

## 26: Current Designers: Jobs and Ive

Wednesday, April 17, 2019 4:54 PM

Today:

Admin  
Overview of Apple design

Admin: Expo timing:

Slot 1: 7:30-8:00 pm Pod A

Slot 2: 8:00-8:30 pm Pod B

Slot 3: 8:30 -9:00 pm Pod C

Slot 4: 9:00 - 9:30 pm Pod D

You should have received an invitation to edit the Googledoc spreadsheet: Aesthetics of Design Final Expo Zoom listings

Post **your** Zoom Room link, project title, and blog link. You can also display your Upcycle project if you want.

Link to share with friends and family:

<https://docs.google.com/spreadsheets/d/1UwrXTmrznE6dOVY65PLAb-OBzOLiFUZzncz6bVysnEM/edit?usp=sharing>

. This spreadsheet is not public, so your Zoom rooms are relatively secure.

**Ungrading/Self Grading:** Send me a brief email by Sunday May 3 describing what grade you think you have earned, and why. I will weight your responses heavily in my considerations. This overlaps a little with the Exit Survey, but that is anonymous.

**Online FCQ** before specified due date. Check your CU email. Please apply our critique guidelines for this and all your courses; they work here too.

**Exit Survey.** You will get an email with a Qualtrics link on Monday 4/27. You will have **until Wednesday 5/6 5pm** to complete. Please allow 1/2 hour for this; I'm looking for thoughtful responses. Yes, you'll get participation points. You may want to copy some of what you write to/from your Summing Up blog post.

Last Sketching advice:

### 5.5.2 Transparency

Glass has several handy and distinguishing characteristics one can use to express it in a drawing. First of all, it is obviously transparent. In a drawing, this simply means that it is handy to draw something 'behind' it to show this transparency. In the step-by-step example, cast shadow is chosen for this reason. A rounded object such as a glass will also distort what is seen through it. This is called refraction.

Another characteristic of glass is the compressed reflection seen in the material. You will find these reflections mostly where the material is thick. They appear mainly as black and whites.

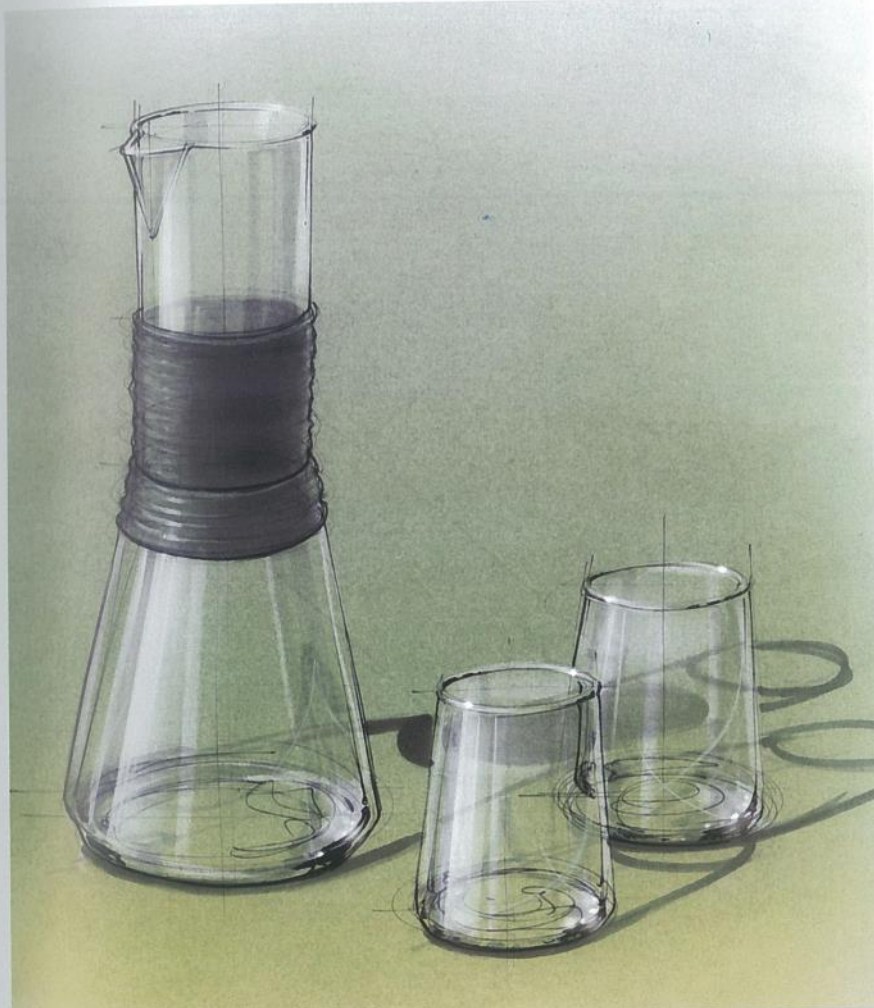
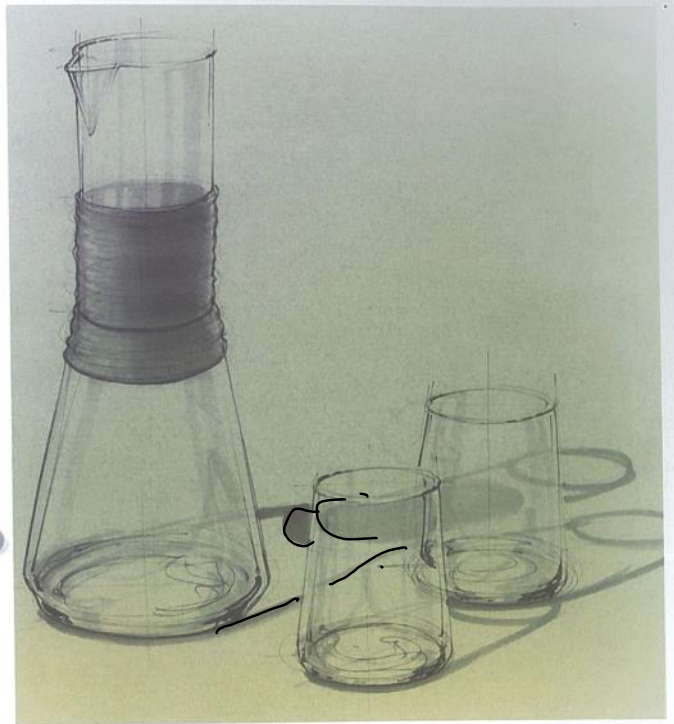
Glass is also very shiny, which means using bright highlights in the drawing. These highlights can hardly be seen on a white background, as in the pictures. In a drawing it is effective to choose a darker background. Here it is done using pastel chalk.



First, a line drawing is made with black fineliner. It is possible to sketch very loosely, especially in positioning the base ellipses. Notice the number of lines used and their visibility in the end result.

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The same fineliner is used to darken some contour lines, to express material thickness and to draw the black reflections in thicker glass areas.



Glass casts a shadow from the thicker glass parts. This effect is somewhat exaggerated. A single layer of grey is used where the cast shadows are seen through glass. Multiple layers of grey are used to draw the shadows next to the glass. On the glass itself this single layer of grey is also used for shading and a 'pointy' reflection. Notice that these glasses are not transparent at all near the contour.

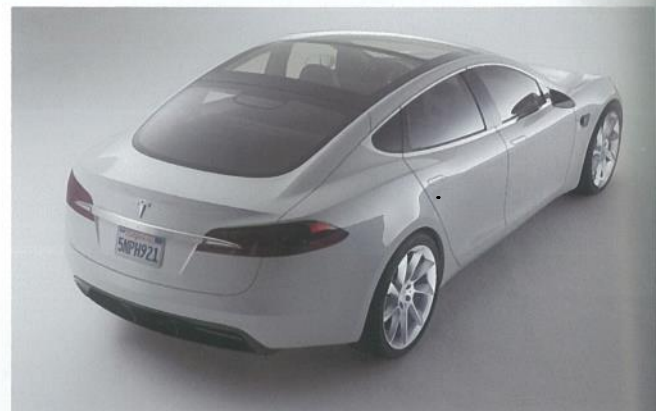
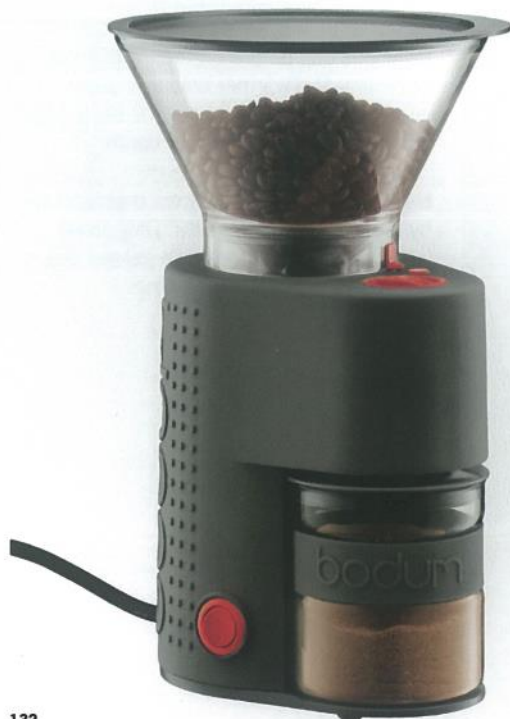
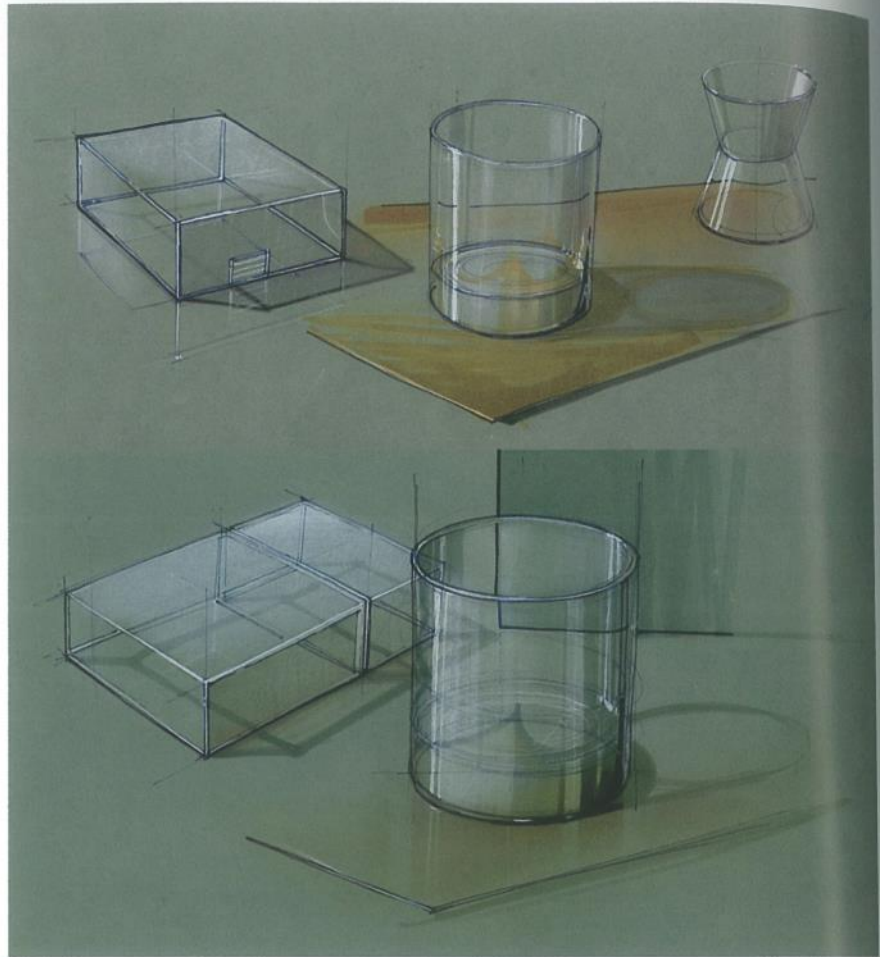
Pastel chalk is applied, so reflections and highlights can be drawn. In this abstract environment a warmer colour is used nearby, and a cooler one at the back, thus adding to the suggestion of depth.

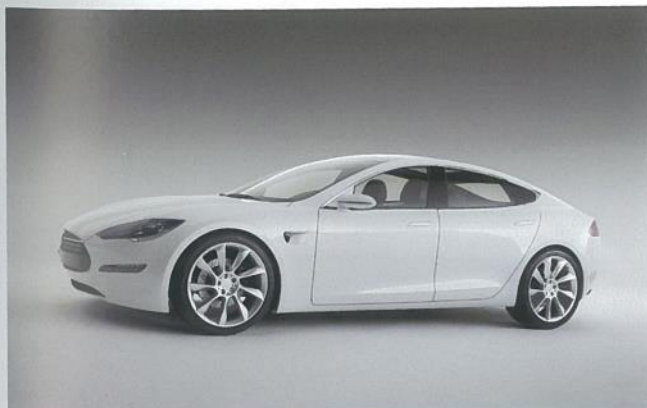
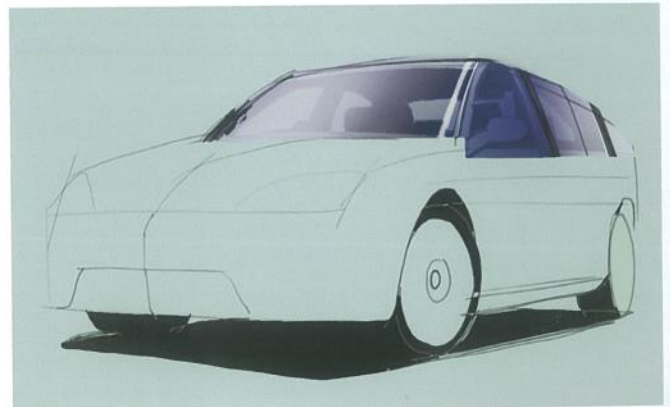
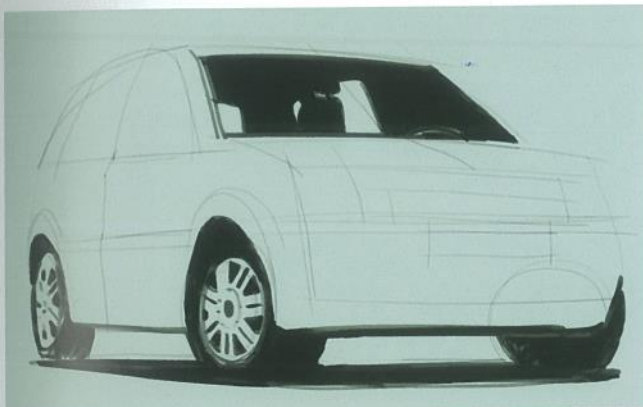
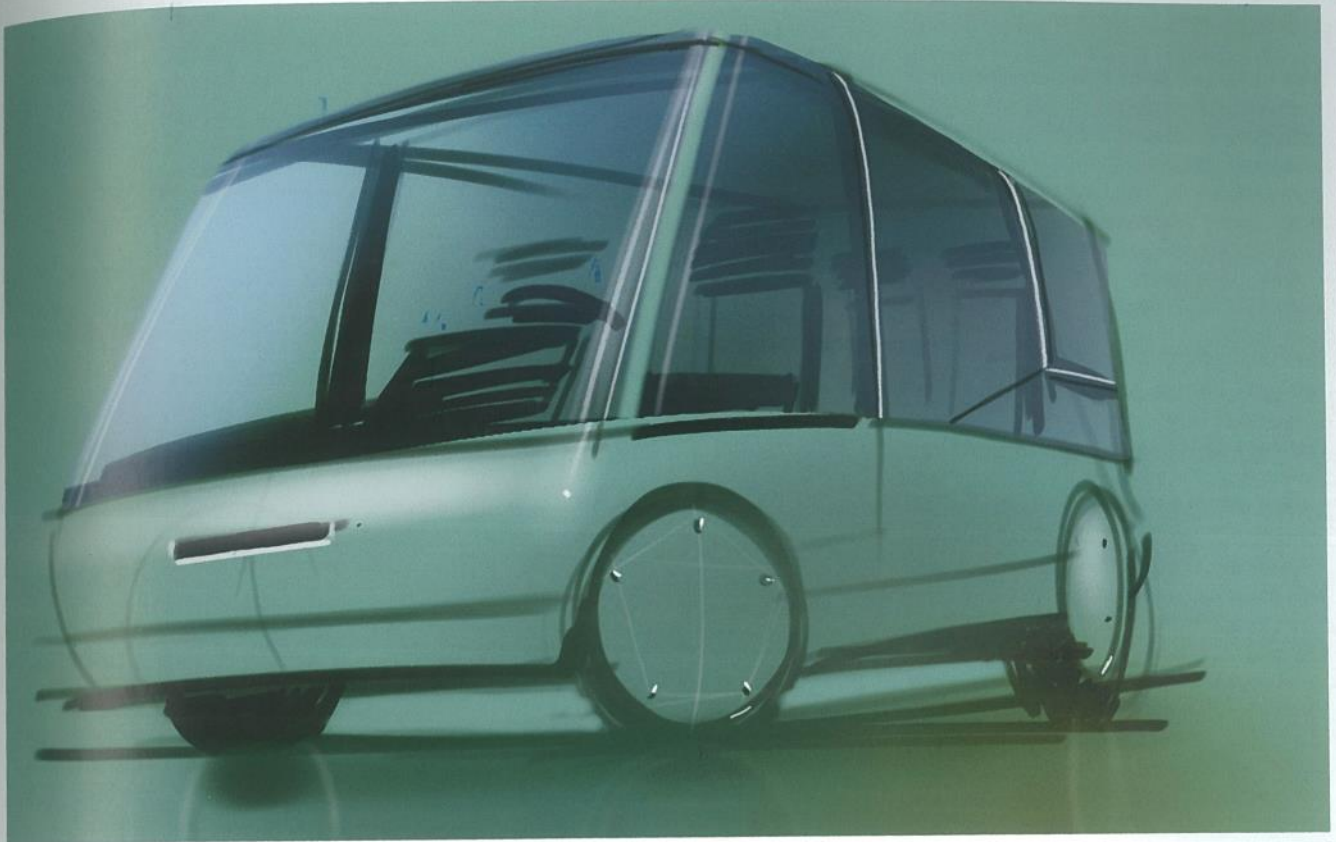
Highlights and reflections are mainly 'drawn' by erasing the pastel chalk. Only some white pencil and some white gel-pen drops are added to finish the drawing.



When **highlights** are important, it is again obvious that drawing on coloured paper can be very efficient. Here, the use of white pastel chalk in the glass will make it stand out against its background.

Previously, transparency of glass was expressed by placing something behind it. In some cases, an object or something else is already at hand, such as in the example of the coffee grinder or the car windows. Sometimes, the transparency of the glass is overruled by bright reflections and highlights, especially on the more angled surface of the side windows. They prevent the material's transparency. In the cylindrical shapes, you most likely see this more to the side where there is more curvature.





In largely 'flat' surfaces like the car glass, transparency will be optimal when looking at it perpendicularly, and reflection/highlights will mostly be seen when looking at the glass from an angle.

First the car's interior is drawn in black only. After that, a large and brighter airbrush is used to partially cover this interior again. Some colour is given to the glass as well. Bright reflections are seen on the rounding in front, but also to the far left and right, further away from the viewer, as you are less perpendicular to these spots.

## Current Designers of Note

Dyson

Apple: Steve Jobs, Jonny Ive

Elon Musk

David Kelly IDEO/Stanford D-school

Tommy Bahama: clothing

Zaha Hadid: Curved architectures and shoes

Buckminster Fuller

Rick Owens: Fashion

Alexander McQueen: Strange fashion

Walt Disney

John Fluevog: Shoes (From Prof. Miller)

Temple Grandin: animal handling systems

Philippe Starck

Karim Rashid

Ross Lovegrove

Yves Béhar

Horacio Pagani

Dieter Rams (Braun)

Chris Precht architect

Ben Burtt audio design for film

Virgil Abloh shoes and men's design (Vitton)

Renzo Piano architect

Class suggestions

David Kelly IDEO/Stanford D-school

Don Norman; *ideas on design. Everyday things*

Netflix: *Abstract (binge worthy) episode season 1 Bjarke Ingels*

When you think of design exemplars, if you don't think of chairs immediately, you think of Apple products:

## Steve Jobs

**Steven Paul "Steve" Jobs** ([/ˈdʒɒbz/](#); February 24, 1955 – October 5, 2011) was an American entrepreneur, businessman, inventor, and industrial designer. He was the co-founder, chairman, and chief executive officer (CEO) of [Apple Inc.](#); CEO and majority shareholder of [Pixar](#); <sup>[2]</sup> a member of [The Walt Disney Company](#)'s board of directors following its acquisition of Pixar; and founder, chairman, and CEO of [NeXT](#). Jobs and Apple co-founder [Steve Wozniak](#) are widely recognized as pioneers of the [microcomputer revolution](#) of the 1970s and 1980s.

From <[https://en.wikipedia.org/wiki/Steve\\_Jobs](https://en.wikipedia.org/wiki/Steve_Jobs)>

Content from

Isaacson, Walter. *Steve Jobs*. 1 edition. New York: Simon & Schuster, 2011.

Background shockingly like mine, up to a point.

Adoptive dad liked to fix up cars. Strong craftsmanship ethic; even the backs of cabinets had to be nice. This showed up in Jobs' aesthetic much later; inside the Macintosh.



'... he scrutinized the printed circuit board that would hold the chips and other components deep inside the Macintosh. No consumer would ever see it, but Jobs began critiquing it on aesthetic grounds. "That part's really pretty, but look at the memory chips. That's ugly. The lines are too close together."

One of the new engineers interrupted and asked why it mattered...Jobs reacted typically. "I want it to be as beautiful as possible..." ' pg 133



<https://www.thinkclassic.org/viewtopic.php?id=89>

Circuit board was made visible in iMac 1998



As a kid, Jobs hung out with his dad in the garage, but didn't get dirty much. Did get exposed to electronics; liked junkyard shopping, including negotiations.

Lived in Mountain View, CA Bay Area, in a mid century modern home designed by Joseph Eichler, a Frank Lloyd Wright follower: simple modern homes for the American 'everyman'. Floor to ceiling windows, open floor plan, exposed post-and-beam construction, heated slab floors, sliding glass doors. Address from age 0-9 yrs not exactly known, but this is an example Eichler:





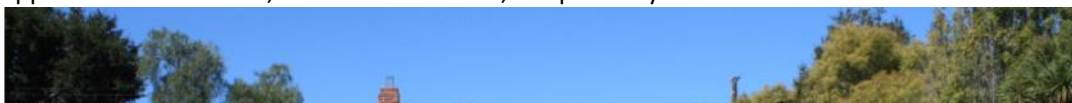
Photo Eichler Social

<http://inhabitat.com/steve-jobs-modern-childhood-home-may-have-incubated-his-design-vision/>

Jobs said "Eichler did a great thing. His houses were smart and cheap and good. They brought clean design and simple taste to lower-income people... I love it when you can bring really great design and simple capability to something that doesn't cost that much. It was the original vision for Apple. That's what we tried to do with the first Mac. That's what we did with the iPod" pg 7.

Can you trace your early influences on your design thinking? Some positive, some negative.

At age 9 the Jobs moved a few miles to the house with the famous garage where the first 5K Apples were assembled, now an historic site, but probably not an Eichler:



Breakout rooms.  
yes.  
Student response:  
"Deep question.  
Will take some  
thought"





Will take some thought"

<http://www.cnn.com/2013/10/30/tech/innovation/steve-jobs-historic-home/>

Steven Jobs was a very bright kid, but erratic in school. Was in the high school electronics club where he met Woz, Stephen Wozniak. First product was a Blue Box, used to hack long distance from the phone company. Jobs scrounged parts, Woz built them. Sold them at colleges until a gun incident made them stop their walk on the dark side.

Jobs went to Reed College as a student briefly. Became a hippie, took LSD, became a vegetarian, Zen Buddhist, and worked in an organic apple orchard (hence the name, and Macintosh).

Dropped out, but sat in on a calligraphy course that had a big impact on him, led to awareness of fonts later. "If I had never dropped in on that single course in college, the Mac would never have had multiple typefaces or proportionally spaced fonts. And since Windows just copied the Mac, it's likely that no personal computer would have them."

"Taking LSD was a profound experience, one of the most important things in my life. LSD shows you that there's another side to the coin, and you can't remember it when it wears off, but you know it. It reinforced my sense of what was important - creating great things instead of making money, putting things back in the stream of history and of human consciousness as much as I could." pg 41

After finding a guru in India, came back and worked at Atari with Woz. 'The Atari experience helped shape Job's approach to business and design. He appreciated the user-friendliness of Atari's insert-quarter-avoid-Klingons game' pg 54.

1975, the first personal computer kit came out, the Altair. This inspired Woz to design a similar kit, using cheaper parts. This became the Apple I. Jobs started helping him get parts. Woz was in the Homebrew Computer club. Today we would call it an open source maker space. Philosophy was free exchange of information and techniques. Bill Gates and Paul Allen wrote the operating system for the Altair (later to become Microsoft), and was appalled that the Homebrew club used it without paying them. Jobs also did not share the ethos, despite his hippie aesthetic. He convinced Woz to stop giving his plans away and start Apple with him instead.

How do you view the differences between Microsoft/PC and Apple? In ethos? In aesthetic? (Ethos (/ˈiːθɒs/ or US /ˈiːθoʊs/) is a Greek word meaning "character" that is used to describe the guiding beliefs or ideals that characterize a community, nation, or ideology.  
<https://en.wikipedia.org/wiki/Ethos>)

Apple II was a full package, not a kit. Jobs designed the case, and began expressing his design aesthetic. 'He wanted a simple and elegant design, which he hoped would set Apple apart from other machines, with their clunky gray metal cases. While haunting the appliance aisles at Macy's, he was struck by the Cuisinart food processors, and decided that he wanted a sleek case made of light molded plastic.' pg 73



[https://en.wikipedia.org/wiki/Apple\\_II](https://en.wikipedia.org/wiki/Apple_II)

In 1979, as part of a tech exchange, Jobs went to Xerox PARC and saw the first mouse and bitmapped graphical user interface. "It was like a veil being lifted from my eyes. I could see what the future of computing was destined to be." "It was the breakthrough he'd been looking for: bringing computers to the people, with the cheerful but affordable design of an Eichler home and the ease and use of a sleek kitchen appliance". Pg 97.

*Ideo designed  
Apple's first  
mouse, after  
tech was  
purchased/stolen  
from PARC*

In 1981 he started attending the International Design Conference in Aspen (<http://www.aiga.org/aspen-design-summit>), and got exposed to Bauhaus concepts; sleek and minimal.

As Apple grew Jobs started working with industrial designer Hartmut Esslinger and frogdesign (1983) pg 133. When first Macintosh design was finished, the whole team signed it; engraved inside each machine. 'No one would ever see them, but the members of the team knew that their signatures were inside, just as they knew that the circuit board was laid out as elegantly as possible...."with moments like this, he got us seeing our work as art" said Bill Atkinson'

Jobs and Ive

Eventually he got himself fired (for being a jerk to everybody and wasting money making the factories look cool, including white glove dust checks), started NEXT computers, helped found Pixar, and then came back to Apple in 1997, where he worked with industrial designer Jonny Ive on iMac and subsequent products.

## Jonathan Ive

[https://en.wikipedia.org/wiki/Jonathan\\_Ive](https://en.wikipedia.org/wiki/Jonathan_Ive)

Sir Jonathan Paul Ive, KBE (born 27 February 1967)[3] is a British designer and the Chief Design Officer (CDO) of Apple Inc. He oversees the Apple Industrial Design Group and also provides leadership and direction for Human Interface software teams across the company. Ive is the designer of many of Apple's products, including the MacBook Pro, iMac, MacBook Air, Mac mini, iPod, iPod Touch, iPhone, iPad, iPad Mini, Apple Watch and iOS.

On 25 May 2017, it was announced that Ive was appointed Chancellor of the Royal College of Art (RCA) in London. 5 year term.

From <[https://en.wikipedia.org/w/index.php?title=Jonathan\\_Ive&oldid=710842687](https://en.wikipedia.org/w/index.php?title=Jonathan_Ive&oldid=710842687)>

Ive: "Why do we think that simple is good? Because with physical products, we have to feel we can dominate them. As you bring order to complexity, you find a way to make the product defer to you. Simplicity isn't just a visual style. It's not just minimalism or the absence of clutter. It involves digging through the depth of the complexity. To be truly simple, you have to go really deep. For example, to have no screws on something, you can end up having a product that is so convoluted and so complex. The better way is to go deeper with the simplicity, to understand the essence of a product in order to be able to get rid of the parts that are not essential." 'This was the fundamental principle that Jobs and Ive shared.' pg 343

Other Ive quotes: [https://www.brainyquote.com/quotes/authors/i/jonathan\\_ive.html](https://www.brainyquote.com/quotes/authors/i/jonathan_ive.html)  
<https://www.youtube.com/watch?v=-gkTxhigtXU> 1:30-3:39

