

Robin James Sullivan

Maddie Rose Hills



# White River Blue Lagoon Green Mound

A Conversation about Cornwall's China Clay Industry



*China Clay, also known as Kaolin, is created through millions of years of granite decomposition underground. It was first mined in ancient China as a key ingredient in fine porcelain. Centuries later a search for the mineral ensued in the UK, with vast quantities of this 'White Gold' located in Cornwall.*

*This area would soon become the Clay Country, covering a 70km stretch of land between Roche, St Austell, St Blazey and Fraddon.*

*The material uses and desirability of Cornwall's china clay are constantly shifting, as product trends go in and out of favour,*

*moving from porcelain to rubber, paper, paint and back to porcelain again.*

*The industry grew to a boom in the late 20th century, but has seen a sharp decrease in recent years. This has shaped the landscape but also the community that inhabits it.*

*One thing however has remained unchanged, in order to extract China clay from the ground, you need to dig.*

*Dig down, dig out, move around, pile up and ship out. Extensive mining of the landscape produces extensive mountains of waste consisting of unwanted minerals piled high throughout the landscape.*



**SMOOTHNESS  
WHITENESS  
BRIGHTNESS  
OPACITY  
GLOSS  
FILLER**



A selection of china clay products



*In January 2021, Robin James Sullivan and Maddie Rose Hills began speaking about china clay resulting in a conversation which has continued over six months. Sullivan has lived in Cornwall, a stone's throw from the clay districts for most of his life. He is a research based artist whose latest project is a five month public programme exploring the area's rich 6000 year history.*

*Hills is a visitor, learning about these landscapes from the outside. She is an artist, curator and researcher, her current practice focuses on the study of materials and their contexts.*

*Communicating in an online document, Sullivan and Hills 'volleyed' thoughts about the industry. A multi time-scaled conversation between past and present selves, responding to questions and thoughts from the future.*

*To dig into the earth is to reunite the past with the present. Ancient layers of rock sediment from the bottom of the quarry sit at the top of waste tips, flipping time on its head – this material reality of the china clay quarries of Cornwall formed a model for this revisionist and a-chronological dialogue.*



*One thing I've been thinking about since chatting is what kind of notions of time are brought up when we're talking about China Clay.*

*How these quarries are dug so deeply into the ground, which reminded me of Tim Ingold articulating how time is not always linear: earth is always waiting to be brought to the surface with regards to erosion.*

*However a human-made version of this exists in the form of quarries, where layers of time are made visible alongside one another.*



*The Ingold reference is a great example to start with.*

*One thing I find so fascinating about the china landscape is the depths of time that are visible.*

*There are the open pits, with their layers exposed, like wormholes in time.*

*Like the analogy of earth's crust being this moment in time, when we dig into the ground we open up windows: portals into other times.*

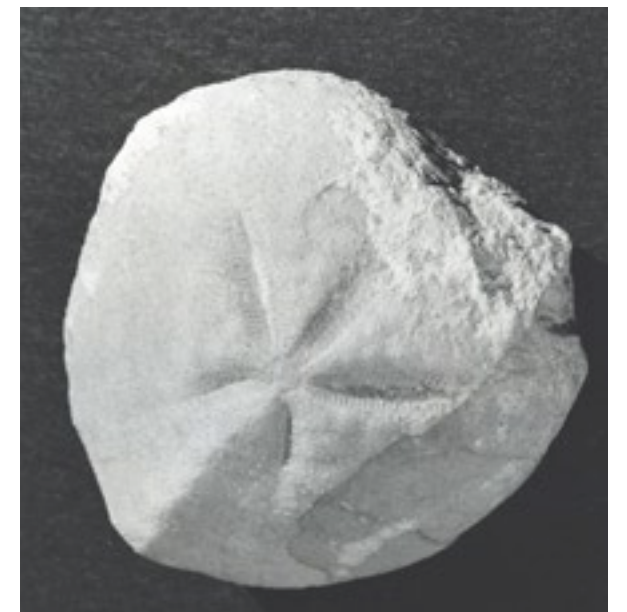
*You can look down and see history laid out in front of you like a surrealist painting or assemblage. For those that know what to look for, you can see all the time in the world.*

*Deep Time.*

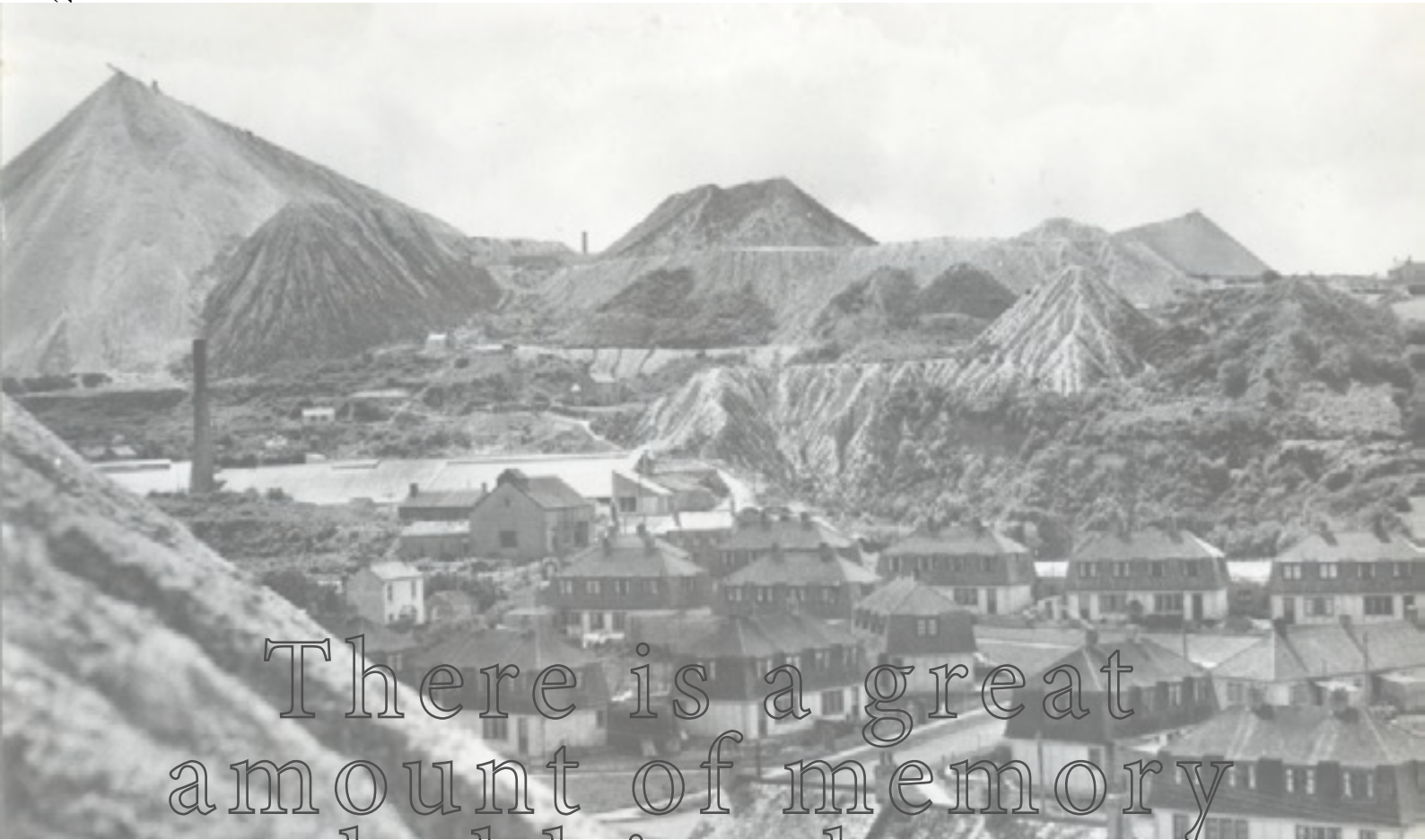


You can see remnants of the first volcanos, the first life underwater, the trees that once grew, the rivers that cut through the landscape.

*This image is from the Wheal Martyn China Clay Museum Archive and is a fossil found in one of clay pits.*







There is a great  
amount of memory  
held in these  
objects. The outline  
of a thing imprinted  
in a place.

*We leave our own fossils around the  
place everyday, traces of a hand in  
clay, or accidental footsteps in  
cement.*

*It's odd to think how many creatures  
have made these areas their homes,  
and how many of us have carved into  
the landscape to dig out materials,  
re-directed rivers or flattened fields.*





*It's funny I was thinking of this yesterday in regards to London Bricks, they are made up of London Clay, this wondrous stiff bluish clay that all of London is built on top of and even built into in regards to the tubes. Tunnels in clay, in time. What I find so fascinating about this clay is that it has a really high fossil content. The clay is from the marine geological formation Ypresian, or early Eocene Epoch, from 56 - 33.9 million years ago.*

*Eocene translates in ancient greek to Eos- (Dawn) and Kainos - (New) and references the appearance of new fauna during that time. The fossils within the London Clay show what the world looked like then. It was a warm climate place, with tropical or subtropical flora, with lush forest similar to that of Indonesia today.*

*I love that there are now huge buildings made of these fossils, trapped within the clay bricks. It brings a new meaning to the saying 'concrete jungle'.*

*To think of walking through a lush forest 56 million years ago, how absolutely incomprehensible it is to think that one day, there will be these fantastical buildings built out of the forest's fossilized remains, entrapped in a resolidified liquid rock. It's this hidden world right in front of our eyes.*

*It reminds me of how there is no 'new' matter, all matter is constantly reabsorbed or separated and then combined in new ways, but it doesn't take up any more space.*









*I find the whole industry kind of troublesome to be honest. There was a clear economic benefit to the industry: it created over 2000 skilled jobs, boosted the economy for Cornwall, built harbours, roads and railways.*

*But! People talk about this material as 'White Gold', yet would you ever put gold in your toothpaste, car tyre, pills, or in a newspaper that gets thrown away as soon as you've read it. This material's extraction takes huge quantities of land up, sweat equity, and water. It destroyed habitats, biodiversity, let alone the chemicals used, machinery needed. It's a finite resource, yet it's used as a throw away item.*



The way it's spoken about in Cornwall, it isn't just livelihood, or industry, or even a way of life, it has become a part of the very fabric of being.

It is in their blood.

*As Peter Herring wrote, we are increasingly aware that landscape doesn't just exist out there, but in here too. In the minds of those that live and work and think about it.*



29th JANUARY



*I find myself drawn to landscapes that are hidden, those dark sides of industry. Places we pretend don't exist. But the waste tips are exceptionally present.*

*Fossilised in the site they were created, landmarks to so many people who live around them.*

*I didn't realise china clay mining produces more waste than usable product, to the extent that for every 1 tonne of china clay there is 9 tonnes of waste.*



15th FEBRUARY

I did the math a little while ago based on the amount of pure Kaolin extracted and it totals 1.4 Billion tonnes of earth that has been moved!

Its mind bending.





*These turquoise waters look so inviting, but are forbidden destinations for wild swimmers keen for a dip in the idyllic lagoon. The water must have a mind of its own to reflect back to the sky this specific shade of blue!*

*Mica is a mineral often found in household electronics, sparkly eye makeup and highlighter for cheeks. Move it around and it distracts the light, offering hidden colours. I just found out the colour of the water is due to the presence of waste mica, a byproduct of china clay. The mica affects the colour through its unique reflective properties.*





29th JANUARY

*We pick and choose what is waste depending on only our needs as a species, and these needs change so often. There is still china clay in some of the disused quarries, but they are no longer mined, so even the clay becomes waste, something undesired.*

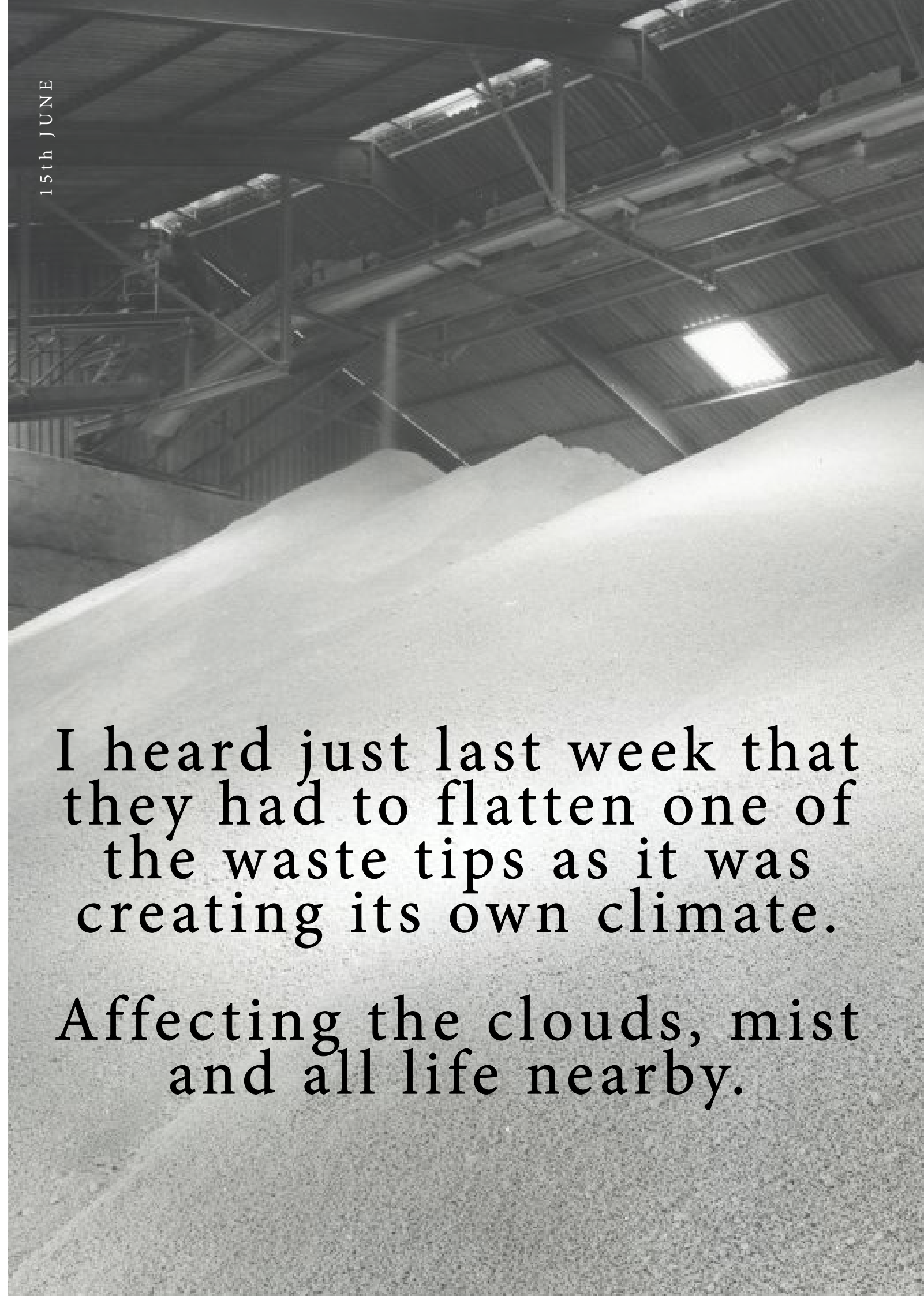
The waste tips aren't harmless either. I was reading about the problems they can cause, one of them being pollution to nearby water sources.



15th JUNE

I heard just last week that they had to flatten one of the waste tips as it was creating its own climate.

Affecting the clouds, mist and all life nearby.





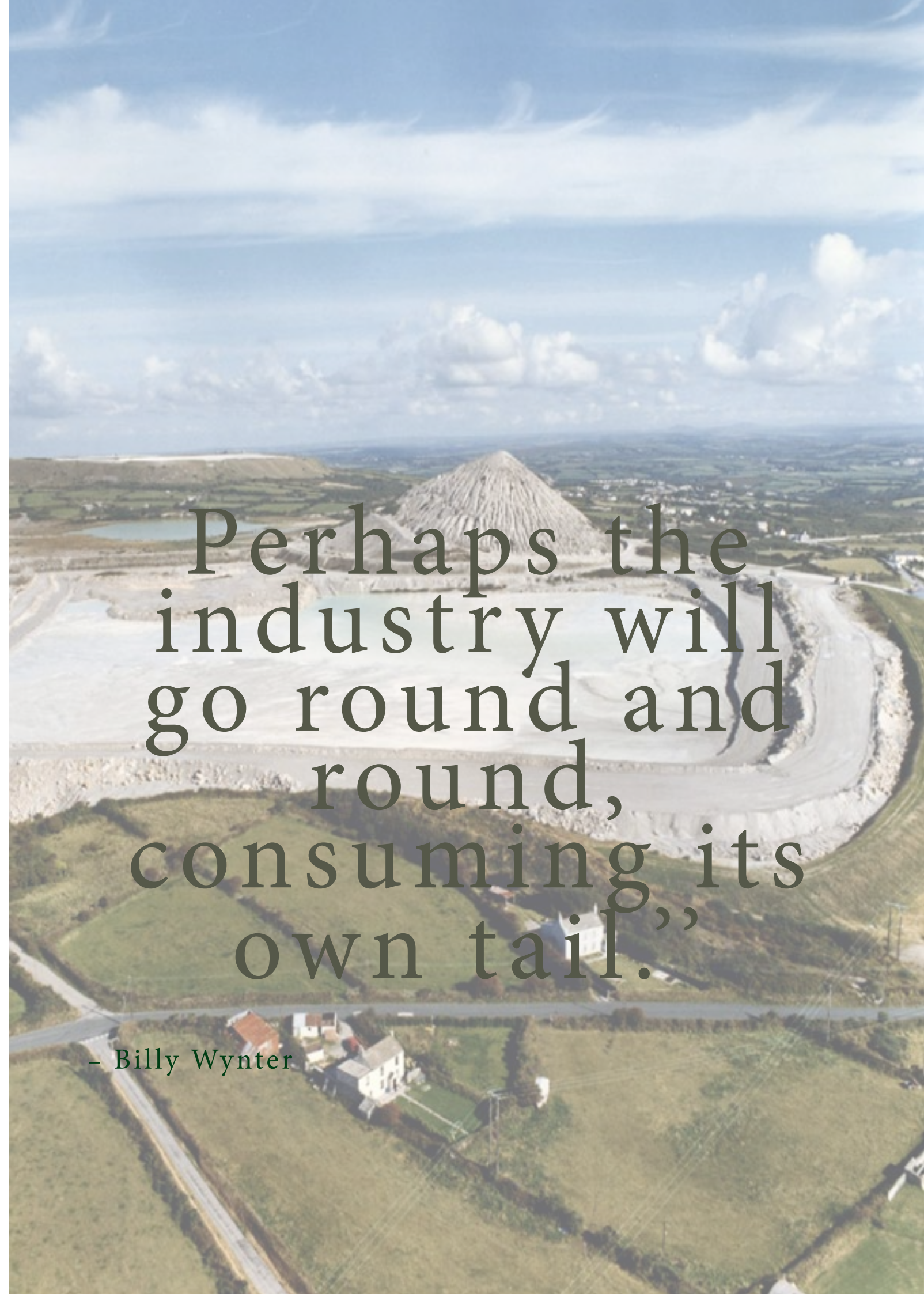
*Fittingly in the nature of all materials constantly used and reused, perhaps the waste tips aren't permanent features of the landscape after all:*



“There is talk of the profitability of re-working old tips for material left over from earlier, less efficient methods...

– Billy Wynter

Perhaps the industry will go round and round, consuming its own tail.”





*I like the idea of the dark side of industry, this side we're not meant to see, but in Cornwall there's no way to hide it, it's right there, so we've built up this cultural appreciation for it, all you ever hear about is the '2000 skilled jobs' it created, the roads, harbours, economic value and impact, the 'unique' landscape.*

*It obscures any other thought regarding it. Lets not fucking kid ourselves.*

## The economic value did not trickle down

*Cornwall is still one of the most deprived counties in the UK, and the middle of Cornwall in and around the china clay industry is the worst hit. Yes it created roads and harbours, but what's it done since?*



*It's amazing the resilience of the communities and the culture surrounding it. I wonder about this spirit, this deep rooted connectedness between people and landscape, between communities.*

*It appears in lots of mining communities across the UK. I think if it wasn't for the beauty in these communities and cultures then the industry itself wouldn't survive.*

*This landscape was built by the community, and the community was built by the landscape*

*It will be interesting to see how this continues to play out, and what culture is created in the aftermath of the industry.*

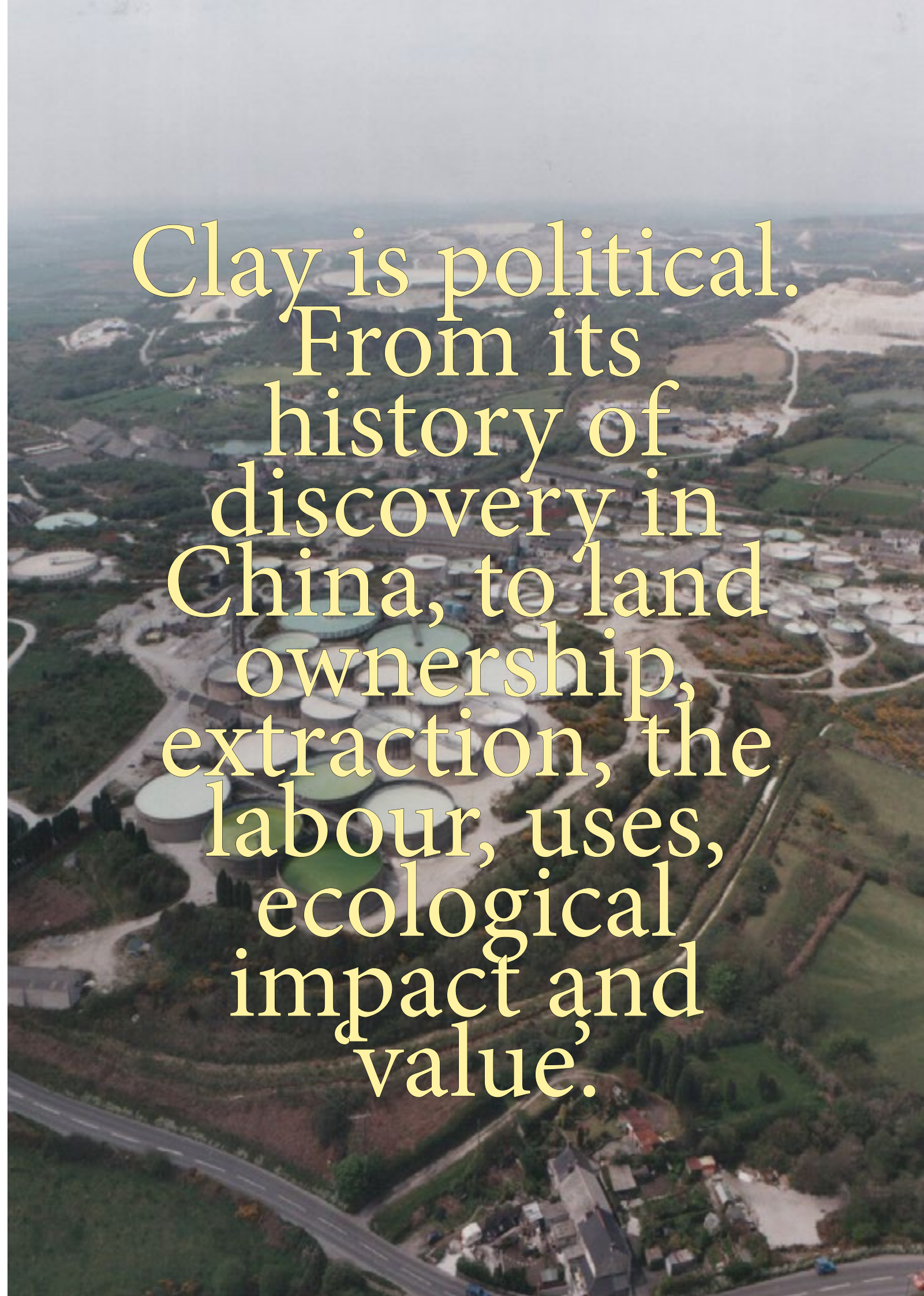


15th JUNE

*It wasn't just the obvious jobs created in the pits, but it was the ancillary industries that boomed to support the trade. These were all skilled jobs, handed down through families, they built entire towns. And these industries were separate, meaning that the power remained in the families and communities themselves. As the larger companies moved, the demand moved, and then we see the decline in all these other businesses. Its a knock on effect that has just continued.*



Clay is political.  
From its  
history of  
discovery in  
China, to land  
ownership,  
extraction, the  
labour, uses,  
ecological  
impact and  
value.





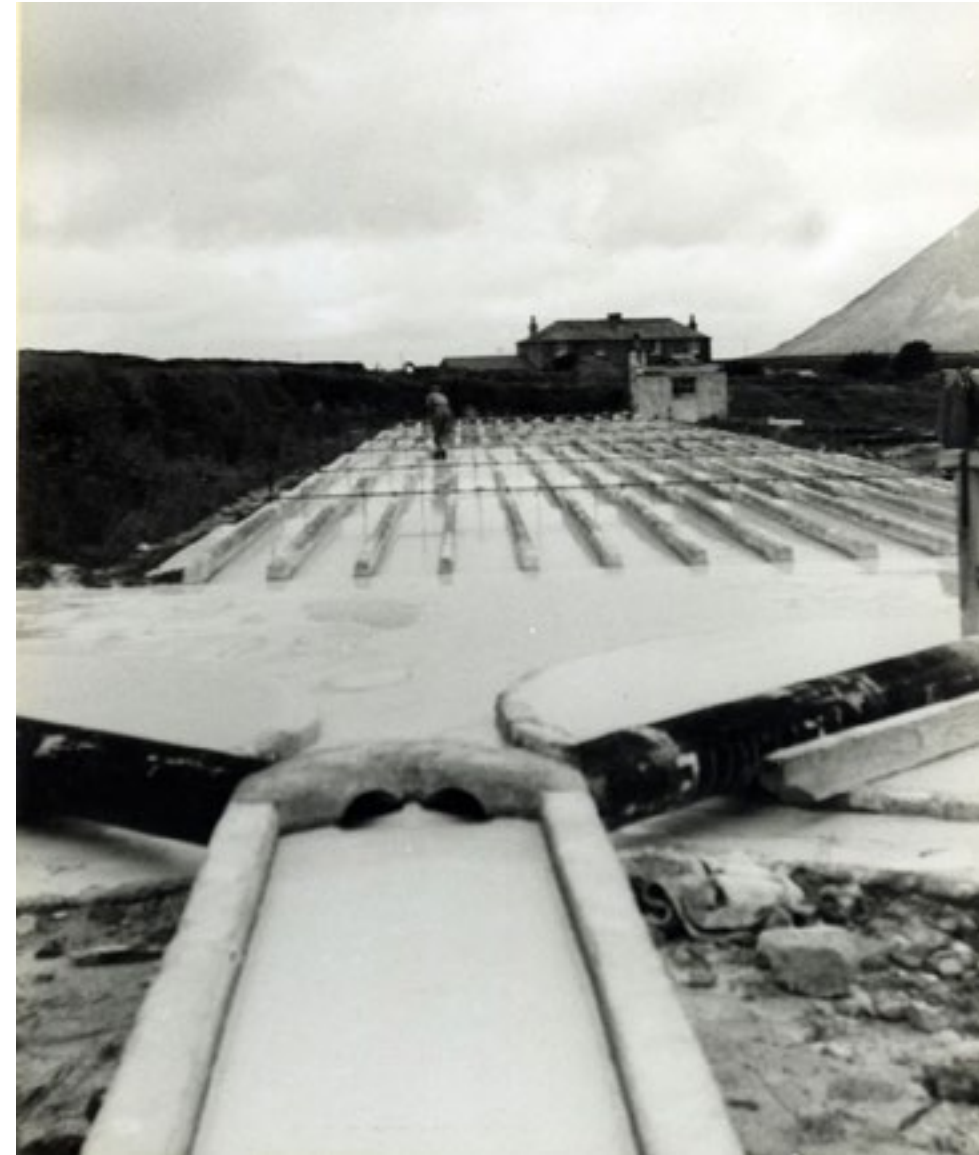
29th FEBRUARY

*This poses a really interesting question, of employment versus environment. So many people, including Mike Grigg, were very well taken care of by the industry throughout their working lives, and as you said the companies built and encouraged local communities to grow.*

*Yet as we know, the aftermath of the industry boom left a massive hole, both culturally and physically. Living in a capitalist society with shifting attitudes towards living harmoniously, the debate around this industry is a question that our entire economy is facing. Particularly now with Covid19 and the climate emergency forcing us to slow down, maybe even to pause individual growth for the sake of our community.*

*It involves a restructuring, one that we may never see, because in this current system people need money to survive, and many jobs are short sighted environmentally and community speaking. How can you say no, in this system, to an industry that offers so many people a job? And if the whole thing were to start over again, would it be possible societally to do anything differently?*

15th JUNE



This is a really interesting thought, what could you do differently given the chance? How could you change an entire view point on a material, and the industry that goes with it?



29th FEBRUARY

*Artist Adam Chodzko points to a hypothetical future for the industry:*

“And then? There are valuable trace elements, such as lithium (for batteries) found in the mineral waste of the mica dams. There are massive water-filled pools in the former clay quarries, allowing good prospects for aqua tourism. But we have no idea what we will be needing from this landscape, 25 years from now.

Our present seems to shift its structural state between sticky malleability, grainy fragmentation and the solidly inert through an increasingly accelerated transformation of our bodies, minds, places, cultures and economies, changes all coinciding with and caused by disparate existential threats. How can we then, in this uncertain state of material-consciousness, begin to predict what our future needs from this landscape might be?”

15th JUNE

*I mean, wow. Yeah, exactly that.*







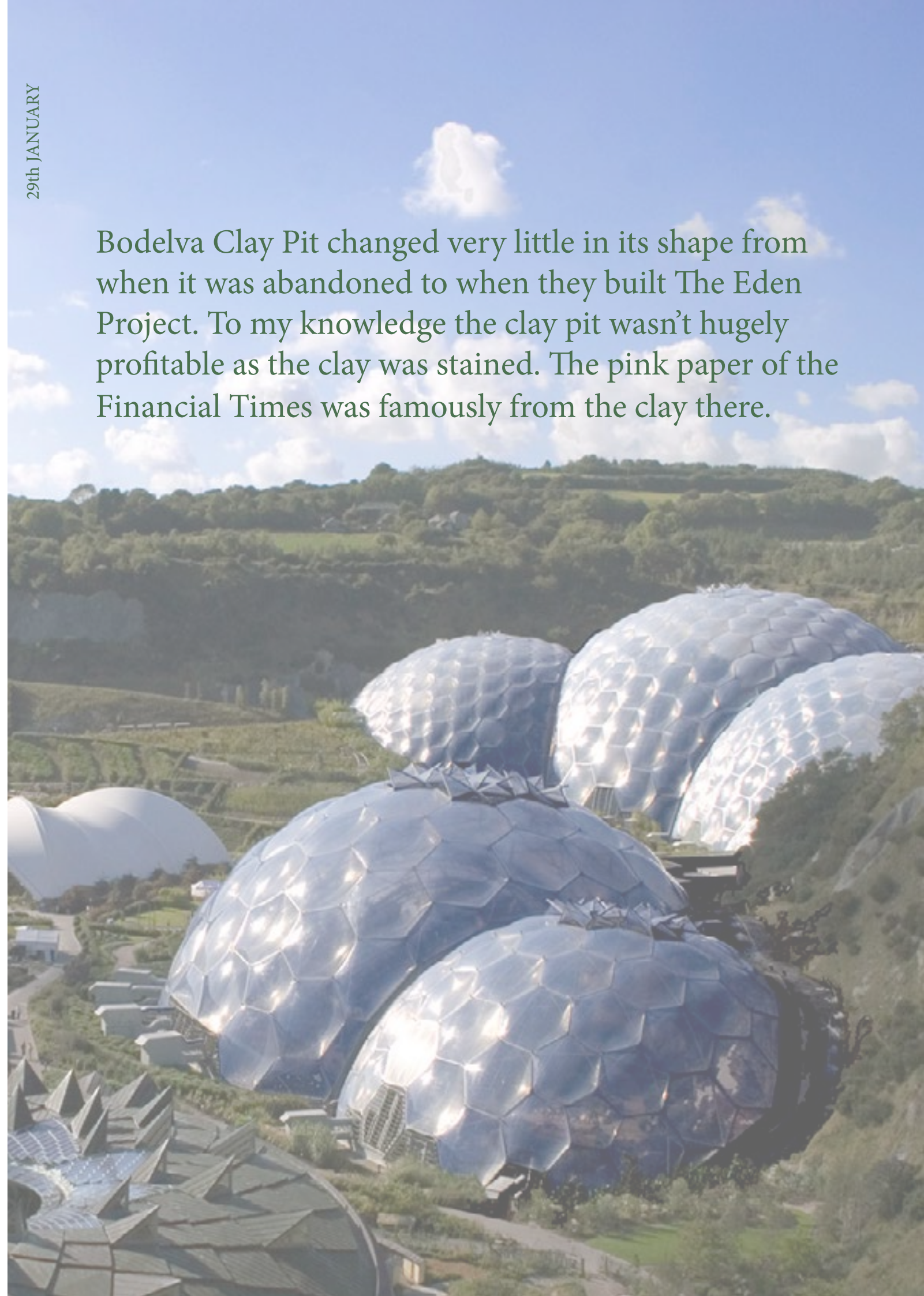




*Bodelva Clay Pit is a disused china clay quarry, which is now home to The Eden Project. The roughly sloped pit opened up to an amazing selection of ochre colours.*

*Did the architects alter the pit or was it's shape kept just like this?*

Bodelva Clay Pit changed very little in its shape from when it was abandoned to when they built The Eden Project. To my knowledge the clay wasn't hugely profitable as the clay was stained. The pink paper of the Financial Times was famously from the clay there.







The earth in Bodelva clay pit has a higher iron content, and the iron rusts in the clay creating this colour. In some of the pits you can see this Iron in streaks, it looks like the cliffs are bleeding.

*Wow. What an amazing image. I was writing about Iron (III) Oxide just the other day. Iron was one of the first elements that belonged to Earth, and existed in its original state for a really really really long time. It wasn't until single-celled organisms began to thrive that enough oxygen developed in Earth's atmosphere for oxidation to begin. At which point all these flecks of iron became affected by it, and the process of painting the earth red began.*

*I love this because it pinpoints Iron (III) Oxide directly to the time that the first signs of life appeared on earth. It literally turned red when life emerged, signalling to nobody that could see that things were about to change. I also find it fascinating, and this makes me think of your thoughts on the curated landscape,*

*how everything is sculpted in some way, that from the moment there was life, be it single-celled life, it began affecting, marking, painting, changing the landscape.*

*So this clay pit being combined with the iron oxide is really incredible, because you have a dramatic, human-made change. This carving out and digging of quarries, but then simultaneous evidence that even when we were a tiny little brainless cell, we were still marking in some way.*

*I'm not saying we should all go out and dig up the earth, but I do find that an interesting comparison.. We mark the earth all day everyday, if not with our hands, then through a glass that we pick up, a plastic cup, or the food we eat. Somewhere down the line this stuff has been pulled out of the ground.*







