Portfolio

tomeaton.io

# Tom Eaton

## Shaping the future of mobility

For the past two decades, my work has been led by the theme of mobility—from digital devices to modes of transportation, spanning speculative advanced concepts to production programs. Each transition to a new category has enriched and informed the next through a constant exchange of ideas, technologies, and cultures, disrupting convention.

The results of my work are embraced by millions of people each day—in the pocket, on the trail, in the sky.

# My journey




This portfolio illustrates how I prioritize the fluidity found in small companies, while working within the largest and most process-driven corporate environments. A characteristic only possible, when the following qualities are prized above all else in a team:

**Trust—Integrity—Creativity**

# Aerospace

## Boeing

As Chief Industrial Designer, I have three core responsibilities:

Supporting the immediate needs of our customers, whether that's configuring a new airplane, or retrofitting one in service.

Shaping the cabin of our next generation of airplane—its architecture and features.

Spurring a culture of innovation, through setting visions that can act as unifying North stars.

## EnCore

After the acquisition of EnCore by Boeing in 2019, I straddled two vastly different organizations—a micro start-up and a global OEM.

This dichotomy of environments enabled me to marry the agile mind-set of EnCore, with the vast resources and technical know-how of Boeing. The result was a powerful fusion which has led to EnCore becoming Boeing's new center for innovation.

## LIFT

Joining entrepreneur Jim Downey as a founding team member of LIFT we created a seating company specializing in products for Boeing. Building teams in California and Wales, UK, I led all creative aspects of our new business, from concept to manufacture.

## Adient Aerospace

While at LIFT, Boeing approached me to support a strategic joint venture with Adient to develop a game-changing Business Class seat.

The cross-pollination of these two spheres—automotive and aerospace—resulted in a product distinguished by its craftsmanship. It is now flying with the world's leading airline, Qatar.

## Zodiac

On entering aerospace, my task was to lead an advanced team of designers, engineers, and scientists in capturing new IP and by developing conceptual designs for new seating configurations and technical features.



Zodiac cabin concept. See pages 18-19

# Unifying our visual presence

Poor and fragmented imagery had plagued Boeing for years. In response, I initiated and directed an aesthetic ‘style guide’ to harmonize the visual expression of our brand and, most importantly, imbue it with our prized human centric design principles.

This document now guides all-new visual marketing material across Boeing’s business.
















## Building trust

Historically, Boeing's presence at AIX, the world's largest interior show, followed long-established cues: hard corporate blues and contrasting bright, often stark, glossy whites—lacking any of the magic of flight, offering no invitation to share, explore, or collaborate.

Taking leadership of the event in 2019, I introduced a new atmosphere, one guided by the beauty and draw of twilight hours. And, in response to the tragic 737 MAX events, I replaced our fortifying walls with fabric, light, and experiential imagery, bringing a sense of openness, transparency, and invitation.



Years past:



Going forward:











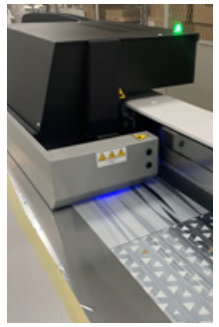

Communicating products through human emotions

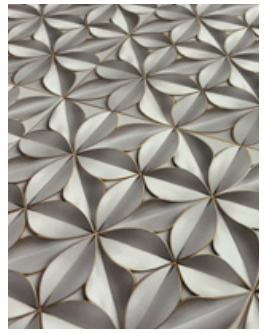
# Moments of realization

**Epiphanies—recognizing the potential in two otherwise disparate elements—are infrequent but profound moments in design.**

While developing a decorative finish using a digital texturing printer, I discovered the possibility of embedding braille directly into a cosmetic surface, rendering it largely invisible to the eye.

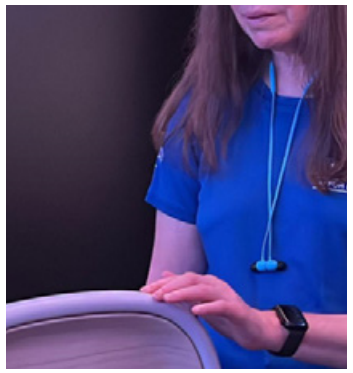
Alongside Boeing's accessibility team, we developed the first prototypes of 'tactile' wayfinding that works in harmony with the cabin's finishes—minimizing the visual disruption to able-sighted people, while introducing a transformative informational layer to those without.

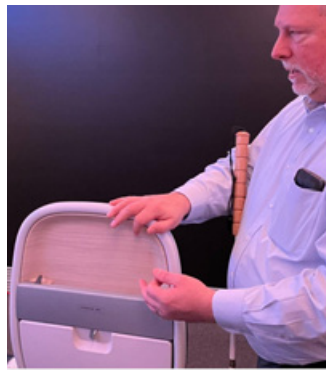




Textured printing deleloped with Cannon














Tactile wayfinding developed for the Aircraft Interiors show

# Natural forces

**How an object is formed profoundly affects both our relationship with it, and the space around it.**

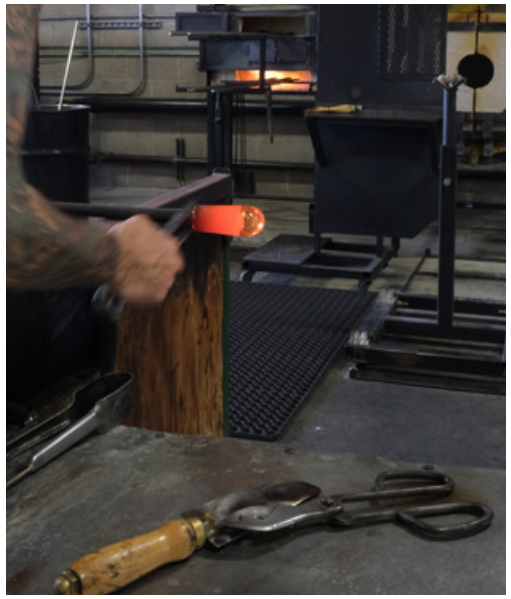
In an world designed almost entirely with CAD and manufactured with mechnical tools, we run the risk of dehumanization.

I use advanced projects as opportunities to explore my premise that a naturally formed body, such as a pool of liquid, has the innate ability to imbue calmness within an environment, alleviating anxiety in a way a rationally derived object can't.

Glass (below)

Working with a Venetian glass blower, we created a feature light whose shape was 'derationalized' by allowing the glass' natural properties to guide its ultimate form.

See pages 16-17







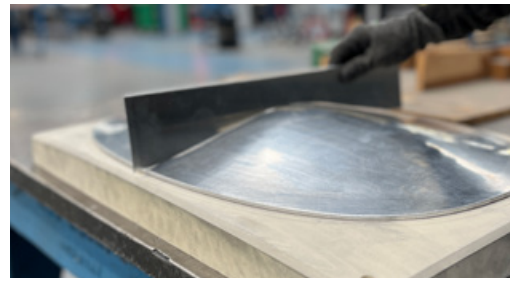





Metal (below)

Employing a long-standing coach builder in Coventry, England, I set the task of hand-forming a complex organic dish, inspired by a pebble, using techniques that would leave behind a visible thread to the hands that shaped it.

See pages 18-21









Ascent, premium front row suite

## Transforming spaces

This conceptual piece was developed to explore how shared, physical spaces could transition over the duration of a flight. Using digital displays, light, and sound to transform an environment, we enabled a shared social space to fulfil different roles depending on the needs of the flight-phase.

perch









The habit of perching








Transparent and flexible displays developed in partnership with LG Electronics

The Perch at the Acraft Interiors Expo, Germany

## Building a platform

My work with Adient Aerospace began with the development of Ascent, a modular business class seat that is now in service on both Boeing and Airbus airplanes.

Recognized as our industry's leading product, it currently flies with Qatar, Hawaiian, American, and is in place to fly with seven others—demonstrating its versatility for customization and unprecedented build quality.



Ascent 787, core product







Hawaiian Airlines - Launch Customer

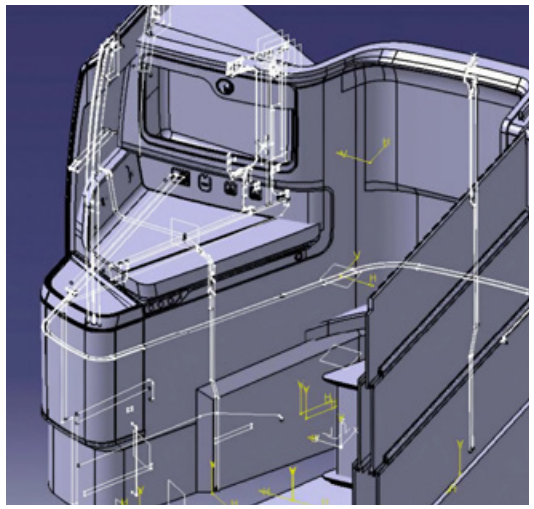
## Craftsmanship

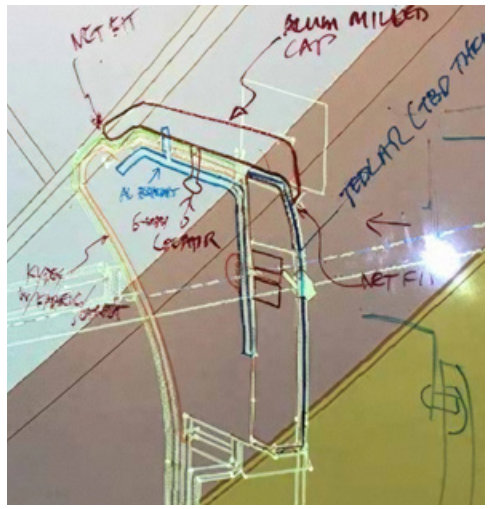
Adient's heritage is in automotive excellence. My role during the early formation of their new seating business was to translate their established methods for car interiors into more formats that could be applied to their new aerospace portfolio.

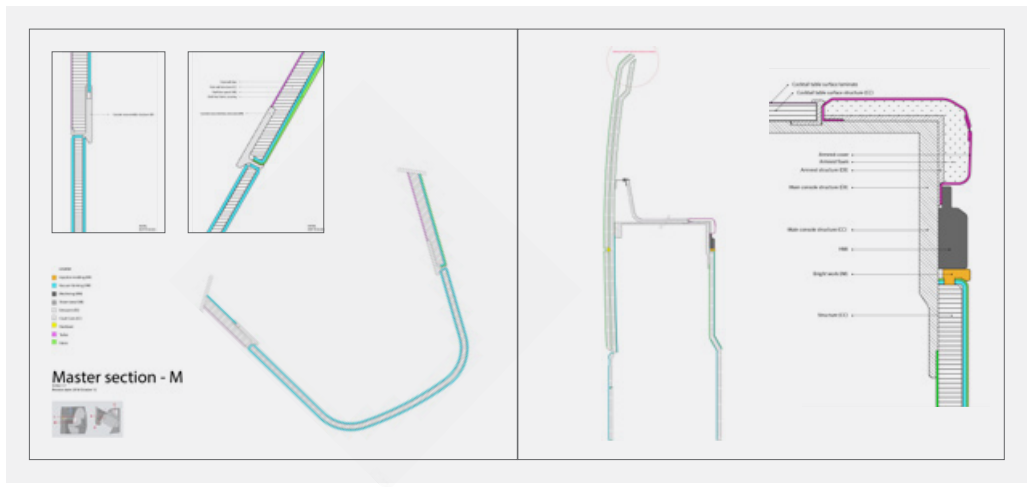
**Craftsmanship, the perception of a product's integrity, was central in this exercise.**

However, the differences in the manufacturing processes of these two industries meant the methodologies used for assessing, implementing, and measuring needed to be completely remastered.

Craftsmanship became the distinguishing quality of Adient's products—its influence led us to be selected by Qatar as its sole business class seating supplier.








## Exploring the chair

Boeing selected LIFT as a partner to develop the first wholly optimized seat for the 787 Dreamliner—spatially, structurally, and aesthetically. A seat in true harmony with the cabin architecture.

The success of this work led to LIFTs acquisition in 2019, and its subsequent integration into Adient Aerospace.





Ovation for the 787



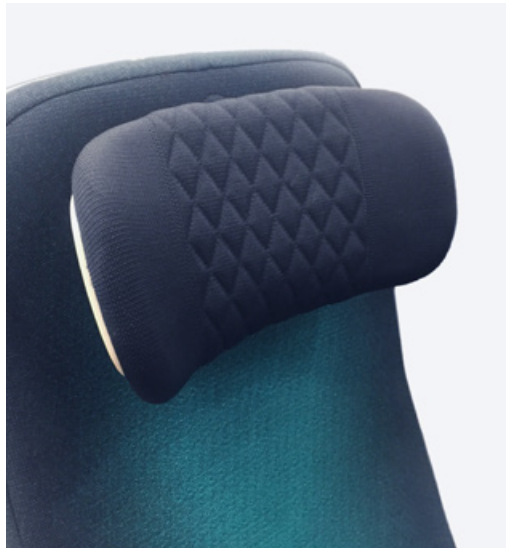




# Material performance

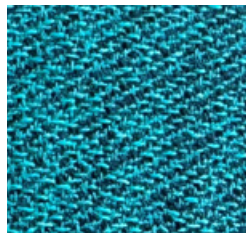
Working with mills in Switzerland, we developed the industry's first 3D knitted headrests and woven fabric seat covers. These new materials featured performance characteristics that varied across their surfaces—increased breathability in the center, where a passenger's body would rest, and enhanced durability around the perimeter, where it would see most abuse.

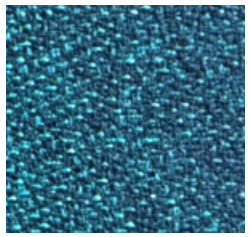
These unique morphing qualities became the central theme of the seat's aesthetic identity—visually describing the embedded technological advancement.

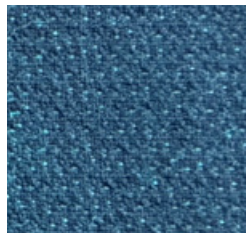


















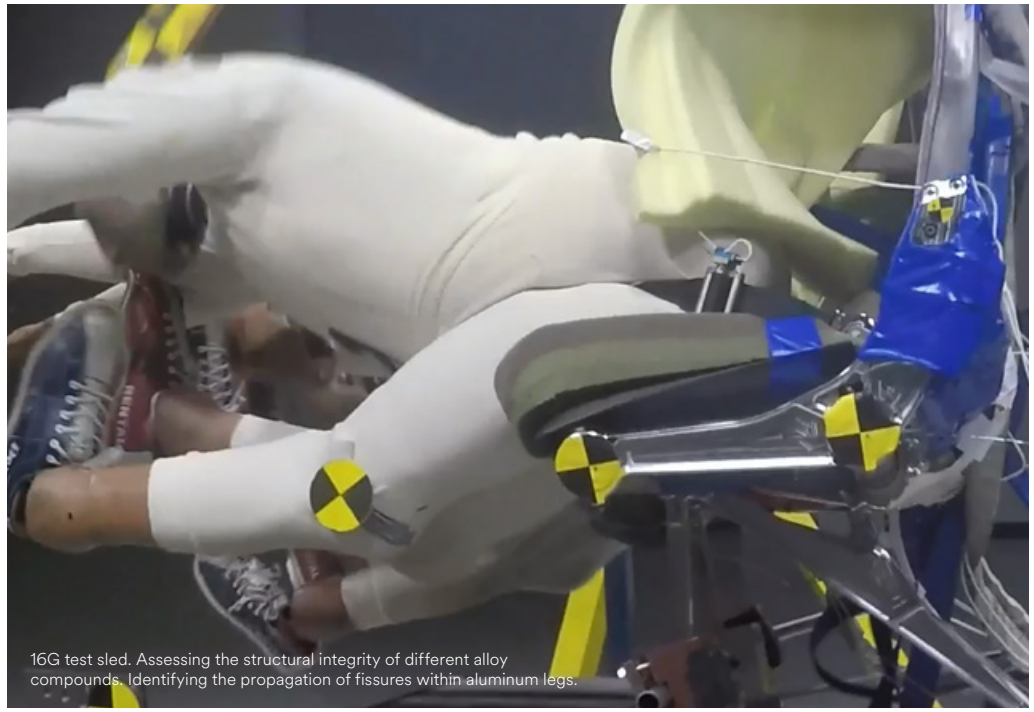
# Dynamic testing

Strength, lightness, aesthetics: finding the precise balance between these factors is fundamental to making a product successful. Overbuild and you're not competitive; underbuild, and you risk in-service failure. Neglect appearance, and you cease to reflect quality.

**Only through embodying an ethos of: design > test > evaluavte > redesign, again and again, could we, as a team, achieve this ultimate objective.**





16G test sled. Assessing the structural integrity of different alloy compounds. Identifying the propagation of fissures within aluminum legs.

## Additive to subtractive manufacturing

Atherton Bikes, pioneers in the construction of modern bike frames, had held my attention since their conception. As a friend of their UK engineering team, I have supported them over the years, guiding the aesthetic characteristics of their products. With each frame, I sought to express visually the unique properties of the manufacturing process, inspiring riders to follow Atherton's technological journey.



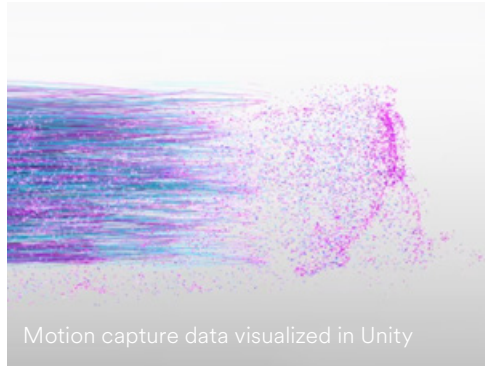



## Desire lines

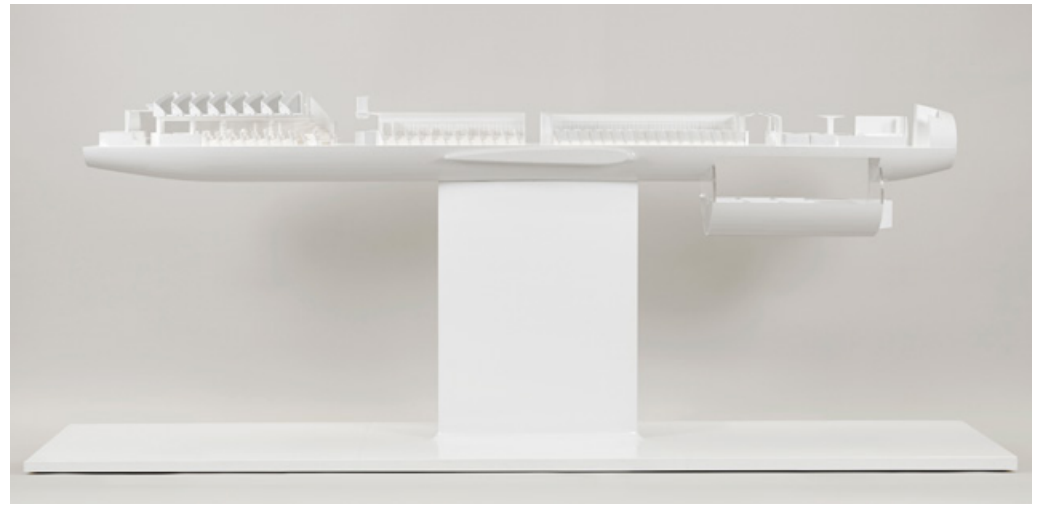
A conceptual study centered around the natural movements of people.

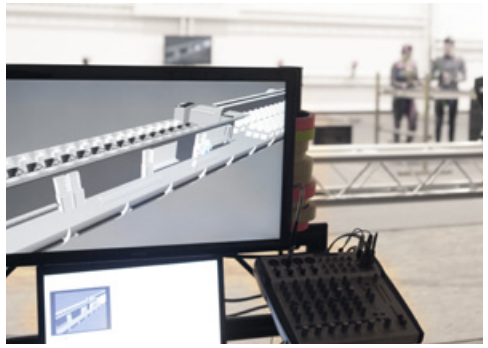
A 1:1 scale rig of our concept was built at Pinewood Studios in London, enabling us to motion capture the instinctive movement of people through the spaces we were developing, gaining greater sensitivity to how we inhabit compact, enclosed environments.

Airbus continued the work independently at their advanced A³ (Acubed) facility in Palo Alto as project Transpose.



Motion capture data visualized in Unity











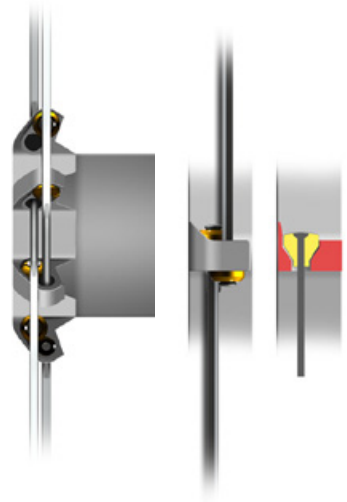
## Architectural constraints

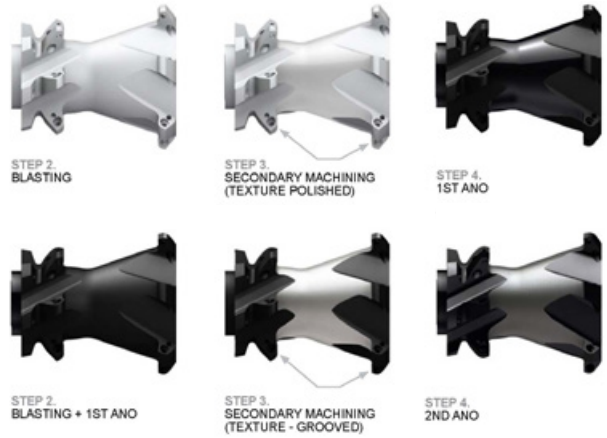
The cycling industry is one of the most enthralling and challenging spaces I've worked in.

The culture at SRAM led me to spend as much time in our labs, factories, and on the trail test riding, as I did at my desk. We were truly immersed in the development of bikes.

**The raw nature of this work exposed me to the unfamiliar worlds of metallurgy, chemistry, logistics and, ultimately, human performance.**











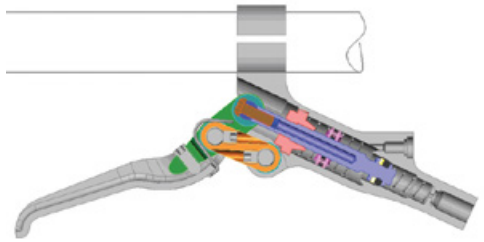


# Expressive performance

Working with athletes, I quickly learned how their relentless quest for a product to provide a competitive advantage was only matched by a desire for it to express this superiority visually.

The challenge this presented was that a product centered on performance has little to no room for embellishment. The path I took over time was to consider our products as one might the build of an athlete—a skeletal structure bound together by muscle. Engineering defined the bones; design formed the connective sinews.

**Lean and emotive.**





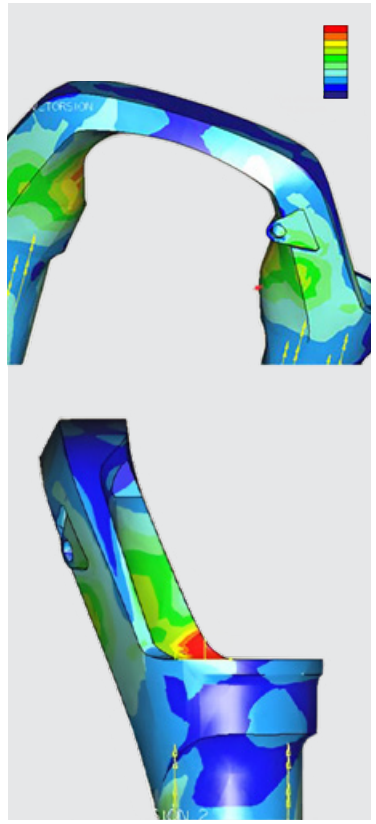














## A system of systems

Bikes are built from numerous sub-systems of diverse components—brakes, steering, suspension, drive chain, etc. Each of these elements requiring different materials and manufacturing processes. The variables are endless. Designing a bike that feels refined and unified, is incredibly challenging.

With time, our most effective tool to visually harmonize the appearance of the bike became material finishes—the art of texturing and coloring raw material surfaces.






## A European perspective

Located in London, our studio had two tasks: to forecast European trends that could be translated into opportunities for a global market, the other, to help introduce a universal aesthetic into LG's products that would appeal to the European sensibility.

The output was a fascinating series of products that exhibited calm, balanced forms, reflective of European design at the time, but which also maintained the dynamic spirit found in Asia.







L-04C Optimus

## Companion devices

By the mid 2000s, the dilemma of how to deal with the proliferation of screens in people's lives—TVs, laptops, tablets, phones, each hosting disconnected experiences—dominated our conversations at LG.

**Our proposal was a family of synergistic devices: streamlined, purpose-built and smart.**




Exploring foldable devices






## Realizing concepts

The 5310 was the first touchscreen phone to encapsulate the foundational design principles of being ‘music-first’—highly pocketable and bold. Its experiential characteristics became the building blocks for the next three generations of this product family.







Informed by an aspirational and progressive concepting phase, the challenge for the 5810 was maintaining the intent despite the technologies of the time not being sufficiently mature to realize them as desired.

Unable to deliver on the purity of the form language, the materiality of the products became instrumental in retaining a sensation of playful wonder and technological advancement—deep translucent injection moldings.



# Finding balance

Building on the progressive path we were establishing, XSeries focused on the evermore demanding packaging requirements, which asked for a more ‘box’ like architecture, while maintaining an agile form and soft tactile experience.

**Clean, unbroken metallic surfaces nested an edge-to-edge screen with forward-facing speakers.**

To strengthen XpressMusic’s presence in the US market, collaborations directly with T Mobile gave rise to new, unique ‘pocket-sized ‘ form factors dedicated to texting.







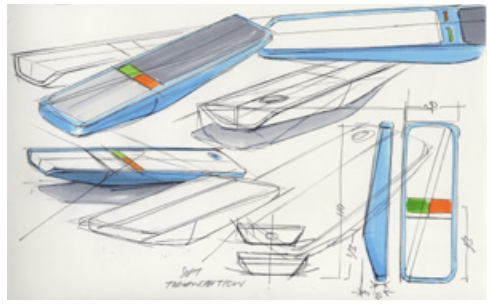


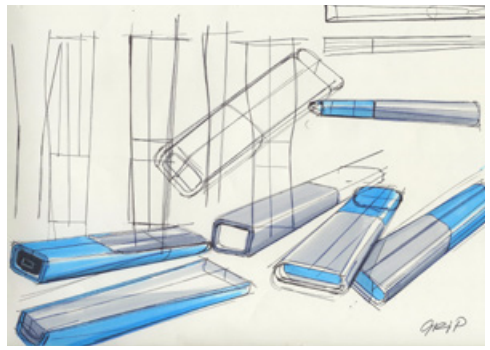



# First studies

**Working in Nokia's 'sports' category, my early explorations focused on the relationship between device and case.**

By designing the case as an integral part of the phone, not just a means of additional protection, a transformative system could be created, one that allowed for an extensive range of user scenarios.

















Studies in tactility investigated how a phone could be used 'blind'. For example, responding to an alert while running without having to stop and look at a device.

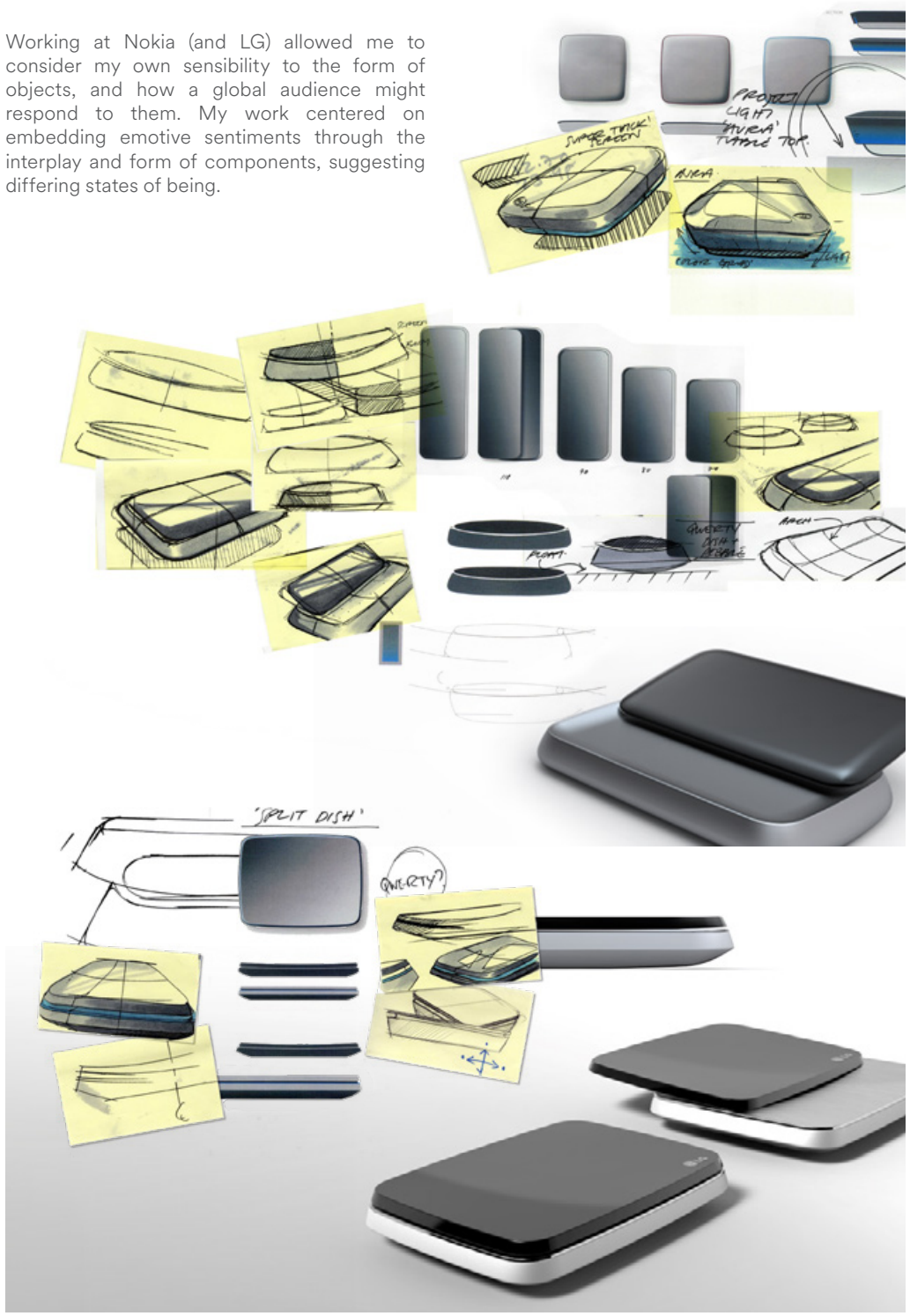
**Simple human gestures.**





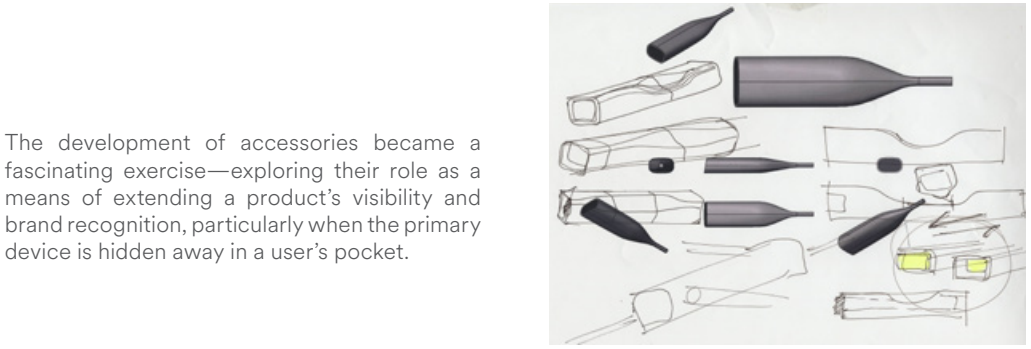

## Form studies

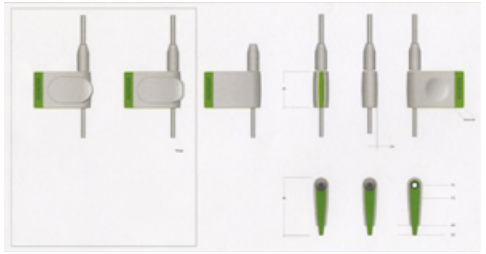
Working at Nokia (and LG) allowed me to consider my own sensibility to the form of objects, and how a global audience might respond to them. My work centered on embedding emotive sentiments through the interplay and form of components, suggesting differing states of being.






The development of accessories became a fascinating exercise—exploring their role as a means of extending a product's visibility and brand recognition, particularly when the primary device is hidden away in a user's pocket.









Assembled

Shell

Core

## Domestication of machinery

With many users of industrial machinery coming from the ‘amateur’ DIY market, the professional solutions JCB offered were intimidating and challenging to use.

Through a series of projects, I looked at both the visual identity, as well as the control interfaces of JCB’s machines, to ‘domesticate’ them—making them more accessible and welcoming to this demographic of users.



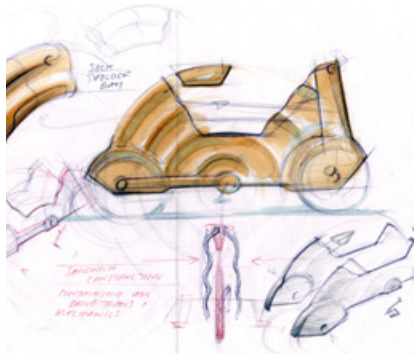


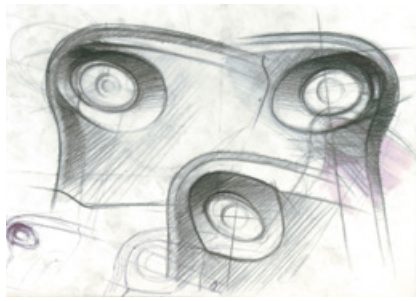


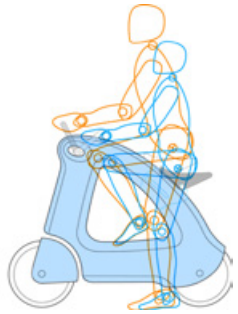

# The Sandwich Bike

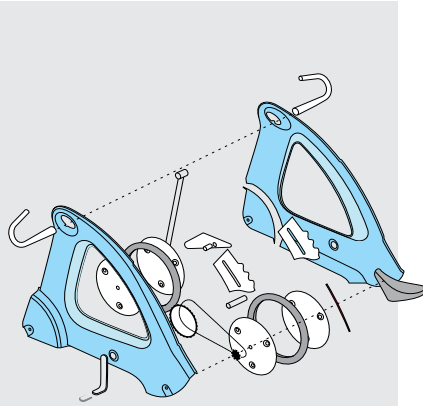
While cycling, filthy and sodden in London rain, the idea to form a bike from two large skins that would capture all of the mechanisms in between—it seemed inescapably obvious and became my mission at the RCA.

This new approach to bike construction would change not only our relationship to its functionality, but also it as an object. The construction process allowed it to take on an affectionate, animalistic character, transforming it from machine to a dependable friend.

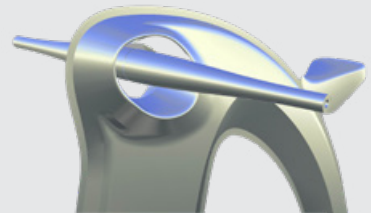














Born in England, I spent the first half of my career in the UK and the second in the US.

Today I live in Echo Park, Los Angeles, with my wife, 12 year old daughter, and dog.

My path through life has been shaped by the lure of adventure and a quest to form genuine connections. Or, in the cherished words, my dad left me with:

**“Find good people, and great work will follow.”**

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Portfolio

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