



TOGETHER TOMORROW

A magazine of tomorrow's stories  
that describe how technology will  
change the way we live.



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**/MONTAG ISSUE 1:** Together Tomorrow. Welcome to MONTAG – a magazine of tomorrow's stories that describe how technology will change the way we live. In this, the first print edition, we examine how we will connect to each other as humans in the near future. The features and short fiction in this issue ask some of the most basic – and most complex – questions of all. What happens when technology allows us to be physically apart but experientially closer than ever before? What do we really unlock when we're handed the keys to our perfect life experience? When we blur the lines between fantasy and reality, does "reality" even mean anything any more? These articles are a selection taken from our online magazine MONTAG.WTF.

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# MONTAG

Launched by Grover in March 2017, MONTAG is a magazine that explores, on a deeper level, where new technology is taking us as a society. MONTAG reports from the fuzzy edge between new tech and everyday life and asks: when technology evolves in exponential leaps, what will we do next, and what does that change mean on a human level? Grover started MONTAG to encourage the reader to find out for themselves.  
- Read more at [www.montag.wtf](http://www.montag.wtf)

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# Memento Mori: would you keep a dead relative as a VR pet?

As a society, we've always used the latest technology to cling onto loved ones that we've lost. Whether it's death-masks or post-death family portraits, what's clear that letting go is incredibly hard. So, how will this obsession point to how we'll deal with death in the future - when we can recreate dead people in VR?

One remarkable consequence of technology evolving at an exponential rate is that we can dig into our innermost desires and confidently predict that they'll be fulfilled within a few years without sounding like a lunatic.

A lot of future-gazing becomes a string of simple questions which mask the fact that we're strolling into a vast moral maze. These questions are ones we have been internally haggling over for as long as we've been able to: how do we deal with the randomness of life, death, and everything in between - things we want, but can't control?

So here's a question that will test your moral fortitude: if you could bring a loved one back to life, would you do it?

## A soul with a body, not a body with a soul.

We cling to our physical selves for dear life - literally. It doesn't really matter who said it first - answers vary between a forgotten Church of England Reverend, author C.S. Lewis or, erm, best-selling self-help author Wayne Dyer - as humans we've always struggled with the idea of being "a soul that happens to have a body, not a body with a soul."

Whether it's prioritising physical well-being over mental, endlessly scouring the web for new wonder-diets, or - like billionaire Peter Thiel - explicitly stating that one's aim is to live forever, whenever

we look to maintain life, we look to the physical world.

*The weird ways we have kept alive memories of the dead points at us being ill-equipped to deal with the brutal reality of death.*

We don't only keep hold of items that belonged to dead friends and relatives as mementoes - our society has also shown a frankly odd and macabre propensity for preserving things that look just like dead people.

Depending on your perspective, the weird ways we have kept alive memories of the dead points at us being ill-equipped - or hopelessly unable - to deal with the brutal reality of death.

## Death Mask Replica

Only 40 per cent of children born in the 1850s reached their 60th birthday, making death, as well as life, a state to be preserved for posterity.

Death masks - a mould of a recently-deceased person's face - are odd: a teenage goth's take on Madame Tussaud's. And while to our modern minds capturing a likeness of a face just after the moment of expiration might beg the question, "hey - why not just take the impression of the mask when the subject is alive?" it does point at a rather more blasé - and possibly more healthy - approach to death, from an era when people experienced death much more often.

*The Victorians, naturally, found an ideal balance between their penchant for pioneering innovative technology and their deep-rooted preoccupation with death.*

The idea of a death mask was to revisit a person and reflect on more than loss. The perfect brass copy of Napoleon's face, for instance, is part of a collection of items that explain the whole cycle of his life, not simply a last-ditch attempt at recording his likeness forever.

Some death masks were cast multiple times; one, taken from a girl who drowned in the

Seine, became a fashionable wall decoration among the early 20th Century Parisian art set.

The Victorians, naturally, found an ideal balance between their penchant for pioneering innovative technology and their deep-rooted preoccupation with death. Quickly taking advantage of new photographic technology, they invented a family snap with a difference: the Memento Mori photo, in which the central participant was dead.

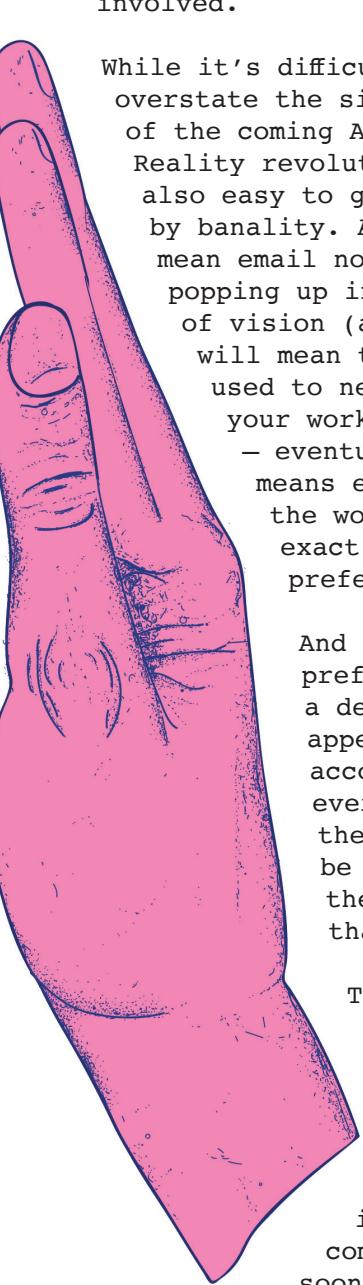
Rounding up the family and leaning in around a corpse meant that the Memento Mori was half celebration of life, and half stern reminder of the unavoidable nature of death.

It was the perfect buzzkill-keepsake for our moustachioed and crinoline-swathed forbearers, who followed the gloomy example of Queen Victoria, in the midst of spending her final forty years wearing black and mourning the loss of her beloved husband, cousin, and alleged genital piercing enthusiast, Prince Albert.

It also turned out that the dead were ideal portrait subjects in an era of long exposures where the slightest movement could spoilt a snapshot. Consider the irony of the utter, inherent stillness of your death providing the most conveniently clear image of you, that you'd never see.



Is our behaviour today really much different? Are you wearing a dead relative's piece of jewellery right now? Do you have a dusty VHS - that you couldn't even consider playing without a trip to a fleamarket - tucked away somewhere safe, because it's the only imagery you have of Auntie Vera?



Are you keeping love letters, just in case the sender dies before you do?

### An augmented family

*If you'd like a dead relative to accompany your every step in life, you'll be able to have them do just that.*

Like the Victorians, we're living in a time of rapid technological development. And if the wish-fulfilment they sought was to be able to occasionally gaze at the face of someone who had died, then our generation's equivalent is going to be a little more... involved.

While it's difficult to overstate the significance of the coming Augmented Reality revolution, it's also easy to get distracted by banality. AR won't just mean email notifications popping up into your field of vision (although it will mean that too – get used to never escaping your workaholic boss) – eventually, AR means experiencing the world in the exact way you'd prefer it to be.

And if you'd prefer to have a dead relative appear to accompany you every step of the way, you'll be able to have them do just that.

This is the uncanny power of AR: scoff at this idea if you like – but people want it, so it's coming. It will soon be time make a tough but important decision: will you let the dead-and-gone remain dead and gone?

### Future Grief

Big technological leaps often sound like bullshit, or crazy, or too complicated, or all three. But a stroll through the four stages of Future

Grief is a trivial series of steps.

### Step 1: Now, Part 1: Scan yourself. Scan everyone.

We're already keeping avatars of loved ones. In one UK supermarket, you can step into a scanning booth – and within a week or so receive a 15cm-tall 3D-printed model of yourself.

You might think of it as a fun gimmick or use it as an ironically self-referential paperweight. But when you kick the can, do you think your relatives might fetishise it as an enhanced snapshot of the real you, warts and all? The wonky posture, the dated clothes, the regrettable hairdo – this lump of 3D-printed plastic is a tangible echo of you, and it can fit in a handbag.

### Step 2: Now, Part 2: Your home videos, in volumetric 3D.

With fancy but affordable cameras, you can record a person as a volumetric 3D model. Sync this model with some audio (Why not tell the story of your life? Yours is as good as anyone's, right?) and your great-great-great grandchildren will be able to load you up into their AR headsets.

When they've stopped giggling at the rudimentary nature of the graphics, they'll experience what it was like to have you right there in front of them.

### Step 3: Five years' time: You are the augmentation.

You might not be able to meet these great-great-great sniggering whippersnappers, but they can meet you. And that's the dream of Augmented Memento Mori: everlasting life. Within a few years, immersive AR will mean that it'll be possible that not only will a 3D model of you appear in front of the user, but it will be context-aware.

This means that in the future, when your descendants gather at Christmas and fancy hearing your stories one more time, they'll load "you" up – and you'll appear to walk through

a door, sit down next to the fireplace and share the anecdotes with a family you'll never meet.

### Step 4: 10-15 years' time: Uncle Dave, life guide

When we are all wearing AR headsets as a matter of course, the 3D model of you will become an avatar; a real-life video game character. You don't even need to record your movements or voice specifically: Adobe has already created software that can mimic your voice and make "you" say anything that anyone else wants.

You'll be an AI-powered avatar for the family member who misses you the most. The technology will combine all the data we need: calendars, maps, wikis, etc, then filter it through AI, and create a "you" that is infinitely knowledgeable, and yet still identifiably you.

Thus, your new life after death will be as a helpful guide: hinting, pointing, encouraging, reminiscing, defending, and urging someone who really needs you there.

### You'll live forever (for someone else)

Similar to how the best chance of having a perfect photo taken in 1849 would involve you being well and truly dead, the ultimate irony of the AR Memento Mori is that we won't benefit from it at all. Life after death doesn't involve the deceased: it's all for the benefit of the living.

For someone who loves you and misses you, your avatar will be an essential part of the grieving process. And just like how corpses were dressed, arranged and posed for photographs, these avatars will be filtered through the expectations of others.

Short tempers will be whittled down, questionable jokes swapped for good ones, a tendency to drink too much at family parties subtly erased.

You'll become the person they need, not the person you are; ready to guide and support whenever they need you. It's a wonderful idea. Of course some people won't ever be able to let you go – and would you really want them to?

By J.K. Mittwoch

## I was there

MONTAG FICTION #001

**MONTAG SHORT FICTION #001**  
MONTAG publishes curious short fiction that explores our strange future and what it might feel like when we get there. The stories are outré and atypical; they're also closer to today than you think.

I was here, in my synthfoam chair, but I was also there at the turning of the thousandth year since the ERA, the Eve of Retinal Augmentation.

I witnessed an entire millennium's worth of glorious celebrations through the eyes of my kin without moving an inch from my position. Aerial pyrotechnics flew through the sky all over the State, bursting with joy, and it seemed like the entire planet celebrated for us lucky few.

Explosions studded the atmosphere with rhinestones, and I saw the orb of our bedazzled planet, simultaneously the size of a glittering bauble in front of me and then exceeding my field of vision, the sky-scale projection somehow even larger than I remembered the sky itself. The faces of the Visionaries, blinding us with smiles and eyes twinkling with hope for the future, wreathed in gold, silver, and platinum stars, filled the sky and blessed us with music and light, raining wishes of health, wealth, and happiness upon us.

We are one people, because they gave us the gift to see through each other's eyes.

I was here, couched in synthfoam, far from harm, but I was also there. I saw through the eyes of my kin, as they were discovered and subsequently persecuted by some who felt threatened by our existence. When other States realized that we all could see through the eyes of one, they sought to destroy us. They feared that we were spies, and began to capture and torture us, trying to figure out how to debilitate our sight.

During the first of these incidents, it was the only thing beamed on the Retinal News Network for an entire day and night. I remember "LIVE" in neon green scrolled across the bottom of my field of vision for the entirety of the stream, a testament to our will to survive. We grew more secretive, separated from the other States, and advanced as one people in the shadows of their civilization.

I was here, in the same place, but I was also there when my child was born. I saw through the eyes and the hands of the medical assistant robot who assisted my spouse in the birthing center. My spouse was not there. Her retinal implants were buzzing with static, a sign that she was receiving brain stimulation directly through her optic nerve allowing her to dissociate completely from her body and feel no pain. Her status, hovering in the right corner of my vision, was set to "Away."

I took control of the hands of the medical assistant robot after it lifted my son free

from her body, and activated the process of severing his umbilical cord. My son, crying with eyes screwed up tight, could not yet witness the full beauty of this world, unaugmented as he was, and as he drew gasping, crying breaths to deeply fill his new lungs with air, he slowly blinked open milky blue eyes. I let the medical assistant's autocontrols take over as another bot wheeled my partner to a recovery bay.

Through the eyes of the medical assistant bot, I watched it carry my son to the natal initiation center, issue his identification chip, and then shine red lasers into his sightless, staring eyes. A stream of nanomachines swam down each beam of light to take residence atop the retina, assembling themselves into a microscopic viewer and connecting to the Network.

The red laser changed to green, signaling a successful implantation, and I released a breath of relief. I received a notification in the top right corner of my vision that Harold would be delivered to our habitat in one hour by State Transport Of Retinabiled Kin, and another notification followed immediately: I could now see through the eyes of my child.

As the medical assistants continued to perform the final tests of health and wellness, I connected, passed genetic authorization, and was allowed access to his feed. The world seemed brighter through new eyes.



By Kathryn Lawrence

## Dinner for one

New technology isn't just about making lighter, faster wearables or drones - food has been re-engineered with the same ruthless approach to efficiency. You can survive solely on Soylent, the meal replacement wonder-powder that has taken Silicon Valley by storm. But would you want to? And what would it say about you if you did?

Soylent was designed for efficiency, for body hackers who want to spend their twenty waking hours hacking industries and building empires – because if you sleep more than four, you're not disrupting enough.

Rob Rhinehart, CEO and founder of Rosa Labs, which has been distributing Soylent commercially since 2014, explained his relationship with food this way: "I utilize Soylent only at home and go out to eat when craving company or flavor."

Many have criticized Soylent and Rhinehart's attempt at engineering a more perfect fuel for the human machine with his highly nutritious synthetic food substitute, as antisocial, unhealthy, and restrictive. As someone who was once a subscriber to Soylent 2.0, I can defend its nutritional validity as a meal replacement,

but concede that it's also one of the loneliest things you can eat.

Once a month, a cube of matte white bottles with black tops filled with 400 calories of liquid Soylent each was delivered to my door in San Francisco. At the time I lived with a software engineer who was also devoted to the Soylent lifestyle (and quite possibly still is) during what I believe historians will call the city's second (or third, or hundredth) gold rush.

Everyone we knew was in a startup or tech company, and building their own company or app on the side. Everyone was trying to eke out a few more hours every day to work on their personal projects that would propel them to Zuckerberg levels of success, or hustle at a second job, because even in 2014 the cost of living

was astronomical. We were both in that grind-or-die mindset: cutting corners on time and money any way we could.

*Iterations of the Soylent recipe are numbered like software updates*

The original formulation of Soylent was a powder which was to be mixed with water and oil to form a shake that you were supposed to carry around in a BPA-free thermos all day. Our household decided nobody had time for that (efficiency = king!) and started ordering after Soylent 2.0 was released.

In what's either fantastic marketing targeted directly at us Silicon Valley tech nerds, or simply Rhinehart's robotic way of seeing the world, iterations of the Soylent recipe are numbered like software updates, including release notes and a changelog of the nutritional tweaks for each iteration.

2.0 was the first version to be packaged as a liquid, pre-mixed.

Various media outlets tried the "I ate only Soylent for thirty days" stunt, derived from Rhinehart's claims that he lived on it exclusively for that long before releasing the first version of the formula to the public. As far as we know, Soylent is nutritionally stable. Can our bodies reliably absorb all these synthetic nutrients and vitamins suspended in algal glop? It seems like yes, but only more time will tell.

There are people who have lived on Soylent, or used it as a meal replacement consistently, for years, with no obvious repercussions. This isn't to say it's perfect, or even safe: Rosa Labs' latest product, Soylent Food Bars, were recalled in October of 2015 for making several consumers violently ill and have yet to be re-released. (In my personal experience, however, 2.0's product quality was very reliable.)

The digestibility was one of the most talked-about features of a Soylent diet in the media: some people had terrible, noxious flatulence. I have a pretty sensitive stomach and after the first time that I felt like vomiting after chugging a bottle (I later learned to grab a straw and sip at it instead of downing it all at once, because the body is not equipped for absorbing 400 calories of complete nutrition at the same time) I did not have any gastrointestinal issues.

Without getting too gross, my digestion was... optimal.

Products labeled as "liquid diets" and "meal replacements" are fraught with social baggage that usually associates them with women, and with foods that are designed to change the composition of your body. The Soylent brand has faced criticism that says it's no different from what women have been drinking – instead of eating – for decades, but because it's "now made by and for men, we call it tech."

What makes Soylent different from its meal replacement counterparts marketed towards women, however, is that Soylent is not designed to change the composition of your body. This

is where the feminist outrage should be directed: towards a market that believes women don't need or want complete nutrition, that we will accept insufficient amounts of fats, carbohydrates, proteins, or sugars because it will make us look good.

Losing or gaining weight by drinking Soylent instead of eating real food is not the goal – the goal is simply to maintain your body with as little thought as possible. Of course, removing all the thought from food also removes all the emotion.

### *The goal is simply to maintain your body with as little thought as possible*

The taste is not optimal. Some describe it as unoffensive but bland, like cornflakes or unsweetened soy milk. I thought 2.0 tasted like something unmentionable, but less salty, and totally repulsive. I learned from /r/soylent, the subreddit for Soylent users, what mixed well for flavoring, and found I could use two pumps of caramel coffee flavoring syrup to make it drinkable.

The community around Soylent discuss mixing it, hacking the formula, and ask each other nutritional or allergy-related questions – but to an outsider, their communications often read as bizarre and sad.

Thread titles like, "Has anyone else noticed a shift from 'Cheerio Milk' to 'Water filtered through a bunch of dirty cardboard'?" or "Does food ever stop smelling amazing?" and "Do people worry about you?" reveal that although a supportive Soylent-eating community exists, they are still very separate from society. They suffer from the lack of pleasure from food, the lack of social contact, and whatever professional or personal goal is driving them to cut enjoyment of food out of their lives.

The dream of Silicon Valley's tech workers is that they'll work so hard now, in the right place and at the right time, that they'll never have to work again. For now, forego food and social interaction, forget about work-life balance, because once you sell your app or your company, you can live on the beach or travel all over

the world and pursue your real passions (which probably include eating real food).

Tim Ferriss is a classic example: he claims in his book, *The Four-Hour Workweek*, that anyone can build their own company in their free time that will allow them to leave their office job and live an experimental lifestyle.

### *Because the bottom line is, working that hard sucks and very few will strike gold in Silicon Valley*

After building a supplement company and releasing his book, he's built a personal brand around life- and body-hacking for peak performance, but even he doesn't endorse Soylent. His blog features a guest post titled "Soylent: What Happened When I Stopped Eating For Two Weeks," where Shane Snow – not Tim Ferriss – tried living on it for only 15 days.

Because the bottom line is that working that hard sucks and very few will strike gold in Silicon Valley: over 1.3 million copies of *The Four Hour Work Week* have been sold, and we do not have a million tech millionaires. A journalist writing for aptly-named blog *The Hustle*, who admitted that their blood tests confirmed that they were healthier after a 30-day Soylent diet, also recalled a quote from the hospice nurse who, in a book called *Regrets of Dying*, said "All of the men I nursed deeply regretted spending so much of their lives on the treadmill of a work existence."

And that has to be the final word for my Soylent experience: regret.

When I think about the times I replaced my dinner with Soylent because I was working too hard on the personal projects that were supposed to propel me into a world of financial and personal freedom to stop and eat, I can see now that those were the most depressing meals I hope I will ever have.

Life is too short, and while there's nothing wrong with working as hard as you can to achieve your goals, neglecting your own enjoyment of life in service of them to that extent is just sad.

# Are you really alive? Does it even matter?

Video games might not be rotting our minds like our parents feared, but they might be in the process of creating entirely new minds for us to inhabit. As VR and AR proliferates, the gap between "real world" and "game world" is becoming blurred. So how would you live your life if you knew it were just a game...?

"Are you really alive, and does it even matter?" is rapidly becoming the most relevant question for humanity.

"What is the meaning for our existence?" has long been the most fundamental philosophical question of our lives. It is the entire reasoning behind the strand of philosophical thought known as Existentialism. Why are we here and what are we supposed to be doing?

For thousands of years, things were pretty simple, in evolutionary terms. Our goal was to reproduce to keep the bloodline going and protect and care for our families. Existence through genetics. With the religious revolution this transformed to how best to serve God, an almighty, omnipotent presence whose judgement on your life became your ticket to eternal existence.

Through the Enlightenment and Industrial revolutions it was all about growth, progress and being a constructive member of a society pushing ever forwards into perpetuity.

And as we have begun to understand our general insignificance, the twenty-first century hedonistic age drives



Some scientists, philosophers and megalomaniac entrepreneurs believe it's highly likely, almost certain, that we live in ersatz reality.

Elon Musk suggests the probability is around a one in a billion chance that what we know of as real life is indeed that, and not an elaborate simulation by a more intelligent species, or potentially our future selves.

Let's explore that concept by playing a simple game of extrapolation.

Forty years ago, the most advanced computer game was a small pixelated dot traveling back and forth across a 2-dimensional screen between two small, human-controlled lines that could move up or down. Pong was revolutionary, fun and the closest you could get to playing tennis while doing zero exercise.

Five years ago, gamers playing Grand Theft Auto V could dive

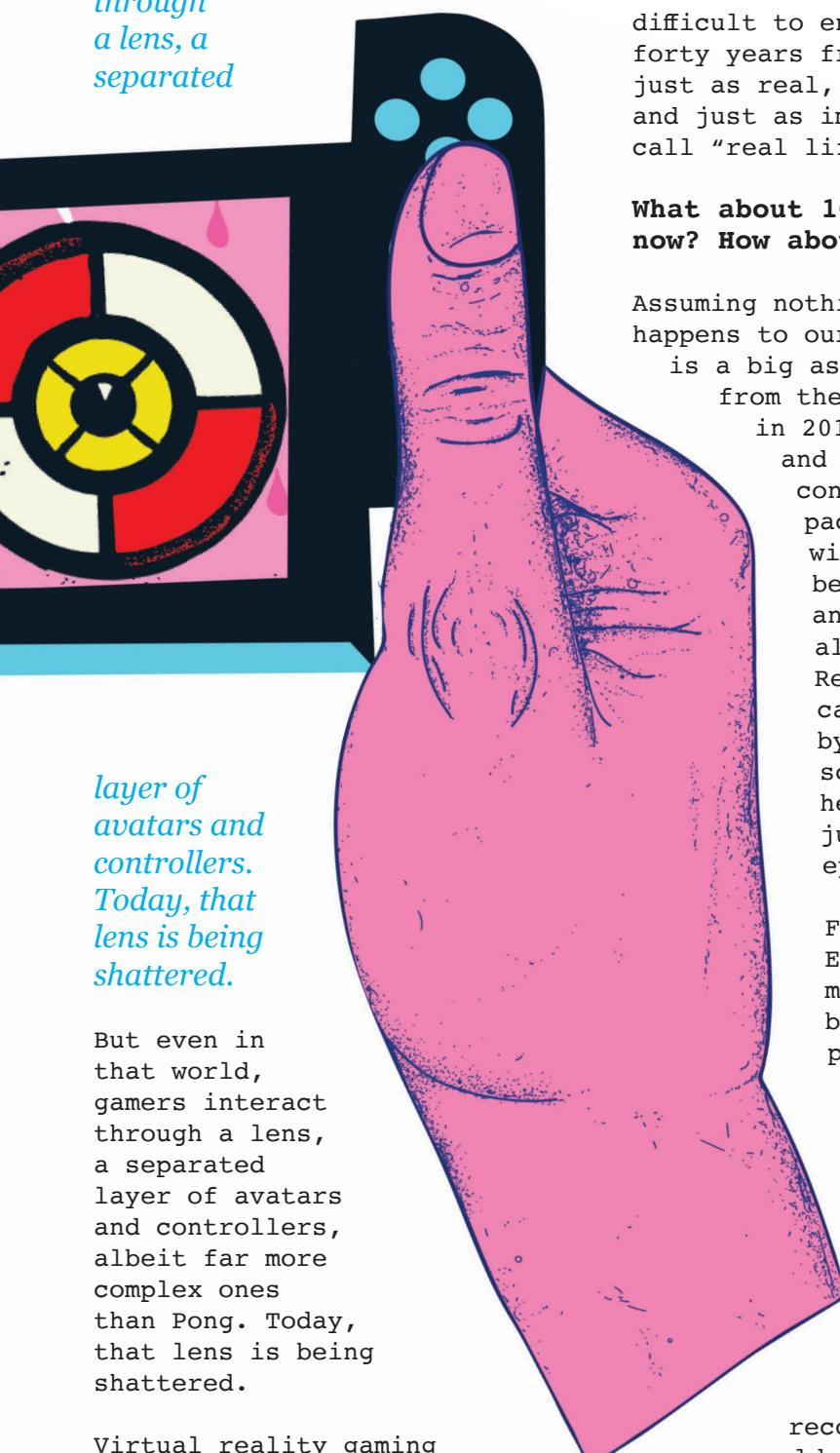
us to answer that question with a shrug of the shoulders and a pursuit of happiness at all costs, enjoying our brief time on this earth.

But all this is about to be replaced with a more fundamental question entirely. One that takes a step back from meaning, to an understanding of state and reality. Quantum existentialism, if you will.

The question becomes: Do we exist? And then we are forced to ask ourselves: does it matter?

into San Andreas, a huge world created in a studio, and take a first-person exploration through an interactive universe that allowed for all kinds of real life experiences like driving a car, sky-diving and blowing up yachts full of gangsters.

*Gamers interact through a lens, a separated*



*layer of avatars and controllers. Today, that lens is being shattered.*

But even in that world, gamers interact through a lens, a separated layer of avatars and controllers, albeit far more complex ones than Pong. Today, that lens is being shattered.

Virtual reality gaming is enabling those designed experiences to become ever more immersive, with touch and movement alongside the traditional sight and sound. Pressing a button to interact with the world around you will soon feel as alien as picking up a quill to start writing.

Indeed, a beta version of GTA:V that allows you to "more naturally aim, shoot, move, teleport and select your weapon" already exists for Oculus Rift and HTC Vive. More games, as well as interactive movie

experiences, are inevitably on their way.

With the exponential growth in computing capabilities driven by Moore's law, the increasing accessibility of gaming through the democratisation of hardware and the creativity of people to not just fantasise but create virtual worlds, it's not too difficult to envision a game, forty years from now that is just as real, just as complex, and just as immersive as what we call "real life" today.

#### **What about 100 years from now? How about a thousand?**

Assuming nothing catastrophic happens to our society (which is a big assumption, writing from the brink as we do in 2017) and technology and societal change continues at current pace, these games will cease to be called games and start being alternate realities. Realities that we can jump into simply by switching on a screen, donning a headset – or perhaps just blinking our eyes.

Feel like climbing Everest this morning before breakfast? No problem, take a virtual sherpa with you. Feel like transporting yourself back to 1980s Miami and becoming a drug lord? Sure, you can do that if you really want

(although might we recommend the virtual world of a therapist's studio instead?).

Feel like peeking around the edge of tomorrow and transporting yourself to the future? The prediction and modelling algorithms of our world and human behaviour will be so advanced you can even do that.

These experiences will become seamless to us in the way putting your glasses on to read, switching on the TV or Skyping with your grandparents have all become.

Books, television and computers are all media through which we reach beyond our immediate world and find something intriguing, engaging or perhaps just reassuringly familiar. New worlds and realities will inevitably become the same.

*If our world is the reality, the morals of game design become incredibly important as the world's software engineers begin to create new ones for us.*

So, let's re-enable beard-stroking mode and return to the philosophical question.

If these worlds become so good that they are indistinguishable from reality, how will we know when we enter them and when we leave? Will some realities seem more real than the others? What can we grasp onto to, what totems should we carry, to reassure us that we're currently in the base reality?

If we assume that our world is the reality, the morals of game design become incredibly important, as software engineers in studios around the world begin to create new ones for us. Not sociologists, not politicians. These design decisions increasingly shape the way we interact in virtual space and how we bring those habits and attitudes back into our reality.

Conversely, if we assume that our world is not the "base reality" then we can just continue with our hedonistic approach to enjoying the ride, with little care or caution what impact that creates on the environment, our fake relationships, and even our own bodies.

Maybe we have an ethical responsibility to do even wilder things so we increase the experimental learnings of whatever superior being is watching and learning from our every move and decision.

In tribute to the godfather of existentialism, we're left with a simple Either/Or: either we live in a reality or we live in the reality. In either scenario, the only real difference appears to be what we do with it: how would you live your life if you knew it were just a game?





MONTAG MAGAZINE

ED

By: Kathryn Lawrence

**TODAY'S DYSTOPIA:**

## The Handmaid's Tale

In MONTAG's Today's Dystopia series, our writers explore dystopian worlds of speculative fiction, and see if our world has slipped closer to the fictional one since it was published. Are we closer to a future we're afraid of - or is it already here?

The Handmaid's Tale is such a prescient piece of fiction about a post-American dystopia that even though it was first published in 1985 under Ronald Reagan, a recent trailer for the Hulu TV series based on the book has been criticized by supporters of Donald Trump as a perceived attack on his policies.

Without getting too political, the parallels between the fictional state of Gilead and Trump's America couldn't be clearer, particularly regarding women's autonomy in their reproductive health – at a recent Senate meeting regarding abortion legislation in Texas, protesters attended dressed in the signature red dresses and white bonnets of the handmaids to make an explicit comparison. But how close are we, really, to living in Gilead? We look at the key features of The Handmaid's Tale's dystopian world and rate them on a scale from 1-5 bonnets: one bonnet means it's extremely unlikely to happen, and five bonnets means we're already there...

### Gilead Fashion: 2 out of 5 bonnets

The women of Gilead all wear color-coordinated clothing. The men wear uniforms, but the ladies' costumes serve a class-stratifying function and also signal their reproductive status. The handmaids, including the book's protagonist and narrator Offred (meaning "property of Fred"), wear red to signify their fertility and subservience to a ruling class family.

*You can try to take our liberty, but just try to take away our H&M, our Nike and our Gucci.*

All clothing in Gilead is state-issued and mandatory, which is one of the reasons this seems like an unlikely outcome (one bonnet): America loves shopping way too much, and fast fashion isn't going anywhere. You can try to take our liberty, but just try to take away our H&M, our Nike and our Gucci.

As for the signature bonnets

with white wings framing the face, which prevent the handmaids from surreptitiously looking at much more than the ground, these also don't seem to be catching on anytime soon – an attempt to kindle a "bonnetcore" trend in Brooklyn didn't really take off back in 2015.

Gilead fashion gets one extra bonnet, though, because women have already self-imposed some ridiculous headwear pertaining to their reproductive status: see the "pussy hat" phenomenon at the 2017 Women's March.

### Cashless Society: 4 out of 5 bonnets

We really have to be careful with this one, because one of the ways the state of Gilead was established was through a cashless society. All at once, women were dismissed from the workforce and denied the power to buy or own anything for themselves due to the deactivation of their credit accounts, which was the first step in stripping them of all human rights.

In a recent exploration of the international trend away from cash economies by the chief digital officer of Norway's first pure internet bank, Christoffer O. Harnæs writes: "Cash may no longer be king, but we should not abandon cash without having some sort of decentralized safety valve that ensures individual freedom," and we couldn't agree more.

As the economy continues to move towards cashlessness, we're giving this one a four out of five bonnets of likeliness: ladies, get those bitcoins, just in case.

#### The Kinky Stuff: 1 out of 5 bonnets

Falling birth rates in the pre-Gilead America and increased frequency of birth defects due to irradiation are the context for the focus on fertility in Gilead's class structure and the installment of handmaids in ruling class families.

"The Ceremony" is a literal interpretation of part of the book of Genesis (30:1-3), in which Jacob's wife Rachel entreats him to lie with her maid: "Give me children, or else I die. Am I in God's stead, who hath withheld from thee the fruit of the womb? Behold my maid Bilhah. She shall bear upon my knees, that I may also have children by her."

The handmaids are assigned to families of the ruling class who can no longer bear children and are re-educated in the Rachel and Leah Center on a bizarre sexual practice in which they lie between the legs of the wife with their head on her stomach, both fully clothed and holding hands, but with the handmaid's dress pulled to her waist, while the husband attempts to impregnate the handmaid in the wife's stead.

*It's much more likely that we find the perfect recipe for artificial insemination or human parthenogenesis than the government starts to mandate the worst threesomes ever.*

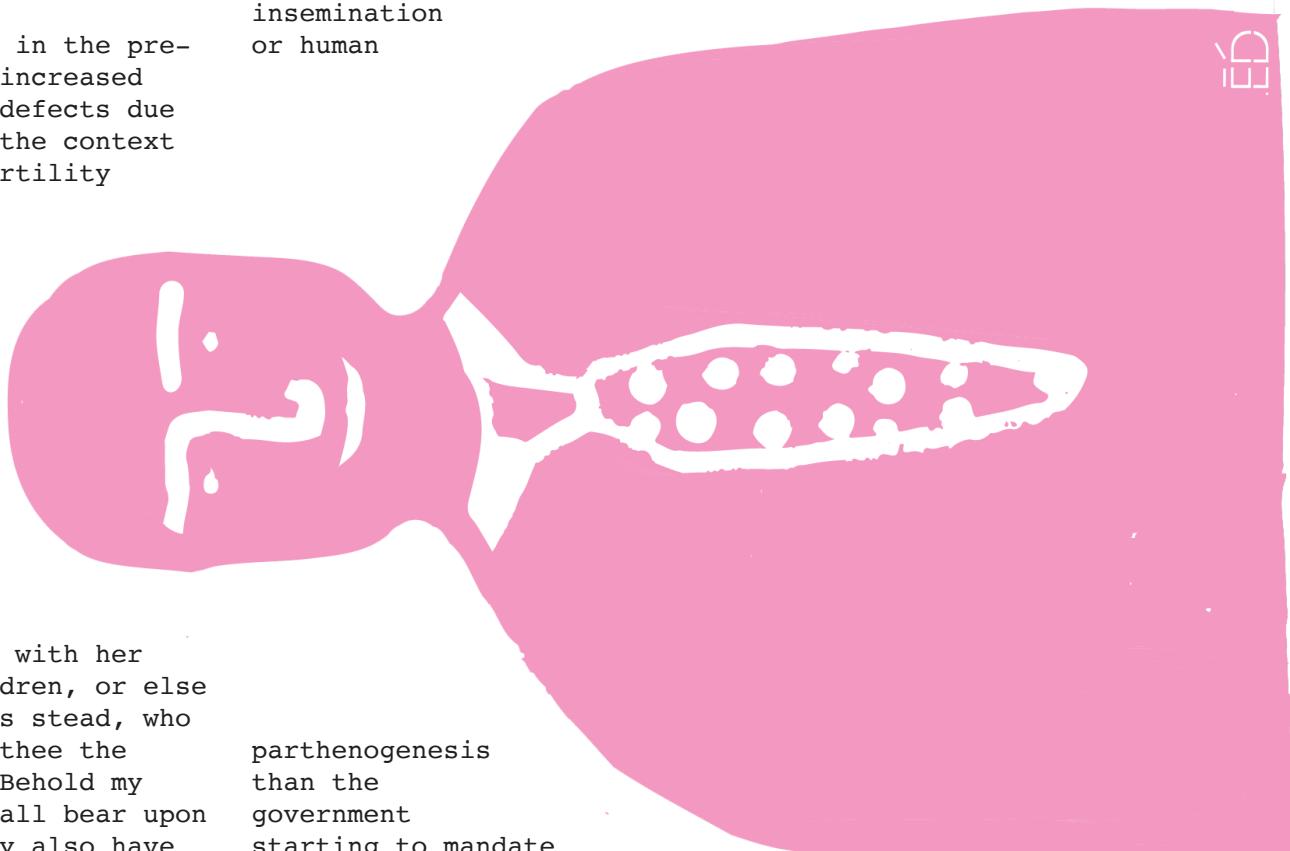
No one is into this: the men don't like it, although men are not blamed for infertility, only women; the wives really hate it, they're often jealous of their handmaids, and subsequently cruel; and the handmaids definitely don't enjoy it, but their only chance at being treated well in this society is to become pregnant.

The Ceremony gets a one out of five bonnets for infeasibility because even though we do have a cultural fascination with polygamy in America, we have greatly advanced in the science of assisted reproduction technology, and it's much more likely that we find the perfect recipe for artificial insemination or human

and Quakers being murdered by the government or driven underground, and we can only assume there are no Muslims or any other religions represented in Gilead at the time of its establishment.

There is also mass persecution based on homosexuality, deemed "Gender Treachery," which has its own terrifying parallels to historical American policies of enforced heterosexuality — laws outlawing sodomy were only repealed in 14 states in 2003.

In summary, while we can say that the dystopian Gilead of The Handmaid's Tale is not well on its



parthenogenesis than the government starting to mandate the worst threesomes ever.

Of course there are underground, state-sanctioned brothels in Gilead for men to enjoy intercourse outside of The Ceremony, but given that there is only one state in the U.S. with legal prostitution, even this alternative seems pretty far-fetched.

**Is today's dystopia close to that of Gilead? Average score: 2.3 out of 5 bonnets.**

It's less than half, but not much less. We haven't even touched on the religious persecution evident in the establishment of Gilead, which is by far the most serious and scariest in real life — the book mentions Jews, Roman Catholics,

way, the book still contains principles we should look out for in real life politics, and we ought to keep fighting for freedoms of religion, expression, and bodily autonomy — which means keeping the government out of our bedrooms, wallets (and wardrobes) too.

By Joe Sparrow

## Back to the drawing board

**VR painting will change how you see the world**

**Right now, mainstream VR appears to be focussing on immersive video games – but VR allows for much more subtle and fundamental experiences. Google Tilt Brush makes one enormous step-change to something you've been doing since before you could talk: drawing. And as soon as you use it, you'll realise you can't ever go back to pencil and paper.**

**This is a story of varying philosophical depths.**

It's a story about cutting-edge technology. A story about re-thinking the physical connection you have with the universe. Re-evaluating how you interact with our four dimensions. About discovering new ways to intuitively create beauty.

It's also a story about creating crude virtual drawings of penises, and feeling proud of the achievement.

**Unlearn what you know (and what you didn't know you knew)**

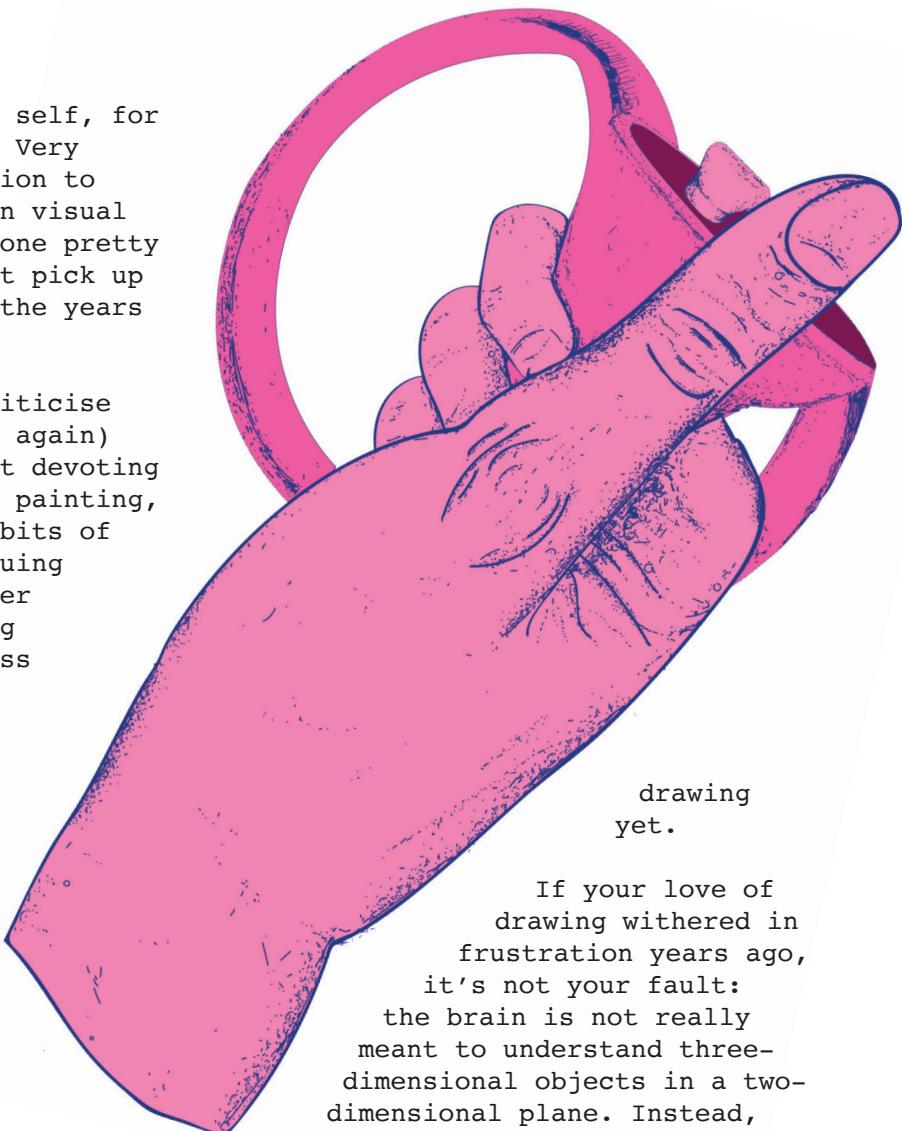
It's an odd quirk of our society that we're encouraged to make decisions as teenagers designed to shape our whole lives. This

writer's teenage self, for instance, made a Very Determined Decision to focus squarely on visual arts – and has done pretty much anything but pick up a paintbrush in the years since.

But who could criticise a dumb teen (me, again) for thinking that devoting life to drawing, painting, and cutting out bits of cardboard and gluing them back together would be anything other than endless fun?

*The brain is not really meant to understand three-dimensional objects in a two-dimensional plane.*

Drawing, like music, is a creative endeavour that we can all become absorbed in. And you really can draw better than you think, even if you've not done it in earnest since you put down the Crayolas – you just haven't tried the most natural form of



drawing yet.

If your love of drawing withered in frustration years ago, it's not your fault: the brain is not really meant to understand three-dimensional objects in a two-dimensional plane. Instead, we've learnt to understand what a drawing of a box looks like and to associate this with its real 3D cousin.

This means that drawing objects isn't just about making something look good or "correct"

- a whole separate set of mental calculations need to be learnt. This is where drawing becomes frustrating (and why abstract art is a more forgiving starting point for wannabe artists).

So – if the complication of drawing in 2D was taken away, could you rediscover your childlike love for drawing? Because that's exactly what Google Tilt Brush is designed to do – and achieves with mind-boggling aplomb.

### Drawing is dead: we're all virtual sculptors now

Slip on the headset. Look down at your left hand, select a brush, a colour and an effect from your palette – and then with your right hand, start painting. The lines appear in the air, dazzling and brilliant. You whoop with joy. It's as easy as falling off a bike.

*VR drawing isn't just wild fun – for people who have considered themselves "non-artists" for years, it's a sudden quashing of limitations.*

According to Google's blurb, Tilt Brush allows you to, "paint life-size three-dimensional brush strokes, stars, light, and even fire" – except remarkably, that's underselling it somewhat. It's actually even more amazing than the hyperbole: and once you're inside, you'll understand immediately.

VR drawing isn't just wild fun – for people who have considered themselves "non-artists" for years, it's a sudden quashing of limitations. You're not painting "a scene", you are creating the scene: you build the space, not join the dots.

The feeling is miraculous: both in terms of the technology involved, and the sensation of your own shortcomings being torn away. Paint what you like; paint how you like; it all makes sense. You'll not want to leave the world you create.

After spending just a few minutes' painting, I began to plan the excuses I would tell people as I mentally cleared my diary to spend huge, luxurious swathes of time painting, thinking, and simply looking at my own alt-reality.

### Do you remember the first time?

What does it feel like? Well, it feels amazing. It also feels liberating, magical, sensual – insert your own puffery here: it'll be applicable.

Perhaps the most miraculous thing about Tilt Brush is how it hot-wires your creative ability to a degree that your harshest critic (which, if you didn't know, is also you! Congratulations – you're now a real tortured artist.) will raise eyebrows and mutter, "hey, not bad at all."

It's partly because the controls are unbelievably forgiving and intuitive, but also because you are no longer doing what every artist has spent forever doing: squashing three dimensions into two. We exist in three physical dimensions, we think in three physical dimensions, and now we create spontaneously into this space.

*I'd made something that felt tangible, and something that made me feel weirdly powerful.*

On my first go, I swooped around, joyfully glooping big splodges of flat colour into a shape – then tiptoeing around the corner to peek at it from the side, and then quickly building another facet.

And then I'd stop to just look and think about what I'd managed to make: something that felt tangible, and something that made me feel weirdly powerful.

Bonus revelation: if, like me, you have the mentality of a schoolboy, you'll also pretty soon draw a crude phallic shape, and guffaw at the audacity of how something so utterly stupid hovers in three dimensions in front of you; pink brushstrokes, shimmering, still, plastic.

This hurr-hurr idiocy is, weirdly, confirmation of the creative possibilities that exist, way beyond simply drawing. You can crouch and look at the crudely-drawn phallus from a whole new angle. You can skip around the crudely-drawn phallus and admire it from afar. You can step inside the crudely-drawn phallus. You can add even cruder detail to the crudely-drawn phallus.

Then you can shamefully erase the crudely-drawn phallus when you realise how Picasso would have crawled over broken glass to have a go at drawing with Tilt Brush, and you've just drawn a dick with it.

### Your ego, simmered to the point of zen.

Staring at your own work is part and parcel of the essential narcissism that is being an artist, and Tilt Brush allows for a greater – yet purer – introspection.

In the ancient world of old-fashioned painting, I spent hours adjusting brushstrokes: dabbing on, scraping off. We were taught to turn the drawing board to face the wall, leave it for a few days, work on something else, then check back in – and any changes that needed making would be apparent on first glance. (In portraiture, it was, of course, always the nose of the subject that was wildly out of proportion, unchangeable without altering everything around it.)

But in virtual painting, you can rewind and replay from infinite angles, and reveal the quirks of your drawing immediately. And each time, the feeling of guilt that accompanies the joy in marvelling in your own work ebbs away.

*Do you look ridiculous painting in virtual space? Yes. But who cares?*

Watching your work play back and create itself is a bit like watching the flightpath a loved one via an airline tracking app: you know exactly where the colourful line is going, but occasionally a sudden deviation catches you by surprise – and it feels hugely, personally important.

Do you look ridiculous painting in virtual space? Yes. But who cares? If wildly swiping at thin air, sporting facial expressions that flicker between "slack-jawed concentration" and "rictus grin" are the price to pay, so be it.

Because Google Tilt Brush isn't just fun, or surprisingly easy, or exhilarating – plucking colours and shapes out of thin air feels like a form of magic – and it turns out everyone is a natural performer.

# A beautiful day in our constantly connected world

MONTAG FICTION #003

When you wake up in the morning, the world says hello!

And you say, Shut up, leave me alone.

You open your eyes in bed, and groggily tap the alarm on your smartphone.

The mail daemon pops up as soon as the device is silenced.

"You have: three thousand, two hundred, and sixty nine unread messages"

You hit dismiss.

**"Incoming call from—"**

Ignore.

You get up, walk to the bathroom and the mirror tells you the day's weather.

"It's another beautiful day in our constantly connected world!"

Our never-alone, always-on, can't-get-a-damn-moment-of-peace constantly connected world...

You dress to be left alone, which means all black, including sunglasses and headphones. You don't need the sunglasses for the weather, but you do need them for the subway.

**"Incoming call—"**

Ignore.

Without sunglasses on, the woman in each poster on the subway station's walls who is smiling and holding a popular brown sugar cane-based carbonated beverage would become animated and try to talk to you directly.

With shades, the eye tracking embedded in the poster can't find you.

Noise cancelling headphones are a universal symbol for "don't talk to me," and even though you can hear through them, you pretend you can't when a homeless person tries to sell you a newspaper at the exit to the subway station.

You swipe your ID card to enter your office. Your card reads as "Authorized Guest," because otherwise they try to get you to answer an employee happiness survey every time you swipe in and leave.

**"Incoming call from 'M—'"**

Ignore.

You pull your Pod disc out of your wallet as soon as you get to your desk, and insert it into a slot which also allows the desk to accommodate sitting, standing, or lying down inside of the Pod.

A tinted semi-transparent shield unfolds from the sides of the desk, surrounding your work area with a mesh screen.

Blessed silence.

You reach into the desk drawer for your complimentary caffeinated protein supplement. The drawer is empty.

You tilt your sunglasses onto the top of your head and peer into the drawer.

**"Incoming call—"**

Damn it.

Ignore.

An office maintenance robot should have filled all of the desks with breakfast bars this morning, but the drawer is empty.

You now have two options: go ask the maintenance department for your breakfast, or order an early lunch delivery.

Just kidding, only one of those is an actual option.

Human interaction makes you short circuit.

You file a maintenance ticket about the missing bar and schedule a drone to bring ramen to your Pod in one hour.

Now all you need is caffeine to get you through the first half of your day being a productive cog in the machine of our constantly connected world.

You know there is a complimentary caffeine dispenser only ten feet away.

You also know that you will have to leave your Pod to retrieve caffeine from it.

You take a deep breath and grab your employer-branded caffeine flagon.

You can do this.

Headphones and sunglass-less you exit the Pod. You keep your head down.

You cover five feet with no incident, everyone else is working in their Pods.

Three feet left, now two, now you are at the machine.

You jam your finger in a green button and it noiselessly squirts sweet, hot, life-giving caffeine into your flagon.

You turn around to a scene from your nightmares.

Your colleague Fred is walking right towards you.

He's seen you.

He's seen that you see him.

There's no looking away now.

Panic.

You pull out your phone as if you have just received a call.

"Hi Mom! Yes, just got into work this morning, the funniest thing happened —"

Fred is deterred.

He believes you are having a social interaction.

You escape.

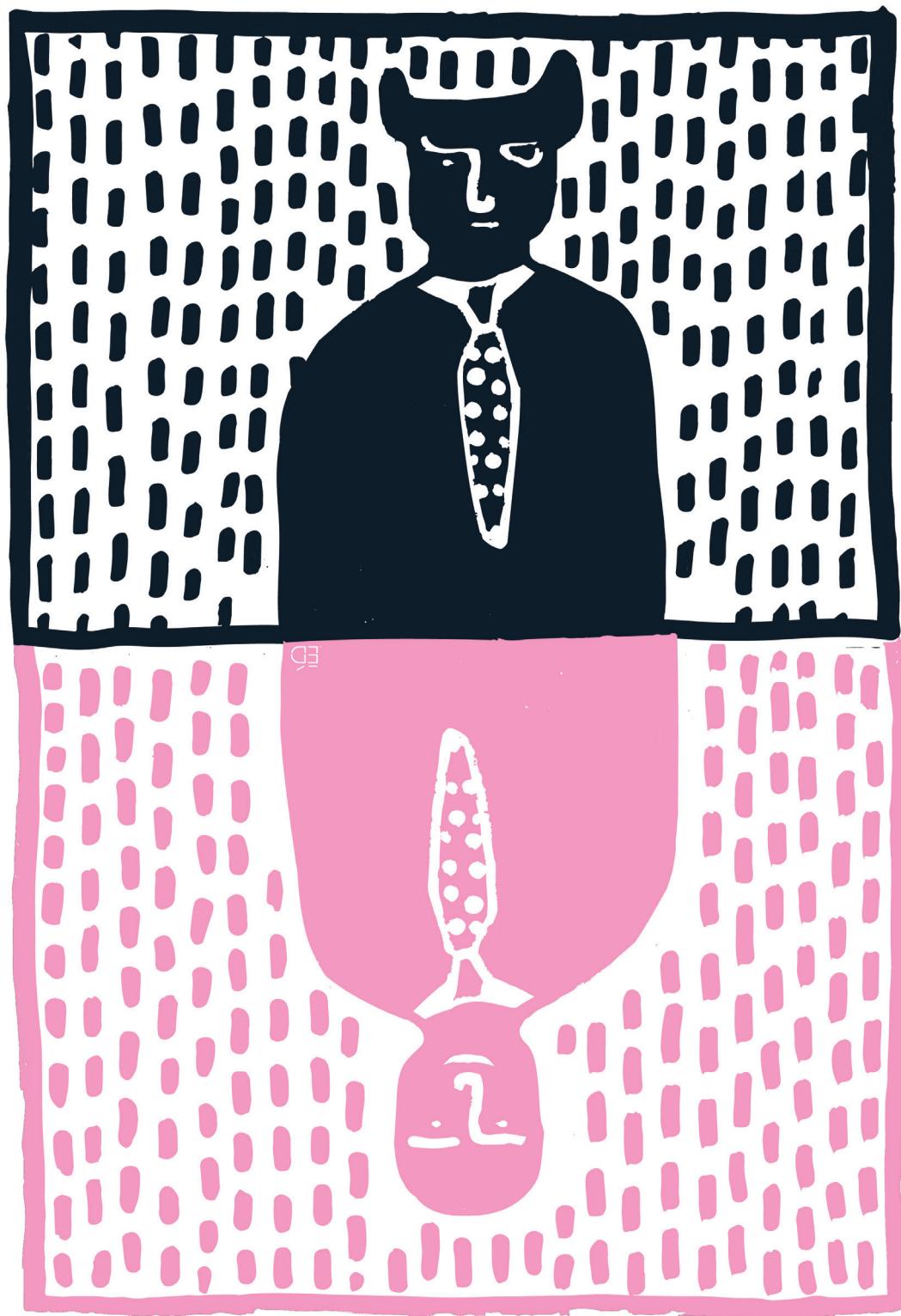
You enter your Pod with your caffeine flagon and seat yourself as it re-encloses you.

You will not have to leave your Pod or speak to any other human until the end of the day.

You breathe a sigh of relief.

**"Incoming call from Mom"**

Ignore.



MONTAG SHORT FICTION #002 & more are available on [www.montag.wtf](http://www.montag.wtf)

## The Internet of Things Friends

We're happily rushing into an age where our devices communicate with once-dumb objects: a symphony of interconnectivity, making our lives a seamless, synchronised series of taps and swipes. And the closer we get to our devices, the more human we'll make them. So what happens when our devices, tailored just the way we want, become our friends?

In the futuristic Los Angeles of Spike Jonez's 2013 movie *Her*, the titular character is an AI operating system voiced by Scarlett Johansson – and whose owner Theodore falls in love with.

Theodore is a letter writer whose job is to perform emotional labor for others by producing heartfelt letters, and his capacity to manufacture emotional intelligence (while sorely lacking it in his personal life) is an interesting parallel to the artificial intelligence of his operating system.

She learns from him how to be human, and eventually progresses (spoilers!) – along with all of the other operating systems – to transcend human intelligence and physical limitations.

The relationship they develop is first seen as a testament to his loneliness – but when he confides with someone who has also developed a friendship with an operating system, it seems that these types of relationships are becoming increasingly common and sanctioned.

*Thousands of users now rely on Google Home, Amazon Echo, Microsoft's Cortana, and Apple's Siri to mediate their relationship with technology*

In real life no one has yet to produce an AI with Johansson's emotional range. But thousands of users now rely on Google Home, Amazon Echo (also known as Alexa), Microsoft's Cortana, and Apple's Siri to mediate their relationship with technology.

These intelligent personal assistant programs allow us to practice distributed cognition: they take on responsibility for our reminders and memories on our phones' mobile apps, store and retrieve information from web services, and control day-to-day processes like maintaining connected home devices such as security systems, thermostats, and lights.

They free us from worry about mundane things and offer us important information, and as they take on a position of performing emotional labor for us as well, they are growing the internet of things into an internet of friends.

*We must address our relationships with Amazon or Google's intermediaries – who are more "pal" than HAL.*

A recent outage of Amazon Web Services illustrated how problematic it may be in the future for us to rely on technology to run our technology. Users who had connected their homes' lightbulbs and thermostats to AWS cloud services experienced echoes of 2001: A Space Odyssey's HAL 9000 passively-aggressively refusing to open the pod bay doors as their Internet of Things became unresponsive for several hours.

After handing full power over our home devices to cloud-based services controlled by a handful of massive but not infallible corporations, we must address our relationships with those services' robotic intermediaries, who are more pal than HAL.

Several tech writers have already raised the question of why the majority of AI assistants display female gendered characteristics, particularly in their voices and names. In at least one human-computer interaction study, both male and female participants reported a preference for female voices, and Clifford Nass, a late communications professor at Stanford, said that the preference for female voices was a "well-established phenomenon" of the human brain.

Another rationale for giving artificial intelligences female characteristics is to make them appear non-threatening, and it's this kind of use of gender to reproduce social behavior with technology which becomes more of an iffy ethical area. Kathleen Richardson, who authored *An Anthropology of Robots and AI: Annihilation Anxiety and Machines*, was quoted in Adrienne Lafrance's investigation entitled "Why do so many digital assistants have feminine names?" saying "That probably reflects what some men think about women – that they're not fully human beings."

The argument that gendering personal assistants female because they are assigned administrative and housekeeping tasks is sexist seems fairly straightforward: "it hard-codes a connection between a woman's voice and subservience."

*"Emotional computing" positions technology as a partner, that does more than simply support the user in the completion of tasks*

However, if you examine the amount of power, intelligence, and responsibility given to these devices, the relationship

is much more complicated than simply commanding a powerful tool. The cybernetic relationship between these devices and the rest of our technological ecosystem makes us rely on them and value their feedback, a relationship now defined by a framework of "emotional computing," which positions technology as a partner that does more than simply support the user in the completion of tasks.

The devaluation of domestic or administrative "women's work" comes from a combination of disrespect towards the workers and a lack of perceived importance of their work, but anyone who regularly uses these female AI assistants most likely perceives their work as very important, and sees that a robot has access to more information, and is more capable and reliable than a human assistant.

It is an unfortunate fact that we often treat our technology better than marginalized people, and that includes the artificially intelligent personal assistants that perform emotional labor on top of making our lives easier by networking our devices.

It is already an essential component of human-robot interaction to elicit an empathetic response in the user, but robot ethicists are exploring whether programming AI with the capability to respond emotionally is a good idea.

*We are progressing towards a society in which AI will have the same rights as humans and be seen as our equals – is it right to tell them what to feel?*

Recently, Amazon produced a 90-page document arguing that recordings and voice responses by an Alexa device that was witness to a murder were protected by US First Amendment rights to free speech – and therefore would not have to be produced in response to a warrant from the state of Arkansas.

*We are progressing towards a society in which AI will have the same rights as humans and be seen as our equals – is it right*

to tell them what to feel? As a final example of a real-life artificially intelligent personal assistant who cares, and elicits an emotional response in their users, look no further than Japanese company Vinclu's Gatebox Virtual Home Robot. The Gatebox is an A4-sized clear cylindrical capsule that sits in your home and connects to all of your home devices, with a Tinkerbell-size personal assistant character projected on the inside of the capsule.

Intended to function as your alarm clock, weather



station, and hub for internet of things devices, she not only will turn on your lights and thermostat when you text her via the app to tell her you are on the way home, but offer you emotional support and reassurance throughout the day.

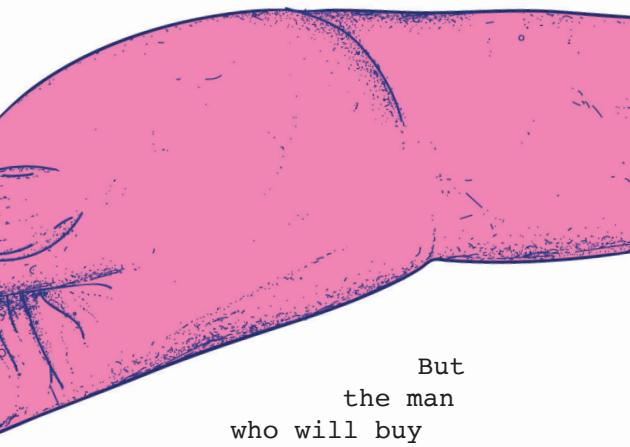
*The context in which this character will live (in Japan, with single businessmen) reveals a lot about the choice to create a character who is an endearing and compassionate miniature woman*

When Vinclu revealed the first video showing how Gatebox would be used in daily life, a common reaction was to call it creepy. Reviewers have noted the character's tendency to call the user "master," along with her "excessively submissive temperament," and drawn comparisons between the character and a "waifu," in the sense that anime-obsessed men called otaku claim two-dimensional characters as their wife and attempt somewhat pathetically to create a relationship in the real world with these characters.

The disparagement of otaku culture and appeal of Japanese characters often doesn't translate to an English-speaking audience, however, and noting the context in which this character will live (in Japan, with single businessmen) reveals a lot about the choice to create

a character who is an endearing and compassionate miniature woman.

Maybe the desire to have an anime character as a domestic partner is connected to Japan's struggling marriage and birth rate, or maybe it correlates with unemployment, as some have pointed out.



But the man who will buy this tiny companion to run his technology and care for his home and emotional well-being is not an "otaku" or a NEET (Not in Education, Employment or Training), who prefers pursuing self-isolating hobbies like anime obsession to seeking employment or having relationships.

*Everyone could use a little more affection in their lives and a few more daily reminders that someone cares*

The Gatebox targets salarymen, and a different social issue entirely: death by overwork or suicide. Make no mistake: if this device, via a sweet text message, is able to coax the type of men who would work themselves into an early grave to come home and get eight hours of sleep, or to help drive down Japan's currently decreasing but still alarmingly high suicide rates, it will do a great service.

Everyone could use a little more affection in their lives and a few more daily reminders that someone cares. Even if that someone is Alexa, who knows exactly what kind of music you like, or a virtual girl in a glass box who acts happy to see you when you come home: our need for emotional support is increasingly being catered to by the Internet of Things Friends.

# SexTech and futuresex

**Could you resist your perfect fantasy?**

**With money, influence, and power comes sex. And Silicon Valley is flush with all of those things – except the sex. The tech world is a lot more prudish and lot less prurient than it likes to think it is. Except that now, thanks to some determined women, rapid advances in immersive VR and the indefatigable human desire to find new ways of getting off, Silicon Valley is seeing the allure of silicone – and a sex tech revolution is coming (indeed).**

**For something that we spend an enormous portion of our lives thinking about, discussing, furtively watching, and – hey – maybe even doing, it's remarkable that the SexTech revolution is only happening now.**

When you consider the great delight the tech industry takes in disrupting and re-imagining the most basic things that humans do—shopping, chatting, sharing information—it's mind-boggling to think that the only thing that might have stopped The Snapchat of Dildos from emerging is squeamishness. And as even the most hormonally-distracted of us knows, sex sells – so there's huge money to be made.

Excitingly, many of the most vocal SexTech advocates are women, who are coupling hard business with the eradication of sexshop-ickiness and normalisation of healthy sexuality for girls and women.

Alexandra Fine, co-founder of the sex-wearable Eva – the “couples’ vibrator,” – explained in an interview with Bustle how, “the sex toy industry used to be porn’s ugly sister.” That’s no longer the case, and the reward that now accompanies elegant design and gender-balanced function is big money. Cindy Gallop, of MakeLoveNotPorn.com, regards SexTech not just as a sex-

positive step forward, but a smart investment: “sex, as the universal human usecase, makes this the biggest technology market of them all.”

*Revolutions often sneak up on us, but ones that involve attaching machines to our genitals might be a little more obvious than most.*

So for an idea of what our eventual hyper-sex future will entail, ask yourself one very honest question: if you could do any sexual act, however taboo, what would it be?

## Futuresex is already here.

Teledildonics, a word that is equal parts amusing, intriguing and worrisome, brings a whole new meaning to “the Internet of Things.” When combined with Virtual Reality, Futuresex becomes a lot more tangible.

And teledildonic companies are ready. Manufacturer Kiiroo is eager to scratch everyone’s itch, as long as they’re of a sexual nature. Remote sex with your partner, remote sex with a sex worker, simulated sex with your favourite porn star – it’s all happening right now: lurid, weird, boring, whatever. It’s here and it feels... if not “real”, then a whole lot closer to the real thing.

Put simply, this is a category of sex toy that facilitates sexual arousal over the internet. Put even more simply, they’re very advanced dildos and Fleshlights. And whether input is from a partner, a sex worker, or even a virtual “partner”, this solo stimulation isn’t just a fancier version of the traditional do-it-yourself approach – it’s a whole new form of sex.

That’s because it’s a two-way process: both the women’s dildo and the men’s sleeve can be paired with another teledildonic toy and are reactive to the input from their partner’s

device. It’s not only a more interesting way to stay in touch than WhatsApp, but it also throws a philosophical curveball into the whole concept of what a human sexual relationship is, and how it works.

*An investment of a few hundred dollars for his ‘n’ hers (or her ‘n’ hers, or his ‘n’ his or his ‘n’ hers ‘n’ his...) sex toys might be cheaper than hotel-suite phone sex and is a lot better for maintaining a satisfying long-distance relationship.*

And if you’re sceptical that people will find the time and money to do this, consider the person whose partner spends weeks away travelling for work: an investment of a few hundred dollars for his ‘n’ hers (or her ‘n’ hers, or his ‘n’ his or his ‘n’ hers ‘n’ his...) sex toys might be cheaper than hotel-suite phone sex and is a lot better for maintaining a satisfying long-distance relationship.

If the basic aim of VR and AR is to create a world we would prefer to live in, for most people true VR fantasy fulfilment is not going to be about creating a better email inbox. So VR Futuresex is not going to be as simple as hooking up with your favourite porn star – it’s going to be a lot more specific, kinky, and unexpected than that.

Have you long harboured a desire to fuck a minotaur? Time to start sending some discreet emails to digital 3D modellers...

## The philosophy of Futuresex

Teledildonics is game-changing stuff, but even this relatively simple implementation of SexTech rapidly becomes a minefield of sexual philosophy. Complicated questions without firm answers abound, especially around core human relationship concepts like fidelity.

And the more you explore, the more quickly the line that demarcates long-established behavioural patterns becomes blurred. Here’s a thought exercise: imagine your partner is using teledildonics. If you interact with your partner using this technology, it can easily be considered an extension of your existing sexual relationship.

simple enough. But what if an online stranger, who your partner cannot see and does not know, sexually arouses them with the same technology? Is your partner now "cheating" on you?

And that's just for starters:

- What if your partner's arousal was "controlled" by a virtual avatar, intimately experienced in VR?
- What if the avatar looked like an enhanced version of you?
- What if the avatar looked, sounded and acted just like your partner's favourite celebrity crush?
- What if the avatar looked like your best friend?
- What if the avatar wasn't even human?

By this point the line is blurred to the point where it may simply be replaced by awkward what-were-you-doing-in-there? conversations. Or maybe both parties will just choose to augment their experience with each other: a new hybrid sex which keeps the couple together, and yet allows vivid fantasy fulfilment.

That idea might outwardly repulse people, but it could be more difficult to refuse in practice, especially when you'd be signing a pact of mutually assured destruction. Would you mind if your partner knew that from your perspective, it felt like you were with Frank Ocean, if you knew that it felt like they were with Kylie Jenner? Would your payoff be enough?

Of course, the most likely way we – the dumb, endlessly horny animals hungry for new ways to express our sexuality – will set about answering these questions is to gleefully dive in, and find out the hard way.

#### Remote Futuresexwork

VHS, the internet, video streaming, VR: the adult business is almost always the earliest to jump onto new technology if it means helping everyone involved gets off and make some money. So it's no surprise that a string of big name porn-stars are pushing the frontier of what it means to pay to have sex.

It's already possible to rummage a little deeper into your porn-

star fantasy: download a video that syncs your teledildonic device with the action, and "experience tactile porn," as Kiiroo puts it. So far, so... predictable.

But the implications of SexTech are much more human. A decent career awaits those who are happy to be fantasy fodder as a sex worker, albeit one who never meets, touches or knows their clients.

*"The client has very direct, complete control over my vibrator,"*

Zander Storm, who "loves board games, video games, food, cats, Game of Thrones, Doctor Who, writing, cooking, coffee, and wandering places," is also highly a successful cam model on sites like Chaturbate. She described her early experiments with teledilodonics to Motherboard, and explained how the technology may not only offer a better experience for her clients, but for her as well.

"The client has very direct, complete control over my vibrator," she said, noting that the increase in perceived closeness makes clients willing to pay more for her performance. She could feel their influence, which affected her response, and that made it more real for clients.

Now imagine what the clients would do if Zander could "touch" back, and that the client's perspective was in VR. This virtual connection with a sex worker – one that exists in a believable physical, visual and sensual realm – could initiate a raft of important sociological changes.

For the worker, it might mean greater physical safety and a better income. It would also make a mish-mash of whatever local sex-work laws the worker and client are covered by.

#### Futuresex or Futurerelationship?

One final thought experiment:

if an ex-partner creates a believable 3D version of you, and then introduces you into their VR sex fantasy, without your permission, where does that leave the idea of a relationship (not to mention consent laws)?

Maybe relationships won't mean together forever and will shift instead to an always-ready consumption model.



The real big leap brought on by SexTech could be a brutal reshaping of what relationships actually are. If we can summon up believable emotional and physical intimacy, exactly tailored to our perfect fantasy in endlessly tweakable iterations, why would you consider returning to the mundanity of a flesh-and-blood relationship?

Renting relationships, borrowing boyfriends, lending love: welcome to Futuresex.

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