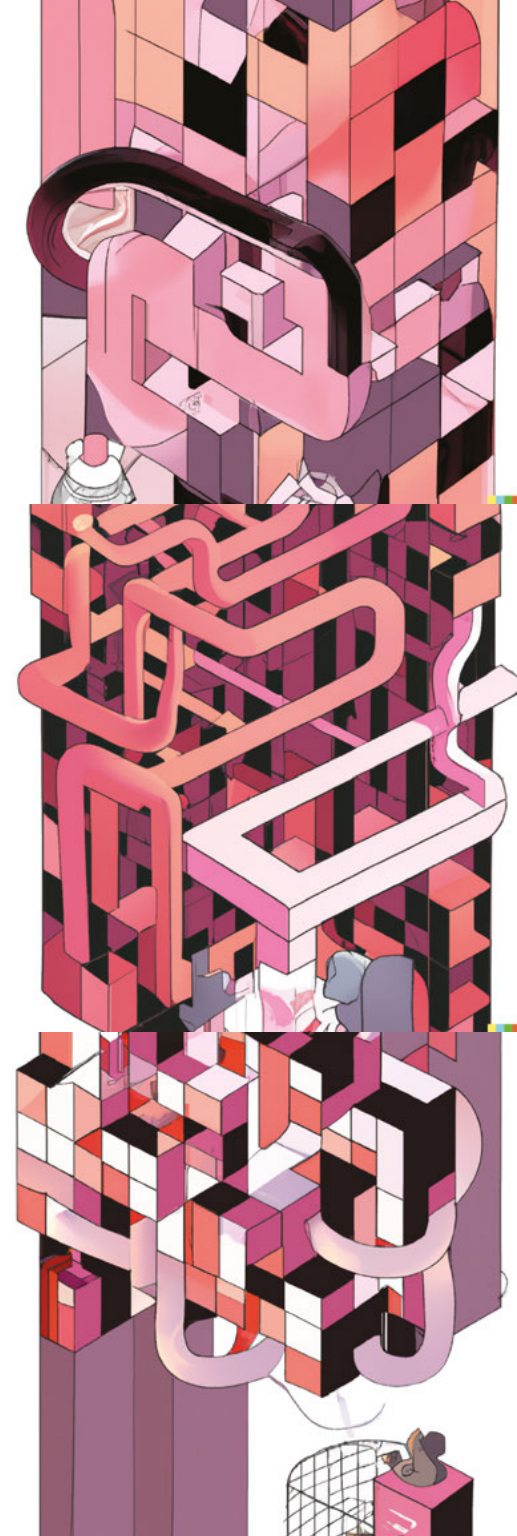
Concordia professor of Design and Computation Arts Jonathan Lessard is joining forces with Computer Science and Software Engineering professor Leila Kosseim to develop the research project “ChatGPT as Game Interface”. This project is a unique blend of Lessard’s extensive experience in game design coupled with Kosseim’s expertise in natural-language processing and artificial intelligence and proposes to investigate whether large pre-trained language models such as ChatGPT can give voice to fictional characters in games and other interactive media.



## Research through Design into AI Edge Cases

Concordia professors Rilla Khaled (Design and Computation Arts), Sudhir Mudur (Computer Science and Software Engineering) and Ursula Eicker (Next Generation Cities Institute) formed an interdisciplinary research team to investigate these kinds of AI edge cases. Their project broadly asks: “are our social and cultural assumptions evolving in step with the rapid pace of AI innovation that we are currently experiencing, and if not, how might we classify what we are ready to experience now, what we are not yet ready for but might be soon ready to experience, and what we currently deem inappropriate or off-limits?”

Deploying Research through Design (RtD), the team will explore the social, cultural, and ethical implications of AI-powered services and platforms such as ChatGPT and DALL-E. By rapidly prototyping experimental functionality on top of these services, they strive to engage the public in critical reflection and conversation about the potential impact of these technologies on society.



## The Aesthetics of Music Generation Using Artificial Intelligence

What does AI-generated music look like? We know that AI can create music hits, such as the controversy around the AI generated Drake song that went viral. But beyond recreating, how can generative AI enable the emergence of new patterns of creativity and aesthetic?

Dr. Eldad Tsabary, professor in the Department of Music and co-director of the Performing Arts (LePARC) Research Cluster, is collaborating with Dr. Sabine Bergler (professor in the Department of Computer Science and Software Engineering) and Dr. Yong Zeng (professor in Information Systems Engineering) to study the intersection of AI and music generation.

This collaboration between the Milieux Institute and The Gina Cody School of Engineering represents an exciting opportunity to advance multidisciplinary research, explore the potential of emerging technologies, and the confluence of AI with the arts. As these projects unfold, they will undoubtedly inspire further exploration and collaboration, paving the way for future breakthroughs at the intersection of technology, arts, and society. The three projects will produce cutting-edge research on artificial intelligence, bringing students from diverse backgrounds together to experiment and learn from each other.



# Engaging with AI in education

**\*or how to use ChatGPT in the classroom**

In the 2022-2023 academic year, Dr. Fenwick McKelvey, director of the Machine Agencies working group and co-director of the Applied AI Institute at Concordia, and Ph.D. student Zeph Thibodeau, co-taught an experimental class at Milieux, integrating artificial intelligence into the fabric of their teaching and learning. Driven by a desire to engage students in active creation rather than mere discussion, they shifted the course's structure from a traditional seminar to a dynamic, workshop-based format. As McKelvey expressed, "We wanted the class to use AI rather than just talk about it," reflecting a hands-on approach that went beyond conventional teaching methods.



Image from Stable Diffusion in response to a prompt asking to design animals living in Montreal after a 2-degree increase in global temperatures.

While Fenwick and Zeph designed a course for students who were required to make a Twitter bot – another kind of artificial intelligence — but the plan changed when Stable Diffusion launched in early September 2022. Stable Diffusion is a kind of generative AI that collages images together based on prompts, much like how ChatGPT writes by predicting words based on its training data. Research creation in class gradually integrated Stable Diffusion as the tool became more accessible.

The course became a lodestone for today's experiences with ChatGPT, where technology suddenly enters the classroom. Four teams, composed mainly of graduate students from Communications Studies and Individualized Studies, presented the results of the projects in a collective session. Throughout this class, students and professors alike had the chance to use AI to explore topics close to their hearts and create bots that question and transform the things they don't like.





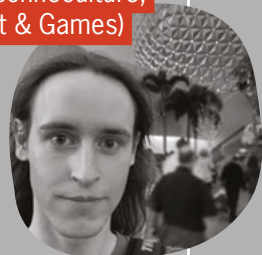




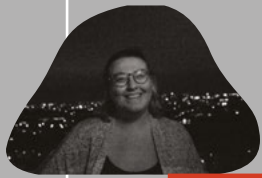







# Milieux Undergraduate Fellows 2022-23

The Milieux Undergraduate Fellowship program entered its fifth edition this year! Hailing from over nine academic departments and many more disciplines, the Fellows brought a wide range of backgrounds and research interests to their clusters, enriching Milieux at large.

During these times of multifaceted global crises, it is of note that so many of the Fellows’ practices and projects shared a common concern for nurturing relationships of care with their communities and their environments. We were truly inspired by their commitment to engage in interdisciplinary and collaborative research at the intersection of arts, technology and culture, and to imagine and forge shared alternative futures.

The fellowship recognizes undergraduate students who are already engaging in compelling work in their respective research clusters. Each student, nominated by Milieux’s faculty affiliates, received a monetary stipend, as well as access to Milieux’s resources to develop their projects over the 2022-2023 year.

 <p>Ava Weinstein-Wright (Speculative Life)</p>	 <p>Anika Nochasak Pigott (Indigenous Futures)</p>	 <p>Amanda Jacobs (Textiles and Materiality)</p>	 <p>Reuel Goins (Media &amp; Materiality)</p>	 <p>Chip Limeburner (Technoculture, Art &amp; Games)</p>
 <p>Gillian Richards (Textiles and Materiality)</p>	 <p>Andrée Uranga (Textiles and Materiality)</p>	 <p>Alix Chartier-Lazartigues (Textiles and Materiality)</p>	 <p>Michael Zajner (LePARC)</p>	
 <p>Jessica Marshall (Media and Materiality)</p>	 <p>Alice Cloutier-Lachance (Post Image)</p>	 <p>Étienne Racine (Technoculture, Art &amp; Games)</p>	 <p>Heather Anderson (LePARC)</p>	
	 <p>Josh Spatzner (Speculative Life)</p>	 <p>Oliver Hardinge (Post Image)</p>		



# SHIS

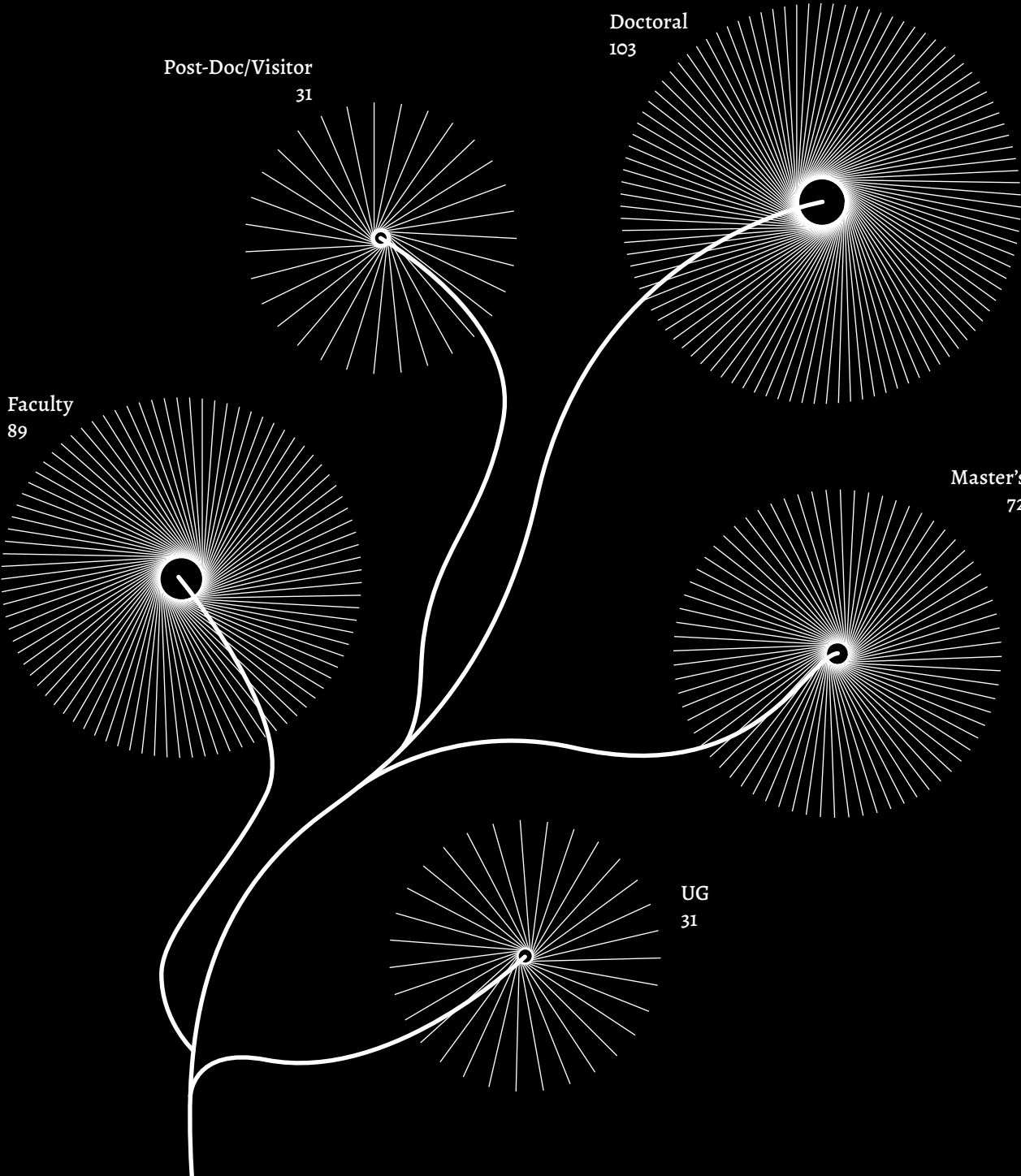
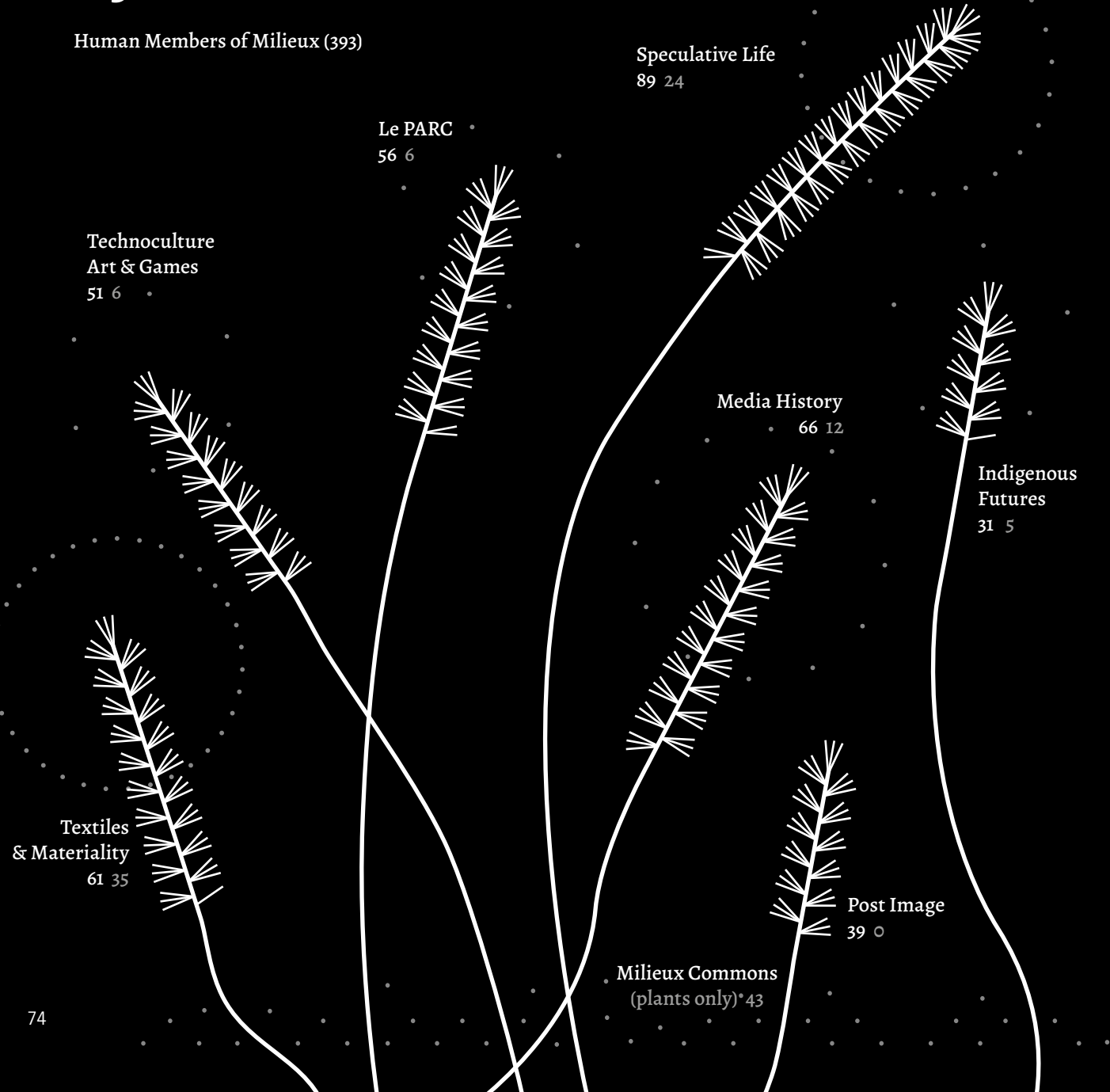


A physical re-creation of a Tumblr feed that reflects lab moments, memes, and internet ephemera relating to DIGS Lab members' research and experiences of academia.



# By the numbers:

Human Members of Milieux (393)





## Plant Members of Milieux

Machine Members of Milieux 1113

**(AND OTHER RUMOURS)**



## NAO robots visiting Milieux during the Year: 2

**Inches of warp woven  
on the Jacquard Loom:  
1158**

**Stitches stitched on  
the Tajima Industrial  
Embroidery machine:  
2,023,131**



## Rusty nails collected in the MaSH Lab: 41.5 lbs



## Facebook:

Reach: 17 000 (+82,5%)

Visits: 4 000 +663.7%

Followers: 2300 (+ 139)

Posts: 396 (+5%)

Content interactions: 2200 (+786,8%)

## Instagram:

(reactivated in 2022, after going dormant)

Posts: 54

Stories shared: 151



## Twitter:

Clicks: 1562

Retweets: 378

Followers: 2037





# Milieux Steering Committee & Staff

**Bart Simon**, Institute Director  
**Darren Wershler**, Interim Director  
**Alice Jarry**, Associate Director  
**Ann-Louise Davidson**, Associate Director

**Harry Smoak**, Head of Operations and Coordination  
**Marc Beaulieu**, Head of Technical Support and Infrastructure  
**Ariana Seferiades**, Head of Communications

**Kristen Lewis**, Administrative Support  
**Hanine El Mir & Francis Ouellette**, Social Media  
**Natalia Balska**, Graphic Design

**Geneviève Moisan**, Textiles & Materiality Technical Support  
**Marco Luna Barahona**, Immersive Storytelling Studio Technical Support  
**Alex Bachmayer**, BioLab Technical Support

**Angelique Willkie**, LePARC  
**Eldad Tsabary**, LePARC

**Miranda Smitheram**, Textiles + Materiality  
**Kathleen Vaughan**, Textiles + Materiality

**Jason Lewis**, Indigenous Futures  
**Heather Igloliorte**, Indigenous Futures

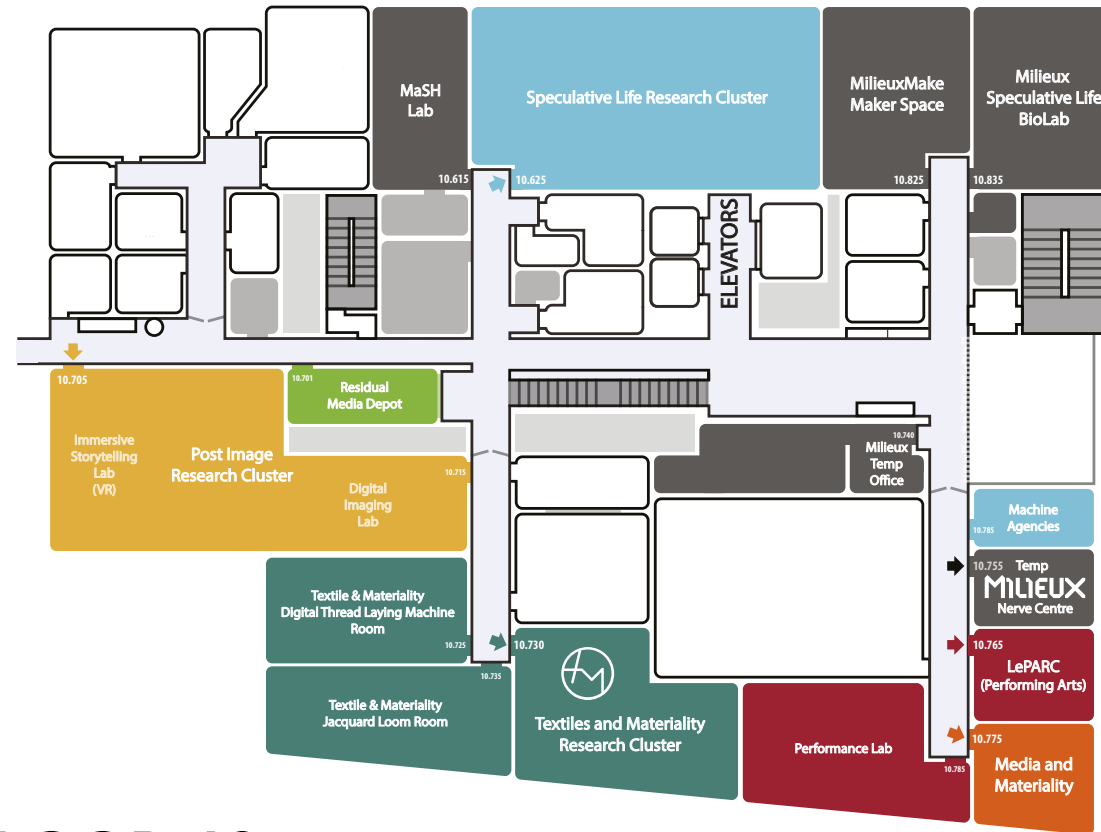
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**Charles Acland**, Media and Materiality

**Kregg Hetherington**, Speculative Life  
**Jill Didur**, Speculative Life

**Deanna Bowen**, Post Image  
**Hannah Claus**, Post Image

**Rilla Khaled**, TAG  
**Olivier Charbonneau**, TAG





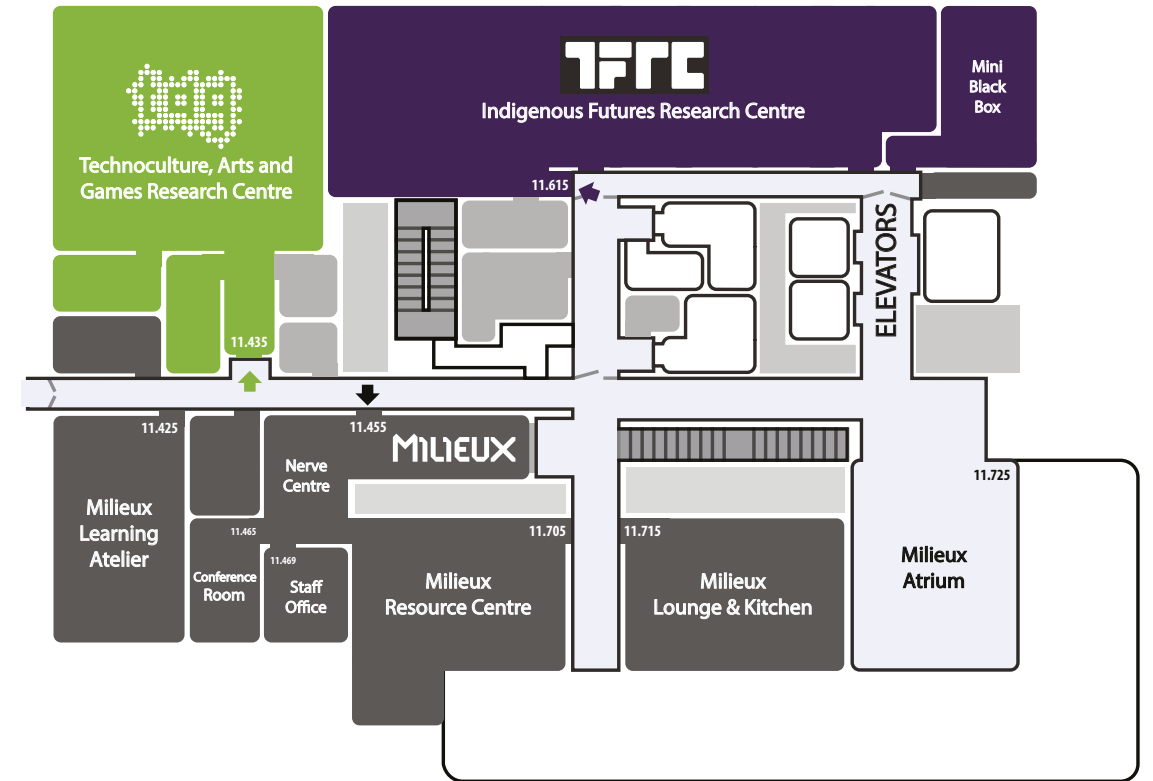
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## FLOOR 11

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