### **Towards Culturally Safe Virtual Spaces for ALL**

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#### **Abstract**

Culturally safe spaces are crucial for unpacking and acting upon lived experiences of being marginalized for one's culture, ethnicity, gender, or class. These spaces are carefully curated to shield interlocutors from bias, victim blaming, dismissal, or attacks often encountered in everyday contexts, while facilitating open dialogues between like-minded members to validate personal experiences for brainstorming and implementing strategies, old and new. By confiding in one another, it builds support networks and communities to act together, establishing a critical mass of individuals to push the agenda forward. However, when these spaces happen online, the traditional framework of safe space making faces previously unforeseen challenges such as sentiment polarization or in-group/out-group dynamics. Further, given the geopolitical skew of global infrastructures, discourses in certain regions become de-facto referencing frame for the rest of the globe due to academic dependency [1]. This panel, therefore, invites a media art scholar, a sound artist, an AI scientist, and a choreographer/scholar to reflect on these issues from their respective vantage points to discuss critical impediments and how we may create different types of safe spaces that are open to ALL by mitigating the limitations of digital sociality through new technological affordances.

#### **Keywords**

Culturally Safe Spaces, Online Sociality, Vocaloid Communities, AI Biases, Cultural appropriation, Human-robotics Choreography, Globalization

#### Introduction

The concept of culturally safe spaces emerged in the late 20th century United States to support a variety of civil rights and counterculture movements of the milieu. Responding to social problems in respective situated contexts, these spaces served as sanctuaries for marginalized individuals, fostering open dialogues, mutual support, and strategies to challenge societal norms. [2] Expanding out from the American

context, safe spaces are articulated as complex social amalgams that are specific to their respective contexts.

Today, safe spaces consist of a diverse mix of physical and virtual components, with much of the discourse, moderation and organizing happening via web interfaces as we do with other aspects of life. However, as "Virtual worlds are not secondary representations of the actual world" but one that transforms through techno-social interactions [3], both the limitations and affordances of web technologies further impact the processes and outcomes of these spaces.

Online contents are often skewed toward the sensational and the spectacular as a common strategy to stand out in the vast sea of information; conceptual sharpening as such easily leads to polarization that then deepens existing fissures; Extreme Nationalism is on the rise across the board, which is then countered by advocacy and activism for cultural, and ethnic inclusivity; these diverse sentiments are then exposed to being conveniently cherry-picked for political maneuvering from many different sides of the game; Fake news, scams, and unverified speculations generate noise, eroding away the "Trust" we have been working so hard to establish in this not-so-new frontier of ours.

Critical reflections are thus necessary amidst the shift towards a post-geographic, virtual, future, as safe space practices naturally retain skeuomorphic cultural artifacts of their geographically specific ancestors. So, how may creative initiatives work with these double-edged affordances and hurdles of the web in creating culturally safe virtual spaces? What are some key concerns and suggestions for implementation?

This panel examines the practice of creating culturally safe virtual spaces from the perspective of four panelists comprising a media art scholar, a sound artist, an AI scientist, and a choreographer/scholar. The new media art scholar, Lisa Park SoYoung, will unpack these traces and propose the need to shift towards a more global sense of community. As there will be new challenges, there will be new affordances towards new kinds of community building. The sound artist, Ken Ueno, will talk about the Vocaloid community as an example of a new kind of virtual safe space

that exemplifies a communality that extends the notion of what it means to be human. The AI scientist, De Kai, will speak on minimizing problematic cultural appropriation by AI in view of creating safe spaces for the future, and the human-robotics choreographer, Sydney Skybetter, will discuss the challenges to notions of safety that robots, as physical extensions of AI, will present in the future.

# Toward a multifaceted implementation of safe spaces for all

Culturally safe spaces serve as sanctuaries for marginalized individuals by fostering open dialogues, mutual support, and strategies to challenge hegemonic societal norms. These spaces validate and unpack lived experiences of identitybased prejudice without the usual fear of dismissal or attack, which is a pivotal first step in addressing marginalization's emergent challenges. However, when such spaces are reified on the world wide web, this protective boundary management can unwittingly intensify the dichotomy between the oppressed and the oppressors, which is notably amplified in the polarized context of the internet. This sharply articulated division risks creating echo chambers of trauma, which can intensify the membership-based ingroup/out-group dynamics [4][5], making the group prone to fundamental attribution errors [6] in the absence of opposing voices within the space to discourse in fuller depth.

Further, with safe spaces discourse being rooted in 20th century activist contexts in the US, the conventional language and tonality exude a notable fervor and militant nuance (e.g. evident in monikers such as Girl Army, or the Guerrilla girls). This discursive tonality carved upon differences and oppositionality then risks becoming amplified on the web, emphasizing the strained relationships between dominant and marginalized groups.

Moreover, this region-specific confrontational approach to debate is also ineffective in many parts of the world, therefore risks alienating scholars in areas where colonization history and political realities differ. In practice, taking on this confrontational tonality and approach in some regions could become a grave mistake that can lead to being barred and marginalized within their own situated contexts. There is thus a need to consider how artistic strategies and methods developed in a specific region can be inadvertently extended to the whole globe through the expansive reach of the internet and under the invisible weight of dominant discursive systems.

Identifying these visible and invisible boundary-making practices of the past as impediments to establishing a deeply diverse and unified front for the globe, Park proposes a need for a new expanded frame for safe-space making that is truly global in both theory and practice. This means going beyond simply "including" Others into the existing frame, by updating the system and processes to make it practicable for

all through a multifaceted implementation toward diversity. How can we broaden both of these visible and invisible boundaries that originated from previously limited human ability to deeply know and understand what is happening on the other side of the boundary? How can we cautiously leverage new technological affordances to overcome our human limitations to foster a unified front for all of humanity? How can we gradually expand the system of knowledge and aesthetic generation, by leveraging the positive affordances of new global technologies that enable us to know, hear, and see alternative perspectives through creative expressions shared across the web?

# Vocaloid Communities - New Communal Affordances of Virtual Spaces

As a vocalist, Ken Ueno has created his own unique practice, inventing bespoke techniques (e.g., multiphonic singing, circular breathing on difference tones, etc.). When initially confronted with Vocaloids (a vocal synthesizer software platform which is a character at the same time), Ueno's reaction to them was of unease, a creepiness associated with a Uncanny Valley-like response (the Uncanny Valley being a term introduced by the roboticist Masahiro Mori to track the uneasy response of a human to a robot as the appearance of robots approach the human [7]). Since his initial unease, Ueno has learned about the online community of Vocaloid fans, who produce their own original tracks and share them. The fans produce original tracks by using various singer libraries representing a particular anime-like character. By making tracks based on their favorite character, the character's synthesized voice becomes a kind of vocal mask for the producers. Many of them are marginalized individuals, and they take comfort in the anonymity afforded by the vocaloid character. Ueno theorizes that this disembodied anonymity facilitates a collective fanfiction maker space, which is a new kind of post-geographic safe space.

# Tackling problematic Cultural appropriation of AI generated content

As a pioneering AI scientist who brought machine learning to the world's first large-scale online language translators as well as music AIs and computational creativity research, De Kai has been working for decades on issues of cultural understanding and biases in both the technological research sphere and the AI ethics, society, and governance sphere. Generative AIs are known to exhibit both overt biases as well as more subtle ones that can inadvertently cause online virtual worlds to feel culturally unsafe for various groups. De Kai argues that simply trying to de-bias the training data inherently falls short in tackling such issues. Instead, generative AI needs to be augmented with arrays of interpretive AI capable of recognizing not only overt

cultural biases, but also to catch subtler nuances like cultural appropriation or dog-whistles. For example, a music interpretation AI can detect "ethnic" samples that have been arbitrarily cut in ways that are clearly ignorant of culturally appropriate phrasing; a text interpretation AI can detect "exotic" foreign words misused in ways that are offensive or hilariously wrong; a visual interpretation AI can spot culturally insensitive imagery. Only through interpretive monitoring of generative AIs can we vet their culture specific tendencies for errors of appropriating cultured content, whether textual, visual, sonic, performative etc.

# Choreorobotics in the interstices of the real and virtual

Hailed by the Financial Times as "One of the world's foremost thinkers on the intersection of dance and emerging technologies," Sydney Skybetter is the founder of the Conference for Research on Choreographic Interfaces and Host of the podcast, "Dances with Robots." He argues that robots (such as Boston Dynamics' "Spot" and "Atlas") are the physical embodiment and extension of virtual AIs into "real" space, and thus choreorobotic performances offer insight into contemporary concerns for algorithmic expressivity as well as surveillance, consent, care and safety. As the physicalized manifestation of their code, the operational principles of dancing robots are revealed through interface and interaction, their choreographies are instructions for movement through space from another time and place, context and culture. As such, the presence of a dancing robot represents an incursion on an audience's reality by another's priorities and politics of care that are only revealed through the possibility for harm. Such questions of ambiguity and safety are extended by Skybetter's research in microgravity choreorobotics and choreorobotic performance during long-duration space flights, where asymmetrically distributed space and sense of time complexifies phenomenological and somaesthetic expectations, troubling distinctions between the virtual and the actual, and what "safety" might come to mean in such emergent contexts.

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### Author(s) Biography(ies)

Lisa Park SoYoung is a South Korean-born and Hong Kong-based media artist and scholar, as well as producer/curator who specializes in virtual/hybrid arts-tech happenings. Lisa's medium agnostic experimentations with artmaking, expanded curation, and academic research culminates in interdisciplinary action research geared towards expanding the ontological plurality in the media artworld. She is currently a Postdoctoral Researcher at the School of Creative Media, City University of Hong Kong where she chairs Leonardo LASER Hong Kong, and previously chaired the Development sub-committee on the Board of ISEA-International. Lisa has a BFA in Visual Arts from York University, and an MFA and PhD in Creative University of Hong Kong. Media from City www.lisapark.net

Ken Ueno is a composer, vocalist, sound artist, and author. His music and installations have been performed and installed around the world. He is known for inventing vocal techniques, composing "person-specific" music, instrumentalizing architecture, and for his activism in decolonizing classical music. As a vocalist, he has performed his concerto with orchestras in Boston, New York, Poland, Lithuania, Thailand, North Carolina, and California. Ueno's writings have been published by the Oxford Handbook, the New York Times, Palgrave Macmillan, and Wiley & Sons. He holds a Ph.D. from Harvard University and his bio appears in *The Grove Dictionary of American Music*. kueno@berkeley.edu

De Kai's work in AI, language, music, creativity, and ethics urges cultures to interrelate. Professor of Computer Science and Engineering at HKUST and Distinguished Research Scholar at Berkeley's ICSI, he was named ACL Founding Fellow for pioneering contributions to machine learning of AIs like Google/Yahoo/Microsoft Translate. De Kai is also creator of one of Hong Kong's best known world music collectives, ReOrientate, and was one of eight inaugural members of Google's AI ethics council. Debrett's named him one of the 100 most influential people in Hong Kong, and he serves as independent director of the AI governance think tank The Future Society. Most recently De Kai' has been featured by The New York Times and on the cover of Germany's "Human" magazine, and his book about AI and humanity will appear this coming year from MIT Press.

Sydney Skybetter is a choreographer. Hailed by the Financial Times as "One of the world's foremost thinkers on the intersection of dance and emerging technologies," Sydney's choreography has been performed at such venues as The Kennedy Center and Jacob's Pillow. His work has been supported by the Alfred P. Sloan Foundation, Doris Duke Charitable Foundation, and a Creative Capital "Wild Futures" Award. He is a Senior Affiliate of metaLAB at Harvard University, a frequent contributor to WIRED and Dance Magazine, the Founder of the Conference for Research on Choreographic Interfaces and Host of the podcast, "Dances with Robots." Sydney serves as the Deputy Dean of the College for Curriculum and Co-Curriculum, is an Associate Professor of Theatre Arts and Performance Studies, and was the first choreographer at Brown University to receive tenure. www.skybetter.org