

1920	1920-1940	Algoal	1986	1986	A Nightmare on Elm Street 2: Freddy's Revenge	1997	2107	Total Reality
1924	1974	Arilla	1985	UNSPEC.	Brazil	1997	2089	Twilight of the Dark Master
1924	1960	The Last Man on Earth	1985	UNSPEC.	Concove	1998	2000	Dece Impact
1927	2000-2003	Metropolis	1985	UNSPEC.	Creatura	1998	2058	Lost in Space
1929	1940/50	High Treason	1985	2002-2005	Enemy Mine	1998	UNSPEC.	New Rose Hotel
1929	UNSPEC.	Woman in the Moon	1985	1989	Friday the 13th: A New Beginning	1998	2013-2036	Soldier
1930	1980	Just Imagine	1985	2005	Mad Max: Beyond Thunderdome	1998	UNSPEC.	Star Trek: Insurrection
1933	1940	Man Must Fight	1985	2085	Starchaser: The Legend of Orin	1998	UNSPEC.	Soundings
1935	1940	The Tunnel	1985	UNSPEC.	Trouble in Mind	1999	2000	Bicentennial Man
1936	1940-2036	Things to Come	1985	12, 090	Vampire Hunter D	1999	2008	Deterrence
1939	2440	Buck Rogers	1986	2179	Aliens	1999	UNSPEC.	aXistenZ
1942	1970	The Mummy's Tomb	1986	1995	Dead End Drive-In	1999	UNSPEC.	Furia
1944	1995	The Mummy's Curse	1986	1990	Friday the 13th Part VI: Jason Lives	1999	2025	Futuresport
1944	1970	The Mummy's Ghost	1986	1987	Maximum Overdrive	1999	2000	Godzilla 2000
1952	2000	L. Amell 2000	1986	UNSPEC.	Robot Holocaust	1999	C, 2199	The Matrix
1952	0000	Captiva Women	1986	2027	Robotch: The Movie	1999	2024	The Thirteenth Floor
1953	1970	Project Moonbase	1986	UNSPEC.	Solarbabies	1999	2054	Wing Commander
1955	UNSPEC.	Conquest of Space	1986	2035	Star Crystal	1999	2049	Zenon: Girl of the 21st Century
1956	1984	1984	1986	2286	Star Trek IV: The Voyage Home	2000	2015	The 6th Day
1956	2220	Forbidden Planet	1986	2005	The Transformers: The Movie	2000	2040	Batman Beyond: Return of the Joker
1956	2508	World Without End	1987	2017	Charlie's Angels	2000	UNSPEC.	Battle Royale
1958	1970	Frankenstein 1970	1987	1998	Crasopodia	2000	2000	Battlefield Earth
1958	1973	It! The Terror from Beyond Space	1987	1999	Prince of Darkness	2000	2027	Fortress 2: Re-Entry
1958	5000	Terror from the Year 5000	1987	2043-2044	RoboCop	2000	2001	Godzilla vs. Megaguirus
1959	1965	Battle in Outer Space	1987	2017-2019	The Running Man	2000	2470	Happy Accidents
1959	1964	On the Beach	1987	UNSPEC.	Steel Dawn	2000	UNSPEC.	The Last Warrior
1960	2024	Beyond the Time Barrier	1987	1988-4039	The Time Guardian	2000	2020-2022	Mission to Mars
1960	1985	First Spaceship on Venus	1987	2501	Timestalkers	2000	2007	On the Beach
1960	2116	Space Men	1988	2019	Akira	2000	2576	Pitch Black
1960	1966-701	The Time Machine	1988	1991	Alien Nation	2000	2045	Red Planet
1961	1980	The Phantom Planet	1988	2020	Droid	2000	2027	Sin: The Movie
1962	UNSPEC.	The Creation of the Humanoids	1988	1990	Friday the 13th Part VII: The New Blood	2000	2101	Supernova
1962	1976-1982	Gorath	1988	UNSPEC.	Phoenix the Warrior	2000	3028-3044	Titan A.E.
1962	UNSPEC.	La 4038	1988	4038	Back to the Future Part II	2000	UNSPEC.	Vampire Hunter D: Bloodlust
1964	1968	The Last Man on Earth	1989	2015	Bill & Ted's Excellent Adventure	2000	UNSPEC.	X-Change
1964	2071	The Time Travelers	1989	2688	The Blood of Heroes	2000	2004	X-Man
1964	1965	Two Thousand Maniacs	1989	UNSPEC.	Friday the 13th Part VIII: Jason Takes Manhattan	2001	2142-4142	A.I. Artificial Intelligence
1965	UNSPEC.	The 10th Victim	1989	1990	Godzilla vs. Biollante	2001	UNSPEC.	Avalon
1965	2020	Voyage to the Prehistoric Planet	1989	1990	Godzilla vs. Biollante	2001	2071	Cowboy Bebop: The Movie
1965	UNSPEC.	Wildland Planet	1989	2000	Lincolnium	2001	2005	Final Fantasy: The Spirits Within
1966	2007	Cyborg 2007	1989	1999	Patriator: The Movie	2001	2176	Ghosts of Mars
1966	2150	Daleks - Invasion Earth: 2150 A.D.	1989	UNSPEC.	Slipstream	2001	2002	Godzilla: Mothra and King Ghidorah
1966	UNSPEC.	Fahrenheit 451	1989	2287	Star Trek V: The Final Frontier	2001	2030	I.K.U.
1966	2064-2066	Thunderbirds Are Go	1989	2089	Venus Wars	2001	2008	Metropolis
1966	1989	Way...Way Out	1990	UNSPEC.	Circuitry Man	2001	2002	Mr In-Between
1967	3000	The Andromeda Nebula	1990	1999	Class of 1999	2001	UNSPEC.	Nabi
1967	1972	The Day the Fish Came Out	1990	UNSPEC.	Crash and Burn	2001	2029-2021	Planet of the Apes
1967	2889	In the Year 2889	1990	2031	Frankenstein Unbound	2001	UNSPEC.	The Princess Blade
1967	6968	Journey to the Center of Time	1990	UNSPEC.	The Handmaid's Tale	2001	2151	Vanilla Sky
1967	2000	Le Plus vieux métier du monde	1990	2000	Hardwara	2001	2051	Zenon: The Zequel
1967	1970	Privilege	1990	2100	Jatsons: The Movie	2002	2009	2009 Lost Memories
1968	2001	2801 A Space Odyssey	1990	UNSPEC.	Megaville	2002	2008	The Adventures of Pluto Nash
1968	4000	Barbarella	1990	2037	Hindurra	2002	UNSPEC.	Cypher
1968	1999	Destroy All Monsters	1990	2038	Moon 44	2002	2072	Equilibrium
1968	1972-3978	Planet of the Apes	1990	1999	Omega Cop	2002	2003	Godzilla Against Mechagodzilla
1968	UNSPEC.	Shama	1990	1997	Predator 2	2002	2079	Impostor
1968	2068	Thunderbird 6	1990	2044	RoboCop 2	2002	2010; 2455	Jason X
1969	2069	Doppelgänger	1990	UNSPEC.	Robot Jax	2002	2044	Minority Report
1969	UNSPEC.	The Illustrated Man	1990	2050	Salad Crisiss	2002	2080-2020	Blindfire
1969	2021	Moon Zero Two	1990	2171	The Spirit of '76	2002	2004	Returner
1970	3978	Beneath the Planet of the Apes	1990	2004	Total Recall	2002	2005	Rollerball
1970	1997	Crimes of the Future	1991	2004	804 Pinocchio	2002	UNSPEC.	Solaris
1970	UNSPEC.	Zabli Jsem Einsteinu, Panove	1991	2091	Bill & Ted's Bogus Journey	2002	2379	Star Trek: Nemesis
1971	2053	City Beneath the Sea	1991	1998	Child's Play 3	2002	2020	Stranded: Naufragos
1971	1995	A Clockwork Orange	1991	1998	Fridays: Dead: The Final Nightmare	2002	2010	Lamson 2010: A Punk Cat in Space
1971	1973	Escape from the Planet of the Apes	1991	1992-2204	Godzilla vs. King Ghidorah	2002	UNSPEC.	Teenage Cavem
1971	2002	The Lathe of Heaven	1991	1996	Harley Davidson and the Marlboro Man	2002	2030-810	The Time Machine
1971	1977	The Omega Man	1991	2024	Highlander II: The Quickening	2002	UNSPEC.	Treasure Planet
1971	C. 2401-2500	THX 1138	1991	UNSPEC.	Liquid Drama	2003	UNSPEC.	Battle Royale II: Requiem
1972	1991	Conquest of the Planet of the Apes	1991	UNSPEC.	Meet the Hollowheads	2003	2050	Code 46
1972	UNSPEC.	Silent Running	1991	UNSPEC.	Prayer of the Rollerboys	2003	2084-2104	Deathlands: Homeward Bound
1972	UNSPEC.	Z.P.G.	1991	2001	Rick-Oh: The Story of Ricky	2003	2003	Encore
1972	UNSPEC.	S.O.B.	1991	UNSPEC.	Saviour of the Soul	2003	2004	Godzilla: Tokyo S.O.S.
1973	2001-2670	Battle for the Planet of the Apes	1991	2293	Star Trek VI: The Undiscovered Country	2003	2021	It's All About Love
1973	1979-2133	Genesis II	1991	1995-2029	Terminator 2: Judgment Day	2003	UNSPEC.	Kim Possible: A Sitch in Time
1973	UNSPEC.	Moscow-Cassiopeia	1991	1999	Until the End of the World	2003	C. 2199	The Matrix Reloaded
1973	2173	Sleepers	1991	UNSPEC.	Wedlock	2003	C. 2199	The Matrix Revolutions
1973	2022	Sozzy Green	1992	2170	Alida 3	2003	2014	Mean Child
1973	1983	Westworld	1992	2029	Death Becomes Her	2003	2000	Natural City
1974	2150	Dark Star	1992	2009	Freejack	2003	2007	Paycheck
1974	2133	Planet Earth	1992	1993	Godzilla vs. Mothra	2003	2011	Revenge's Tragedy
1974	UNSPEC.	Teens in the Universe	1992	2008	Split Second	2003	UNSPEC.	Robot Stories
1974	2293	Zardoz	1993	2022	Alien Intruder	2003	2004	Terminator 3: Rise of the Machines
1975	2024	A Boy and His Dog	1993	2074	Cyborg 2	2003	2025	Immortal 2: The Berlin Decision
1975	2000	Death Race 2000	1993	UNSPEC.	Daybreak	2003	2142	Wonderful Days
1975	2018	Rollerball	1993	1996-2032	Demolition Man	2003	2004	X2
1975	2155	Strange New World	1993	UNSPEC.	Executioners	2004	2131	Applesseed
1976	2006	Any Day Now (Vandaag of Morgen)	1993	2017	Fortress	2004	2204	Ark
1976	1985	Euroeworld	1993	1994	Godzilla vs. Mechagodzilla II	2004	2019	Avatar
1976	2274	Logan's Run	1993	2012	Mutant Action	2004	2010	The Butterfly Effect
1977	1979	Damnation Alley	1993	2007	Nemesis	2004	2075	Alphaborn
1977	UNSPEC.	Sleeping Dogs	1993	2002	Patriator 2: The Movie	2004	2583	The Chronicles of Riddick
1977	1988	The War in Space	1993	UNSPEC.	Point of No Return	2004	UNSPEC.	Dead Leaves
1977	UNSPEC.	Wizarda	1993	2042	Rain Without Thunder	2004	2010	District 13
1978	3000	Deathport	1993	2044-2045	RoboCop 3	2004	3000	Dracula 3000
1978	UNSPEC.	Eutectic Cop	1993	2047	Robot Wars	2004	UNSPEC.	FAQ: Frequently Asked Questions
1978	UNSPEC.	Planet of Dinosaurs	1993	UNSPEC.	The Secret Adventures of Tom Thumb	2004	UNSPEC.	The Most Cut
1978	UNSPEC.	Test pilota Pirxa	1993	UNSPEC.	Stark	2004	2032	Ghost in the Shell 2: Innocence
1979	2122	Alien	1994	2073	A.P.E.X.	2004	2044	Godzilla: Final Wars
1979	1998	Americathon	1994	1990	Class of 1999 II: The Substitute	2004	2035	I, Robot
1979	2130	The Black Hole	1994	UNSPEC.	Cyborg 3: The Recycler	2004	2095	Immortal (Ad Vitam)
1979	2491	Buck Rogers in the 25th Century	1994	2003	Death Machine	2004	2008	Kamen Rider: Blade: Missing Ace
1979	H. 2106	H. Hell's: The Shape of Things to Come	1994	2007	Double Dragon	2004	2000	Pinchbeck 3000
1979	1985	Mad Max	1994	1995	Godzilla vs. Spacegodzilla	2004	UNSPEC.	The Purifiers
1979	UNSPEC.	La Mort en direct	1994	1997	Hong Kong '97	2004	2204	Retrograde
1979	UNSPEC.	Quintet	1994	2040	Macross Plus: The Movie	2004	UNSPEC.	Starship Troopers 2: Hero of the Federation
1979	UNSPEC.	Stalker	1994	2022	No Escape	2004	2010	Thunderbirds
1979	2271	Star Trek: The Motion Picture	1994	UNSPEC.	Plughead Rewired: Circuitry Man II	2004	2054	Zenon: Z3
1979	2002	Undersea Super Train: Marine Express	1994	UNSPEC.	Shopping	2005	2005	Aon Flux
1980	1994	The Age-2	1994	2293-2371	Star Trek Generations	2005	2046	Don't Boy vs IGTA
1980	3001	Galaxina	1994	2019	Test Tube Teens From the Year 2000	2005	2046	Doom
1980	2772	Phoenix 2772	1994	2004	Time Cop	2005	2019	The Island
1980	UNSPEC.	Saturn 3	1994	1999	Witness to the Execution	2005	UNSPEC.	Land of the Dead
1981	1997	Escape from New York	1995	1996-2035	12 Monkeys	2005	2517	Serenity
1981	2015	Erabird 2015 AD	1995	2029	Ghost in the Shell	2005	2055	A Sound of Thunder
1981	1984	Friday the 13th Part 2	1995	1996	Godzilla vs. Destroyoyah	2005	2020	Staalh
1981	1995	Heartheaps	1995	2053	Harrison Bergeron	2006	2500	Aachi & Saipak
1981	1991-2011	The Last Chase	1995	2021	Johnny Mnemonic	2006	2027	Children of Men
1981	1990	Mad Max 2: The Road Warrior	1995	2130	Judge Dredd	2006	2006-2034	Click
1981	1999	Malevil	1995	UNSPEC.	Mechanical Violator Hakaidar	2006	2500	The Fountain
1981	UNSPEC.	Memoirs of a Survivor	1995	2092	Memoires	2006	2007	I'll Always Know What You Did Last Summer
1981	UNSPEC.	Outland	1995	2073	Screamers	2006	2006	2505
1982	2036	Android	1995	2019	Steel Frontier	2006	2306	Origin: Spirits of the Past
1982	2960	Arcadia of My Youth	1995	1999	Strange Days	2006	2012	Paprika
1982	2019	Blade Runner	1995	2033	Tank Girl	2006	2054	Renaissance
1982	1990	1000: The Bronx Warriors	1995	2030	Theodore Rex	2006	2013	A Scanner Darkly
1982	1984	Class of 1984	1995	UNSPEC.	Virtuality	2006	2008	Southland Tales
1982	1984	Friday the 13th Part III	1995	2500	Waterworld	2006	2076	Ultimate
1982	UNSPEC.	Health Warning	1995	UNSPEC.	The White Dwarf	2006	2015-2028	V for Vendetta
1982	1989	Kamikaze 1989	1996	2007	Adrenalin: Fear the Rush	2006	2007	X-Men: The Last Stand
1982	UNSPEC.	Megaforce	1996	2017	Barb Wire	2007	2900S	An Adventure Through Time
1982	2019	The New Barbarians	1996	UNSPEC.	Crimetime	2007	2135	Applesseed Ex Machina
1982	1992	Parasite	1996	UNSPEC.	Dardrive	2007	2097	The Beach Party at the Threshold of Hell
1982	2205	Star Trek II: The Wrath of Khan	1996	1999	Doctor Who	2007	UNSPEC.	Blood Lar
1982	1992	Iranosia	1996	2247	Escape from L.A.	2007	2025	Escape from L.A.
1982	UNSPEC.	Turkey Shoot	1996	UNSPEC.	Eutectic War	2007	UNSPEC.	Day Zero
1983	2019	2019: After the Fall of New York	1996	2127	Hellraiser: Bloodline	2007	UNSPEC.	The Gene Generation
1983	1994	The Atlantis Interceptors	1996	2015	Memory Run	2007	2187	Highlander: The Search for Vengeance
1983	UNSPEC.	Le Dernier Combat	1996	3000	Mystery Science Theater 3000: The Movie	2007	2009-2012	I Am Legend
1983	2025	Endgame	1996	2009	Sci-Fighters	2007	2037	Meet the Robinsons
1983	1990S	Escape from the Bronx	1996	2193	Space Truckers	2007	UNSPEC.	Pinchbeck 78
1983	UNSPEC.	Overdrawn at the Memory Bank	1996	2063-2373	Star Trek: First Contact	2007	2057	Sunshine
1983	UNSPEC.	Rock & Rule	1996	1999	X	2007	2009-2307	Transmorphers
1983	2101	Spacehunter: Adventures in the Forbidden Zone	1996	UNSPEC.	Zone 39	2007	2077	Vexille
1983	UNSPEC.	Testament	1997	2379				

2008	2057	Repul	The Genetic Opera
2008	UNSPEC.	Sleep Dealer	
2008	UNSPEC.	Starship Troopers 3: Marauder	
2008	UNSPEC.	Tokyo Gore Police	
2008	2105-2805	Wall-E	
2008	UNSPEC.	War, Inc.	
2008	2016	Zombie Strippers	
2009	2012	2012	
2009	2012	2012: Supernova	
2009	2081	2081	
2009	2055	The Age of Stupid	
2009	2108	Astro Boy	
2009	2154	Avatar	
2009	UNSPEC.	Battle for Terra	
2009	2267-2270	Cargo	
2009	UNSPEC.	Eysborgs	
2009	2020	G.I. Joe: The Rise of Cobra	
2009	2034	Gamer	
2009	2050	Love Story 2050	
2009	2035	Mean	
2009	2002	Mr. Nobody	
2009	2173-3097	Pandorum	
2009	2019	The Road	
2009	2233-2387	Star Trek	
2009	2017	Surrengates	
2009	2018	Terminator Salvation	
2009	2010	Up in the Air	
2009	2016	Wrong Turn 3: Left for Dead	
2009	2009	Knowing	
2010	2043	The Book of Eli	
2010	2202	Dark Metropolis	
2010	2019	Daybreakers	
2010	2025	Repo Man	
2010	2015	Shank	
2010	2039	Tekken	
2010	2012	Titanic II	
2011	2012	2012: Ice Age	
2011	2500	Dead Space: Aftermath	
2011	2016	Hall	
2011	2169	In Time	
2011	2039-2045	Love	
2011	3127	My Future Boyfriend	
2011	2020	Real Steel	
2011	2008-2016	Rise of the Planet of the Apes	
2011	2012	Transformers: Dark of the Moon	
2012	2144-2321	Cloud Atlas	
2012	2134	Dredd	
2012	2526	Halo 4: Forward Unto Dawn	
2012	2092	The Hunger Games	
2012	2018	Iron Sky	
2012	2079	Lockout	
2012	2044-2074	Looper	
2012	2093	Prometheus	
2012	2021	Sacking a Friend for the End of the World	
2012	2112	Total Recall	
2013	2063	The A.B.K. Report	
2013	3071	After Earth	
2013	2154	Elysium	
2013	2083	Ender's Game	
2013	2024	G.I. Joe: Retaliation	
2013	2022	Hell Baby	
2013	2025	Har	
2013	2093	The Hunger Games: Catching Fire	
2013	UNSPEC.	The Machine	
2013	2017-2080	Oblivion	
2013	2050	Odyssey 2050	
2013	2020-2025	Pacific Rim	
2013	2014-2022	The Purge	
2013	2592	Riddick	
2013	2031	Snowpiercer	
2013	2259	Star Trek Into Darkness	
2013	UNSPEC.	The Congress	
2014	2045	Android Cop	
2014	2044	Automata	
2014	2032	Big Hero 6	
2014	2018	Brick Mansions	
2014	2026	Dawn of the Planet of the Apes	
2014	2020	Edge of Tomorrow	
2014	2200	The Giver	
2014	UNSPEC.	Die Gattensaga: The Rise of Echaenfriedl	
2014	2093	The Hunger Games: Mockingjay - Part 1	
2014	2067-2151	Interstellar	
2014	2022	Penguins of Madagascar	
2014	2023	The Purge: Anarchy	
2014	2028	RoboCop	
2014	2021	Transcendence	
2014	2017	Transformers: Age of Extinction	
2014	2023	X-Men: Days of Future Past	
2014	2114	Zyuden Sentai Kyoryuger Returns:Hundred Years After	
2015	2093-2103	The Hunger Games: Mockingjay - Part 2	
2015	2035	Kamen Rider Drive: Surprise Future	
2015	2015-2018	Mad Max: Fury Road	
2015	2035-2043	The Martian	
2015	2025	Bessha Sentai ToQger:Super ToQ Zgon of Dreams	
2015	2025	Isn'tsars	
2015	2017-2029	Terminator: Genisys	
2016	2202	2BR02B: To Be or Naught to Be	
2016	2018-2034	Baar Baar Dekho	
2016	2313-2343	Passengers	
2016	2022-2040	The Purge: Election Year	
2016	2263	Star Trek Beyond	
2017	2104	Alien: Covenant	
2017	2049	Blade Runner 2049	
2017	UNSPEC.	Downsizing	
2017	2019-2023	Geostorm	
2017	UNSPEC.	Ghost in the Shell	
2017	2018	Iron Sky: The Coming Race	
2017	UNSPEC.	Life	
2017	2029	Logan	
2017	UNSPEC.	OtherLife	
2017	2018-2034	The Space Between Us	
2017	2018	Transformers: The Last Knight	
2017	27009	Valarian and the City of a Thousand Planets	
2017	2029	War for the Planet of the Apes	
2017	2036	Blade Runner 2036: Nexus Dawn	
2017	2022	Blade Runner: Black Out 2022	
2017	2048	Blade Runner 2048: Nowhere to Run	
2018	2030-2036	2036 Origin Unknown	
2018	2028	The Cloverfield Paradox	
2018	UNSPEC.	Fahrenheit 451	
2018	2028	Hotel Artemis	
2018	2038	Isle of Dogs	
2018	7698-13,950	Mortal Engines	
2018	UNSPEC.	Muta	
2018	2035	Pacific Rim: Uprising	
2018	2020-2021	A Quiet Place	
2018	2025-2045	Ready Player One	
2019	2050	2050	
2019	3022	3022	
2019	2105	Ad Astra	
2019	2563	Alita: Battle Angel	
2019	2023	Avengers: Endgame	
2019	2027	Captive Stata	
2019	C. 2025	Je Suis Auto	
2019	2024	Spider-Man: Far From Home	
2019	2020-2042	Terminator: Dark Fate	
2020	2067-2474	2067	
2020	2820	Bill & Ted Face the Music	
2020	2024	The Last Days of American Crime	
2020	2020S	A Quiet Place Part II	
2021	UNSPEC.	Dune	
2021	2024	Godzilla vs. Kong	

FUTURE AS MEDIUM

RHODE ISLAND SCHOOL OF DESIGN
MFA GRAPHIC DESIGN 2021

GEORGIE NOLAN

* The front cover of this book is a list of films with settings beyond the date they were released or made. They are organized by the year they were released, the year they predict (unspec. if unknown), and their title.

* This 10 second film, “Buck and The Time Machine” explains how the designer navigates moving forward. Looking through the front windshield to the future, consulting the time in the present and looking in the rear vision mirror at the past. All perspectives must be considered.

Buck
and
The Time Machine



See, I drive this little time machine



Out there's the future



In here's the present



And back there is the past



What is this thing that has happened to us?

And in the midst of this terrible despair, it offers us a chance to rethink the doomsday machine we have built for ourselves.

It's a virus, yes.

Nothing could be worse than a return to normality.

In and of itself it holds no moral brief. But it is definitely more than a virus.

Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different.

Some believe it's God's way of bringing us to our senses. Others that it's a Chinese conspiracy to take over the world.

It is a portal, a gateway between one world and the next.

We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us.

Whatever it is, coronavirus has made the mighty kneel and brought the world to a halt like nothing else could.

Or we can walk through lightly, with little luggage, ready to imagine another world.

And ready to fight for it.

Our minds are still racing back and forth, longing for a return to "normality", trying to stitch our future to our past and refusing to acknowledge the rupture. But the rupture exists.

—Arundhati Roy, "The Pandemic is a Portal", 2020.

ABSTRACT

FUTURE AS MEDIUM through critical examination develops a working premise for advancing designed visualizations of the future. In an effort to build new models of practice that consciously work towards the future, I undertake a set of delicate negotiations rooted in critical inquiry as well as creative production, all expressed across three temporal contingencies: yesterday, today and tomorrow.

I work the terrain of the past as an assembled archive of speculative worlds created by architects, designers, and artists, and problematize the mediation of futures through a close reading of their world-building tools. I use this archive to make sense of my overall visions and methodology, always looking to the future.

In the present, I measure these accounts against the ideological and systemic biases of designers and the complex world we inhabit, allowing opportunities for nuance, true plurality, and the incorporation of diversity for effective social engagement.

Tomorrow explores adaptive models for an alternative pedagogical framework and the invention of new visualization strategies. Behaving like an “ologist”, taking a somewhat scientific and ethnographic approach to understanding my subject matter and intended audience, I finally ask (and attempt to answer) these questions: Are there ways for us to build multiple yet collective futures? Can we use the future as medium?

It matters what matters we use to think other matters with;
It matters what stories we tell to tell other stories with;

It matters what knots knot knots, what thoughts think
thoughts, what ties tie ties.

It matters what stories make worlds,
what worlds make stories.

PREFACE

If there was ever a time to discuss the potential for the future as a medium in design, now seems like the perfect moment. The future gives us space to unpack and explore the new obstacles ahead, to make mistakes and reorient again. To be clear, when I suggest we use the future as a medium, I am not saying that the future needs to be a positive. Imagining alternative futures allows us platforms to make mistakes and color outside the lines, to trial alternative ways of thinking and propose new models and potential pathways (even bad ones). As Benjamin Bratton highlights “alternative does not mean disengaged”[1]. We cannot design without purpose. As much as design needs to account for listening, absorbing and understanding with humility, it also needs to enact change and actively de-future, futures that are no longer tenable.

This present moment in time is a call to action. I see it as a time to rethink my position as a designer, and as a human existing on Earth in general. I am empowered by this seismic shift in our terrain to rethink my relationship to the natural environment at both micro, meso and macro scales. To take ownership of my contribution to the unjust social hierarchy existing within the design profession today and society at large. To contribute to a dismantling of a hierarchy that puts European aesthetics at the centre of design and upholds a Western canon, and to imagine a world of respectful designers who are as engaged in a practice of listening and understanding as they are with making and solving.

Design is always future-making.

–Susan Yelavich, “Design as Future-Making”, 2014.

ON BUILDING A PRACTICE OF FUTURE-MAKING

Just as there is no single future, only many different possible futures, there is no single design action that can account for the future. We can aggregate designs about the future, but there is no collective consensus or composite picture of the future that emerges.

–Andrew Blauvelt, “Defuturing The Image of The Future”, 2020.

As designers, we are constantly negotiating past, present and future in our work, developing the ephemeral foundations for possible worlds. These contingencies (and possible futures) are based on what we know in the present, and are influenced by the past. Through both critical inquiry and creative production, I have explored futures based on reflections of the past and deduced predictions of what’s to come.

I am acutely aware that the word “future” often arises from a shadowed past where evidence across Western history reveals the logic of colonization, of capitalism, of patriarchy, of power– all of which are transcribed into futurist movements. Media portrayals, whether on television, film or in literature, that I remember offered narratives of the future. But these representations only fueled visions of partial realities. As Andrew Blauvelt asserts, there is no one future, in the same way that there is not only one world but a number of futures or worlds that exist alongside and inside one another [2]. I think about this insistence to avoid one single and authoritative view of future-making.

Efforts to shape the future that I grew up watching on television and movie screens or reading within the pages of my science fiction books, through their ubiquity have othered and erased diverse cultures. It should be acknowledged that the “future” or futures are also thought of and experienced vastly differently across social, cultural and socio-economic boundaries.

Across our various cultural experiences, we see and understand the future differently. For most of my life, the future meant something far ahead, something shiny and hyperreal–flying cars, artificial intelligence and robots. What I know now is that the future is something placed on a shifting timeline. It’s both temporal and spatial. The future is in an hour, in a year, and in many years. It’s a medium we use in our minds eye to guide us and help us navigate our own next steps. We have used the future as a medium to understand our worlds and desires and, in this effort, futuring can open our minds to imagining how our worlds might be different.

I chart “yesterday” –the past– as a way to understand why past speculative visions went unrealised. I search for ways to understand the consequences and dangers in creating these imagined worlds. Who might they be harming? How has science fiction played a role in further alienating and erasing histories? I explore “today” where we find ourselves in the reality of designing for the multiplicity and multivariate worlds we inhabit, both culturally and environmentally in the present. And finally, I suggest a view of “tomorrow” where I propose new methods and modes of working in an attempt to design more nuanced worlds or futures.

[2] Andrew Blauvelt, “Defuturing the Image of The Future”, Walker Art Center, September 15, 2020.

The future and futurity belongs to us all. I believe that this positionality is what matters most. How do they come into being? Who is telling the story?

* Blackletter, also known as Gothic script, Gothic minuscule, or Textura, was a script used throughout Western Europe from approximately 1150 until the 17th century.

* Sepia toning is a specialized treatment to give a black-and-white photographic print a warmer tone and to enhance its archival qualities.

CONTENTS

YESTERDAY

INTRODUCTION	21 Yesterday
	23 Lexicon
ESSAY & ARCHIVE	25 Ghosts of Futures Past: Carcasses of Unrealised Utopias
CONVERSATION	53 Forest Young
PROJECTS	71 Hyperland Video
	83 Microbial Cosmologies Website, AR & VR
	95 Scensitive Speculative Fiction & Installation
	97 Aerocene Ecosystems and Post-Covid Futuring Website & Proposal
	101 Archive of a Scrimshaw Book & Object

* Design circles in present day (2020s) prefer a utilitarian, sans serif, almost Helvetica (now passé) but not quite. A touch of humanist and all together 'simple and minimal'. Although now often acknowledged, designers carry with this a built in Eurocentric bias.

* PANTONE 17-5104 "Ultimate Gray" + PANTONE 13-0647 "Illuminating", best represent today as Pantone's "Color of the Year" 2021.

TODAY

INTRODUCTION	103 Today
	105 Lexicon
ESSAY & ARCHIVE	103 Present Futures: The Reality of Designing for Futures
CONVERSATION	123 Chris Lee
PROJECTS	137 Future Talks Video
	139 Gigantic Invisibles + Video Digital mixed media
	143 Extraordinary Ordinaries Proposal
	145 Fragmented Artifacts Video
	147 Gone by 2050 Event
	149 AirDrop Emergency Video
	153 Disaster Tea Towel Object
	155 Digital Gift Shop Installation
CONVERSATION	157 Maddie Woods

CONTENTS

* “TOMORROW” is set in a typeface called “WAX MELT”, a unicast typeface by WAX STUDIOS. It reflects the fluid and ambiguous nature of what is still yet to come.

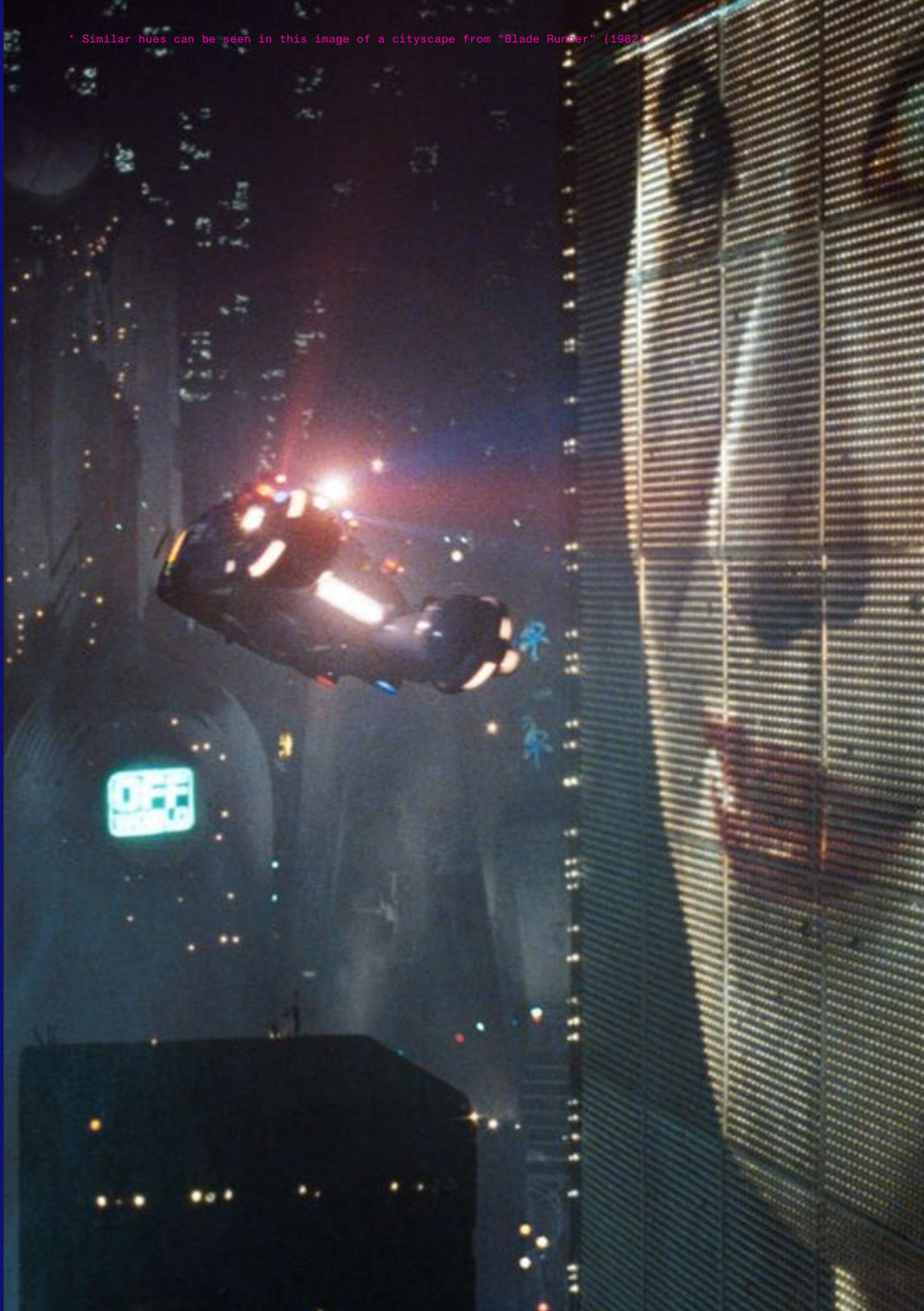
* Pink and purple are often associated with extravagance, ambiguity, innocence and romance. From a distance these colors seem harmless but pink pollution muddies the night sky. It’s fitting that Denis Villeneuve used this particular combination of colors in “Blade Runner 2049”.

CONTENTS

TOMORROW

INTRODUCTION	167 Tomorrow
	169 Lexicon
ESSAY & ARCHIVE	171 Towards Tomorrow: Adaptive Models of Future Making
CONVERSATION	193 Rory Hyde
PROJECTS	209 RISD Graduate Exchange <i>Community Event</i>
	213 A Manual For Care: RISD GD MFA Programming <i>Community Event</i>
	221 Co-Immunity: Building Community Resilience <i>Workshop</i>
CONVERSATION	223 Adam Fein
SYLLABUS	233 Future As Medium
CONVERSATION	245 Annelys de Vet

* Similar hues can be seen in this image of a cityscape from “Blade Runner” (1982)



* Along with a sepia toned color scheme, blackletter typography is a heavy-handed design move that I have made deliberately to play on tropes of “the past”. The General Motors Futurama pavillion at the 1939-40 New York World’s Fair symbolises an iconic vision for the future, based in the past.

UTSUTERAU

THE GENERAL MOTORS FUTURAMA PAVILLION, NEW YORK WORLD'S FAIR, 1939. [IMAGE: GENERAL MOTORS]

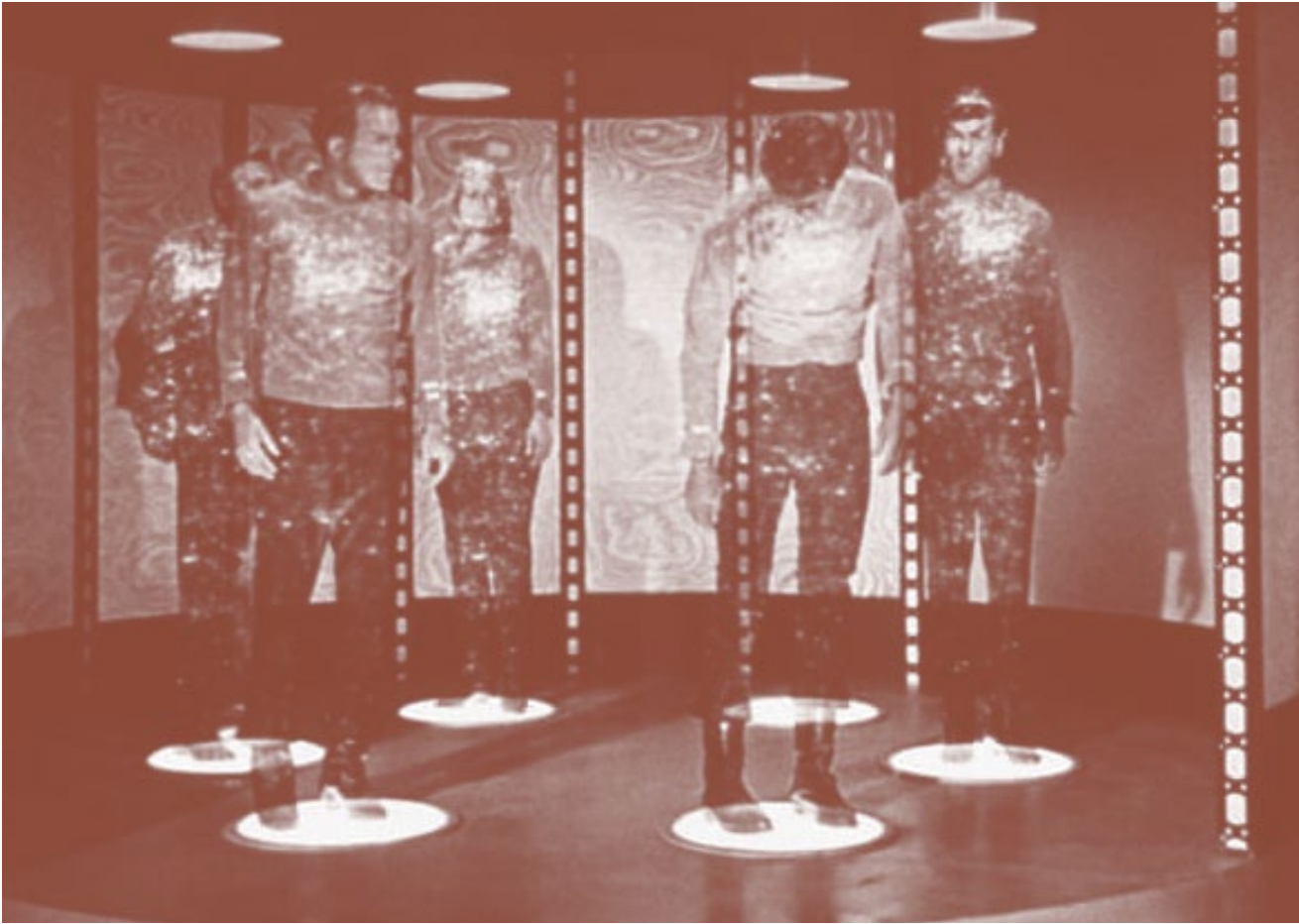


GHOSTS OF FUTURES PAST: CARCASSES OF UNREALISED UTOPIAS



If all records told the same tale—then the lie passed into history became truth.
“Who controls the past,” ran the Party slogan,
“controls the future: who controls the present controls the past.”

—George Orwell in *1984*, 1949.



STAR TREK: THE ORIGINAL SERIES, 1966. [IMAGE: THE GUARDIAN]

Star Trek (1966), was an American science fiction media franchise created by Gene Roddenberry. It follows the adventures of the starship USS Enterprise (NCC-1701) and its crew exploring the Milky Way galaxy.



BACK TO THE FUTURE, 1985. [IMAGE: BLOGTOTHEFUTURE]

Back To The Future (1985), was the first in a series of films about time travel. Set in 1985, the story follows teen heart-throb Marty McFly, who is accidentally sent back to 1955 in a time-traveling DeLorean built by his eccentric scientist friend “Doc”.



THE FIFTH ELEMENT, 1997. [IMAGE: SCIFIEMPIRE.NET]

The Fifth Element (1997), is set in the 23rd century, when Earth is threatened by a cosmic entity and Korben Dallas (Bruce Willis), a taxicab driver and former special forces major, must save it against all odds.

Beam me up, Scotty!

Wait A Minute, Doc. Are You Telling Me You Built A Time Machine...Out Of A DeLorean?

Watch your head for flying cars and strap in your robot butler—we’re going back to the future. As we’re speeding down this time warped worm-hole, take a moment to cast your mind back to your earliest encounter with the future. Perhaps you used to watch *Lost In Space* or *The Jetsons*, or like me, grew up watching *Star Trek* and movies like *Blade Runner* and *The Fifth Element*. The future seemed bright, but was it?

Just as entertainment has played a role in our imagining of the future and the imagery that is conjured by the term, so too has architecture, advertising, art, design, and even governments. All media, all communication has played a role in the dispersion of future imagery that has ultimately led us here. It is important that we look back to these futures to understand our past as a way to move forward. Let us not make the mistakes of yesteryear and acknowledge the origins which we now have the opportunity to rewrite. By creating new futures, we can defuture those that no longer serve us.

ENTERTAINMENT

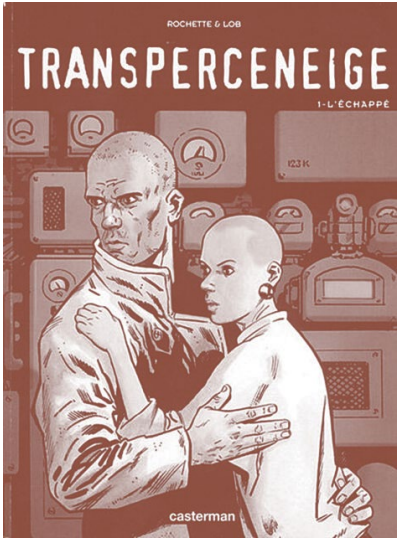
As storytellers, we use our entertainment and media as a way to explore our deepest desires and darkest fears. The future, in all its utopian and dystopian iterations is a ripe place to bring these projections to life. Many science fiction films have been extrapolations of ideology and fears of the times in which they were made. Fritz Lang's *Metropolis* for example, was inspired by the futurist movement of the 1920s and Bong Joon-ho's *Snowpiercer* (adapted for film in 2013 from French graphic climate fiction novel *Le Transperceneige* by Jacques Lob, Benjamin Legrand and Jean-Marc Rochette) imagines a dystopian ice age world (in 2014) which occurs after an attempt to stop global warming with climate engineering backfires.

In present times, a reading of the room asks us to reimagine the futures that colonised western narratives dictated. In 2019, Nuotama Frances Bodomo's short film *Afronauts* debuted online. It explores the story of school teacher and activist Edward Mukuka Nkoloso who, in 1964, during the Cold War and on the eve of Zambia's independence, started *Zambia's National Academy of Science, Space Research and Philosophy* where he was training the first African crew to travel to the moon.

In an interview with *Hyperallergic* (2019), Bodomo said "[Filmmaking] is such a specific and successful colonizing tool that's been used against my people, you know? There's this core work to do and undo at the same time, and I think that creates a very active love for this form and this medium." [3]



AFRONAUGHTS, 2019. [IMAGE: HYPERALLERGIC]



LE TRANSPERCENEIGE, 1982. [IMAGE: SNOWPIERCERFAN]



SNOWPIERCER, 2013. [IMAGE: THE GUARDIAN]



METROPOLIS, 1927. [IMAGE: TIMEOUT]

[3] Dessane Lopez Cassell, "Parsing the Real and Unreal Stories of the Zambian Space Academy," *Hyperallergic* (blog), September 4, 2019.



ZAMBIA'S NATIONAL ACADEMY OF SCIENCE, SPACE RESEARCH AND PHILOSOPHY, 1964. [IMAGE: DISCOVEROLOGY]

Can a community whose past has been deliberately rubbed out, and whose energies have subsequently been consumed by the search for legible traces of its history, imagine possible futures? Furthermore, isn't the unreal estate of the future already owned by the technocrats, futurologists, stream-liners, and set designers—white to a man—who have engineered our collective fantasies? The “semiotic ghosts” of Fritz Lang’s *Metropolis*, Frank R. Paul’s illustrations for Hugo Gernsback’s *Amazing Stories*, the chromium-skinned, teardrop-shaped household appliances dreamed up by Raymond Loewy and Henry Dreyfuss, Norman Bel Geddes’s *Futurama* at the 1939 *New York World’s Fair*, and Disney’s *Tomorrowland* still haunt the public imagination, in one capitalist, consumerist guise or another.

—Mark Dery, *Black to The Future*, 1994.



DEF JEF BLACK TO THE FUTURE VINYL, 1989. [IMAGES:DISCOGS]

Yo, bust this, Black
To the Future
Back to the past
History is a mystery 'cause it has
All the info
You need to know
Where you're from
Why'd you come and
That'll tell you where you're going

—Def Jef, *Black to the Future*, 1989

BLACK TO THE FUTURE

I am excited by the narratives, like *Afronauts*, that the Afrofuturist movement brings to speculative and science fiction. Stories that look to the past, even reimagine the past, as a way to offer alternatives.

In 1993, Mark Dery coined “Afrofuturism” to refer to the cultural movement developing in the intersection between African diasporic culture and technology [4]. Although the movement has become more prevalent since the 2000s, its core concept and aesthetic can be seen as early as the mid to late nineteenth century. In her book *Afrofuturism: The World of Black Sci-Fi and Fantasy Culture*, author Ytasha Womack defines Afrofuturism as, “an intersection of imagination, technology, the future and liberation.... Both an artistic aesthetic and a framework for critical theory, Afrofuturism combines elements of science fiction, historical fiction, speculative fiction, fantasy, Afrocentricity, and magic realism with non-Western beliefs”. Towards the end of the book she also goes on to explore a second related term “afro-surrealism” which is set in a “lowtech, present-day, and sees very little difference between the dream world and the waking one” —dealing with the present and bringing the abstract into reality.

Womack expresses that Afrofuturists are not only redefining the present moment, but are also changing past “notions of blackness”. The same notions of blackness that Western science fiction narratives (that you and I would both be familiar with) have gone on to support. She quotes arts and filmmaker Cauleen Smith, who says “blackness is a technology. It’s not real. It’s a thing”. Highlighting to us that blackness is a representation that has been constructed and needs to be challenged. [5]

[4] Ytasha L. Womack, *Afrofuturism: The World of Black Sci-Fi and Fantasy Culture*, Chicago: Lawrence Hill Books, 2013.

[5] Mark Dery, “Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose,” in *Flame Wars: The Discourse of Cyberculture*, ed. Dery (Durham, NC: Duke University Press, 1994), 180.

ASIA-FUTURISM

In the summer edition of ARTFORUM in 2016, Dawn Chan wrote an article on Asia-futurism that caught my attention, having grown up watching Mamoru Oshii’s 1995 film, *Ghost In A Shell*. She argues that though the “myth” of an Asian influenced future has found its way into the international consciousness over a century, that “visions of Asia-futurism continue to be mirrored, magnified, and distorted in the Western world toward complicated ends, with complicated effects on both contemporary art production and an already troubled construction of Asian American identity” [6]. She comments that Asian faces and Asian characters, if they are present, are not central to the action in depictions of American life today in high and low culture. She also wonders if writer Ryan Lee Wong is thinking about how to own and depict this agency, finding a model for creating an Asian self-defined futurist cultural agency when he talks of an Asia-futurism that draws inspiration from Afrofuturism. She highlights that though efforts have been made by art exhibitions to provide the opportunity for Asian artists to express their own vision of the past, embodied in the present and the future that they seem disconnected from. But the reality of “sitelessness” that is experienced by Asian American communities still remains.



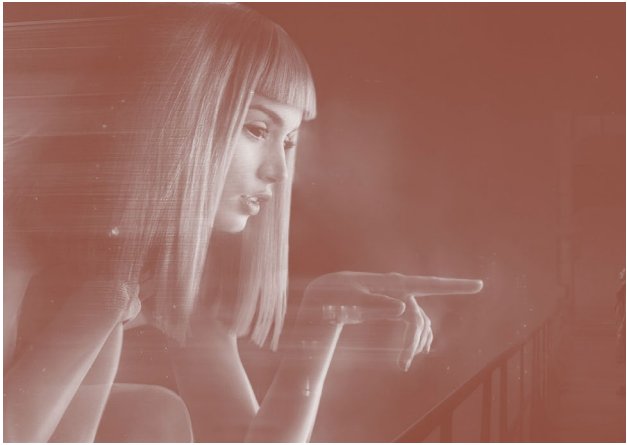
BLADE RUNNER, 1982. [IMAGE: MEDIUM]



GHOST IN A SHELL, 1995. [IMAGE: YOUTUBE]



GHOST IN A SHELL, 1995. [IMAGE: ARTFORUM]



BLADE RUNNER 2049, 2017. [IMAGE: INDIEWIRE]

Is it possible to be othered across time?
For almost a century already, the myth of an
Asian-inflected future has infiltrated
imaginings worldwide.

—Dawn Chan, *Asia-Futurism*, ArtForum, 2016.

[6] Dawn Chan, *Asia-Futurism*, Artforum, 2016.



MAJOR MOTOKO KUSANAGI IN GHOST IN THE SHELL, 1995. [IMAGE: NEW YORK TIMES]



MAJOR MOTOKO KUSANAGI IN GHOST IN THE SHELL, 2017. [IMAGE: INDEPENDENT UK]

The live-action Hollywood remake of the successful Japanese anime *Ghost In A Shell* (2017), cast Scarlett Johansson as the central cyborg heroine Motoko Kusanagi. The film was heavily criticized upon its release for “whitewashing”.

DEFUTURING & A DARK HISTORY OF THE FUTURPOLIS

In his article for the *Designs for Different Futures* exhibition at The Walker Center, Andrew Blauvelt discusses the relatively recent origins of our need to invent (or design) the future. The desire to define futures in the “now” emerged during the Enlightenment as religion became less popular. He examines the work of sociologist Fred (Frederik Lodewijk) Polak and his work *The Image of the Future* which chronicles envisioning of the future from ancient times right through to the twentieth century.

According to Polak, for millennia the strongest image of the future was conceived of mostly in other worldly terms, in religious prophecies that were to be realized in the afterlife. This changed over time, with images of the future increasingly constituted on this side of the ethereal divide, most often in the form of utopian proposals—a pursuit of paradise here on Earth. [7]

Blauvelt notes that the current absence of a consistent vision for the future of Western civilisation is recent. There were times where we thought we would be able to visit and exist within these futures (like the *Tomorrowland* exhibit at *Disneyland*). The international fairs and expositions during the Industrial Age put the future within reach. The world’s fair (occurring between 1851 and 2005) worked something like a marketplace for the latest tech gadgets and architecture, “a technophilic utopia”.

Though, Blauvelt reminds us that these visions of the future on display at fairs across the world often used contrasting backdrops of the past “for which various Indigenous peoples, often from colonies of the host countries, were brought in to reenact daily rituals in simulated natural habitats. Portrayed pejoratively as either simple (“static”) or primitive (“unevolved”), and decidedly non-Western, these ethnographic displays or “living dioramas” can be seen as markers in time, signposts by which visitors could gauge their own progress”. By presenting other cultures as unchanging while the white Western world moved further into the future, the future itself became colonized. As Blauvelt states “The static exposition of otherness “defutured” these cultures, not only in the minds of most visitors, but also in the imagination of many of the colonized, vanquishing possibility and agency over their future.”



PROMOTIONAL POSTCARD FOR 1906 COLONIAL EXPOSITION. [IMAGE: WALKER ART CENTER]



1939 WORLD'S FAIR UNDER CONSTRUCTION, ON FORMER WETLAND. [NYC PARKS PHOTO ARCHIVE]

Throughout the article this term defuturing is used, borrowed from Tony Fry who says:

We need to remind ourselves that the future is never empty, never a blank space to be filled with the output of human activity. It is already colonised by what the past and present have sent to it. Without this comprehension, without an understanding of what is finite, what limits reign and what directions are already set in place, we have little knowledge of futures, either of those we need to destroy or those we need to create. [8]

THE FUTURE IS ALREADY HERE

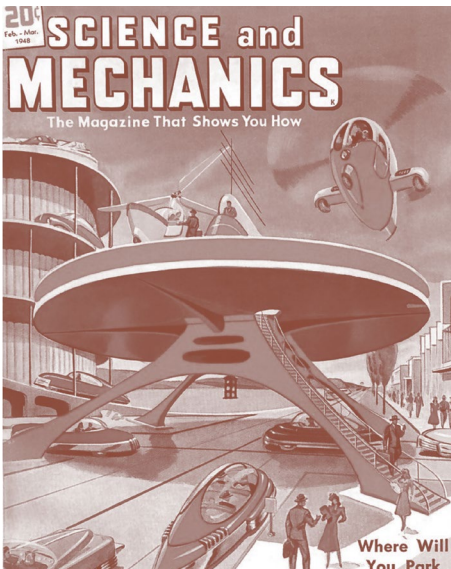
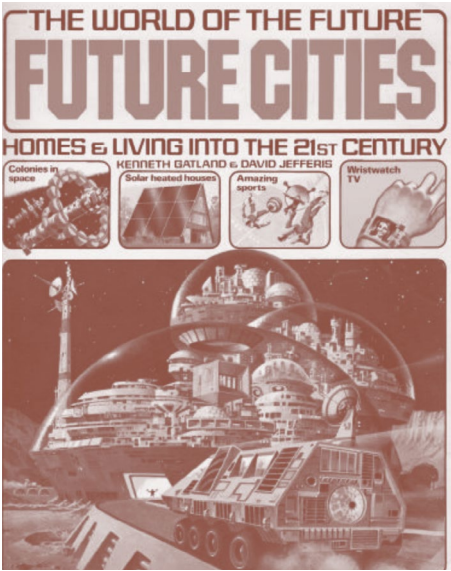
American Speculative author William Gibson famously stated “The future is already here—it’s just not very evenly distributed” [9]. He means that the luxuries of the future that we aspire to already exist for some. Over time the “future” will simply spread or become more commonplace. It also alludes to the idea that the future will be characterized by the same inequalities that exist in our present because the power to realise them is with those that have the power now. It is no coincidence that the Western idealised depiction of “the future” is a curated utopia of healthy and wealthy citizens that rely on high-tech gadgets and cutting edge technology. Despite the fact that we know our future is certainly not a utopia, in fact, due to global warming, many of us may lose our homes and find ourselves unable to work. If what Gibson is saying is that the future maintains the same inequalities that we have today, just with better gadgets for some, then I’m afraid he might be onto something.

Each of our futures are built on our present experience and more recently we feel on unstable ground due to terrorism, climate change, economic crisis, increased migration and disease including the Covid 19 pandemic . In order to find a way to design ourselves a more equal and sustainable future that manages to upset this apple cart, we must ensure that we can build a more solid foundation for those who attempt to play a role in writing the future. Because the future is so influenced in our past, one solution may be looking back at abandoned futures.

[8] Tony Fry, *A New Design Philosophy: An Introduction to Defuturing* (Sydney: UNSW Press, 1999), 11–12.

[9] Gibson, W. See Quote Investigator for origin: <http://quoteinvestigator.com/2012/01/24/future-has-arrived/>

[7] Andrew Blauvelt, “Defuturing the Image of The Future”, Walker Art Center, September 15, 2020.



"FUTURE" MAGAZINE COVERS, 1940–1950.



DISNEYLAND RIDE ATTRACTION PRINTS, 1967.



DISNEYLAND RIDE ATTRACTION PRINTS, 1967.

FUTURES PAST ARCHIVE



ESCAPE FROM NEW YORK, 1981.



MINORITY REPORT, 2002.



LOGAN'S RUN, 1976.



BLADE RUNNER, 1982.



SLEEPER, 1973.



THINGS TO COME, 1936.



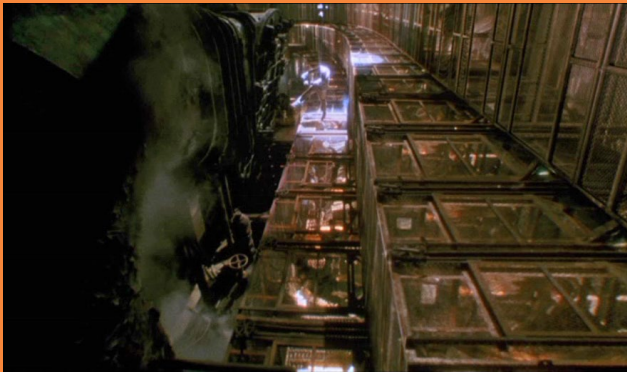
METROPOLIS, 1921.



FARENHEIT 451, 1996.



ALPHAVILLE, 1965.



12 MONKEYS, 1995.



DUNE, 1984.



GATTACA, 1997.



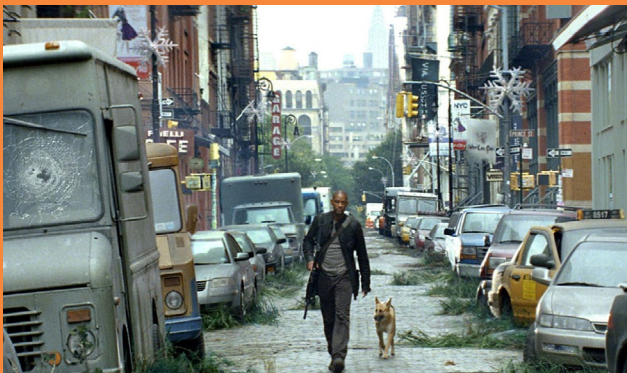
BABEL, 2006.



AKIRA, 1988.



BRAZIL, 1985.



I AM LEGEND, 2007.



IDIOCRACY, 2006.



LOST IN SPACE, 1998.



MAD MAX, 1979.



THE MARTIAN, 2015.

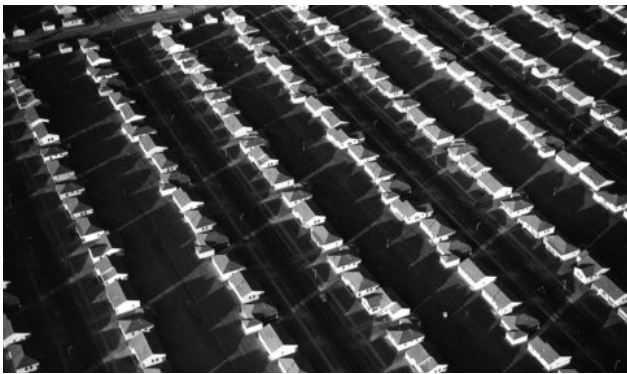
1950s Domestic Dystopia



A SUBURBAN DEVELOPMENT, 1965.



WILLIAM GARNETT'S PHOTOS OF HOUSING DEVELOPMENT IN CALIFORNIA, 1950.



There is good reason why entertainment, television in particular, and space-age imagery have had such a close relationship with one another. It can all be traced back to the disillusionment occurring towards the end of the 1950s in the United States. With such great hopes at the beginning of the decade, many felt the utopian ideals for the American dream went unfulfilled. Instead of consumer prosperity, consumer debt piled high. Instead of being at the forefront of technological advancement and space exploration—the Soviets beat them into space with Sputnik. There was a sense of mass disappointment with Eisenhower’s America.

Mass produced suburbs became a kind of suburban nightmare rather than suburban bliss, “critiques of suburbia were especially bitter, particularly when we consider the hopes invested in this new “promised land” at the beginning of the decade”. Suburbia was intended to be an answer to severe housing shortages and the hardships of city living post World War II. Government incentivised housing projects popped up everywhere but these properties were not available to everyone—only for the white middle class. FHA policies and red-lining made sure that “undesirables” were kept out.

Lifestyle magazines and popular culture quickly glorified the ‘burbs, but that wasn’t the reality. The reality of post-war life meant that green spaces were taken

up with identical houses, almost piled on top of one another. These ubiquitous housing arrangements eventually become a cause for concern. Housewives grew tired of the homogenous lifestyle and cult of domesticity, many women joining the workforce in the 1950s with a 60 perfect female labour force by 1962, “thus when Betty Friedan attacked domestic ideology and institutional sexism in *The Feminine Mystique* (1963), she receives widespread support.”

Similarly, the popular entertainment at the time reflected the rejection of middle-class living. Films that explored the consequences of rigid social structures, movies like *Rebel Without a Cause* (1955) and *Rock n’ Roll* gave youth role models that questioned the ideals of their parents’ own generation.

The New Frontier



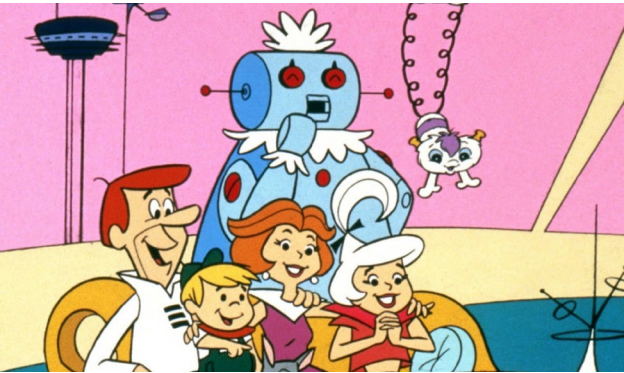
KENNEDY VIEWS FRIENDSHIP 7, 1962.

The air of disappointment felt towards the end of the 1950s paved the way for John F. Kennedy’s New Frontier. This new popular movement took the nostalgia for the past and blended it with new political agendas and a national purpose.

In 1960, a nationwide survey in Look suggested that “most Americans today are related, unadventurous, comfortably satisfied with their way of life and blandly optimistic about the future...mainly concerned with home and family”... Look summed up the attitude with the words of one Milwaukee woman who confided, “We are pretty far removed from outer space here on 71st street.” [10]

Just like Look magazine took this complacency and turn it into an issue called “Soaring into the Sixties” with an image of a rocket on the cover, so did the New Frontier and the Kennedy administration. The media was going to be able to use space age metaphors as symbols of progress and freedom.

The Fantastic Sit-Com



THE JETSONS, 1962



I DREAM OF JEANNIE, 1965

On a warm July night in 1969, people from all across the globe sat watching a blurry blob floating across what they were told was the moon. Apollo 11 successfully filled a decade-long American dream. Officially ending the space race and captivating the public imagination like nothing else.

Throughout the 1960s, television found itself a new genre that combined narratives about 1950s domestic life and associated difficulties with excitement for the New Frontier and space exploration. This new genre went on to be called “the fantastic family sit-com”. You might remember some fantastic family sit-coms like; *I Dream of Jeannie*, *My Favourite Martian*, *The Jetsons* or *Lost in Space*, for example.

[10] Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom, (1991), *Close Encounters: Film, Feminism, and Science Fiction*, University Of Minnesota Press.

The “Real” West



PRIME TIME WESTERNS OF THE 1960S.

In his article, *Johnny Yuma Was a Rebel: He Roamed through the West—Television, Race and the “Real” West*, Alan Nadel discusses the crucial role American adult westerns played in helping secure television’s popularity in the mid-1950s. He highlights that what made television unique was its ability to connect to “reality” in a way that film could not (by broadcasting live for example). Westerns were able to “represent the “real west” in a historical sense, the “real” American spirit in a mythic sense, and, more subtly, the Western Bloc in a (Cold War) geopolitical sense.” The portrayal of the west during the Cold War evoked questions around what compromised western values. America needed to distinguish themselves from the geopolitical west and create a narrative of their own. John F Kennedy made clear the connection between these two representations of the west as a way to unite America’s past and future as “The New Frontier”.

Kennedy went on to become known as the first “television president”, well aware of the effect mass media platforms would have on the public. It’s no coincidence that when Kennedy gave his speech, almost all households across America had their own television set and there were 32 adult westerns in prime time slots.

We stand today on the edge of a New Frontier—the frontier of the 1960s, the frontier of unknown opportunities and perils, the frontier of unfilled hopes and unfilled threats. ... Beyond that frontier are uncharted areas of science and space, unsolved problems of peace and war, unconquered problems of ignorance and prejudice, unanswered questions of poverty and surplus.

—John F. Kennedy at *The Democratic Convention*, 1960.

Disneyland



WALT DISNEY AND HIS PLANS FOR DISNEYLAND, 1954



DISNEYLAND RIDE ATTRACTION PRINT, APPROX 1967.

In 1954, in conjunction with *Disney Studios*, ABC made a large scale tradition to telefilm. Rich in capital but needing competitive programs to make the merger viable. To win Disney’s weekly show *Disneyland* over other competitive networks (NBC and CBS), ABC agreed to finance the building of a huge amusement park in Anaheim. The deal paid off and *Disneyland* quickly became an ABC favourite. Though, Walt Disney had a plan to finance the show (which he hadn’t expected would make a profit) through a “real life experience”. Disney was clever to ground and connect their fantasy worlds to the static reality of a theme park. Now *Disneyland* was a real place, with a geographical location—dreams seem real. [11]

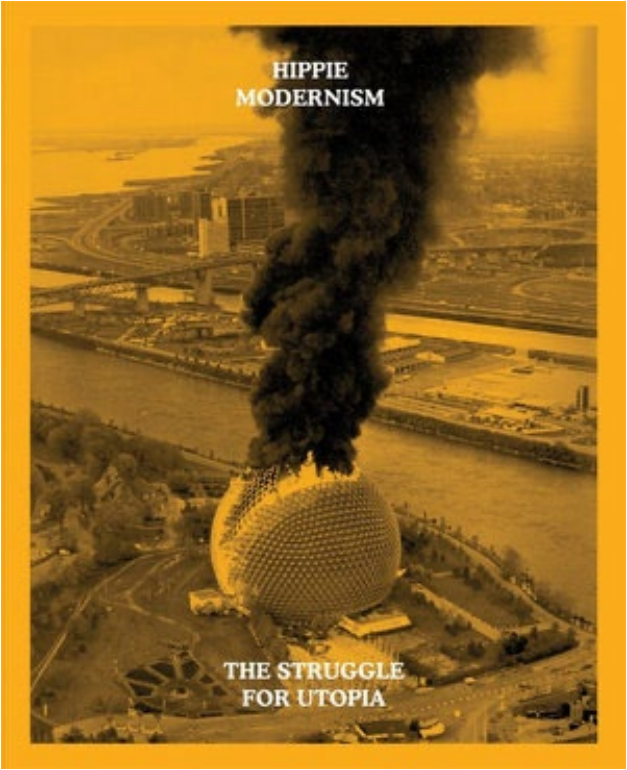
Each of the show and theme parks “themed lands”, *Frontier Land*, *Fantasy Land*, *Adventureland* and *Tomorrow Land* were curated to pull on tropes already successful in popular culture and through this, Disney sought to use *Disneyland* to represent America and it’s future.

[11] Alan Nadel, (2005), *Television in Black-and-white America: Race and National Identity*, University Press of Kansas, United States.



After the devastation and dislocation and emigration associated with World War 2 (1939 —1945), the 1950s were a time of recovery and rebuilding in Europe and countries in the Asia and Pacific regions. The return of servicemen and women to the US and Commonwealth countries such as Canada, New Zealand and Australia precipitated a baby boom and a focus on a conservative period also characterised by the rebuilding or creation of communities, economies, lives and relationships. By the 1960s economic and social conditions in many countries had stabilised and there was a flourishing consumer society in some and, in some quarters, a developing awareness of the ecological and social consequences. For many people, businesses and governments, the past was gone, the present was positive and stable enough to allow a dream of the future. The print revolution, radical politics and promise of technology allowed for avant-garde movements to flourish expressed in innovation in everything from fashion and mini skirts to the space race. It was an optimistic yet critical time which is reflected in the nostalgic imagery that we remember it by.

In an article about the 2016 exhibition *Hippie Modernism: The Struggle for Utopia* shown at the Walker Art Center, Andrew Blauvelt suggests that the counterculture of this period was so successful:



HIPPIE MODERNISM EXHIBITION CATALOG, 2016.

Because it actively 'prototyped' the future it wanted to live. If you want sexual liberation you must live it now not simply ask for it, for instance. Don't want to work 9-5 in a soulless job, then invent a world or counter economy in which you don't. Even if it fails, it provides a glimpse and a taste of what is possible and that has more lasting consequence and value. [12]

Different to what we might see in design practices today, this counterculture embedded itself in the problems felt in their present. In the 1960s, the counterculture saw computers as a democratic tool that would promote individual creative expression and connect people across the globe though portable devices. This idea was revolutionary and presented a very possible future that directly reflected the mood and feelings of the time. Unfortunately, as we know, reality took on only the portable part of this and then diverged on a separate path.

[12] Billie Muraben (2016), *Hippie Modernism: The Struggle for Utopia*, April 2016, It's Nice That (online blog)



CLAUDE PARENT, 1966.

DANTE BINI, 1972.



ANNTI LOVAG, 1975—89.

HANS WALTER MULLER, 1970.

I am often drawn to architecture to be inspired as to how our species has dealt with crisis in the past. Our cities and environments are the ruins of our past futures that have brought us to the moment where we are today. They make up images of history and human culture. These places show the scars of countless redirections and revisions that we can follow and learn from.

In *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds* (2018), Arturo Escobar suggests the creation of worlds between worlds that allow for the difference between our diverse complexities:

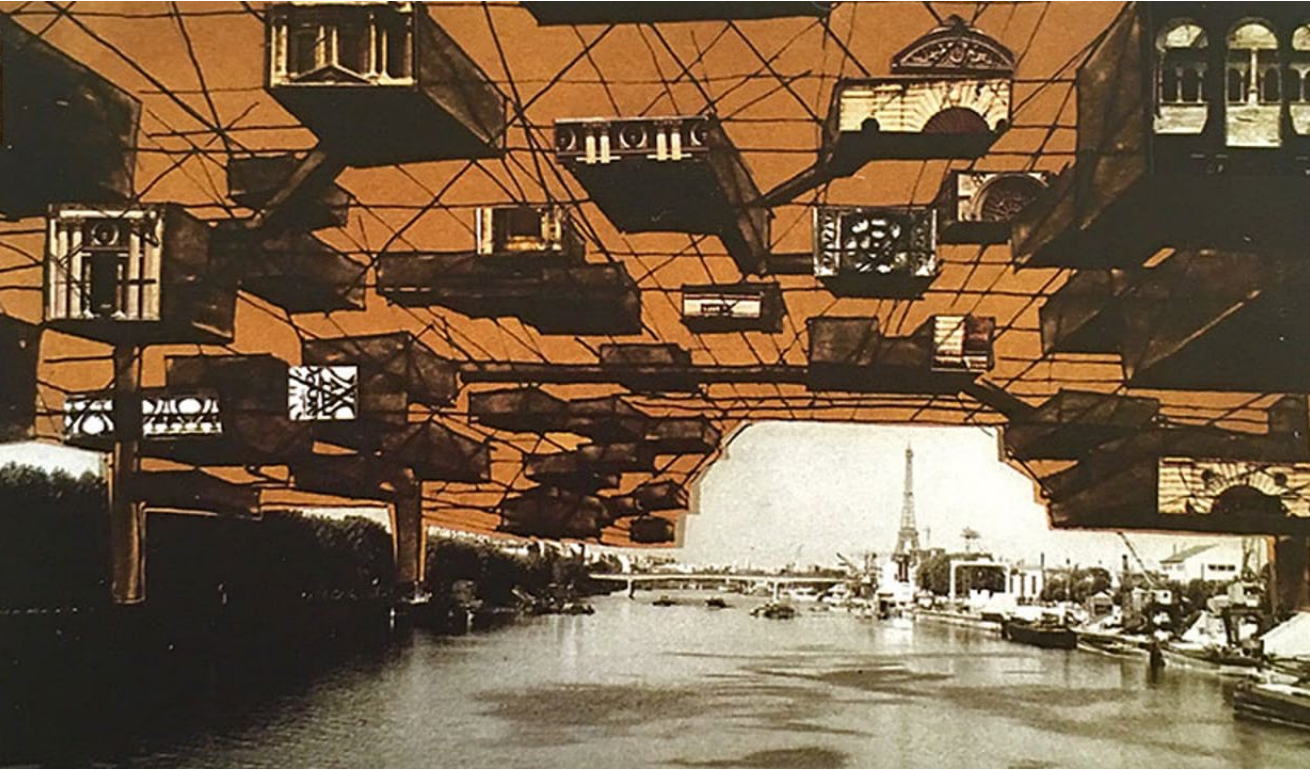
There is no doubt that after decades of what has been called "development", the world is in crisis—systemic, multiple and asymmetrical: long in the making, it now extends across all continents...never before did so many crucial aspects of life fail simultaneously, and people's expectations for their own and children's futures look so uncertain. Crisis manifestations are felt across all domains: environmental, economic, social, political, ethical, cultural, spiritual, and embodied. [13]

When we think of 1960s and 1970s design, we think—colorful, wild and progressive. Though, If we look at the architecture, we

can see some examples of bizarre and radical attempts of social and political justice as failed carcasses of unrealised utopias. Architects of this period dared to push the boundaries of the building typologies we inhabit. I believe that there is real promise in these ruins where we can find opportunity to learn about designing possible futures.

It's impossible to use the formulas of Haussmann's Paris or Ebenser Howard's garden city to build for a billion inhabitants in the slums of megacities around the world. But if modernity is to be our antiquity, as documenta 12 posited in 2007, it means we must be able to find within its ruins formulas for the present and the future. [14]

[13] Aturo Escobar, (2018), "Introduction: Finding Pluriversal Paths." In Ashish Kothari, Ariel Salleh, Atruo Escobar, Federico Demaria, and Alberto Acosta, eds, *Pluriverse: A Post-Development Dictionary*, New Delhi: Tulika Books, 2019.



YONA FRIEDMAN'S SPATIAL CITY PROJECT, 1958-59

It has struck me that even after all of this time, we are still looking for radical solutions for the issues facing us, to the extent that we are still working towards a future that is better than our present and that requires some kind of radical thinking.

A publication titled *Eurotopians* is an archeology of the optimistic futures designed by European radical architects like Yona Freidman, Cini Boeri, Hans Walter Muller and Antti Lovag. Unfortunately their visions were never realised, due to the economic crisis of the 1970s and the triumph of neoliberal capitalism in the 80s and associated changes in taste. [14] In 2020, *Radical Architecture of the Future* was published, written by curator, critic and cultural consultant, Beatrice Galilee. This more recent text features a diverse collection of projects by the most forward-thinking spatial designers and architects working today. [15]

These two books showcase work from entirely different periods of history but they share a commonality of brave exploration of form, space and structure. I wonder what this cohort of radical thinkers will be named in the next retrospective text on radical architecture in four decades? Anthropotopians? To think towards the future and to consider futurity is part of what it means to be human. But what is it that keeps us from reaching these potential futures that we have been envisioning for decades? Is it financial? Political?

"If you look at 1960s architecture today, it's easy to dismiss it out of hand as the crumbling remains of an unredeemed utopia of late modernity. Many of those coffee-table books do just that, wallowing in a highly aestheticised "ruin romanticism" which, ultimately, merely reinforces the status quo. If the building utopias of yore are decaying so visibly, if the light from the faded plastic lamps of 1971 is glimmering so matt and milky, it's quite all right to carry on as before." [13]

[14] Johanna Diel and Niklas Maak, (2017), *Eurotopians: Fragments of a Different Future*, Hirmer Verlag GmbH, Munich.

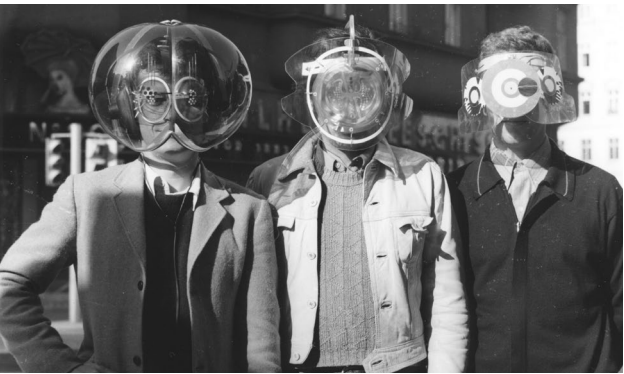
[15] Beatrice Galilee, (2021), *Radical Architecture of the Future*, Phaidon Press Limited, London.



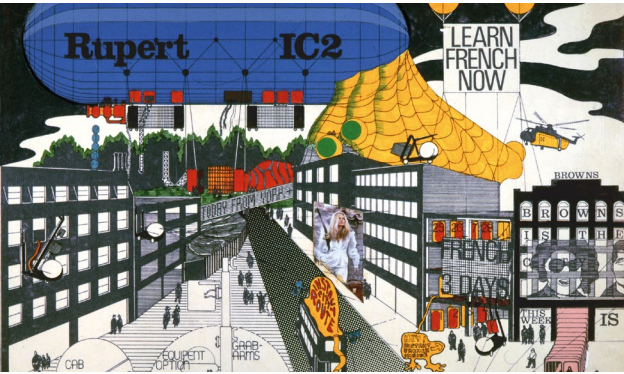
SUPERSURFACE: HAPPY ISLAND, 1972.



ANT FARM: HOUSE OF THE CENTURY, 1972.



ENVIRONMENT TRANSFORMEN, 1968



ARCHIGRAM: INSTANT CITY, 1970.

When you look back at architecture and the urban visions of the twentieth century, you can find some incredible images of radical utopias ,beautifully rendered alternative worlds and narrative architecture. Groups like Archigram, Superstudio, Archizoom, Ant Farm, Haus-Rucker-Co, Walter Pichler and the Metabolists dared to imagine what was beyond building, buildings. They understood that architecture had a direct effect on the way we live and our relationships to one another that extended beyond just "living".

While designing the *Minnesota Experimental City*, Athelstan Spilhaus said:

The essence of an experimental city is that it will be continually changing because in an experiment you must make mistakes so that you can learn from them and change them. [16]

Looking back at experimental cities, and continuing to use experimental cities as a method to model possible futures still appears valid (look to my conversation with Forest Young where he goes into detail about his city typologies).

In present times we see speculative architects like Liam Young using narrative and speculative fiction together with city design as a way to make commentary on the consequences of reality.

In the book that accopanies his latest project, *Planet City*, he makes the claim:

All cities are fictions. Their literal edges are nebulous and their physical definition is endlessly being rewritten but their boundaries come into focus as shared narratives. The fiction of a city weighs as much as its physical shadow. [17]

[16] *The Experimental City*, Dir. Chad Freidrichs. 2017. Documentary.

[17] Liam Young, (2020), *Planet City*, Uro Publications, Melbourne, Australia.

GN When did “futures” become something you were actively thinking about? Did the future start to interest you as a product of your professional work as a designer or were you always looking to uncover what comes next?

FY I would say it probably goes back to my childhood. When I was about five or six, my mother got a job at the Atari Cambridge Research Laboratory. The laboratory was kind of like this stealthy hub on the east coast where a lot of the futurists that were in Silicon Valley like Alan Kay, were brought over as part of this kind of think tank that was in and around Cambridge. That prefigured places like the Architecture Machine Group and the MIT Media Lab. So, there are a lot of people that just congregated in and around Cambridge, either at Harvard or MIT to try to address notions of the future from a couple of different vantage points. Specifically, what I found to be interesting was how much the element of play was involved in futuring. I had always thought of this being about probability, statistics and modelling and that it should be very serious and straight faced, but I saw the exact opposite. If everyone could actually see the future or the big silhouette of the future—everybody would be incredibly wealthy. There’s reasons why the future is incredibly elusive, it’s because one— it doesn’t exist and, two—because it’s contingent upon so many variables, very few of which we can actually see, even when we think we can.

My mother was working in the medium, using Word (software) for self-directed education, and specifically looking at self-directed education relative to computer programming. There was a computer programme called “Atari Logo”. Now, Atari Logo was a programming language that was imagined by Seymour Papert. He was kind of like a super brain. He studied with Jean Piaget, and was interested in constructionist theories of learning, and specifically believed that if people could feel a greater sense of agency, and understanding how they could manipulate their world, they would have a greater ability to think about being able to affect it. So he created this giant robot called “Turtle”. He would give this turtle commands, like “Turtle, forward 40”. Everyone was saying “Oh my gosh! Robot turtle!” because it was the 70s and people didn’t know better. But eventually, the turtle became the software image. And so, I first encountered the turtle seeing a little turtle on screen, it was looking very 8-bit, but very high tech at the time. I could type in commands for the turtle, “forward, 90, right, 90”, all this kind of stuff. But the amazing thing about the turtle, was it when it transitioned into software, was it was no longer just a mechanical object that you would give commands to—like a Mars Rover—you were also able to re-skin it. And the moment that the idea of reskinning an object—the idea of something having an

avatar—the ability that my turtle may look different to your turtle, and your turtle is different to someone else’s turtle was kind of like, “Oh my god!”. The concept of understanding this idea of an avatar before we were talking about avatars. This idea that you could re-skin the thing that has a fundamental source of truth but can be lensed in different ways so that you can see yourself “in” an object. This was probably the first foray into my thinking about world building relative to something that actually wasn’t a far fetched idea, but actually felt like I was constantly practising it, even in basic sketches on the computer. I would say that it was very informative, but I didn’t necessarily pursue the idea of futuring or this idea of “design futures” until much, much later. And part of that was because I had so many artists in my family and was being raised in a type of creative atmosphere. I’m going to look at world building and was thinking, we create worlds every day on things called canvases.

I think it was hard for me to understand the difference between prophetic imagining and world-building, like where does one start and one stop? Where does an artistic kind of canvassing start and stop? Where is design futures relative to a set of tools? Because I think the big difference is that one is like a personal methodology or a practice about how one taps into one’s inner lived experience and propels their curiosities forward to create a particular type of world as an opportunity to see oneself in order to better understand oneself. And then, there are a set of tools (which I think you are probably/hopefully skeptically looking at), which are the tools of the futurists to (quote unquote), “as objectively as possible”, try to understand the future as a realm of probability that we are moving into at some type of velocity and undeterred will collide with something that is an inevitable intersection.

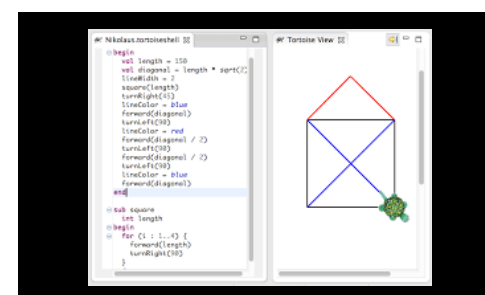
If we look at the Voros cone—there’s a cone of possibility, and each of these different size cones relates to something that’s possible and plausible, probable, and then ultimately, what is preferable. Those tools were a revelation when I discovered them, because I think most of the world’s conflict is either related to misunderstandings about how people communicate, or different people’s futures being in conflict. So, it’s interesting that future literacy and futuring is unfairly pushed towards the realm of science fiction or big tech, because it seems like it’s related to these inevitable showdowns like “man versus machine” or, you know, AI and machine learning betraying us and becoming Skynet. We’re constantly jostling between a dystopian and utopian outcome. But actually, whether you believe in this religion or that religion, you believe in different notions of afterlife, different notions of whether your actions will have some type of future consequences—all of these things are futuring. Now,



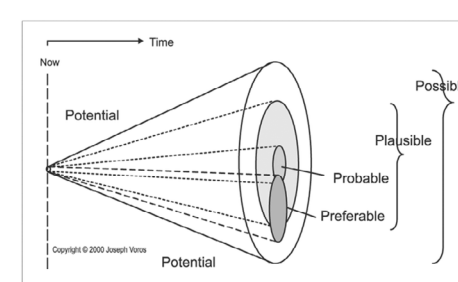
Atari Logo, 1980s.



Children playing with Atari Logo's Robot Turtle in 1969.



Logo is an educational programming language, designed in 1967 by Wally Feurzeig, Seymour Papert, and Cynthia Solomon.



Example of the Voros Cone.

I always tell designers that every creative brief is essentially an imagined future that you're being asked to create, or at least to imagine, because the creative brief means that whatever is probable or inevitable is unacceptable to someone.

I think some of the interesting things to consider now in the 2020–2021 moment, are: who is the brief actually for? Who is the beneficiary of the brief? Has this brief been imagined by a triumph or a trauma of some kind? Whose trauma and whose triumph? And that's where I think futuring becomes very interesting is this idea of plurality, which is a new conversation, like plurality and liberation, which to me is very exciting. The idea of creating plural outcomes where different people can inhabit different types of futures—there's more plasticity in that future. It's not like, "we are building a shiny mountain, it's floating, and everyone will love it, you know, it's like...it will be called home". It's like, Oh, boy (we can have a whole lot of things at the same time) .

So anyway, there was like, early childhood computer programming to the Atari Logo, then a turtle—a turtle can be anything, which seeded the idea of self-directed world building. Then I put that on pause and came back to re-familiarize myself with that idea and that sensibility later on when I was in the realm of briefs that were going to be on more and more distant time horizons. Like, getting a brief from a tech company saying, "I'd like you to imagine what we'll be like in the year 2022" in 2017 and realising that five years is both not a lot of time and a tremendous amount of time. I became really enamoured by the shift between a one year and a five year time horizon, and then a five to 10 or 10 to 50—at that point whole cultures are different.

All of this was interesting to be able to challenge myself to think about different time horizons, of course, and then you start to get into wicked problems like global warming. You start to hit into these wicked problems very quickly, which becomes both terrifying and exciting.

I'm interested in what happens when you're asked to project five years into the future. Where do you start? How do you consider those wicked problems? Is that a big part of what you're thinking about when you are doing those projections? Where do you start your research?

I try to imagine teased apart scenarios as a way to defend against tunnel visions, you know, aggregating personas of like, the middle upper class person with disposable income who will gladly purchase this product and give it to their kids. We've used a framework, which I think is very interesting, which is to think of four different city typologies. So, for instance, imagine a city that's just just emerging—it's just coming online, or specifically, it might not have brick and mortar infrastructure, but in some ways, maybe that's an advantage. This provides a way of futuring, which actually says, okay, maybe they don't have giant banks. That's exciting to think about, you know—a mobile infrastructure versus a brick and mortar infrastructure. Maybe it's more distributed than it is centralised. So we have this emerging type of city.

Then you might have an exponential city, which is growing so fast. It's like Shanghai for example or Lagos, Nigeria which is emerging, which is very exciting, because they have all types



THE FINAL ASSEMBLY LINE IN A DETROIT FACTORY, 1967. [PRESTON STROUP/ASSOCIATED PRESS]



DETROIT THEATER, WHICH IS NOW USED AS A PARKING GARAGE. [SEAN DOERRY/WNET.ORG]

of developer conferences, and all types of startup infrastructure that’s happening. Many tech CEOs go visit Legos, because it’s very exciting to them. And it is and should be—anything that is placed like Shanghai where, you know, you are exponentially on top of a rocketing national economy that’s predicated on this whole super app (like WeChat) as a way of being. So it’s like, your whole experience is in this cocoon of WeChat, which I think is interesting. So what can I learn from an exponential city?

Then is there a city that’s on the brink of collapse, which we call an “apex city”. An apex city is almost never going to get this good ever again. And they’re kind of cautionary tales, you can say, maybe London is an apex city because of Brexit, where like, all of a sudden, it hinges on drastic consequences of isolation. And then look at cities that we might call Renaissance cities. Cities that were great once or had a great technological centre of gravity. Detroit might be a renaissance city, because, you know, it was the fourth largest city in America at one point, it was the centre the automotive industry, Cranbrook was there, you had all these people from GM, and, you know, big five, and it was just kind of like—it was the Silicon Valley of its day.

And so, these four city topologies give me ways to think about how a city is a context and provides different vantage points for imagining how citizens are perceiving themselves and their conditions. And then I might place an individual, at a different point in their life within each of those city typologies. So, there might be somebody who is still living at home, and so is dealing with something that’s, you know, intergenerational, or looking to be emancipated. So might be like a 16 year old who can’t wait to leave home and go to start her life. So that’s kind of an emancipation corridor or type of conundrum of then what type of scenarios provide a sense of freedom or escape. Then there might be one in an exponential city, where you might have different types of sensibilities towards being individualist or collectivist—so for instance, if it is collectivist, then we’re thinking about how the elders are people to be respected and to be taken care of, and not just in away in nursing homes, and so you end up having the grandparents living with the parents, living with the kids. And so you get the kind of sandwich generation phenomenon. So that’s interesting because you’re thinking about possibly taking care of a generation below and above simultaneously.

And then, let’s say for an emerging city, it could be somebody who’s embracing this as an entrepreneurial capacity. Like what does somebody in Legos need to do to thrive and to attract the attention of big tech or investors. And then, you know, for someone that’s in a kind of Apex scenario like London, maybe you think about somebody in a creative class.

So first—map out a city typology, and they basically ramp up like this...it’s like; emerging, exponential, then apex. Then Renaissance is like a dip. And then the people (personas) are situated within that. It’s a helpful way to think because personas can be both a blessing and a curse. You know, of course, there are different ways to abbreviate people for the purposes of understanding using task based personas, or people that are trying to accomplish a thing, versus very specific types of segmentation whittled down into a person, to an age and into a profession. We’ve experimented sometimes with actually working with ac-

tors and trying to engage personas as real people, like running an entire backstory and hiring writers to write intricate scenarios that then the actors respond to, and then they respond to their city and their context. And we like to create movies for the clients to be able to watch something like, this is what your day in life looks like. And we start to notice things that jump out and are very fascinating that don’t happen with regular personas. Going that one step further to use real humans which, of course, will respond to some sense of the universal source of truth in the people they’re relating to (at least as good actors try to). Then we start to think of how they do certain things. Imagine a person in the centre of all these things like payment, wellness, education, transportation and social community. I start to imagine—okay, today, how does this person take care of all these needs? and it’s like, “Oh, interesting, in Shanghai, this person does all these things inside of WeChat, that’s insane”. WeChat does all of these things. So if we’re actually going to talk to this person, we actually have to go through each app. WeChat is the actual membrane. And in different cities, there might be different ways in which they’re mediating their experiences. And that’s where, you know, a lot of times, you might start and then you do what we call a PESTEL scan, and line up all the PESTEL scans relative to those cities and then you start to apply those particular scans to what is probable about this person in this context—given all the we know about the political, socio cultural, environmental, legal environments etc, and think about what they will be like in one year’s time, or two years time, three years time. And then you can make some educated guesses (and they’re obviously still guesses). But oftentimes, it provides a level of specificity that most importantly, brings a sense of emotion to a person that doesn’t exist, in a time that doesn’t exist, in a context that is very hazy. Like, ‘Oh wow, she drops her phone in the year 2023 and sensors in the phone will automatically order another phone, the moment that it hits the ground”, the phone is aware that it’s injured, and the phone wants to get another phone, which of course plays into maybe the device makers planned obsolescence, (and also perpetual novelty idea) but, it also is that devices start to feel like they almost have a sense of animism. Like, “I’m aware that I’m no longer a fully functioning phone, so I’m going to call in a replacement for myself and I’m going to be obsolete”. That’s interesting, that objects become aware of their own mortality. And that’s the whole thing. And whether we start to talk to our objects, because our objects are all connected to this weird ambient ecosystem where they’re all interoperable and I can talk to my coffee maker and a coffee maker is like, “your caffeine uptake is...”



WeChat Logo, 2021.



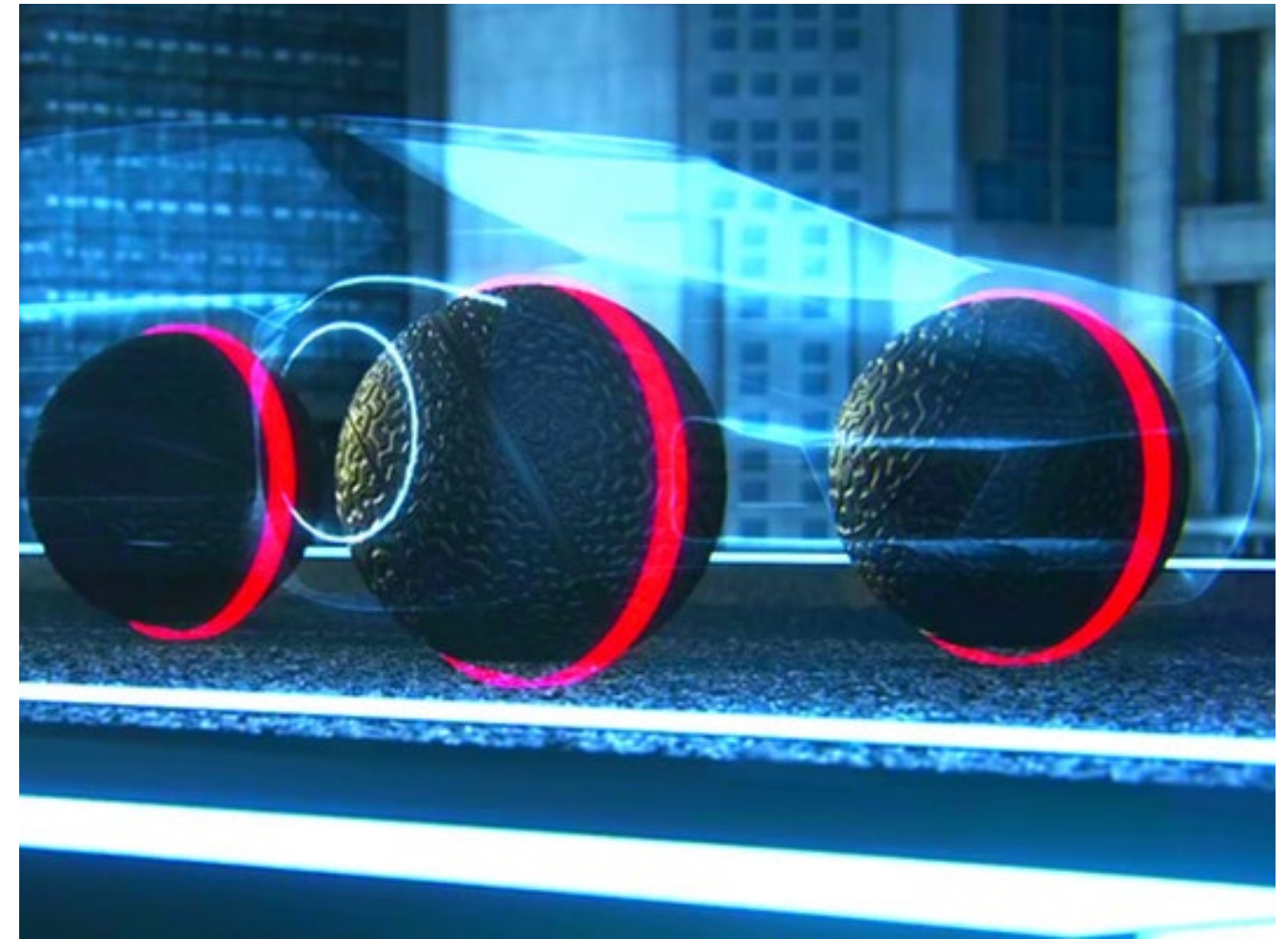
A “PESTEL” Analysis Diagram

Yeah, I've seen that Tesla's are already ordering their own new tires.

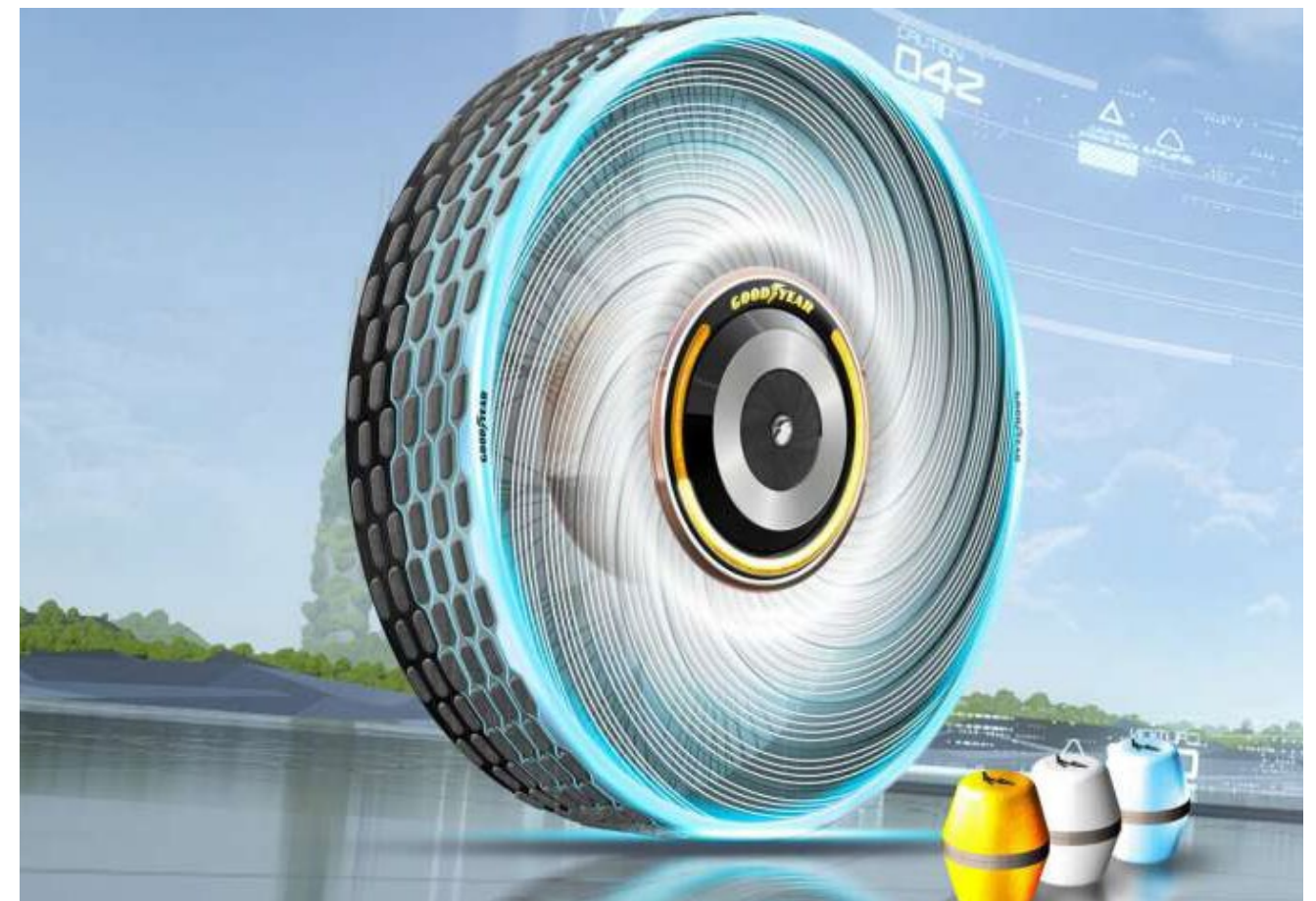
It's fascinating! Some of the mobility briefs we've had, like we had a project with Goodyear — their innovation lab came to us and they're like, "we're basically trying to launch this new servicing platform for fleet management". Very quickly, this idea came into all of our brains, which is, in the future...maybe in 10 years time...because a lot of autonomous cars, when they get to L4 of autonomy, the magical level of autonomy that everyone's hoping to get to when cars safely get us to where we're going without us having to drive — a lot of those cars only have like, three year life spans to be perfectly safe, but they actually don't last very long. So there's this larger question of like, well, clearly those need to be EV's and then you start to think about how they will recharge? There are all types of companies that are making, you know, charging pads where you charge to the asphalt, so when the car is at rest, it's charging inductively through the road. And so, that becomes, you know, really, really interesting. In some of these scenarios, where Goodyear presented, we were like "Oh my gosh, tires will be more important than cars!". Because the tires will be aware of their own pressure and they will be able to signal when they're low, to not only you, but to the fleet that's governing them. And so, imagine you're in a taxi, and you're like, "I will never not ride in a car that doesn't have Goodyear tires", which is like...you would never say that now. You would never talk about the tires, you'd be like, "I would never get in a car with this crazy driver or where someone was like... smoking up a storm". Now it's like, "I would never get in a car that doesn't have Goodyear tires", because it's this new sensibility where the tires themselves have this whole intelligence, and that doesn't matter whether you're in a Toyota or Mercedes or BMW or an Audi, it doesn't have Goodyear tires — they're like dumb tires versus smart tires.

I think it's interesting now looking at how language is scaffolded. Like, the moment that anything becomes smart, the thing that precedes it becomes dumb. So, if you have a smart home, then the home you had before is dumb. So, it has such a future oriented bias about intelligence and interoperability as something we should welcome in. It's just fascinating to think about how light assets and dark assets are used in branding. Like a shopping cart that doesn't have RFID (Radio-frequency identification) is a dark asset, it's an asset that is being underutilised because it can't communicate with other shopping carts. But if it could, it could tell you, "these carts are always left on this side of the parking lot so maybe there's something about the way in which maybe the asphalt is more level, or maybe the view is more interesting, or maybe people are doing last minute purchases on this side of the store". The cart will actually communicate information that is valuable to your grocery store.

So, this mobility stuff is really fascinating. I've worked on fleet stuff like intelligent pneumatic ecosystems. Micromobility, which is first mile, last mile things like electric bikes, scooters and mopeds. Multimodal mobility, which is like, working with Uber on planes, trains, automobiles, public transportation. And Intermodal mobility, which is freight and logistics for things like shipping containers, where multiple people are governing the same package.



GOODYEAR EAGLE-360 TYRE CONCEPT, 2016.



GOODYEAR "RECHARGE" CONCEPT TYRE, 2020.

I've been thinking recently about working on mobility briefs which, often because of their large infrastructure, require taking on a lot of responsibility over the creation of possible futures. For example, we already see companies like Uber making extreme progress and change in such a short amount of time. Uber has significantly impacted the way we experience cities around the world.

We have opportunities as designers to be involved at the levels that consider the futures we are making. We can also be in a position of defuturing futures that no longer serve us. I've been following Dori Tunstall's work at OCAD (Ontario College of Art & Design University) around respectful design and have been inspired by her thinking about how we become more conscious designers beginning in the classroom through to the workforce beyond the institution. Part of what I'm looking at through my own practice is conversations around the ethics of aesthetics. Because, as designers, aesthetics are something we have control over and know how to manipulate. We help people to see (or not see) things.

I'm wondering, for designers who are out seeking an education at the moment, how can they prepare for taking on these briefs of such scale and impact? How well do you think we prepare students for these roles now?

I think we're probably doing a terrible job. I would say that most design education doesn't prepare designers to have a high degree of agency in terms of being persuasive which is in practice a very important skill. (Why is this ?) Because persuasion is really selling and selling is like "ughh! don't mention that in school". But then, when you enter the (quote, unquote) "real world", and you're like, the same person doing the same thing (as you did in school) and the clients and the team are asking, why should I listen to this? The ability to be persuasive is really important. In school, it's like 80% craft and 20% expository skills that lead into more soft skills. In soft skills, we're negotiating; what does success look like with the stakeholders? The agreement on a successful outcome comes through a process of negotiating to build consensus, a process to find this aggregate future that everybody finds is exciting to some degree, at the same time. (How does this happen?) There's a team futuring exercise, and then there's a client partner bridge where the team maybe imagine a future that is going to be too terrifying for the client, so then you have to do this recalibration of the team futuring, the client partner futuring, and then ultimately, you get to the third gate, where they have to go tell someone that you're never going to meet about this idea for their approval. And the final outcome will likely be calibrated between those three parties. So that's persuasion in design, in the real world and it has to be done in five weeks! How do we teach students to understand the variables of investment in terms of, you know, deciding the best way to allocate time and labour towards a successful outcome to a creative brief. The problem is, until we start to make students aware and sceptical, they will not leave their studies prepared for this process and be aware of the unconscious bias embedded in their practice and their ethical responsibilities. Dori talks about this, modernism in America was a settler colonial project and maybe it had noble origins relative to the use of the powers of industry to make well made affordable goods, but when it becomes high end mid-century modern, it becomes something different and it also starts to elevate a certain type of eurocentrism relative to the mythologies around aesthetics,

like circle, square, triangle becomes attributed to like, Kandinsky and the Bauhaus. Colour, just like circle, square, triangle, cross and spiral have been found by anthropologists from ancient civilizations. So it's like, it had a moment in Germany, but you could argue, and some have said that whether there was an African transmission of some of those shapes, you know, obviously, the pyramids themselves, our conversation between circle, square and a triangle, right? It's four triangles, it's the squaring of the circle, in the form of four triangles— that is the ultimate balance trinity. That clearly predates Kandinsky's colour tests. But if we start to then think of all these different intersections of influence happening and if we can be more open about where these ideas came from, and these places, these points of origin aren't necessarily in enveloped in you know, notions of war and victory, and all this types of places to plant a flag that I think we can think of everything is having like— what was the scene before this scene? What is the scene before this creative brief? How did this creative brief emerge? These must be the things that are happening at this company, and maybe in society. And then the more that one becomes more knowledgeable about what will happen in society, then you get to see the creative brief in a greater context. It's like, "oh yeah, totally, all this on demand transportation and putting too many cars on the road, that's traffic congestion that you're going to have on the first mile and last mile." All of a sudden, these companies like Lime and Bird are going to point a finger at all the universal companies like Uber and Lift like "we just congested our streets are for many years in this industry, we knew this was going to happen, because of your incentive structure and because more and more drivers want this ability to join the gig economy, but we don't have infrastructure to support infinite amount of cars".

I feel like even tools for the future, even the Voros Cone points out. This means it has a bias. But it's interesting to see certain designers look at cones pointing forward and backwards. Like, maybe we could look backwards and learn from our mistakes so that we don't make the same mistake again. This is interesting, this kind of like juggling between past and future as a kind of tug of war. But all of those things aren't really taught. For instance, I think designers are either taught specific historical trajectories, or they're taught to be able to respond in a very quick turn. In that quick turn, it's just, can I finish it? Not, why should I do it? Or, should I do it? Or, what's the value of this? Or, what will I do with these materials after I finish it? All of these considerations aren't really ingrained. They're not questioning any of the tools they're using. Faculty aren't encouraging it and it's more so like, does the institution have a mythology about the types of ways in which this transmission of knowledge has to happen to these kinds of contextual signifiers? Or is that something that can be adjusted? To better prepare students to think of, you know, the longer now?

Within my thesis I'm exploring using futuring as a medium for students to test their ideas while they are designing as a way to challenge their ethical considerations and implications. Asking that in the design process, they are considering multiple possible futures and are open to the idea that you might design to realise the mistakes or potential pitfalls? So that it's not that we're just educating designers to achieve the best outcome all the time, but

to assess why they are designing and for whom — will this future create more opportunity or inflict more constraints?

I’ve been thinking about whether we can use futuring as a medium to open students to opportunities to test their ideas in a way that they’re thinking ahead while they’re designing? Considering things like: who is this future serving? Why am I doing this? How is it going to work? How is it going to live in the world? Asking that in the design process you might propose multiple possible futures, and be open to the idea that you might design futures that fail as a way to play that out, through creating these images of the future, which is kind of the business that we’re in, we’re in creating these visions. So, what’s to say that all of our visions need to be positive? Maybe we can use world-building to find out where the pitfalls are. We’re not just educating designers to achieve the best outcome all the time, but to analyse. I think we need to reassess the curriculum that frames how we look backwards, acknowledging the past, whilst also looking forward, rather than separating these things into, “okay, we’re going to do history of graphic design then you can take that and move forward with this knowledge”, but like, while you’re designing actually looking both forward and back, and even further back than what is taught. You need to reimagine what would have happened if the circle, triangle and square didn’t get stuck in association with a particular period of time, but what if we could kind of take it even further back in time. We can reimagine that imagery that brings us up to the present moment, in a way to move forward.

I really like how you’re thinking about a much looser sense of design. I mean, obviously, design has historically been ephemeral from like posters, and you know, printed matter has some degree of being degraded over time. But I think it’s very interesting to think of, world-building as something that doesn’t have to be so precious and time intensive. That would be interesting to think of a game like structure, to be able to see which futures are plural and why. That’s a muscle that I haven’t seen anybody address, how to know whether or not a future even if it is exciting for you and to people like you is combated repressive towards another future that is perfectly viable that may even be more sustainable. I think that’s where we’re going. That’s kind of where we’re at right now. And I think that the danger is, we don’t understand how to use prophetic imagining to truly reach the people who need to be reached. Like, if I see another image of a polar bear floating on a piece of ice... Now, if that image had worked, we would not be where we are, but we just can’t use that image because we don’t have another. We haven’t imagined another way to talk about climate change or global warming in a way that shows how you get like a hyper capitalist to embrace this? Is it the green HVAC systems are more efficient, and therefore you have greater margins if you adapt to solar? It’s like, you need to start thinking in oblique angles to achieve those outcomes. People are not willing to think in those types of oblique angles, because it’s so terrifying. It’s like, you need to choose a point of view, that is not your point of view to achieve the outcome. I think that’s another interesting thing relative to this training of thinking of plural futures is also this plural motivation.

Agreed, designers need to be thinking about the motivations for the client they’re working for and understand the future of that industry. Just answering the brief in terms of design and aesthetics isn’t enough if you want to be responsible for the role you play in the process.

I was speaking to a client earlier today and they have this technology they don’t really lean into. They’re not that excited about it. I say, “ you guys should be so excited about it”. But that’s not really what the margins are like.

It feels like it’s not our job, like we’re going into territory outside our skill set and domain. That’s not the place we’re supposed to be and I find that difficult. As a graphic designer, in a graphic design program, (whatever that means, I don’t think we know) I’m not necessarily thinking about the future in this way and looking into what my skills can bring to and benefit companies outside of aesthetics. If I’m going to do a brief about mobility, I really want to understand mobility, I really want to understand the future of mobility and what it means to these companies. And that’s flexing a completely different muscle to the muscles that I would usually be using. So I’m interested to ask you... do you see yourself now as a graphic designer?

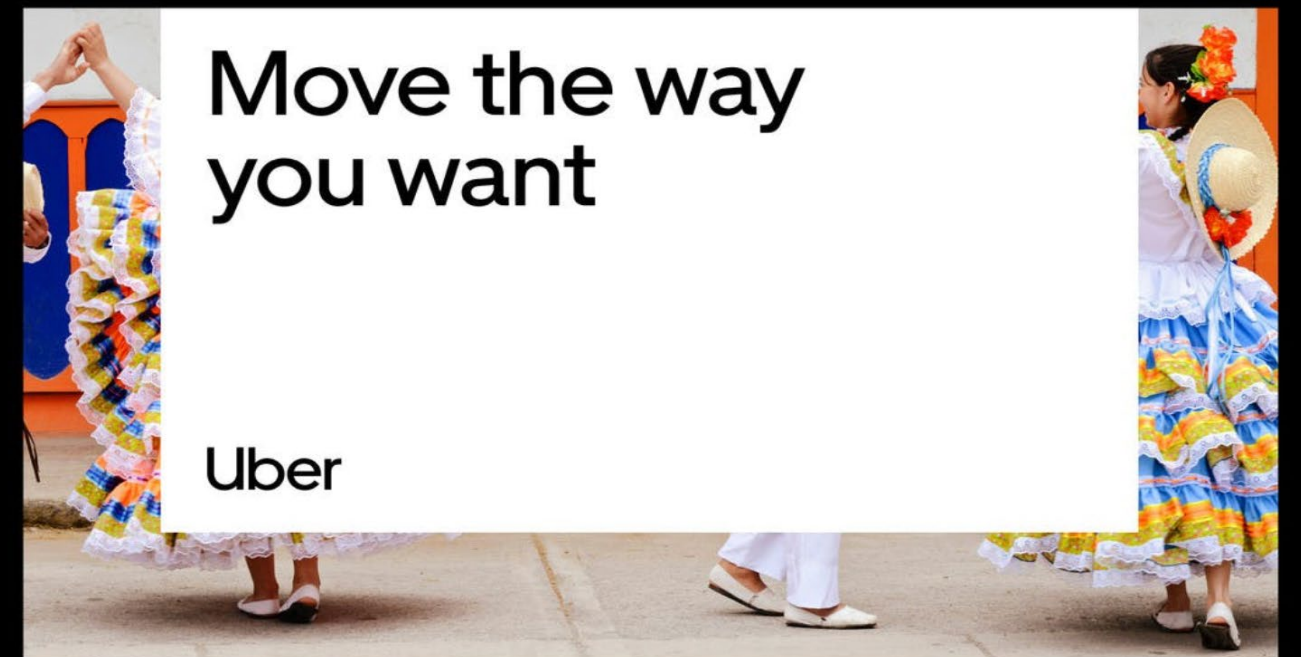
Yeah, it’s interesting. I was thinking about the word “graffiti”, and different terms that designers use, commercial artists or basically, people who accept briefs from other people, take a commission, and then complete it. Now that we have designers who are writing their own content or doing self generated or self propelled work, is that even design? Then what are the boundaries between, design and art versus self initiated briefs versus one that’s inherited. I think in some ways there is small ‘d’ design, that implies a kind of a painterly type brief, where you’re talking about compositions, treatments of surface; form, tension, balance, typography, semiotics. And then there’s more nuanced graphic design that has maybe an intellectual component that’s starting to make linkages to design that came before and references to pop culture. Then there’s design thinking, Big ‘D’ design where we are thinking about how we think about what’s feasible, credible and desirable, and processes to get new, larger works onboard into our process to make non-designers into designers through the tools of design thinking. I feel like this would be like another version of designer, where I do think, similar to the way that a lot of people feel like “oh, all designers should learn how to code” or “all designers need to learn how to write”. I feel like the requirements for being called a designer keep expanding. I do think future literacy is going to be a must have for designers to be able to navigate briefs that they feel good about, briefs that are getting outcomes that they will feel good about. For a greater understanding of the consequences of actions and materials. And I think that’s exciting that you’re asking these questions. I think that’s the future of our profession. Well, it’s the only way that designers become elevated beyond where software is going to go. Machines will be able to do amazing graphic design every time. And it’s a question of then, what is the value of a designer? Well, it’s not as it’s not a production artist. It should be somebody who has the ability to think, in different dimensions, in different time horizons, and is able to look at different synesthetic linkages and understand intermodal or multimodal references and interaction patterns.

It’s going to be interesting how designers say, “Oh, I’m a graphic designer, but I need to understand, sometimes the thing needs to talk and sometimes things needs to vibrate”. There’s going to be a new sensitivity to knowing when you need to bring somebody next to you, or it’s going to be a new skill set. But I

do think that it's going to be a very interesting, interesting time.
Now, I wonder.. maybe "designer" will still work?

Being a designer that is aware of all these things working together in tandem, apart from just the aesthetic side of the job. We will need to have more of an understanding of the experience and value of our designs and kind of what biases are embedded in what we're designing. Like Dori looks at the relationships between design, values and experience.

I think the only thing that I would add onto Dori's three components of that equation is— all that within a rubric of the plural. Because I think, part of the danger is that we're building experiences that are for people that can afford them by people who can afford to. We go to schools to be able to design for the people that can afford these things. It's interesting to think about what are plural futures that different types of people can inhabit, to all achieve some degree of value in some experience that feels coherent and not alienating. And then I think that's the sweet spot.



* The projects in this section explore "the future" as inspired by the past through media and entertainment, pandemics, speculative city design, urban planning, ecologies and cultures.

PROJECTS



HYPERLAND

Video series, 40 minutes
December 2020

This four part video series, *HYPERLAND*, traces the influence of historical events that link technology and political power on visual fiction speculation about the future and how, in turn, the influence of these fictions manifest in the real world. Completing the continuous feedback loop these manifestations, now themselves part of the historical record, become fact and are the basis for the next iteration of the visual media's speculation on the future, in which technology is harnessed in service of advancement of contemporary political agendas.

The series highlights how successful entertainment films about the future provide us with a timestamp to order the progression of contemporary fears and aspirations of the people for whom they were made in past decades.

Mass appeal visual fiction not only plays a key role in the formation of public opinion but also in the development of the identity of the self and our personal futures. Pop culture, media, entertainment and technology have steered our path to where it is today. It isn't a coincidence that we now find films we saw in our childhoods which were accurately able to predict the future we now find ourselves in. These narratives and worlds are constructed by us—from what we know, dream of and fear.

Before the 20th century we saw the end of the world in biblical/mythical terms. Then we saw it through science fiction (class war scenarios of the 19th century). But post World War II we know what it looks like because we've seen it. We have seen the major disasters that until this point, we had only imagined (concentration camps, nuclear bombs, natural disasters). These horrors have also been well documented and circulated; we might also have been directly affected ourselves. [18]

This video series uses the four Disney theme parks to separate its content to cover four separate topics. *Frontierland* is about power, order and disorder. *Tomorrowland* is about future technology. *Adventureland* is about climate and finally *Fantasyland* which explores conspiracy.



[18] Berger, James. *After the End: Representations of Post-apocalypse*. University of Minnesota Press, 1999.

FRONTIER LAND

ADVENTURE LAND

TOMORROWLAND

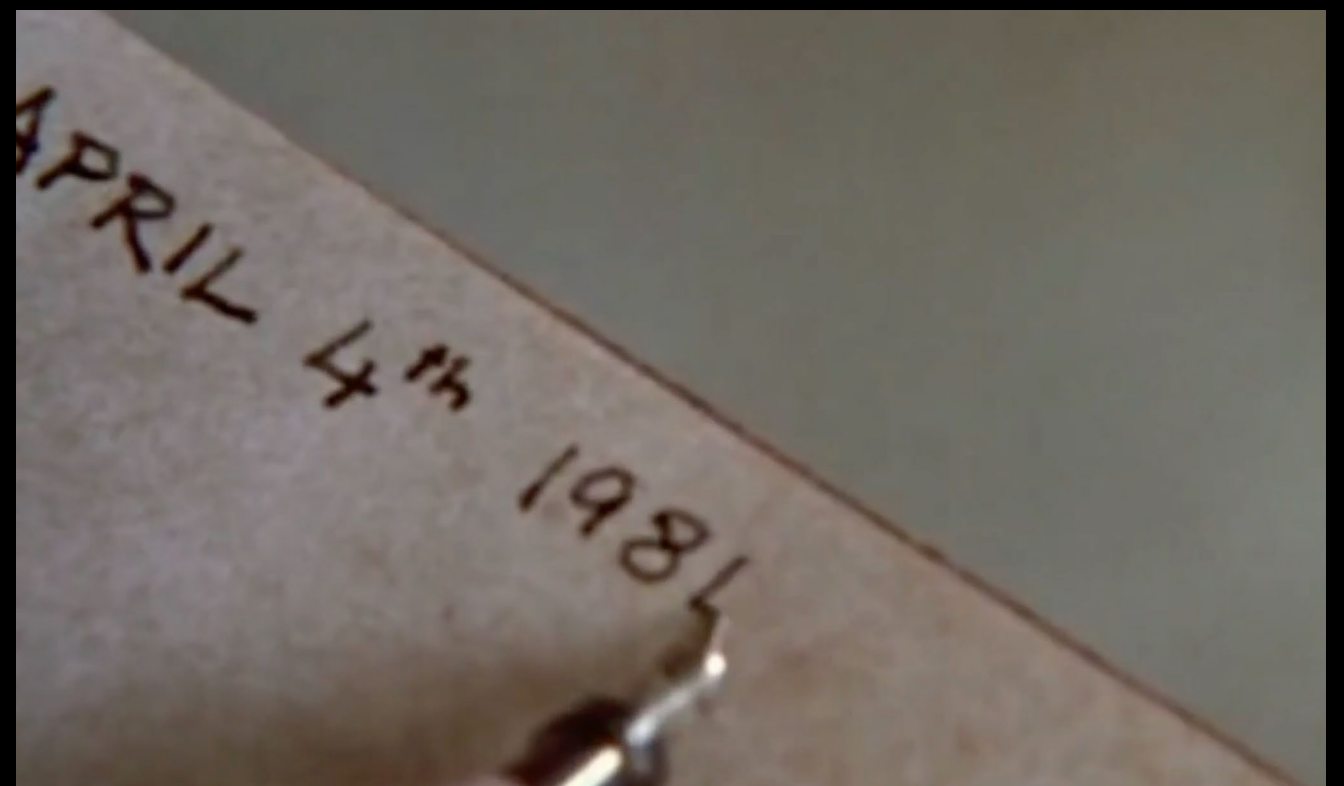
Fantasy LAND

A FOUR PART *Film* SERIES BY *GEORGIE Nolan*

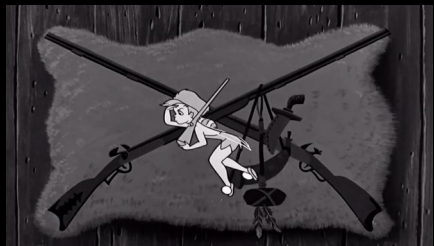
MADE WITH 100% FOUND FOOTAGE
FROM VARIOUS SOURCES.

DOES TRUTH SEEM
STRANGER THAN
FICTION?

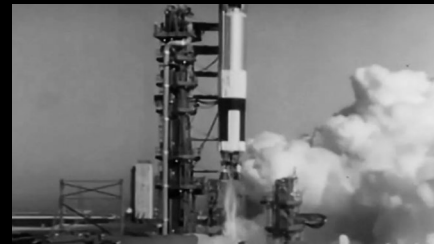
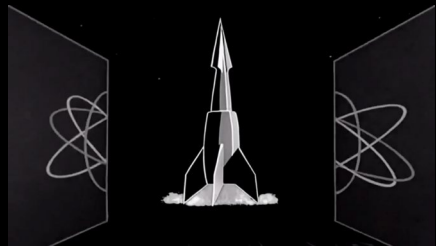




FRONTIER LAND



TOMORROW LAND



THE FUTURE THROUGH FILM: EPISODE TWO

TECHNOLOGY



THE FUTURE THROUGH FILM: EPISODE ONE



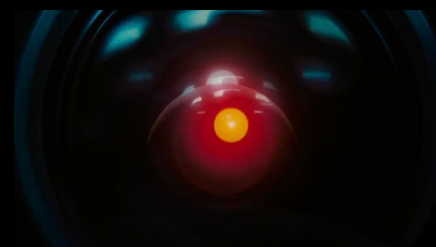
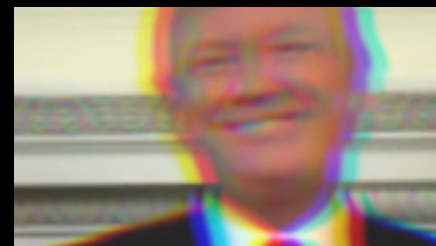
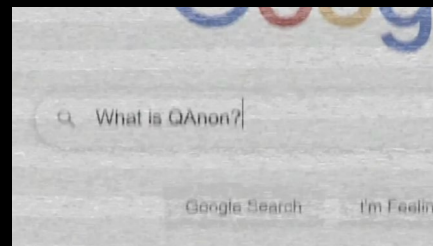
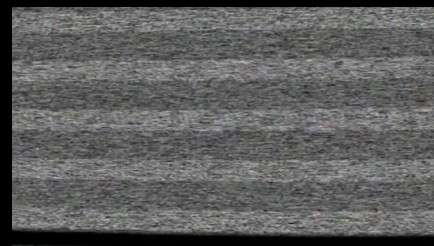
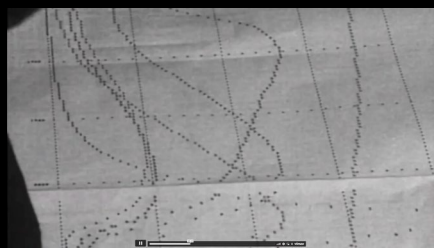
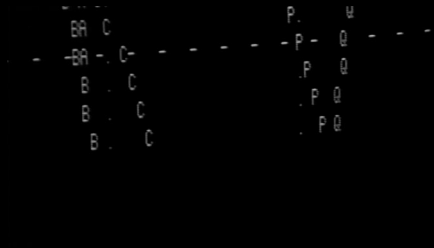
ADVENTURE

LAND



FANTASY

Land





MICROBIAL COSMOLGIES

Website & video, 1:52 minutes
May 2020

This project was funded by RISD + RISD
Nature Lab and corporate partner,
Hyundai Motor Group

COLLABORATORS

ANASTASIIA RAINA
ASSISTANT PROFESSOR
GRAPHIC DESIGN

ELENA HUANG
RISD MFA
INDUSTRIAL DESIGN 2021

MEREDITH BINNETTE
RISD BFA
FILM/ANIMATION/VIDEO 2020

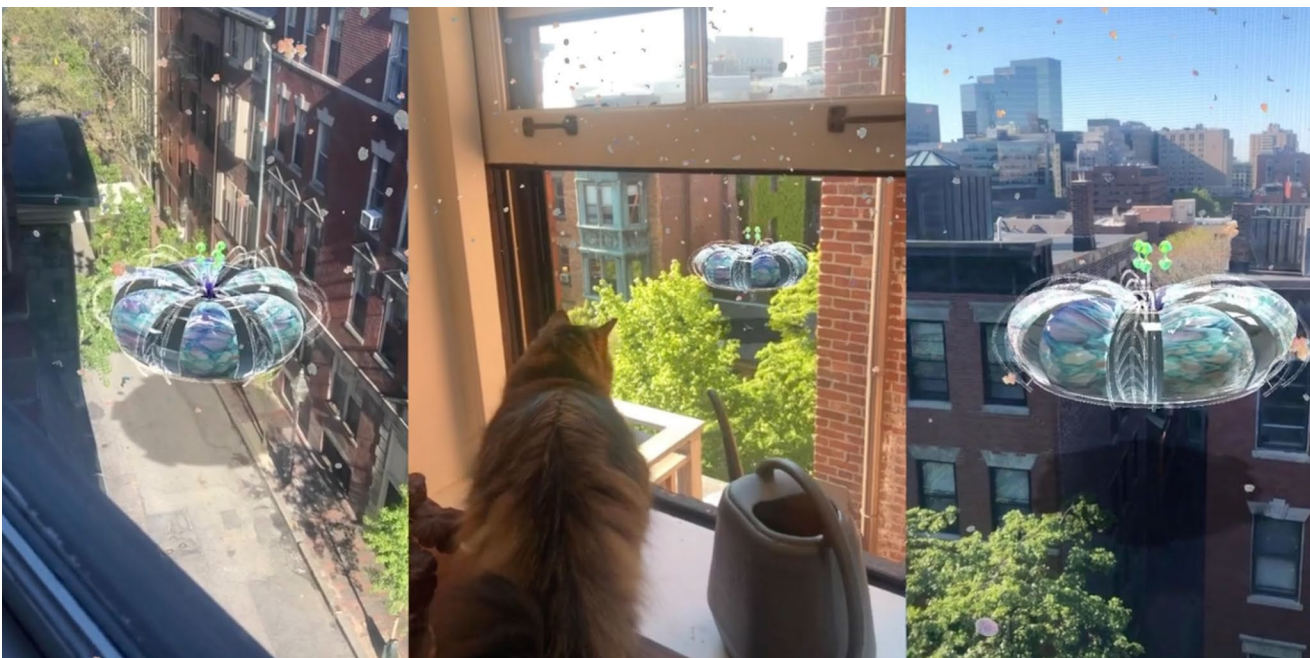
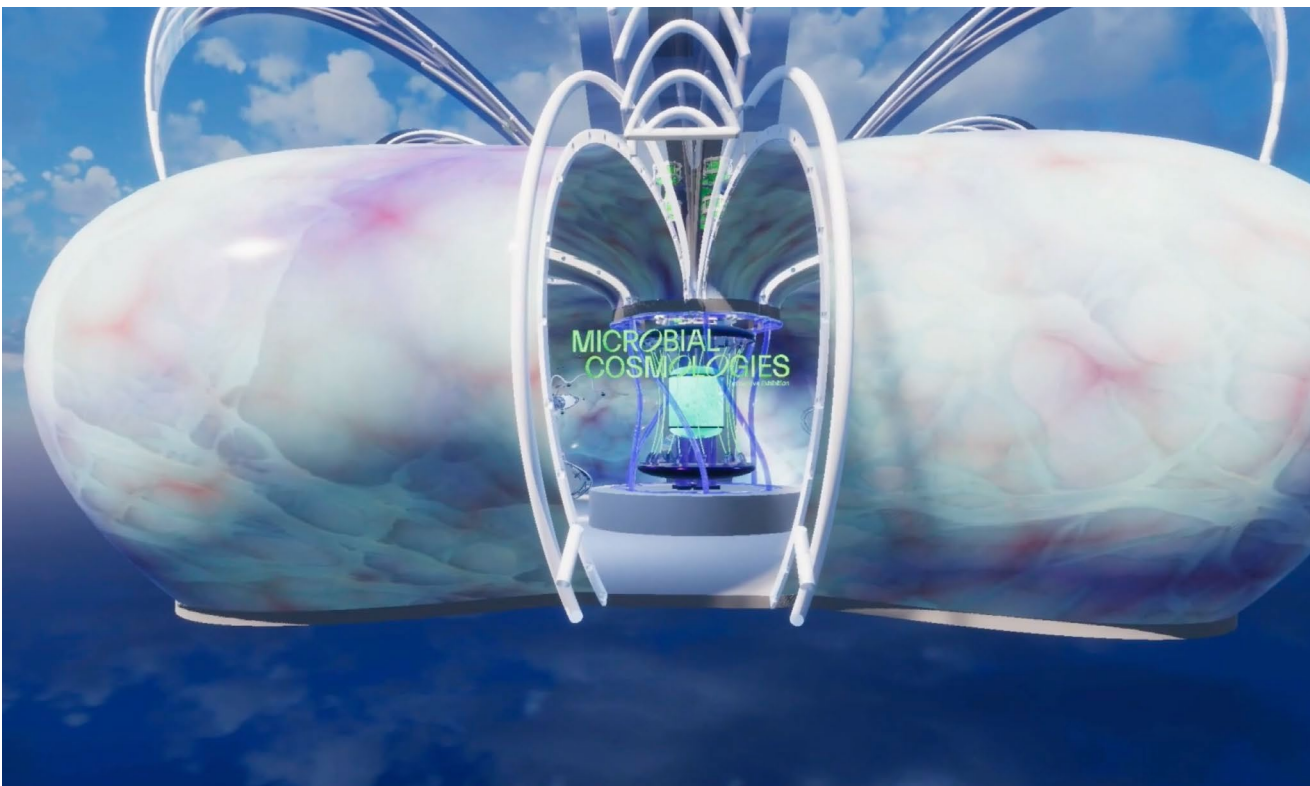
YIMEI HU
RISD BFA J
JEWELRY + INDUSTRIAL DESIGN 2021

Microbial Cosmologies explores the millennia-old mutualistic relationship between organisms, such as insects and humans, as environmental hosts for bacteria, viruses, and other microbes. These tiny living factories thrive, spread, and give the benefit of access to crucial chemicals and nutrients to the host as well as the disadvantages of compromised function. The microbiome, whether it lives on the skin of a human, in the gut of a fly or in the very architecture of the spaces we inhabit, is what connects us across species, inside and out.

And yet, our human tendency to underestimate the invisible world around us, and our unwillingness to change our lifestyle accordingly, has rendered millions of us unprepared, immobile and isolated while the Coronavirus itself spreads around the world at an unprecedented speed, jumping cross-species boundaries. This is the time for rethinking what mobility means in the age of pandemics and how the mobility distribution of bodies, goods, and information is now carefully choreographed by the invisible microorganisms that move through space with and between us.

Microbial Cosmologies was an immersive project where five designers, inspired by scientific research, imagine a Future of Mobility that is entirely built around the most successful type of organism on the planet—the microbe. This project add-resses the relationship between humans and microbes and our need to adapt and respond with agility to the new world around us and heal the deleterious effects of injustices revealed by the pandemic. Employing speculative design, industrial design, mechanical engineering, AR, VR and Machine Learning we set out to create a world in which humans redefine our relationship with nature to make space for inclusive human/nonhuman assemblages and develop methods for designing for, with and around the microbial world within and around us.

Due to Covid-19 this work could not be exhibited in person so the work was displayed through a website experience. The website contains a teaser video for our speculative world, 3D models of our digetic prototypes, AR face filters and a video of our VR exhibition space that presents all of the work.



SYMBIOTIC DESIGN: NATURE+TECHNOLOGY+SOCIETY

Symbiotic Design explores the entanglement of symbiotic interspecies relationships that are continually adjusting according to requirements and environmental conditions. Symbiosis is not an idealized relationship, but a process in which the species are continuously negotiating the use of natural resources in a dynamic balance that allows all to survive. This research strand seeks to develop technologies to facilitate the biofeedback loop in order to generate alternative energy sources; explore design for pandemics and the development of objects that allow us to coexist with pathogens.

ARTIFICIAL NATURES

The power of computers and code has given us the ability to read, write, and design DNA and made possible synthetic biology—a marriage of biology and engineering that allows researchers to design organisms in a lab. This technology is having a profound impact on medicine, agriculture, and manufacturing, where we can engineer sustainably grown organic materials. In this section, we think of possibilities, promises, and dangers of designing organisms by employing synthetic biology in the sphere of biosecurity and economy.

BIO STATE

The Global Gut Technology Operating System is self-learning, expanding, and self-regulating governing apparatus. The largest organism on the planet—the mycelial network is enmeshed with the physical infrastructure of the Internet. The System is a techno-natural hybrid network that connects humans, vehicles and cities, climatic patterns, algorithms and organisms. The System is entwined with existing structures and embeds itself into homes, public buildings and roads. By augmenting the core existing systems and reading the environmental, virtual and microbiome data, it is able to identify key issues and concerns of the inhabitants and address weakened microbiota by reversing some of the more deleterious effects of industrialization. The Global Gut Operating System is calibrated to ensure that weakened microbiome community members are prioritized. Resource Distribution Vehicles are sent to replenish nutrient-rich foods and introduce proper micro-biodiversity to accommodate regional needs.

GOVERNANCE

Bacteria is democratic and does not recognize borders, genders, social, cultural, political, and economic differences. The unprecedented nature of the Coronavirus has divided cities based on the management of their immunological containment response. Once the external environment changes or is over-balanced, The Global Gut

Operating System introduces a new combination of different groups of people with a diverse microbiome to enhance the immunity of the society as a whole to withstand future pandemics.

OBJECT: MICROBIAL MASK

From a type of medical supply to a daily necessity, masks have become a symbol of safety, concern, and respect for individuals and communities. Masks are now worn not only as protective equipment but as a symbol of community and belonging. They have gone through multiple generations of change in a short period of time that no other fashion items have experienced. The latest generation of the mask abandoned full facial coverage and minimized the protective mechanism to its functional core covering only the mouth and the nostrils. The virtual mask projection signifies that a person is wearing protective gear and becomes a decorative and symbolic representation of their particular microbial-community.

The Microbial Mask is the first personalized microbiome sequencing technology. The device is designed to give a readout of the user's unique microbial composition, composed of fourteen sensors monitoring not just its GPS location, but also air quality levels, social-distancing distance, new pathogen exposure, making it possible to analyze an individual's micro-environment. The results are transmitted directly to the user's device. The Microbial Mask Filter now sequences and analyzes samples from hundreds of thousands of individuals worldwide in real-time.

OBSCURING CITIZENSHIP DATA

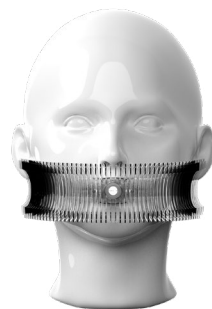
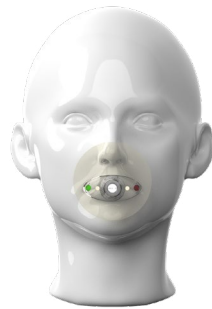
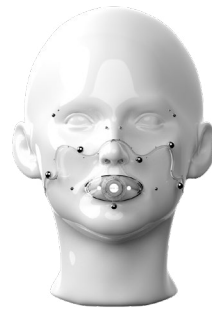
To gain agency over a person's own citizenship data and move through space undetected, a Microbial Mask wearer can attach The Obscuring Device, which anonymizes bacteria on wearers' skin and within their gut. The device is able to destroy DNA found in a Microbial Mask filter using UV lighting to kill or inactivate microorganisms. After wiping, the filter is replaced with a synthetically designed Global Gut data filter specific to the wearer's desired location.

BIOSECURITY

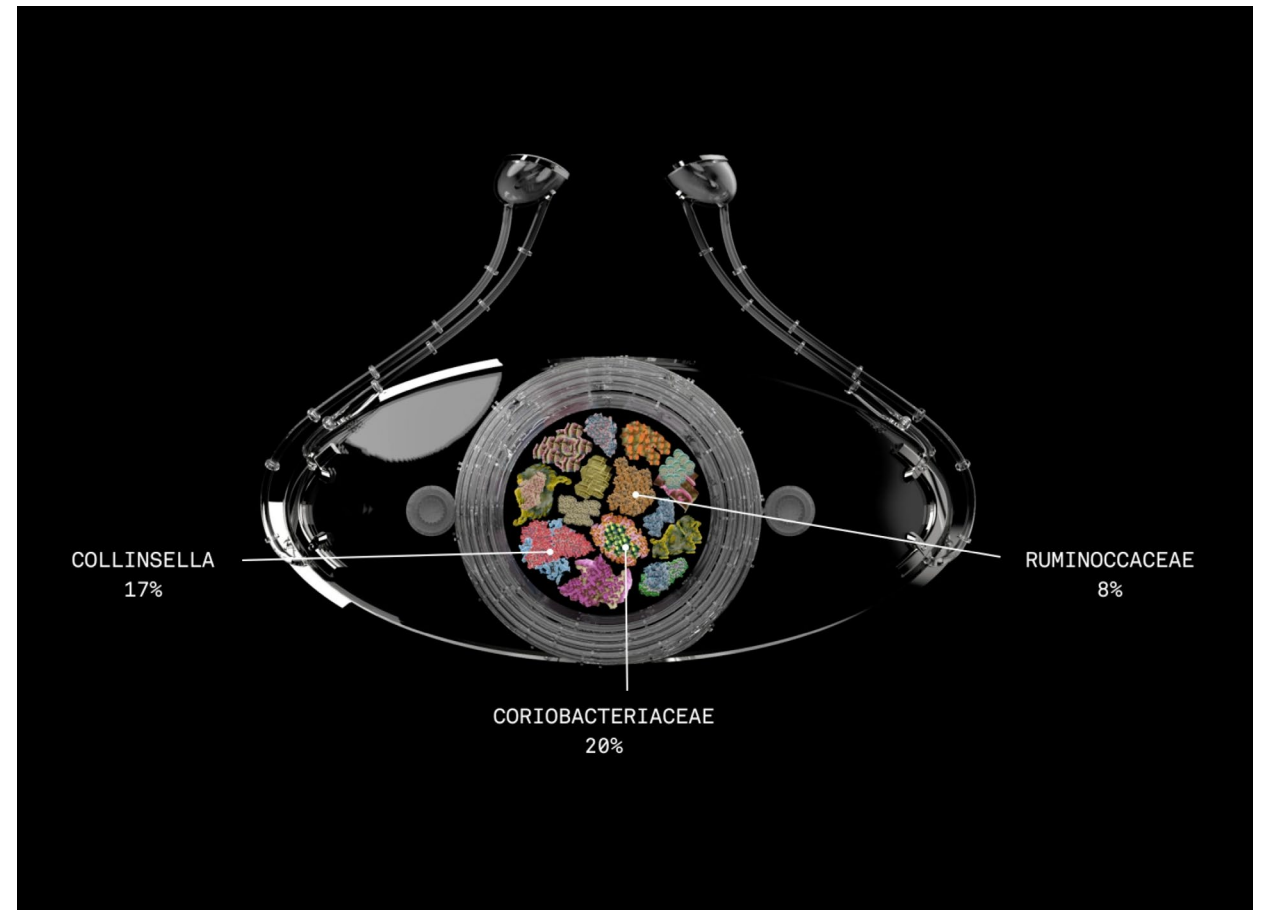
Post-coronavirus, the collection, and the sharing of microbial data has become the norm. The world realized the existential risks of ignoring the microbe and efforts were put towards monitoring and healing for stronger immunity to potential threats. Pools of community data are stored locally in The Global Gut Operating System, which allows for communities to have regional control over their information.

MICROBIAL CITIZENSHIP

Mobility and belonging to a national state has changed as a result of the biosurveillance post-COVID-19. The need for physical passports, visas, records of immigration history, and other identification documents



MICROBIAL MASK COMMUNITY VARIATIONS BY YIMEI HU.



I CREATED A "MICROBIAL PASSPORT" WHICH WOULD ALLOW FOR PEOPLE TO TRAVEL ACROSS THE WORLD WITHOUT PAPER DOCUMENTS, RATHER READING YOUR MICROBIOME AS A WAY OF IDENTIFYING YOUR TRAVEL HISTORY. AS WE NOW KNOW, WE CAN IDENTIFY WHERE A PERSON HAS TRAVELLED BASED ON THEIR GUT FLORA.

are erased. Global Gut technology can identify a person's microbial composition, and the Microbial Passport reissued every six months to reflect the constant shifts in the personal microbiome. All records of travel are identifiable in a passenger's microbiome data monitored by The Global Gut Operating System. When on the move, this data is projected while entering and exiting communal spaces. Individual person's microbiome has become a defining factor of their identity. The System collects and analyzes a unique and singular fingerprint of genetic and social information that defines access to the resources.

INTERFACE

Using the Microbial Mask, data is analyzed from the travelers' digestive system and skin surface. Global Gut Technology looks for bacteria colonies in individuals systems and gives them a reading of the most common colonies and any potential threat (If at risk, the individual can receive the treatment). The system then allocates them to a community that has a robust microbiome.

ECONOMY

In a world where microorganisms generate the primary source of energy, a circular economy makes use of the microbes in our environment and within our bodies. We can cultivate, harvest, and trade the bacteria from our waste to fuel the way we live. This enables nature and the algorithmic process (The Global Gut Operating System) to take control and redefine our current systems.

OBJECT: GUTCOIN

Bacteria are the most abundant organisms in our biosphere, capable of doubling their population in under ten minutes. In this micro-biopolitical state, life is sustained by this vast resource. The trading of GutCoin supports the Global Gut Economy, a currency developed to replace our traditional money system. GutCoin allows community members to exchange goods post-COVID-19 pandemic where many lost employment. GutCoin can be retained by depositing microbes to be redistributed through The Global Gut Operating System. The surface of each coin marks a different pandemic.

GutCoin deposits are made to Microbial Data Banks within cities and onboard Resource Distribution Vehicles. When wearing a Microbial Mask, inhabitants can connect to a bank and upload, retrieve or exchange GutCoin.

OBJECT: MICROBIAL DATA BANK

A Microbial Data Bank allows citizens to upload their microbiome data to The Global Gut Operating System in exchange for GutCoin. This coin is one of the main circulating digital currencies that citizens can cultivate, trade, and spend on purchases like rides on a Resource Distribution Vehicle. The Data Bank is part of the ecology of devices interconnected with The Global Gut Operating System. It collects and stores citizen microbiome data, which powers the Bio-Economy, Symbiotic Engine, and Microbial Mask.

MOBILITY

In the world where our digital mobility is lighting fast and physical mobility is stunted by traffic, city overpopulation and constant viral threats, drift lifestyle and economy grounded in slowness exists alongside acceleration, and it is on the rise. Large self-sufficient communal spaces drift through the airspace containing access to all of the vital resources utilizing the air currents and wind patterns. Location, access to work opportunities, culture, and education, are no longer the prime concern of the citizens since the distribution of goods is equally distributed throughout the area. (eg. An exhibition from the MET currently on view in a Resource Distribution Vehicle)

Combined with the information supplied by The Global Gut Operating System, the soft architecture of the vehicle contracts and expands to accommodate a different number of passengers or adapts to be suitable for quarantine by dividing into several isolated areas with alternative entry and exit points. At the end of its service life, when the materials break down, it can be repurposed as a shelter.

RESOURCE DISTRIBUTION VEHICLE

The Resource Distribution Vehicle (RDV) connects all assets of the mobility system. It harvests and collects bacteria for research purposes, and generates energy to fuel mobility of citizens, goods, education, and culture. While onboard, passengers can use Microbial Data Bank to pay for their trip. This deposit of microbes contributes to the symbiotic engine which powers the vehicle.

RDV EXTERIOR

The exoskeleton of the resource distribution vehicle mimics the body structure of opiliones - also called daddy-long-legs or harvestman. Opiliones use their circular array extremely long legs to support its centralized nervous system and feeding organs. Their locomotion is more stable, durable and manageable than mammiferous quadrupedal movement. It's reasonable to speculate that the future transportation vehicles would morph into circumferentially symmetric structure.

The external structure and membrane of the vehicle operate like a hot air balloon, where a colony of microbes and fungi decompose waste, live out their lives, and produce heat that lifts the structure with a flexible sac-like top. Microbes are guided to create and reinforce specific areas of the vehicle, and self-learn to efficiently organize themselves.

RDV INTERIOR SPACES

The inner structure is dependent on the type of vehicle needed. Some may be office spaces, other hospitals, marketplaces, or recreational spaces. Alternatively, the RDV could contain flexible compartments that accommodated new areas as they emerge.



OBJECT: SYMBIOTIC BIOENGINE

OUR WORLD REQUIRED THE DEVELOPMENT OF A NEW ECONOMIC SYSTEM AND CURRENCY. I CREATED THE OBJECTS TOGETHER WITH YIMEI HU, WHO BROUGHT THEM TO LIFE IN 3D.

Resource Distribution Vehicles are powered by Symbiotic Bioengine. The engine is a platform to create a biofeedback loop that combines photosynthesis, biohydrogen production through metabolism and hydrogen-electric generation. The engine, which sits in the center of the vehicle's flexible structure, allows each RDV to be self-sufficient using methods of:

1. Diatom photosynthesis

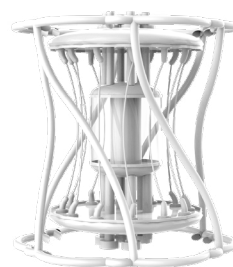
The diatoms are one of the largest and ecologically most significant groups of microorganisms on Earth. It has been known for a long time that they're abundant—almost everywhere in aquatic habitats, forming an essential part of the natural food web. Moreover, diatoms make a tremendous contribution to the global carbon economy by fixing carbon and releasing oxygen. In the bioengine model, diatoms play a role of one symbiont. Living in the top layer of the vertical structure, diatoms produce oxygen for the electricity generator and provide sugar for the hydrogen-producing bacteria.

2. Bacteria Hydrogen Production

Hydrogen-producing bacteria, including several genera like Clostridium, Enterobacter, Klebsiella, Citrobacter, and Bacillus, can consume sugar and release hydrogen gas when digesting. The only byproduct of the metabolism process is water.

3. Hydrogen Electric Generation

The bio-hydrogen gas produced by bacteria is funneled into a fuel cell. The hydrogen fuel cell produces on-demand electricity by combining hydrogen and oxygen atoms. The hydrogen reacts with oxygen across an electrochemical cell to produce electricity, water, and tiny amounts of heat.

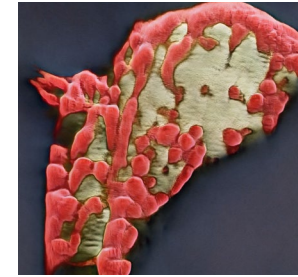
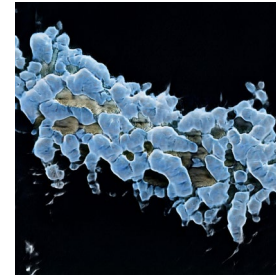


SYMBIOTIC BIOENGINE SHELL

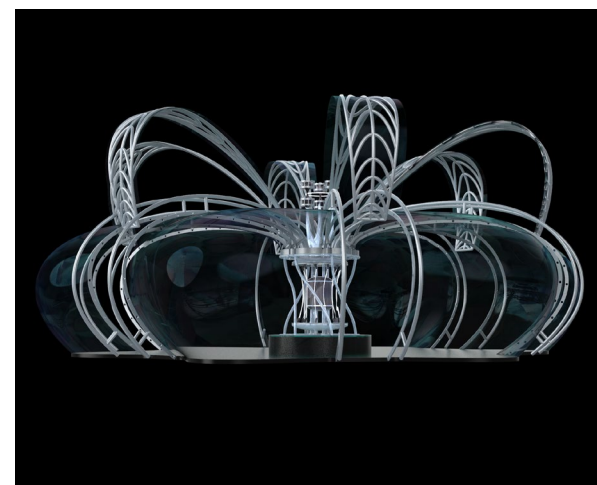


BIOENGINE WITH MICROBIAL GROWTH

By speculating a vertical multilayer Bioengine, we designed and created a new circular ecosystem that generates power resources by utilizing the symbiotic relationships. The only external supply input in this mechanism is solar power, and the two byproduct outputs are electricity and water. Jumping out from the carbon cycle, a hydrogen circulation system model is presented here, provoking the discussion of reimagining the potential urban development pattern of designing with and by nature, reconstructing the conventional energy industry and challenging the one-way resource consumerism in "Human-centric Nature".



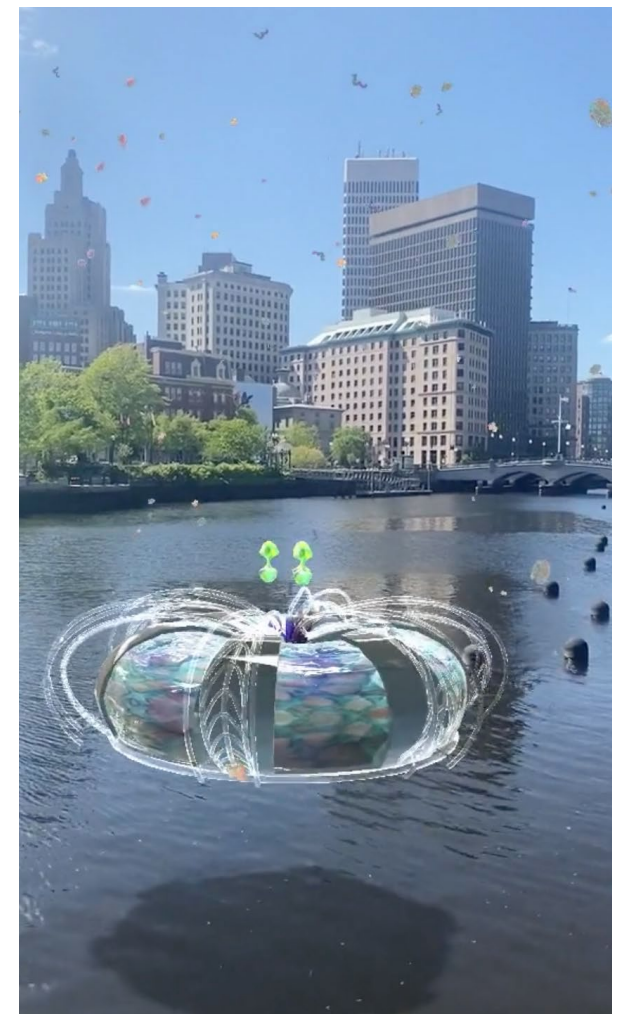
AI GENERATED MICROBES CREATED BY ANASTASIA RAINA



MODEL OF THE EXHIBITION VR EXHIBITION SPACE CREATED BY ELENA HUANG.



SYMBIOTIC BIOENGINE DESIGN BY ELENA HUANG.



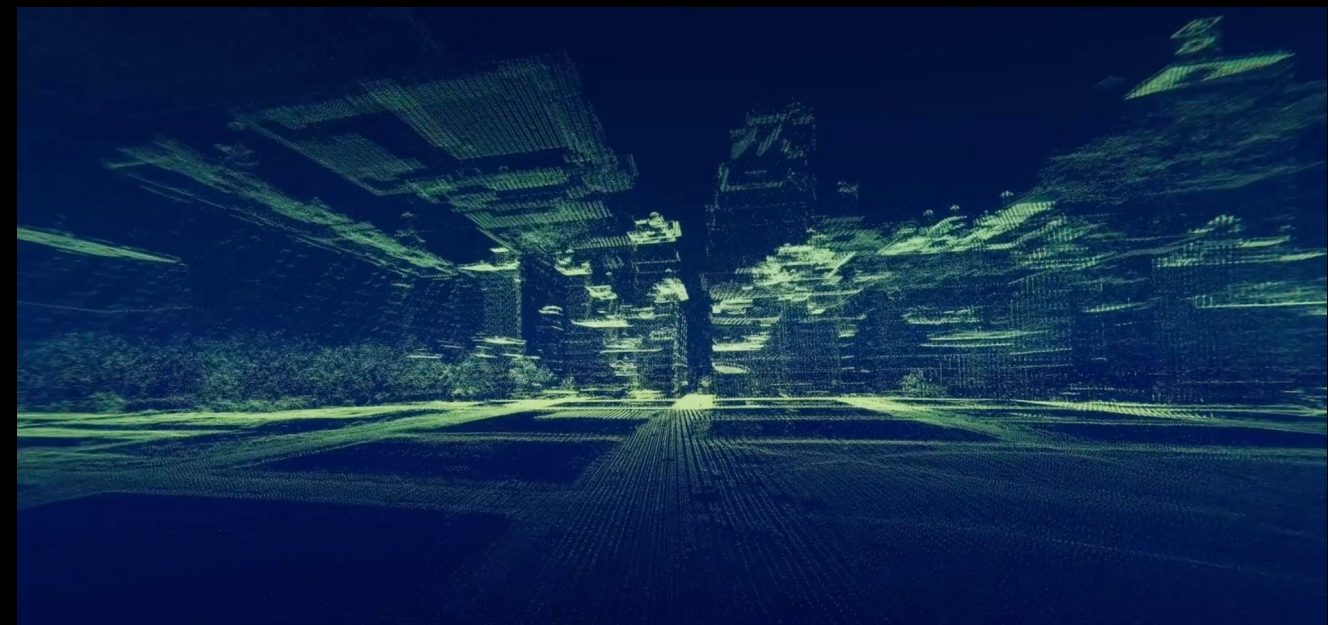
BY CREATING AR FILTERS FOR PEOPLE TO USE, WE WERE ABLE TO BRING OUR SPECULATIVE WORLD INTO THEIR SPACE AT HOME. THIS GAVE A SENSE OF THE SCALE OF THE PROJECT IN REALITY.

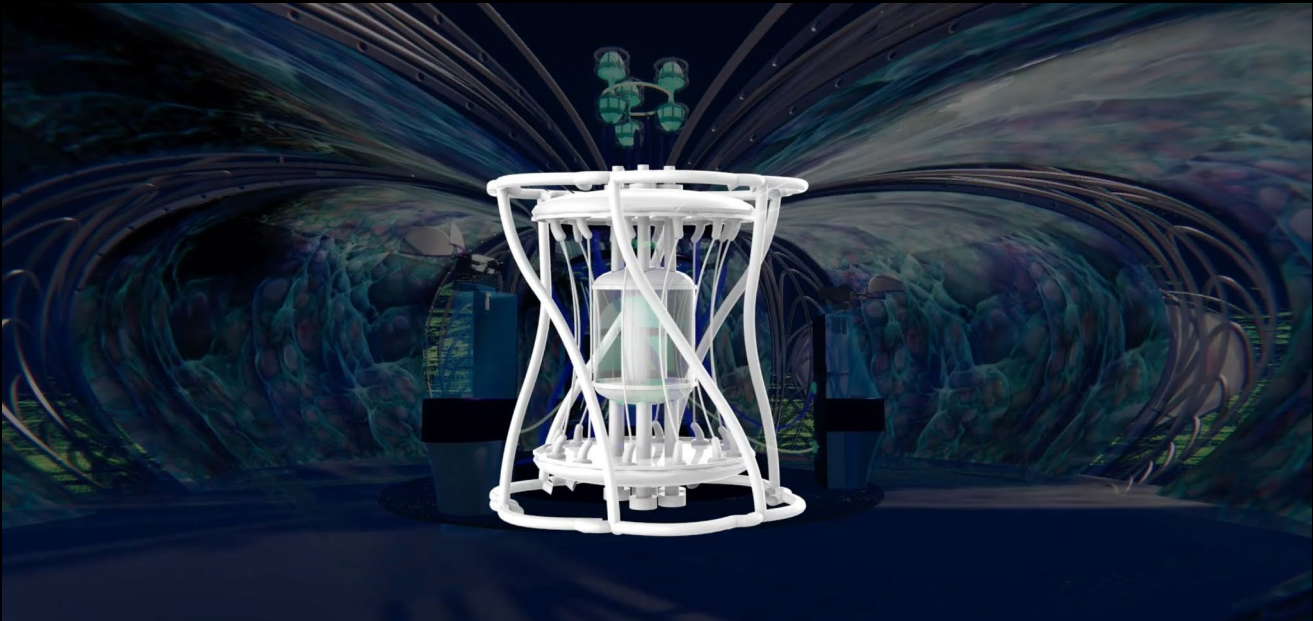
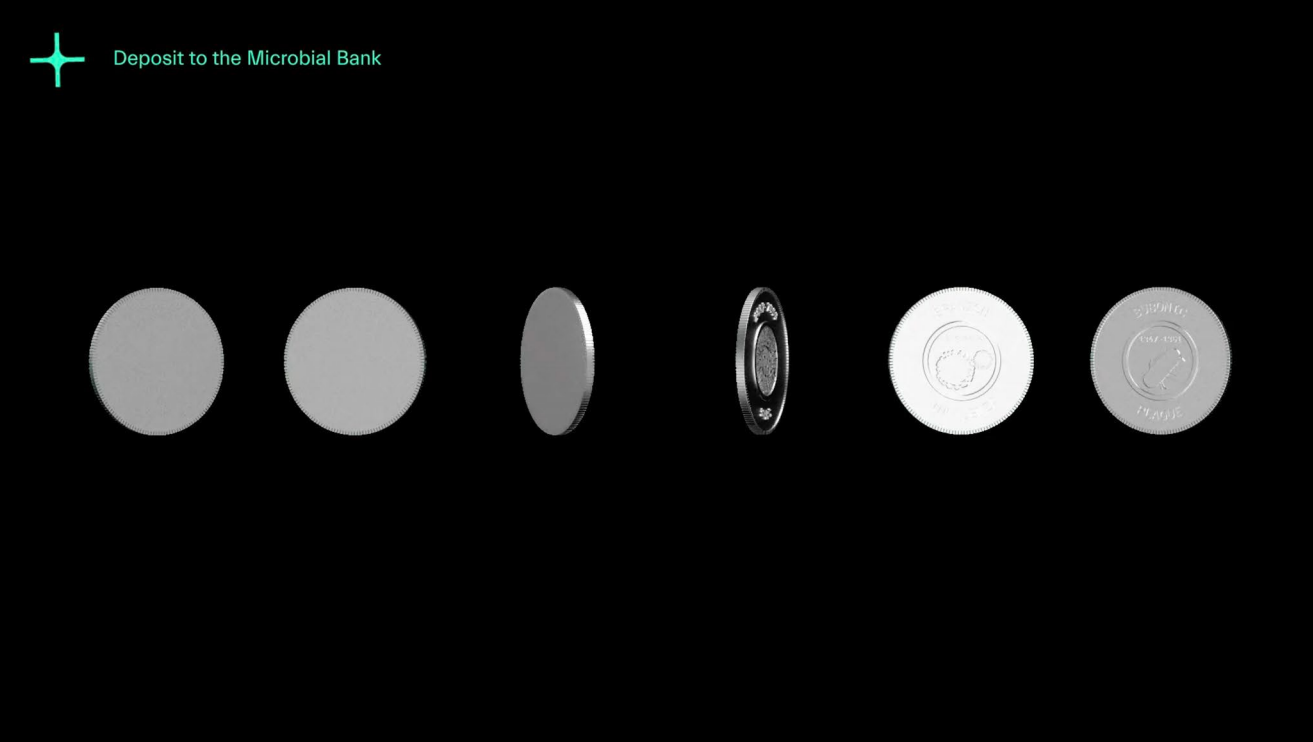
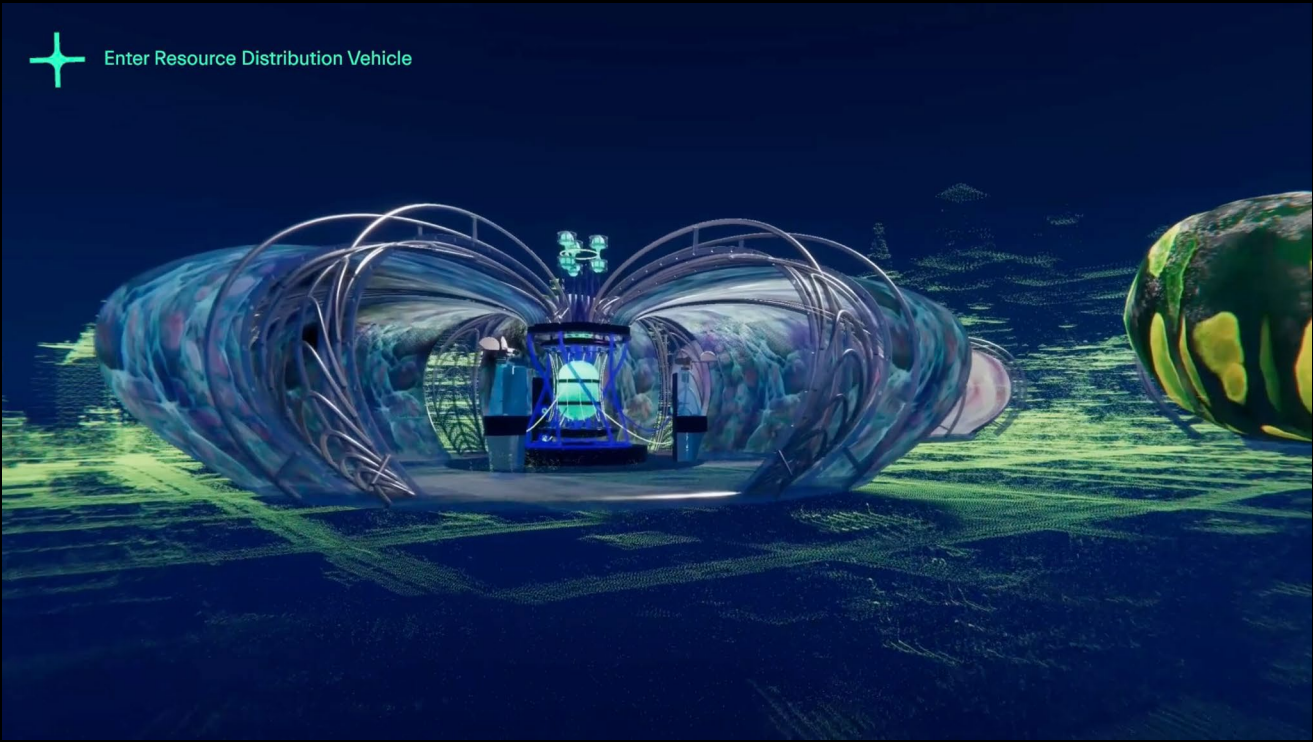
MICROBIAL COSMOLOGIES

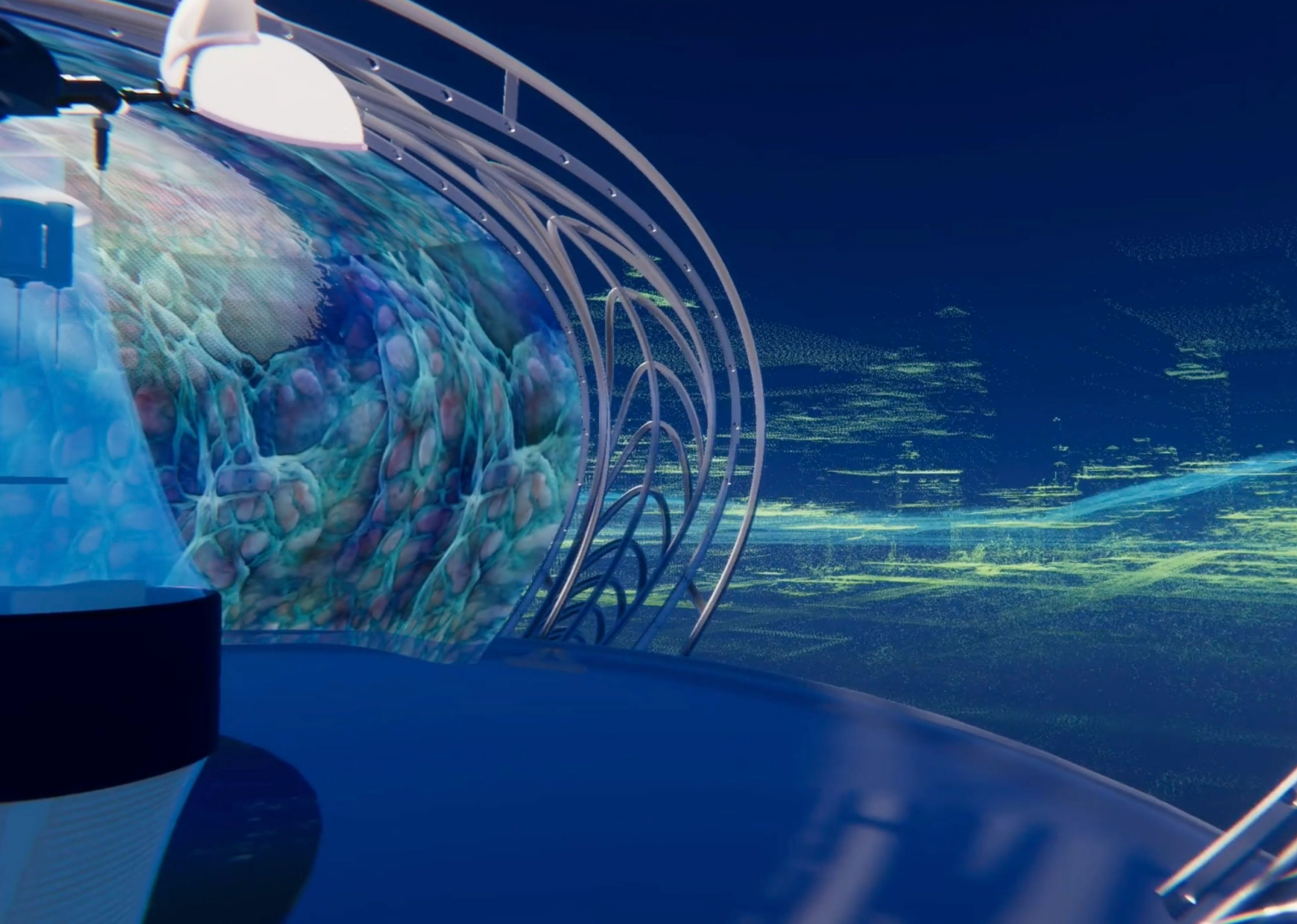
+ Receive Microbial Passport



+ Breathe Out









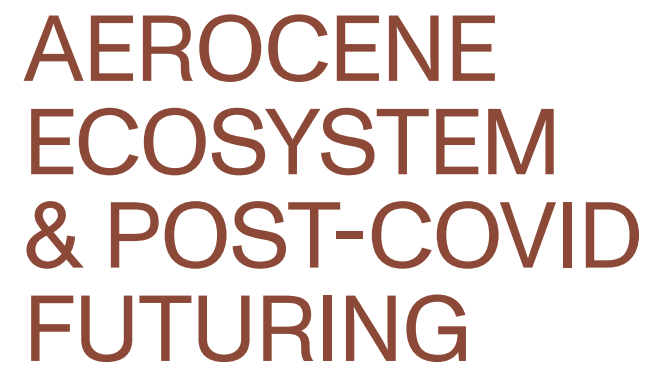
SCENTSITIVE

Speculative fiction & objects
May 2019

Scentsitive explores a possible future where all living things need to isolate from the atmosphere during a climate crisis. Physical and emotional relationships have changed in response to the toxicity of the environment. In that world, it is not possible for people to share skin to skin contact. In the face of such loss and profound experience of alienation, the sense of smell has become a powerful, portable and intimate source of comfort and escape. It is also a way of connecting with others and the sensory experience of humans in the centuries past that they see in the digital archives. Humans find an altered happiness in a hybrid simulation of the past in an indoor and individualised world when the external environment is desolate, toxic and dangerous.

What you see above are explorations that I made alongside a speculative fiction short story, trialling prototypes and materials.





Starting with the assumption that different future visions belong to different presents, the research foundations of each scenario are tied to concerns (emergent and recurring) adjacent to the current pandemic. Outcomes and provocations draw attention to the built environment, transitional spaces, and speculative anthropology.

In the speculative, *Mapping Steam City* side of the project we were exploring steam for its physical properties (When is it most effective as a disinfecting process? How is it generated? Can thermal energy be recycled? How does it effect the distribution of water sources? How would the excess moisture effect surrounding environments?) but also conceptually as an abstracted response to COVID-accelerated fears and adaptations in public and private spheres How would psychological safety change if sanitation is indicated by visible signals like wet/dry and transparent/opaque? Can steam pathways be highlighted between public resource and individual security to foster a sense of communal responsibility?

*This project was funded by RISD + RISD
Nature Lab and corporate partner,
Hyundai Motor Group*

PAOLO CARDINI
ASSISTANT PROFESSOR
INDUSTRIAL DESIGN

LINA LOPEZ
RISD MA
NATURE & CULTURE
SUSTAINABILITY STUDIES 2020

DEREK RUSSELL
RISD BARCH
ARCHITECTURE 2022

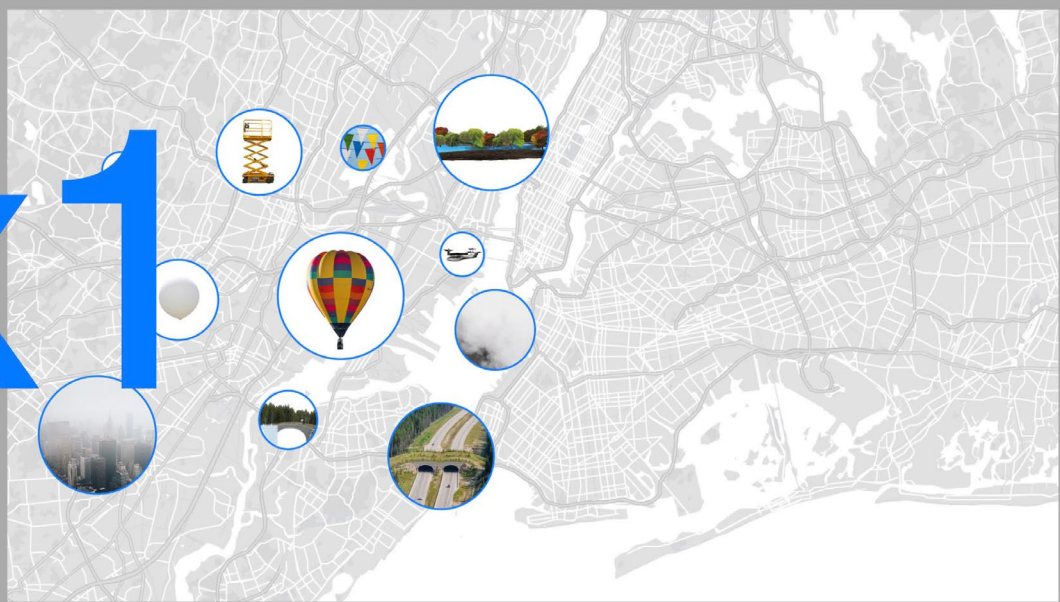
MEGHAN SURGES
RISD MFA
DIGITAL + MEDIA 2021

IRINA V. WANG
RISD MID
INDUSTRIAL DESIGN 2020

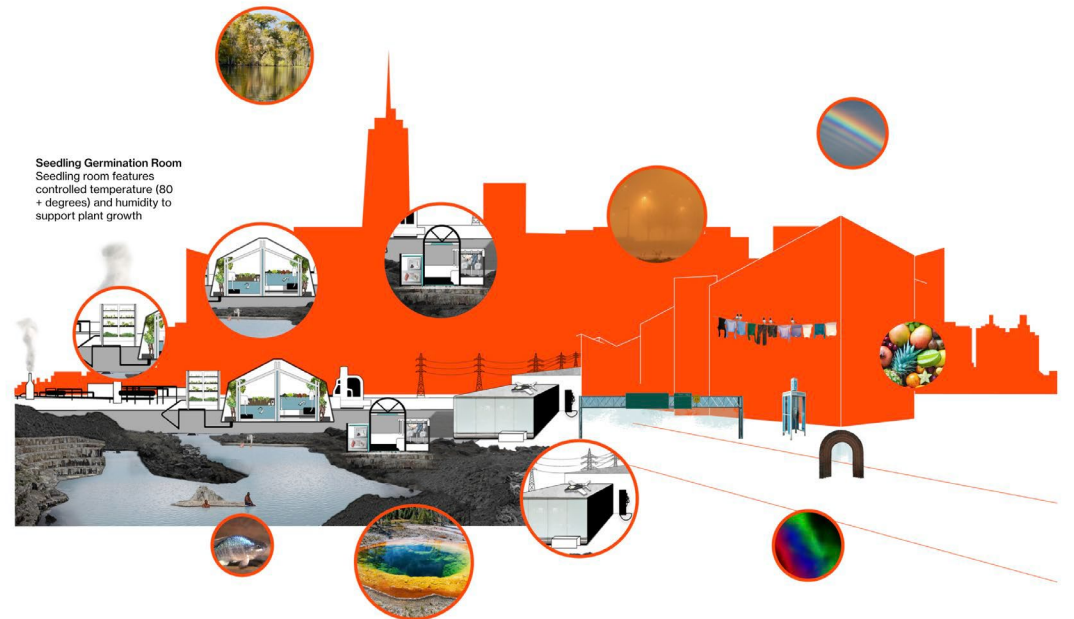
PROJECTS



x1

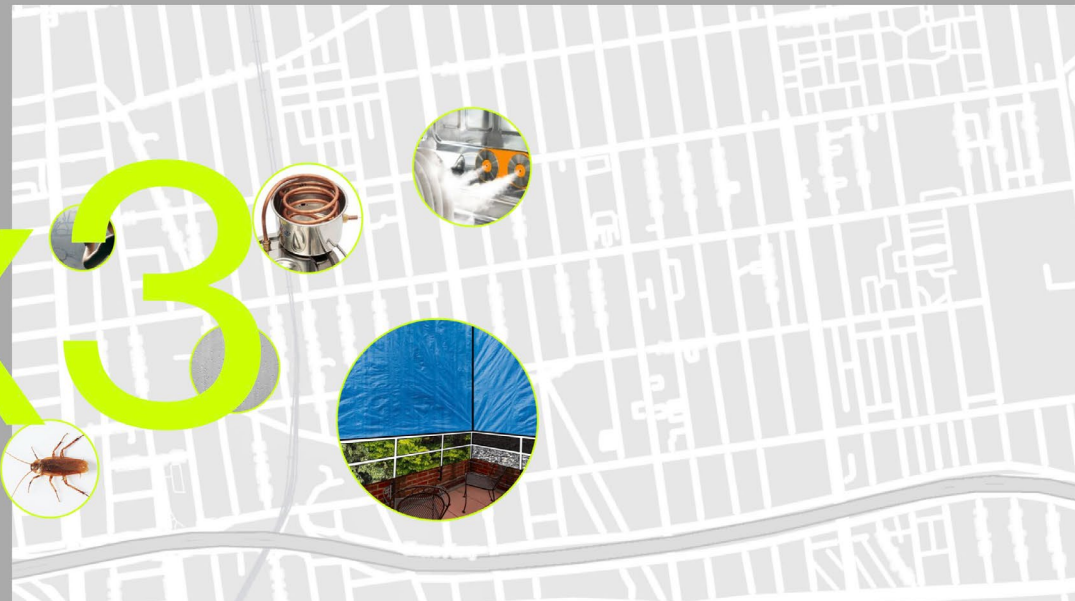


x2



Seedling Germination Room
Seedling room features
controlled temperature (60
+ degrees) and humidity to
support plant growth

x3



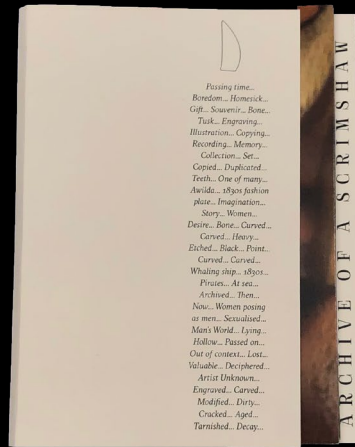
Repurposed Household Steam Devices
Hand steamers, bamboo steamers and
dishwashers can be repurposed to
sanitize everyday items and PPE.

ARCHIVE OF A SCRIMSHAW

Book & object
September 2019

This project started with a university trip to the Providence Public Library. We were invited to explore the library's special collection archives. I was immediately shocked by the amount of whaling material the PPL had collected. Among that material I found a decorated sperm whale tooth from the 1800's.

The library had identified two figures engraved on the scrimshaw to be of Awilda, the female pirate and an image of a woman taken from a fashion magazine in an 1830's dress. I became fascinated with the object itself and how it captured these two stories. As a response, I created a scrimshaw of my own using machine learning to generate stories of our time. I made a scrimshaw of exact height, width and weight and created documents of authenticity to accompany it.



* A sans serif typeface called "MONUMENT GROTESK" is set in Pantone's 2021 "Colors of the Year". Together, these deliberate design choices paint a picture of my world today. The grey, a dull drone of COVID-19. The yellow, a glimmer of hope. I compliment this design with an image of the "SpaceX Starship" test flight launch in February 2021, where the huge next-generation spacecraft (that one day, Elon Musk hopes will take us to Mars), came to an explosive end. For a world that at times, feels progressive, it doesn't quite take off...

TODAY

@JOHNKRAUSPHOTOS CAPTURES THE STARSHIP SN9'S HARD LANDING AT SPACEX'S SOUTH TEXAS LAUNCH SITE, FEB 2021.



PRESENT FUTURES: IMAGINING ALTERNATIVE FUTURES & THE AESTHETICS OF ETHICS



Western Flag (Spindletop, Texas) (2017), is a digital simulation which is set in the desert of Spindletop, Texas, the site of the world's first oil rush in 1901, the beginning of the environmental catastrophe we are now confronted with.

WESTERN FLAG (SPINDLETOP, TEXAS) 2017, JOHN GERRARD, AT MUSEO NACIONAL THYSSEN-BORNEMISZA, MADRID, SPAIN, 2019 [IMAGE: JOHN GERRARD.NET]

Dreams are powerful. They are repositories of our desire. They animate the entertainment industry and drive consumption. They can blind people to reality and provide cover for political horror. But they can also inspire us to imagine things could be radically different than they are today, and then believe we can progress toward that imaginary world.

— Steven Duncombe, *Dream: Re-Imagining Progressive Politics in the Age of Fantasy*, 2007.



BLACK PANTHER'S FICTIONAL WAKANDA, 2018. [IMAGE: ARCHITECTURAL DIGEST]

Black Panther (2018), made a big splash at the box office upon its release. Different to other Marvel films, the world of Wakanda didn't use tropes of futuristic glass-and-steel towers, instead, a varied array of textures and surfaces. It offered an alternative vision of what future cities could look like in Africa, and presented a number of realistic and implementable ideas for city and urban planning.



TESLA CYBERTRUCK IN TRAVIS SCOTT'S "BANG BANG" MUSIC VIDEO, 2019. [IMAGE: TRAVIS SCOTT "BANG BANG" YOUTUBE VIDEO]

GANG GANG (2019), Travis Scott's music video is the perfect stage for Tesla's Cybertruck. In March 2019, Elon Musk published a teaser image of a vehicle described as having a Blade Runner/cyberpunk style resembling a futuristic armoured personnel carrier. The Cybertruck was the final result.



URBAN AIR MOBILITY (UAM) CITY INTEGRATION, MVRDV, 2020. [IMAGE: DEZEEN]

Urban Air Mobility City Integration (2020), MVRDV collaborated with aircraft manufacturer Airbus to design public transportation networks for future cities using passenger drones. This is one of a number of UAM proposals that I have seen which leads me to ask the question. What happens to those below while the rich fly high above? Who does this future leave behind? How does this impact our sociality and the way we live together?

We have a tendency to look at representations of new cities and quarters as a kind of pornography, the gaze that maligns and entraps

—Michael Sorkin, *reSITE Conference*, 2015.

In the present moment, it is becoming increasingly difficult to imagine a future. Perhaps because our notions of future now are far more short-term than in the past. It feels more like a continuum of change occurring in quick succession rather than working towards a collective vision. But there is still a value in imagining the future. Our human consciousness means that we will always be looking ahead to a tomorrow and this thought allows us to move ahead, plan and make decisions.

In her essay *Dream On*, Michaela Büsse reflects on the early history of our concern with the future. "Representative for the very first approaches to exploring the future is the Oracle of Delphi, the great symbol of ancient Greek mythology. It is approximately dated back to 800 BC" where people used superstition to deal with the uncertainty of life and look to the future. She goes on, "In the following centuries the vague prophecies from earlier times were replaced by utopian future schemes, which came mainly from philosophy, theology and social sciences. As opposed to the rather heteronomous future thinking, the formation of such images depended on a conscious choice between alternatives. At this point, concepts of the future and ethics got strongly entangled and they still are nowadays." [19]

[19] Michaela Büsse. *Dream On*, Michael Schindhelm, Online, 2014.

The reality in designing futures in the present day is that we can no longer ignore the multiplicity of complex, varied and intermingled stories at play. We need to design worlds within worlds and futures among futures in order to prepare the adequate contingencies as designers. To build opportunities for new narratives and futures within the constructs of our making.

AES-ETHICS

Aes-Ethics is a term I have coined to speak about the aesthetics of ethics and the deliberate aesthetic choices made to reflect ethical values. To me, aesthetics and ethics sit next to one another in the designers toolkit although, until recent times the ethical implications of our designs seemed to carry less weight than the aesthetic . Designers could be accused of making extraordinary efforts to smooth the representation of human complexity out of the “represented” world, where ethically we should all see our real selves reflected.

As designers, our value is our ability to manipulate aesthetics in a meaningful way, the ability to persuade and communicate using visual form gives us power that should not be overlooked. Designers are able to harm and propagate systems and hierarchies of oppression, so we must be intentional about how we use our technology (aesthetics) and assess what we are seeking to control and what the outcomes of that control would be. The present is about designing for the multivariate world we live in, in a positive and less paralyzing way.

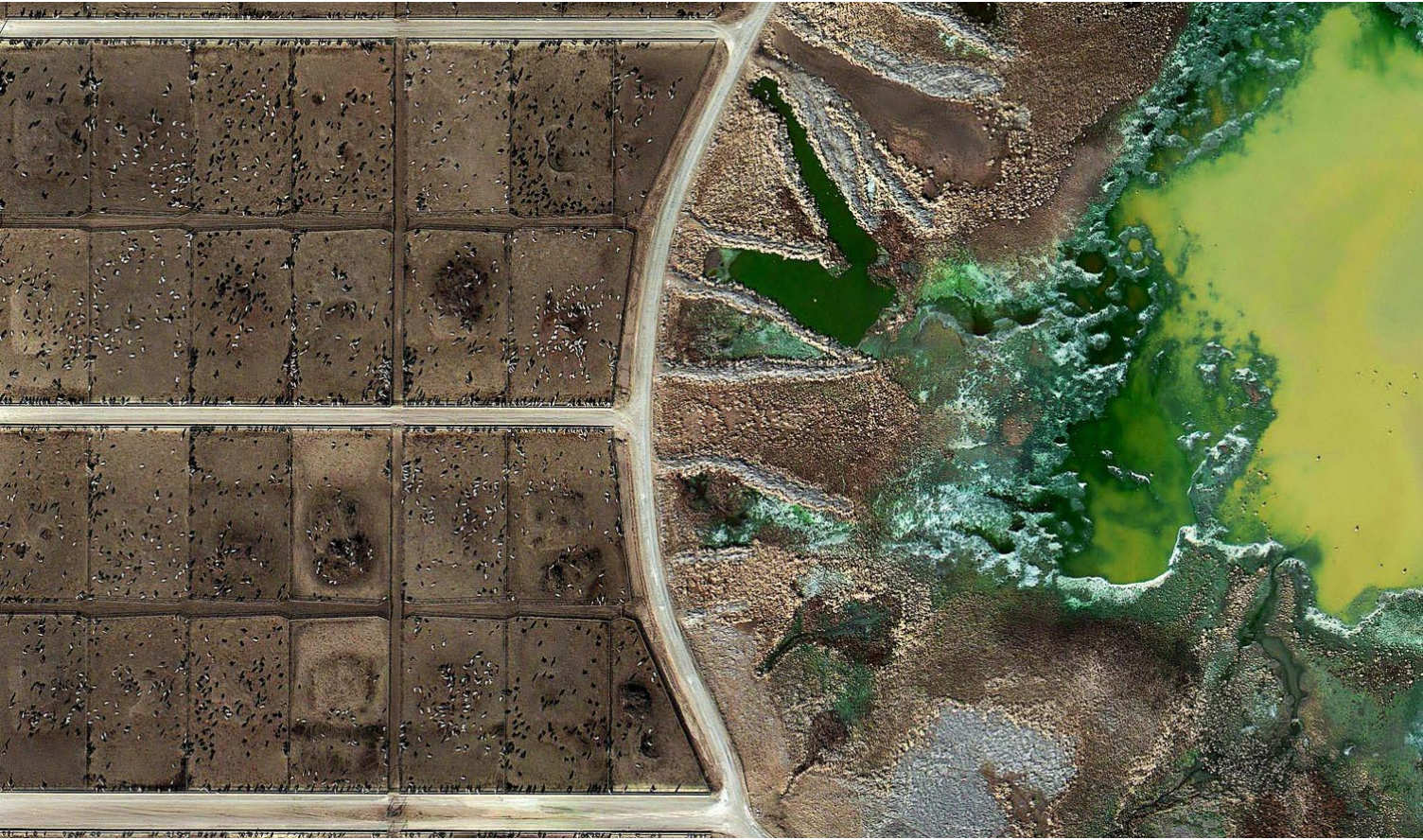
As Fred Polak mentions, images of the future are linked directly to the rise and fall of cultures and “renewed influence-optimism that can lift us out of the lethargy of our present essence-pessimism.” [20]

HYPEROBJECTS

In his book, *The Ecological Thought*, philosopher and writer Timothy Morton coined the term “hyperobject” to identify concerns, systems and phenomena that are so large in their temporality and scale (relative to human scale) that they defy human comprehension [21]. Climate change, the Internet, and the vast accumulation of styrofoam and plastic bags are all hyperobjects. Due to their vast size and temporal scale (for example a styrofoam cup which will outlive states and monarchical dynasties—a lifetime completely unavailable to a human), they are difficult for humans to comprehend and, as a consequence, cause a



The Line (2021) was unveiled by Mohammed bin Salman, the crown prince of Saudi Arabia, proposing plans for a 100-mile belt of zero-energy walkable communities for a million people. The city will have no car access and no streets with all essential facilities in walking distance. It will be a part of Neom, Saudi Arabia's fully renewable and automated region that will span Saudi Arabia, Jordan and Egypt.



Feedlots: Tascosa Feedyard, Bushland, Texas (2021), is an image and part of a larger series, that were made by stitching together hundreds of screen shots from publicly accessible satellite imaging software, in an effort to bring awareness to the ethical charge related to the meat industry.

kind of ungraspable anxiety and humiliation, highlighting the insignificance of our singularity on this Earth and the limitations of our perception, cognition and of our meaning making systems. Hyperobjects invoke a kind of melancholia: we need the earth, but it will live on after we are gone—measured against these hyperobjects, the outcome of our existence seems inconsequential.

A hyperobject could be a black hole. A hyper object could be the Lago Agrio oil field in Ecuador, or the Florida Everglades. A hyper object could be the biosphere, or the Solar System. A hyper object could be the sum total of all the nuclear materials on Earth; or just the plutonium, or the uranium. A hyperobject could be the very long-lasting project of direct human manufacture, such as Styrofoam or plastic bags, or the sum of all the whirring machinery of capitalism. Hyperobjects, then, are “hyper” in relation to some other entity, whether they are directly manufactured by humans or not. [22]

As with each of these examples, hyperobjects are so large in scale that they have an impact on and distort (sometimes in unhelpful ways) how we think, coexist and experience our politics, ethics, art and life in general. Focusing on the indeterminate and unpredictable parameters of these hyperobjects demands the invention of new visualization strategies.

The conceptual framework of hyperobjects provides “a theory of everything” that identifies the commonality of the human experience of the big challenges of our age and in this way makes the incomprehensible somewhat comprehensible. This allows the possibility of finding a way to manage and maybe subvert our conditioned unhelpful responses to more effective ones. I am attracted to the idea of trying to visualise what we can’t or don’t see, whether that is hyperobjects or perhaps, “hyperfeelings”. Making the invisible, visible in some way. I think that this is the graphic designer’s key contribution to the global response to overcome these hyperobjects—to help society visualise, comprehend and act.

[21] Timothy Morton. *The Ecological Thought*. Harvard University Press, 2010.

[20] Fred Polak .*The image of the future*. Amsterdam : Elsevier Scientific Publishing Company, p. 195, 1973.

[22] Timothy Morton. *Hyperobjects: Philosophy and Ecology after the End of the World*. University of Minnesota Press, 2013.

THE ABSURDITY OF NORMALITY

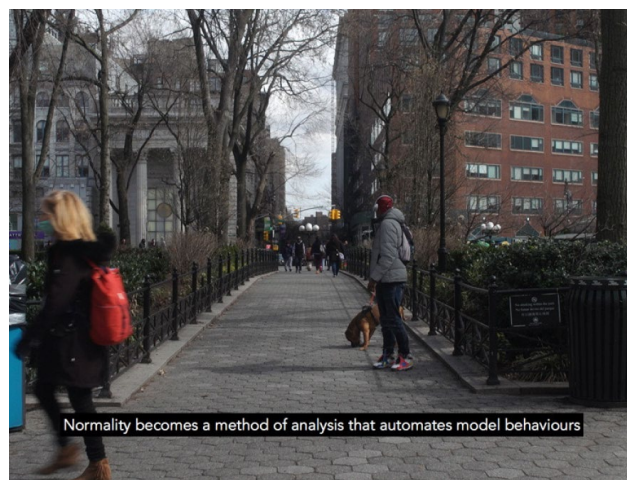
From the very early days of the pandemic, the shining light at the end of the tunnel was waved in front of us to encourage hope and prevent panic and dampen desperation before it turned to hopelessness. Desperate to get back to “normal” or a “new normal” was the central focus of most media outlets. Though, the construct of “normal” seems highly contextual. “Normal”, compared to what? After Joe Biden’s win over Donald Trump in the American Presidential election in November 2020, CNN’s Christiane Amanpour and Van Jones spoke about how the public became “insufficiently shocked” by the disruption made by those who would dare to upset the status quo. Hilary Clinton also spoke to *The New York Times* about how the four years of the Trump leadership had damaged “norms and values”. But what are these “norms and values” that Clinton refers to? What do we actually mean by ‘normal’?

During the New York COVID lockdown in March 2020, architect and designer Silvia Susanna created a short film which showcases clips of footage about the everyday strangeness of life in the city [23]. The script of the film talks about “normality” which is read aloud by an automated voice. She asks the question, what do we think about when we talk about normality?

Through her work, Susanna suggests that normality is a state in flux. That it is a condition that is based upon multiple pre-existing conditions and reflects “the basic structures and the foundations of what we consider to be normal”. So “normality” is an on hold, psychological construct, both a comforting memory of past experience and a back-up plan or back pocket future. A set of psychological filters that are ensured to be there to comfort us and guide us and give us direction to reproduce those same markers and triggers. But the truth about “normality” is that it is anything but a useful construct or set of filters for the future. In my opinion, it is the reductionist impression of the things that we have clung to that reassured us and provided the perception of continuity that in turn allowed us to ignore the information that was present but did not fit our chosen narrative. The concept of humans wearing their personalised filters built from an idealised past, looking for triggers of their feeling of normality seems completely absurd. I often wonder if then, does it follow that absurdity is the norm? Perhaps if we stopped trying to chase this quest for a feeling of stability and predictability,



CNN News Broadcast (2020), shows us the media’s desperation to look for “normal” in a time that was entirely abnormal.



Normality (2020), focusses on what normal means and why we seek it, against a backdrop of New York City during the pandemic lockdown.

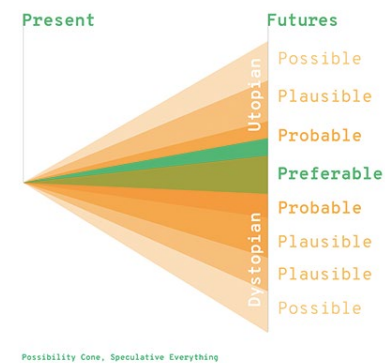
CNN NEWS BROADCAST, 2020. [IMAGE: CNN]

NORMALITY, SILVIA SUSANNA, 2020. [IMAGES: DAMN MAGAZINE]



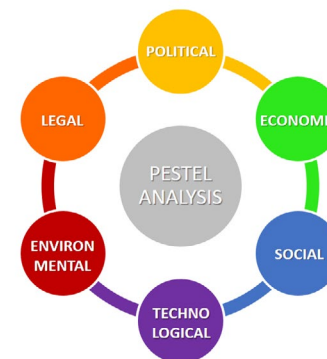
Huggable Atomic Mushroom (2004–5), are a part of the *Designs for Fragile Personalities in Anxious Times* series where Dunne and Raby produced objects for people with phobias. In this case, fear of nuclear disaster.

HUGGABLE ATOMIC MUSHROOM, DUNNE & RABY, 2004–05. [IMAGE: DUNNEANDRABY.CO.UK]



Possibility Cone (2013), as arranged and labeled by Dunne & Raby in their book, *Speculative Everything*.

POSSIBILITY CONE, DUNNE & RABY, 2013.



PESTEL Analysis Framework (2016), a tool used to monitor the macro environmental factors that may impact on an organisation’s performance.

PESTEL ANALYSIS, BUSINESS TO YOU, 2016.

we might be able to recognise and face down our existential terror and enjoy the sweet melancholia of the true reality of life on earth.

SPECULATIVE WORLDS

It is not unfamiliar for designers working today to use the absurd to their advantage. In the past decade, designers have been able to use irony and the absurd to surreptitiously move past the constraints of using their trade as a way to solve perceived problems. Critical and speculative design practices have expanded design beyond purely form, function and aesthetic to explore how design development affects the human experience. Speculative design advocates Anthony Dunne and Fiona Raby pioneered this area of design through their work and text *Speculative Everything*:

What we are interested in, though, is the idea of possible futures and using them as tools to better understand the present and to discuss the kind of future people want, and, of course, ones people do not want. They usually take the form of scenarios, often starting with a what-if question, and are intended to open up spaces of debate and discussion; therefore, they are by necessity provocative, intentionally simplified, and fictional. Their fictional nature requires viewers to suspend their disbelief and allow their imaginations to wander, to momentarily forget how things are now, and wonder about how things could be. [24]

In 2009, the duo met futurologist Stuart Candy who shared with them his diagram to illustrate the different levels of potential futures. From it, Dunne and Raby created the *Possible Futures Cone* which breaks up thesis potential futures into levels (cones) of likelihood:

Probable: A future that is most likely to happen. This is the space where most designers work, are educated and how we evaluate “good” design.

Plausible: A future that could happen. This is not about prediction, rather developing alternatives for a number of different futures.

Preferable: An intersection of the two cones above. The preferable cone requires you know for whom this future is being designed and for what purpose.

Through my research for this thesis, I have looked at the use of speculative worldbuilding tools like the Futures/Voros Cone and PESTEL analysis to examine how these tools might be used productively in the exploration of possible futures within individual practice and commercial work. In some cases, individuals were using these tools as a way to show all the potentials for various outcomes—like maps of possible alternative futures based on particular decisions. In my interview with Forest Young (Global Principal at Wolff Olins), we discussed his organisation’s use of these tools, worldbuilding and personas as a way to explore client briefs.

Narrative exploration of potential futures based on these varying parameters is a tool that designers can use to explore a wide range of alternative worlds.

BEING LYRICALLY CRITICAL

It is my view that there is a place in design that responds to the complex messiness and scale of the hyperobject. Beyond pure speculation on futures (through critical or speculative design), it seems that now we need designers to read and react to our current situation with smart solutions, models and methods through systems, structures and ecologies. And, in doing so, to generate possible alternatives that are responsive to the needs of the population as the hyperobject unfolds around (even overwhelms) them.

In Daniel Van Der Velden’s essay ‘Lyrical Design’, he suggests a new alternative to critical design”

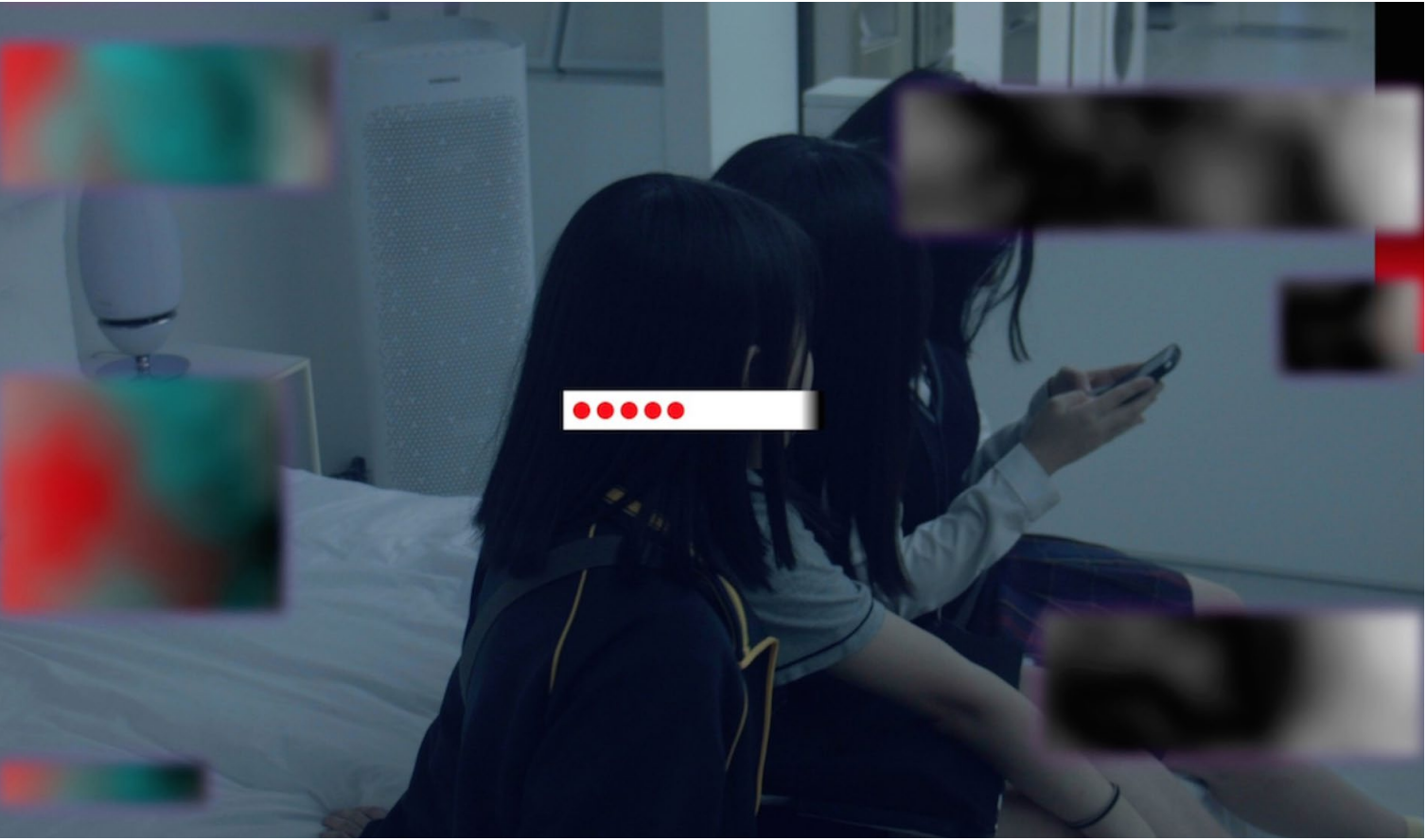
‘Critical design’ was coined to describe speculative design proposals surveying possible social and technological futures for society. These tantalizing hypotheticals were supposed to engage the public in debate on which of these futures were desirable and which weren’t. At the ballot box and through the mediating influence of public institutions and accountable media, society was thus to collectively ‘choose’ its future. [25]

Van Der Velden highlights the view that the critical design model is ultimately out played by the techno-political reality we live in. He suggests that the technology platforms that we subscribe to already ‘pre-own’ our critiques and ‘pre-include’ them within their products. Instead of this, he suggests a new approach for critical design termed ‘lyrical design’. This new model has a different



The *Sprawl* (2016) was Metahaven’s way of exploring, through film and narrative, how to make sense of propaganda in the social media age. They combine

a number of references from Tolstoy to Google Earth and found footage, all filtered through their own unique art direction.



The narrative exploration of the themes in *The Sprawl*, explores this very “lyrical design” concept which Van Der Velden presents in his essay. By using

video, we are able to connect emotionally with an audience and play out scenarios to explore their outcomes.

THE SPRAWL, “LEO TOLSTOY, WHAT IS ART?”, METAHAVEN, 2016 [IMAGE: THE DESIGN MUSEUM, LONDON]

THE SPRAWL, METAHAVEN, 2016 [IMAGE: ID MAGAZINE]

origin point than critical design—in that it begins with and lands in the present, our current reality. According to Van Der Velden, “Criticality externalises the forces in the world and attempts to distantiate itself from them so it can reflect; by ‘what-if’ scenarios it projects a rationalised ‘pause button’ in the temporal continuum implying that we have choices that we may not have.” He suggests that we become accepting and welcoming of the present rather than distancing ourselves from it to imagine possible futures. In other words, that we prototype futures more aligned to the present day than far fetched speculative visions for alternative realities or futures.

Lyrical design seizes the day like it's its last. It celebrates the best of current human experience as a starting point for examining the dysfunctional and singling that out for modification rather than looking to escape to an unrealistic fabrication of a whole new future that discourages true engagement with reality. [25]

While I am committed to a certain type of urgency which mourns loss while awake, I follow two streams of experimentation: one is critical, the other is lyrical. What world will open next in the face of the hyperobject? I search for clues without really knowing what to look for, but my terror and dismay are sharpened by my observations. This process drives me to play carefully and systematically. My design studio is a kind of laboratory, with many procedures occurring. They all begin with the questions:

What future lies ahead? Is it possible to imagine a future beyond the present? What constraints exist in the present that have not yet been questioned? Is there agency here?

Like Van Der Velden, I find that presenting design that represents speculative alternative realities or futures takes the core of the concept away from reality and thus weakens the argument. The most intriguing design to me now, is the kind of design that I can relate to in the moment and that reflects the same questions I am asking myself and see in the world around me. The type of design that asks me to shift my perspective and warrants my opinion to a certain situation rather than hide from it. How can our design in the present allow for more opportunity in the future?

[24] Anthony Dunne and Fiona Raby. *Speculative Everything*, MIT Press, 2016.

[25] Van Der Velden, Daniel. “Lyrical Design”, *Design Dedication: Adaptive Mentalities in Design Education*. Amsterdam: Valiz, 2020.

[23] Damn Magazine. “VIDEO: Normality—A video by Silvia Susanna.” Damn Magazine (website), December 2020.

* The "Futures Present Archive" represents the creation of a collection that brings together the latest in smart city design proposals and images of the future today, alongside images of the reality of the complex world we live in that these "images of the future" gloss over.

FUTURES PRESENT ARCHIVE



CORONAVIRUS, 2020.



HYUNDAI URBAN AIR MOBILITY, 2020.



CYBERHOUSE BUNKER, 2020.



STATUES FELL'D, 2020.



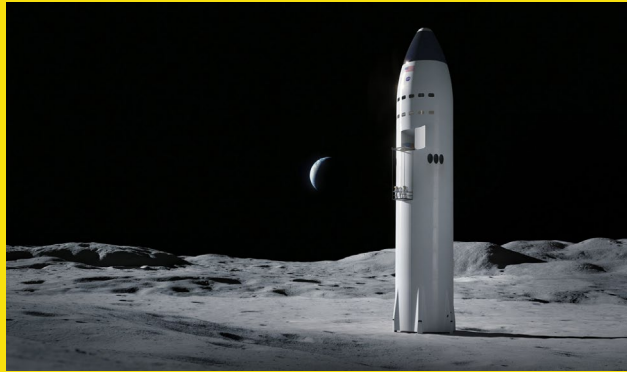
WOVEN CITY, 2020.



MILITARY AIRSTRIKE IN GAZA, 2021



BLACK LIVES MATTER, AUS., 2020.



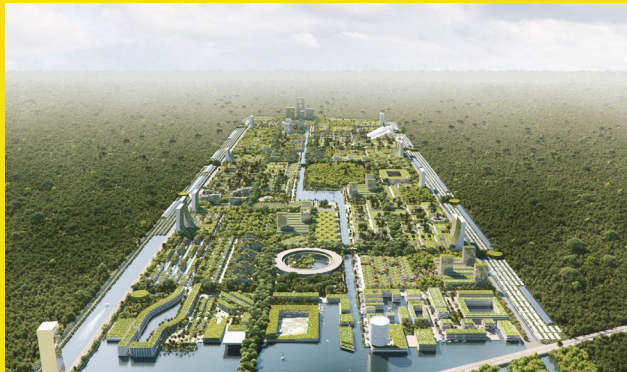
SPACE X STARSHIP, 2020.



CLIMATE RELATED FIRES, 2020.



MK27 METALLIC VILLADROME, 2020.



SMART FOREST CITY, 2019.



ATLANTA SPA SHOOTING, 2021.



BLACK LIVES MATTER, 2020.



BRAINPORT SMART DISTRICT, 2019.



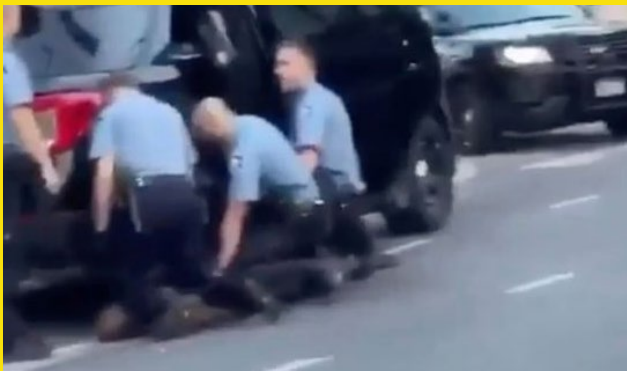
INNOVATION PARK, 2019.



SELF-SUFFICIENT CITY ON MARS, 2021.



ZAHA HADID SMART CITY, 2018.



DEATH OF GEORGE FLOYD, 2020.



CLIMATE RELATED FLOODING, 2021.



UN STUDIO SMART CITY, 2020.

GN I have been inspired by your practice starting with your graduate work at the Sandberg Instituut, to your work as an educator and am so excited to hear about the upcoming book on your research around ‘the document’. In this thesis, I’ve explored the possibility of using the future as a medium to speculate outcomes and how images are involved in the production of some futures and the defuturing of others. I think the document is a rich piece of graphic design that is concerned with future making/breaking. I am curious if this is something you have thought about?

CL When you mention the term defuturing, I think you’re referring to Tony Fry, right? With regard to speculative modes of practice, I think that all design, to the extent that it entails some kind of planning, whether that’s for production, or whether it’s targeted to this audience to produce this effect, or whether it’s a drawing, is about prefiguring some kind of future. I’ve come to think that the speculative dimension of design is often actually made invisible. But that is I think, its most profound effect. And I think Tony Fry’s defuturing idea is a really useful way to charge speculation with a kind of political dimension. It’s like, whose future are we talking about?

The document is a really good example of that. All design has a speculative dimension, and that specular dimension is political, because documents are meant for the future, right? One of the writers that I refer to a lot, talks about documents having a dual function. There is a knowledge producing function and an evidentiary function, but the evidentiary function is dormant until some future moment of controversy, or when some kind of claim or argument has to be settled. And so, documents for the most part, are filed away or invisible, and are only called up when something has to be settled or when a claim has to be reinforced or made. So there is an inherently anticipatory mode. If we take the example of an architectural drawing, which is a graphical object, it’s also a form of document. I think it’s useful to think of it as evidentiary, of what can be right in the future, of something that is going to exist, that is going to be here. A map is also a really good example. A map is made for the purposes of delineating private property, and there’s a kind of future already to that. Maybe someone is going to try to dispute my claim, so I have this document which is a drawing of a space. This document is to reinforce my claim, and this document isn’t on its own functional, in the sense the document is part of a kind of institutional, bureaucratic discourse that is itself, backed by some kind of power. The document is in some registry, the registry is a sanction by the state, the state sees itself as a mediator of these sorts of disputes. The state is the third party that mediates conflicts between its subjects. As in Hobbes’s Leviathan, the state makes peace within this community as a means for

defending itself against other states and other communities. But in order to have peace within the community, you need to have some kind of authoritative power. This authoritative power is that is the power that settles that future, right? Like, this is Georgie’s property. This is Chris’s property. And again, property is very much graphical, I think of it as a graphical thing. It’s not something that exists physically, or ontologically, not a thing that exists except by paper, by document. And so these documents are hyperobjects too?

I think it’s shocking how little we consider the document as designers [in the context of design education specifically] when they carry so much responsibility. So much of our lives are governed by paper work.

I think that the state is a kind of hyperobject that is made visible through documents, right? Driver’s licenses, birth certificates, marriage certificates, all these kinds of certification, property deeds, legislative documents, maps, flags. And these are all sort of like visual metaphors. But without these things, there’s no there’s no state, you know, it’s like, vigilantes with clubs and guns and knives.

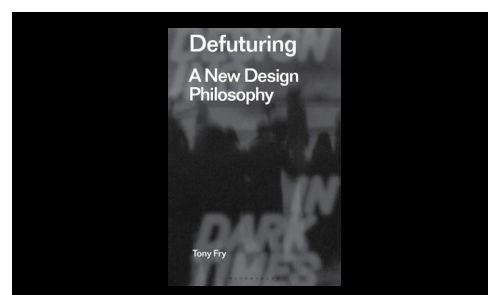
It’s crazy, though, what stops us from being vigilantes. I don’t know if it really does stop us. But what is in the way between us and doing something that’s “wrong”, is a piece of paper—the document.

I think there’s like a lot that can be learned from different societies. If one wants to go through an academic route, through ethnography and anthropology, we know that there are other ways of organizing societies. Large societies that don’t necessarily mimic or resemble the state as we understand it now. For example, Iroquois matriarchal societies which had this infrastructure where resources were pulled into longhouses and the redistribution of resources was governed by matriarchs. So, you had to ask the grandmothers first, and then they would give it to you. It wasn’t a market based exchange system. This is just one example of an infinite number of examples of ways societies can be structured. I think for me, one of the things that’s really interesting about examples like that, if we’re thinking about it in relation to design or contract documents, is that those forms of sociality don’t have documents. They don’t have contracts formalized on pieces of paper. I think, there’s probably limits to this, but one could say that documents and design are almost coextensive with the state and with colonial forms of governance and status forms of governance.

So, to go back to futurity. You have to go back to maturity, like the document. An ID document prescribes who we



Leviathan: The Matter, Forme, & Power of a Common-Wealth Ecclesiastical and Civil. Book by Thomas Hobbes, 1651.



Tony Fry’s “Defuturing: A New Design Philosophy”, 2020.



Example of drivers license “document” in Australia.



Iroquois Longhouse interior.

are. My name now, and in the future, is Christopher Lee. It's not just on this card, but it's also on a database that corroborates this claim. And all on a whole network of other documents that corroborate that claim. But in informal ways that are not written I can be what whoever, whatever. It's not a total foreclosure, but a lot of the forms of sociality that we rely on in contemporary society is premised on a certain kind of identification. Like you're an Australian citizen. This permit means that you're permitted to travel in these spaces, or across these borders. These are the rights and responsibilities of your citizenship. Things like gender are also prescriptions that are only real to the extent that they appear on documents and are reinforced by a network of other kinds of documents. To go back to the future, there's a lot of foreclosure that happens when things are written, when things are set in stone.

So you've been thinking about the document in this way for quite some time now and I'm wondering about how these ideas manifest in your practice and how you see this area of research moving forward. Would you consider policy intervention at all? Or do you see your work existing more within a design or art space?

I think the other thing that for me that was really resonant about your thesis statement was that there was a pedagogical orientation in it. And for me, that's sort of where I am. I feel like there's a space for intervention with these ideas, certainly not in any kind of institutional politics, or through legislation or policy. For the master's tools will never dismantle the master's house. But I think, for me, the pedagogical aspect of my practice is where I feel like I can make an intervention. I think like most design schools around the world, the curriculum is oriented by commercial practice, by client facing practice. But in terms of forms, like form factors that students engage with, and teachers teach, the form factors tend to be limited to a pretty narrow range of things, at least in scale, from typography, to logos to, books and posters, campaigns, apps, websites. All of these form factors, I think, are oriented towards or fall under the rubric of what I call the design imperative to publicity. There's a sort of, implicit assumption in all of these form factors, that implies or takes for granted or presupposes a mass audience. Usually, a pretty large audience, presupposes a public or a mass market of consumers. Often I think designers have figured out some kind of consumer. So that's sort of a normative orientation. And I think you can see this if you look at websites, like school websites, or prospectuses, like career outlook, this is the part that's for parents, right? For them to decide - am I going to pay for my kids to go to the school? What kind of job are they going to get? Well, your son or daughter can become a web designer or an art director, they can work for Under Armour, or Nickelodeon, or Abercrombie and Fitch. A lot of the schools name these big brands, if you're in California, you'll hear about movie studios, or if you're in Detroit, you'll hear about auto companies, car manufacturing companies, in New York, you'll hear about ad agencies. This career outlook, again, form factors, this implies that within the pedagogy, within the curriculum, the students are going to be given things to work on, like logos, brand books, identities, campaigns, etc. but not passports, not tax forms, not

driver's licenses, these are not salient to that career trajectory. And so, here's the contrast, if that's the sort of normative orientation of design school, then, one thing that I propose only as a provocation—what if design schools were charged with teaching things like passports, money for certificates, marriage certificates and property deeds? What if those were the things that students studied in terms of how to design? Well, what that provocation might entail is not only the design of the actual object itself, but the design of the bureaucracy within which that object circulates, for example for a driver's license. Lisa Gitelman says that the document is constitutive of the bureaucracy within which it circulates and the bureaucracy within which it circulates valorizes that document. So there are two aspects of the same document. In a way it's this hyperobject, a bureaucracy is a hyperobject where there's a kind of discreet instantiation. Let's just talk about the DMV, which issues driver's licenses. Driver's licenses are essentially like the reason for the DMV, right? They're co-constitutive. And so, if we're teaching driver's licenses at school, then we have to teach bureaucracy. Again, this is not something that I'm actually proposing, it's a provocation to say “Well, you know, that's not really desirable, right?” If we, if we teach designing money, then we ought to say, how do we design the way money works as part of that? Do we want that money to actually function in the way that it does now? Then we have to also create some kind of administration to govern the circulation of that money. Which might mean the state. We don't want to make the state, we don't want to make the colonials. That's not what we want to do. What is this really about? Whose future are we designing? If the document is about making a claim about a potential future controversy, it needs to be designed and intended to essentially settle that claim before it becomes an outright open conflict.

If there is a design school out there, that's about designing documents to create a certain kind of future, then what might another design school that has similar design concerns about the future look like? What would that curriculum look like? What would that imperative look like? In contrast to the present design school, which for the most part is oriented towards publicity, the design school] that centers the document would be oriented towards the concern with immutability. I think immutability is an imperative that frames document design. Basically, if you're making a claim about the future, the claim that you make now, orally, is inscribed so that it holds its form. It can travel through space and time and not change shape, it's not editable, it's not negotiable. There's all these graphical metaphors for things that don't change like “set in stone” or “in black and white”. So immutability is an alternative design imperative to publicity. But immutability has this colonial dimension. So I'm thinking, if we don't want to be a colonial design school, what is another kind of orientation that one might have? And so, this is the third part of this sort of triptych of orientations or imperatives that I'm thinking of as publicity, immutability. And then the third, I'm thinking of it as an imperative to poetry. In contrast to the kinds of claims, the kinds of writing that's done through documents, which is totally banal and and seen as inevitable because of its banality, to use the example of what is said in a property deed in New York City right now, that says, “this plot

belongs to Georgie Nolan, it's in New York City and you have the right to this property as long as you hold this document". And as long as you are Georgie, that claim is illegitimate. If you try to go back to the original claim or proceeding claim, which is not New York City, this may not be identifiable as such because New York City is actually a colonial name.

So, in this case, it's like the document represents a kind of formed colonial memory, like a column form of colonial knowledge. And so the design imperative to poetry would be, in terms of curriculum, be oriented towards trying to think about, study and create ways of remembering something otherwise. Remembering that no, this is not New York City, it is Lenapehokin. And so what does that entail? Does that mean making other kinds of property claims through documents? Or is there some other form of practice or other forms of practice that, remember and can make claims that can counter the colonial claims?

There's a couple of spin off ideas from this, too, that I think I can respond to your thesis with. One of them is that maybe this question entails abandoning graphic design as a useful category of making in practice. Maybe it is not useful? Graphic design is not a fixed thing anyway, it has very contestable boundaries in terms of what the discipline or practice entails. But just as a provocation, maybe the question of how do we remember things differently or make claims differently, is not within the domain of a kind of normative conception of graphic design. The second thing that caught my interest from your thesis statement was this, this idea of the past, present, and future, this progressive kind of teleological, chronological arrangement of things. Doing something like futuring is just one of a number of responses to the present, another response to the present might be to look to the past, to recover something more. The term that I wanted to use is re-exist, an idea from Walter Mignolo, who was a thinker of decoloniality. I'm not super familiar with this term, but the way that I understand it is that re-existing is about recovering ways of being and ways of knowing that had been suppressed, marginalized and violated, etc. by perennialism and coloniality. So going backwards is important too, right?

I think these are various sorts of abstract terms. So maybe the ethics of these ideas may be contingent on specific contexts. Everyone is talking about when the pandemic is over, we want things to go back to normal but like... normal was shit. Right now it's particularly intense, but normal is not better. I mean, normal is maybe less bloody, but it's not good either.

Chronological sequencing is something that I would also like to rethink. Maybe re-existing is an idea to couple with Tony Fry's defuturing.

By going back to reimagine "what could have been", to imagine new futures is something that can be quite helpful because it gives you a base of understanding. I'm thinking about some of our graphic languages that we know have relevance in particular time periods beyond what they are known for in a contemporary colonial context. What if we could go back and reimagine their trajectory to imagine other visual cultures?

I think it's also interesting to me when you were talking about the idea of an institution/design school where students would learn about designing

documents. And in that curriculum, in order to design the document, you would also need to understand the bureaucracy behind it and it's reason for being. It makes clear sense why document design would need this deeper level of understanding, but I would also argue that design education [in general] should be concerned with the authoritative power and systems at play behind the scenes. This is something I touched on in my thesis—why the ethics of aesthetics is really important. Why do you do what you do? What does that mean to who you're speaking to?

I think aesthetics has this shared logical route with ethics. I think aesthetics is inherently a kind of ethical question. What is beautiful for what reason, has an ethical dimension. For example, you could say 100 storey skyscrapers are beautiful with a kind of aesthetic value, but that's the aesthetics of hyper capitalist development in a beautiful future city. This is what I often think about when I see sci fi images, like, wow, this is like capitalist utopia. This many people work in skyscraper offices? What are these buildings for?

On the other hand though, if we question the aesthetic/ethical value of everything... Then where does that leave us? What does the world/ the future look like? I've been playing with this idea in the design of my thesis book. I am using tropes of what people know and recognise to be associated with particular time periods, themes and feelings as a way to make design decisions. I'm acknowledging our inherent biases as a way to make a commentary while [I hope], at the same time presenting new ideas and alternatives. But, it's a vicious cycle to continue pulling on these tropes...

There's a famous Henry Ford quote where he says, something like, " if I consulted with the public about the design of a car, they would have advised me to make faster horses". Imagination is constrained by the available conceptual tools that one that one has. And so this brings me to another point about the past, which I think is really interesting and very salient to what you're thinking about. This is actually from Tony Fry about people who write about design history, that history shapes the disciplinary imaginary. There is another really great essay by Johanna Drucker that's a review of some commonly used history textbooks like Megg's "A History of Graphic Design", and Richard Hollis' "Graphic Design: A Concise History". What you include in your history for design students shapes what they think that discipline entails. So if you teach that the history includes typography, and books and logos, and posters and campaigns and websites, then the design student who's inculcated into that history, or sees themselves as part of that history. They become a contemporary instantiation of that, they think that's what makes me a designer, and this is what designers do. They become the production of a subject. They think the designer that has a certain kind of agency makes these kinds of things. The book that I'm working on is about trying to narrate graphic design history as the history of the document. All of these claims where things were designed to last, I have broken down to four techniques: material, standardization, coercion, and codification.

So these techniques, to go back to the thing about the design school, are a way to understand how documents are made outside of the discrete object, how they function to hold their form and their meaning across time and space, but also

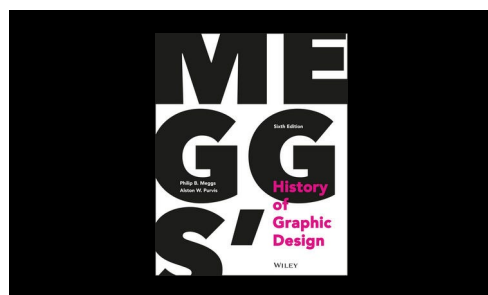
against dispute. And the pedagogical moment here is again, not to make a curriculum about how to make a better document that more securely makes the claim that “this is New York City”. But rather to see design history as a history that’s entangled with the development of capitalism and the violations of colonialism. I’d like to see graphic design entangled that way as the ground or as the backdrop against which to try to figure out different ways of remembering and claiming and knowing. You can design history to be inclusive and not just inclusive in terms of here’s typography from Asia and here’s typography from Africa. I find that problematic too, because it tries to understand this great variety of things in terms of typography which is not like a universal category at all.

We can also continue to talk about European design but look at it more critically. The subject of who the designer is, is also up for question. One of Drucker’s critiques of Megg’s is that historiography is modeled off of a kind of art historical mode of historical expression. What enters into history is modeled after what and how things entered into art history in the past, from the art historical canon. So the subject of design history is the designer who, you know, in most cases has, for the most part, been the European male.

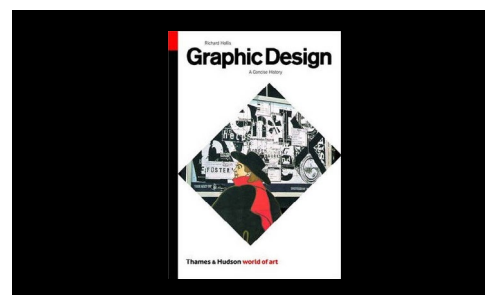
There is a parallel in art history and design history with the valorisation of individual genius, and what the individual genius makes is the masterpiece. Joanna Drucker argues for design history, that there’s so much design, actually, that is not done by an individual genius [like Megg’s might have you believe]. And it’s very much a kind of collective effort. Or, again, if you think about the document, that’s not an individually produced thing. It’s a bureaucratic entity, which is, of course, more than one person. So even in that history, the subject of the individual designer and the idea of the masterpiece doesn’t hold up. Also I don’t think it’s useful to call everything design. I think that that may be a colonial thing to do, for example to say “Japanese family crests embody the principles of modernist formal reduction”. I think that is a colonial way of describing something from another culture that has a totally different logic than the minimalist reduction that you saw in modern European design and using it to valorize European design.

My point here is that the ideas about who the designer is and what we think the designer is supposed to do, are not stable and not codified.

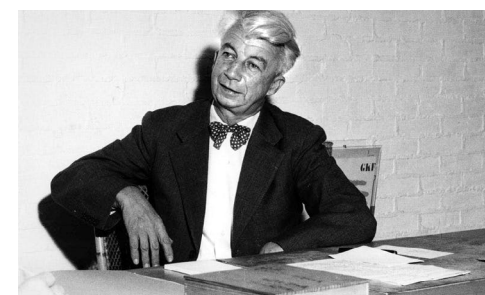
If you had to speculate, as an educator, working with students who will go out into the workforce and in light of everything you have said, how do we prepare them? What skills do we need that we didn’t want, don’t have or haven’t needed until now?



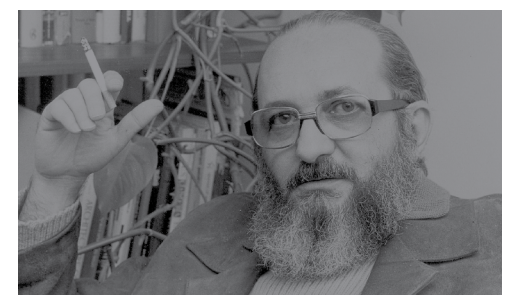
Megg’s “History of Graphic Design” Sixth Edition.



Richard Hollis’ “A Concise History of Graphic Design”



Willem Sandberg, namesake of the Sandberg Instituut.



Paolo Freire, Brazilian radical pedagogue.

That’s a big question. Urgency around bringing some repair or upturn of colonialism and capitalism is one of the things that can be done in design school, but I don’t think it would have a giant impact. Who knows? Again, finding ways to address the problem of the document. This is one thing that I would maybe do as a minor study. For example, looking at “how do you invalidate colonial claims on land on Turtle Island?” For example, in Australia, how do we upturn colonial claims, which are, again, premised on documents? I think, largely, we need an expanded idea of documents as embodied culture of the bureaucracies in the government jurisdictions and the corporations in which they circulate. How do we do that? One of the ways might be, creating new forms of claims. Another way might be teaching students how to counterfeit, in order to flood the scriptural economy, so that the economy destabilizes. Make tons of fake passports, make tons of fake IDs. Do we teach students how to do that? Or do we figure out how to destroy documents? Maybe it’s not creative, maybe it’s destructive. So again, this is where I’m thinking, maybe design, as we think of it now as a creative activity, is not the most useful way to address the problem of the document. Maybe its destruction, right?

The graduate school that I went to is named after Willem Sandberg. One of the things that he was famous for was for destroying the municipal archives in Amsterdam, so that the Nazis couldn’t corroborate who they were. They couldn’t identify people properly. It probably prevented tons of arrests and executions. In this way, document destruction is also a tool. So, how do we teach these things? This is not a realistic speculation, because we can’t teach crime. But it is a provocation, at the very least.

Another person that I think about often is Paolo Freire, who is a Brazilian radical pedagogue. He says, as educators, we’re charged with teaching students the dominant grammar so that it can survive in the world that they live in. We also have to teach them that their dialect, the way that they speak at home, their slang, their inflections—that this is also beautiful, and that it’s also valid. That’s maybe one thing that educators can do, to say to students there is a market out there, there’s a job out there, this is what employers want and this is the dominant grammar. But, if you want to make this other thing, do it, do it everyday, do something that you love. There’s a space that I think we can create for that. It’s not even that we have to create it, I think we have to just sort of like, prop the door open and the student makes it through. They inevitably learn that though there’s the capitalist realism of the market that imposes itself and says, “okay, you did all this cool stuff in grad school,

now shut up and dribble”, the market says they want the most creative, innovative person. But you know, really, when you get there, you’ve just got to sit down and click this mouse button a few 1000 times a day. I’m sorry, I know, that sounds really shitty to say that to someone who’s just about to graduate.

It’s the truth. That would be one of my major critiques of the grad school experience. But maybe, it would be easier to deal with that if we dealt with it beforehand, you know?

When I got back home from grad school, I didn’t put anything from grad school in my portfolio when I was shopping around for jobs. Except for one, at one place where the creative director was a Dutch guy. And I was like, okay, maybe he’ll sort of get some of this, maybe I can trust him. Yet he still said, that’s cool, but you know, we don’t do this kind of work here.

Something I spoke a lot about with Annelys de Vet was student organizing, and students meeting each other and developing networks, and starting creative collectives together, that have more power, and being collaborative. That even more time should be invested in that space so that graduates have a chance to do something different upon graduation and feel supported. Perhaps that is an alternative to going into a commercial practice.

There’s a way of thinking about a degree, an advanced degree in graphic design as like one in English Literature. You’re very employable as it has a practical aspect, but also you can take it as a set of tools for addressing the world and thinking about the world. Generating insight about the world, essentially writing about it. Maybe it’s not literary writing, but a kind of discursive image making or something. In the design community, one of the practical dimensions of the practice relevant to every field of practice is talking to people. You need to get an idea down and transmit it and store it, by using design tools. A lot of our students [at Pratt], because we’re in New York City, aspired towards ad agencies and design studios that do a lot of publicity and policy oriented work. In a different context, we might generate graduate practitioners that can work with community groups or work differently. It’s usually not like that, especially in the United States, because school is so damn expensive. The cost of the course disciplines you into narrowing the kind of horizon of possibilities of where you can apply. You need to get a job and make the money back. You need to pay your parents back or you need to pay the bank back or something like that, so you owe your debt now. And if you’re in debt, you’re not totally free. So, you know, that’s, that’s a whole other conversation, the cost of education, therefore, has a kind of circular effect on the curriculum.

* The projects in this section explore "the future" as inspired by the present. It looks at the hyperobjects we face, the technology that we confront, our relationships, our dreams, our fears and collaboration.

PROJECTS



FUTURE TALKS

*Video, 3:38 minutes
January 2021*

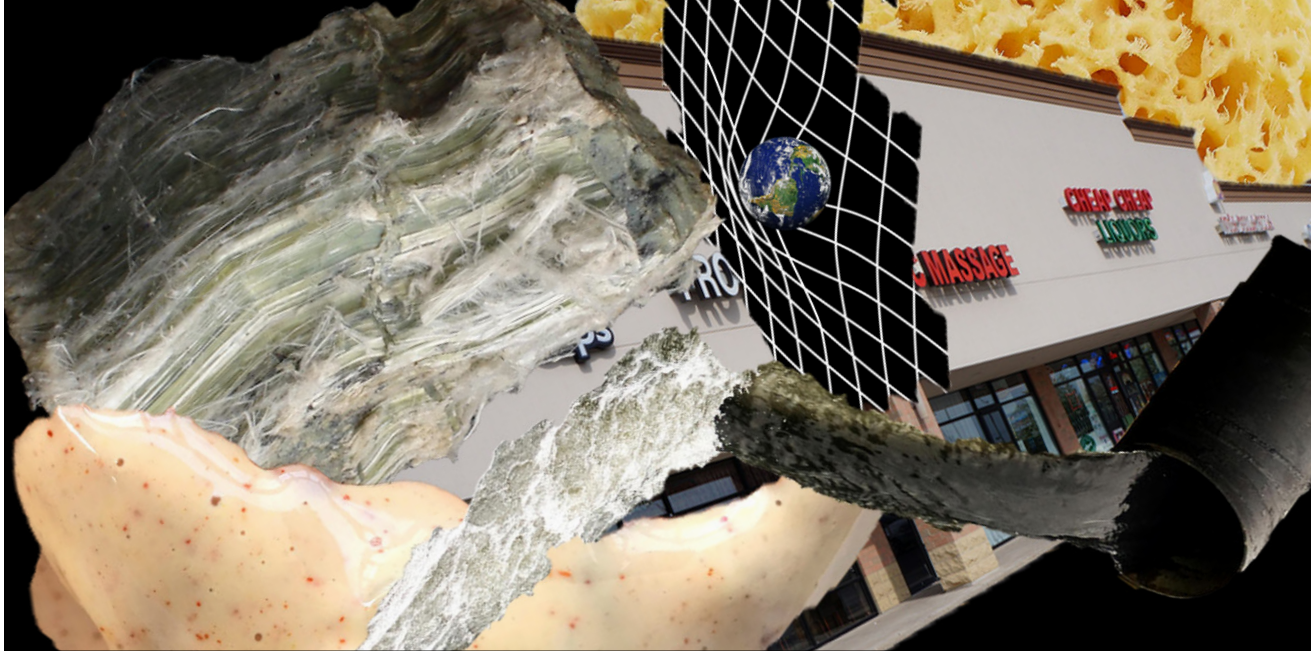
The “future” can be a scary and intimidating concept. To many, when you say the word “future” they think flying cars, hover boards and robots. Though, future isn’t always as far “future” as you might think. The “future” is in an hour, in a week, in a month, a year or in many years.

I sat down with some strangers to talk about the future and how it’s perceived. How do people feel about the path that lies ahead? What are their dreams? Their fears? How far ahead can they predict? How does age effect how we see the future?

This is an ongoing project and archive that is always in progress. I will build this archive beyond this thesis to continue documenting how our visions of the future change and how imagery, particularly imagery in entertainment and the media effects the way we see ourselves and our world.

“THE FUTURE”





GIGANTIC INVISIBLES

Digital mixed media
October 2020

An inquiry into writer and philosopher Timothy Morton's book *Hyperobjects: Philosophy and Ecology After the End of the World* was the inspiration for this work. Morton gives the name "hyperobject", to things that are so large in scale and temporality, that humans are not able to fully comprehend them (eg. climate change). In this work, I was exploring a way of generating visual imagery of these hyperobjects by using our other four senses (taste, smell, sound, touch).

By using the senses we are able to begin to find a new relative scale through which to judge the size and impact, both physically and emotionally, of these objects. Perhaps if we can leverage what we share in common and what we can perceive, we can start to comprehend the look and scale of things that we struggle with.

To create the work, individuals from across the globe described selected hyperobjects by perceived input to their senses: sound, scent, touch and taste. The data was collected using a digital form via a website and was then translated into new objects made from found imagery inspired by the language used.

The moment just before someone reaches out to take your hand, the moment your hand is about to be held but it isn't yet, it's a just a hand, alone, suspended in air...

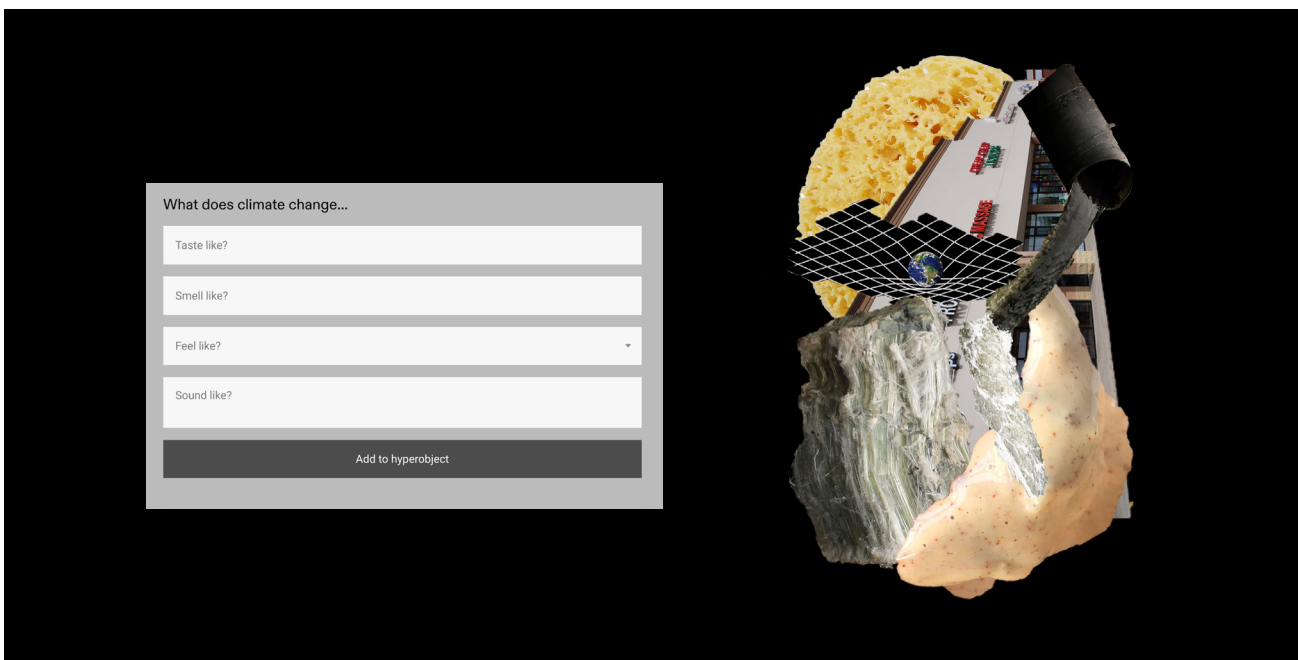
The Feeling of The Universe

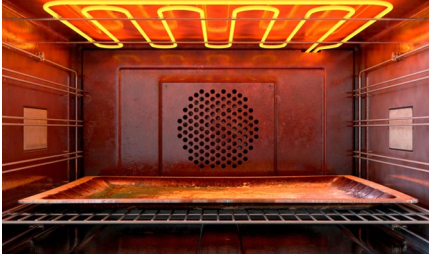
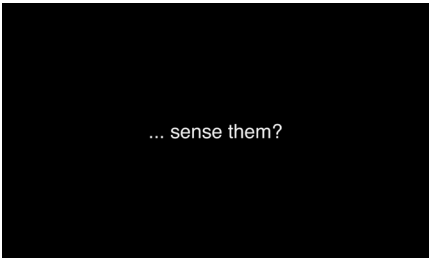
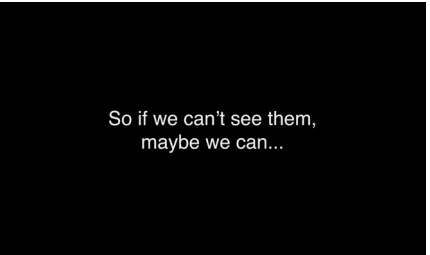
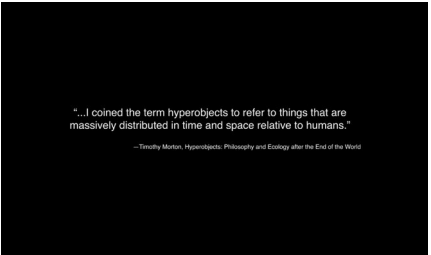
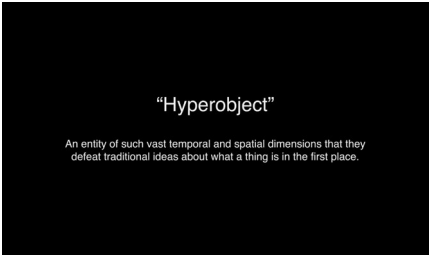
— From Australia, 52 yrs

It tastes like the secret sauce in the bigmac that you just can't put your finger on what it is... but it's gonna kill ya because it's poisonous, but then again McDonalds is still serving it so can't be that bad, right?

The Taste of Climate Change

— From Iceland, 28 yrs





GIGTANTIC INVISIBLES VIDEO

Video, 6:35 minutes
April 2021

After creating the initial project proposal for *Gigantic Invisibles* I found the most engaging element of the work was the responses from the participants and their descriptions.

What was lost in the "print" version of this project was the emotion that was expressed in the responses to these hyperobjects and the reaction to the absurdity of the questions to begin with. "What does global warming taste like?" Is hardly a question you would encounter in everyday life, but it gets you thinking...what does global warming taste like? If I could taste it?



EXTRAORDINARY ORDINARIES

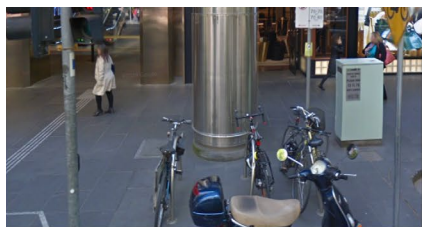
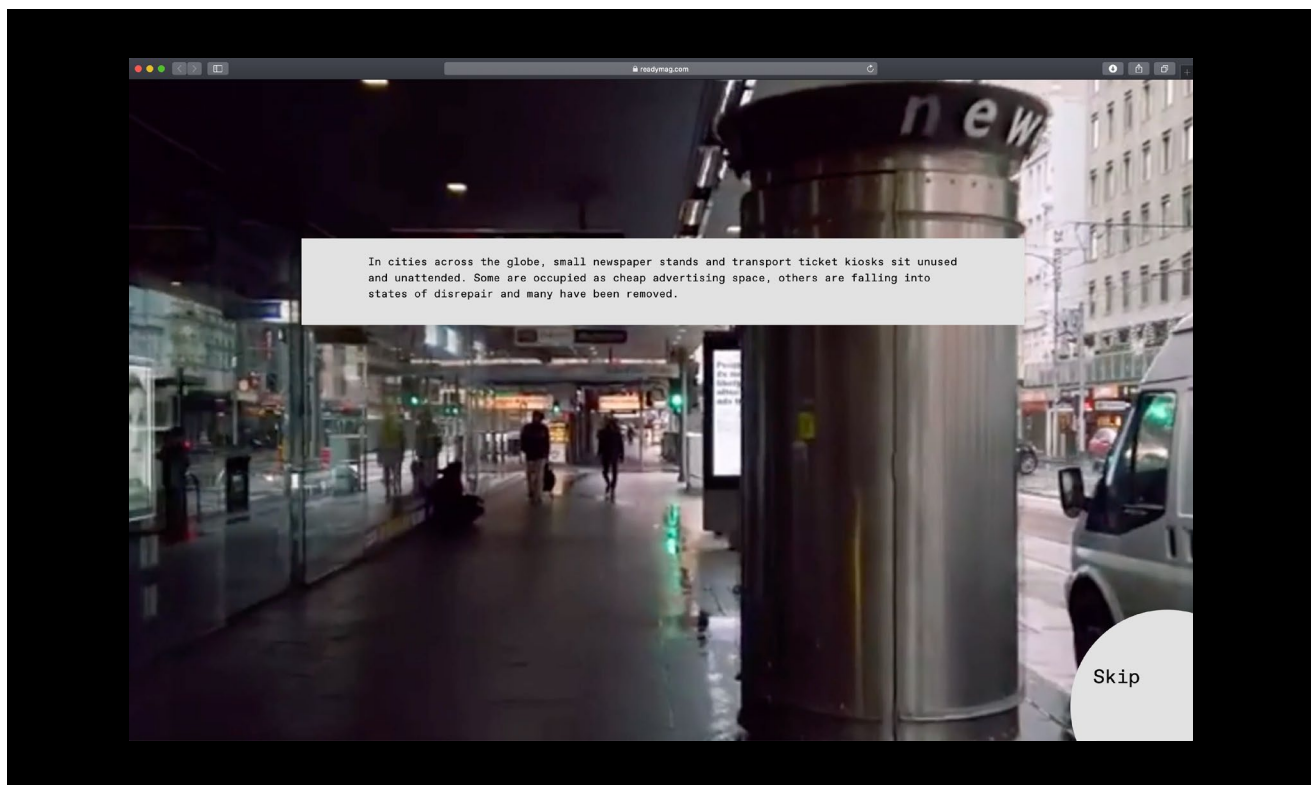
Website & Installation proposal
November 2020

Memorials in brass and stone represent a curated and edited version of human experience. These monuments acknowledge that we loved, fought, sacrificed, stole, won and lost but they spin the truth and create heroes.

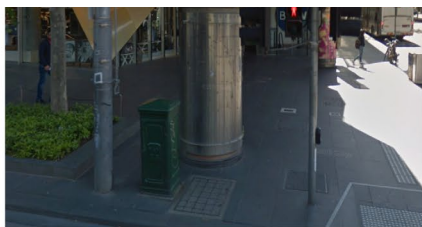
The fantastical brass bust version of reality does not seem fitting to our lived experiences—it's the everyday things that we relate to. We use what is available to us to create these ephemeral memorials. These collections of text messages, news alerts, plastic, photographs, hand written notes and beloved objects remind us of people that we love and have lost or announce to the world a precious personal milestone. So, the unsanctioned memorial is actually the most important.

This living memorial makes use of otherwise abandoned street furniture, newsstands and kiosks to bring the public monthly memorial spaces that are dedicated to capturing human experience in the present.

Every month, submissions from the public are collected and displayed. Each submission becomes part of a display for one month before being archived digitally.



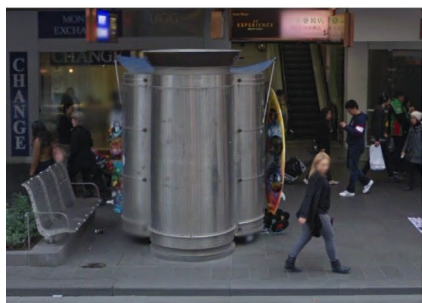
260 COLLINS ST



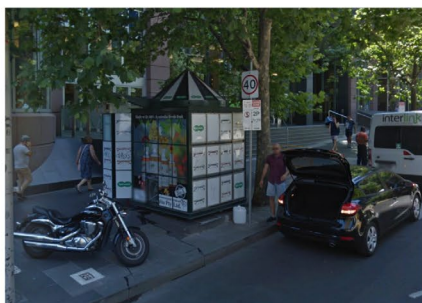
287 SWANSTON ST



181 SWANSTON ST



172 SWANSTON ST



COLLINS ST



132 SWANSTON ST



FRAGMENTED ARTIFACTS

Video, 1:35 minutes
December 2019

COLLABORATOR

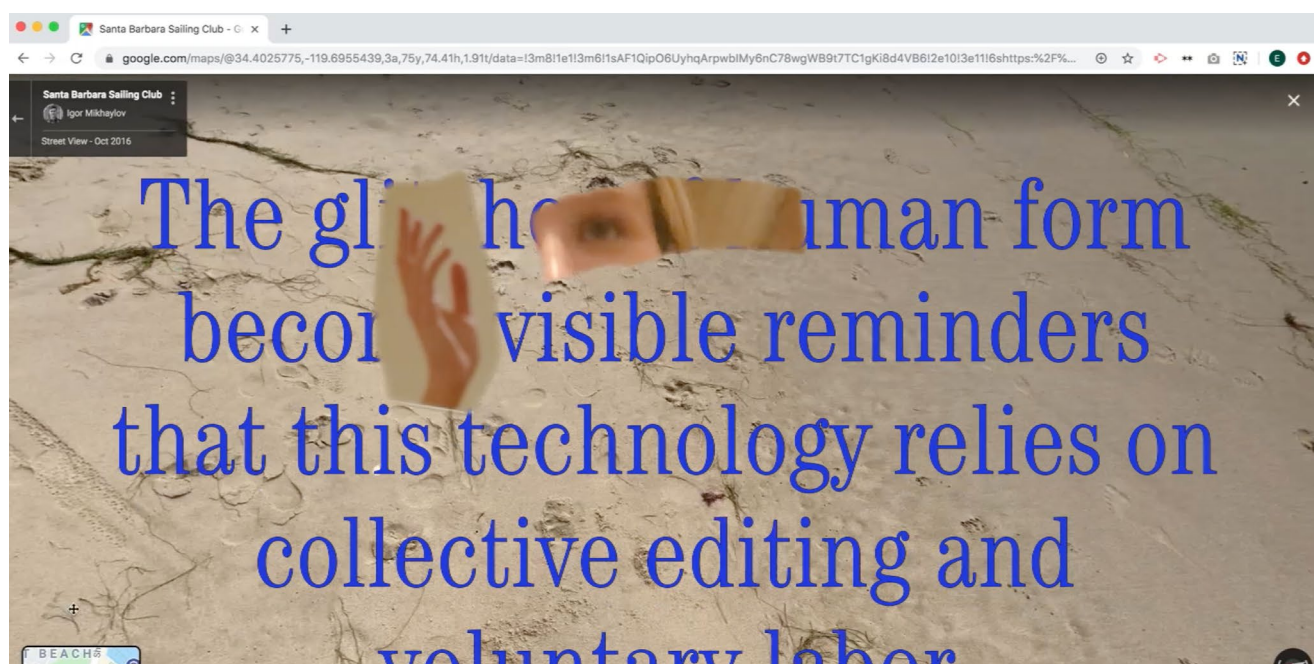
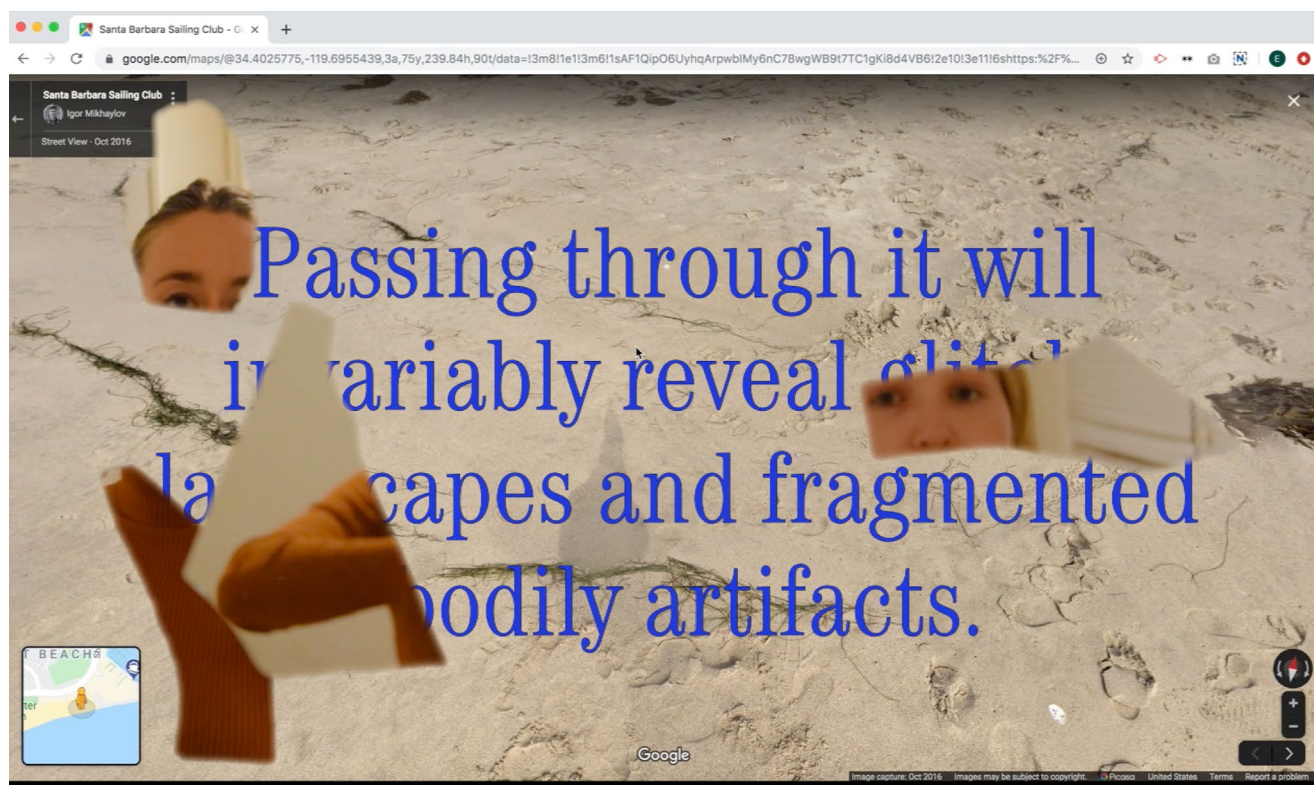
LIZZIE BAUR
RISD MFA
GRAPHIC DESIGN 2020

While navigating the internet, glitches are signs of malfunction. Though, there is a beauty in these moments that happen only in online space.

This project was a collaboration with Lizzie Baur, a fellow RISD graduate student. While browsing Google maps panoramas, she noticed a collection of images that had captured uncanny fragments of body parts.

Taken with this strange imagery, we sought out to create our own analog fragmented portraits by filming ourselves reflected in broken shards of mirror.

We then took our portraits and layered them back into Google maps landscapes and created this video.





GONE BY 2050

Event
April 2019

COLLABORATOR

MADDIE WOODS
RISD MFA
GRAPHIC DESIGN 20201

We are here today to lay to rest Dark Chocolate, the sweet treat beloved by all. After years of living in the narrow strip of rainforest land roughly 20 degrees north and south of the equator, where temperature, rain, and humidity all stay relatively constant throughout the year, Chocolate was taken from this earth when its home was destroyed. Chocolate was always there for us: the first time we were dumped; the unexpected rejection from our dream job; every time we were single on valentine's day and just needed a pal to watch romcoms with. Through thick and thin, we knew we could always count on the ever-loyal Dark Chocolate. Prior to its untimely demise, the average temperatures in Chocolate's home became more volatile, but Chocolate put our needs before its own. Chocolate gave and gave until it could give no more. We only wish we had done more to save it.

After researching UN climate goals, Maddie Woods and I gathered data on various foods that are susceptible to extinction by 2050 in the face of rising temperatures and the imminent effects of climate change. We knew an experience about foods that people love—like chocolate, coffee, cherries, and wine—could be powerful. These foods are grown in very specific regions, and are imported thousands of miles to consumers in America. We also wanted to speak to the negative impact that the global food industry has on the climate, and suggest more sustainable alternatives.

The resulting satirical performance simulates a speculative memorial service set in the year 2050. We appropriated visual tropes of a funeral: kitsch gilded frames, candles, floral memorial wreaths, memorial cards, and other associated ephemera. An audience was invited into a decorated memorial space to hear a eulogy for the crops that were lost: Cherry and Cocoa.

The serious delivery of the performance underlines the irony. Viewers were guided into the room with signage, and memorial pamphlets were distributed. Among the flowers and in place of a coffin, a cake rested on a stand, made from the last cherry and chocolate on earth. Eulogies for the extinct, delivered in somber tones, brought deadpan humor to the performance. Finally, the performance ended when participants were invited to taste a slice of a cake, implicating themselves for a final time. We envision this as a series, with future iterations speculatively memorializing other endangered foods (of which there are many).





AIRDROP EMERGENCY

*Video & participatory activity
November 2019*

Airdrop Emergency is distributed as an Airdrop video and accompanying image with instructions. This was an attempt to explore alternative information distribution methods for emergencies.

This specific iteration of the project imagines mass migration due to global warming. Once the participant in the activity receives an AirDrop video, they are asked to quickly implement a universal graphic system to help identify essentials like drinking water, food, medical supplies and shelter.





EXPECT MASS MIGRATION. ALL BORDERS ARE OPEN.



IT IS TIME TO IMPLEMENT ALL EMERGENCY SYSTEMS.



250 MILLION PEOPLE ARE DISPLACED FROM THEIR HOMES.



FOLLOW DIRECTIONS SENT TO YOUR MOBILE DEVICE.



DISASTER TEA TOWEL

Object
January 2019

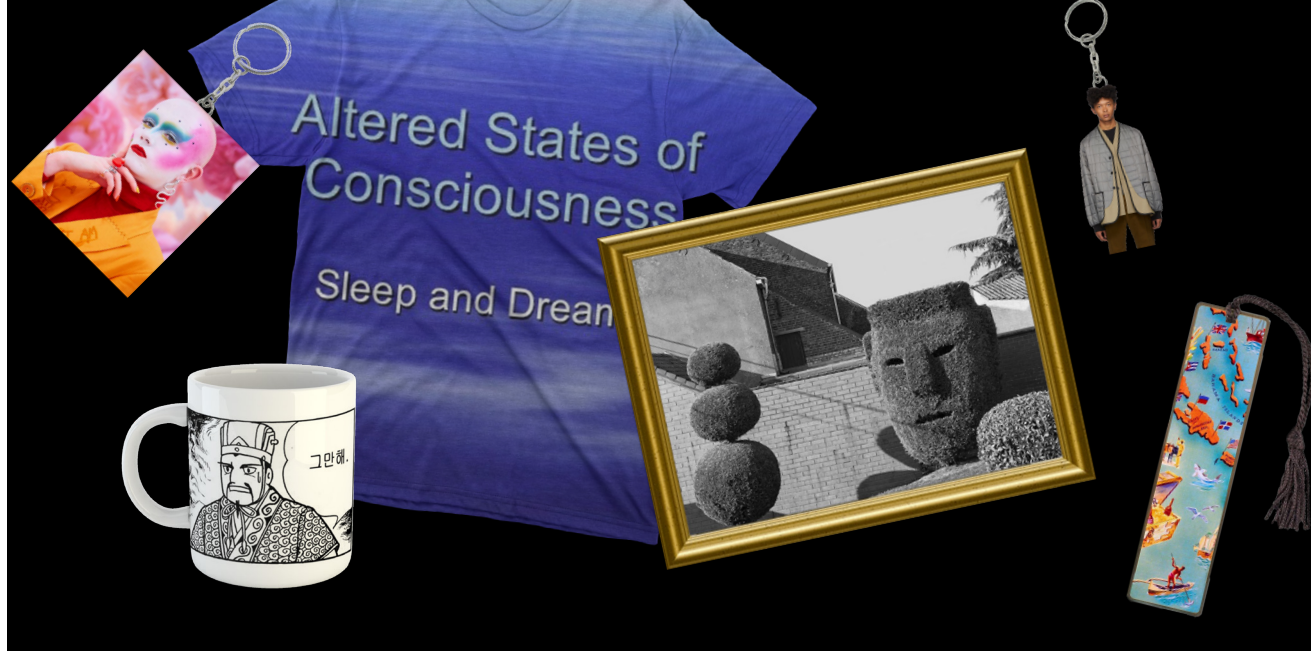
This work was created during the 2019-2020 Australian bushfire season, now known as *Black Summer*, in which approximately 18,636,079 hectares of land was burned alongside significant loss of wildlife, citizens and homes.

This series of souvenir gifts subverted the iconic Australian tea towel imagery to memorialise this horrific moment in history.

Each quarter of the towel references an aspect of the tragedy: the loss of wildlife, poor air quality, extreme smog, hail storms and floods.

The tea towel becomes a souvenir of this catastrophe and what was lost as well as a reminder of the very real dystopia that awaits us if we do not change our ways.





DIGITAL GIFT SHOP

Installation
September 2019

Digital Gift Shop is a collection of curated digital memories translated into physical objects. A fictional souvenir shop of digital experience to highlight the significant change in the way we store and preserve memory in modern life. It is an exploration of the visual language of souvenirs and memorial ephemera—the physical objects which we keep as an embodiment and trigger for our individual and shared memories.



MW Hi there, it's so good to see you. Where do we start? Should we try talking about the first time we collaborated? Start at the beginning?

GN Hi, yeah, that's fun. Hmm. What was the start?

I think the first official time we collaborated was for the Visiting Designers workshops in our second semester. I mean, obviously we had brainstormed for assignments before that, and had thought through tons of ideas together, but those were the first projects we actually did as collaborations.

Hmm. Yeah. I think that the Chris Lee workshop about documents was the first one we collaborated on, right?

Yeah, I think it was, and it's kind of cute that our very first collaboration was about friendship. (Giggles)

(Smiles) Well I think that collaboration really came together because we'd already spent six months really getting to know the ways that we worked, and developing trust and respect and friendship with one another. And so when it came to that brief, it was easy for us to create something using worldbuilding and systems because we were already so familiar with each other's worlds.

Totally, we knew each other's strengths and interests. We have this really open, judgement-free way of speaking to one another that fosters ridiculous ideas because we get each other. Worldbuilding was already just part of our rapport.

Ya, there was mutual understanding, and it was easy to delegate what we were each going to bring to the table and decide which parts of a project we would each take on. But maybe we should talk about what those were?

Yes, the work always split up with no real tension. Hmm. Well, I think there's a lot of back and forth in the early phases of a project; roles aren't really defined at first as we brainstorm. That part is probably the most fun, especially with you. But as we narrow in on a concept, and begin building the world or constructing objects, I take on a producer role. I think I'm good at organizing how to actually execute a project.

You're kind of like the production manager in a way. I would come in like "I know I want to make this world, I know I want it like this... I think this is how we should do it". And then you're like, "Okay, so what are the actual, like, diegetic prototypes gonna be? How are we going to make it convincing? What are the tropes we are going to pull on?"

Yes, well it's good to dream big, and then reign things in. (More laughter!) Our projects were really my first attempts at engaging in speculative design processes, which you taught me so much about! Probably not even intentionally, but you opened up world-building as a design methodology for me. Once you get me in that kind of headspace, the imagining of worlds comes really naturally for us because we share similar experiences and views and a friendship. There's not any fear in sharing thoughts and ideas. You pull that side out of me, which I love and appreciate.

I was just reading about collaboration at the Sandberg Institute, because it's something that's really fostered within their programs. At RISD, even though we wanted to collaborate again and again, we felt pushback at times to work on our own individual practices rather than exploring a practice together.

I'll read a passage: "This text aims to problematize the notion of collaboration—in the context of design, design education. Specifically, it looks at the ways in which the Sandburg Design Department contributes to undoing of the fetish of collaboration"... "This is not to abolish the notion of collaborative design practice—but to acknowledge that collaboration is not a choice. Collaboration as a condition acting and reacting at all times, and inhabiting power relations. The question is: what constitutes collaboration? What are the implications of collaborating, and how can design education reflect and negotiate the dynamics inherent in collaboration in (self)conscious ways?"

I think it's interesting, because within our program, it seems like collaboration is seen as a "way out" of dealing with your own practice. It even has kind of a negative connotation.

Ya, I know what you mean. It feels like it's not seen as a way of working that's as valid or important as individual work.

Exactly. Collaboration between us has been a really natural way of working, but I feel like at times, we've actually had to push against a system that mostly wants us to work individually.

There was sometimes initial hesitation because it felt like we had to ask for permission, or have a specific reason to work together. We sort of had to approach professors like, "Oh, do you mind if we do this together?" Because I feel like there was always push back against joint projects.

Which is insane because in the real world, if you're given a week to do a project, and you don't ask anyone for help, you'd be crazy.

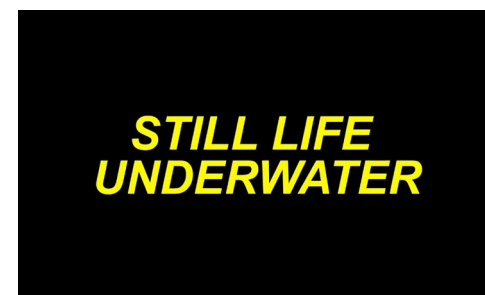
And also just insane in that, like, I feel like we had been collaborating already. There were projects I was doing that you were involved in, and projects you



The opening titles of our collaborative project called "Quarantine TV". We spent our pandemic isolation sending each other design challenges that we then recorded and put into a video series.



Purell bottles were an icon of the pandemic so we had to include them in the opening title sequence (along with masks and gloves for other episode titles.)



This is an example of the type of design challenges we set one another. Create a "still life underwater". We were inspired by one of our favourite artists, Max Siedentopf for this collaboration series.



Each of us recorded our outcomes using our iPhones and sent our videos to surprise the other person and compare our results at the end of the week.

were doing that I was involved in, but we couldn't call them collaborations because there's this expectation to show up with your own work to every class.

It's more a matter of authorship that seems to be the issue. Though, almost all works are collaborations in a sense, because we don't exist in a vacuum, and we're always influenced by one another (even just sitting next to one another in the studio). It's important that we're influenced by each other's experiences, and what we've each been exposed to.

I've learned so much from you!

Aw (blushes). I've learned so much from you too! ... Anyway (laughs), I think these collaborations have been a great way for us to get out of our own heads and our repeat tendencies. It's a way to experiment with other ways of working, and had we not done these collaborations, I don't think either of us would have realized parts of our individual practices.

Agreed. The other thing that differentiates our collaborative work from our independent work is the emphasis on playfulness and irreverence. And absurdity, and humor! I think we both hint at those things in our individual work—they exist under the surface—but they take on a larger role and a bigger importance when we make stuff together. Humor is just so hard to make work in design projects, and especially as an individual creator, you're just constantly doubting your own sense of humor and wondering if it's valid.

I get what you mean. Yeah, I think it's because when we are working on something together, I'm not making it for a vast audience of people that I don't know, which is maybe how it is when we're doing the rest of our work. But instead—

I know what you're about to say and I'm already feeling emotional...

—I'm making it for you! We become one another's audience, and maybe that's what makes it so easy.

Yeah, you know, I didn't think about it that way before. Especially for our "Quarantine TV" project, like that literally was us individually performing for one another.

Yeah! It gave us a sense of purpose. And maybe we wouldn't enter that realm of play on our own because there's just no reason to, but together there is. At least I can make you laugh! That gives it a sense of purpose that feels different. Working on through the process together was always really rewarding.

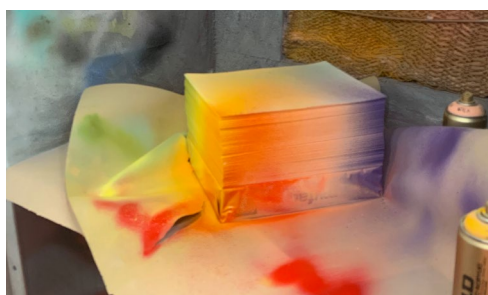
(Laughs) that's true. I would think to myself, first and foremost, "Georgie is gonna see this, and Georgie's reaction is kind of the most important thing"

When we're working with each other in mind, the projects end up being more successful because they are created specifically for an intended audience and reaction. Even if the audience is only ourselves. When I think about the "Gone by 2050" project—we did that because we essentially wanted to host some kind of dinner party (for ourselves). We knew that we wanted it to communicate something in some way, but that we also wanted it to be an experience. And we wanted to have fun. That was a big part of it. And ultimately, if we designed it for each other—the audience of each other—then when we brought other people into that, they could feel the spirit and the excitement behind the project. Play is contagious, and it gets people's attention. I think we both use humor as a way to invite people into our world in kind of a low risk way. It's an invitation to come in and play with us, but you might also come away with thinking about something a bit differently. We're not asking you to be yourself or to be overly critical; we're just asking you to experiment.

Yeah, it's never just humor for humour's sake. Humor is used with a purpose or as commentary. It's just another tool in our tool belt that happens really naturally. But the way we use it also has a wide range, where sometimes it just bubbles under the surface. "Gone by 2050" for example was performed really seriously and had an urgent message, but was also driven by elements of dark comedy; a morbid sense of humor. But others are much more overtly silly.

The "object" is also important in bringing some of our worlds—or skits, maybe you would call them—to life. There are often props involved that we use to activate an experience. With "Intelligent Cutlery," we just started out by asking what can we do with cutlery? How can we make the use of it an enjoyable, fun experience? What would we want? What could we do with it? And then later on asking "Oh, actually, the fact that we find this fun and like the fact that we wanted to create this is actually interesting, but why?" If this sensorial experience is funny and interesting to us, how can we use it in a different way? How can we apply what we've learned through this design process and use that for something else. We can post-rationalize the process to come up with a meaningful purpose. But that project wouldn't exist if we weren't able to freely experiment and make for each other; without the initial play and instinct to have fun.

Yeah, I never really thought about how important the object is—every single one of our collaborations includes props or tools that prompt an activity



The "Bureau of Friendship" document we created as a part of Chris Lee's visiting designer workshop.



The final digetic object/document we created for "Bureau of Friendship".



Classmates trying our "Intelligent Cutlery" in Keetra Dixon's experience design class.



An up-close look at the inner workings of "Intelligent Cutlery" This spoon lights up red or blue based on the temperature of your meal.

or a process. That feels like sort of a unique approach: coming up with the objects first that then create the performance. And you're obviously the performer in the relationship. And along with objects, a physical space is important. I think that, sadly, just because of the distance, it's been harder for us to collaborate this year because we don't have the ability to just build objects together and be in a space together. Being in a space and making things to activate the space is kind of the crux of our collaboration, and we just didn't have access to that this year.

Sadly, yeah, I think space really does matter. It's the backdrop for the props. We build a lot of physical things. Moving forward, I think it would be interesting to see how we can transform entire spaces or full rooms into sets—more than just props. I think now both of our practices are moving more towards world building.

Yeah, I can imagine creating embodied spaces as more immersive experiences for design. I think it would be interesting to see where some of the ideas go in that space.

I think it would really open these worlds up more to people that want to come and explore them with us. I've been thinking about how we continue to do this in a way that's accessible beyond grad school.

Space has a two-fold importance for us, as it becomes the backdrop for a project, but also I think being together in a place is really important. Not that we haven't been able to maintain the friendship or a relationship, obviously, that's still there. But it is a lot about being able to touch things and play and dress up and create a little miniature world for ourselves. And then that's what prompts ideas. (Laughs)

(Laughs) What is your favorite project that we've done?

I have very fond memories of "The Friendship Bureau" project because it was so weird. I don't think either of us understood it while it was happening. And I don't think I understand it now. But it was so fun. And I think that's a project that really has legs. You know? I think that a lot of our projects for now are just the beginning of an idea. That one—a world where friendship is currency and law and status—is one I've love to go back to. And I love that we just used our concept to make an object we really liked (laughs.) Spray painting that document rainbow did not need to happen, but it was really fun to make.

I just loved the moment that we were both so sure—we decided this is the way it needs to look very late in the night. But I mean, it looked great.

How about you? What was your favorite?

It's hard for me to choose. I think "The Friendship Bureau" has a place in my heart. And then I think "Gone by 2050" was a real turning point in my practice, just in terms of how to talk about issues that I find important and relevant in a way that felt true to me, and the way that I want to work. I wouldn't have been able to do that project by myself. It kind of took me on the path that led me to where my thesis is now. Also, "Intelligent Cutlery" was so fun for me as well, just because it was really interesting to witness how people came into our world using those objects.



INTELLIGENT CUTLERY, 2020. [IMAGE: MADDIE WOODS]



INTELLIGENT CUTLERY, 2020. [IMAGE: MADDIE WOODS]

Both of those provided us with opportunities to see how other people reacted and I think they were both super rewarding experiences. We actually got to enact the performance for both of those. Both were also very sensory experiences—both involved a cake! (laughs)

Oh, yeah, sitting around the table eating something with a bunch of people is something that I think we both enjoy and see value in, and it kind of subconsciously snuck in there.

“Gone by 2050” was a turning point for both of us. Food is really important to me, as you know, but I never really understood how that could possibly play into a design practice or design experience until that project. So they cracked open that door for me, where I saw food as something that can be emotional, profound, and evocative, and it can create meaningful connections and experiences between people that you can’t really create with other things. It just fostered a lot of ideas for me.

When we revisit our collaborative practice, I think we’ll want to prioritize things that are participatory in nature, things that involve more sensory activities like eating because it makes for a richer experience. This really is a practice developing where there’s terminology that we use and clear modes of making. Which...I actually didn’t realize until just now?

Lovely! For me, working collaboratively with you also eliminates the fear of working with more people. I struggle to create participatory or experiential works when I’m by myself because I am a bit shy and find it quite intimidating, but working together with you, allows me to bring things to a greater public. It’s a natural confidence booster in that I’m like, okay, Georgie is in this with me, so I’m happy to present this to a group of strangers.

Yeah, and it relieves my worry that I get caught up in my own worlds, where they make so much sense to me, but I fear that they won’t communicate. So to have you involved to say, “ya this totally makes sense”. If you get it, other people will. That helps me; it gives me confidence too.

So who inspires us? I know we have this shared lexicon of references, we are immersed in these very similar realms of artists and readings and issues. We have similar tastes, so even if you show me something I haven’t seen before I usually love it.

You’ve never shown me anything that I didn’t like, so it makes it easy. When we work together, it can feel like the conscious mind takes a backseat and the subconscious takes over. We work pretty instinctively. But as far as inspiration, Keetra has also been really important to us in thinking about collaboration more practically. In her classes, she really encouraged us to imagine ourselves having a professional practice. Up until that point, we were just doing it for fun, but she helped us imagine how a collaboration could work outside of graduate school.

Yeah, she totally introduced this entirely new paradigm of someone who’s a serious designer, but is also very playful, experimental, and experiential. I don’t think another person like her exists in the faculty (or in the world!). And I think she shaped the way we thought about design in a really

profound way. A huge influence for us, really. Shout out, Keetra. It was in her class our first year where we learned how to implement participatory design and conditional design. A lot of the building blocks came from Keetra, even though we applied them to assignments in other classes.

That’s true. It’s also about the energy that she gave us. She was a reminder that the design process can and should be fun. But fun also doesn’t mean easy. Humor requires a lot of work to get it right. It requires nuance, sensitivity, and empathy. A bit of intelligence too! To be funny in a way that makes sense, and seems original is quite a task. And when it’s used the right way, it also can make an experience less uncomfortable for the people that we’re asking to participate. As soon as people realize they’re allowed to laugh, it breaks the ice instantly.

All this laughing is making me really have to pee. Can I go pee?

Yeah, of course.

Peeing is definitely a major source of connection for us because we have equally tiny bladders.

Yeah, it’s good. We always need to take a break at the same time because we always need to pee.

We recognize the urgency of human needs in a very similar way. We really have similar understandings of the human body and it’s primal, biological needs. Between the two of us, there was always someone in the bathroom.

Like one of us was never not peeing. I’m way less well hydrated now. That’s one bad thing about not being in the studio.

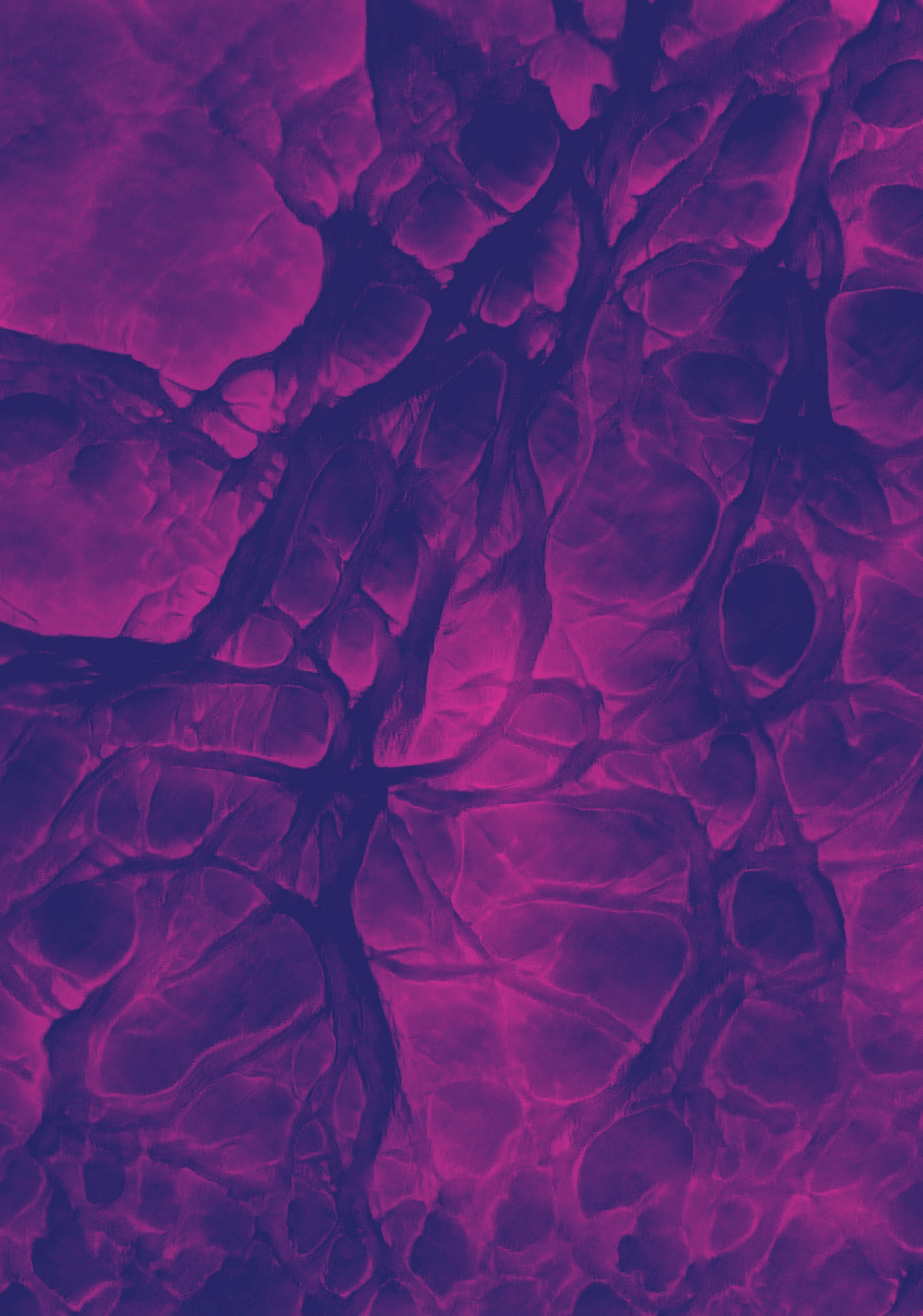
Never not peeing! (Laughs) Okay, I’m gonna stop recording and pee. Love ya!

Love you!

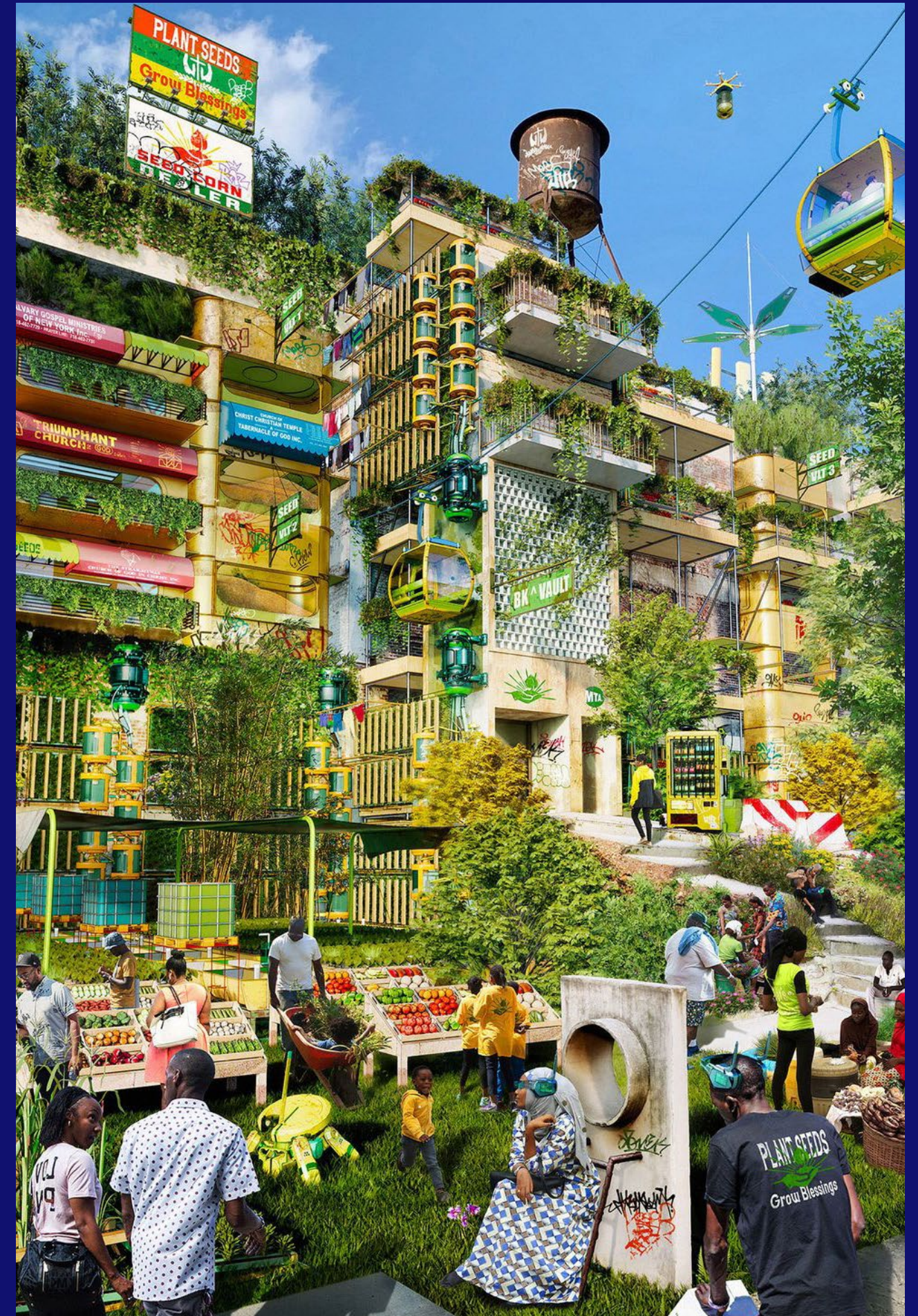
* A combination of "WAX MELT", a unicast typeface, and the pink/purple coloring are deliberate design choices made to represent the ambiguous tomorrow. Alongside this, I have chosen a machine made image of a microbial network. Tomorrow is about ecologies, networks and nuance. All of these can be seen in the natural world at mirco and macro scales.

tomorrow

MICROBIAL MEMBRANE DESIGN FOR "MICROBIAL COSMOLOGIES" CREATED USING MACHINE LEARNING, 2020. [IMAGE: MICROBIAL COSMOLOGIES TEAM]



TOWARDS TOMORROW: ADAPTIVE MODELS OF FUTURE MAKING



The *Frozen Neighbourhoods* (2020), is a series of beautifully vibrant renderings by Olalekan Jeyifous, which examine a speculative world in Brooklyn's Crown Heights after climate change has changed the way we are able to move through space, and notions of private versus public space.

OLALEKAN JEYIFOUS. PLANT SEEDS GROW BLESSINGS FROM THE FROZEN NEIGHBORHOODS IN CROWN HEIGHTS, 2020.



TAPIS ROUGE, EVA STUDIO, 2016. [IMAGES: GIANLUCA STEFANI, ETIENNE PERNOT DU BREUIL]

Tapis Rouge (2016), is a public space intervention in a neighborhood in Haiti that was devastated by the 2010 earthquake. EVA studio worked together with locals to heal their community and build this new space that would bring life back into the landscape. By working together and listening to each others stories, can we build public space for healing? How do we build collective visons of the future through our shared spaces?



DONNA HARAWAY: STORY TELLING FOR EARTHLY SURVIVAL, FABRIZIO TERRANOVA, 2016. [IMAGE: TATE]

Donna Haraway: Story Telling For Earthly Survival (2016), is a film that seeks to unravel and explain (to a general audience) the work of Haraway through the use of pure storytelling and greenscreen imagery. I am inspired by the effort to make these ideas accessible through film—unpacking hyperobjects.



RAFIKI, WANURI KAHU, 2018. [IMAGE: THE GUARDIAN]

Rafiki (2018), was created by Kenyan film maker Wanuri Kahiu, who is part of *Afrobubblegum*, a collective of African artists seeking to create fun, free and fierce story telling that highlights pan-African experiences. She presents us with near-future narratives that color the image of the future with vibrance and challenge images of African lives as seen on-screen throughout history.

Towards the future, in the world of tomorrow, I am proposing adaptive models of future making and have explored shaping a pedagogical framework for considering design from an ethical future-driven perspective.

My design prospectus is built upon a wager that confusion yields concern and its effect is productive. Confusion and hope can live in tandem. As a designer working towards a future that celebrates complexity, I want to go deep into these spaces, whether real or imagined, as a way to make the invisible, visible—highlighting the changes in our surroundings that we do not see, underestimate or cannot bring our collective selves to consider at all. I want to create worlds for my participants to climb into, become lost in and explore new possibilities. To explore, play, agree, disagree. Pointing towards hope does not minimise the grave seriousness of the issues that we face but encourages us to lean into the grief, overcome paralysis and procrastination as we face a high level of urgency. Yes, some scowling and some beckoning can co-exist.

Smooth design that putties over nuance loses too much in translation. In favor of a clear visual system, design communication that addresses larger, macro relationships often

prioritizes uniformity, yielding an air of neutrality upon rich layers of interconnectedness. Designers that seek to edit to render a clear, organized system, can dramatically alter the shape of a story. As we compartmentalise our world as a way to make sense of and understand it, we have a tendency to simplify and distill what is around us. This over-simplification is dangerous. What we need is clarification of the complex, not a simplification of nuance. I am exploring other strategies and visual systems that offer objectivity, veracity, and also unsettle.

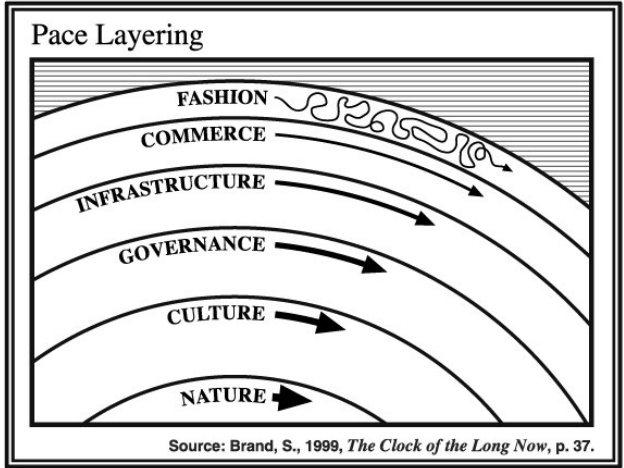
In the uncanny chaos that is life, shouldn't designers use this complexity to create more tolerant, varied human expectations and outcomes? As we practice future making, might we harness collective intelligence to incorporate novel ways of thinking that are flexible, critical, and robust, with the unpredictability of life built in? Wouldn't this invite dynamic relationships that respond to political and environmental agendas, exposing and incorporating the richness and diversity?

While we are dealing with tremendous uncertainty and struggle to find hope, few designers are uniquely placed to capture the human fondness for novelty and the fascination with the bizarre as a pathway to make possible the development of collective visions of what is necessary for survival and finding contentment in the ever changing reality. The creation and maintenance of hope and access to the means to make a better life and see a different future, is the one thing that we know prevents humans from obliterating themselves in a moment of absolute desperation.

One way of understanding the experience of our now (our civilization) and how different influences at work might systemically be employed to ensure its survival is presented by Stewart Brand (1999) in his book *The Clock of the Long Now* [26]. He refers to the earlier work of a theoretical physicist, Freeman Dyson, and his idea that each person is attuned to six unique timescales layered over each other during their lifetime (a person measures years, families measure decades, nations measure centuries, cultures measure millennia, species measure tens of millenia and the whole web of life on our planet measures eons). By extension, Brand thinks about "civilization" as the personal experience of the temporal system in which each human lives and postulates six components or "pace layers" that form the working structure: fashion/art, commerce, infrastructure, governance, culture, and nature. Each operates within a specific time frame [on a scale from



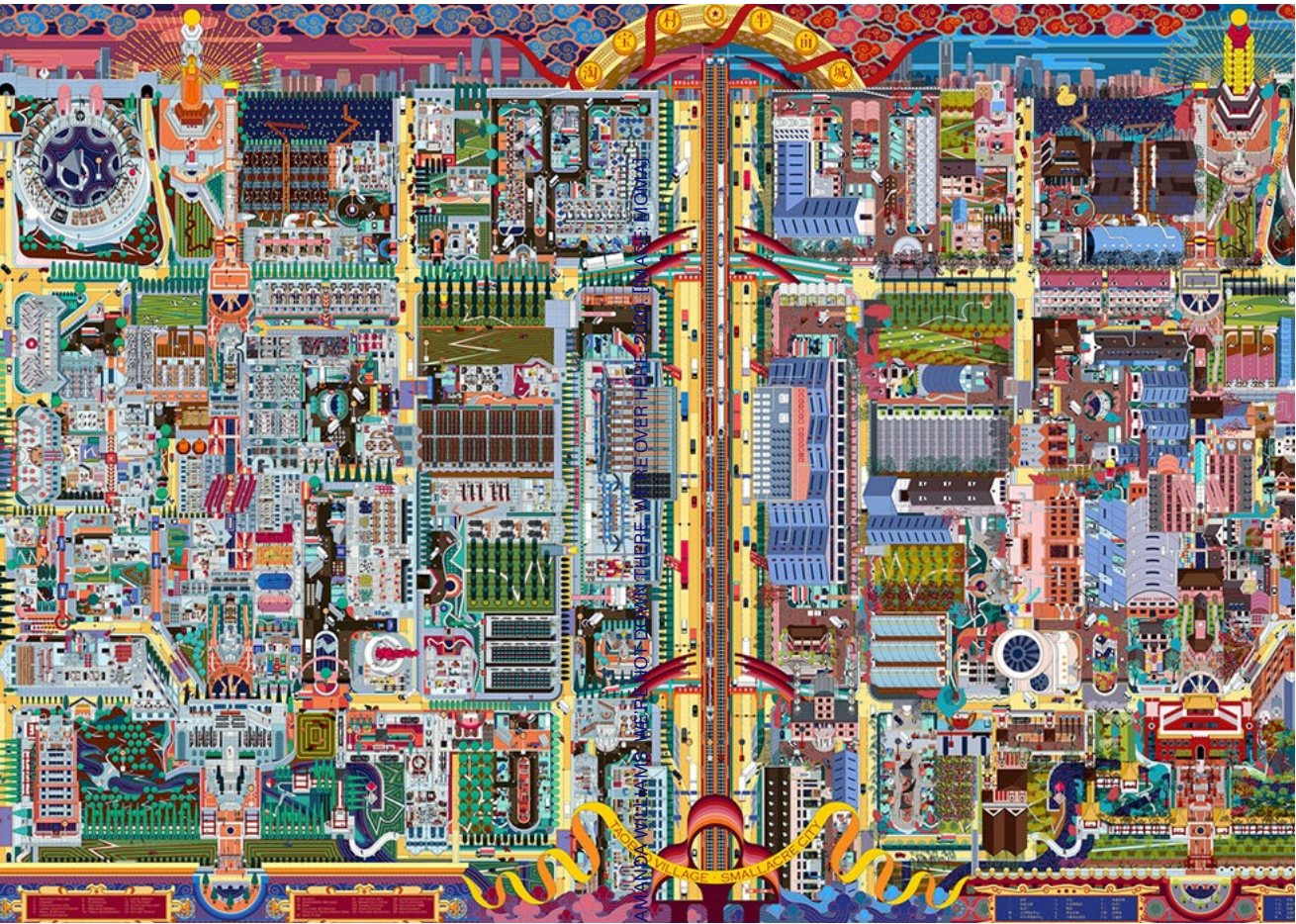
Year 3 (2019), paints a picture of London and it's identity through the images of the city's thrid graders.



Pace Layers (1999) diagram from Stewart Brand's book "The Clock of the Long Now.

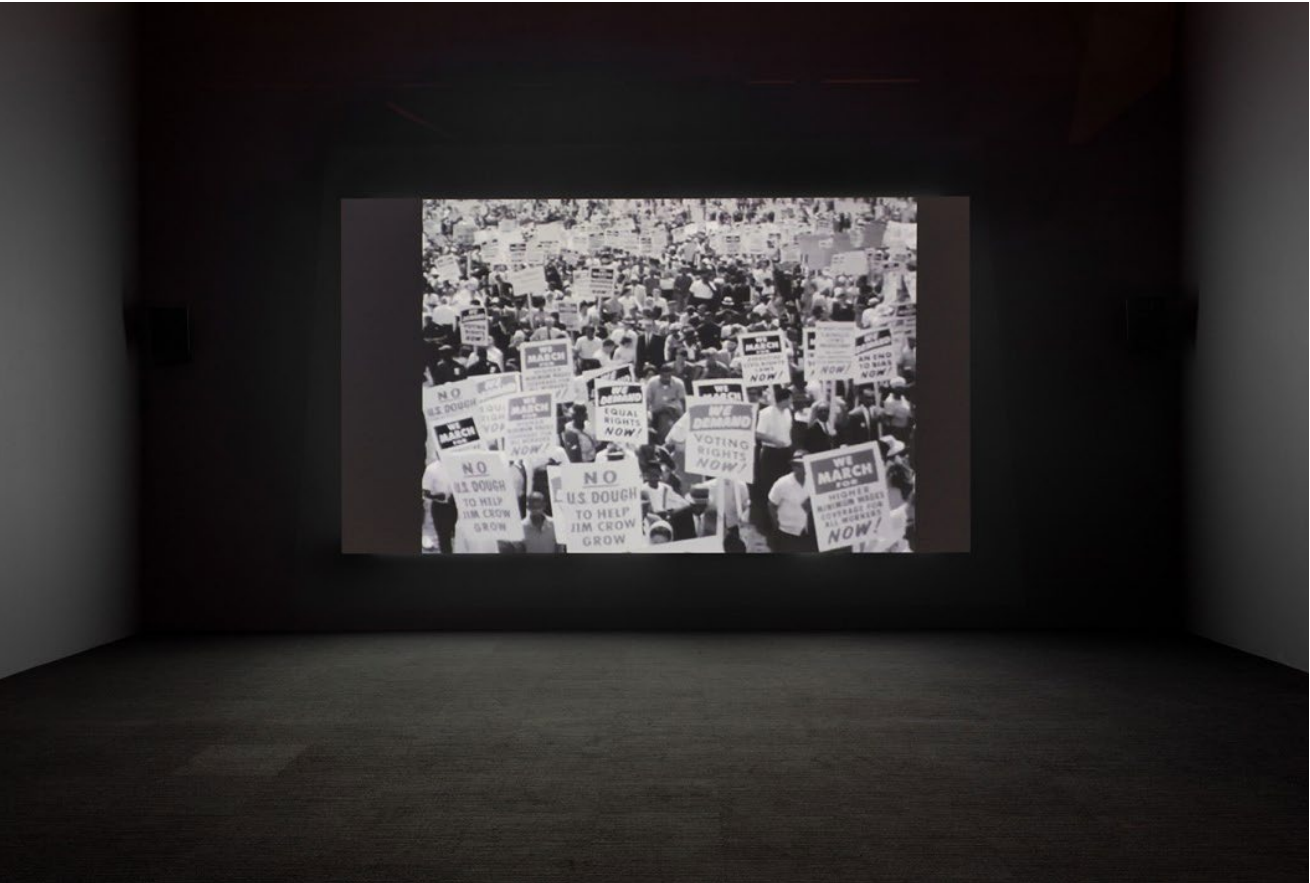
YEAR 3, STEVE MCQUEEN, 2019. [IMAGE: FRIEZE]

PACE LAYERS, STEWART BRAND, 1999.



Taobao Village (2018), shows a vibrant cross-section drawing of a village devoted to the e-commerce platform "Taobao". The drawing depicts a virtual village that is inspired by real "Taobao villages" where rural producers sell their goods online through the marketplace. In this case, e-commerce has given opportunity to rural e-retailers.

TAOBAO VILLAGE: SMALLACRE CITY, DRAWING ARCHITECTURE STUDIO, 2018. [IMAGE: MODUMAG]



Love is the Message, The Message is Death, Arthur Jafa (2016), collages an archive of found footage that speaks to the media representation and imagery of Black people in America. In summer 2020, a network of US and European museums worked to make the video available online.

ARTHUR Jafa: LOVE IS THE MESSAGE, THE MESSAGE IS DEATH, 2016. [IMAGE: MOCA]

fashion/art the fastest to nature the slowest] but influences the other to introduce new ideas, while providing checks and balances to maintain continuity and stability in the face of systemic shocks [or hyperobjects].

In Brand's "pace layers", fashion/art [and I add design] are recognised as a way of introducing sustainable change in human behaviour and experience. The work done in this space has significant value and should not be overlooked. As I consider the inscriptions and transformations of the surface [mentioned earlier], concrete specificities must be addressed in design education. This is why I believe that questioning the curriculum taught in design education matters, rethinking the systemic biases and structures that led us to this moment matters, why exposure to varied worldviews and diversity of student body and faculty matters. Understanding the greater picture and how systems and ecologies function and feed one another is our way towards a better future.

ADAPTIVE MODELS FOR FUTURE MAKING

As a profession we don't deeply understand the ecologies and systems that we live in and we don't know how to collaborate with those who would be able to help us. We're not trained in and comfortable with organising collectively, but there is a recognised need to organise and be stronger collaborating together as designers rather than pursue individually focused practices and visions.

There is a general feeling that design education as it was delivered up until recently was not preparing students adequately for future practice for a number of interlocking reasons including that the application process advantages certain types of students to receive certain levels of education and subsequently the faculty and student body do not reflect the worldviews and diverse cultural makeup of the world around us. Many students graduate with a debt that also dictates the setting of and their subsequent practice.

We know that this needs to change and it seems to be a wheel in motion across design institutions the world over. However, the types of practice students are preparing for are not yet adaptive enough. I wonder how we can build opportunities [based on Brand's temporal model] for future literacy into our design of visions of potential futures? Does building this literacy help to provide individuals and communities with more agency to create their own futures? How do we incorporate these teachings into syllabi?



We're Not Down There, We're Over Here (2020) considered free Black space in the United States through this installation project installed at MOMA.

Through her speculative diageitic objects and diagrams, Amanda Williams encourages her audience to consider free black space and how to find it.

AMANDA WILLIAMS. WE'RE NOT DOWN THERE, WE'RE OVER HERE. 2020. [IMAGE: MOMA]



Immeasurability (2020), recreates imagery of Atlanta and practices a refusal against the 'smoothing' of architecture. They bring to the forefront the Black

story and experience of the city which allows the audience to imagine a different world.

EMANUEL ADMASSU. IMMEASURABILITY. 2020. [IMAGE: MOMA]

In our interview, Christopher (Chris) Lee, discussed the cultural and other biases we have inherited in design education and explored some ideas to address them. He noted that the form factors that students engage with, and teachers teach at elite design schools tend to be limited to a pretty narrow range of things, at least in scale, from typography, to logos to, books and websites, and are all oriented towards or fall under the rubric of what he called the design imperative to publicity. He suggested that there was a sort of implicit assumption in all of these form factors, that implies or takes for granted or presupposes a mass audience that is the normative orientation of design school. He proposed, as a provocation—what would happen if schools were charged with teaching things like passports, money, identity certificates, marriage certificates and property deeds? What if those were the things that students studied in terms of how to design at postgraduate level? He speculated that provocation might entail not only the design of the actual object itself, but the design of the bureaucracy within which that object circulates, for example for a driver's license. He noted that Lisa Gitelman says that the document is constitutive of the bureaucracy within which it circulates and the bureaucracy within which it circulates valorizes that document. He also recognised that a document in many circumstances represents a kind of formed colonial memory, like a column form of colonial knowledge. And so the design imperative to poetry would, in terms of curriculum, be oriented towards trying to encourage students to think about, study and create ways of remembering something otherwise and reorient the bureaucracy.

Chris suggested that there's a way of thinking about an advanced degree in graphic design, as like one in English Literature. You're very employable, as it has a practical aspect, but also you can take it as a set of tools for addressing and thinking about the world. Generating insight about the world, essentially writing about it. Maybe it's not literary writing, but discursive image making.

MOBILITY AS FREEDOM

Futuring and world-building are spatial practices—they consider how people live, how they move, how they interact with one another and occupy space. Ideal futures offer mobility systems that allow people to move freely in space to achieve these goals. Power over mobility is a tool to explore and express freedom.

An exhibition at MOMA, *Reconstructions: Architecture and Blackness in America*, presented 11 commissioned works by architects, artists and designers that explored the relationship between architecture, space and the experience of African-American and African diaspora communities. The works embodied themes of black sociality, anti-black racism and spatial zoning that ultimately designed exclusion and discrimination. The projects in the exhibition each propose an intervention in a different city “from the front porches of Miami and the bayous of New Orleans to the freeways of Oakland and Syracuse” [27]. That all imagine alternate futures — some more speculative than others.

Amanda Willams created, *We’re Not Down There, We’re Over Here* (2020):

For me, it’s important that you know, there’s already been free Black space in the United States. There are a number of towns that were called Free towns, of which Kinloch, Missouri was the first for the state of Missouri. Kinloch and outer space in many ways are both frontiers. I think it’s important to connect them and imagine how we relaunch back or forward into this kind of space. [27]

Her project was made up of a series of emergency blankets which depict tools and fragments that would map Black people towards free Black Space. She also created a “space-boat -ship-vessel-capsule” to help participant’s travel to this space of freedom and acknowledged the space that Black Americans occupy by highlighting patents for everyday objects invented by African-American scientists, scholars and designers.

This exhibition highlights how the inherent privilege of mobility makes it the appropriate vehicle through which to reconstruct ideal futures. Ideal futures offer mobility systems that allow people to move freely in space to achieve these goals. Power over mobility is a tool to explore and express freedom.

Space is freedom and mobility to move from space to space without barriers is a privilege currently not extended to all. The mobility of tomorrow is a mobility that has the potential to provide opportunity and break down zoning of space that has contributed to our social segregation across cultures.



THE FUTURE STARTS HERE, V&A, LONDON, 2018. [IMAGES: VICTORIA AND ALBERT MUSEUM]

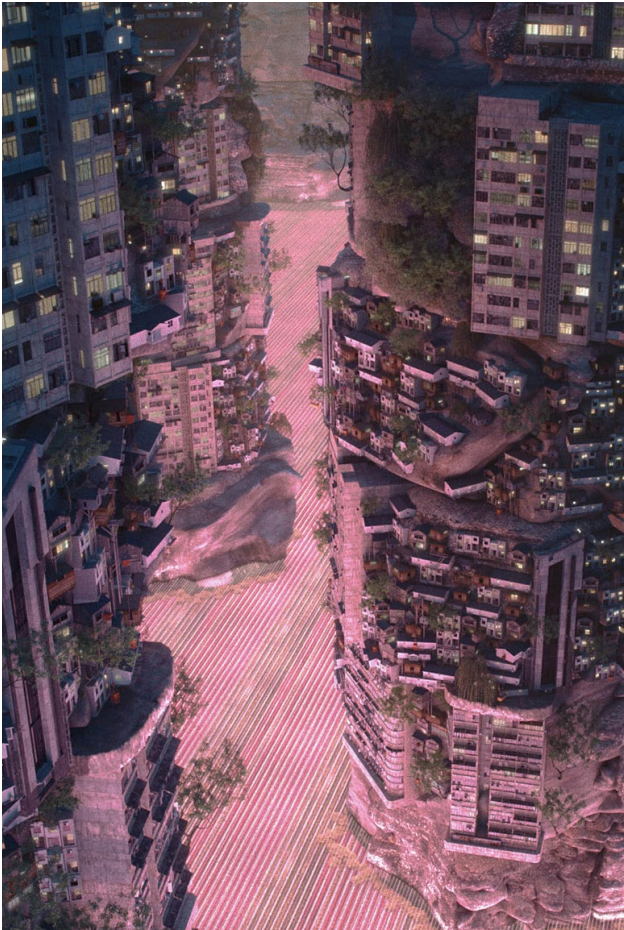


The Future Starts Now (2018) raises the questions we should be asking when we encounter these future design objects. Like, “we are all connected but do we feel lonely?”



TERMINUS AI CITY OPERATING SYSTEM IN CHONGQING, BIG, 2020. [IMAGE: DEZEEN]

Terminus AI City Operating System (2020) is Bjarke Ingles latest smart city design proposal.



PLANET CITY, LIAM YOUNG, 2020. [IMAGE: DEZEEN]

Planet City (2020), view over the city’s agricultural system.

Planet City is not a plan for direct implementation, but rather serves as a grounded provocation that prototypes the necessary systemic and lifestyle changes that may be required in order for our world to continue to support human life. It stands as evidence that climate change is no longer a technological problem, but rather an ideological one, rooted in culture and politics.

—Liam Young, *Planet City*, 2020

EXPLORING SHIPS AND SHIPWRECKS

Rory Hyde is an architect, writer, curator and educator whose work has inspired me in the creation of this thesis. During his role as a Curator of Contemporary Architecture and Urbanism at the Victoria and Albert Museum, Hyde was involved in a number of projects but *The Future Starts Here* exhibition is something I often reflect on and think about as I consider future-making. The exhibition took place at the Museum in London between May and November in 2018. The V&A is a perfect stage for this collection of objects, objects, considering its rich history displaying “cutting-edge objects at the forefront of art, design, science and technology” [28]. For these reasons, it was a fitting place to present and discuss the new frontier of design within this context. From biology to robotics, ‘post-truth’ politics and self-governance systems, satellites, rockets and reawakening after death. A number of future designs were on view.

In thinking about designing collective futures that provide opportunities for nuance, *The Future Starts Here* provides what I believe to be a successful case study for considering how we approach these discussions with the general public and improve future literacy and encourage public critique of emerging technologies. Co-curators thought carefully about highlighting the intended use of design objects (which are often sold as utopias by the companies who produce them) as well as possible unintended uses, hacks or negative flow on effects (which we don’t see in the shiny visions of future utopias peddled at us). They concentrated on asking questions that provoke the audience to respond honestly and personally rather than telling them what to think or believe.

In a talk at the Melbourne Pavilion (MPavilion) in 2019 about his involvement in co-curating the exhibition, Hyde quotes Paul Virilio, a French cultural theorist, urbanist, and aesthetic philosopher, who said “The invention of the ship was also the invention of the shipwreck” [29]. As we work towards the future of tomorrow, I think this notion should remain at the forefront of our minds. Just as emerging technologies offer exciting opportunities for new ways of living, they are almost always one side of a double-edged sword.

REFUSING RENDERTOPIA

Every other week a new proposal for the city of the future, the building of the future or the transport

[26] Andrew Blauvelt, “Defuturing the Image of The Future”, Walker Art Center, September 15, 2020.

[27] Amanda Williams, *Reconstructions: Architecture and Blackness in America*, MOMA, online, 2021.

[28] Victoria and Albert Museum, *The Future Starts Here*, V&A, 2018.

[29] Rory Hyde, ‘*The Future Starts Here*’, MTalks, 2019.



EVERYTHING, DAVID O'REILLY, 2017.

Everything (2017) is a simulation game developed by artist David O'Reilly. A player of the game is able to play as anything/everything they like. From objects, to animals to plants...everything. This game is a perfect display of the ultimate hyperobject—everything. It becomes a tool to understand the interconnect- edness and intricacy of the world we live in.



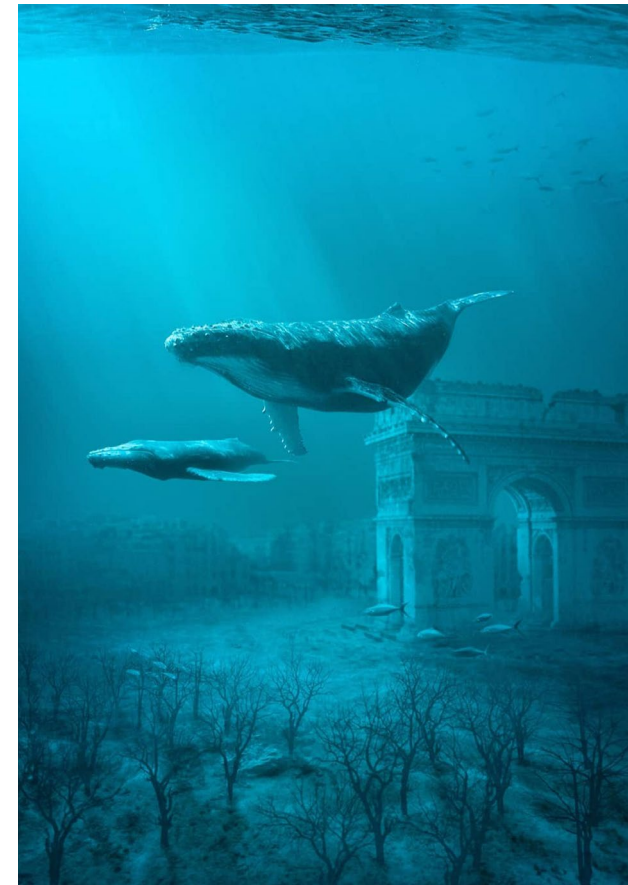
DOKU-LU YANG'S DIGITAL REINCARNATION, 2020. [IMAGE: LU YANG'S WEBSITE]

DOKU (2020) is a virtual character created by Shanghai based artist, Lu Yang. DOKU is able to float freely through the internet without restriction to time and space. DOKU defies what it means to be human. Towards tomorrow, how do we continue to use digital space to expand our horizons?



NEWS FROM THE FUTURE, FABIEN BARRAU, 2019. [IMAGE: FABIEN BARRAU INSTAGRAM]

News From The Future (2019), Fabien Barrau uses drone photography and photoshop to create these dystopian visions of the future after a climate change apocalypse



NEWS FROM THE FUTURE, FABIEN BARRAU, 2019. [IMAGE: FABIEN BARRAU INSTAGRAM]

News From The Future (2019), whales swim over Paris' Arc de Triomphe in paris.

system of the future makes its way onto Dezeen (see Danish architecture studio BIG's plans for *Terminus AI City Operating System* in Chongqing, China, that will be operated by an artificial intelligence system). It seems William Gibson might have been right and “the future is already here, just not evenly distributed” and we are headed for domination by Apex companies that will take over our buying habits and then finally, our cities. However, we do have agency to choose our futures and reject those that do not serve us if we act on it. We look back and recognise the complete inappropriateness of the displays at the World's Fair in the 19th century that used comparisons to indigenous cultures to highlight the advancement of modern society and “less evolved” cultures it left behind. How are these rapidly multiplying renderings of the future on Dezeen different? Ignorance of nuance and multiplicity results in erasure of culture and meaning.

Speculative architects like Liam Young have drawn my attention in their efforts to forge a new way. By using fiction and storytelling, Young presents us with roadmaps of potential futures that are extrapolated from research around emerging technologies but reference and embody existing diverse multicultural values. His recent work “Planet City” imagines “The end of the end of the world,” at a time where there is no more future. [30]

“Planet City is not a plan for direct implementation, but rather serves as a grounded provocation that prototypes the necessary systemic and lifestyle changes that may be required in order for our world to continue to support human life. It stands as evidence that climate change is no longer a technological problem, but rather an ideological one, rooted in culture and politics.

Young worked with experts across a number of disciplines to design a city that can house the world while the rest of the planet re-wilds itself and regenerates. “The Planet City project imagines all the people of Earth assembled into a single massive city in the Amazon, where freshwater is likely available for the longest time after other regions of the planet have become inhabitable.” [31]

PLAY SPACES

In a world in which relationships are complex, unstable and unknown, what is the intrinsic value of play and free exploration? Critical and speculative design practices are at times deemed unnecessary within the field of design.

The strategy of this book, then, is to awaken us from the dream that the world is about to end, because action on Earth (the real Earth) depends on it. The end of the world has already occurred. We can be uncannily precise about the date on which the world ended. Convenience is not readily associated with historiography, nor indeed with geological time. But in this case, it is uncannily clear. It was April 1784, when James Watt patented the steam engine, an act that commenced the depositing of carbon in Earth's crust—namely, the inception of humanity as a geophysical force on a planetary scale.

—Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World*, 2013.



News From The Future (2019), the statue of liberty in 2119 after sea level rise caused by climate change.

NEWS FROM THE FUTURE, FABIEN BARRAU, 2019. [IMAGE: FABIEN BARRAU INSTAGRAM]



News From The Future (2019), Chicago in 2323 after cities are abandoned and have rewilded themselves.

NEWS FROM THE FUTURE, FABIEN BARRAU, 2019. [IMAGE: FABIEN BARRAU INSTAGRAM]

Though, I would argue there is some necessary play that needs to happen in order to arrive at more lyrical, critical practices. In the play space of tomorrow, can we explore design methods that make use of the uncanny awkwardness of everyday life and human experience to invite participation and exploration of our society's complex natural, psychological and technological challenges and plot our way to the next iteration of our personal and collective experience. As we face pandemics, wars and refugees, the gap between the rich and the poor, political polarization, radical racism, resource shortages and uneven distribution, global warming, natural disasters, nuclear pollution and waste discharge, and bio-extinction, how will we exist? How will we design? How do graphic designers use their craft to play a role in the creation of worlds that we want to live in?

I have carefully and systematically used play as an approach to exploring the uncanny. This is where I encourage my audience to explore my “created realities” or anthropomise-en-scène.

This space is the designer's “workshop” This is the sphere where ideas are integrated into an approach to design that meets the problems of the real world where they currently live and provides the laboratory to model them holistically by bringing together all the elements that one needs to incorporate in a current and future practice—the ethical, emotional, behavioural, psychological, temporal. It is a way of interacting with the world and our environment that prioritizes voluntary exploration, purposelessness, escapism and, occasionally, rules. It considers novelty, enjoyment, interaction, and cooperation over fulfilling certain outcomes.

UNCANNY MALFUNCTIONING

The ideal of perfection and concomitant denial of imperfection seem to be obstacles to the effectiveness of design. While we know that there is no true innovation without failure, we harbour the fantasy that we can avoid that reality. Timothy Morton talks about “the smooth functioning myth of smooth functioning” [31] which I find quite enticing. Perhaps there are ways to explore the potential of interposing the uncanny and finding the grit in the process of creating design responses that will move an audience to have a kind of visceral response and in such a state, be prompted to embrace the imperfection and confront the real rather than the idealised.

By contrast, the uncanny is the unbalancing experience of the strangely familiar in an unexpected or previously unexplored

context. As designers, we should go deep into these spaces, whether real or imagined, as a way to make the invisible, visible—highlighting the changes in our surroundings that we do not see, underestimate or cannot bring our collective selves to consider at all. We should want to explore the potential of interposing the uncanny and finding the grit in the process of creating design that will move an audience to have a kind of visceral response, and in such a state, be prompted to embrace the imperfection and confront the real rather than the idealised. I want to create worlds for my participants to become lost in and climb into and explore new possibilities. Confusion that yields concern is productive.

FOR FUTURE PRACTICE

It seems the visions of the future we are seeing now imagine a world that is post-humanity and post-everything, in a place where life as we know ceases to exist. For some, it is easier to imagine the end of the world, the end of life and civilization or the start of a new life on Mars than it is to resolve the hyperobjects we face. In his article *Defuturing The Image of The Future*, Andrew Blauvelt mentions that Fred Polak’s prediction for the end of Western civilisation due to a lack of future imagery seems more and more likely despite the fact that we have never seen more imagery of futures than in any time of our history.

Paradoxically, today we seem to be awash in a sea of images about the future. Billionaires plan for life on Mars. Scientists contemplate terraforming Earth. Technologists ponder the Singularity. Our images of the future are, perhaps appropriately, post-human and post-nature. They are by turns pessimistic and optimistic, fateful and fanciful. Although decidedly futuristic, such images of the future are survivalist strategies and presumptive forecasts. They are the future posing as today’s speculative solutions to yesterday’s wicked problems. [26]

And so, if this is where we find ourselves, where do we go from here? What is the hope? What power do we as designers have to turn around this dismal forecast and chart a new course? We need new models of practice, practice that consciously works towards tomorrow that looks to collectively expand the horizons of design. The individuals I have been lucky enough to speak to in the production of this thesis have presented



Altered Carbon (2018—2020) is set more than 300 years in the future, where society has discovered a way to upload your brain to a “stack”/portable hard-drive. Bodies then become sleeves for consciousness. This dystopia sees a

future similar to that of *Blade Runner*, sky scrapers, bright lights and flying cars all feature in this Netflix TV series.

ALTERED CARBON, 2018. [IMAGE: NETFLIX]



Stowaway (2021), is a story about a crew of a spaceship on a mission to Mars. They discover an accidental stowaway shortly after takeoff.

SHAMIER ANDERSON IN STOWAWAY, 2021. [IMAGE: NETFLIX]

possible answers to these questions that I hope to continue to explore. Forest Young spoke to me about the real implications of the past on future making and how we can better prepare students for future practice by imagining possible futures based on current contexts. He presents models for futuring that consider a world beyond the designer’s own bias and how to work through the ethical minefield of client facing work, and suggests how we might better prepare students for the world ahead of them where aesthetics will not be enough. A designer of the future needs to be a part of a collective society, a sales person, a consensus builder, a researcher and understand synesthetic linkages, intermodal/multimodal references and interaction patterns. But future making can be exciting, it is about optimism and generating enthusiasm—tomorrow can be bright if we put in the work, and speculative world-building practices have a space within design if applied carefully and with a sense of wonder and possibility. In his latest book, Rory Hyde talks about architects that are working “plus and beyond” traditional notions of practice by stretching the boundaries and re imagining what is possible. Some within architectural practice, others that have ‘left’ the discipline as a way to expand its relevance into other adjacent territories [33]. In our conversation we agreed that the designers who will be building the best futures will be those involved in cross-examining questions to assess if in fact we are asking the right questions. The banal work involved in advocating for policy change and building community relationships will become increasingly important. Designing radical aesthetic futures is an exciting but less meaningful pursuit. In her most recent publication *Design Dedication: Adaptive Mentalities in Design Education*, Annelys de Vet suggests that design education needs focus on the inherent political nature of our work and prepare students to think about how design adds value to our futures and is able to contribute to us being “imaginative, and receptive citizens”[34]. How do we achieve this from within the structure of institutions? How can we work with the larger communities and governing bodies that inhabit the spaces where our practice will live, out in the “real world”. We spoke about the importance of collaboration and organizing within the institution as a way to prepare students for these roles—roles that are about finding opportunity and creating agency for control over our collective futures.

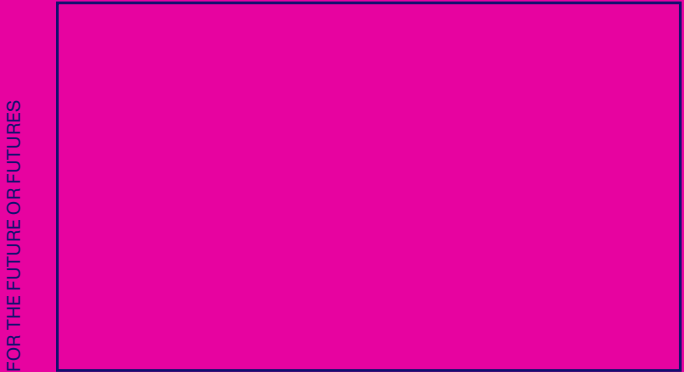
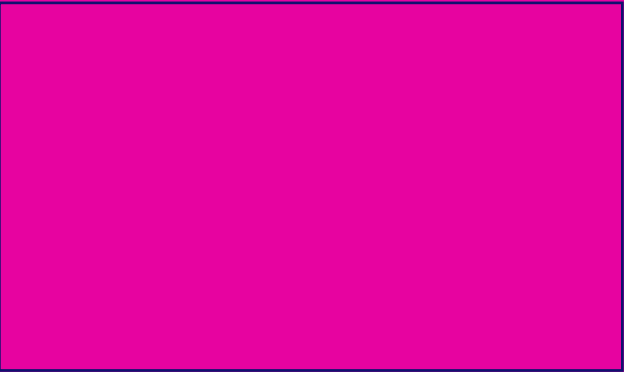
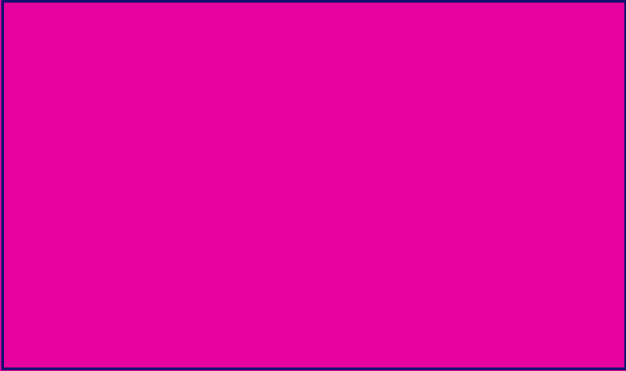
[30] Liam Young, *Planet City*, Uro Publications, Melbourne, Australia. 2020.

[31] Benjamin Bratton, *Planet City*, Uro Publications, Melbourne, Australia. 2020.

[32] Sci-Arc Media Archives, *Timothy Morton Masterclass*. Youtube, 2019.

[33] Harris. H, Hyde. R and Marcacio.R. *Architects After Architecture: Alternative Pathways for Practice*, Routledge, New York, 2021.

[34] Annelys de Vet. *Design Dedication: Adaptive Mentalities in Design Education*, Valiz, Amsterdam, 2020.



GR

You're someone who has spent a lot of time throughout your career considering futures and future practice both as a curator, writer, educator, and architect. I wonder, when did futures become something that interested you? And was it a product of your practice or just a product of living and natural curiosity?

RR

The short version is that it came through practice. In my PhD, I was looking at the role of new technology and how it was changing design, but also, more importantly, how it was changing the way practices were organized and the way they worked. My definition of practice is how you set yourself up, your sort of internal construction and how you interface with the world. The technology was kind of changing that then, especially that interface with the world, you had people collaborating across the planet using digital tools. You know, this is during 2005–2006 when Skype was kind of becoming normal. We are using Zoom now, but video calls were cool then and you could imagine patching together expertise in this more lightweight, distributed manner. It led to new forms of practice, which were distributed and augmented with technologies and so on. It didn't take much of a leap to see what other forms might emerge out of those forms of practice. I was looking particularly at small practices, and really used them as an intro. One of the things I was interested in was very high technology, and very low skills. I had the software that they were using to design the airliners, or Frank Ghery's new concert halls, but I'm working with a guy who works out of the back of his ute. So what's the bridge between those worlds when you're not working with this perfect, high tech fabrication laboratory? And I thought that those banal places are where we can find different kinds of futures, so that's where I started to build a catalogue of ways the practice could go forward, which led to the book, *Future Practice*, looking both from inside architecture, and then back at it—how people make space. And then from there, it was sort of a different vision of what the future was, through *The Future Starts Here* exhibition.

As a co-curator of *The Future Starts Here* at the V&A you were exploring futures that are already in progress of production (as opposed to speculative futures), looking at the ships and shipwrecks associated with new technologies and futures. The exhibition was unique in that it presented the items as loaded artefacts which could create both utopian and dystopian worlds and the curation did not show a particular bias. For example, the inclusion of the Facebook Drone, Edwards Snowden and Mars to name a few. I was thinking of the Gibson quote, "The future is already here, just not evenly distributed" is that something that crossed your mind at all? The overall feeling of the exhibition seemed hopeful and positive. How did this personally change your perspective on our future?

The Gibson quote, for us, and all the co-curators, was about looking seriously at the present, and what was happening out there, and actually it was a gentle action against speculative design, and this whole speculative futures movement, which was very big in London, at that time—still is, of course, coming out of the work of Dunne and Raby. People like Liam Young, or Daisy Ginsberg, who are really "designers of the future", in a way. But then we were thinking, reality is stranger than fiction. You know, we saw this Facebook drone and we saw this photograph of Mark Zuckerberg giving a model of this airplane, this drone, to the Pope, when they met in the Vatican. I mean, just think, a science fiction writer wouldn't have thought that scenario would even be plausible, but it's a real thing happening. So, there's a really important job to be done here, which is to look at the things that people are making, the sort of propositions that they're putting into the world, and to critically analyze them and to ask—where are they going to take us? What's their promise? What's the claim that they're making on our behalf to define what's coming next? And is that something that we want to be a part of? Is that a feature that we want to agree with? And that's where the ship and shipwreck comes in, which is part of that which is really critical analysis.

Paul Virilio says "The invention of the ship was also the invention of the shipwreck". And you look at the Facebook drone, and you say, okay, there's two futures contained within this; a utopia and a dystopia. The utopia is the one that Mark Zuckerberg tells you about, and the one that he tells the pope about, which is we're going to give the internet to the next billion people, the whole of Africa or the whole of India, we're gonna have thousands of these planes flying over the top of the country, beaming lasers to each other and creating a new free internet for a whole new billion users. And so that's a utopia, right? Access to information, education, healthcare, to business, connectivity, like you name it—it's this incredible gift to a billion people that could transform the whole continent. But—what's the shipwreck? You have to sign in with Facebook. You have to go through this service, which we now know is there to reinforce fake news, to sow division, to spread conspiracy theories and to get authoritarian leaders elected. So you're holding these two things, one in each hand. The benefits and the costs... and you ask, is this a utopia or a dystopia?

So to come back to your question, am I optimistic? Well, yes, and no. It depends when you ask. We wanted to make a positive show. We didn't want to make a judgmental show. We wanted to sort of recapture some of the excitement that comes with the future, because it is exciting. But, we also wanted to challenge the path that we're being pulled down. And that's



"Does democracy still work?" question on view at *The Future Starts Here* exhibition, Victoria and Albert Museum, 2018.



"Should the planet be a design project?" question on view at *The Future Starts Here* exhibition, Victoria and Albert Museum, 2018.



The Facebook Aquila aircraft, 2016.



Robot that folds the laundry in *The Future Starts Here* exhibition.

where the Snowden stuff comes in. But we also wanted to say—to use the drone example again, this is actually also a really incredible piece of design, it's an aircraft with a wingspan of a 747 that three people could lift. It weighs only 300 kilograms, because it's made of carbon fiber, but because it is made of carbon fibre you can't even lift it with your fingers actually, because you would dent it. I lifted up the wing tip, which was taller than I am, it's three meters. It was like lifting nothing—like lifting air—the most incredible piece of design. But, can we celebrate that design without also questioning what it's been used for? And can we enjoy one thing without the other thing spoiling it? We wanted to bring people into this complex space where nothing is simple or obvious in the way that it's presented to us. Mark Zuckerberg presents it as a simple obvious future. It's not—you've got to ask those questions and decide which one you want, because you can't have it all.

I think it's very powerful to use a space like a museum or the gallery, a place the public enters with a certain level of trust and expectation, to open this conversation around futures and influence future literacy. What people see and think when they come into contact with these new ideas and these grand plans is quite loaded and dangerous. How do you see yourself having influence on the future in that space? Were you asking questions about the ethical implications of your influence on the public as you were curating?

That's a really good question. We worked really hard on the really basic stuff like labels. Because for many people they will be encountering something, an object or a product or project that they've never seen before. So there's a first layer that you need there, which is, Okay, tell me what it is. What is that? What does it do? And for that, we need to be really dispassionate, “this is a robot that folds the laundry”. And then we use these titles, which wasn't the name of the object but was the description of what it is and what it does. Okay, I'm looking at a robot that folds laundry. Then we might follow up with a question. And that's where we were playing this double game of informing people.

I think “future literacy” is a really nice phrase of yours. That's certainly what we tried to do. It's like, okay, let's look at the things that we're building today—a robot that folds the laundry. But then there's the discourse role, which is about not rushing to judgment with, we tried to avoid that. We tried to create space for a discussion. We wanted people to have an argument with their friends or their family in the gallery. And that's why the whole exhibition was structured around these questions. We started off calling the first section “Home”. But then we realized... no.... what's the sort of emotional question underneath this, this promise of a smart home? So we renamed it, “We're all connected, but do we feel lonely?”

And then we are looking at an object pair, which is, let's say a robotic seal designed to provide comfort to a person with dementia. We've tried to draw the shortest line between this piece of technology and your heart. We want to know, do we love each other anymore? Because even though we can speak to anyone at any time in the world, what are the social emotional consequences of this?

That, we felt, was the real subject of the show—the way that this use of technology is changing how we relate to each



THE FUTURE STARTS HERE EXHIBITION AT THE V&A, 2018. [IMAGE: VICTORIA AND ALBERT MUSEUM]



RAPID RESPONSE COLLECTING DISPLAY AT THE V&A [IMAGE: VICTORIA AND ALBERT MUSEUM]

other. I could go on and on about all the other decisions we've made. We were desperately pushed to have some sort of special technology or glasses or headsets to navigate the show. That somehow the experience of the future show should be a sort of future exhibition. We said, No, we're not going to. We've done that before, for instance, with shows like David Bowie, where you wear headphones all the time, and the music comes on, depending on where you're standing. Like there's lots of tech you can use for that. We said no, we're going to strip it all out. We're going to have paper labels, we're going to have normal lighting. We're going to do it so that you have to talk to one another. It's a civic space, a space of immersion experience, it's a space of discussion. All of those other decisions flowed from that idea.

Rapid Response Collecting and the All of This Belongs to You exhibition, I think achieves that goal in a similar way by provoking discussion within the space. It's less about what's high tech and what's brand new, rather encouraging agency and critique about what needs to exist and why—what it does to us as a community.

And you don't have to do much. One of the very early projects we required for Rapid Response was a pair of two pound eyelashes from the chemist, which were endorsed by Katy Perry. So we had those on the shelf, and then next to it, we had a photograph of the factory where they are made in Indonesia, by women who had incredible deformities and disabilities, because of the work that they were doing, because of how long their hours were and how detailed the work was—they'd go blind doing this work. It was an investigative journalist who made the connection for us and pointed us towards this object. So, through that very cheap, very disposable, very thoughtless thing, you can somehow bring a whole world of outsourcing and logistics and labor and gender and material into the gallery. These are subjects which are very difficult to broach otherwise.

So we, you know, we expect a lot from our visitors, but it's also those two things next to each other that create tension and a power, especially if it's something that you might be wearing. These are cheap, popular eyelashes, and it's not such a leap to think that our visitors might have had them on at that very moment. So then you're implicated. And then we've got this triangle, which is the object, the visitor and the gallery—that's normally how we think about an experience of a gallery. You come to the museum, you look at the painting on the wall, and you're affected by it, you feel something. But what we talked about was curating in triangles, and what's that third thing, which is sort of a disruptor, that upsets that very easy relationship between



Katy Perry Fake Eyelashes in the Victoria and Albert Museum archive.



The Rapid Response Collecting display at the Victoria and Albert Museum.

A and B, what's the C? And in that instance, it's a photograph in the future show, it's a question, it's also other visitors. So then we start thinking about networks of connections between people and things and spaces and all the ingredients of making these exhibitions. And that's where I love it as a practice, because of those levers that you have access to, to create those situations.

Do you feel like it does communicate, and you see a change in the visitors on their return visits?

People react really strongly, and they write us letters, that's one of the ways that we get feedback. You can hang around the gallery and listen to people talking and there's a lot of that. But also that you give a lot of tours. So one of the questions we asked in a future show was: is Edward Snowden a hero or a traitor? And that was our sort of longhand version of saying should the internet be open or closed? And that's, of course, the question that Snowden raises. Every other group, schoolchildren, colleagues, whatever, they'll be on Snowden's side and then, you know, you take the rich donors through and they say, of course, "He's a traitor. He should be in prison". So that's the other thing—they're not rhetorical questions. You go to some exhibitions, and they'll ask, Can robots think? as a question, and then they show you a robot that thinks. So the answer is, yes. And that's not interesting. The answer should be "I need to discuss this in the bar afterwards" I know I'm talking about the language but it's important.

It's an important aspect of the design. Just by changing the question, you're provoking a whole new discussion.

So you've touched on Future Practice, your PhD project and your latest book, *Architects After Architecture*, where you are looking at the field of architecture and how it's changing and adapting to the world we now live in. You talk about Randian starchitects, who some would argue are "building the future". I am wondering how we can move past or beyond the roles we are encouraged to seek out through education. In my own work, I've been looking at architecture from the 1950s, 60s and 70s and trying to understand why some of these radical visions for the future went unrealised. Why do you think that was? Do you think we have a better hope now to build new futures? Maybe we need to move into a space of working with government or policymakers, inserting students into public service to achieve real change?

Exactly. I mean, perhaps the first question, why did it fail? I think it failed, because we didn't listen to enough different voices. We all took different versions of the question. And that's really the lesson of modernism, which says, okay, the challenge of housing this whole area is to provide enough rooms, and we'll just use a spreadsheet approach to stack them all up in the most efficient way. And then, these poor people who we'd never even gone out to speak to or understand, because their homes were so dirty, we wouldn't go there anyway, we stack them all off and—problem solved. Put them in towers, put them in modern, high rise projects. We would call them estates or Housing Commissions. Then somebody like Jane Jacobs, the American urbanist, also an activist in the 60s, would say, you have housed

all the people, but you destroyed all life. So an area that you thought was like going downhill, you replace it with these towers, and it goes further downhill even faster, because you forgot that in the ground floor of that shop, of that house, that tenement, that you said was overcrowded and dirty and disease ridden, actually had a shop which employed that person, and they kept an eye on this street, and the school across the road. And that, all of these social connections, which was what made that place work, were destroyed and replaced with just “homes”. And therefore, people who are moved into those buildings, have their social networks disrupted, and they can’t make any money.

So that’s an example of solving one question and we created four others, and that was the problem with modernism. And how we answer that, I think, is ecology in the broadest sense, which says that there’s this kind of network of feedback loops, that creates a system, stable or not. We can see that happening in nature, we need to now see that in design and that what we design or what we insert into the world is inserted into a system. And what are the processes that that work can initiate or catalyze, or shape or create? So these are the questions that I think we need to ask now about design. How many opportunities does it create for others? Does it operate as a platform for your potential? Does it create jobs for you and your children? Does it create habitat for the non-human participants? These are really broad questions that all intersect within the field of design. We can use ecology to mean just nature but—we are ecology. It’s all us. So that I think is the answer.

To come to the second part of your question, it means that we’re no longer designing objects, we’re designing systems. And so we need to think in different ways. That’s why I’m really interested in strategic design. I’m interested in governments, I’m interested in policy, I’m interested in people and their roles and how all of those things are shaped to align incentives. This is the key—how do we set this in motion, where, because their incentives are aligned, create more and more without us holding the pen. So, it’s also about the division between chance and control. This is the next book in a five minute answer. This is a big space. And I think the short version is—strategic design, and systems thinking that is driven by people and nature. Because we have modernism which claims to be systems thinking, but spreadsheet style systems thinking is always the one single minded system of the engineer, not the complex system of the planet.

How do you prepare students for the roles outlined in your book? Does curriculum need to focus on understanding and designing systems and ecologies? How do we move away from the ambitions of the starchitect?



Writer Jane Jacobs walking on streets of New York.



Gertrude St/ Brunswick St housing commission flats in Melbourne, Aus.

I feel like that was the answer, maybe 10 years ago. But, you know, we saw the starchitect version of architecture fail in the crisis of 2008. We saw the developers and the banks go bust, we saw all the architects who were dependent on that sector, laying off all their staff, they were all out of work. And we realized how fragile and dependent we were on that financial capital version of what architecture was.

And then we did this sort of pendulum the other way, which says, Okay, well, you know, we have to give up on that world, let’s just focus on what we can control. And we started making what I call “private utopias”, which says, Okay, let’s make a perfect garden—we do a vegetable patch, in our backyard. If you draw a circle around that vegetable patch, you can say, I’m living self-sufficiently, I am not participating in the world of capitalism, I am a radical. But actually—you’re just satisfying yourself, you’ve turned your back on the world, on responsibility to the world, and you really change nothing.

And that’s where the third pathway comes in, which is what in Future Practice Wouter Vanstiphout, calls “dark matter”. He says, you know, if you really want to make a change, it’s time to get involved in the complex, difficult systems of governments of development of policy making and knowledge systems. He sums that up as the “dark matter”, the horribly complex “dark matter”. To connect those dots then it would mean to take your ethics, take your beliefs that led you to build a community garden, but go work in the city hall and change the policies that prevent people from making community gardens. All that incentivize development over community gardens, all that incentivize towers over schools, or luxury apartments over affordable ones. By shifting those dials and those levers in that place, you can have this huge flow on effect. Therefore, you’re sort of a squared circle or something between your participation in a system that you didn’t agree with and the futility in one that you didn’t participate in. So that’s where the dark matter, I think, is.

And that’s why I keep coming back to the world and two systems and what that looks like to answer the other part of your question, around education and what that looks like for students today. I’ve done crits at places like the AA and Bartlett, the so-called “radical schools”, and people are designing hotels on the moon and inflatable villages in, you know—wherever. And I just think no. Enough of that. Let’s take on real briefs, let’s look at a real project that’s being proposed now in a city and let’s redesign it so that it’s more social, it’s creating more benefits for more people. Let’s take a real responsibility for what the future of the city is, and use the university as a lab for alternative futures. And that’s the sort of pedestrian version of what a future looks like, it’s not a better development on this corner, not a hotel on the moon.

It’s complex, though, because then you’ve breached the protective shell of the university, which is meant to be a safe space for experimentation, and, by extension, a kind of place that’s not corrupted by the demands of the world. I would say, there’s one way that the demands of the world can be quite appalling, which is when conventional practice has too much power in determining what people learn. It’s always called “job ready graduates”. I strongly disagree with that. We shouldn’t be listening to that voice. We shouldn’t be just producing people

who can go and sit down and be useful to practice. That's not the role of the university, that might be relevant to a TAFE college or a more technical degree. But at university you're trained to think so we don't breach the boundary of the university in that direction, but we breach it towards the world, we breach it towards those bigger questions of inequality of climate change, or homelessness, or technology, or community and economies. And that's where we let the world shape what we learn, and provide real briefs that seek to answer those questions.

It was interesting that when I spoke to Forest Young, I asked him a similar question around preparing students in graphic design for different forms of practice, for this new space where a graduate might find themselves working with companies, and they ask you, "what does my company look like in five years". We arrived at the outcome that the graphic designer needs more than just design skills, they really need to know how to think, they need to know how to do research and survey the field of the company to reframe the brief. It seems as though, many of the creative fields are going in a similar direction, beyond just the technical skills or aesthetic skills being enough for a practice. How do you think about the wicked problems that you're implicated in when you're taking on these briefs?

Just really briefly, the way I'm thinking about it for how I want to teach next semester is if usually, we spend the first 10% of the semester thinking about briefs and research, and then we spend the rest designing, probably it's more like 20 or 30% and then 70% design. What if we flipped that? What if we spent 70% of the semester getting the understanding of the context and getting the question right. And then an intervention? How does that change the way we think about what we do?

I think that sounds ideal. I was thinking about future speculation through world-building as a medium for students, as a way to encourage them to start asking the right questions about a brief. To uncover where the flaws are by playing out potential outcomes. World-building through speculative projections of various worlds is something that has been used widely in architecture. I know you're friends with Liam Young, who is pioneering a new kind of speculative architecture—a stark contrast to the presentation in The Future Starts Here exhibition — as he is operating in fictional worlds and far futures.

Do you think we will see more practitioners in this space? Looking for the ships and shipwrecks of these future technologies through fiction? Is that a meaningful pursuit?

What Liam does is incredible. His project in the NGV Triennial (Planet City) I thought, was the best thing he's ever done. And it's astonishing, that kind of imagination and the people that he

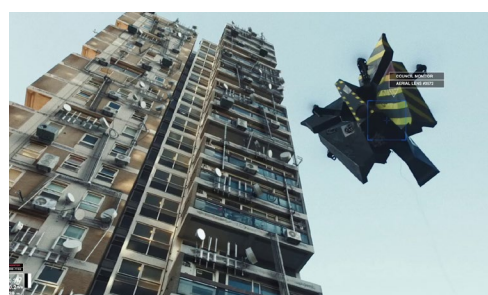
brings together to think that far in the future with such emotional clarity. But that's his space. And I guess I'm not necessarily encouraging my students down that path. You know, for instance, like I've said, it's a bit more banal. And maybe it's less spectacular, but I think it's no less important.

Downstairs, there's an exhibition of a future homes competition. So rethinking the suburbs, basically. There are, I don't know, 100 projects, boards, and boards and boards, you know, maybe 5000 drawings, at least, so much work, literally 10s of 1000s of hours. But—nobody broke the boundaries. Everybody worked within the current laws of homes, and how we build them under the current planning constraints. And I was just screaming, they were all the same, they're all a tiny bit different, but they're all exactly the same, none of them imagined the future. And that comes back to this flipping the brief thing, where, if you spend more time understanding those constraints and researching them, and understanding why we're constraining that way, surely your proposal ought to be different.

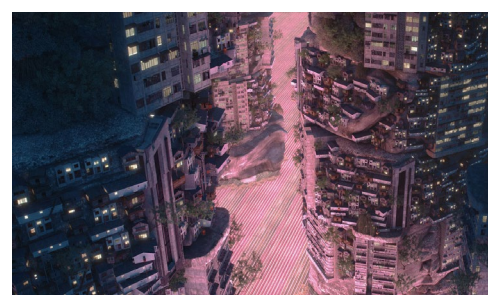
The rule about residential code boundary is a really good example. Here in Melbourne, on the boundary you can go up three meters, then you have to go in 1.2m, and then you have to go up at an angle. It results in these very strange shaped buildings when they're next to a boundary, which is actually making a poor city, poor structures, poor social buildings, all the rest. It was just designed so you don't overshadow your neighbor's backyard but nobody stopped to say, Well, this is actually producing something really problematic. We need to change that law, not make a better building that fits within it. And for me, that's equally valid imagination, to understand the way that your world is designed, and what's constraining it. And then to just take one step beyond it and imagine a different one.

Thinking about what policy we should change instead of what we could build. That seems like a natural first step.

I mean, that's one example. It can be lots of different things. It could be about construction, it could be about who we're designing for, why do we only design 1 or 2 or 3 bedrooms? Like, what if we stopped to research actual family types? Not idealized ones. Would we end up with a totally different mix of housing types? What are people using their sheds for? You know, so many people in the suburbs use their sheds to start a new business. And yet in all of these apartments, the cars are together in one car park. So this is what was sort of my interest in the suburbs, which says, again, we've misunderstood the question of housing to be one of creating enough bedrooms for people in the most efficient way, rather than creating an armature which



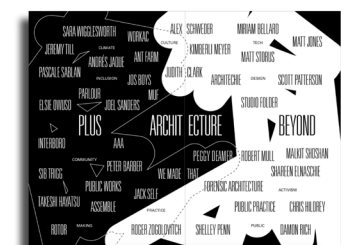
In the Robot Skies, Liam Young, 2016



Planet City, Liam Young, 2020



Architects After Architecture: Alternative Pathways for Practice, 2021



Architects After Architecture: Alternative Pathways for Practice, 2021. Showcasing architects working "plus" and "beyond" architecture.

allows them to improve their lots to fulfill their potential. If we took that away because we were being so sensible, then we're actually destroying the entrepreneurial opportunity of a huge proportion of people. So it's coming at it from a different angle building opportunity, more than just housing.

So it's coming at it from a different angle building opportunity, more than just housing.

So, that just means slice the question, don't assume that the brief you've been given is right. Look at it from every perspective and understand it—find where it's wrong and change that.

As a summary of your work and thinking on the future. What do you believe the future holds? In what direction are we moving? How long do you think it will take for attitudes to change and turn around? Is this a far off future?

Again, there's two versions of that. One that is hopeful and one less hopeful. I think about people like Norman Foster, or Richard Rogers, or Renzo Piano. These guys like Rogers and Piano won the competition for the Pompidou in 1971 — 50 years ago, and they're still winning all the competitions. Norman Foster is still on that list of designing most of the buildings. I'm just desperate for the next generation to have space and those guys need to get out of the way. Because there's so many big ideas that don't have the platforms for their realization, they're working in the margins, or they're forced to teach or they can't support a practice. So this whole ecosystem makes me depressed, which is like, when housing is too expensive, people don't have studios, they have to work in a very corporate way. And sort of forces this self censorship on the whole of society where we can't have experiments.

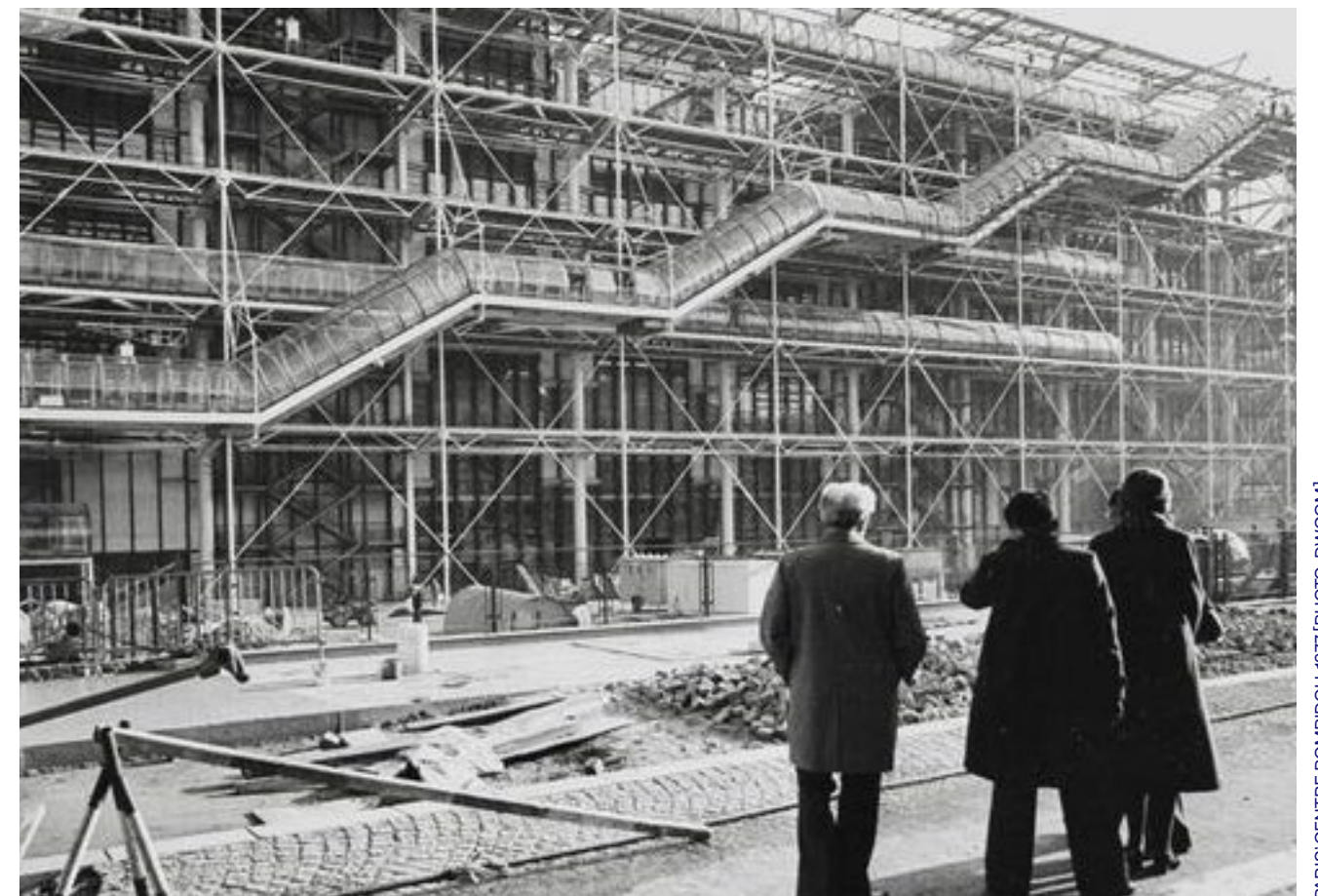
And, you know, for graphic designers, it's even worse, or for artists, it's even harder. Where does creativity go in this? Where are we going to create space for it? And then on the other side, I'm hopeful for my students that are so clever and ambitious and driven, and are driven by civic values, and asking the right questions, and they're desperately keen to decolonize the curriculum and to decolonize the city and to embrace diversity in all its forms. And that, for me, is extremely hopeful. So there's two things, that they rely on each other and that we need to create space for those sorts of ways of thinking and then we can really imagine a new future.

So we can continue to make new futures that defuture others.

Retire the old ones. Literally.



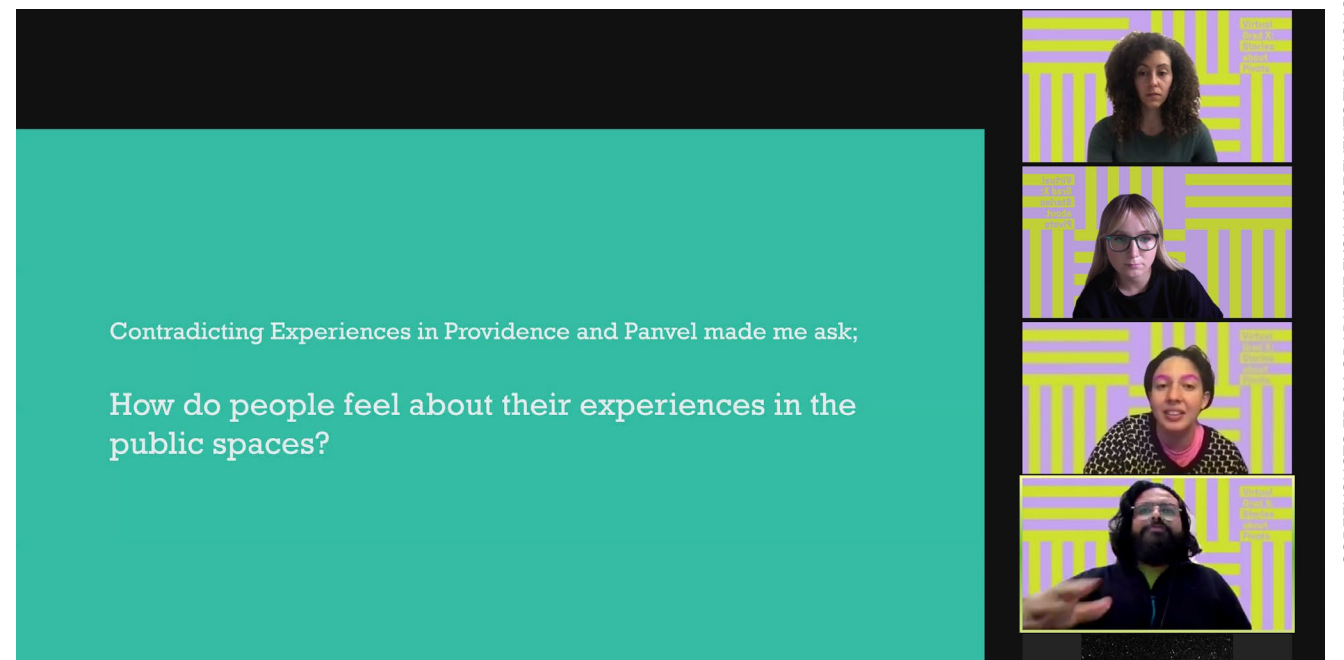
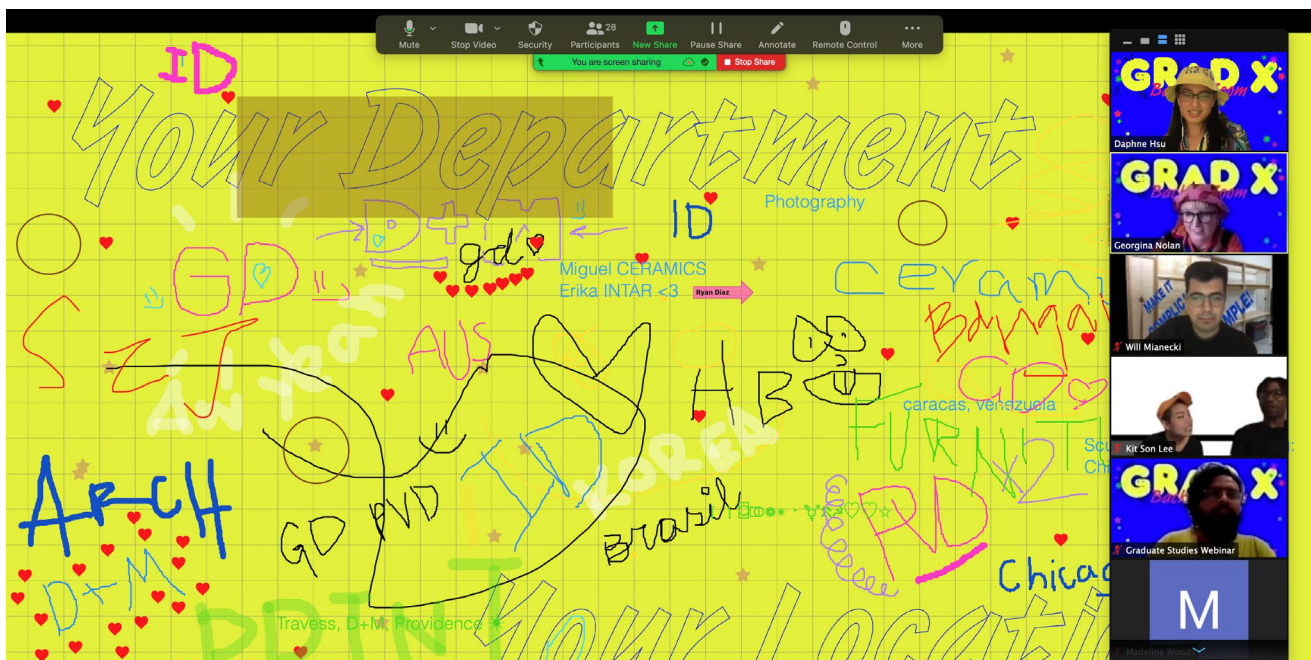
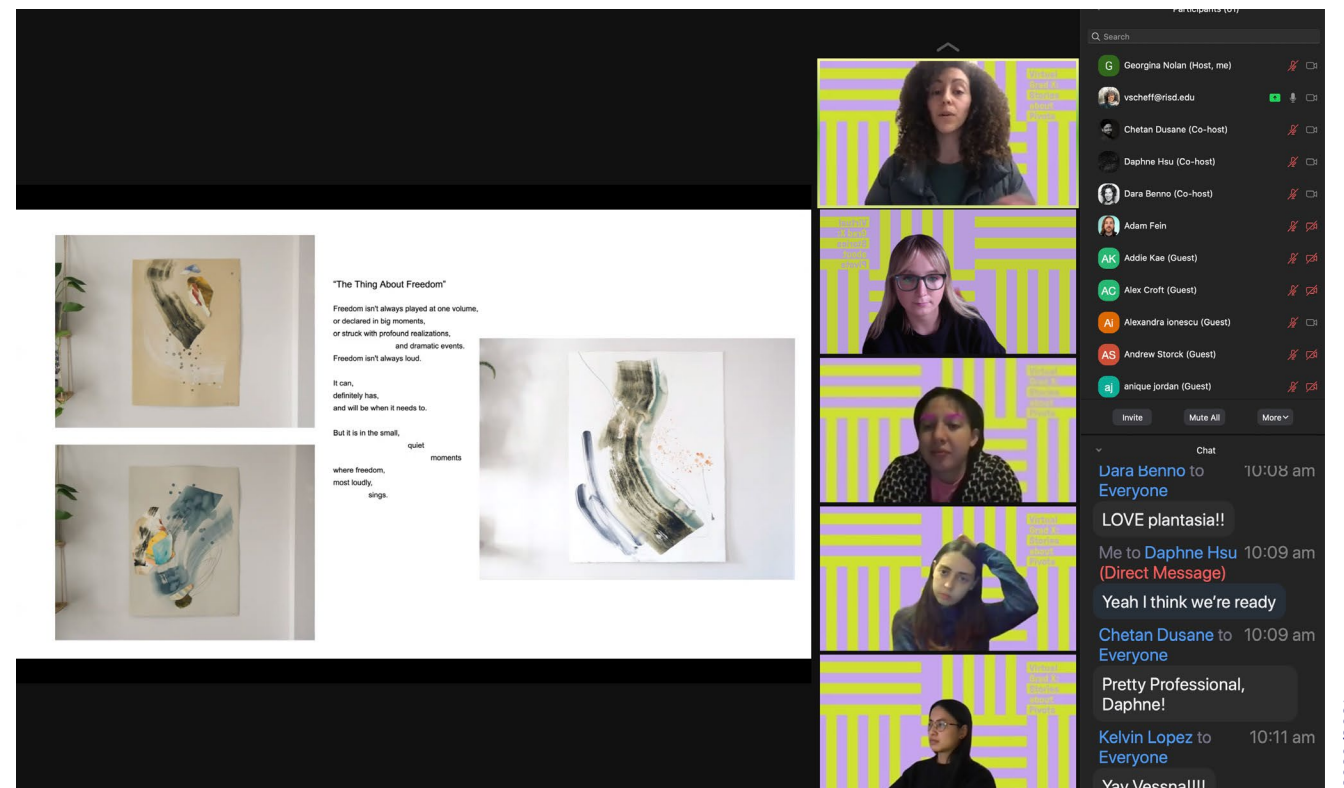
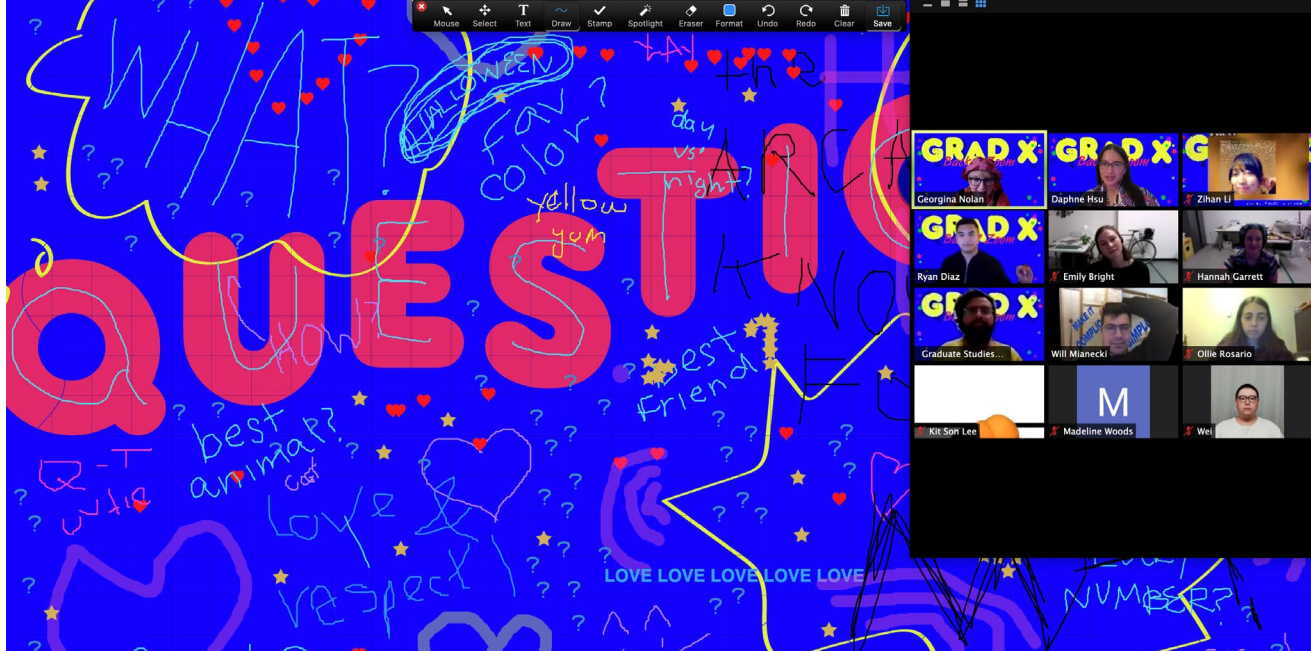
FIRST PRIZE WINNER, FUTURE HOMES, 2021 [IMAGE: MELBOURNE UNIVERSITY]



PARIS CENTRE POMPIDOU, 1977 [PHOTO: DWCOM]

* The projects in this section explore “the future” as inspired by what comes next and how I have been thinking about pedagogical frameworks and community building as an answer to the issues we face as designers in these complex systems and ecologies.

PROJECTS

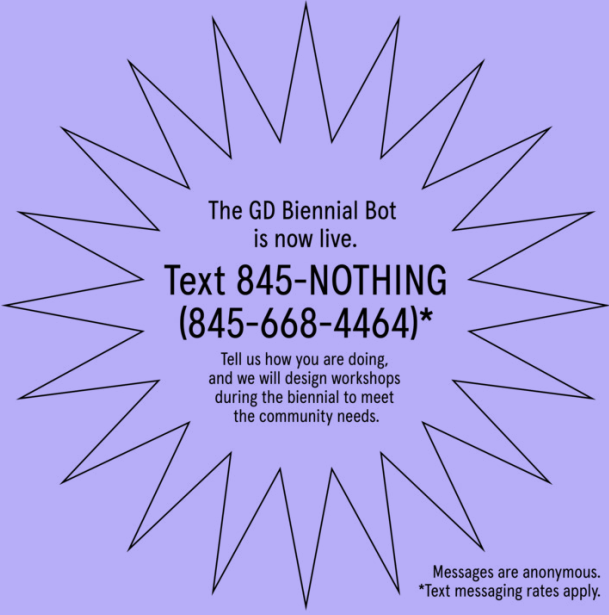


SCREENSHOTS FROM GRADUATE EXCHANGE EVENTS THROUGHOUT 2020/2021.

SCREENSHOTS FROM GRADUATE EXCHANGE EVENTS THROUGHOUT 2020/2021.

ENVISION YOUR SELF-CARE PALACE.

WHAT DOES IT LOOK LIKE?



The GD Biennial Bot
is now live.

**Text 845-NOTHING
(845-668-4464)***

Tell us how you are doing,
and we will design workshops
during the biennial to meet
the community needs.

Messages are anonymous.
*Text messaging rates apply.

EVERYTHING
YOU CAN THINK
OF; NOTHING
YOU WANT

COLLABORATORS:

GUESTS:

2020 and its attendant crises have shown us that—while risk-taking and failure are encouraged—failings are unacceptable within the university. In the midst of burnout, physical and mental illness,

213

not just a product; it is also labor.* 2020 has revealed that RISD students have inherited unsustainable systems which ignore or scorn student wellbeing. What we reluctantly accepted a year ago seems unendurable now. There must be a better way.

Our programming attempts to reconcile what we endure and what we desire. Our speakers, all RISD alumni, will offer reimaginings of the MFA program. Many have become educators after graduating and have seen both sides of MFA education; they offer perspectives on how institutions can care for students and faculty alike.

Traditionally, a biennial is a moment to pause and reflect on the ideas and concerns of the RISD graphic design students during the past two years. Presenting the work of the MFA cohort in 2021 without reckoning with the material and emotional conditions of those same students would be a dereliction. We owe more to one another and to ourselves.

We join with students across the world in saying: institutions must change if we are to reconcile everything and nothing. We want their full energy committed to our cause. Go girl, give us everything!

*The unseen cost of this biennial is over 1000 collective hours (a low estimate) of unpaid labor undertaken by current GD MFA candidates beyond our normal school-related responsibilities.

I love her lack of energy, go girl give us nothing!

—YouTube comment on a Dua Lipa performance

morphine love
@morphinelovemua

Replied to @morphinelovemua

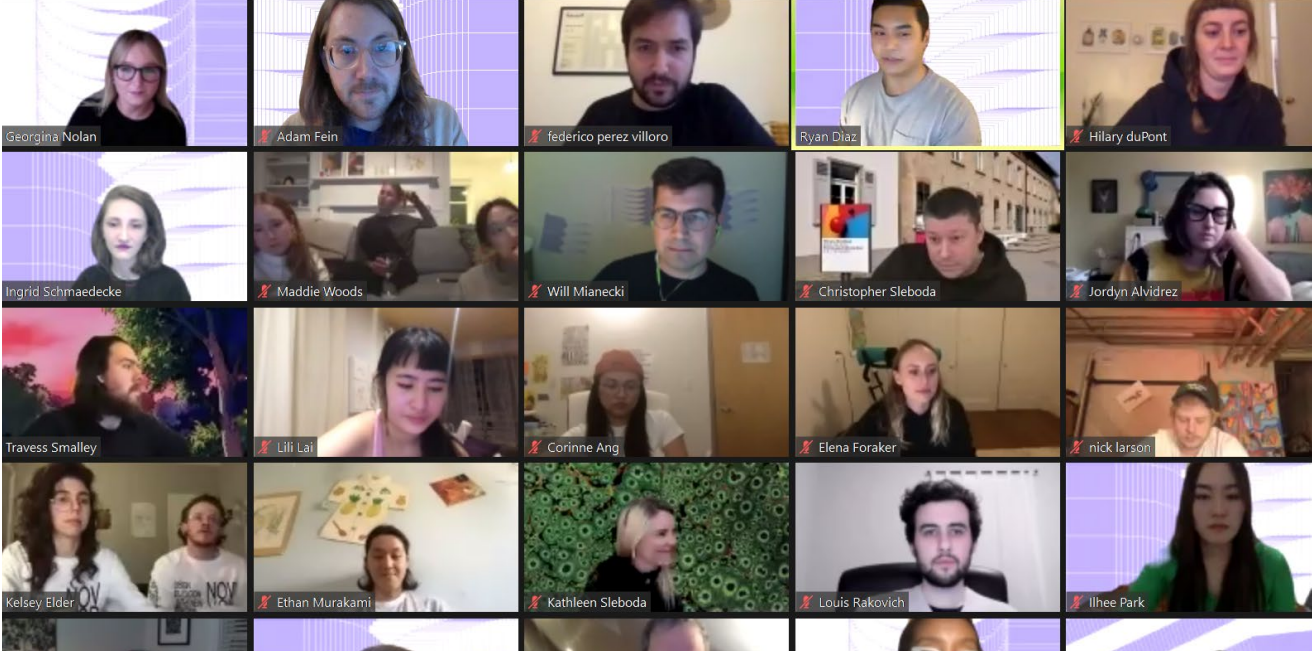
literally go on girl give us nothing!

LIVE 565

24.1K views

0:01 / 0:24

4:19 AM · Apr 14, 2020 · Twitter for iPhone



SCREENSHOT FROM A BIENNIAL ZOOM EVENT.

Not Secure — mfabiennial2021.risd.gd

EVERYTHING YOU CAN THINK OF NOTHING YOU WANT	
This biennial was on display from Jan 21-Feb 21, 2021. Exhibited works are catalogued below.	
TITLE	CONTENT
Burnout/Wellness Survey: "I find my work to be a positive challenge"	image
@risdwn "global pandemic; radical imagination"	image
Screenshot of a child screaming from the Kidz Bop music video for "Since U Been Gone"	image
@risdwn Cheeto Lock Meme: "FINALS; BURNOUT; COVID RESURGENCE; 'Untitled (toothpick sculpture no.6)' WIP"	image
Serendipity Re: to the Golden Record	image, image, image, image, video
Email: "Board Response, Re: RISD COVID-19 Grad Task Force: Letter to the Board" (Page 4)	image
Air Canada cancelled booking, screenshot	image
u+16e99_PoundOfFlesh gif	animated gif
"COME ON YOU ALL PLEASE COME THIS IS FOR YOU (11.12.20)"	image
The Time Zone Converter screenshot	image
Albertus Modification	image, image, image, image, image
Margarita, netflix, and chill	image
WE QUARANTINED VOL I gif	animated gif
Burnout/Wellness Survey: "It happens more and more often that I talk about my work in a negative way"	image
Visibility	image, video
Paris Hilton wearing a white tank top that says "STOP BEING POOR"	image
Blue opera alien from The 5th Element singing "Inva Mulla Tchako's Arlo of 'Lucia di Lammermoor"	image
@risdwn "Me at 3 am the night before crit with nothing to show: I am going to create an artwork that is so passable"	image

EVENTS

ABOUT

DEAD STATE OF THE BIENNIAL WEBSITE.

Jenni Oughton (Co-host)

TG Tatiana Gómez

Delia Rodríguez-Masjoan

AM Andrew Zeitz

AD Ann McDonald

AD Annals Delgado

AD Annals Delgado

AD Annals Delgado

Chat

Everyone

PVD is a great place to land

They can print it!

Bethany Johns to 12:24 pm Everyone

alum power

James Goggin to 12:24 pm Everyone

I'll be coming back to

SCREENSHOT FROM A BIENNIAL ZOOM EVENT.



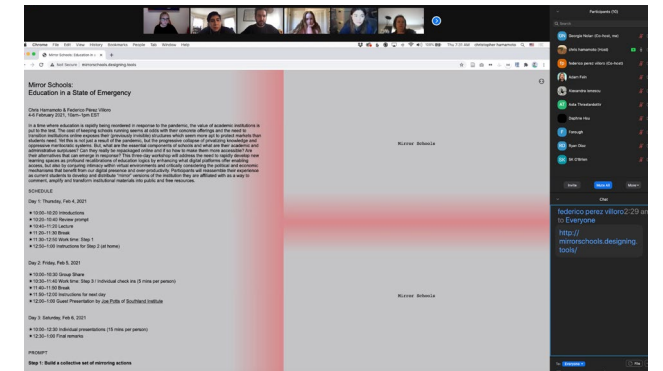
Elaine Lopez graduated from the RISD GD MFA program in 2019. She is an Associate Professor of Graphic Design at the Maryland Institute College of Art and an AICAD Fellow.



José Menéndez and Tatiana Gómez will talk about some bottom-up initiatives they have been part of or have initiated during the last year as a way to respond to the needs of their surrounding community in times of a pandemic, social unrest, and climate change.



This is intended to be a friendly, unstructured conversation, rooted in openness and connectivity. Our goal is to make the graduate student experience transparent and to foster ongoing community between students.



In a time where education is rapidly being reordered in response to the pandemic, the value of academic institutions is put to the test. The cost of keeping schools running seems at odds with their concrete offerings and the need to transition institutions online exposes their (previously invisible) structures which seem more apt to protect markets than students need. Yet this is not just a result of the pandemic, but the progressive collapse of privatizing knowledge and oppressive meritocratic systems. But, what are the essential components of schools and what are their academic and administrative surpluses? Can they really be repackaged online and if so how to make them more accessible? Are their alternatives that can emerge in response? This three-day workshop will address the need to rapidly develop new learning spaces as profound recalibrations of education logics by enhancing what digital platforms offer enabling access, but also by conjuring intimacy within virtual environments and critically considering the political and economic mechanisms that benefit from our digital presence and over-productivity. Participants will reassemble their experience as current students to develop and distribute "mirror" versions of the institution they are affiliated with as a way to comment, amplify and transform institutional materials into public and free resources.

Feb. 10, 7PM EST

Dream Syllabus

Guest Speaker:
Elizabeth Leeper

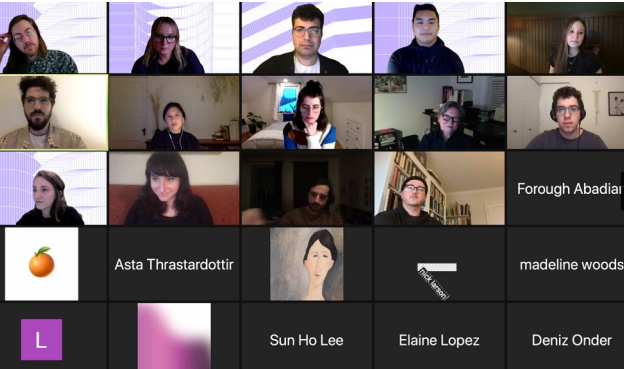


A syllabus is a creative document that gives shape to a shared experience. This workshop is an opportunity to convert frustrations and critique into proposal. Participants will work in small groups to identify unmet needs or new possibilities, then imagine and draft a syllabus in response. By its conclusion, the workshop will generate a catalogue of speculative courses that structure alternative configurations of learning, modes of engagement, and priorities, with emphasis on mutual exchange, community, and student and instructor well-being.

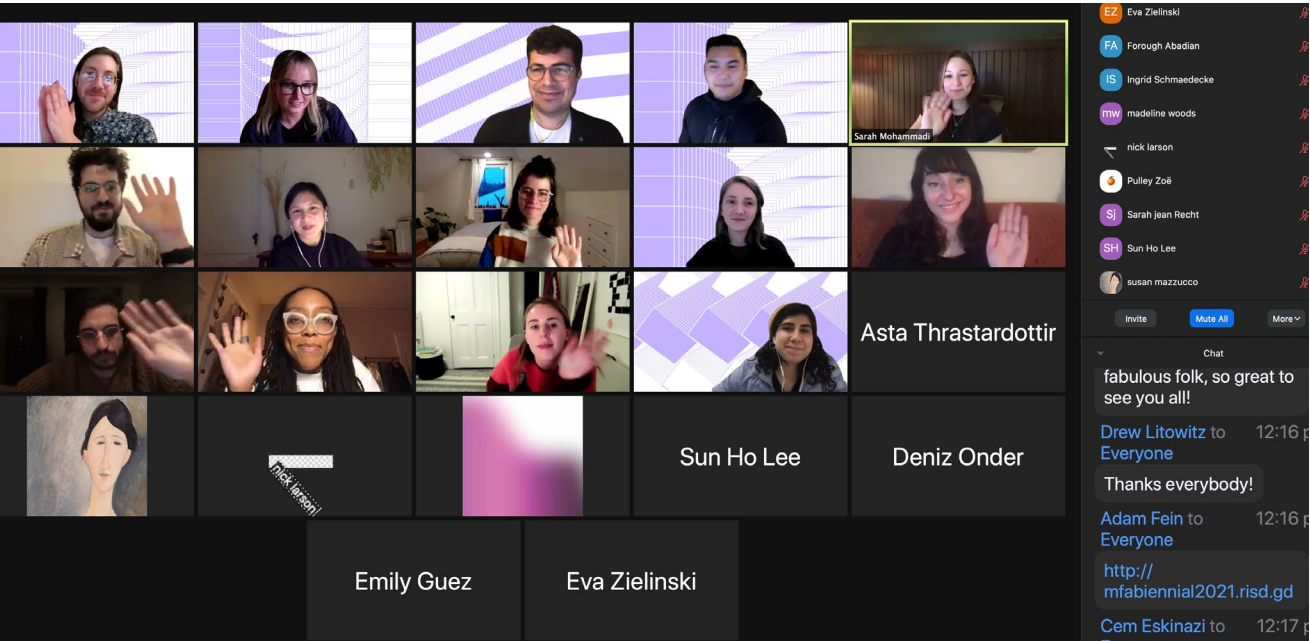
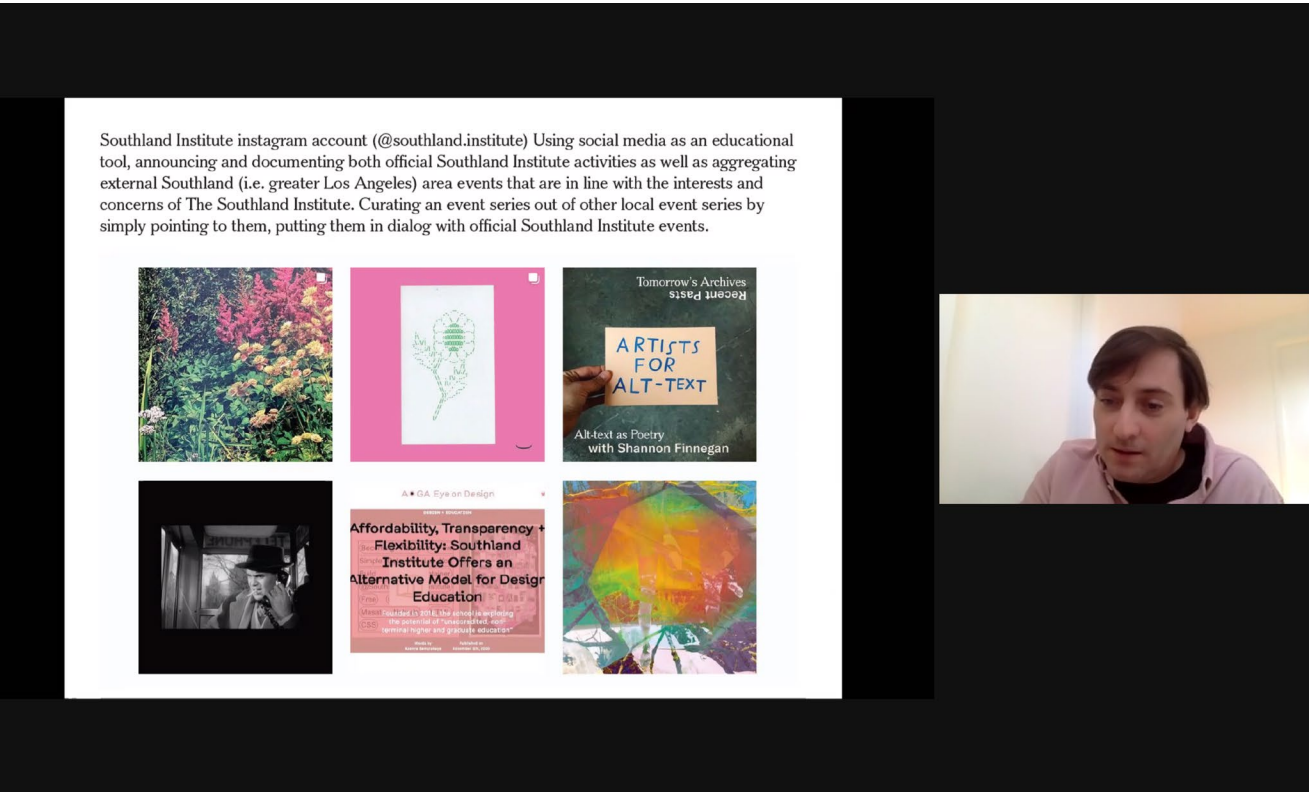
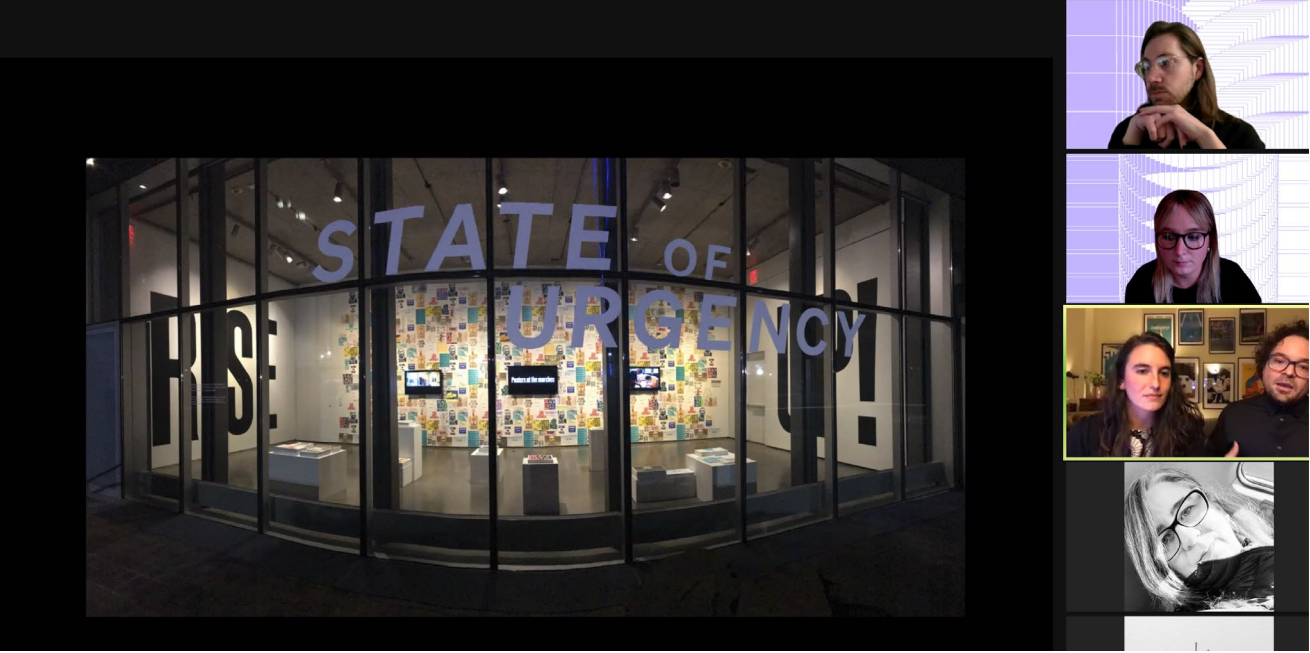
Feb. 11, 7PM EST

A Conversation with Feeeels

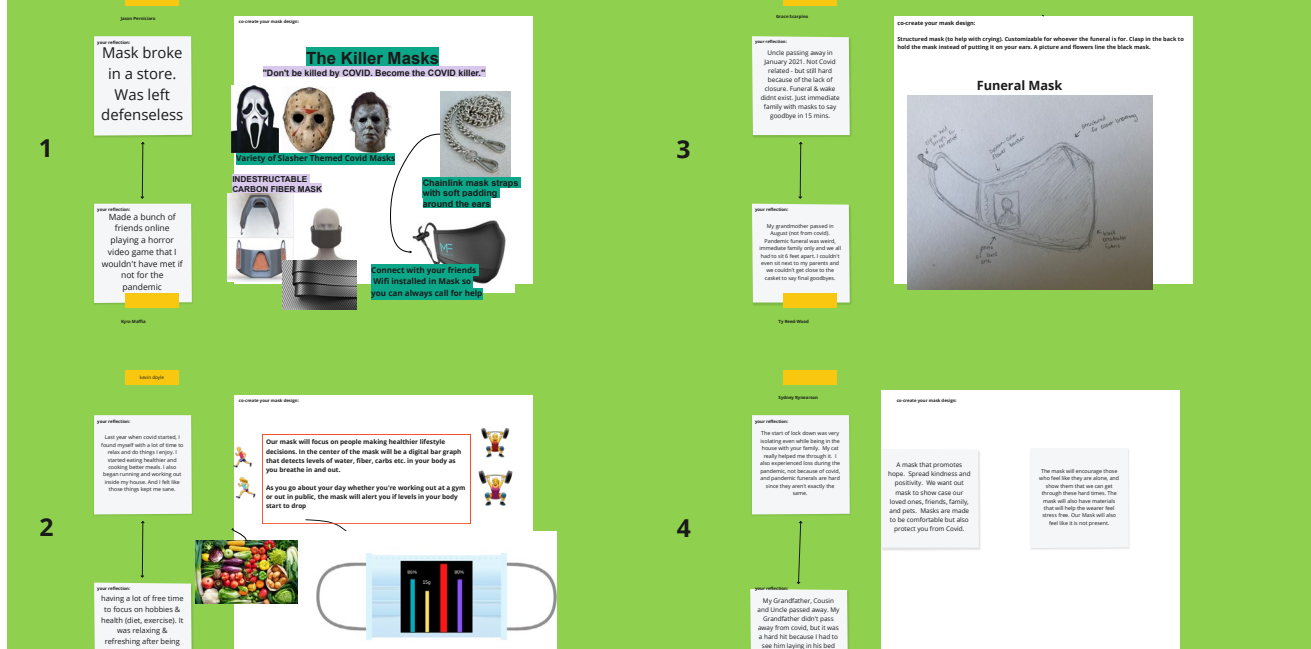
Guest Speakers:
Drew Litowitz, Angela Lorenzo,
Sarah Mohammadi and Lauren
Traugott-Campbell



A conversation with Drew Litowitz, Angela Lorenzo, Sarah Mohammadi and Lauren Traugott-Campbell on how to start an independent publication and how to foster creative community after school.



SCREENSHOTS FROM BIENNIAL ZOOM EVENTS.



CO-IMMUNITY: BUILDING COMMUNITY RESILIENCE

Talks & Workshops with RISD Microbial
Cosmology Team

This project was funded by RISD + RISD
Nature Lab and corporate partner,
Hyundai Motor Group

COLLABORATORS

ANASTASIIA RAINA
ASSISTANT PROFESSOR, GRAPHIC DESIGN

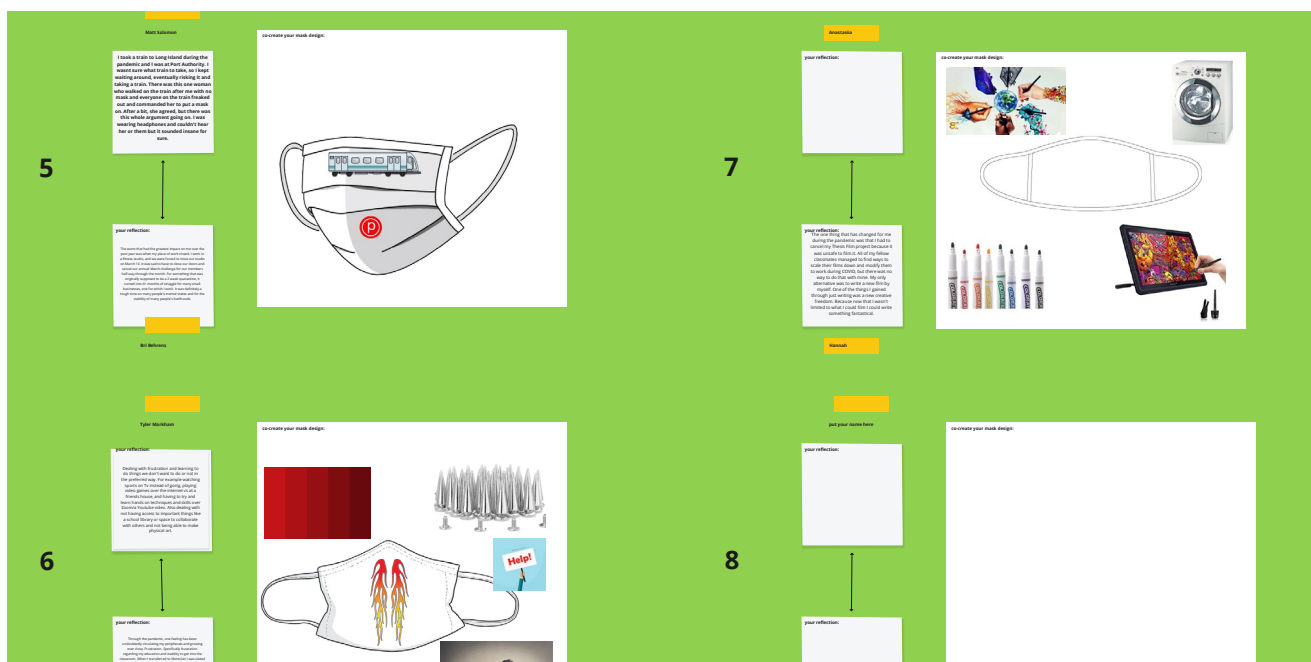
ELENA HUANG
RISD MFA INDUSTRIAL DESIGN 2021

MEREDITH BINNETTE
RISD BFA FILM/
ANIMATION/VIDEO 2020

YIMEI HU
RISD BFA JEWELRY+
INDUSTRIAL DESIGN 2021

In the early days of the pandemic, mask-wearing was stigmatized. It was associated with a feeling of suspicion or danger that came with the people wearing it, subjecting some of its wearers to xenophobia. In most circles today, masks are considered a sign of solidarity between people to protect one another. The mask is an evolving symbol of our desire for human connection and hope for our loved ones' safety. The concept of "trust" in the context of COVID-19 becomes almost paradoxical: being physically distanced for so long, we thirst for a hug or even just a smiling face; meanwhile, we respond to those who have tested positive with fear and prejudice, even if they're someone we love. How can we move beyond an object's functionality and re-build community resilience and intimacy through a symbolic object like a mask?

During our collaboration with Hyundai Motor Group, in the creation of *Microbial Cosmologies*, our team developed a set of tools and methods for rapid speculative workshoping. After the conclusion of our official project brief, we created a short workshop to share this process with others.



SCREENSHOTS FROM MICROBIAL COSMOLOGIES WORKSHOPS.

GR

What were we thinking when we came up with the theme for the 2020/2021 biennial? There was this sense going into planning that everyone was already exhausted before we had even started. Everyone was burnt out and tired and confused and overwhelmed. I remember we discussed doing a graphic design version of the *Great British Baking Show*.

RF

In those early ideas, themes of institutional critique and refusal were essential, and then it was about deciding a form. It started out specific—we were going to do a reality-tv-style competition or we were going to draw one another's work rather than actually submit work—but it became more inclusive.

Because one one hand we wanted to communicate discomfort and refusal, but, on the other hand, there was a desire to celebrate our program, to show our work, and to bring attention to the program. We were pulled in these two directions: wanting to refuse but also wanting to display work; how we're really feeling but also what the department wants from us and what we're expected to want from ourselves. The theme, *Everything You Can Think Of; Nothing You Want*, was a way to demonstrate the two sides of this coin.

Right, there was one side that was meeting the productive demand of the biennial: to advertise our work, to make the department look good. And then there was the shadow biennial. (Initially, I wanted to do a biennial that was totally off site: not on RISD property; not accessible to RISD ip addresses. I love that idea and still wish we had done that.) The shadow biennial, the "Nothing" side, became about what we were going through: our feelings about the work, the context of the professional/polished side of things, and our burnout and fatigue. The institutional critique came from the relationship between the two sides of the biennial, and of graduate school, rather than from an outright rejection of the traditional biennial format.

We embraced these two sides in the biennial programming, which was something that the graphic design department hadn't done for a biennial before. We invited alumni, faculty and students together to discuss and explore the two sides to the graduate experience.

Why did we decide to do programming? Why did that seem like something that we had to do?

At the time there was this feeling of lack of community because of the displacement caused by COVID and how abruptly that situation escalated. It was clear that we needed to talk about the issues that we all experienced during that first online semester and how we could improve things. Biennial programming was an opportunity to bring people together. We also wanted to find answers to questions that we were asking ourselves, like, what does it mean to be in grad school when we're completely online? What is the value? What is the value going to be when we graduate? Inviting the alumni back gave us insight and helped us see the world beyond the virtual walls of Zoom school. So many people say that the value of the RISD experience is the connection to this global network of RISD alumni. But we didn't know alumni, had never seen them or heard from them during graduate school, which seemed like a lost opportunity. We didn't really know how our degree would translate when

we left the institution. That was one initial impulse for programming, alongside just getting to do something a bit different given the lack of physical space. But then it started to take on other ambitions.

That was definitely part of it. What were some of our original ideas for refusal? Returning to the *Great British Baking Show*, the motivation was that we did not want to show work. We would just create work as a performance for one day to make the biennial as easy as possible, but also as a refusal of the biennial. It started there, but we ditched that idea for a much bigger thing that was harder to accomplish.

We learned a valuable lesson. We were refusing the institution and trying to do something that made it easier for us, but we actually ended up completely overworking. For the other students, the events did achieve some of the goals that we set out to achieve. But for us, it was just a lot of work. That's why refusal is so difficult—it does require work. It's not as easy as "I'm not going to do xyz." To refuse, and to do it in a successful way that carries meaning, is hard.

Right, refusal is not just non-participation. It is a reimagining. You have to both understand the institution—where you're operating, within what structures you're operating—and then do something entirely outside of that. It is a lot of work, because it's imagining two different systems.

There are always going to be these conversations. There are always going to be students and faculty that really want to make a change. But there will also be students that realize that, actually, in order to refuse and to do this, it's actually going to take more effort.

Going back to why we chose to do programming, we realized that we were in Zoom school and that we weren't able to do a traditional physical biennial. So why recreate a traditional biennial online? It didn't make sense to reproduce what was normal in an abnormal period. That realization opened up the possibility, weirdly enough, of programming, which we probably wouldn't have even thought about otherwise.

Yeah. Through the biennial, we met people that we otherwise would never have met. We got a lot out of it. This is something that I'm thinking about in terms of adaptive models of education. Having to think this through and create events that would be meaningful to the invited speakers—because initially, we asked them to participate for no compensation—was a learning experience. To create events that would be interesting for students, to manage the negotiation of the whole thing, running events, running the advertising. We learned a lot: practical skills that we can take with us. And these are contacts that we've now made and can take with us into our careers. Doing and organizing events has been equally as important as completing design briefs. In the real world, these skills, these things we asked of ourselves through the biennial, are the things that we will be doing when we leave school.

Yes, that is also something I learned through the biennial: the organization is just as important as the design. The themes that we were interested in, like refusal or self care or community—those are things where you have the most access to them

out to people. If you have a fairly precise interest—zoom school or institutional critique or design education—others who are interested will be very happy to talk to you about it, to spend time with you engaging in those issues. You do not need to have well-formed ideas about the topic to justify those conversations. Making community can be as easy as wanting community.

Which events do you feel were the most successful?

It is a hard question to answer. Once you organize something, once you create a biennial, then you are forced into an extractive position. The question becomes not only what is the most interesting event for me personally, but what is the event that's going to produce the most ephemera or interesting outcomes. For us, that means what event made the most stuff that can be captured in the Manual for Care, our post-mortem publication?

We were looking for answers in a way, which maybe changed our perception. I don't think people would usually be doing that when they put together a program like this. But because we wanted to make a change and to find some actionable things that we can show our department as a way to move forward, that added pressure.

The event where I feel like I learned the most was Federico Pérez Villoro and Chris Hamamoto's workshop, Mirror Schools. That was a three-day workshop about exploring how to subvert and extract material from the institution to give it to a broader community. Plus, Chris and Federico built up an amazing group of references on their website, their presentation was so great, and we got to talk to Joe Potts of the Southland Institute. That was my favorite event personally, and a lot of interesting proposals for work came out of it. In terms of producing content, Elizabeth Leepers's event was maybe the best.

You could really see the care behind Elizabeth Leeper's workshop, Dream Syllabus. I really enjoyed imagining the syllabus as a speculative tool or tool to manifest care. Also, coming together with students and faculty in one place with designated time to talk about the syllabus from our varied perspectives made for really engaging conversation that felt productive.

It was interesting that, in some feedback on events, people found the issues raised quite confrontational, like life after graduate school, the realities of the industry, what does and doesn't earn money. Elaine Lopez did a fantastic job of showing us the "Nothing" side of her work, the stuff she doesn't show when she's invited to give a presentation. Yes, perhaps it was a bit shocking to be confronted with the idea that when you leave grad school, you have to make a living. But it was also refreshing to see the honesty, to see *how* the skills and thinking she developed translated out into the world. We don't talk about that enough. I think bringing awareness to other modes of education outside of what we are experiencing was also really formative for me. Speaking with Joe Potts was a definite highlight.

Yeah, that goes back to the idea that refusal—or trying to set up alternatives to what felt like unhealthy situations like Zoom school—is a lot of labor, and you hope that it pays off. But you have to sacrifice your body on the wheels of alternative education models.

I can't wait to work on all of this again in creating the Manual for Care.

I think I am still recovering from the burnout that putting on the biennial caused. I don't think I ever quite got over it. What was your favorite event?

I enjoyed all of them for different reasons. It feels like such a long time ago, and we didn't get a moment to absorb just what we'd achieved. The graphic design community event, which Bobby Joe Smith III created, felt really productive. I had a lot of fun there too. It felt really necessary. When we were planning it, we didn't think that it would go as well as it did. I see people that connected during that event are still staying in contact, still in touch on Instagram, asking each other about the thesis process. The community event felt less self-serving; it was an event needed by a wider community. I hope that the network stays together. I hope that it continues or that somebody thinks to do it again. By doing that event, we created this community that needs love and attention, which we need to make sure it gets. There's a responsibility there that we didn't realise at the time.

Yeah, the community event expanded outside of RISD and allowed a larger community to discuss overwork, burnout, and weighing the demands of professional versus personal interest. It allowed us to see that these concerns are actually symptoms of larger structures beyond the school, beyond RISD, that require more organized attention rather than anger at any individual program.

Learning how to organize, how to get things done, how to stop complaining and do something about it, that was definitely a learning curve. It's fine to have these ideas in school, to be angry and upset, to realize what is not working for you. But then you actually need to think about why. How do we talk about that in a space with other people in a way that is not just complaining but actually constructive? How to frame the complaint?

Right, that also goes back to the conditions that we were complaining about, which was burnout and overwork and feeling compelled to constantly produce. Those conditions prevent people from engaging in organization to improve their environments—but also even prevent people from engaging in conversation about those conditions. During the community event, everyone said how great and important it felt to connect with others in the graduate graphic design community, to connect with others who are going through the same things. But we probably would never have met any of them otherwise, because the institutions are competitive towards one another, because the schools won't build inter-programs spaces.

There is a competitive energy between students, and then also between departments, and between schools. Graphic Design isn't always seen as a collective pursuit that is collaborative.

Right, the form of collaboration that's allowable within graphic design is where you interpret someone else's vision. There's no like working towards something together.

That was actually an interesting part of Tatiana Gómez Gaggero and José Menéndez's presentation. They were really showing how graphic design

can operate as a community-based and collaborative effort, how they were working within the Providence community. A sad realization that I had during that talk was that we aren't really engaged with the Providence community. It's something that I hope changes.

It is important for both RISD and Brown—if they want to continue to position themselves as elite institutions—to maintain a certain amount of separation between themselves and the local community. If they were more porous, then they would not be elite anymore.

Do you think this might change?

I hope so. I want RISD to be non-elite. But I don't think anyone else wants that.

That is something that we spoke a lot about, in the early stages of thinking about refusal, why do people come to RISD? Is it more about the piece of paper and the name and the network? Or is it about the work that you're actually producing and what you're learning? When we all went to Zoom school, we lost so many parts of the graduate experience. What people were holding on to was "I want to finish because I want to graduate from RISD."

To go back to our early thinking on the biennial, one of the reasons we moved to this position of refusal and institutional critique was to ask the question, what is a biennial, and who does the biennial serve? Especially in the case of the 2021 biennial, where we weren't allowed to have a physical space, we thought, "It's our graphic design projects. We're doing all the work to put on the biennial. We're personally paying for digital tools. So, why do we have to do the biennial at all? Why isn't it okay for us to not put it on? Or do something different? Do whatever we want? Why does it have to be about showing projects, when it's ultimately all unpaid, student labor?"

How do you feel like zoom school has gone? How do you think design education at the graduate level is working? What direction do you think that this all needs to go?

I don't know what direction we're going in. I don't feel like I know enough about design education more broadly. But at least, at RISD, in my experience, there should be less work. I honestly don't think students will produce worse things if we do 20% less work, have 20% less demanding schedules, have 20% less requirements. We might even produce better things. One of the big benefits—perhaps the foremost benefit—of elite design education is the network. A big part of that is actually spending time with other people. I think "elite" Zoom-based education is impossible. And I don't think RISD as a fully Zoom-based program would be successful. This year was an experiment that showed our program has to be in person. What do you think? What did you learn? What do you think the future design education is?

It became clear to me during the last year that it is really important to have trust within a design department, to trust students to organize and to produce events that they find meaningful, to get the most out of their own

education. Space for student organizing is really important and encouragement and time for student organizing is really important. What I know from speaking to other grads through that community network and from my own experience is that the most important takeaways from graduate school aren't really the things that happened in the classroom but what happens between people, for example, in the studio. Those relationships and what we learned from one another are the most important. Design education has to change. There is a general feeling that we need to reassess curriculum. We also need to reassess the ways we are teaching it, and the environments and the spaces that we are teaching in, and how to make that a place that's not stressful—a place where students really feel like they can explore.

To build on your point, one of the things we learned from the biennial was that we are capable of creating the sort of educational experiences that we want to have. We invited the speakers we wanted to hear from. We invited the teachers we wanted to learn from. It raises the question: do schools need to be an organization? Or could they be nomadic, little moving events that people join and then leave? Could they be dispersed and cloudy—not buildings but clouds? [Laughs]

What if there are no assignments or strict structures, but instead you float through, find things to attach to, and explore? That might be a more intuitive way of navigating an institution.

It definitely feels like it's moving away from skills based learning.

We're not learning skills. We're learning how to think. That's why we don't leave, because we want to know how to think, and we all see value in that.

Right, it makes me wonder if we are moving away from school as a place to develop a personal visual voice or brand. We are no longer asking, "how do we make our own studio?" Instead we are figuring out alternative forms of knowledge making or ways to organize alternative relationships and communities.

What makes design education different from art education?

That's like the question, isn't it? How is design different from art? I think art is the field where we can test value, where we decide what we care about and what we should care about. And design is the social enforcement of that value: how do our values appear in the world? How do they direct us in the world? If that is the role of the design, it makes sense that RISD graduate students are all thinking: How can we find freedom within the way that design operates? Does graphic design always need to enforce established social values or can graphic designers instead resist or subvert values? Part of the reason that design cannot be a field in which you speculate value is that for design to operate it has to have some sort of social recognition. A street sign in order to guide people to places can't be in an alien language, right? But art can be an alien language, and it's fine, because there's no material effect. Either people believe the art, or they don't believe it.

What kind of space, interaction, or questions are specific to design and design pedagogy?

This is hard because I have never been in an art class. So I shouldn't really be talking about art. But I feel that a lot of what our design does is engage in the interpretation of other things. How do we take an input, put it through whatever-design-is, and create an output where we recognize the input but it is improved, altered, made legible. Design is input the transformation then output. Art is, maybe, more about collecting things, interweaving things. [Laughing] Art is about making blankets!

Art is about making blankets, and design is about making...

Widgets! It is a factory! What I am getting at is that in design there is more of an emphasis on the interpretation of a thing. How will people interpret your thing? And how can you control that interpretation given the history of interpretation, based on how everything else has previously been interpreted? Whereas for art, the question is: How do you say something new and how will that new thing be read?

Perhaps design has more to do with behavior, understanding behavior. In art, you are open to many different types of reactions, to all responses. Whereas in design, you're trying to predict that or you design for a particular kind of behavioral reaction. I'm wondering whether this idea of design as problem solving—whether that is still true. And art is more exploring rather than solving?

One difficulty in locating the difference between design and art is that both can do similar research: How do people see? How will people interpret that thing? Art can do that. So I like your point that design operates within a narrower field of behavior. There are fewer reactions, at least culturally, that design is supposed to produce. Art can disgust you, or gross you out, or make you angry. Where design isn't supposed to do that. And if you are grossed out by design, it needs to be clever enough that the viewer reflects on their own disgust and thinks, "Oh, the designer was so smart. They provoked a response in me." When there's like a negative affective reaction that's associated with it, design must also draw attention to the way that that negative reaction was produced. Art doesn't have to do that. Do you think that's true? I don't know. I don't know what art is.

This makes me feel that what I'm doing is not design. It's closer to art. I don't think that we are asked to really think about design in the RISD graphic design department. We aren't thinking like designers. We are thinking like artists.

Really, if I have to give a safe, definite answer, I would say design is something concerned with type and pages.

Design feels more methodical or constrained. It serves a purpose in some way. Whereas art feels like, like more personal exploration.

This is why I am so interested in type. I want to talk about graphic design, and type is the only way that I'm sure I'm talking about graphic design.

Graphic designers deal with typography, and we know that as a fact.

[laughs] Right, we know that!

Maybe we should have shown more of that in the biennial?

Oh well.

* The syllabus brings together all of the findings of this thesis so that others may benefit from the research that I have done here. I hope it can provide a framework and scaffolding for thinking about design, the image of the future and the future as medium.

Syllabus

SYLLABUS TEASER: FUTURE AS MEDIUM



In the 2020 Winter semester, I taught *Introduction to Graphic Design* to a group of students from various interdisciplinary backgrounds and year levels. From freshmen to second year graduate students, some studying design at RISD and others in liberal arts and science degrees at Brown University. We all came together in this classroom—the place where I discovered my passion for teaching and found my interest in design pedagogy.

COURSE DESCRIPTION	GOALS	OBJECTIVES
<p>Designers need to play a number of roles; designer, thinker, learner, and cultural agent. Sometimes facilitator or mediator. Graphic Design is more than placing typography and image into place. It's about the creation of culture and reflects the world that we live in. Designers, if they choose, are able to change the world we live in through the stories they share and doors they open, through the places and sense of belonging they create. Past design has charted a course for the design of our futures, but we have the power to stop and change that course. Can we defuture the image of the future? Can we use the future as our medium?</p> <p>We will start by looking at the “traditional”, as well as messy and untold history of design (that you won't find in your history books) to understand where, how and why design disciplines find themselves where they are now. We will look specifically at the ways in which “the future” as been presented by image makers in the past and present. We will reflect on current trends in design from studio to commercial practices and evaluate if and how we have a role to play in the creation of the future before establishing new modes of making and practice.</p> <p>Students will demonstrate their understanding of ethics and defuturing through design exercises and assignments throughout the class (assignments are left open for students to pursue their own lines of inquiry). The course will be presented each week through readings, films, podcasts, lectures and group discussions, as well as three studio assignments and short exercises which should be used to make sense of some of the themes that are touched upon during class.</p> <p>This course is designed to give students who are just beginning their career, an opportunity to understand their own positions and views on design ethics and futuring as well as explore the views and opinions of their peers. My aim for students after completing this course, is that they feel comfortable and confident to think critically about design as a tool and form of communication. They will have developed an understanding and critical view of the contemporary field of design and its challenges, and be able to demonstrate alternative ways of working through their finalised projects.</p> <p>This course does not require any previous experience in design (of any discipline), just a passion and interest in the course content, critical thinking, discussion and project development.</p> <p><i>*The course materials for Future As Medium are available at my thesis website. Users are free to share, copy and distribute this as they like. Updates and the relevant readings/course material will be posted to the website.</i></p>	<p>These are my aspirations for the class which are focussed around developing students' own technical skills as well as conceptual development and creative practice:</p> <p><i>To develop critical thinking and vocabulary around design as a tool</i></p> <p>The core goal of this course is to provide students with a knowledge of what's currently happening within design (graphic design in particular) and other design disciplines as we move into this new future. Students should feel comfortable exploring new ideas and discussing the themes presented within assigned readings each week. The readings should help to provide a critical theory as well as a vocabulary which students can use within their own work and practice.</p> <p><i>To promote an adaptable practice that is informed and researched</i></p> <p>This course will begin by exploring current trends. In recent times, each design discipline has had to devise new methods of thinking and creating which we will use as a starting point to define what has or hasn't been successful. Students should gain an understanding of the need for an adaptable practice and will be encouraged to think of and devise a new understanding of the role of the graphic designer and what tools they need in today, as the world around us becomes more uncertain.</p> <p><i>To gain an understanding of the landscape of design and its influence</i></p> <p>In this course, we will look at past, present and emerging design to understand what is possible when developing interfaces and proposing designs for the future. This will be done through lectures, readings and reference material that is provided as a part of this course. We will look to the past to develop new and original designs that can help us in navigating this new landscape and terrain.</p>	<ul style="list-style-type: none"> • A developing understanding of design as it relates to ethics and defuturing • Developing critical thinking around current trends and design discourse expressed through assignments and class discussion • A developed vocabulary and ability to communicate and participate in class discussions • A developed understanding of research methods and resources demonstrated through class exercises • An ability to apply comprehensive research into design practice and projects • An ability to demonstrate critical thinking around ethics and defuturing in design • An ability to give and respond to critique and participate in various class discussions • An ability to develop meaningful and fully realised prototypes/sketches of ideas • Advanced conceptual thought displayed through final project presentation • Advanced critical argument for design as it relates to ethics and futuring/defuturing

PROJECT 1: GHOST OF FUTURES PAST

Four weeks (final review last week)

Watch your head for flying cars and strap in your robot butler—we're going back to the future.

As we're speeding down this time warped wormhole, take a moment to cast your mind back to your earliest encounter with the future. Perhaps you used to watch *Lost In Space* or *The Jetsons*, or like me, grew up watching *Star Trek* and movies like *Blade Runner* and *The Fifth Element*. The future seemed bright, but was it?

Just as entertainment has played a role in our imagining of the future and the imagery that is conjured by the term, so too has architecture, advertising, art, design, and even governments. All media, all communication has played a role in the dispersion of future imagery that has ultimately led us here. It is important that we look back to these futures to understand our past as a way to move forward. Let us not make the mistakes of yesterday and acknowledge the origins which we now have the opportunity to rewrite. By creating new futures, we can defuture those that no longer serve us.

For this project, look back at futures as speculated in the past to develop 4 future variants. A possible, plausible, probable and preferable (use the Voros Cone to help you to identify each of these).

You might look to Athelstan Spilhaus's Experimental City, Ivan Leonidov's Competition Proposal for the Town of Magnitogorsk or Archizoom's No-Stop City. You might be inspired by science fiction narratives or newspaper clippings. Choose and examine any past future that interests you.

Through readings, visual examples, discussions and critique, we will work as a class to realise how our role as designers can make a difference in our local communities and society at large using this Voros Cone method as a starting point. Firstly we will look at and discuss your source inspiration, then extrude 4 possible pathways before finally prototyping and examining their final outcomes.

FRAMING & RESEARCH: FINDING A GHOST (WEEK 1)

This is a moment to really question and pull apart the brief. Look at as many resources as you can and find something that truly interests you. Bring a collection of research and imagery to our next class along with a paragraph of writing for each future variant scenario (this will be 4 paragraphs of writing in total).

PROJECT DEVELOPMENT: SCENARIO & WORLDBUILDING (WEEKS 2—3)

After gathering feedback from class discussion on your chosen "past future" move ahead with extrapolating the 4 future variant scenarios. You might decide that writing a speculative fiction helped you in building out the alternate worlds, or you might find sketching or prototyping most useful. These two weeks are for you to explore and bring these 4 future worlds to life. What do the lives of people living in your worlds look like? What is different in each scenario? Continue asking questions of your worlds to find their flaws. Record and document all of your findings along the way.

FINAL PRESENTATION (WEEK 4)

Students should put together a 20 minute presentation of their final project. This can be presented in whichever format you deem appropriate. Show us your progress from week one through to week four — what was interesting to you? What did you find unexpected? What did you struggle with? Were there any particular failures or successes that navigated your process? How can you apply what you have explored in this project to the rest of your practice beyond this class? We are interested in your findings and what take aways are most interesting for us to discuss as a class.

I will then ask each of you to complete an informal reflection document after the assignment. Through this reflection, note down your key findings and the key points that were raised in class discussion. Write down areas that you would have gone deeper in to or might return to later. It is valuable to look back at what you did and did not find interesting about the project, both for yourself and for future students taking this class.

PROJECT GOALS

- A developed understanding of the effects of futuring and worldbuilding
- An ability to critically examine research and the circumstances of your chosen "past future"
- A critical perspective and deeper level of understanding of your chosen subject area
- A developed and realised designs which takes into account the core concepts of our class research and discussions
- Authentic sharing of your process, class exercises and final project with peers and faculty

LEARNING OUTCOMES

- Conceptual development: In projects and class discussion 30%
- Critical thinking: Project development progress and presentations 30%
- Class participation in class discussions and critiques 20%
- Process documentation/Assignment/Presentation 20%

PROJECT 2: VISUALIZING HYPEROBJECTS

Four weeks (final review last week)

In the present moment, it is becoming increasingly difficult to imagine a future. Perhaps because our notions of future now are far more short-term than in the past. It feels more like a continuum of change occurring in quick succession rather than working towards a collective vision. But there is still a value in imagining the future. Our human consciousness means that we will always be looking ahead to a tomorrow and this thought allows us to move ahead, plan and make decisions.

One of the difficulties of future making and designing for futures is the interconnected complexity of issues we face as a society. In his book, *The Ecological Thought*, philosopher and writer Timothy Morton coined the term “hyperobject” to identify concerns, systems and phenomena that are so large in their temporality and scale (relative to human scale) that they defy human comprehension. Climate change, the Internet, and the vast accumulation of styrofoam and plastic bags are all hyperobjects. The difficulty with hyperobjects is that they are so large that we aren’t able to see them. This is an issue for finding ways to confront and deal with them. Hyperobjects are the designers ultimate client. How do you design to combat an issue that is invisible or highly complex?

For this project, look out into the world around you to find a hyperobject sized issue. We will work with this issue and find ways as a class and individually to make the seemingly invisible, visible.

FRAMING & RESEARCH: HYPEROBJECTS (WEEK 1)

We will start this assignment by having a conversation as a class about the hyperobjects we can identify. Together, we will start pulling these apart to find the interconnected web of complexity that makes these issues so overwhelming. At the end of class, you should have a hyperobject in mind to work with for the first week of research.

For next week’s class, bring a map of sketching and most importantly thinking about your hyperobject and prepare a short 5 minute presentation. How can you effectively communicate complexity and nuance of the issue in a clear and concise way?

PROJECT DEVELOPMENT: A NEW PERSPECTIVE (WEEKS 2—3)

Now that you know your hyperobject, you should get a sense of its complexity. How can you communicate this complexity to a public audience? For this next phase of the assignment, come up with a mode of communicating your hyperobject. You are in complete control of the message that you would like to convey (for example, you might have chosen the internet as your hyperobject and decided to convey a message about the environmental damage associated). You can do this through a film, an event, an object design, an installation—whatever medium best suits your message.

For the final critique next week, consider the audience for your design. Who are you speaking to in particular? If the class is not your audience, see if you can invite an external participant or group to give you feedback.

FINAL PRESENTATION (WEEK 4)

In this final week, we will be presenting your outcomes. Each student has 20 minutes to use in whatever way they feel best serves them and their project.

At the conclusion of your final critique, please write a short and informal reflection about your project. This can be done creatively (ie. you might write the reflection from the perspective of your hyperobject) or from your own perspective. It is important to keep a record of what you learnt, what findings surprised you and what you did or didn’t enjoy about this project, both for yourself and for other students.

PROJECT GOALS

- A developed understanding of the complexity of the world we live in and what it means and the responsibility to design within that context
- An ability to critically examine how design communicates complex issues
- A critical perspective and deeper level of understanding of your chosen subject area
- A developed and realised redesign which takes into account the core concepts of our class research and discussions
- Authentic sharing of your process, class exercises and final project with peers and faculty

LEARNING OUTCOMES

- Conceptual development: In projects and class discussion 30%
- Critical thinking: Research, project development progress and presentations 30%
- Class participation in class discussions and critiques 20%
- Research/Assignment/Presentation 20%

PROJECT 3: AN ADAPTIVE MODEL OF FUTURE MAKING

Four weeks (final review last week)

What stands in the way of ethical future making? Is it the designers relationship to, and priority over aesthetics? Is it government policy? A commercial design monopoly over products? Lack of accessibility to education? Lack of diversity and a mutliplicty of voices?

In this final project, you are asked to identify a key issue or concern you have about design and the designers role in futuring/defuturing.

We will start this project by having a class discussion about the findings from our semester so far and identify the areas where there was tension in the design/designer relationship. After discussion, we will break into groups (students can organize this amongst themselves or choose to work individually) to develop, plan and schedule a community “event”. These events will be designed for fellow designers and peers.

Students will be involved in leading 3 elements of the event:

1. Inviting a key speaker to present the main theme (decided by the group). This can also be done by a member/members of the group.
2. Planing a workshop that responds to the theme of the presentation.
3. Leading a discussion and a conclusion of findings.

Students will have all four weeks to plan and organize the event with individual meetings and group critique along the way.

FRAMING & RESEARCH: DECIDING ON A THEME AND SCHEDULING (WEEK 1)

The first week should be spent on getting organized. Decide on a theme quickly and if appropriate, outline roles for each group member. Plan a date and time for your event and sent out all relevant emails for planning. If this week is used well, the rest of the planning will be made easy.

PROJECT DEVELOPMENT: DETAILED PLAN (WEEKS 2—3)

By this week, you should know if you have a guest speaker and how many interested participants you have. Use this time to write a curatorial statement and plan the workshop for your event.

EVENT (WEEK 4)

The final week is for you to host your event. The duration and location of your event are entirely up to you but be sure to notify students when and where they should expect to gather.

At the conclusion of your event, collect quotes and any ephemera that was created. Be sure to document this and keep it for your own reference. Write a short reflection on the experience, both for yourself and for future students.

PROJECT GOALS

- A developed understanding of organiza-tion and planning
- An ability to critically examine your own opinions and ideas and synthesize them into a format for others to become involved in and repond to
- A critical perspective and deeper level of understanding of your chosen subject area
- A developed and realised redesign which takes into account the core concepts of our class research and discussions
- Authentic sharing of your process, class exercises and final project with peers and faculty

LEARNING OUTCOMES

- Conceptual development: In projects and class discussion 30%
- Critical thinking: Research, project development progress and event 30%
- Class participation in class discussions and critiques 20%
- Planning/Event 20%

Institutions are preparing students for future practice alongside the increasingly complex realities we are facing globally and in our local communities. I really appreciate the line in the foreword of *Design Dedication* that says “...This book is not about the Design Department, it is about how design may contribute to being critical, imaginative and receptive citizens.” How do you think design education is or isn’t preparing students to play this role of the receptive citizen? What needs to change?

Annelys and I were both in agreement that art and design schools are often very isolated from the communities that surround them, despite the fact that the society that exists outside the walls of the institution will be our ultimate clients. She suggested that we should work towards bringing down these barriers. Also those barriers that lead to a more diverse student population and faculty, from application requirements to opportunity for international students—we spent time discussing the structures and systems that perpetuate the colonial bias that undertones design education today. In Annelys’s Disarming Design program, “The selected students came from Palestine, Lebanon, UAE, Egypt, Spain, US, Estonia, Germany, Italy and the Netherlands. I mention these countries because they make a difference. Eleven candidates don’t have a passport from the EU, and so they needed to pay three times as much for attending the program as EU-students do. € 6,396, – per year to be exact. This is Dutch politics, in line with the EU. Because institutional fees for students outside the EU are higher than statutory fees for those with an EU passport, because the government offers higher education institutions money to subsidize the statutory fee, and don’t support the institutional fees. As a result, for Dutch universities, students from outside the EU are more expensive for the institute, despite the fact that they pay three times as much as their European colleagues, and the (financial/institutional) impact of selecting candidates from outside the EU is something the institute itself has to deal with.”

In order for students to play the role of a receptive citizen, they need to be out and engaging with society. The Disarming Design Department at the Sandberg Instituut is Annelys’s attempt to change this. She actively advocates for student diversity and looks for additional funding where required, which means that her program is made up of a collection of individuals that all bring unique and diverse perspectives and experience to the table. The collaboration between students and artisans and designers in Palestine also awakened her understanding of unequal access. “This particular program started with a desire for a more politically driven design course. I had been heading the design department for ten years and felt that in a discipline driven curriculum I couldn’t put the political and colonial aspects of design at the center, as this was not what the students, nor the tutors had signed up for. The years of working closely with artists, designers, students and artisans in Palestine awakened my understanding of coloniality and the unequal accessibility to knowledge, networks, resources and opportunities. This opened up critical thinking on what is at stake in design; it made me approach aesthetics, material and processes from a more political and critical perspective. The act of making together allowed people from very different educational, class and cultural backgrounds to develop ideas

together and share narratives. It demystified the role of ‘institutionalized’ education for the act of design, and allowed other ways of thinking, to imagine another future. But it also confronted me with the Eurocentric structures and thinking that I was raised and acting in, and the privilege of access that comes with it. I wondered, from that position, how I could contribute to a wider awareness, different organizational structures and organize myself differently. One that could support the self-determination of designers and design practices, and contribute to another, more just way of being in the world.”

Following the events of the past year: a pandemic, natural disasters, conflicts and the Black Lives Matter movement — we can no longer turn our backs on the issues on our doorstep as designers and educators and we can see a real urgency and willingness to rethink design education. Where do we start in dismantling design and reconfiguring the structures and systems that perpetuate futures that no longer serve us?

I discussed with Annelys other texts I had read in the production of my thesis and my conversations with Forest Young (a global partner at Wolff Olins), Chris Lee (a past student of Annelys’s that now works at the Pratt Institute in New York, teaching Graphic Design) and Rory Hyde (a writer, educator and architect, associate professor of architecture at the University of Melbourne, and design advocate for the Mayor of London) around a sense that design education as we know it, can be no longer. When I thought of design educators and leaders in design education who were making a difference and truly exploring alternative modes of practice, her work came instantly to mind. In our discussion, she mentioned how trust and care was something truly important that she had been working on through her programs. Without a sense of trust and opportunity for creative agency — we can’t dismantle anything. “You are much stronger working as a group, or as a collective, than as an individual”, in order for collaboration to happen and for progress to be possible, we have to establish trust and work together. “Since all backgrounds are radically unequal, it is important to take care of the material and emotional conditions students are in, and invest in support structures. For students that come from backgrounds that are marginalized by race, gender, class, geography, or some combination, the academy often continues to be a place for disconnection. But how can we organize support and create a solid educational structure within the given reality and limited resources? We take care as an institute, as a department and as individual tutors in different ways. From the institutional perspective we invest in how we can secure access to the possibilities the academy can offer; like housing, contact with confidants, lawyers and getting introduced to the relevant individuals and organizational bodies within the school. As a department we invest in individual support per student, create more informal opportunities to get to know each other, invest in community building and shape the curriculum in response to the needs and dynamics of the students.”

There is also a unique approach to curriculum development within the Disarming Design Department, Annelys says “educational processes cannot be understood outside of the social, historical, philosophical, cultural, economic, political and

psychological contexts that shape it. We do not start from a fixed set of knowledge of discourse that needs to be transmitted, but instead see learning as an active-knowledge-making process. This means that knowledge isn't passively received, but is instead actively created by the students. Existing knowledge is the starting point and is to be critically examined through co-investigation of the group. Through this process of co-investigation new understandings are developed and new knowledge is created. We create different formats in which students can share thoughts and ideas. Hence, the development of the program has been a responsive process from the start, it is a process-led approach, which is manifested in several ways through time and people involved. This exchange or adaptability is part of our pedagogy."

In your own work and the Sandberg Institute's Design Department, collaboration seems an integral part of design practice. Do you think that supporting skills in collaboration and organisation with a design education program is important?

In our discussion, I mentioned some of my experiences during my time at RISD that I had been reflecting on during the production of my thesis. Collaboration and the opportunity to be involved in designing and organizing events was something that I ended up valuing as much as, if not more than the technical instruction. In her book *Design Dedication: Adaptive Mentalities in Design Education*, Annelys also mentions this very important part of the graduate experience (even her own experience as a graduate student at the Sandberg Instituut) and how the physical space can make a huge difference to the success of collaboration and effective learning and development. We spoke about how she finds it incredibly important to support students to be self-starters and find their own voice. Leaving students space to get together and collaborate on passion projects is incredibly important and will also contribute to establishing networks, relationships and practices for students after they graduate.

It can be hard to find the time within the busy life and schedule of the graduate student to make space for these kinds of activities, collaboration and the dreaded "group project" also has a bad reputation for unevenly distributed workloads on crammed time schedules. But, put so aptly by Sandberg faculty member Anja Groten in her article for *Design Dedication*, "Towards A Critical Collaborative Practice", "...acknowledge that collaboration is not a choice. Collaboration as a condition acting and reacting at all times, and inhabiting power relations. The question is: what constitutes collaboration?" Annelys and I both decided that collaboration, or simply "working together with others" is as important to learn and practice as the practical design skills.

In my own studies in graphic design, I have been considering aesthetics and ethics and the difficulty of negotiating these two parts of a design practice through the curriculum. Is this something that you have been thinking about? How have you considered this within the programmes you have been involved in leading? Do we need to treat design education differently to art/music/fashion/performance education in the way that we approach

ethics and aesthetics (because of our innate influence and power over the aesthetic)?

Prior to our zoom interview, Annelys and I had asked one another a couple of questions to consider before we met. This was one of them, considering the differences between art and design education in particular. But this question is a very difficult question to answer because most students (particularly those in classic "art school" settings) sit somewhere in the middle, in terms of practice. I proposed the idea that perhaps art is the field where we can test value, where we decide what we care about and what we should care about. Design is the social enforcement of that value: how do our values appear in the world? How do they direct us in the world? Therefore, design education requires a better understanding of the social reception and value positioning, and connection to place and community is more important. Annelys agreed that exposure to a multiplicity of environments, people and perspectives is key to a design education and that design education needs to better understand and work with the structures and systems at play. Design needs to see itself within the context of the greater world outside of itself.

Finally, a rather broad but curious question... where do you think the future of design education is headed? What is the future of the institution and what does that mean for students? What other models of teaching might we see more of?

We both agreed that the future of design education and the institutions involved should change their approach across a number of areas, and that there was still a lot of water to go under the bridge until the results of this tumultuous time and the calls to action of the past year would be known. However, we agreed that as educators invested in pedagogy, the values expressed by design education was something that we would both continue to actively question. To improve the future of design education, we all have to be conscious in our approaches to teaching and implementation in our own practices—this is something that Annelys demonstrates in her work and approach and why she is someone that I so greatly admire.

"This particular program [Disarming Design] started with a desire for a more politically driven design course. I had been heading the design department for ten years and felt that in a discipline driven curriculum I couldn't put the political and colonial aspects of design at the center, as this was not what the students, nor the tutors had signed up for." Annelys created space for the kinds of conversations that she felt students should be a part of, if they wanted to be. "The Sandberg Instituut offered the opportunity to develop a temporary master's program from scratch. One that could catalyze this desire and develop knowledge, skills and networks to establish learning platforms for design, while building networks of solidarity."

I asked her if she thinks the format of the temporary program might be a new way forward for design education, providing focussed courses with the opportunity to work closely with a community on a particular project, framed in a specific way. She said that although she was very critical of the temporary

program format at the Sandberg in the past (which had been running for some time before she embarked on developing her own) it provided great opportunity and flexibility to create curriculum and bring in new faculty.

We both agreed that adaptive mentalities to design education will become more prevalent, because we will be forced to change our ways as we are faced with new challenges (ie. zoom). We should be prepared to see more alternative teaching strategies and institutional structures like temporary programs, unaccredited education platforms (like The Southland Institute) and community based sharing which we've seen occurring through social media during the pandemic.

It seems to be that access is what makes a degree (like an MFA from RISD), something to be "respected". Alongside the academic rigour that is expected from students within these programs, it's also the application methods and fees that give a degree like an MFA a certain value. We both agree that this access and elitism is what stands between us and better design/better designers. I want to work on making design education accessible and possible. This is something that I hope my own masters thesis, and the production of the syllabus that is within this teaching portfolio works to achieve. I want to share my research and knowledge with others as an attempt to bring awareness to, and attract conversation for a conversation on design futures and ethics.

* Since this interview took place in early May, recent developments in Palestine have flooded our news outlets and captured the attention of the world. Since this has happened, Annelys and the Disarming Design Department have been supporting students and pushing institutions to speak out against settler colonialism – a response that I have great respect for and only adds to the admiration I have for Annelys as a designer and educator – practicing exactly what she outlines in all of her writing and indeed, the conversation below. A quote from their Instagram page on May 18th 2021:

"Disarming Design aims to uphold Palestinian narratives in the face of the systemic oppression caused by the Israeli occupation. As such, we stand in full solidarity with the people of Palestine and the struggle for liberation from settler-colonialism. We will be on strike today Tuesday 18th of May, in response to the call of the Palestinian people. We call upon all our partners and friends to take a public stance for boycott, divestment and sanctions against the state of Israel."

"Disarming is not a metaphor. Disarming is an approach that positions design as a cultural tool to oppose and defy oppression."

ACKNOWLEDGEMENTS

To my friends and fellow classmates, Matthew Bejtlich, Laura de Baldeon, Ryan Diaz, Everett Epstein, Daphne Hsu, Will MianECKi, Romik Bose Mitra, Kit Son Lee, Lai Xu, Maddie Woods (and Sophia Brinkgerd!) No one expected that we would be ending our time at RISD in the midst of a pandemic. It’s been an impossible year. But, through it all, even on the other side of the world (here in Australia) we have been there for one another and supported each other through this. If anything, even though this year has been hard, I’m most glad I had you all there to battle it out with me (even if it was over Zoom). Thank you for always being your unique, talented and inspiring selves.

The the class of 2019, Amy Auman, Christopher Cote, Joel F. Kern, Eury Kim, Jieun Kim, Elaine Lopez, Robert McConnell, Mohammed NasseM, Annaka Olsen, Marcus Peabody, Oliva de Salve Villedieu, Angela Torchio, Wei-Hao Wang, & June Yoon. Thank you for teaching me the ropes and for inspiring me to see what was possible in the early days of my time at RISD.

To the class of 2020, Seyong Ahn, Lizzie Baur, Mukul Chakravarthi, Aleks Dawson, Hilary duPont, Carl-Gustaf Ewerbring, Fabian Fohrer, Elena Foraker, Emily Guez, Yoonsu Kim, Sophie Loloi, Vaishnavi Mahendran, Caroline Robinson Smith, Bobby Joe Smith III, & Weixi Zeng. Thank you for your friendship, your leadership and your strength when times got hard. I’m in awe of all of you!

To the class of 2022, Forough Abadian, Katie Burwick, Adam Fein, Zengqi Guo, Sabrina Ji, Qiwen Ju, Nick Larson, Ilhee Park, Louis Rakovich, Ingrid Schmaedecke, & Asta Thrastardottir. Thank you for all of your support through this year. I can't wait to see what you all do next!

To the class of 2023, Mina Kim, Sun Ho Lee, Moritz Lónyay, Jenni Oughton, Zoë Pulley, Zach Scheinfeld & Jack Tufts. Although circumstances meant that we never met in person, I hope we get to meet again soon. 3-year track team forever!

To my thesis advisory team, officially Paul Soulellis, James Goggin, Ryan Waller and Kiera Alexandra as well as everyone who helped me along the way, Bethany Johns, John Caserta, Anne West,

Adam Fein, Doug Scott and Nancy Friese. Thank you for your generosity and all of those countless hours spent on Zoom. Thank you for encouraging me and fostering my growth as a designer, thinker, writer and (to Nancy in particular) an educator. This book would not have come together without each of you.

To the teachers and members of the graphic gesign department at RISD that have been there along the journey, Ed Brown, John Caserta, Kelsey Elder, James Goggin, Cyrus Highsmith, Lucinda Hitchcock, Nora Khan, Anther Kiley, MinkyounG Kim, Aki Nurosi, Doug Scott, Nancy Skolos, Paul Soulellis, Ryan Waller, Tom Wedell.

Thank you to Anastasiia Raina for nurturing my interests and helping me to find space for my ideas. Also to Paolo Cardini, Rebecca Nolan and the Hyundai Motors Group for their support and guidance in the RISD/RISD Nature Lab + Hyundai collaboration.

To Keetra Dean Dixon for your energy and inspiration and for supporting Maddie and I in our collaborative practice.

To my family, Dad, Jeremy, Jane, The Burt’s, The Nolan’s and The Dahlstrom’s. Who supported me through it all (and across our varied time zones).

To my Mum, Andrea, for your endless support and confidence in me.

To my friends, friends in the US, friends in the EU and my friends at home in AUS. For reminding me to sleep and eat.

A special thanks to Maddie and Kit, for being there every step of the way.

Lastly, a special thanks to my friend Lizzie Baur, for laughing with me (and at me), for always keeping me in your thoughts, and for taking me under your wing when I first arrived to the US in 2018. Couldn't have done it without you!

FUTURE AS MEDIUM

A thesis by Georgie Nolan presented in partial fulfillment of the requirements for the degree Master of Fine Arts in Graphic Design in the Department of Graphic Design at the Rhode Island School of Design, Providence, RI.

Approved by Master’s Examination Committee:

Paul Soulellis
Assistant Professor, Graphic Design
Primary Thesis Advisor

James Goggin
Assistant Professor, Graphic Design
Secondary Thesis Advisor

Ryan Waller
Critic, Graphic Design
Tertiary Thesis Advisor

Kiera Alexandra
Partner, Work-Order
Tertiary Thesis Advisor

Bethany Johns
Professor, Graphic Design
Graduate Program Director

ENDNOTES

1. “Benjamin Bratton on speculative design”, May 2016, e-flux, accessed 8 April. 2021.

2. Andrew Blauvelt, “Defuturing the Image of The Future”, Walker Art Center, September 15,2020.

3. Dessane Lopez Cassell ,“Parsing the Real and Unreal Stories of the Zambian Space Academy”, Hyperallergic (blog), September 4, 2019.

4. Ytasha L. Womack, Afrofuturism: The World of Black Sci-Fi and Fantasy Culture, Chicago: Lawrence Hill Books, 2013.

5. Mark Dery, “Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose,” in Flame Wars: The Discourse of Cyberculture, ed. Dery (Durham, NC: Duke University Press, 1994), 180.

6. Dawn Chan, Asia-Futurism, Artforum, 2016.

7. Andrew Blauvelt, “Defuturing the Image of The Future”, Walker Art Center, September 15,2020.

8. Tony Fry, A New Design Philosophy: An Introduction to Defuturing (Sydney: UNSW Press, 1999), 11-12.

9. Gibson, W. See Quote Investigator for origin: <http://quoteinvestigator.com/2012/01/24/future-has-arrived/>.

10. Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom, (1991), Close Encounters: Film, Feminism, and Science Fiction, University Of Minnesota Press.

11. Alan Nadel, (2005), Television in Black-and-white America: Race and National Identity, University Press of Kansas, United States.

12. Billie Muraben (2016), Hippie Modernism: The Struggle for Utopia, April 2016, It’s Nice That (online blog).

13. Aturo Escobar, (2018), “Introduction: Finding Pluriversal Paths.” In Ashish Kothari, Ariel Salleh, Atruo Escobar, Federico Demaria, and Alberto Acosta, eds, Pluriverse: A Post-Development Dictionary, New Delhi: Tulika Books, 2019.

14. Johanna Diel and Niklas Maak, (2017), Eurotopians: Fragments of a Different Future, Hirmer Verlag GmbH, Munich.

15. Beatrice Galilee, (2021), Radical Architecture of the Future,

16. Phaidon Press Limited, London.

17. The Experimental City, Dir. Chad Freidrichs. 2017. Documentary.

18. Liam Young, (2020), Planet City, Uro Publications, Melbourne, Australia.

19. Berger, James. After the End: Representations of Post-apocalypse. University of Minnesota Press, 1999.

20. Michaela Büsse. Dream On, Michael Schindhelm, Online, 2014.

21. Fred Polak .The image of the future. Amsterdam: Elsevier Scientific Publishing Company, p. 195, 1973.

22. Timothy Morton. The Ecological Thought.Harvard University Press, 2010.

23. Timothy Morton. Hyperobjects: Philosophy and Ecology after the End of the World. University of Minnesota Press, 2013.

24. Damn Magazine. “VIDEO: Normality–A video by Silvia Susanna.” Damn Magazine (website), December 2020.

25. Anthony Dunne and Fiona Raby. Speculative Everything, MIT Press, 2016.

26. Van Der Velden, Daniel. “Lyrical Design”, Design Dedication: Adaptive Mentalities in Design Education. Amsterdam: Valiz, 2020.

27. Andrew Blauvelt, “Defuturing the Image of The Future”, Walker Art Center, September 15,2020.

28. Amanda Williams, Reconstructions: Architecture and Blackness in America, MOMA, online, 2021.

29. Victoria and Albert Museum, The Future Starts Here, V&A, 2018.

30. Rory Hyde, ‘The Future Starts Here’, MTalks, 2019.

31. Liam Young, Planet City, Uro Publications, Melbourne, Australia. 2020.

32. Benjamin Bratton, Planet City, Uro Publications, Melbourne, Australia. 2020.

33. Sci-Arc Media Archives, Timothy Morton Masterclass. Youtube, 2019.

34. Harris. H, Hyde. R and Marcacio.R. Architects After Architecture: Alternative Pathways for Practice, Routledge, New York, 2021.

35. Annelys de Vet. Design Dedication: Adaptive Mentalies in Design Education, Valiz, Amsterdam, 2020.

CREDITS & COLOPHON

FUTURE AS MEDIUM

© Georgina Elizabeth Nolan

The images in this book were reproduced without permission for education purposes only.

Contributors:
Annelys de Vet
Adam Fein
Rory Hyde
Chris Lee
Maddie Woods
Forest Young

Design:
Georgie Nolan
Rhode Island School of Design
Master of Fine Arts
Graphic Design, 2021

Design Guidance:
Kiera Alexandra
James Goggin
Ryan Waller
Paul Soulellis

Editorial Support:
Anne West
Adam Fein

Typeset in:
Monument Grotesk Mono, by Dinamo Typefaces
Monument Grotesk, by Dinamo Typefaces
English Towne
WAX MELT, by WAX STUDIOS

255

* The back cover of this book is a list of films set in the future, organized by the date they predict, the year they were released, and their title.

UNSPEC.	1929	Woman in the Moon
UNSPEC.	1955	Conquest of Space
UNSPEC.	1962	The Creation of the Humanoids
UNSPEC.	1962	La jetée
UNSPEC.	1965	The 10th Victim
UNSPEC.	1965	Wild Wild Planet
UNSPEC.	1966	Fahrenheit 451
UNSPEC.	1968	Shame
UNSPEC.	1969	The Illustrated Man
UNSPEC.	1970	Zabih Jsem Einsteina, Panova
UNSPEC.	1972	Silent Running
UNSPEC.	1972	Solaris
UNSPEC.	1972	Z.P.G.
UNSPEC.	1973	Moscow-Cassiopeia
UNSPEC.	1974	Teens in the Universe
UNSPEC.	1977	Sleeping Dogs
UNSPEC.	1977	Wizards
UNSPEC.	1978	Eutura Cop
UNSPEC.	1978	Planet of Dinosaurs
UNSPEC.	1978	Test pilota Pirxa
UNSPEC.	1979	La Mort en direct
UNSPEC.	1979	Quintet
UNSPEC.	1979	Stalker
UNSPEC.	1980	Saturn 3
UNSPEC.	1981	Memoirs of a Survivor
UNSPEC.	1981	Outland
UNSPEC.	1982	Health Warning
UNSPEC.	1982	Megaforce
UNSPEC.	1982	Turkey Shoot
UNSPEC.	1983	Le Dernier Combat
UNSPEC.	1983	Overdrawn at the Memory Bank
UNSPEC.	1983	Rock & Rule
UNSPEC.	1983	Testament
UNSPEC.	1983	Yor, the Hunter from the Future
UNSPEC.	1984	Eutura Schlock
UNSPEC.	1984	The Ice Pirates
UNSPEC.	1984	Runaway
UNSPEC.	1985	Brazil
UNSPEC.	1985	Cocoon
UNSPEC.	1985	Creatura
UNSPEC.	1985	Trouble in Mind
UNSPEC.	1986	Robot Holocaust
UNSPEC.	1986	Solarbabies
UNSPEC.	1987	Steel Dawn
UNSPEC.	1988	Phoenix the Warrior
UNSPEC.	1989	The Blood of Heroes
UNSPEC.	1989	Slipstream
UNSPEC.	1990	Circuitry Man
UNSPEC.	1990	Crash and Burn
UNSPEC.	1990	The Handmaid's Tale
UNSPEC.	1990	Megaville
UNSPEC.	1990	Robot Jox
UNSPEC.	1991	Liquid Dreams
UNSPEC.	1991	Meet the Hollowheads
UNSPEC.	1991	Prayer of the Rollerboys
UNSPEC.	1991	Saviour of the Soul
UNSPEC.	1991	Wedlock
UNSPEC.	1993	Daybreak
UNSPEC.	1993	Executioners
UNSPEC.	1993	Point of No Return
UNSPEC.	1993	The Secret Adventures of Tom Thumb
UNSPEC.	1993	Stark
UNSPEC.	1994	Cyborg 3: The Recycler
UNSPEC.	1994	Pinhead Rewired: Circuitry Man II
UNSPEC.	1994	Shopping
UNSPEC.	1995	Mechanical Violator Hakaider
UNSPEC.	1995	Virtuosity
UNSPEC.	1995	The White Dwarf
UNSPEC.	1996	Crimestime
UNSPEC.	1996	Darkdrive
UNSPEC.	1996	Eutura War
UNSPEC.	1996	Zone 39
UNSPEC.	1997	Doom Runners
UNSPEC.	1997	Gattaca
UNSPEC.	1997	Habitat
UNSPEC.	1997	Nirvana
UNSPEC.	1997	Open Your Eyes
UNSPEC.	1997	The Second Civil War
UNSPEC.	1998	New Rose Hotel
UNSPEC.	1998	Woundings
UNSPEC.	1999	eXistenZ
UNSPEC.	1999	Eutia
UNSPEC.	2000	Battle Royale
UNSPEC.	2000	The Last Warrior
UNSPEC.	2000	XChange
UNSPEC.	2001	Avalon
UNSPEC.	2001	Nabi
UNSPEC.	2001	The Princess Blade
UNSPEC.	2002	Cypher
UNSPEC.	2002	Solaris
UNSPEC.	2002	Teenage Caveman
UNSPEC.	2002	Treasure Planet
UNSPEC.	2003	Battle Royale II: Requiem
UNSPEC.	2003	Kim Possible: A Sitch in Time
UNSPEC.	2003	Robot Stories
UNSPEC.	2004	Dead Leaves
UNSPEC.	2004	FAQ: Frequently Asked Questions
UNSPEC.	2004	The Final Cut
UNSPEC.	2004	The Purifiers
UNSPEC.	2004	Starship Troopers 2: Hero of the Federation
UNSPEC.	2005	Land of the Dead
UNSPEC.	2007	Blood Car
UNSPEC.	2007	Day Zero
UNSPEC.	2007	The Gene Generation
UNSPEC.	2007	Paragraph 78
UNSPEC.	2008	Dante 21
UNSPEC.	2008	Sleep Dealer
UNSPEC.	2008	Starship Troopers 3: Marauder
UNSPEC.	2008	Tokyo Gore Police
UNSPEC.	2008	War, Inc.
UNSPEC.	2009	Battle for Terra
UNSPEC.	2009	Eynbarga
UNSPEC.	2013	The Machine
UNSPEC.	2013	The Congress
UNSPEC.	2014	Die Gattettensaga: The Rise of Echsenedri1
UNSPEC.	2017	Downsizing
UNSPEC.	2017	Ghost in the Shell
UNSPEC.	2017	Lila
UNSPEC.	2017	Otherlife
UNSPEC.	2018	Fahrenheit 451
UNSPEC.	2018	Muta
UNSPEC.	2021	Duna
1928-1940	1920	Algal
1940/50	1929	High Treason
1940	1933	Man Must Fight
1940	1935	The Tunnel
1940-2036	1936	Things to Come
1960	1924	The Last Man on Earth
1964	1959	On the Beach
1965	1959	Battle in Outer Space
1965	1964	Two Thousand Maniacs
1966-701	1960	The Time Machine
1968	1964	The Last Man on Earth
1970	1942	The Mummy's Tomb
1970	1944	The Mummy's Ghost
1970	1953	Project Moonbase
1970	1958	Frankenstein 1970
1970	1967	Privilege
1972	1967	The Day the Fish Came Out
1972-3978	1968	Planet of the Apes
1973	1958	111 The Terror from Beyond Space
1973	1971	Escape from the Planet of the Apes

1974	1924	Aelita	2017	1987	Cherry 2000	2071	1964	The Time Travelers
1976-1982	1962	Gorilla	2017-2019	1987	The Running Man	2001	2001	Cowboy Bebop: The Movie
1977	1971	The Omega Man	2017	1993	Godzilla	2072	1984	Warriors of the Year 2072
1979-2133	1973	Genesis II	2017	1996	Barb Wire	2072	2002	Equilibrium
1979	1977	Damnation Alley	2017	2009	Surrogates	2073	1994	A.P.E.X.
1980	1930	Just Imagine	2017	2014	Transformers: Age of Extinction	2074	1993	Cyborg 2
1980	1961	The Phantom Planet	2017;	2029	Terminator Genisys	2075	2004	Casshern
1983	1973	Wastworld	2018	1975	Rollerball	2077	2007	Voxilla
1984	1956	1984	2018	2009	Terminator Salvation	2078	1995	Scanners
1984	1981	Friday the 13th Part 2	2018	2012	Iron Sky	2078	2006	Ultraviolet
1984	1982	Class of 1984	2018	2014	Brick Mansions	2079	2002	Impostor
1984	1982	Friday the 13th Part III	2018-2034	2016	Baar Baar Dekho	2079	2012	Lockout
1985	1960	First Spaceship on Venus	2018	2017	Iron Sky: The Coming Race	2080	2002	The Adventures of Pluto Nash
1985	1976	Eurozworld	2018-2034	2017	The Space Between Us	2080	2003	Natural City
1987	1979	Mad Max	2018	2017	Transformers: The Last Knight	2081	2009	2081
1986	1985	A Nightmare on Elm Street 2: Freddy's Revenge	2019	1982	Blade Runner	2083	2013	Ende's Game
1987	1986	Maximum Overdrive	2019	1982	The New Barbarians	2084	1990	Total Recall
1988	1977	The War in Space	2019	1983	2019 After the Fall of New York	2084	2002	Returner
1988-4039	1987	The Time Guardian	2019	1988	Akira	2084-2104	2003	Deathlands: Homeward Bound
1989	1966	Way...Way Out	2019	1994	Test Tube Teens From the Year 2000	2087	1966	Cyborg 2087
1989	1982	Kamikaze 1989	2019	1995	Stank! Frontier	2089	1989	Venus Wars
1989	1985	Friday the 13th: A New Beginning	2019	2004	Avatar	2089	1997	Twilight of the Dark Master
1990	1981	Mad Max 2: The Road Warrior	2019	2005	The Island	2092-2095	1985	Enemy Mine
1990	1982	1990: The Bronx Warriors	2019	2009	The Road	2092	1995	Memories
1990S	1983	Escape from the Bronx	2019	2010	Daybreakers	2092	2009	Mr. Nobody
1990	1986	Friday the 13th Part VI: Jason Lives	2019-2023	2017	Geostorm	2092	2012	The Hunger Games
1990	1988	Friday the 13th Part VII: The New Blood	2020	1965	Voyage to the Prehistoric Planet	2093	2012	Prometheus
1990	1989	Friday the 13th Part VIII: Jason Takes Manhattan	2020	1988	Droid	2093	2013	The Hunger Games: Catching Fire
1990	1989	Godzilla vs. Biollante	2020-2022	2000	Mission to Mars	2093	2014	The Hunger Games: Mockingjay - Part 1
1991	1972	Conquest of the Planet of the Apes	2020	2002	Stranded: Naufragos	2093-2103	2015	The Hunger Games: Mockingjay - Part 2
1991-2011	1981	The Last Chase	2020	2005	Stealth	2095	2004	Immortal (Ad Vitam)
1991-2044	1984	Sexmission	2020	2009	G.I. Joe: The Rise of Cobra	2097	2007	The Beach Party at the Threshold of Hell
1991	1988	Alien Nation	2020	2011	Beal Steal	2100	1998	Jackass: The Movie
1992	1992	Parasite	2020-2025	2013	Pacific Rim	2101	1993	Spacechaser: Adventures in the Forbidden Zone
1992-2204	1991	Godzilla vs. King Ghidorah	2020	2014	Edge of Tomorrow	2101	2000	Supernova
1993	1992	Godzilla vs. Mothra	2020-2021	2018	A Quiet Place	2104	2017	Alien: Covenant
1994	1980	The Apple	2020-2042	2019	Terminator: Dark Fate	2105-2805	2008	WALL-E
1994	1983	The Atlantis Interceptors	2020S	2020	A Quiet Place Part II	2105	2019	Ad Astra
1994	1993	Godzilla vs. Mechagodzilla II	2021	1969	Moon Zero Two	2107	1997	Total Reality
1995	1944	The Mummy's Curse	2021	1995	Johnny Mnemonic	2108	2009	Ashe's Bay
1995	1971	A Clockwork Orange	2021	2003	It's All About Love	2112	2012	Total Recall
1995	1981	Heartbeats	2021	2012	Seeking a Friend for the End of the World	2114	2014	Zyuden Sentai Kyoryuger Returns:Hundred Years Af
1995	1986	Dead End Drive-In	2021	2014	Transcendence	2116	1968	Space Men
1995-2029	1991	Terminator 2: Judgment Day	2022	1973	Soylent Green	2122	1979	Alien
1995	1994	Godzilla vs. Spacegodzilla	2022	1993	Alien Intruder	2127	1996	Hellraiser: Bloodline
1996	1991	Harley Davidson and the Marlboro Man	2022	1994	No Escape	2130	1976	The Black Hole
1996-2032	1992	Demolition Man	2022	2013	Hall Baby	2131	2004	Apocalypse
1996-2035	1995	12 Monkeys	2022	2014	Penguins of Madagascar	2133	1974	Planet Earth
1996	1995	Godzilla vs. Destoroyah	2022-2040	2016	The Purge: Election Year	2134	2012	Dredd
1997	1970	Crimes of the Future	2022	2017	Blade Runner: Black Out 2022	2135	2007	Applesed Ex Machina
1997	1981	Escape from New York	2023	2014	The Purge: Anarchy	2139	1995	Judge Dredd
1997	1984	Das Arche Noah Prinzip	2023	2014	X-Men: Days of Future Past	2142-4142	2001	A.I. Artificial Intelligence
1997	1990	Erdrater 2	2023	2019	Avengers: Endgame	2142	2003	Wonderful Days
1997	1994	Hong Kong '97	2024	1960	Behind the Time Barrier	2144-2321	2012	Cloud Atlas
1998	1979	Americathon	2024	1975	A Boy and His Dog	2150	1966	Daleks - Invasion Earth: 2150 A.D.
1998	1987	Creepozoids	2024	1991	Highlander II: The Quickening	2150	1974	Dark Star
1998	1991	Child's Play 3	2024	1999	The Thirteenth Floor	2151	2001	Vanilla Sky
1998	1997	I Know What You Did Last Summer	2024	2013	G.I. Joe: Retaliation	2154	2009	Avatar
1998	1968	Destroy All Monsters	2024	2011	Spider-Man: Far From Home	2154	2019	Elysium
1999	1981	Malèvil	2024	2020	The Last Days of American Crime	2155	1975	Strange New World
1999	1987	Prince of Darkness	2024	2021	Godzilla vs. Kong	2157	2008	Dark Planet
1999	1989	Patlabor: The Movie	2025	1983	Endgame	2169	2011	In Time
1999	1990	Class of 1999	2025	1999	Futuresport	2173	1973	Sleeper
1999	1990	Omega Cop	2025	2003	Timecop 2: The Berlin Decision	2173-3097	2009	Pandorum
1999	1991	Emag's Dead: The Final Nightmare	2025	2007	Chrysalis	2176	1998	The Spirit of '76
1999	1991	Until the End of the World	2025	2010	Kapo Man	2177	2001	Ghosts of Mars
1999	1994	Class of 1999 II: The Substitute	2025	2013	Her	2179	1986	Aliens
1999	1994	Witness to the Execution	2025	2015	Bessha Sentai ToQger:Super ToQ Zgou of Dreams	2179	1992	Alien 3
1999	1995	Strange Days	2025	2015	Ten Years	2187	2007	Highlander: The Search for Vengeance
1999	1996	Doctor Who	2025-2045	2018	Ready Player One	2196	1996	Space Truckers
1999	1986	X	C. 2025	2019	Ju Suis Auto	C. 2199	1999	The Matrix
2000-2003	1927	Metropolis	2026	2014	Dawn of the Planet of the Apes	2199	2003	The Matrix Reloaded
2000	1952	1. April 2000	2027	1986	Robotech: The Movie	C. 2199	2003	The Matrix Revolutions
2000	1967	Le Plus vieux métier du monde	2027	1993	Nemesis	2200S	1997	Starship Troopers
2000	1975	Death Race 2000	2027	2000	Fortress 2: Re-Entry	2200S	2008	City of Ember
2000	1990	Hardwara	2027	2000	Sin: The Movie	2200	2014	The Giver
2044-2045	1993	RoboCop 3	2027	2006	Children of Men	2202	2018	Dark Metropolis
2000	1998	Dean Cain's Fear the Rush	2027	2008	Babylon A.D.	2202	2016	2087B: To Be or Naught to Be
2000	1999	Godzilla 2000	2027	2019	Captive State	2204	2004	Ark
2001	1968	2001: A Space Odyssey	2028	2014	RoboCop	2204	2004	Betrograde
2001-2670	1973	Battle for the Planet of the Apes	2028	2017	War for the Planet of the Apes	2220	1956	Forbidden Planet
2001	1991	Riki-Oh: The Story of Ricky	2028	2018	The Cloverfield Paradox	2233-2387	2009	Star Trek
2001	2000	Godzilla vs. Megaguirus	2028	2018	Hotel Artemis	2247	1982	Trancers
2002	1971	The Lathes of Heaven	2029	1984	The Terminator	2259	2013	Star Trek: Into Darkness
2002	1979	Undersea Super Train: Marine Express	2029	1992	Death Becomes Her	2263	1997	The Fifth Element
2002	1993	Patlabor 2: The Movie	2029	1995	Ghost in the Shell	2263	2016	Star Trek Beyond
2002	2001	Godzilla: Mothra and King Ghidorah	2029-5021	2001	Planet of the Apes	2267-2270	2009	Cargo
2002	2001	Mr In-Between	2029	2017	Logan	2271	1979	Star Trek: The Motion Picture
2003	1994	Death Machine	2030	1995	Theodore Rex	2274	1976	Logan's Run
2003	2002	Godzilla Against Mechagodzilla	2030	2001	I.K.U.U.	2285	1962	Star Trek XI: The Wrath of Khan
2004	1994	Time Cop	2030-810	2002	The Time Machine	2285	1984	Star Trek III: The Search for Spock
2004	2000	X-Men	2030-3036	2018	2038 Origin Unknown	2286	1966	Star Trek IV: The Voyage Home
2004	2003	Godzilla: Tokyo S.O.S.	2031	1990	Frankenstein Unbound	2287	1989	Star Trek V: The Final Frontier
2004	2003	Terminator 3: Rise of the Machines	2031	2013	Snowpiercer	2293	1974	Zardoz
2004	2003	X2	2032	2004	Ghost in the Shell 2: Innocence	2293	1991	Star Trek VI: The Undiscovered Country
2005	1985	Mad Max: Beyond Thunderdome	2032	2014	Big Hero 6	2293-2371	1994	Star Trek Generations
2005	1986	The Transformers: The Movie	2033	1995	Lank Girl	2293	2006	Origins: Spirits of the Past
2005-2295	1999	Bicentennial Man	2033	2008	Death Racers	2313-2343	2016	Passengers
2005	2002	Rollerball	2034	2009	Gamar	2375	1998	Star Trek: Insurrection
2006	1976	Any Day Now (Vandaag of Morgen)	2035	1986	Star Crystal	2379	1997	Alien Resurrection
2006-2034	2006	Click	2035	2004	I, Robot	2379	2002	Star Trek: Nemesis
2007	1994	Double Dragon	2035	2008	Doomsday	C. 2401-2500	1971	THX 1138
2007	1996	Adrian's Fear the Rush	2035	2009	Kamen Rider Drive: Surprise Future	2415	2005	6th Flux
2007	2000	On the Beach	2035	2015	Moon Rider Drive: Surprise Future	2440	1939	Buck Rogers
2007	2003	Paycheck	2035-2043	2015	The Martian	2500	1995	Waterworld
2007	2006	I'll Always Know What You Did Last Summer	2035	2018	Pacific Rim: Uprising	2470	2000	Happy Accidents
2007	2006	X-Men: The Last Stand	2036	1982	Android	2491	1979	Buck Rogers in the 25th Century
2008	1992	Split Second	2036	2017	Blade Runner 2036: Nexus Dawn	2500	2006	Aachi & Sispak
2008	1999	Delaerenda	2037	1990	Minikwar	2500	2006	The Fountain
2008	2001	Metropolis	2037	2007	Meet the Robinsons	2501	1987	Timewalkers
2008-2020	2002	Beign of Fire	2038	1990	Moon 44	2505	2005	Idocracy
2008	2004	Kamen Rider Blade: Missing Ace	2038	2018	Isle of Dogs	2508	1956	World Without End
2008	2006	Southland Tales	2039	2010	Iakken	2508	2008	Dead Space: Downfall
2008-2016	2011	Rise of the Planet of the Apes	2039-2045	2011	Loava	2509	2011	Dead Space: Aftermath
2009	1992	Ereajack	2040	1994	Macross Plus: The Movie	2517	2005	Serenity
2009	1996	Sci-Fi Fighters	2040	2000	Batman Beyond: Return of the Joker	2520	2012	Batle 4: Forward Unto Dawn
2009	2002	2009 Lost Memories	2041	1993	Robot Wars	2563	2019	Alita: Battle Angel
2009-2012	2007	I Am Legend	2042	1993	Rain Without Thunder	2578	2000	Pitch Black
2009-2307	2007	Transmorphers	2043-2044	1987	RoboCop	2583	2004	The Chronicles of Riddick
2009	2008	Cloverfield	2043	2010	The Book of Eli	2592	2013	Riddick
2009	2008	Iron Man	2044	1990	RoboCop 2	2654	1999	King Commander
2009	2009	Knowing	2044	2004	Godzilla's Final Wars	2688	1999	Bill & Ted's Excellent Adventure
2010	1984	2010	2044-2074	2012	Looper	2691	1991	Bill & Ted's Bogus Journey
2010-2455	2002	Jason X	2044	2014	Automata	2700S	2017	Valerian and the City of a Thousand Planets
2010	2002	Jamala 2010: A Punk Cat in Space	2045	2000	Red Planet	2707	2008	Mutant Chronicles
2010	2004	The Butterfly Effect	2045	2014	Android Cop	2772	1980	Phoenix 2772
2010	2004	District 13	2046	2005	Doom	2805	2008	BURN-E
2010	2004	Thunderbirds	2047	1997	Event Horizon	2820	2028	Bill & Ted Face the Music
2010	2008	The Incredible Hulk	2048	1917	Blade Runner 2048: Nowhere to Run	2887	1967	In the Year 2888
2010	2009	Up in the Air	2049	1999	Zanon: Girl of the 21st Century	2900S	2007	An Adventure Through Time
2011	2003	Revenge's Tragedy	2049	2017	Blade Runner 2049	2956	2005	Astro Boy vs IGFA
2012	1993	Mutant Action	2050	1990	Solar Crisis	2960	1982	Arcadia of My Youth
2012	2006	Paprika	2050	2003	Code 46	2985	1985	Starchaser: The Legend of Orin
2012-2013	2003	Death Race	2050	2009	Love Story 2050	2989	1989	Millennium
2012	2009	2012	2050	2013	Myssay 2050	3000	1952	Captive Woman
2012	2009	2012: Supernova	2050	2019	2050	3000	1967	The Andromeda Nebula
2012	2010	Titanic II	2051	2001	Zenon: The Zequel	3000	1978	Deathsport
2012	2011	2012: Ice Age	2053	1971	City Beneath the Sea	3000	1996	Mystery Science Theater 3000: The Movie
2012	2011	Transformers: Dark of the Moon	2053	1995	Harrison Bergeron	3000		