

Memory is a funny thing—a gurgling of irretrievable moments locked between the ears like prisoners we sometimes want to escape. The inside of the mind can remind one of an Arman sculpture, or maybe paintings by Kurt Schwitters. Telling stories is a good way to test memory. Not only what we remember, but how we remember stories says something about who we are now. There is one story that seems to ring clearly today as much as it always has: the story of great migration. It's a harrowing tale of leaders and followers engaged in the drama of love, danger, and the will to survive—like Shakespeare, only better...

Yes, it's the story of several species of butterfly native to Southeast Asia who make annual journeys of up to 2500 kilometers from areas of Hong Kong, China, and Japan¹. What some don't know is that over the months they travel, it is rare for a single butterfly to make a full trip. In fact, there is speculation of how many generations are born each way, but the number is thought to be at least two or possibly three, all picking up the mantle of their parents to continue the voyage. How on Earth do they reach their destination? How do they even know where their destination is? I imagine it's sometimes a surprise for them too—like someone who didn't drink all of Meng Po's special brew. It's reminiscent of Abramović and Ulay's *The Lovers*. They weren't surprised by their separation, but they knew when it was time to enter uncharted territory, to end for a new beginning, even if they didn't know exactly why.

The real answer is far from simple and lies in what is sometimes called "genetic memory." The idea of memories passed from progenitor to offspring is hardly new, but its importance and prevalence may only have just begun to be realized. This phenomenon is not limited to only insects though—its effects are seen in a wide range of animals from mice to monkeys, and even in human beings. The psychological implications for people are massive if true, as it opens the possibility for the traumas, fears, and anxieties of our ancestors to be expressed by our modern selves—by our words, actions, and paintbrushes—maybe without us even realizing what is happening. More than this, if it could be utilized effectively, it seems as though there could be an intuitive yet deep understanding of processes surrounding musical, mathematical, or artistic grammar with minimal effort. So far, controlling, altering, or purposely tapping into the latent memories of our ancestors is science fiction, although its accidental effects can be seen. How else do we explain dreams, phobias, and artistic passions?

This exhibition will dive into the depths of our memories—especially genetic memories— as socially located humans and artists to try to claim some truths from our experiences. Nothing is off limits here, and we will play with such ideas as mass memory manipulation, gene altering, and what happens (or should) when memory fails us. The answers will surely not always be pleasant, but you probably won't remember them anyway so sit back, smile, and enjoy the ride.

With basic understanding, we all know about genetics and inheritance. You might be told that you have your father's nose, your mother's eyes, your grandfather's ears and so on. These physical traits are passed down through the genes of parents to their offspring, and are expressed depending on both the genes themselves and on the environment in which the organism finds itself. In other words, an organism's characteristics are based on both genes and environment. The environment's impact on an organism can be significant even down to the cellular level. Changes of expressed characteristics that happen at the cellular level without altering DNA are called "epigenetic" changes (the prefix "epi-" means "above" or "outside of"). There are some cases, however, where these changes—which are not traditionally thought of as inheritable (since they are not passed along with DNA)— appear to be passed from parent to offspring and beyond.

Let us be clear: the science behind what some think of as epigenetic inheritance is still in its infancy—we don't even really know what we don't know yet. It is at least clear that this phenomenon does exist, but to what extent is a source of speculation and conversation. Therefore, we will assume and imagine that transgenerational epigenetic inheritance is real and robust, and that it has at least some bearing and meaningful impact on who and what we are. Keeping this in mind, we should take a moment to focus on what we do know.

We'll start with mice. They're a helpful bunch who have been filling our homes and laboratories for generations². We know them better than most creatures, in terms of both behavior and anatomy and physiology. We know them inside and out, and we have gotten there through processes that weren't always fair or ethical. Perhaps this is why the Russian Monument to the laboratory mouse is so striking—it reminds us that there is a debt owed to laboratory animals, one that is likely to grow as we continue to move forward and make progress.

One portion of the mouse's brain which scientists have an especially good grasp of is the part responsible for olfactory response to stimulus i.e. the part of the brain that controls smell. This is why in 2013 when researchers at Emory University were looking into the possibility of a transgenerational fear response, they chose smell as the stimulus to be associated with pain. They released a certain chemical odor into the air, and with that they would administer a mild shock to the mouse's foot. After 10 days, they allowed the mouse to mate and found that their children seemed to experience heightened fear³ when exposed to the same chemical smell that their parents had associated with being shocked—and further, researchers concluded that the third-generation offspring also exhibited this same heightened fear. In order to account for any abnormalities during child-rearing, the test was repeated with the offspring being completely separated from their biological parents before birth, through IVF. This second experiment ended with the same results, leading researchers to believe that the response was a consequence of the memories somehow being passed down through the generations without altering the DNA of the mice. These behavioral results were an incredible discovery—and have begun to open a dialogue after nearly 200 years of stifled discussion that labeled transgenerational epigenetic understandings as pseudoscience.

What significance does this give? It is experiments like these that give writers and artists imaginative fodder and provide a space for possibilities to be explored while still being tied to our lived and empirical realities. Take for example Joseph Wright's *An Experiment on a Bird in the Air Pump*. Look at how Wright's classical style is epitomized, but he subtly replaces the wonder of the religious with the curiosity of the sciences. Wright helps us to see what can be learned from looking forward, but what can be gained by looking back?

Artists of the early 20th century were asking just this same question. Wagner, Stravinsky, and Diaghilev were among those who viewed themselves as liberators rejecting rationalism, popular morality, and life-affirming values for what they viewed as the superior artistic modes of instinct, impulse, and emotion. As an impresario and "private propagandist," Diaghilev especially contributed to the European return to primal art by drawing on the traditions of Russian peasantry, as well as general tribalism and eroticism hitherto unseen in the public sphere. To these artists, the Apollonian had ruled artistic endeavors for far too long—and they used their cultural influence to bring about a Dionysian revolution to a skeptical and sometimes shocked public. Through these early 20th century cultural revolutionaries and their comrades, the past returned with lasting influence on the philosophy of art. They reached back to a time before in their creating, to a conceptual-creation model that plays with our collective, personal, and maybe even our genetic memories to say something about how where we've been leads necessarily to where we're going. In more Wagnerian language, as often as a Gesamtkunstwerk requires an understanding of the past, it also needs a vision for the future.

Similar to how these thinkers wanted to transcend their social and cultural limitations, some today are eager to do the same with our natural limitations. We are left wondering of the effect that biotechnology will have, especially when it comes to "remembering"

² And occasionally our cat's bellies too. Some cats, however, have other things in mind for our small rodent friends; see: "Behemoth"

³ Not to be confused with a fear of heights. See: "[What Lies Beyond the Wall](#)"

¹ Do they get confused sometimes? Surely, and it is beautiful. See: [Bianhua](#)

genetic memory. What, if anything, will we be able to unlock from the past and how might we be able to impact the future of humanity? Should we be scared or excited, or a bit of both? Most importantly, if we were to gain any sort of control over our genetic memories, what sorts of creations might artists be able to make⁴? The truth of the matter is, we've already started the process—not extensively with humans yet, but with other creatures. In 2015, the American Society of Microbiology hosted an art competition in which the medium was bacteria on petri dish. Famous artworks, including the Great Wave of Kanagawa and Starry Night, were recreated in eye-popping color using pneumonia, salmonella, and sphingomonas, among other nearly unpronounceable bacteria. This is a strong starting point for biologically engineered art, but what comes next?

One possibility for scientific creativity moving forward is a future where genetic differences could be prompted and epigenetic inheritance could be falsified. This is also already happening in laboratories and studios in the United States. Artist Eduardo Kac commissioned a French laboratory to implant genes of a jellyfish into a rabbit to make it glow under certain lighting conditions. By the time he had envisioned this artwork, gene splicing had been happening for years—but always explicitly as science, never as art. The creation of this green, bioluminescent bunny (named Alba) was a success, but was met with heavy resistance by animal rights and religious groups. Kac also famously had his own DNA spliced with a petunia, giving it red-veined leaves and creating what he dubbed a “plantimal”. While controversial at the time, these artworks were by no means paradigm changing. However, they do lead us further along in the conversation of what is permissible in gene or memory alteration.

Undoubtedly, art has historically been treated as a signpost of high culture, and as such, the gatekeeping surrounding the history of art has been intense. Modern art, postmodernism, and the rest served as plague-filled bodies being catapulted over the castle walls, helping to deconstruct the artworld. With deconstruction has come an expanded perception of what art is as well as an expanded vocabulary for how we talk about it. One consequence of this is that the “history of art” can no longer be merely a list of dead European painters, but now involves the rest of the continents and innumerable mediums. What has the legitimization of Asian, African, and native art done to our collective art-memory?

We cannot say, at least not here. We can only comment on how memory is so often unreliable. What does it mean to forget anyway⁵? You know when it happens, but to describe it somehow seems false. Forgetting is failure—which is why it is oftentimes confusing and frustrating. Some people will put something convenient in place of the fugitive memory via fabrication or pure creation. The replacement memory is always plausible, cobbled together with fragments of other truths. Many of us have experienced a version of this, as dad’s stories become more exaggerated over the years⁶.

Is it possible that some replacement memories come from our dreams? Dreams have certainly acted as a life spring for inspiration and creativity. We know scientifically that REM sleep (and the dreams that come with it) are useful in consolidating long-term memory— but what if there is something else there? Ancient civilizations throughout the Americas believed that dreams provided access to the spirits of their ancestors, a sacred method of communication with those who came before. Some contemporary spiritual movements echo this sentiment, claiming that dreams sometimes allow for the ability to experience first-hand the memories of our ancestors. While there is no research directly backing these claims or any others that episodic memories can be passed along to our children, one does wonder during moments of déjà vu what really is happening.

Those of us who live in Shanghai live within a complex and rapid play of memory and forgetfulness. Too often, our favorite restaurant⁷ last week is a parking lot this week. Our best friends return home or change cities after two or three years. Our own homes become hazy, alternate versions of their realities as a red 拆 emerges on the walls of our memories. Baoan⁸ transfer or retire, friendly faces are replaced by distracted eyes glued to smartphone screens, and we eventually join

them all. Perhaps this is the greatest secret to be unlocked through genetic memory: conformity, starting with the family and eventually spreading to the wider community as survival needs demand.

Liu Dao does its best to depict some truths of our experience here. Artworks like “To My Dearly Beloved” depict women walking tightropes like trapeze artists over yesterday’s laundry. Her careful balancing over what’s old, moving forward into what’s new, and back again while trying not to fall—this is our struggle. In “Butterfly Menace,” the antiquity of the vase is juxtaposed with the transformative and ever-changing nature of the butterfly, reflecting our own attempts in reconciling our current situations with our personal histories. And again, those characters in artworks such as “A Small Shrine of Mine” cleaning our new cities and ancient vases are in a process of actively remembering and actively forgetting those things that lie outside the realm of coherence. These themes, taken personally and pressed against deeper biological questions of identity and will, make for true inspiration. The question is: will you embrace this unavoidable dissonance and try to make a singularity of its many parts, or will you shrink away, a mere carrier of genetic material for someone greater?

Out of the paradoxes of Shanghai life, our memories must help us make meaning. Our minds and identities are narrative, stories that help us get to the next step. Therefore, our own personal narratives must be coherent. In places so fragmentary and so cobbled, this is no easy task. The dissonance runs deep here, but if we try, it can be overcome and meaning can be made. On February 21st, 2019, we invite you to come have a look at our Shanghai, of times past and times coming.

About the Liu Dao Collective

Liu Dao is a Shanghai-based art collective of tech-geeks and creative talents driven by innovation and interaction. The collective produces cutting-edge art that engages sights and scenes from the old and new China, and elevates the skills of new talents by working from a communal forum. Liu Dao’s art is visual, interactive, conceptual, humorous, and always striking, involving fresh takes on modern technology, and always the product of collaboration. Since Liu Dao’s beginning, painters, sculptors, photographers, filmmakers, new media artists, software and digital imaging artists, dancers, writers, engineers, and curators have worked together to produce original, intriguing shows. At island6, all the work exhibited is made on site and specifically for the theme of a show through the collaboration of the collective’s in-house artists, curators and art directors. The collective has exhibited at the China Art Museum (Shanghai), at the Smithsonian Anacostia (Washington D.C.) and at the MOCA Shanghai, among many others. Major collections that have Liu Dao artwork include: Louis Vuitton House, Taipei - Antoine Arnault Collection, Paris - White Rabbit Collection, Sydney - Katz Collection (Neiman Marcus), NYC - Patrizio Bertelli Collection (Prada), Milano - Countess d’Ornano Collection (Sisley), Paris - Swire Collection (Temple House Chengdu, Middle House Shanghai).

Dates: From February 21st to April 17th, 2019

Curation: Carlin Reinig & Andras Gal

Art Direction: Thomas Charvériat & Nick Hersey

Art Research: Lu Xiao Tian, Tang Dashi & He Dashi, Owen

Coordination: Yeung Sin Ching, Iris Gardener

Artists: island6 art collective (Liu Dao)

Venue: island6 Main, 50 Moganshan Road, building #6, 2/F, Shanghai

Link: <https://island6.org/FlashbulbOnMemoryLane>



Scan and follow island6 Wechat account

⁴ We would be on our way to unlocking “[The Hidden Beauty of Unknown Times](#).”

⁵ Photos help us to not forget. See: “[This Moment is Gone](#)”

⁶ It’s almost as if his stories are cultivated, not unlike “Watering Thoughts”

⁷ See: “Cat Noodle Joint”—great restaurant over on 巨鹿路.

⁸ See: “Baoan” for a reminder of those good old days.