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The New School  
Spring 2018

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We see myriad examples around the world: city administrations partnering with data and technology companies to solve our most pressing urban problems. More data promise more customized administration of public services, more equitably meted justice, more efficient transit and health and education. More sensors promise a city capable of constantly monitoring, at all times, the totality of its constituent parts and operations. Yet humans have been dreaming of technologically-optimized cities since, well, the dawn of urbanization. Still, we hold out high hopes for this new age of intelligent urbanism.

The Spring 2018 Urban Intelligence graduate studio at The New School, led by Shannon Mattern and Jonas Voigt, questioned the epistemologies and ideologies coded into these dominant visions of “smart cities.” We wondered about the other forms of intelligence that “smartness” brackets out: the local, embodied, historical, situated, and other-species ways of knowing that enrich the urban episteme. The following projects, which range in topic and tone, explore these myriad urban intelligences. Collectively, they demonstrate how much more we can know about our cities by acknowledging its ways of knowing that might even exceed our own. [\(Click here to visit website.\)](#)

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# PRESS PLAY: ELEVATING THE HAPTIC IN SHARED LEARNING PRACTICES

Figure 1

## ALLIE MULARONI

The intention of the Mixtape Collective is to move away from digital interfacing—even if it’s just temporarily—as a means to reinforce the value in analog artifacts and haptic modes of meaning-making. Focusing on the sentience embedded in our environments, as well as the collective effort communities in those environments exert in expressing affect and gathering memory, the Mixtape Collective is concerned with the “gentle [breaching] of psychological space” while building on Miranda July’s idea of shared openness.<sup>[1]</sup>

### MIXTAPE AS METHOD (PHASE 1)

There’s a kind of physicality in the crafting of a mixtape; like analog filmmaking, it requires actual splicing and cementing of material. “Algorithmically designed” playlists, meanwhile, preclude this haptic sensation <sup>[2]</sup>. To augment the romantic sensibilities in mixtape culture today, the Mixtape Collective asks willing partic-



ed to respond to the following prompt: “What’s in your head? Share a memory, plug your new single, or let us in on what’s #np” (Figure 2). Fusing performance art practice and archival research methodology, the Mixtape Collective presents a way to “mine” sensation and memory while foregrounding the aforementioned breach of psychological space.

Figure 2

## GENERATIVE DISPERSION (PHASE 2)

Where computation prides itself on indiscriminate ubiquity, analog media offers democratic dispersion. Keeping artist Selena Kimball’s idea of the mixtape as “gift” or exchange in mind, the second phase of the Mixtape Collective method involves

distributing the resulting mixtape compilation into various nodes within the environment in which it was created (Figure 3). Feeding the individual selections back into the space of origin, by means of QR codes, my intention here is to once again move away from fast algorithmic processing while underscoring the very participatory approach in this method of data extraction. In a world where urban environments are replete with touch-screens, many of us are not fully aware of our capta generation—even when it comes to an activity as innocuous as streaming music online [4]. Although the selections employ QR codes to direct participants to their respective nodes in the network, the Mixtape Collective is interested in elevating the granularity of capta without assigning it an identification; in other words, we know someone chose this particular song, but we don’t know who. Sharing information in this format maintains anonymity for the “sharers” (no links, logins, or likes are required to enter a selection) while ex-

tending the opportunity to opt-out or “play” after the information has been dispersed. Of course, the hope is that people in the space will engage with (and listen to) the resulting dispersion, generating new modes of memory-making. As a shared learning practice, this method could be implemented across disciplines to produce ecological compilations as a means to “measure” collective memory and interests.



Figure 3

## THE FRAGILITY IN ANALOG HAPTICS

The insistence on haptic engagement stands diametrically opposed to streaming services like Spotify, the interests of which include venture capitalists and corporate sponsorship—not the people who create the actual content. However, what becomes clear in implementing analog methods in the digital era is the constraint in distributing information. The producers of sonic information, in particular, rely on streaming platforms to reach potential consumers. But in the interest of “personalization” (i.e. quantification), these platforms are just one channel through which independent artists find their work disproportionately featured. The Mixtape Collective project is interested in holistically extracting information from willing participants while presenting itself as a grassroots method for up-and-coming artists to share their work. This extends the opportunity for such artists to link to their own domain without having to adhere to any one distribution platform.

In an effort to repurpose the apparent fragility in analog haptic interfacing, the Mixtape Collective may be imagined as



source material for an app like Phonopaper, which reads graphic interpretations of a sound and plays back its “silhouette” in real time. A hypothetical model of this presentation can be seen in the first image (Figure 1).

## ***CONCLUSION***

Where less performative human interaction lends itself to data for the sake of commercialization, more humanistic and less goal-oriented projects lend themselves to data for the sake of memory formation and retention, social interaction, and curiosity. The Mixtape Collective was formulated to extract data slowly as a means to push against algorithmic processing and to qualitatively determine—and learn from—the “output” of intelligence across disciplines and areas of interest.

The rationale undergirding the Mixtape Collective project is personal. Upon leaving the nest, I negligently left mixtapes given to me by friends and admirers in my mother’s care. Needless to say, years of sonic memories are irrevocably buried underground. In the hope of retrieving some material assemblage reminiscent of my lost-objects, I conceived of a method that would promote the fundamental interaction of memory and touch in mixtape creation.

## ***WORKS CITED***

- [1] Jefferson, D. (2018). “Perth Festival: Siren Song turns skyscrapers into surround-sound system.” Retrieved from <http://www.abc.net.au>
- [2] Pelly, L. (2017). “The Problem with Muzak.” Retrieved from <https://thebaffler.com>
- [3] Alison Hoffman’s chapter, “The Persistence of (Political) Feelings and Hand-Touch Sensibilities: Miranda July’s Feminist Multimedia-Making” from Columpar, C. & Mayer, S. (Eds.) (2009). *There She Goes: Feminist Filmmaking and Beyond*. Detroit: Wayne State University Press.
- [4] The term “capta” is borrowed from Rob Kitchin and Martin Dodge’s work *Code/Space: Software and Everyday Life* (2011) Cambridge, Mass: MIT Press.

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# LEARNING GROUNDS, VIRTUAL AVATARS, 3D PRINTED HEADSTONES: WHAT REMAINS WHEN WE DIE?

“Life is not what one lived, but what one remembers and how one remembers it in order to recount it.” — Gabriel García Márquez

IRIE EWERS

When I step into the well-lit industrial office I’m met with the full force of cool air, cool music, and bright lights. Thankfully, my glasses automatically re-calibrate to lessen the strain. There’s a light hum of electric violin in the background, both electrifying and soothing. The walls are white, but every so often a holo-vision of someone’s past circles the room <sup>[1]</sup> <sup>[2]</sup>.

First, an older man in his sixties walks in, sits down next to me, flips through his pocket magazine, slides the screen back into his jacket and exits. Next, a little girl of about seven plops down. She looks up at me with wide brown eyes and smiles. I’m both intrigued and spooked. White walls. White lab coats. If the music had a color, it would be white.

I’ve just encountered my very first virtual avatar of the day, real and embodied incarnates of past lives right there: walking through the Hereafter Institute’s walls <sup>[3]</sup>. I’m here for my first consultation. Although I should be preoccupied with theoretical or ethical concerns, the first question that comes to mind involves clothing. What outfit would I actually like to be immortalized wearing? What does this say about me?

A woman in a white lab coat appears with her electronic slate at the door. She calls my name. I enter the industrial white room and am seated on a padded chair. She offers me a beverage, club soda with lime? I’ll take it. She tells me I can use the holo-wall in front of me to check out my appearance and make sure my hair is adequate for immortal preservation, though not in so many words. She says it soothingly and logical, as if everyone



should want to be virtually captured into a VR hologram. The experts will soon walk through my virtual data footprint with me, take a full body scan, and discuss immortal branding strategies for my legacy. They even offer investment advice, which I take a few snapshots of with my glasses and chuckle. The entire appointment should take no more than 45 minutes.

The discussion of immortality, legacy, and memorialization is everywhere, from what happens to our street avatars that pick-up food deliveries for ourselves (best self, helping lazy self, more in Refinery's 2044 article), to the idea of carbon dating virtual data footprints, to the concept of 3D printing your own concrete memorial using your own ashes [see [Cemetery](#)<sup>[4]</sup> for more information]; the concept of death seems to be on the forefront of everyone's lips. Even so, this conversation contains a cacophony of interpretations and nuances. Particularly in this limanility between virtual and analogue spaces, the pushback between the aforementioned afterlife and the current life is stronger than ever. Likewise, community organizational response to pre-planned corporate practices has grown.

As part of my post-death exploration, I head down to Community Block 13 where a community has plans to break soil on their design for a "learning ground" taking the form of a community land trust. Although the space is still currently a



concrete lot slammed between office spaces, the energy surrounding the meeting is high. People of all ages have congregated to discuss plans for their upcoming design. Children galore. Children in a cemetery? Immediately I am intrigued.

According to executive board member Kgosi Peronel, "this space will operate as a community focused non-profit. As such, we want to promote stewardship of our own cultural landscapes, as well as deathscapes. Both are completely interconnected and it's our mission to bring attention, awareness, and mindfulness to these

systems.” Bringing death to the forefront of urban planning attempts to underscore the value of life. Likewise, it serves as a physical space to ground emotional intelligence, particularly in a day and age in which 80% of our lives happen within virtual spaces.

“Kids are an important component. They inherit our physical world, but they also inherit our cultural values. We want to give community members an opportunity to reflect on the kind of values we’ll inevitably pass along,” Peronel states, while holding her own nugget on her hip.

One of the key components of this urban cemetery is that it reflects upon human values traditionally lost in post-death practices such as the Hereafter Institute. It poses questions, such as: what defines dignity, responsibility, and humanity? What defines a legacy, but more importantly, what defines a life? The community non-profit will offer services for mourning family members that range from assisting with home preparation, dressing of the body, and chemical-free disposal methods, as well as virtual data consultations.

Unlike the white-walled Hereafter Institute, the purpose of these services is to give family members autonomy and choice involved in data deletion, rather than preservation. From crafting virtual wills, to retracing virtual data lives, these services offer family members closure on all planes, spaces, and times.

As if to pay homage to Native American burial intelligence, the space utilizes “berms” or bedrocks of “mounds” to create dimensional hills while





directing runoff water flow throughout the space. Not only will this space serve as an ecosystem for resilient burial systems, but it will also offer educational opportunities to promote local species preservation. Students and community members alike may participate in landscape workshops, including community garden maintenance practices as well as the possibility of extension into a physical seed bank. Family members can even choose to memorialize loved ones through integrated ashes into stones, or integrated ashes into musical instruments that personalize a deathscape according to loved one's passions. These personalized instruments create song and joy beyond mortal years. The most notable component of this space is that it integrates technology in a way that actually blocks signals, creating a tech-free solitude within the grassy plane. Both children and adults will be forced to interact with the natural world, rather than any sort of technological device.



Using the momentum of earlier twenty-first century pushes toward “green” burials, this space operates completely free of the New York state funerary laws. Instead, it requires that all burials complete a closed system loop. From soil, to soil. The cycle continues.

As I reflect on my experiences at both ends of the post-mortem spectrum, I am humbled and grounded by the inspiring message of the Learning Ground legacy. Although I’ll

go home and prep my digital avatar all the same, this experience discovering post-death practices makes me question my own legacy all the same. It forces me to question my own purpose after death, and in doing so, I question my purpose in the here and now. Ultimately, how I'll be remembered is a reflection of how I choose to live in the first place.

## WORKS CITED

- [1] "Hereafter Life - Gabebc.Com". 2018. Gabebc.Com. Accessed May 9 2018. <http://www.gabebc.com/Hereafter-Life>.
- [2] Hereafter Institute rendering modeled after photos, images, and hours of digital video data by Gabriel Garcia Colombo
- [3] "Welcome". 2018. Accessed May 9 2018. <http://www.hereafterinstitute.com/>.
- [4] "Cementery". 2018. Adobe Spark. Accessed May 9 2018. <https://spark.adobe.com/page/GQUxbHKW-JsSZZ/>.

## CONTACT

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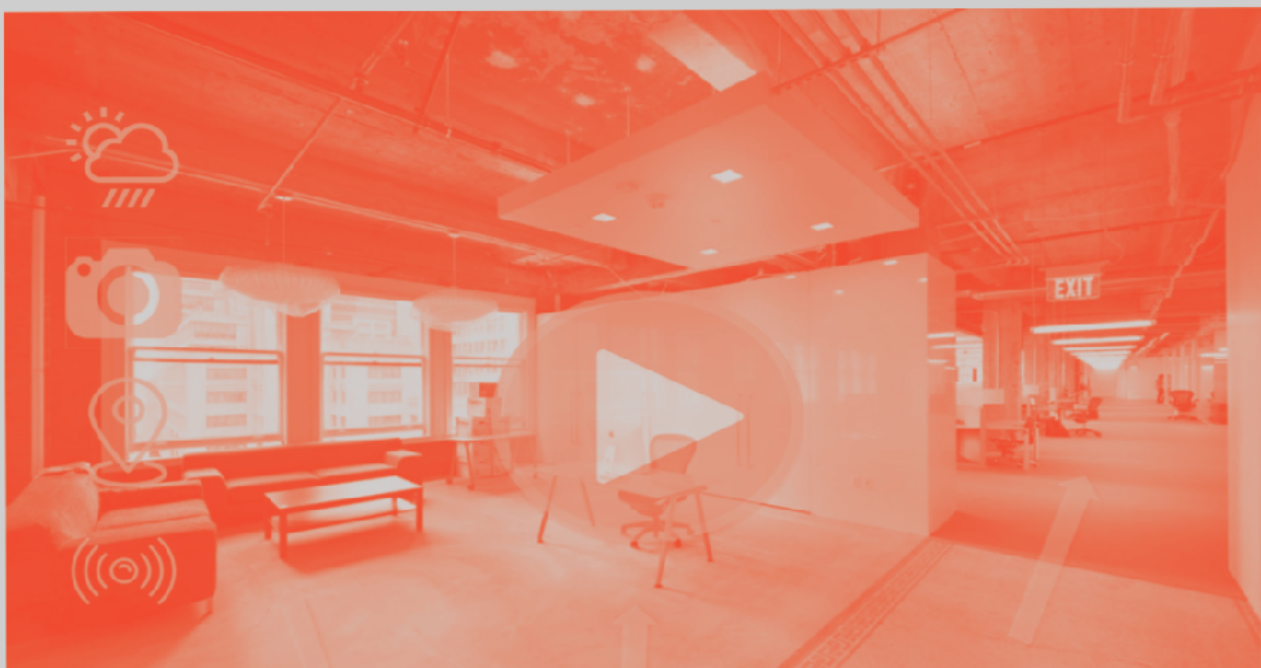


# The New York Times

## Learning Grounds, Virtual Avatars, 3D Printed Headstones: What remains when we die?

By Melissa Owens May 9, 2046

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“Life is not what one lived, but what one remembers and how one remembers it in order to recount it.” Gabriel García Márquez



When I step into the well-lit industrial office I'm met with the full force of cool air, cool music, and bright lights. Thankfully, my glasses automatically re-calibrate to lessen the strain. There's a light hum of electric violin in the background, both electrifying and soothing. The walls are white, but every so often a holo-vision of someone's past circles the room.



CONGRATULATIONS! YOU

ARE NOW THE PROUD OWNER

OF A SMART HOME HUB.

**(1) New Message  
(click to read)**

JULIA FOOTE

Growing numbers and types of smart devices herald a simpler future. With increased connectivity, more granular monitoring, and the automation of everyday tasks, the smart home promises to make life more efficient and its residents better people. But, as with everything, the reality of life in a smart home will inherently be more complex than the glossy assurances this life is built on.

Smart Home looks into the messiness of our promised smart future, exploring the potential failures and complications of domestic devices. In stories told through digital messages (emails, notifications, texts), Smart Home takes a lighthearted look at the various potential futures inherent in a world of smart lights, vacuums, and beds.

Find the game online at: <http://philome.la/footefaced/smart-home>

The following images show an abbreviated version of the 'smart bed' storyline:

Take your sleep to a whole new level. Our Smart Bed offers the ultimate in individual comfort and tracking. Every night, SleepSmart technology in your bed measures how well you sleep and offers recommendations on how to improve.

Sleep your way to a better self. Buy your Smart Bed today.

**Purchase**  
**Back**

We're almost done with setup. As a last step, please connect your new bed to your work email. Sending your sleep data to your office will help you become a more efficient employee. When you sleep your best, you work your best.

**Connect**

Great! Jack now has access to your nightly sleep reports.

Your Smart Bed is fully set up and ready to be used.

**Ok**

**Message:**

*Hello, this is a notification from your bed.*

It's getting late. You should go to sleep in order to be your best self tomorrow.

**Go to sleep || Snooze this alert**

## Message:

Good Morning! Here is your sleep data from last night:

**Sleep Amount:** 7 Hours

**Sleep Quality:** Good

**Aggregated Sleep Score:** 80

**Go to work**

## (1) New Email

To: Jane  
From: Jack  
Re: New bed

Hi Jane,  
I got an email last night with a link to the data feed from your new smart bed. That's great! The more employees who sync their beds to the office, the better. Looks like you slept well last night - I expect high efficiency from you today at work.

One note - if you do any work from home, you can log it through your bed. Working from home is not mandatory, though with this project deadline coming up it may help you get your work done on time.

Cheers,  
Jack

## Message:

It's getting late. You should go to sleep in order to be your best self tomorrow.

**Go to sleep || Work from home**

Good Morning!

Here is your sleep data from last night:

**Hours Slept:** 5

**Sleep Quality:** Good

**Aggregated Sleep Score:** 75

Go to work

Hi Jane,

I saw you worked from home last night - that's great. Just make sure you don't lose out on any sleep! If your sleep aggregate drops below 70 your efficiency at work will drop as well. I hear that the Smart Bed manufacturer offers seminars on sleep hygiene - maybe you can check one out!

Cheers,  
Jack

Message:

It's getting late. You should go to sleep in order to be your best self tomorrow.

Go to sleep || Work from home

Good Morning!

Here is your sleep data from last night:

**Hours Slept:** 5

**Sleep Quality:** Good

**Aggregated Sleep Score:** 70

Message:

It's getting late. You should go to sleep in order to be your best self tomorrow.

Good Morning!

**Go to sleep || Work from home**

Here is your sleep data from last night:

**Hours Slept: 5**

**Sleep Quality: Average**

**Aggregated Sleep Score: 65**

**Go to work**

To: Jane

From: Jack

Re: Good work

Jane,

I got an alert last night that your aggregate sleep score was below 70. I've emailed you about this in the past - low sleep efficiency, and that hurts the whole office. Please meet with me tomorrow so we can talk over your commitment to sleeping well.

Best,

Jack

**Your project is 90% complete**

**Meeting**



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sleep means low  
me today at 1 so

### **WORKS CITED**

Kofman, Ava. "Bad Housekeeping." The New Inquiry. June 9 2016.  
<https://thenewinquiry.com/bad-housekeeping/>.

Koolhaas, Rem. "The Smart Landscape: Intelligent Architecture." Artforum. Accessed May 9 2018.  
<https://www.artforum.com/print/201504/the-smart-landscape-intelligent-architecture-50735>.

McGuirk, Justin. "Honeywell, I'm Home!" The Internet of Things and the New Domestic Landscape." e-flux. April 2015. [www.e-flux.com/journal/64/60855/honeywell-i-m-home-the-internet-of-things-and-the-new-domestic-landscape/ery](http://www.e-flux.com/journal/64/60855/honeywell-i-m-home-the-internet-of-things-and-the-new-domestic-landscape/ery). 2018. Adobe Spark. Accessed May 9 2018. <https://spark.adobe.com/page/GQUxbHKWJsSZZ/>.

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KATHRYN MULLER

Tucked away in deep grey file cabinets, down past aisles of shimmery silk organza and cotton twill, there are hundreds of paper patterns; portrait sized envelopes organized like a librarian's card catalogue. On the front of the envelope is a picture or yellowed color or pencil drawing of the summer dress, pleated trousers, or dress shirt for which the secrets of construction are contained inside. Open the envelope and you will find one large sheet of transparent tracing paper inked with shapes, outlined with varying degrees of solid and dashed lines. Combinations of dots and dashes denote darts, double lines mean to cut on the fold.

Centuries-old techniques are codified onto tissue paper like a map. The legend may or may not exist. On the back of the envelope are the instructions to follow, as well as fabric recommendations (linen, cotton-based blend, non-stretching medium weight). The patterns allow for a range of sizes (S-M, M-L, XL-3XL), the measurements of which depend on the year and maker. Reading a pattern requires several things: patternmaking vocabulary, an understanding of fabric compositions, knowledge of commercial U.S. sizing measurements. Using a pattern also requires other things: a sewing machine, tools and materials, garment construction familiarity, and money, because patterns are not free.



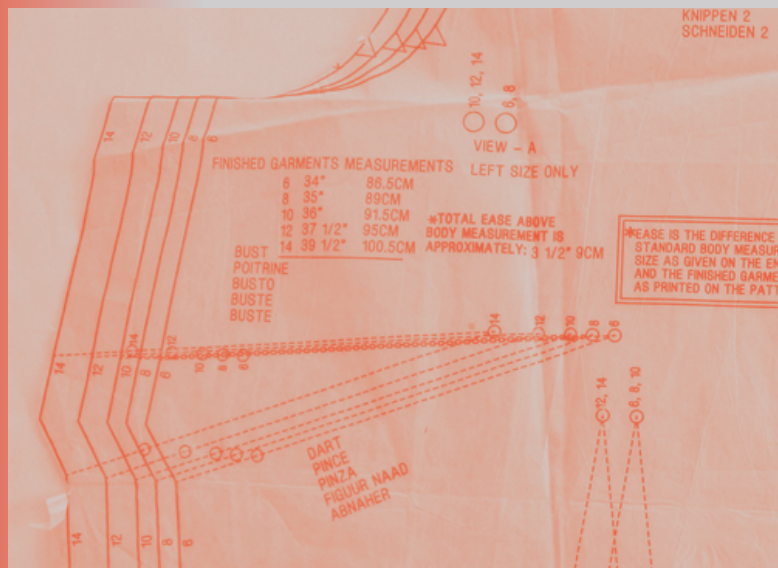


Image: Craftsyt.com.

Historically, paper patterns have their roots in the technological development of the printing press and the distribution of printed trade materials. Renowned Spanish and French tailors would print tips and short articles in trade publications, which also evolved alongside printed and distributed magazines (Emery, 2015). When tailoring and sewing became mechanized by the sewing machine, sewing machine companies started creating paper patterns to be included in their

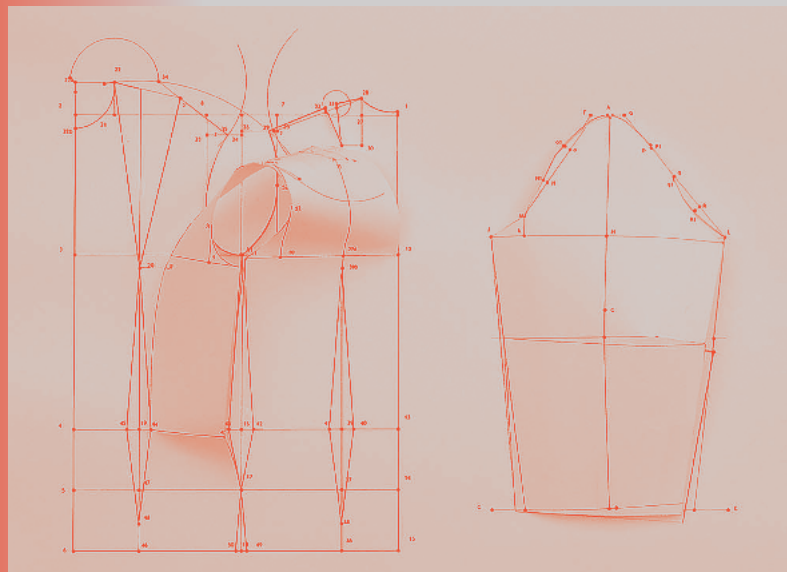
fashion magazines, often for a garment featured in the spread. Primarily a form of advertising, both for the fashion designer and for the sewing machine, the printed patterns became more of a hobbyist's trading card than an entrypoint into fashion designing.

Printed patterns, now available online through craft sites (rarely free), have maintained the same narrow scope of styles, shapes, and sizing methods that they have had since the 1950s. Butterwick, McCall's, Vogue, Simplicity fill the same drawers of filing cabinets while releasing far fewer design than

they did a century before (Emery, 2015).

Despite having a loose variety of styles, the paper patterns share the same organizational elements, all informed and constructed within the same methodology of clothing design informed by the values, standards, and cultural frameworks which shape our relationship to clothing.

The language and vocabulary of the paper pattern hail an audience already informed on the difference

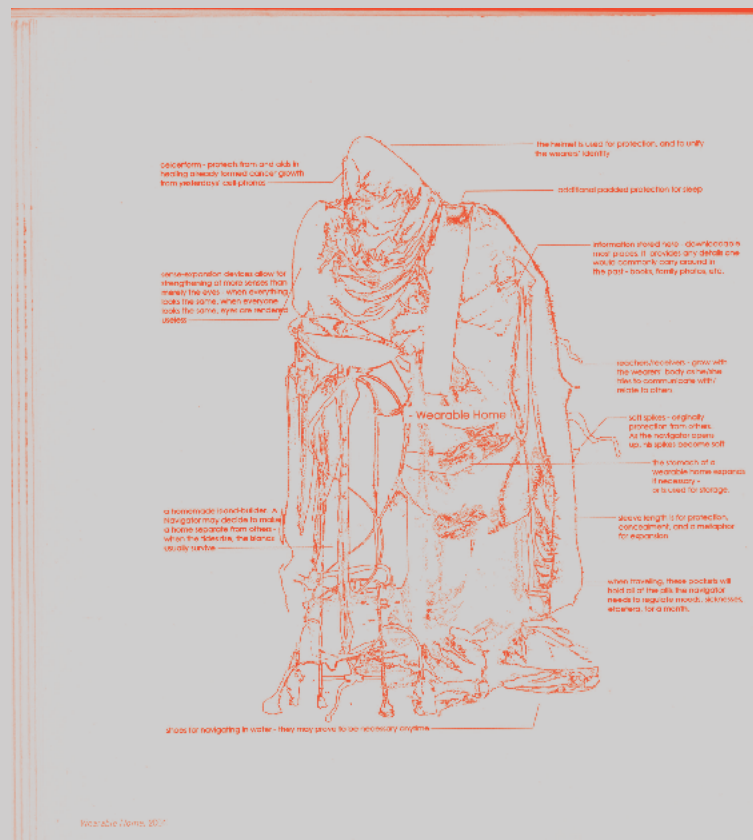


between a gusset, a ruffle, and a seam allowance. The measurements are classified and informed by conventional beauty standards of just how many inches form a small, medium, or large waist. Pattern pieces use standardized shapes constructed along the gender binary, jewel-neck bodice and narrow skirt for women

and upper sloper and pants sloper for men. Success is gauged by how well a garment “fits” the human body, flattering, concealing, and drawing the eye in such a way that codes body parts as more or less attractive, desirable, and acceptable. Discussion of the fabric is limited to mere recommendation, with no discussion of accessibility, breathability, composition, quality, or origin. The brief fabric suggestion is also the provided space for creativity and improvisation within this creative process.

The pattern contains its own code space for the continuation and translation of values through engagement in its rules. Efficiency, standardization, and acceptability seep through the tissue paper: this is a process of cut and copy.

However, as brands, designers, and consumers are starting to perk their ears up at the sound of neoliberalism’s vague interest in sustainability, waste, and ethical production, some much needed attention has turned to clothing production and the design processes we engage in, and for good reason. The monopolistic synthetic construction of fibers is no longer environmentally or physiologically suitable for use with the continued rise in global temperatures and unpredictable weather patterns. The resources and human labor required for the production of synthetic fibers is a distant relative of the material-based design practices that brought us weaving, knitting, felting, and dying. Therefore, a logistic and resource-driven re-approach to garment construction requires more than technological advancements aimed at sustainability. Design, as we have come to know it within the world of fashion, clothing, and textiles, needs to be reworked.



Our world goes to pieces; we have to rebuild our world. We investigate and worry and analyze and forget that the new comes about through exuberance and not through a defined deficiency. We have to find our strength rather than our weakness. Out of the chaos of collapse we can save the lasting: we still have our 'right' or 'wrong,' the absolute of our inner voice—we still know beauty, freedom, happiness...unexplained and unquestioned. (Albers, 1976, 33)

Artist and scholar Anni Albers wrote in her 1944 essay, "One Aspect of Art Work," that an over-emphasis on formal education can lead to inaction in creative work. "We have to apply what we absorb to our work of the moment. We cannot postpone the use of what we learn. Much of our education today

prepares us for a later day, a day that never comes. Knowing for later is not knowing at all" (Albers, 1976, 33). Amassing formal knowledge systems and techniques for a later time is, to Albers, an utter waste of creativity. Intuition and a cultivation of awareness, both inner awareness and material awareness, should instead be the guiding lights of artistic work. She suggests that the design process should begin with an understanding of the materials that would guide the artist from start to finish so long as the artist contributes their intuition, spontaneity, and exuberance. "The

conception of a work gives only its temper, not its consistency. Things take shape in material and in the process of working it, and no imagination is great enough to know before the works are done what they will be like" (Albers, 1976, 34).

A similar approach to design can be found in Eric Gordon and Stephen Walter's essay, "Meaningful Inefficiencies," where they suggest that designing "meaningful inefficiencies" in human systems like civic governance can provide

an opportunity for play, increased civic learning, reflection, and an overall awareness of the systems we are a part of (Walter, 2016). Just as Gordon and Walter suggest that all play has the potential to be meaningful, so too can the design process that is guided first and foremost by improvisation and intuition.



Bucher, Heidi. Mummified Homes, 1985.



What, then, would a pattern look like if it started first with an acknowledgement of its material form? How would the process proceed, guided by the creator's intuition, inner awareness, and their exuberance for the process itself? How would the values of this process translate into a final form? Would this process be more accessible to those who are interested in engaging with textile and fiber arts? Here is my attempt at reworking the pattern, and thus the process of clothing design, from start to finish:

"Intuitive Design Pattern" exemplifies a new "intelligence" of materiality, representing a blending of human and algorithmic intelligence.

## WORKS CITED

Albers, Anni. On Designing. Wesleyan University Press, 1976.

Diamond, Irene, and Gloria Feman Orenstein. Reweaving the World: The Emergence of Ecofeminism. San Francisco, CA: Sierra Club Books, 1990.

Emery, Joy Spanabel. A History of the Paper Pattern Industry: the Home Dressmaking Fashion Revolution. Bloomsbury Academic, 2015.

Forastelli, Fabricio. "Scattered Bodies, Unfashionable Flesh." In The Latin American Fashion Reader, edited by Regina A. Root, 283-89. New York City, NY: Berg, 2006.

Walter, Stephen. "Meaningful Inefficiencies: Resisting the Logic of Technological Efficiency in...Civic Systems." Civic Media: Technology, Design, Practice, by Eric Gordon, MIT Press, 2016, pp. 243-266.

Lehan, Joanna, ed. Ecotopia: The Second ICP Triennial of Photography and Video; Brain Wallis, Edward Earle, Christopher Phillips, Carol Squiers;. New York, NY: International Center of Photography, 2006.

Mattern, Shannon. "Cloud and Field," Places Journal, (August 2016). <https://placesjournal.org/article/cloud-and-field/#0>.

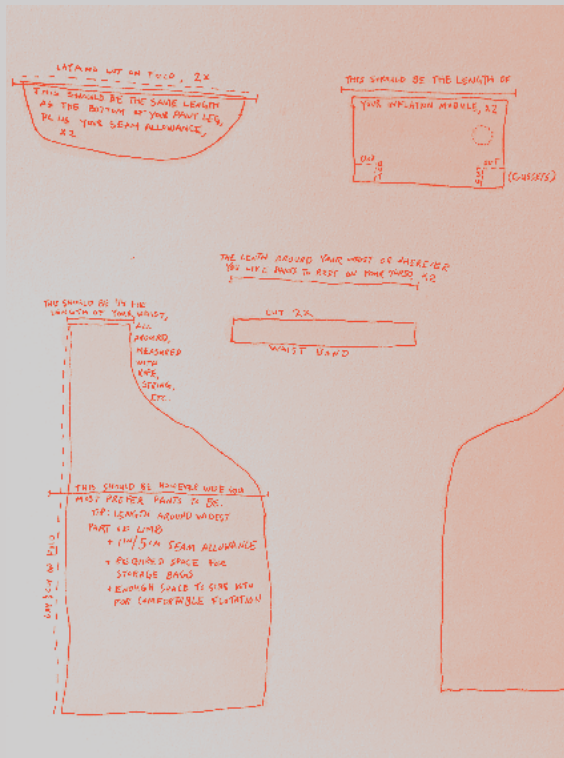
Root, Regina A. "EPILOGUE: Counter-Couture." In Couture and Consensus: Fashion and Politics in Postcolonial Argentina, 149-62. University of Minnesota Press, 2010. <http://www.jstor.org.libproxy.newschool.edu/stable/10.5749/j.ctttstv2.10>.

## CONTACT

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<b>WHAT ARE YOUR INTENTIONS?</b> What would you like to see take form? What do you want from this process? Who are you doing this for? If your intention is to craft a piece of clothing that forms to the curves of a conventionally sized human body, go here. _____ _____ _____ _____ _____ <b>WHAT ARE YOUR VALUES?</b> Tradition, joy, improvisation, modesty, utility, community, compassion, efficiency, other: _____ _____ _____ _____ _____		<b>STEP 1: WHAT ARE YOUR MATERIALS?</b> Get to know your materials, where do they come from? Who made them? _____ _____ _____ _____ <b>Feel, smell, pull, push, poke.....</b>
<b>LET YOUR MATERIALS, INTENTIONS, AND VALUES GUIDE YOUR DESIGN PROCESS:</b>		
<b>BEGIN AT THE BEGINNING, AND KEEP GOING.</b>		<b>REEVALUATE, REVISE, REPEAT.</b>
<b>RESPECT YOUR INTUITION. BEGIN TO SKETCH YOUR DESIGN HERE:</b> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>		





KENNETH TAY

Single-slide presentation, script

In 2016, Singapore made the headlines for being the most light-polluted place on earth. For a nation that constantly tries to top the world's lists for number one spots, this piece of news came to pass as something of a non-event, unnoticed by many. As the report puts it, "the entire population lives under skies so bright that the eye cannot dark-adapt to night vision" (Falchi et al., 2016). To live in Singapore, it seems, is to live within a constant skyglow, and under an illuminated blanket of street lamps.

But if this image of Singapore's night lights gives off the impression of a lively nightlife in Singapore, it should be noted that such nocturnal portraits of cities are often taken at 1.30AM (Carlowicz, 2012). What this means is that the spots of illumination tend to refer, more often than not, to infrastructural spaces, which glow round-the-clock, rather than human activities (Kurgan, 2018). Not surprisingly, in the case of Singapore, the most illuminated spaces are its petrochemical complexes, its container ports, and its airport. Singapore, after all, prides itself as a major gateway for the flows of the global economy.

And now a different kind of infrastructure is being built in Singapore, seamlessly mounted onto the existing network of street lamps. During the last National Day Rally, Prime Minister Lee Hsien Loong (2017) explained that as part of Singapore's Smart Nation program, We are building an integrated national sensor network. We are making "every lamp-post a smart lamp-post," meaning it can mount different types of sensors on any of the lampposts. We are installing more CCTV cameras in public places. We are combining inputs from different sources -- police, LTA [Land Transport Authority], hotels and commercial buildings, even handphones, which are effectively sensors on the ground.

If this sounds like added state surveillance, it should. But as the government admits, its version of smart urbanism was



accelerated in part by an incident in late 2013 known as the Little India riot, which occurred just a year before Smart Nation was launched officially.

On the Sunday evening of December 8, 2013, a fatal motor accident involving a Singaporean bus driver and an Indian migrant worker drew an angry mob of about 400 South Asian workers within the neighborhood of Little India to start rioting <sup>(Neo and Chia, 2013)</sup>. While the police and a team of paramedics attempted to extricate the dead worker from under the bus, the mob grew increasingly agitated, shouting and throwing bottles, baskets, groceries and garbage at them. Several vehicles were overturned, and the ambulance burnt.

The first riot in four decades, the event clearly shook a nation branded by its clockwork efficiency, civic obedience, and political stability. As the Prime Minister put it, “we were caught a little flat-footed. There were too few CCTV cameras monitoring Little India. We had to rely on footage posted by the public on social media.”

As if to underscore this lack of illumination, despite already being the most light-polluted place on earth, the stage design for the 2017 National Day Rally sees the Prime Minister surrounded by an entire backdrop of brightly lit screens tuned to varying shades of blue. Recalling the “blue screen of death” or the “no signal input” screen, the blue screens behind the minister seem to beckon for more data, constantly monitoring input from his captive audience.

In a sense, these screens point us to the entire network of blinking lights underneath the city. I’m thinking here of the sprawling fiber-optic cables that enable the state’s surveillance apparatus to exist in the first place. Lights that are translated back onto the screens of Singapore’s “dashboard governance” <sup>(see Mattern, 2015; also Ho, 2018)</sup>.

Yet, this is not simply to repeat the well-established caricature of Singapore as a top-down surveillance state, because, as the Prime Minister himself reminds us in his 2017 address, Smart Nation is [also] about Singapore taking full advantage of IT. Using IT comprehensively to create jobs, new business opportunities, to make our economy more productive, to make our lives more convenient. To make this an outstanding city to live, work and play.

Condensing the term “information technology” into a friendly acronym of “IT” communicates an efficiency that is by now familiar to most Singaporeans. The split second saved in condensing “information technology” into “IT” may not be much; and as ridiculous as this sounds, there is nonetheless a sense in which this friendly acronym of “IT” will be the thing (the “it”, so to speak) that brings Singaporeans up to speed with the acceleration of the global economy. Again, we are reminded by the Prime Minister <sup>(2017)</sup> no less that “while we have the right ingredients, we lag behind other cities in several areas,” such as China’s ubiquity of electronic payments. But what it, or IT, screens out in haste is that this logic of economic development demands, also, greater surveillance and greater security measures.

Returning to the image of Singapore’s nightscape, the intensity and the distribution of night lights tells us that the city is trying to securitize its infrastructural spaces, to ensure that these spaces remain seamlessly connected to the flows of the global economy. Any disruption to these infrastructural spaces—the petrochemical facilities, the ports, and the airport—would be detrimental to Singapore’s economy.

Perhaps it is not without irony that even these securitized spaces are often compromised by a level of risk and vulnerability necessitated by global flows. Take for example, the case of the port: while it is in theory good to inspect all containers coming through Singapore, such an endeavor would in practice slow down the flows of the global economy, affecting delivery times that turtles all the way down. Too tight a control and the port in Singapore risks losing out to ports elsewhere in the region that may be more attractive for supply chain managers, simply because time is money <sup>(see Cowen, 2014, chapter 2)</sup>. For a world built on two-day deliveries and just-in-time productions, maximum security is increasingly becoming something of a luxury that Singapore can no longer afford, especially if it wishes to secure its position within global supply chains.

While a total awareness and securitization of all cargoes and containers coming through Singapore may be impossible and in fact economically disruptive, this insecurity is displaced elsewhere. By citing the Little India Riot as the basis for expediting the Smart Nation program, Singapore’s version of smart urbanism is no longer simply about improving the lives of Singa-

poreans through the integration of IT, nor is it simply to turn all citizens into measurable and monetizable data—a critique often leveled against corporate visions of smart cities worldwide (Halpern et al., 2013; Townsend, 2013). Rather, it is a displacement of that insecurity onto the surveillance of foreign migrant laborers who built and maintain the very same infrastructures that necessitated this insecurity in the first place.

In other words, the Little India Riot represents less of an urban crisis threatening the social order of Singapore, than it does a labor unrest that potentially threatens to disrupt the seamless flows of the global economy. As Deborah Cowen (2014) points out, “it is the security of supply chains rather than the people who live and work in the city that is at the focal point of a logistics lens.” Here, in Singapore’s case, we might say that the Smart Nation is really just a synecdoche for supply chain security.

Yet if anyone should doubt the hospitality of Singapore towards its migrant labor force, local Singaporeans are not spared either. By mounting sensors onto street lamps for illumination, the state turns every body passing by into a measurable entity, always already a potential threat. “To make [Singapore] an outstanding city to live, work and play” (Prime Minister Lee, 2017) requires that all of us be treated as potential threats to the security and flows of the global economy. Every one of us, under this great illumination, is always already guilty until proven innocent. That is, everyone except for those on the other side of screen.

We ought then to think of Singapore less within the frame of smart cities, than within the broader understanding of logistics and its attendant biopolitics. If the “military history [of logistics] reminds us that logistics is not only about circulating stuff but about sustaining life” and refueling the battlefield (Cowen, 2014), we need to ask ourselves whose lives and whose lifestyles are we sustaining through this blinding light.

For light gives life, literally (Walmsley, 2015). This is evident in the biological and chemical processes that sustain our ecosystems. And its cultural importance is also represented in the ways we describe knowledge as clarifications, illuminations, and revelations. But if we truly live in a photosensitive culture, then perhaps Singapore offers an important complication: That is, there is a biopolitics to this light (see Browne, 2015).

Turning back to the 2016 report on light pollution that started this whole movement, perhaps it's not all that surprising to note that Kuwait, Qatar, the UAE and Saudi Arabia join Singapore at the very top of the list. All of these are places with a significant logistics market. Every one of these places is highly connected to the flows of global supply chains. Every one of these places is highly reliant on foreign bodies to build and maintain their infrastructures.

But these are the same precarious bodies that are subjected to harsh blue lights in spaces where they sleep and rest, kept almost in a captive wakefulness, no different from the goods that move constantly through the seamless spaces where they work (see Wang, 2016). "What does the Smart Nation mean for the workers, sourced largely from the region, whose lives are made vulnerable by transnational capitalism and for whom data is often missing, falsified, or withheld?" (Ho, 2018)

Perhaps it is clear by now that this light sustains the existing status quo. This light secures it, so that we will always have a disposable and exchangeable migrant labor force that we can still afford, while we continue to click "purchase" on the goods we desire, trusting that the goods will be made in parts all over the world, but shipped to us in whole and in good time. For this is, really, the same old world built on the promise of seamless connectivity and flat spaces, only updated to be brighter and faster (see Qiu, 2016).

## WORKS CITED

Browne, Simone. *Dark Matters: on the surveillance of blackness*. Durham: Duke University Press, 2015.

Carlowicz, Michael. "Out of the Blue and into the Black." NASA Earth Observatory, December 5, 2012. <https://earthobservatory.nasa.gov/Features/IntotheBlack/>.

Cowen, Deborah. *The Deadly Life of Logistics: Mapping Violence in Global Trade*. Minneapolis: University of Minnesota Press, 2014.

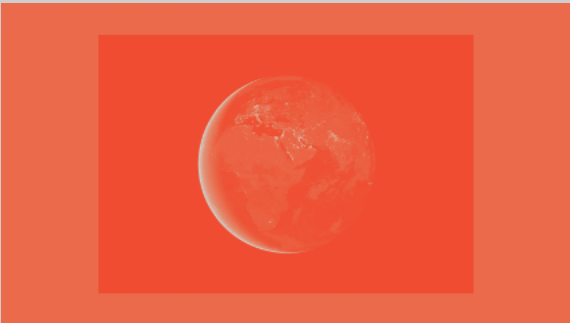
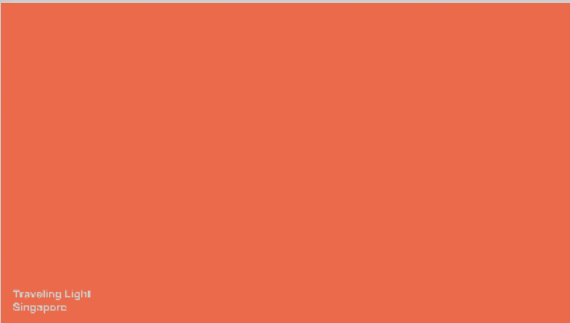
Falchi, Fabio, et al. "The new world atlas of artificial night sky brightness." *Science Advances* 2.6 (June 10, 2016). [http://advances.sciencemag.org/content/2/6/e1600377\\_full](http://advances.sciencemag.org/content/2/6/e1600377_full).

Halpern, Orit, et al. "Test-Bed Urbanism." *Public Culture* 25.2 (2013): 273-306.

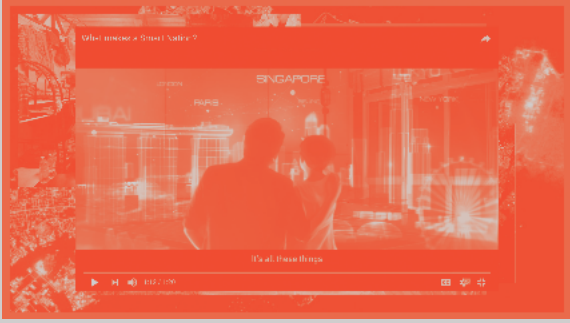
Ho, Rui An. "Crisis and Contingency at the Dashboard." *e-flux journal* 90 (April 2018). <http://www.e-flux.com/journal/90/191694/crisis-and-contingency-at-the-dashboard/>.

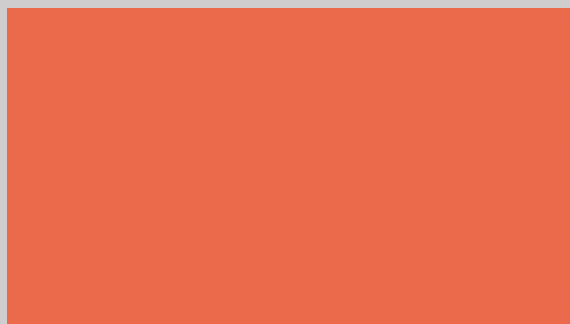
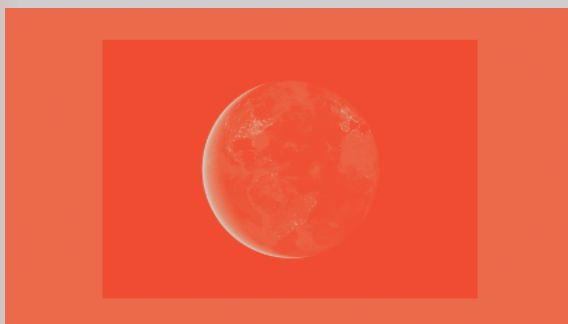
Kurgan, Laura. Cited in "Dimensions of Citizenship". *e-flux gallery*. New York. March 12, 2018.

Mattern, Shannon. "Mission Control: A History of the Urban Dashboard." *Places journal* (March 2015). <https://placesjournal.org/article/mission-control-a-history-of-the-urban-dashboard/>.









Images: Screenshots of presentation slide transitions

Neo, Chai Chin and Chia, Ashley. "Little India riot: 18 injured, 27 arrested." Today. December 8, 2013.

Prime Minister Lee Hsien Loong. "National Day Rally 2017." ITE Central College East. Singapore. August 20, 2017. <http://www.pmo.gov.sg/national-day-rally-2017>.

Qiu, Jack Linchuan. Goodbye iSlave: A Manifesto for Digital Abolition. Chicago: University of Illinois Press, 2016.

Townsend, Anthony. "Introduction: Urbanization and Ubiquity," in Smart Cities: Big data, civic hackers, and the quest for a new utopia. New York: W. W. Norton, 2013.

Walmsley, Ian. Light: A Very Short Introduction. New York: Oxford University Press, 2015.

Wang, Bo. Spectrum, or the Singapore Dan Flavin. 2016. Installation. <http://www.bo-wang.net/spectrum.html>.

### **IMAGE CREDITS; IN ORDER OF APPEARANCE**

Atmospheric Phenomena;  
Ariffin Jamar, Complutense University of Madrid;  
Singapore Guide; Straits Times;  
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Fabio Falchi, et al.

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KEVIN ROGAN

Where to begin? I have a hard time truly defining what this project is supposed to be, to me. I can definitely tell you what it's supposed to be about, though: the "hyperwar," cities, and simulation. What any of those mean in this context are up for debate. The product of the three is a fully armed sort of urban horror.

## HYPERWAR

Loosely (and personally) defined, the hyperwar is a transduction—the grim specter of a future conflict, the hideous exhumed Yaldabaoth of the Baudrillardian "apotheosis of simulation," a title which he gave to the infinitely inhibited, politically contingent promise of nuclear exchange. It is alternately defined as a war of uncertainty (see: Gerasimov doctrine), a multi-domain war in both real and cyberspace, asymmetric war in the megacity, or a war of such explosive ferocity that it startles even the forces engaged in fighting it. The hyperwar is all of these at once, because it's not here yet. It withdraws, is occulted, is uncertain.

That uncertainty informs this project. And in speaking of ambiguity, it has become ambiguous itself, piling on layers of simulation and hyperstition until the final product has looped back around on itself (or so I hope).

## CITIES

The hyperwar is inextricable from the form of the megacity: the patch-worked, diffuse, endogenic unknown, the charnel house of "encirclement



FM 3-06

### THE NEW URBAN DOCTRINE FOR COMPLEX ENVIRONMENTS

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and suppression campaigns.” Felix and Wong write about the megacity in relation to urban operations within it by defining it as a symbol of complexity: “to win in a complex world, Army forces must... integrate the efforts of multiple partners, operate across multiple domains, and present enemies and adversaries with multiple dilemmas.” Simply put, the Army must become more complex than their environment—an evolutionary imperative that abounds in complexity theory.

When attempting to think as a “military intelligence” (human or otherwise), I consistently encountered limits in the prevailing doctrinal approach. Attempting to solve this informed the core of this project, as far as I’m concerned, with the rest of the work—THEIA, the leak format, even the war itself—becoming auxiliary to the attempt to rewrite the way the military works. In military-hyperbolic jargon, I referred to this as the “Fourth Offset Strategy” or “Chaos doctrine.”

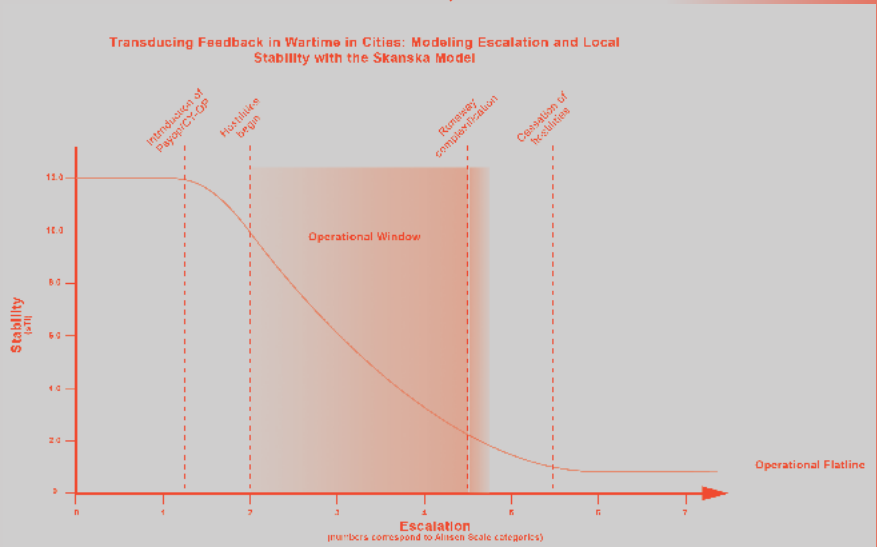


The megacity, along with the hyperwar, fundamentally violates military thinking as they are both entirely defined by cybernetic complexification and mutation. This is something the

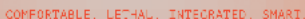
military knows but at present cannot fight. Instead, it avoids the city altogether: its warrens, its close combat, its hidden snipers, its door to door fighting. Ashworth in *War and the City* remarks vividly that the “urban environment creates a highly physically structured but fragmented series of compartmentalised battle-fields that can absorb large quantities of personnel – which, once committed, will be difficult to extricate, regroup or reinforce.” The city eats armies. Urban metabolism goes carnivorous. Look at Stalingrad, look at Berlin.

The historical touchtone is important—most currently extant urban warfighting doctrine (or Military Operations in Urban Terrain: MOUT) is about avoiding cities altogether, or hoping to choke up their brutal capacity for digestion with a torrent of bodies in a war of attrition against space itself, as well as opposing forces. Following Mumford, we can see the city as a megamachine of megamachines, and applying Bar-Yam’s work on complexity, further interlocking subroutines are revealed, a mandelbrotian engine of recursive escalation. In attempting to formulate a future urban warfighting doctrine, I looked to Manuel de Landa’s *War in the Age of Intelligent Machines*, where he adapts Deleuze & Guattari’s notion of the “machinic phylum” and develops the idea of revolutions in war technology and doctrine as existing at cross-section with the phylum. In imagining a “new urban warfighter” I did the same—attempting to visualize what a fully “cooperative” army would look like, with human and autonomous systems completely integrated. This in turn informed a doctrinal approach: reformatting military operations so they became agents of chaotic breakdown in the urban environment, depriving local combatants of their privileged local knowledge, and sluicing the deterritorialized panic by virtue of superior firepower and coordination.

This theoretical-strategic futurism is presently scattered throughout the Cloister IV leak files, but predominantly appears in the form of “UMBRAA,” or the fully playable Game of Metropolitcal War.



The general form of the project is a simulation of a future hyperwar, the fabulation of a “generative myth.” Lagos in the dead of night on 16 June 2036. So we’re back at Baudrillard, in some way. But the simulation is a bit ambiguous and cybernetic as well, involving a few different layers.



For Skanska, the "right" production system, developed by Simon Corporation, has long been the gold standard in building a high-performing job site. Now it's THX's job construction division, a new unit under the firm's City & County Group, that's been instrumental in creating a new standard of efficiency and cost control. With 950 employees, it handles concrete, masonry, and brick masonry, ASHRAE, regular, and irregular construction. It's been up and running since 1995, and it's been a success story. In 1995, the company's revenue was \$1.2 billion, up from \$1.1 billion in 1994. In 1995, the company's revenue was \$1.2 billion, up from \$1.1 billion in 1994. In 1995, the company's revenue was \$1.2 billion, up from \$1.1 billion in 1994.

**GENTEX** LOWING OUT THE  
**BLACK LAKE**  
OLYMPIAN FOREST

At the first level, the bottom rung, is the constructed hyperwar scenario: the “8 Hours’ War” in Lagos in 2036. It’s hell. A hypertrophied, ambiguously autonomous NATO squares off against an insurgent “China-Africa Mutuality”—a counterinsurgent terrestrial hyperpower, composed of a hegemonic China and several African nations. An attempt to invoke Ligotti’s aphorism: “...the fascination, the potent mystery, of the second-rate, half-baked, run-down, dirty little back-room world” writ large.

At the next level up is Cloister IV. Cloister IV is constructed as a ‘leak’, a data format popularized by the Wikileaks format. In analyzing the leak, I arrived at several tenets to inform my design:

1. Data eugenics goes out the window. The amount of noise vs. the availability of a bright throughline of signal is heavily weighed in favor of “noise.”
2. This ‘noise’ can and should be used to construct the “zone of neighborhood” of the scenario “ordinal”. Basically, it should be used for worldbuilding, through the production of seemingly-disconnected ephemera. A universe of crap.
3. The leak itself is, metacritically, not a design project as much as possible. Outside a modicum of attention paid to capturing generic feelings of a future design, attempting to design in the future will always collapse into historicist weirdness and look immediately dated. The digital future is owned by cyberpunk and high California Ideology-Silicon Valleyism. Keep it that way.

The ramifications of this loose thesis pushed me towards a less-is-more approach: the bulk of the leak is text, white on black. The leakers are anonymous with a generic political orientation. The world, hopefully, is allowed to breathe. “To write a story that did not depend on the reader for its existence.”



Please visit [cloister4.com](https://cloister4.com) to explore the leak in full and add another layer to the simulation.

## **WORKS CITED**

Baudrillard, Jean. *Simulacra and Simulation*. Ann Arbor: University of Michigan Press, 1981.

Metcalf, Steve. "Killing Time-Strife Kolony-Neofuturism." Accessed April 8, 2018. [website of origin now offline]

Scharre, Paul. *Army of None: Autonomous Weapons and the Future of War*. New York: W.W. Norton Publishers, 2018.

Ligotti, Thomas. "We Can Hide From Horror Only in the Heart of Horror." last modified April 15th, 2009. <http://topologyoftheimpossible.com/blog/?p=18>.

Sorel, Georges. *Reflections on Violence*. Cambridge: Cambridge University Press, 1999.

Ashworth, G.J.. *The War and the City*. London: Routledge, 1991.

Gerasimov, Valery. "The Value of Science is in the Foresight." *Military Review* 96, no. 1 (2016).

de Landa, Manuel. *War in the Age of Intelligent Machines*. Brooklyn: Zone Books, 1991.

Guattari, Felix and Gilles Deleuze. *Capitalism and Schizophrenia Vol. 1: Anti-Oedipus*. New York: Penguin, 1996.

Guattari, Felix and Gilles Deleuze. *What is Philosophy?*. New York: Columbia University Press, 1994.

Palazzo, Albert and David R. McLain III. "Multi-Domain Battle: A New Concept for Land Forces." last modified September 15, 2016. <https://warontherocks.com/2016/09/multi-domain-battle-a-new-concept-for-land-forces/>.

Bar-Yam, Yaneer. "Complexity Rising: From Human Beings to Human Civilization, A Complexity Profile." pdf. New England Complex Systems Institute, Cambridge, 1997.

Felix, Kevin M. and Frederick D. Wong. "The Case for Megacities." *Parameters* 45, no. 1 (2015).

Hussain, Amir and John Allen. "On Hyper-War." last modified July 10, 2017. <https://fortunascorner.com/2017/07/10/on-hyper-war-by-gen-ret-john-allenusmc-amir-hussain/>.

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SAMIHA AHMED

belong.now is a web application (coming soon to AppStore) that definitively tells its user in which city they belong in the world. Satirical at heart, the concept of belong.now alludes to our society's fascination with and fear of using data to quickly address all of our quotidian dilemmas, while also prompting the user to question whether data can really solve our qualitative problems with quantitative approaches—and to what end.

While belong.now has a satirical overlay, its real audiences—who may have the pain points an application like this targets—are people in times of transition. For example, the feeling of not belonging might be especially present in an early-20s individual who is in their final year of university and must figure out where to go now in a world of infinite possibility. In such a time of flux, belong.now promises to serve as a tool to dissolve out-of-placeness with just a few clicks, making the complex existential heaviness of belonging as easy (and non-committal) as clicking “Add to Cart.”

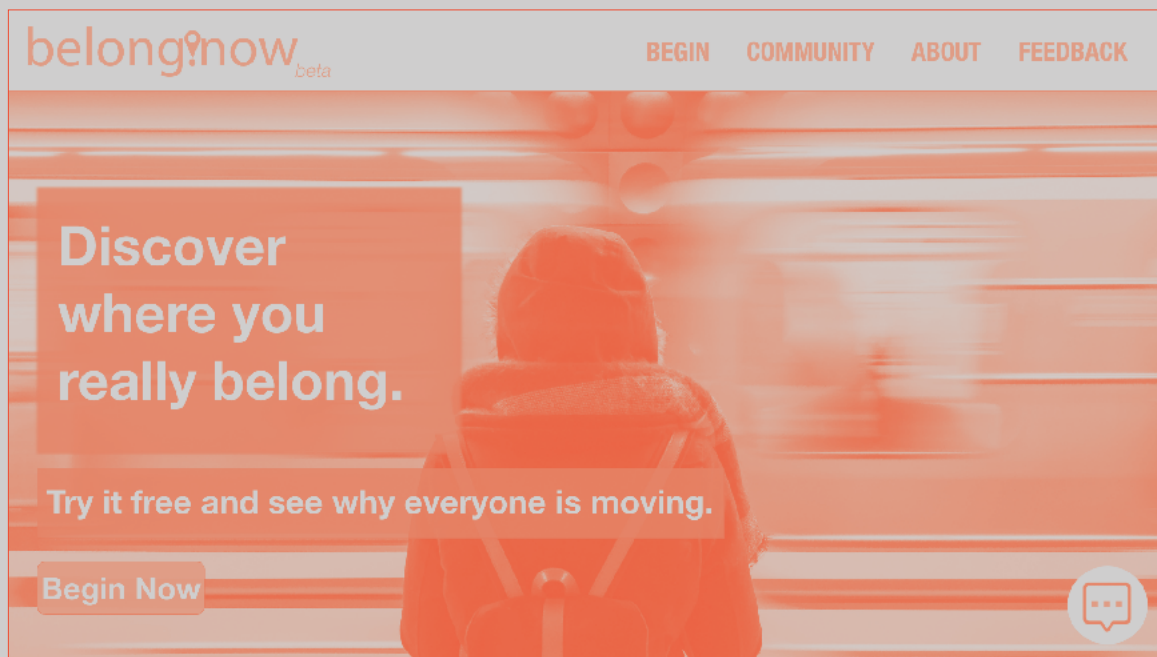


Fig 1—Homepage of belong.now: the app that's turning cities inside out.

**How It Works**

On the following pages, you will be asked to answer questions that our scientists have determined to be central to unlocking one's belonging. Our AI-powered tool will then analyze and match your responses against everything that has ever existed on the internet to find you the one city in the world where you really belong.

You may also skip this process by connecting your Facebook account. Don't worry—we'll never access information that can't help after elections.

**Begin**

Continue with Facebook

**Relationships**

These questions help us learn about your social preferences.

Do you have children?

Relationship with your mother

First crush

Do you believe Yodeling Kid could be the next U.S. president?

**Next**

**You belong in LONDON**

Say bye to your family

Visit the official site of the City of London

Fig 2—belong.now interface:

First, the user inputs information about themselves, like their age and preferences. Once they submit all information, the data is run through a complex, proprietary algorithm and the user is finally presented with a definitive answer about where they belong, along with some helpful advertisements.

As my work draws a connection between two seemingly disparate realms (finding belonging in the physical world and finding belonging through the digital world), the satirical belong.now application is conceptualized from the perspectives of both those who create algorithms and those whose lives are “optimized” by them.

You can experience a semi-functional prototype of this thought experiment for yourself at [tinyurl.com/belongnow](http://tinyurl.com/belongnow).

Till then, welcome to the world of belong.now.  
Thank you for subscribing.

YOU'RE SO CLOSE TO BELONGING!

1 message

belong.bot <helpme@belong.now>

Wed, Oct 14, 2020 at 9:22 AM

To: myemail@tiredhuman.org

brought to you by  
belong:now

# belong:daily

Welcome!

Dear belonging-seeker:

Thank you for signing up for [belong.daily](#), your daily e-mail reminder to go where you belong.

Not long ago, there were no real solutions for dissatisfied city-dwellers to find the right answer to the question: “where do I belong?”. Scientists and scholars have long defined “belonging” or “sense of place” as an intrinsically personal, complicated, and nuanced human experience, central to which are one’s relations to culture, society, and oneself. So at [belong.now](#) we’ve whittled this complex existential burden down to geography. Our easy-to-use web application uses a sophisticated algorithm that takes any data you give us to quickly calculate your best city match. Just tell us who you are and how you feel, we’ll tell you where you’ll feel better—instantly.

Our records show that you used [belong.now](#) to find your city [two days ago](#), on Oct 12, 2020, but have remained in your city. Please leave. To inspire you, I am sharing a heartwarming story from one of our many cherished community members below. You'll also find resources to help you make the move to your new city.

Till tomorrow,  
belong.bot



Image: Katie and her partner reveling in feelings of belonging. Courtesy of Shutterstock.

We belong in Boise.  
From Katie L.

Boise, Idaho

I am so grateful to belong.now for helping me start my life over after my boyfriend left me due to schedule conflicts. Once I clicked "Begin Now" on the app, I felt like someone was finally listening to me, possibly even keeping detailed records of everything I said.

Thanks to belong.now's astonishingly accurate algorithms and all of the resources it provided, my move from Copenhagen to Boise was quick, easy, and painless. belong.now even guided me through my heartbreak—now I only date operating systems (that's her on the left!). I have never been happier. I found home and I know you can, too.

Keep reading Katie's story on our [Community forum](#).

*Join millions of others on the short journey to belonging.*

---

## Live Anywhere Realtors

You can take the girl out of her 60ft2 apartment, but you can't take the 60ft2 apartment out of her. Whether you're looking for more of the same or want a brand new living space, Live Anywhere Realtors will find you the perfect home in your city of belonging.  
Single-Click Hire



## On the Run Movers Co.

A belong.now-certified moving company, On the Run Movers will handle all of your items with the utmost care. They already know where you're going and they'll get there before you to install all your smart devices.  
Single-Click Hire

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**WORKS CITED**

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Cathy O'Neil. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. First edition ed. New York: Crown, 2016. Print.

Clifton, Brian, Sam Lavigne, and Francis Tseng. *White Collar Crime Risk Zones*. 2017. *The New Inquiry*.

Ha, Anthony. "Delphia helps publishers create complex, AI-driven surveys." *Tech Crunch*. March 14, 2017. Web. <https://techcrunch.com/2018/03/14/delphia-y-combinator/>.

Pasquale, Frank. *The Black Box Society: The Secret Algorithms that Control Money and Information*. Cambridge: Harvard University Press, 2015. Web.

Sweeney, Latanya. "Discrimination in Online Ad Delivery." *Communications of the ACM* May 1, 2013: 44-54. Print.

Various Artists, and Tactical Tech Collective. *The Glass Room*; 2017. Mozilla, <https://theglassroom.org/>.

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# CITYCANINE CK9 TOOLKIT FOR URBAN DOGS



**CityCanine**  
LESS LAG, MORE WAG

TIM MURPHY

Urbanization has drastically transformed the human experience, altering our collective consciousness and recontextualizing human sensory ability. Exposed to different stimuli and scenarios, human beings adapted to city living but in doing so lost some developed abilities that were useful before mass urban migration. The rise of a fast-paced lifestyle bolstered by technology integration has produced a generation of urban ‘millennials’ with different desires and goals than those of previous generations. One prevailing example of this change is the decline in marriage rates among millennials <sup>(Lowry, 2016)</sup>. As a result, people are transforming the family dynamic, and most dog owners consider their pet a member of the family.

As global urbanization inevitably increases, other species will be forced to adapt to these new conditions. With that in mind, CityCanine has developed a CK9 Toolkit for Urban Dogs, designed to help ease the transition to city living for urban dogs and to adapt dog’s natural senses to the urban context. In addition, dog owners are provided the satisfaction of giving their beloved pet the same level of sophistication and optimization that urban humans experience in their daily lives. Using a mixture of established dog cognition science and speculative research, our CK9 Toolkit combines training techniques (for dogs and owners), wearable technology, data collection, and genetic identification science to enhance and optimize life for city-dwelling dogs.

## BREEDING IT OUT

In developing the CityCanine Ck9 Toolkit we consulted Professor Alexandra Horowitz, a renowned dog cognition expert and best-selling author of books such as *Inside of a Dog*, and *Being a Dog*. The biggest problem for urban dogs and their owners is the vast quantities of time spent apart; “Some dogs live most of their lives in relative isolation in apartment units (or in homes in less urban locations) while their owners work. This is fundamentally a deprivation: of social interaction (with dogs or people) and of preoccupation (there is nothing to engage them)” (Horowitz, 2018).” This leads to ‘bad’ behavior such as barking and chewing on furniture, and can have profound psychological implications for the dog and, in turn, the owner. The CK9 Toolkit includes products that facilitate remote communication between owner and dog, as well as monitor the dog’s behavior at home. Our CK9 toolkit also encompasses behavioral and exposure training for dogs to better cope with apartment living and on-the-street challenges.

Professor Horowitz has suggested that dogs are “losing their nose”: “there are inevitable restrictions on the dog's movements, ability to pursue natural instincts, and to explore the world in the way their senses allow them to. They are often not ‘allowed’ to smell the world, since we do not value their smelling” (Horowitz, 2018).” The breathing problems associated with brachycephalic dog breeds such as pugs and bulldogs came second to the fact that they looked cute to humans, and Professor Horowitz “Let your dog sniff. I recommend dedicated smell walks, where the walk is simply following their nose wherever and for however long it takes. I like nosework games for owner and dog to get them enjoying sniffing again. Don't leave a dog alone with nothing to do for 8 hours at a stretch.

Socialize your dog early and often. Take your dog off leash wherever possible.”

—Alexandra Horowitz (Horowitz, 2018)

notes that this devaluation of a dog’s sense of smell could lead to us breeding the trait out. CityCanine’s solution is to introduce products that heighten and highlight a dog’s nose, along with owner training to teach humans how to protect and utilize their dog’s sense of smell.

## INNOVATIVE IDEAS, PROVEN PRODUCTS

### Scent Acclimation Training™

Our wearable module combines recognizable, sleek looks with futuristic function. Programmable scent modules allow you to select a ‘home scent’ that can be released in stressful situations to trigger a positive reinforcement response. In addition, owners are taught how to conduct dedicated smell walks designed to reinvigorate and recapture their dogs’ strongest sense. The wearable module also includes a GPS tracker and data storage capability, allowing owners to upload their walk data for easy analysis.

### Stimulus Desensitization Training™

Stimulus Desensitization allows owners and dogs to re-program their initial response to one of the most common causes of urban anxiety: traffic and overcrowding. Horowitz advises, “Gentle exposure to a stressful stimulus (like a loud noise) should be paired with really, really rewarding stimuli (like their favorite treat). Slowly, the noise can become a cue for something positive.” With this in mind, our system of exposure and reward works to reduce stress through repeated exposure and reward to urban stimuli.

### DogWhisperer™ Home Base Module

The latest in remote communication, owners can use their smartphone, smart watch, or computer to broadcast and receive sound and video from our home module. Affording owners the ability to check in on their dog’s welfare from any location provides peace of mind while also remedying the lack of activity for stay-at-home dogs. Equipped with a video screen, speaker, and motion detector, dog owners are provided an additional home security resource along with the any time access to their dog—it’s like Digital Daycare? <sup>[1]</sup> Additional scent and treat release capabilities allow owners to calm and reward their dog remotely.

### Genetic Analysis and Storage

Recent years have seen more sophisticated genetic identification technology become available to the general public. City-



Canine can now extend the same level of knowledge and sophistication to dog owners. Simply take a cheek swab and mail it to our labs to get a detailed genetic breakdown for your dog, allowing you to plan for future breed health concerns. CityCanine can also provide assistance for owners of “problem breeds” to assuage fears of apartment boards, dog day cares, or other potentially exclusive establishments. In addition, this is the first step in the dog cloning procedure, should you wish to explore that option.

### CK9 Genie™ Wearable Sensor

The wearable sensor provides a variety of functions such as activity and sleep monitoring, dog ‘mood’ sensing, and GPS tracking. All of this collected data is uploaded to the cloud, allowing you to track your dog’s habits and compare them to breed standards. This information can be sent to pet care providers to help them better assess your dog’s health and make more accurate suggestions. The lightweight and stylish module is available in a number of colors and attaches to any collar.

### Marketing Strategy

“Our designs were meant to feel fun and approachable. They almost mimicked a dog’s personality in a lot of ways. Fun, goofy graphics and a playful type helped us seem like a friendly brand right from the get go.”—Bennett Einbender, Designer (Bennett, 2018)

Our product targets a specific market: urban ‘millennial’ dog owners who live technologically-integrated lifestyles. Inspired by the marketing imagery and style of

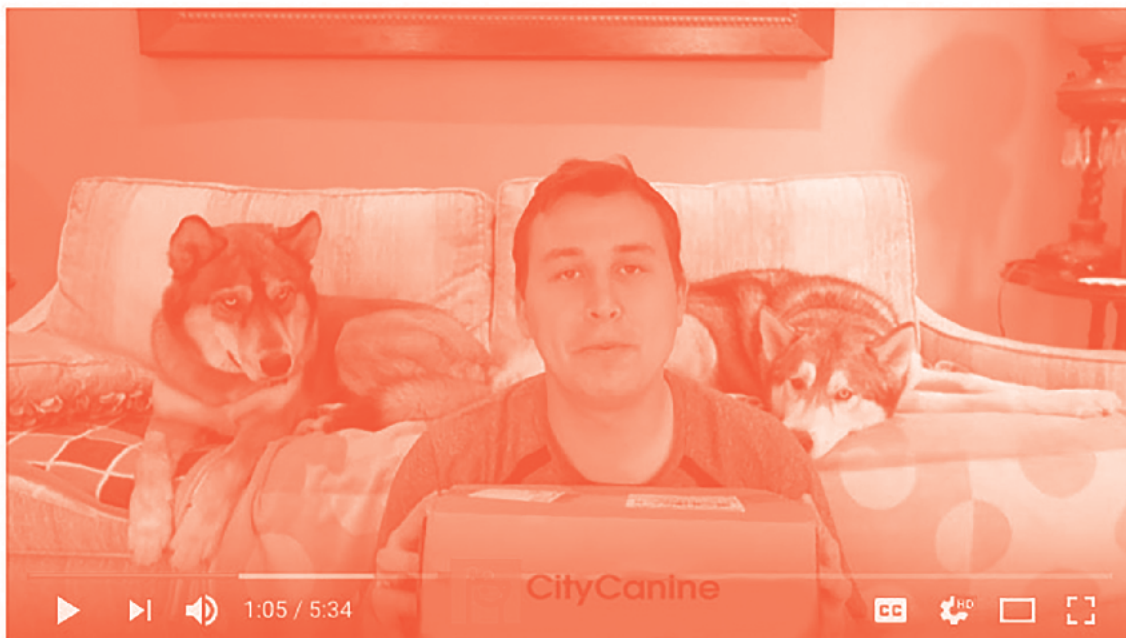
Silicon Valley, CityCanine’s CK9 Toolkit combines elements of techno-futurism, data-driven optimization, and ‘everything in a box’ lifestyle improvements. However, since our products are for dogs, we sought to capture the playful and joyful character of the canine spirit. Our design team recruited former employees of BarkBox and Apple, with aims to create a sleek, forward-looking



aesthetic that still retains an organic and lively element of ‘fun’. The CK9 Toolkit is designed for the tech-savvy owner who wants to extend their own technology-enhanced reality to their dog.



Many of our products require an internet connection, and involve components of data storage and comparison. These products are also built for sharing, as millennials already catalogue their lives extensively on social media. Owners are encouraged to create dedicated social media accounts to share pictures and data collected from their pets. We also contacted influencers to post reviews, unboxing videos, and other content to further solidify our brand image and reach our target demographic. By appealing to both the inorganic and organic concerns involved with the CK9 Toolkit, we forged a unique but recognizable brand image and logo. In addition, using resources like subway ads and targeted Instagram posts, we reached our audience in the spaces they were already interacting with in their daily life.



## CityCanine (CK9) Toolkit Unboxing

5,714 views

193

5

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**Connor O'Brien**

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### WORKS CITED

[1] <https://petchatz.com/> Slogan

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Einbender, Bennett. "Re:BarkBox Experience." Message to Tim Murphy. April 12th 2018. Email.

Horowitz, Alexandra. "Re:Dog Cognition Research." Message to Tim Murphy. April 8th 2018. Email.

Johnston, Angie M, et al. "What Is Unique about Shared Reality? Insights from a New Comparison Species." *Current Opinion in Psychology*, vol. 23, 2018, pp. 30–33., doi:10.1016/j.copsyc.2017.11.006.

Kim, Ga, et al. "Species-Specific Challenges in Dog Cloning." *Reproduction in Domestic Animals*, vol. 47, 2012, pp. 80–83., doi:10.1111/rda.12035.

Lowry, Erin. "Why Are So Many Millennials Opting For Pets, Not Parenthood?" *Forbes*, *Forbes Magazine*, 31 Aug. 2016, [www.forbes.com/sites/erinlowry/2016/08/31/why-are-so-many-millennials-opting-for-pets-not-parenthood/#2e376aa33963](http://www.forbes.com/sites/erinlowry/2016/08/31/why-are-so-many-millennials-opting-for-pets-not-parenthood/#2e376aa33963).

### PRODUCTS ADAPTED FROM:

BarkBox  
 Embark Dog DNA Test  
 PetChatz HD  
 PETKIT Fit P2 Pet Monitor





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