

THE 3D

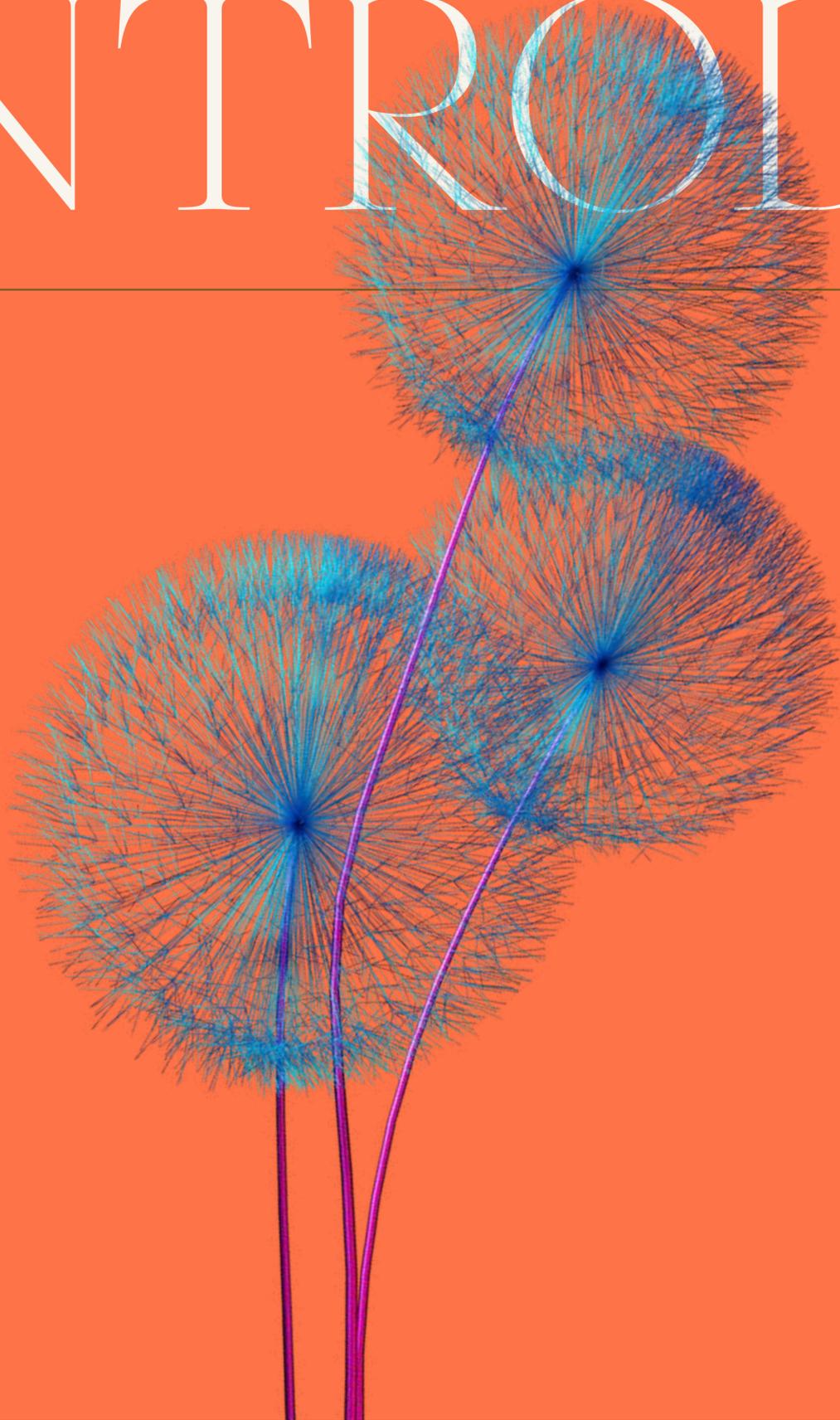
TRENDS

REPORT



It's Nice That × Adobe

INTRODUCTION



The design world is an increasingly physical place. Where objects were once drawn they now flow, bounce and burst. Edges that used to be flat now have crunch, squidge and sheen. As the gap between the real and the virtual grows ever smaller, 3D design presents one of the most exciting frontiers in visual culture.

Whether in gaming, product design, fashion or art, you'll likely have noticed the rise of 3D design. We're in an exciting moment, where the ambitions of creatives are riding a wave of groundbreaking technology. From the outside, though, it can be hard to find a way in. If you're a creative approaching the world of 3D for the first time, you're probably full of questions. What are the limits and who is pushing them? Where are designers getting their inspiration? And as someone who is new to this, where do I start?

Over the following pages, we'll introduce a selection of artists and ideas making waves in the world of 3D. Researching into the length and breadth of work currently being created, we've identified a handful of trends we believe are leading the conversation and offer hints as to where the industry might be heading next.

To dig deeper, we've also spoken to Christina Worner, the founder of London-based studio Dada Projects, who is leading the charge to correct the gender imbalance within 3D design. She shared the story behind her recent work for Vogue Singapore, which saw her use Adobe Substance to create a range of orchid-inspired 3D visuals for the magazine's launch. If you're looking to adopt such practices in your own creative output, we've also spent time getting to know the ins and outs of Adobe Substance – an industry-leading 3D painting tool which recently joined the Adobe family.

Beyond that, we'll look to the future. What comes next for 3D? We'll point out a few emerging trends to keep your eye on, as well as nudging you in the direction of the tools you need to get involved yourself.

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CHAPTER 1

CURRENT

3D TRENDS



CURRENT 3D TRENDS



Our research of the current 3D design landscape took in a wild and eclectic array of creative practices. Put simply: if you can make it in 3D, someone probably has. We did notice, however, that designers across the medium are drawing on one theme above all others...

Reimagining Reality

3D deals in the lifelike. It should perhaps come as no surprise then, that the trend we've identified as leading the conversation is concerned with imitating real life. As programmes like Adobe Substance make it easier to recreate the shapes, textures and movement of the physical world, designers are able to experiment with reality as a paintbrush.

Reimagining Reality is the name we've given to a wide range of work that captures the world in hyper-real detail, and then reshapes it. From photorealistic humans with unfamiliar features, to tactile fabrics with a life of their own, this is a visual language that plays with our expectations and loosens our grip on reality.

Some of the work we've grouped under the Reimagining Reality banner is absurd and playful, finding joy and humour in the everyday. Other examples are more disconcerting, giving real life an unsettling twist.

What unites them is a sense of exploration. These trends show how 3D design provides an opportunity to take the world apart and build something new from its materials.

To explore this trend from all angles, we've broken Reimagining Reality down into four sub-trends. These should offer a more detailed view of the work being created, and hopefully inspire you to think about how you could use 3D to disrupt the nature of our lives.

1 EVERYDAY OBJECTS



Hang tight, © Saratta Cheungsatiansup

Inspiration can come from unexpected places. While art typically draws on the sublime, 3D design is currently proving that the ordinary has just as much to offer.

Commonplace objects like those scattered around you now – shapes we’re used to seeing every day – often provide the inspiration for some of the most surreal and innovative work happening in 3D. Across the medium, designers are faithfully recreating the everyday, from cars to telephones, only to adapt and distort them in a variety of ways. In doing so, they ask questions about what is “ordinary”, “everyday” or “normal”, and why we deem it so.

Take the work of *Uninspired by Current Events* – the moniker of Thai artist **Saratta Cheungsatiansup** – who creates lifelike 3D models of everything from desk chairs to petrol tankers, in order to satirise current events. Or **Laurent Allard**, whose work reproduces childhood objects before giving them a sinister spin.

To think about:

- How can I look at the everyday differently?
- Which everyday objects have shapes that lend themselves to adaptation?
- Pick an ordinary object on your desk – if it were a 3D model, how could you warp it?

We live in an age in which the value of “stuff” is being questioned – especially the plastic and disposable. 3D design can help us rethink our relationship with a variety of objects and, through creatively remoulding the everyday, allow us to see the world ripe with possibility.

Keep an eye on:

- **Uninspired by Current Events**
Thai artist Saratta Cheungsatiansup uses 3D to satirise modern culture.
- **Laurent Allard**
Paris-based artist whose work takes a disturbing look at innocent-seeming objects.

2

UNCANNY
AVATARS

To think about:

- What are my defining features?
- Compare a photo of a real person and a 3D avatar – what distinguishes them?
- How could you use 3D to show a different side to the human form?

From gaming to cinema, the ability to represent people has always been one of the primary uses for 3D in modern culture – though it's fair to say that its use has been largely limited to the mainstream.

However, artists have recently begun experimenting with the uncanny – a term that describes the strange, unsettling feeling we experience when faced with something that resembles a human so closely that it's almost convincing.

Over the past few years we've observed a huge boom in uncanny avatars. From virtual influencers like [Lil Miquela](#) (a 3D model who has been operating as a real person for the past few years) to the figures in work by artist [Harriet Davey](#), who uses the human form as a starting point to create something altogether new. In the age of the self, designers and artists are using the 3D space to experiment with the idea of simply what it is to be human.

Most striking about the new wave of 3D humanoids is the level of detail. 3D design doesn't just allow creators to mimic people's shapes or characteristics, it also allows textures, like hair or clothing, to be accurately rendered. The surface of skin can be captured with all of its glorious imperfections, including wrinkles, freckles, dimples and hairs.

In the age of the self, designers and artists are using the 3D space to experiment with the idea of simply what it is to be human.

Keep an eye on:

- [Giusy Amoroso](#)
Berlin-based digital artist who explores the outer limits of human evolution in her expansive work.
- [Harriet Davey](#)
Berlin-based digital artist who blends the corporeal and the ethereal in her work.



© Harriet Davey

3

TEXTURES & MATERIALS

To think about:

- What does the word "material" mean to you?
- Pick a surface or material near you how would you least expect it to behave?
- How could you use 3D to reimagine the world's many textures?



© Vincent Schwenk

As we've established, 3D design allows artists to reimagine the fabric of reality. And nowhere is this truer than of fabric itself.

Technologies, like Adobe Substance, provide the tools to render textures in more detail than has previously been possible. From hard metals to molten liquids and squidgy foam, the surface and feel of the inanimate world has never been more readily achievable in the digital space.

This, of course, has obvious implications for product design. Whether a pine coffee table or a glass bottle, 3D is the perfect medium for mocking up potential designs or experimenting with different materials in prototype form. Yet, just as with our Everyday Objects trend, what starts as a straightforward, practical use can also offer scope for the surreal.

The work of **Vincent Schwenk** perhaps best showcases the reality-bending qualities of playing with materials in 3D. His digital textures look real – amazingly so, from rippling curtains to spongy cushions – but they also behave in totally unexpected ways, dancing, bulging and merging on the screen.

His work, like that of many others who are experimenting with the material world, inspires us to think more creatively about the most basic matter in our lives.

3D design allows creators to follow the laws of the material world, before throwing them out the window.

Keep an eye on:

- **Vincent Schwenk**
Hamburg-based artist who uses 3D to recreate fabrics, and then makes them dance.
- **Shane Fu**
NYC-based artist who fuses motion and lifelike digital textures to play with our sense of reality.

4 LOOK TO NATURE

When looking at the ways creatives are using 3D to Reimagine Reality, it's not just the human world that's being remodelled. From gardens and rainforests to the colour-bursts of flowers and geological intricacies of rock formations, 3D design is inspiring a surge in work that responds to the natural world.

Take London-based artist **Chris Golden**, who works with 3D to render delicate blooming flowers, only to flood them with psychedelic colour schemes and coat them with an iridescent sheen. The resulting digital art is almost hallucinogenic; the organic matter of planet Earth vividly rewired.

Elsewhere, Copenhagen-based duo **Wang & Söderström** take cues from the unruly growth of fungi, roots, crystals and moss in their work. They blur the natural and the unnatural to great effect, applying it widely, from product design to animation.

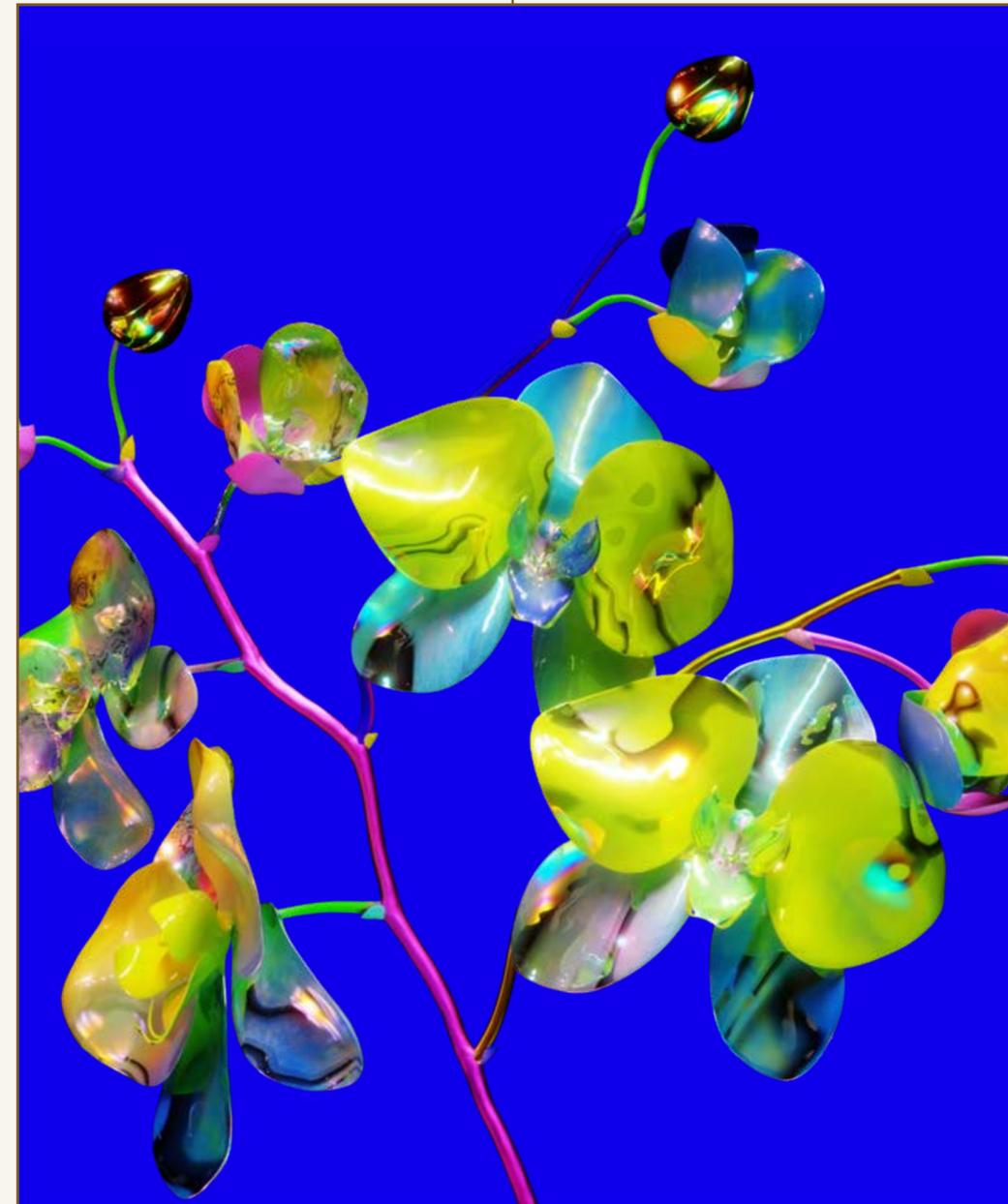
On the surface, it's easy to see why the organic world is a natural inspiration for 3D. Nature encourages recreation and adaptation, so it makes sense that designers are finding joy in reimagining it. Look more closely, though, and you may find more to consider. As we play with the natural world in the digital space, what can we learn from it? How can we adapt in return?

Keep an eye on:

- **Chris Golden**
London-based artist who combines the biological patterns of flowers and the electric colour schemes of rave culture.
- **Wang & Söderström**
Danish duo who have created a wealth of projects inspired by the formations and shapes of organic growth.

To think about:

- What unusual shapes or textures can be found in nature?
- What shapes or structures can be found in both the natural and manmade worlds?
- What does adaptation mean – or look like?



© Chris Golden

CHAPTER 2

INSIDE



THE 3D



INDUSTRY

DADA PROJECTS



FOR VOGUE SINGAPORE

Christina Worner is a digital artist, creative director, and the founder of female-led 3D motion design studio, Dada Projects. Across her work for a wide range of clients, she pushes the boundaries of computer-generated visual communication, as well as driving to make the world of 3D design more inclusive.

This year, she was commissioned by Vogue to create a range of 3D assets to accompany the magazine's launch in Singapore. We spoke to her from her base in London, to discuss the **Vogue brief**, and the 3D future she believes is starting to take shape.

➤ [Vogue Singapore on Instagram](#)

DADA PROJECTS

FOR VOGUE SINGAPORE

Q When and why did you set up Dada Projects?

A It was about a year ago. I'd freelanced for a lot of different studios, working with smaller teams, and bigger corps to change that a little bit. I decided to set up a female-led studio to get as many female identifying creatives in there as possible, and hopefully to create a welcoming environment without hierarchy in the process.

Q Would you say the appetite for 3D is growing?

A I think there was already a rise before the pandemic. Then, suddenly, many companies that would have done live shoots had to think of new ways to get their products out there, and a lot of them turned to 3D. The pandemic was, in many ways, good for 3D. Since then, it has grown – both our understanding of it and the possibilities it offers.

Q Can you offer some insight into your creative process for Vogue Singapore?

A Vogue reached out to say it was launching the magazine in Singapore for the first time. The brief was all about spreading positivity. The orchid is their national flower, and they wanted to highlight it in all its beauty. So, they asked me to create section openers for the magazine, and a face filter, around that theme.

We started to think about how we could showcase the orchid. We decided we wanted it to feel photorealistic, but also surreal. At first glance you think maybe it's a real flower, but you look twice and see it actually has all these colours or shiny metallic sections that don't exist in nature. We also wanted to use the element of water to link it to the location of Singapore, which is right by the sea.

We found a model of the orchid and then used Adobe Substance painter to add the textures. We use Adobe Substance a lot in our work, especially when we want something to be photorealistic. You can recreate textures at such a high level of detail.

Q Does nature inspire your practice more generally?

A I like to go for walks in nature and not think about anything. I often find this is when my best ideas come to mind – when I'm looking at the nature around me, giving my brain the time and space to be bored. I love the organic world.

Q What was the thinking behind the orchid face filter?

A I think for Vogue it was an accessibility consideration. They wanted to get as many people involved with the launch as possible, and for them to experience the national flower. So we created blossoming 3D flowers that floated around the face in this mesmerising way, and water droplets that sparkled.

Q Moving forward, do you think the human face – or representations of self – will be important to 3D?

A It's going to grow and grow. The desire to represent yourself digitally is going to be huge in spaces like the Metaverse, for example. From a technological point of view, we are closer to reaching a photorealistic stage. We can represent the real world quite amazingly, but I would say we still haven't yet figured out how to capture the micro-expressions that make a face feel truly alive – which is why they continue to look a bit eerie.

Q Do you think we will close that gap?

A I hope so. I'm excited for the possibilities. But I still think it's going to take a while – especially in motion.

“I ALWAYS THOUGHT 'OKAY, WHERE ARE ALL THE 3D GIRLS AT?' I FELT THE URGE TO CHANGE THAT A LITTLE BIT.”

DADA PROJECTS

FOR VOGUE SINGAPORE

Q Is “reality” something you play with a lot in your work?

A I think that’s the most exciting part of working in 3D: you can bend what’s perceived to be real. You can, for example, create something photorealistic, but then give it a supernatural physicality. You can manipulate the perception of the viewer, and in doing so create a magical moment where they question what they’re seeing.

I’ve always been interested in bridging the gap between the digital and the physical. These days we’re surrounded by so many smooth surfaces – your phone, your computer screen etc. I like to try and break out of the screen and make something so lush and detailed you feel it has tactility.



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Q Does working in 3D allow you to see the physical world differently?

A In 3D you can take an everyday object and add a magical element to it. 3D has the potential to make something mundane no longer appear mundane. I also think it’s an accessibility thing. Mundane objects are the easiest to get as 3D models, as all of the libraries of scans are full of them.

Q Why do you think so many designers are using 3D to reimagine reality at the moment?

A I guess with everything that’s taken place over the last two years, people are drawn to worlds in which they can escape from our manic reality. Maybe that’s why people are drawn to building alternate worlds – they might be places to find some peace.

Follow Dada Projects

➤ dada-projects.com

➤ instagram.com/christina_dada.projects

CHAPTER 3

EMERGING TRENDS



EMERGING TRENDS



JUST HAVE FUN

Working in 3D doesn't necessarily have to mean dealing with harsh realities. Plenty of designers and creators are utilising the medium to explore their playful sides. From animation that captures the childlike wonder of cartoons, to work full of bright, primary colours and spongy, squidgy materials, 3D design often embraces its gleeful, goofy side.

As a creative, 3D gives you licence to return to what excited you about art and play as a kid. You have the tools to make work that is tactile and physical, so use them! Don't limit yourself to being refined or overly technical. Experiment with shapes. Invent weird characters. Push the boundaries of good taste and rediscover your inner child.

EMERGING TRENDS

VISUALISING SCIENCE

3D doesn't just offer potential for the arts. In the fields of science and technology, programmes like Adobe Substance are allowing users to create visual tools to facilitate learning and development. From models of DNA strands to mapping weather patterns – from sports-scientists illustrating the motion of different muscles, to engineers building complex virtual machines – 3D design is revolutionising the visual language of scientific innovation.

The applications, and implications, of this are massive. For scientists, it means being able to easily visualise their material with previously unmatched levels of accuracy and detail. And for the rest of us, it means gaining access to otherwise inaccessible worlds: from the structures of the human body, to the inner-workings of aeroplanes. In the world of science and technology, 3D design becomes more than a tool for just illustration. It's a means of understanding.

EMERGING TRENDS

THINK MAXIMALISM



Artists and designers working in 3D right now are thinking big. So perhaps it's no mistake that maximalism is proving to be one of the fastest growing trends within the medium. Visual artists in particular are using 3D design to create complex, expansive work full of detail, colour and texture. In many cases, maximalist 3D work takes the form of artificial environments – landscapes rendered to provide a virtual background for a photo shoot, or just a piece of work in its own right. These 3D epics are part sci-fi, part hallucination, pushing 3D design to its most vivid extremes.

More than anything, this is about an approach. Working in 3D means possessing the tools to realise the artist's ambition with a scale and accuracy of detail that has previously been inaccessible. When using 3D, push yourself to the edges of your imagination. Instead of using 3D to design an object, why not use it to build an entire world?

CHAPTER 4



ADOBE

SUBSTANCE

WHAT IS ADOBE SUBSTANCE 3D?



Now you know what can be done with 3D, you probably want to know how.

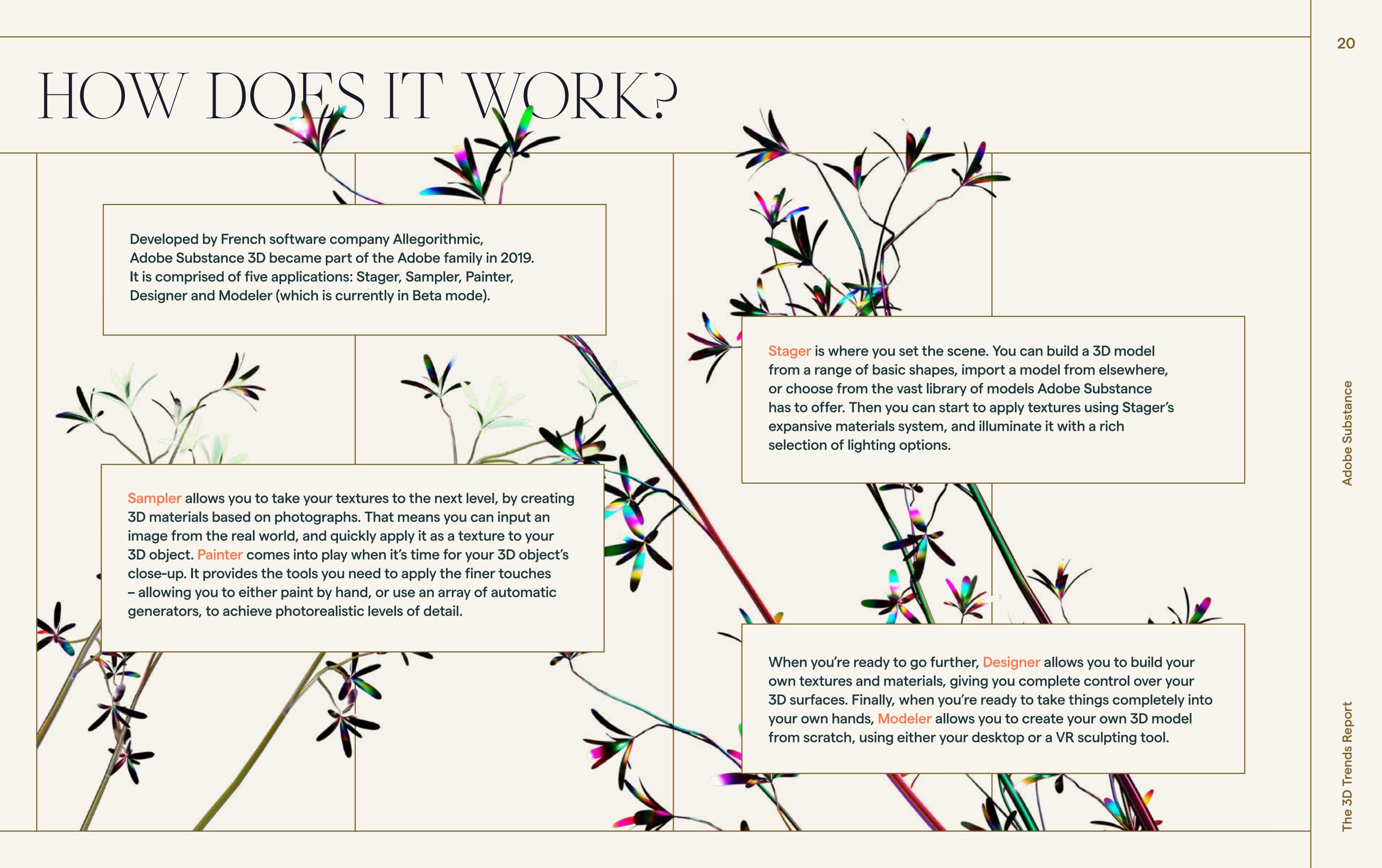
As we've explored the ways in which 3D designers are reimagining reality, certain words have frequently recurred: detail, texture, tactility. That's where Adobe Substance comes in.

Adobe Substance 3D is a collection of integrated applications that allow creators to model, texture, stage and publish their own 3D content. It's a powerful set of tools, giving you complete creative control at every stage of the 3D production pipeline. But it's also approachable. Working with Adobe Substance can be as simple or as complicated as you need it to be, with features ranging from the automatic and intuitive, to the self-directed and complex.

The applications for Adobe Substance are endless, and so are the disciplines and industries where it's being used. Maybe you work in product design, and would benefit from being able to create endless virtual prototypes of the product or packaging you're working with.

Or perhaps you'd find it helpful to visualise the potential decor of a new home, without buying a single drop of paint. Whether you're in fashion, architecture or game design – looking to perfectly recreate the texture of a cheesecake, or design a plant pot from scratch – Adobe Substance is where the digital becomes real.

HOW DOES IT WORK?



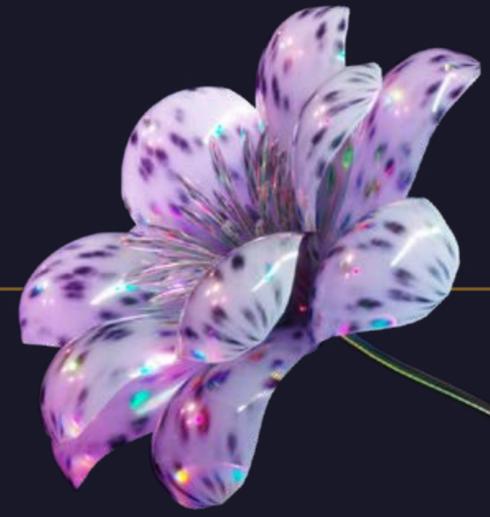
Developed by French software company Allegorithmic, Adobe Substance 3D became part of the Adobe family in 2019. It is comprised of five applications: Stager, Sampler, Painter, Designer and Modeler (which is currently in Beta mode).

Sampler allows you to take your textures to the next level, by creating 3D materials based on photographs. That means you can input an image from the real world, and quickly apply it as a texture to your 3D object. **Painter** comes into play when it's time for your 3D object's close-up. It provides the tools you need to apply the finer touches – allowing you to either paint by hand, or use an array of automatic generators, to achieve photorealistic levels of detail.

Stager is where you set the scene. You can build a 3D model from a range of basic shapes, import a model from elsewhere, or choose from the vast library of models Adobe Substance has to offer. Then you can start to apply textures using Stager's expansive materials system, and illuminate it with a rich selection of lighting options.

When you're ready to go further, **Designer** allows you to build your own textures and materials, giving you complete control over your 3D surfaces. Finally, when you're ready to take things completely into your own hands, **Modeler** allows you to create your own 3D model from scratch, using either your desktop or a VR sculpting tool.

CHAPTER 5



CONCLUSION



CONCLUSION



If we've learned one thing from this study, it's that 3D design is increasingly ubiquitous. As we emerge from a period during which creators were locked out of the outside world, the tools that allow us to create physical objects in the digital space have become more relevant than ever. Against this backdrop, new technologies like Adobe Substance 3D are articulating the ever-growing ambitions of designers in all their vivid, particular detail.

We chose to focus on a trend we named **Reimagining Reality**. The work we discovered under this umbrella is a good temperature read for the tastes and inspirations driving 3D design right now, but it also points to the future of the discipline. As we journey further into the Metaverse – with the line between the virtual and the real becoming ever more blurred – 3D design is steadily becoming the creative language of today.

But, as much as this report reflects on seismic shifts in visual communication, it has also returned time and time again to the smaller things. Capturing reality in 3D design is about detail – the imperfections, the grain of the wood, the flecks of dust in the light. What makes the advances in applications like

Adobe Substance so exciting is not just its capacity to build worlds, but also its precision in reproducing the things we see, touch and experience every day.

If you're new to 3D, hopefully this report has given you an overview of the potential it has to offer, as well as sparking your imagination as to how it might influence your practice. Now is a great time to begin embracing this medium. The draw of 3D design has never been more real.

COLOPHON

This 3D trends report was commissioned by Adobe, and written and produced by It's Nice That.

➤ [Learn more about Adobe Substance.](#)

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REPORT