

Hi, I'm Mauro Porcini, PepsiCo's Chief Design Officer.

Join me for our new series where we dive into the minds of the greatest innovators of our time.

With the goal of finding what drives them in their professional journey and in their personal life.

Trying to uncover the universal truth that unites anyone attempting to have a meaningful impact in the world.

This is In Your Shoes.

Architects have to become designers to be consistent.

Not just designers of beautiful facades or beautiful sculptures, but systems of economy and ecology.

Where we channel the flow not only of people but also flow of resources through our cities and buildings.

I'm quoting the guest of today.

He is a Danish architect, founder, and creative partner of the architectural firm Big.

Often noted as one of the most influential architects of our time.

His most notable projects include the Eight House housing complex, Via 57 West in Manhattan, the Google North Bayshore Headquarters, the Superkilen Park, and the Amager Resource Center waste-to-energy plant, that incorporates both a ski slope and a climbing wall on the building exterior.

In 2016, He was named a Time Magazine 100 most influential people.

He and his company are the subject of the 2017 documentary Big Time.

His firm has received numerous awards, for their work over the years.

He is one of the most renowned architects in the planet.

Bjarke Engels, welcome to In Your Shoes.

Thank you. A pleasure.

It's such such a pleasure to have you with us today, Bjarke.

Your career is just mind blowing.

You became one of the most renowned and famous international architects in the world at a very early age.

And I was reading a little bit about your past.

And I found out that actually, you wanted to be a cartoonist.

And you did architecture school to improve your drawing skills.

Is it true? What is the story?

I mean, it is true.

Because I finished from high school at the age of 18 and since I was, in kindergarten,

I had always been like the best kid in class at drawing.

So I spent my sort of early years drawing drawings for everybody.

And when there was a school comedy or a ski trip where people were making a sweatshirt or a study trip or something where they were making sweatshirts or a poster for something.

I was always the one drawing it.

So it was somehow deep in my self-perception that I was of course gonna be a cartoonist.

But when, especially Belgium and France and Italy and America, obviously have an incredible scene for graphic novels and comic books and animated cartoons.

In Denmark, not so much.

So when I was done with High School I somehow had to choose what to do.

And there was not a lot of options,

so the one thing that I could find in Copenhagen, and my worldview was apparently limited to Denmark was...

The fact that back then the architecture school was part of the Royal Danish Art Academy, it still is.

So you basically had painting, sculpture, and architecture within the same art school.

And because it was before computers had taken over our lives and everything else, the first two years was actually dedicated specifically to giving the cunning architects all the drawing skills they needed to be able to manifest their visions of the future.

University is for free in Denmark,

it felt reasonable to have risked wasting two years of studies getting better at drawing, essentially backgrounds.

'Cause you can say as a cartoonist you are interjecting the action, the life, the interaction between the people, the animals, the vehicles, whatever.

The planes flying around.

And the background is more like the setting.

Yeah.

But of course in architecture school, they would teach you to draw landscapes and 3 dimensional projections of buildings so I thought,

"It can't hurt to get a little bit better at drawing the background."

And then of course, after two years I was obsessed with the background and I never went back to graphic novels.

And then what happened?

I think many people, especially the young one listening to us today, are thinking, "Okay, how can I get the career similar to the one of Bjarke?"

Not just arriving to where you arrive, but arriving so fast.

What happened in your life? What did you do right?

What did you do differently from others that accelerate your journey so much?

I mean, I think what definitely happened is like in the beginning, also because the Art Academy was an art school, it was very free.

Maybe a little bit too free for my taste at the time.

Because I didn't know anything about architecture, and it was mostly this kind of master-apprentice kind of set up where you went to a department and in that department, you had to submit some projects.

So, and I normally sort of would say that the only thing you got in the sort of, on the first day of school, was they gave you

a key card so you could enter the building,

a library card so you could take out books,

and a copy card so you could Xerox copies your drawings.  
And then it was like, "See you in five years," right?  
That was a little bit, it's not entirely untrue.  
I would say, so what happened was that me and another friend,  
we basically went down to the library and because we didn't really know,  
I mean, of course there were some lectures  
about Corbusier and Miss van Der Rohe, and like a few others,  
but we just basically started pulling books out of the, of the bookshelf and...  
at the beginning when you have no understanding whatsoever  
you just turn the pages and when you see something that seems relevant  
you start reading into it and then if something  
seems very inspiring then you sort of read all the interviews, all the essays.  
And when you read the interviews you start reading the footnotes,  
sort of when they refer to something or someone you find out  
where it's from by reading the footnotes  
and then you go find that particular book  
by that particular author or that particular architect.  
And then you start reverse engineering your curriculum, basically.  
And then I think one thing that made a lot of sense,  
is that you almost describe my education,  
which was in a way a very self-established curriculum,  
as a kind of serial monogamy,  
in the sense that I would fall madly in love with the work of an architect,  
and then I would find everything that I could find about that architect.  
And then I would read everything that architect had written him or herself,  
and then I would find the people writing about them,  
who else did they reference, and then eventually  
what happens very often, it's a bit like Nietzsche,  
he calls it "to philosophize with the hammer." Right?  
Like you hammer on the surface of certain concepts  
to see if there's anything underneath  
or if it's just a hollow shell.  
And eventually, when you pursue almost any architect,  
you'll reach the fundamental assumptions,  
the underlying assumptions that if you start questioning those,  
everything falls apart.  
At that point, you will often have found someone else  
that was either the origin of this architect  
or a parallel track of this architect  
and then that would be your new kind of passion.  
And then you would repeat this kind of love affair again  
until you reach this kind of moment  
where you start questioning some of the fundamentals,  
some of the axioms of this particular practice.  
And again, you would have to fall in love again.  
So, and I somehow repeated that until I discovered Rem Koolhaas,

who in my mind was fundamentally different in the sense that where many other architects see architecture as a kind of autonomous art form, almost autonomous from the rest of society, and in the work of Rem Koolhaas and OMA

The architecture was always in direct dialogue with the society that was full of political, economical, geopolitical, social, cultural issues, and they were writing about engineering and program and technology and all kinds of conflicts so there was this almost like journalistic attitude towards architecture.

And also I found that rather than being governed by, although they definitely have distinct vocabularies, I found them less, whereas an architect like Richard Meier is very well defined.

A building has to be white, and there's like a certain set of rules and you can't really do anything if it doesn't comply with those rules, so in that sense, a style becomes almost the sum of all your inhibitions.

So it's all the things you can't do that ends up defining your style.

Whereas in this case there was something more open about it and I somehow decided to take it to the next level and try to go and get an internship there to see how it was on the inside.

It's very interesting because you talk about one of your first work experiences not just as a work experience, but as a way to learn more.

many people they just wanna get a job.

And they are finished with their study, and now, "I'm ready, I get a job."

And the way you present your experience with Rem Koolhaas was really about, "Okay, I wanna learn more."

And I wanna keep, I guess, you wanna keep learning all your life.

You wanna be a student for life.

I find that as one of the common denominators of all the innovators.

They never stop learning. Right?

No, for sure.

It's essential also, you can read and study as much as you can and of course, you can go on study trips which I definitely also did.

I tried to get as close to any Koolhaas building as I could.

I think any architect has jumped a lot of construction site fences and also slightly broken into a handful of, too.

to get to where you are maybe not supposed to be.

I found out lately that when you arrive with a child you are even less suspicious when you have a year and a half old baby, then you are clearly not a burglar.

So that's a good tip for any curious architect.

But of course, going to OMA was definitely a pilgrimage to try to see how it really happens inside the machine room.

And then, over the years obviously you developed your own point of view on architecture, on life, on creativity.

You've been quoted talking about two extremes that you can find in architecture.

One side you have vanguard, full of crazy ideas, on the other side, something that is more by the book.

And I'm quoting you creating boring boxes eventually this corporate kind of approach, and you found that sweet spot, that somehow combines the two worlds in something that is new, unique and different.

Can you talk about what is that point of view of yours on architecture?

Yeah, I think it's because you say architecture is, maybe the most powerful tool we have to create the framework for the life we wanna live.

So it's not just a sort of self-serving art form for the artist to be able to express him or herself, but it's really a way to facilitate life itself.

We've somehow as human beings,

we've invented an additional layer of geography or geology that means that we not only like, we're not just left to be able to climb a tree to protect ourselves from the wild animals, or to climb into a cave to get some shelter from the elements, we can actually design our own trees and our caves.

And now that they are no longer just trees or caves, we have to ask ourselves, "What kind of a cave would you like to live in?"

And how would you like to live?"

And suddenly, so therefore it has to be very practical, and functional, and perform as a habitat.

But then, on the other hand, we're not just repeating, this was a cave now we can build

our own caves and we keep building them like caves.

No, no, no. Now that we have new tools, new materials, new technologies, we have to experiment.

We have to discover new possibilities that we haven't even thought about.

So in a way, we can't just wait for people to demand something.

Sometimes you have to offer them something

they didn't know that they were longing for and then, now that you've offered it as a gift almost, they wouldn't want anything else.

So, you have to be both experimental, creative, think out of the box, create unlikely combinations

in order to discover something that might work, but you also have to make sure everything

against how does it perform, what does it do?

I mean, it's essentially in those two overlaps that you have the frontier, because when something is both unexpected and,

creative and innovative, surprising,

but it also has a lot of performative qualities,

It almost creates a new typology.

And you can say the job of the innovator

is to come up with new typologies for others to copy.

Because it's once when you come up with something that is not only

because you have a specific personality that it becomes beautiful,

no that it has something that transcends your touch.

It's replicable in a way that means that others can take that new typology

and test it and make their own versions of it.

Just like, it's like you can say when someone writes a beautiful melody,

then sometimes the cover song is better than the original because

they've created a new format, a new typology

that someone else can be inspired by,

and make an even more beautiful version of it.

So the cover song is never the same as the original.

It takes it to a new level.

This idea resonates with me so much, I'm sure many people listening to us,

not just the architects, but the brand designers,

the industrial designers, the innovators

of any kind are resonating with that idea.

If I think about the world of PepsiCo, where its mass market, obviously,

but we always try to push the envelope,

to try to do something that nobody ever did before.

But one of the problems that we have,

and this is the question, the problem is not even about us.

But it's about the fact that you are surrounded

then by people that need to approve your designs.

Or in our case, there are consumers,

we do consumer tests, we see what they think.

And often, you said it earlier, you need to propose it first.

They need to use it almost,

and then they will realize that they actually needed it.

And so, how do you convince a city, or a customer,

or anybody that pay you to do those architecture

to experiment, as you say?

And take the risk of experimenting?

Yeah. I think that that is the challenge that maybe especially the architects have.

And I think the film directors have a similar challenge.

Because architecture is so expensive, and it takes so long to do it,

Any building takes between five and 10 years to make happen.

And depending on what it is, the waste-to-energy power plant

that we built in Copenhagen with the ski slope on the roof,

even if the architecture part of it is only maybe 50 million dollars,

the whole project is more 500 million dollars.

So, that's like the cost of the movie Avatar, even more.

It's like so much money, and it took nine years to do it,

and it's gonna be on the skyline of Copenhagen for

hopefully forever, but, so.

And the problem is like you're saying, if you do something proactively, you can make it happen and then people are gonna...

They can see how they feel about it once you've done it.

Whereas this case, you have to persuade an army of people to allocate all the resources, to write all the permits, say this is what we're gonna do.

So before the building can speak for itself, you as the architect have to speak on its behalf.

And of course, you have to find this kind of mixture of arguments that in a very sort of intuitive way, allow people to both, offer them a chance to fall in love with it, make it compelling, beautiful, sort of exciting, inviting.

But also make it convincing, rationally, economically, technically, and I think this kind of combination,

you can almost say like almost the most important building materials of the architect is actually all these different like narratives you have to master in order to make a project really truly come true.

Often you've been described as somebody with a larger than life personality.

I mean, I know you personally, you have a lot of charisma, and you have your point of view, but you're also fun.

You know how to interact with people.

And how important is this, to be like this?

To sell those kind of ideas? in front of customers, once again.

The eventual, " I don't know if to do it or not to do it. "

How important is being your character, your personality to drive that success that you gain?

And also, what would advise, what suggestion would you give to anybody out there that wanna try to leverage that kind of personality to be more outgoing, out there, in their work and in everything they do?

I'll say two things to that.

I mean, I think, first of all, I think as an architect for sure,

I think any designer or form-giver, maybe the most important sensibility or ability is empathy.

And I think empathy is interesting because empathy is a form of creativity.

Because I don't necessarily think that empathy is like, it's not like you feel what the other one is feeling.

I don't think you necessarily plugging directly into the nervous system of someone else, but you try to put yourself in their shoes.

And you try to...

There's this saying, "Never judge a man or woman until you've walked a mile in their shoes," right?

That just somehow try to put yourself in their shoes, and you try to imagine what would be important to them?

What would make them happy? What would make them sad?

What would make their lives easier?

What would make their lives more fun?

What would give their lives more effective?

And by trying to empathize, and you try to because often there's a lot of different interests involved in a project.

By trying to empathize, not just with the people that are gonna be using, living in your building, or working in your building, but also the neighbors, the people passing by on the street, the people you know that might be living where it's gonna cast a shadow, or where it's not gonna cast a shadow, where it's gonna allow the light to combine where it creates shelter, where it creates shade.

And by putting yourself into these many different sets of shoes, you end up creating a richer requirement for this building.

So in the beginning, if the ask or the challenge is too easy, it's very hard to make it interesting.

But ironically by making the problem more difficult to solve, the standard solution eventually is no longer gonna cut it.

'Cause the standard building wouldn't be able to answer all of these different requirements,

and you force the architecture to go out of the ordinary, because it has to address both this issue, and this issue, and this issue, and this issue.

And suddenly, the standard-issue, the standard building, the standard design won't work.

And you have now made it necessary to find an unusual design as an answer to this question.

So that's maybe the one thing, the idea of empathy.

And then I think the other idea is the idea of communication.

And you can say architects never work alone, and they also, they're never the ones building the building.

They're just designing it.

And you can say, to make an architectural model, and an architectural drawing, or the sketch, or sketch model, or a 3D model, is a communication tool.

It's a communication tool, of course in the end so you can show the contractor, the masons, the carpenters, the metals workers, this is what we're gonna do.

Now let's do it, right?

But before that, it's a tool within the team.

The team of architects and designers.

The team of engineers of different trades, of different kinds of consultants,

and the clients and the sort of city people that have to write the permits.

To communicate with them, what are we trying to do, in that sense.

I think since I came from drawing, when I was a cartoonist, you can say in the beginning, I was drawing by hand.

And I was using like, watercolors, crayons, ink, with brush,



and I'd been doing it my entire life,  
so I had so much feeling in my wrist that I could,  
I could mix the colors and...  
Well then we had to draw with a hard line, and with rulers,  
Pella rulers, so you could construct.  
So I was, in the beginning, I was frustrated 'cause  
I lost a lot of the control, the sensibility I had with my old tools.  
But then as I started mastering it, you could choose the different line weights,  
you could construct very complex 3D point perspectives,  
you can make much more complex drawings, without, getting lost.  
With accuracy that could be measured.  
But then, of course, I started drawing with a computer.  
And now you lost even more of the sensibility,  
'cause now you were sitting with a mouse and clicking.  
But suddenly you could, once you had created the three-dimensional object  
you could apply the pigments here,  
there's different light settings, you could walk through it.  
So, each step you were losing some of your old control,  
but you were gaining a whole new repertoire of control.  
And the final step, of course, has become not just drawing with a crayon,  
or with a hard line, or with a computer, but drawing with people.  
And of course, if you're not the one holding the crayon or clicking the mouse,  
you've lost even more control, but of course, you have a bigger team.  
Some people can be experts in certain things,  
some people can spend the next two weeks just digging into a deep issue.  
Another part of the team can set out different options.  
So each time you lose some of the control you used to have,  
you gain a new sort of plethora of possibilities.  
In that sense, I think this idea of communication,  
if you communicate with a crayon or a hard line  
or a computer or with words and gestures,  
it's all just ways of getting your ideas,  
from in here and out into the open.  
I would say the more explicit you can do it,  
like the more you can have the giant pile of marbles,  
so when you have a meeting, you can pick up this marble, this marble,  
The more you can make the idea available for the creative input of the many.  
Whereas an idea that is only inside your own head,  
you're the only one who can see it.  
So, it's really about getting the ideas out there in the open.  
I totally agree with you in those two ideas.  
The idea of empathy that is all about  
deeply understanding people, needs, wants, dreams.  
And then communication is once you understand that you connect with them.  
You communicate with them.  
There is something implicit to what you say

that this idea of diversity of thinking, right?

'Cause if you need to put yourself in different kind of shoes,  
the more diverse is the people you interact with,  
the more richness you will gain from that interaction because  
they will help you change in perspective, change in point of view.

Today diversity is a topic very very relevant.

That everybody obviously is talking about  
with most recent events here in the United States.

What do you think about diversity in what we do as creative, as innovators?

How important it is?

I think, first of all,

I mean, it's an incredible resource.

To think back to this point about

how having a too rigid

or too defined a style,

or let's call it a too rigidly defined identity,

It's like an inhibition.

Like, whereas if you can open yourself up

in the case of design is always a collaborative art form,

the more you can find ways where every team member

can arrive with their perspective.

And of course, depending on where you grew up, and what city you grew up in,

if it was in the countryside, if it was like in a big city, if it was,

in the tropics or in the Arctics,

or if it was like in India, Asia, Africa, North America,

you're gonna have all kinds of background experiences,

but also all kinds of assumptions, actually.

That there are certain things that you don't think to question because

you can't see the forest for all the trees, right?

They say in hermeneutics, you can't see your own horizon of understanding,

Because it is that horizon of understanding

with which you see the world.

That's also why it's a great gift to learn more than your mother language

because suddenly you realize that, in French or in Spanish,

they say completely differently than they do in Danish,

and you start understanding that the language you speak as your mother tongue  
is full of preconceptions, or assumptions.

That why says

you should speak like a foreigner in your own language.

You should try to speak your own language without those assumptions.

Without those set preconceptions.

And I think there's just nothing better than having a diverse team

or trying to sort of gain input from a diverse group of potential users or neighbors  
to identify those assumptions and to open them up.

And I would even say from a...

And of course you will end up with more interesting exciting

and rich ideas and forms and designs,  
but also they will of course be welcoming  
to more kinds of potential users.  
And also they will be surprising in great ways  
to the same amount of potential users,  
because once you inherit something that came from another insight,  
from another culture maybe, or another perspective,  
or you say, "Hey, that could work here."  
Then it's gonna be a nice little food for thought  
for someone who then encounters it.  
Like, we did this urban space in Copenhagen called Superkilen,  
which has been the most ethnically diverse neighborhood in all of Denmark.  
Sixty different nationalities live around this urban space,  
there's a club and a lawn.  
Urban space in the middle of Copenhagen,  
where there used to be train tracks and now it's this urban space.  
And we thought, in a way, first of all, as a way to create ownership,  
it's gonna be so hard to create,  
a kind of homogenous space that's gonna feel like home  
for so many different kinds of people.  
So we thought, "Why don't we make it a celebration of cultural  
and ethnic and demographic diversity?"  
So we reached out to the entire local community  
via different channels, like Facebook, online,  
there was a big mailbox in the middle of this space  
where people could drop in ideas.  
And then we asked people to suggest elements from their other home country  
that they thought could be cool to have here in Copenhagen.  
So, in the end, there's 120 different objects.  
Also, the plants come from different countries,  
of course, limited to plants that can actually grow in Denmark.  
But we found hemp palms in China  
that grow in a Danish climate,  
so it's pretty diverse.  
But of course, it ends up becoming this kind of incredible collage.  
And I started realizing that in one way  
you can see all of earth as one big laboratory,  
where seven point eight billion people are constantly every day  
conducting experiments in how to best inhabit the planet.  
So that means that it's a kind of lab full of innovations and inventions  
that are just waiting to be discovered and to spread.  
And just as an example, I know that Melbourne and Sydney,  
they call their bicycle lanes, Copenhagen lanes.  
'Cause they took this sort of design manual from the Copenhagen ones.  
They are shifted in elevation so that the cars won't just drive over them,  
'cause there's actually a curb.

So you have two curbs, one from the sidewalk,  
and then one down to the actual road, right?  
So, this idea that of course,  
the Japanese they have certain things that are way cooler.  
It's like all the vending machines everywhere with hot and cold beverages.  
We should have them in Copenhagen.  
We don't yet, but we will do.  
I know that Copenhagen was the first place to have to have the Citi Bike,  
the free system of bicycles that have now spread elsewhere.  
I think all the scooters that most people see as a plague,  
but I think we have to somehow find a way to live with them.  
I think they came from Silicon Valley  
and now spread to the rest of the world.  
So like, that's what we tried to do with Superkilen  
is to imagine it as a kinda global best practice,  
where we could handpick elements from different cultures,  
and bring them to Copenhagen.  
But you mention the word plan.  
It's an immediately...  
Another word came to mind is the word of sustainability.  
As you can imagine because of the nature of the industry we play in,  
sustainability is a hot topic.  
We are investing a lot of money in effort,  
trying to be as sustainable as possible in everything we do.  
What is sustainability in architecture?  
And then you have, you talk about hedonistic sustainability.  
What do you mean with that?  
I think the first we did almost 20 years ago was the Copenhagen Harbour Bath.  
It was essentially, it had been decided to instead like normally in a port,  
all the surface water just washes over the piers and then it drops in the port.  
So that means that all the dirt is constantly washed into the port,  
which means that the port ends up being quite polluted.  
So then Copenhagen made some investments to make sure  
that all of the surface water went into the sewers instead.  
And shockingly quickly, like in less than a decade,  
suddenly the water quality of Copenhagen port  
had become so clean you could swim in it.  
So we designed the first sort of Harbour Bath in Copenhagen.  
And it became this kind of sensation overnight  
because it completely changed people's perception of what a port is.  
instead of sitting in your car for hours to get to the Hamptons,  
you can jump in the port in the middle of the city.  
And it became clear that a clean port is not only nice for the fish,  
it's amazing for the citizens of that city because they can just,  
they have a beach in the middle of town.  
It's almost like pseudo but actually created.

And that kind of made us discover this idea,  
"Hey, what if a sustainable city or a sustainable building  
is not only better for the environment,  
it's also better for the lives of the people inhabiting it?"  
Then suddenly sustainability doesn't become this necessary compromise  
or this kinda moral impetus,  
but it really becomes the more desirable solution.  
It feels like the reason that the electric car is finally coming  
is because Tesla made the fastest accelerating, safest, best car ever,  
and now it's the most valuable car company on the planet.  
Not just because it was the right thing to do.  
No, no. It was the coolest thing.  
So that the Tesla is not only an electric car.  
It doesn't have any kind of greenhouse gas emissions.  
And if the electrical source is renewable, it's carbon neutral.  
But it's also the greatest and the most fun, fastest accelerating,  
most enjoyable, most driverless car out there.  
And I think that's hedonistic sustainability  
and of course our most recent example in Copenhagen  
is the waste-to-energy power plant that is not only  
the cleanest waste-to-energy power plant in the world,  
but it's so clean that we could turn the roof into an alpine ski slope  
with hiking paths and ski slopes and the tallest climbing wall in the world.  
So imagine all the public infrastructure becomes, clean technology,  
suddenly you can have this kind of  
man-made mountain range of cool parks in a city.  
Not just big boxes that cast shadows on the neighbors and block the views.  
So I think that's essentially the idea that if you want the environment to win,  
it shouldn't just be the right thing to do,  
it should be the best and most desirable, and the right thing to do.  
And therefore is a design challenge is something you stated as well.  
And not an easy one, because essentially you...  
Not to compromise on cost or materials, on the convenience of certain materials,  
or certain functionalities is not easy, but I completely agree with you.  
We need to give people what they need,  
what they want, what they dream, what they desire.  
And we need to try to do it in a sustainable way, actually adding value.  
True sustainability, it's a powerful concept.  
What inspires Bjarke Ingels?  
Where do you find your inspiration?  
I think, it was kind of funny,  
my experience was actually that almost any subject,  
if you find someone who has extremely deep knowledge about the subject,  
and is very passionate about it,  
then any subject is potentially fascinating, right?  
So, that's why it's interesting to hang out

with people that are passionate about, what they do,  
or maybe not what they do, but like, a certain thing that  
they have some kind of deep passion,  
because they become, in a way an invitation to discover a world  
that is different than the one you know about.  
And I think that's maybe one of the great things  
about being an architect is the,  
we never work for other architects, because  
they can make a building themselves, right?  
So we always work for someone who does something that is not what we do.  
And to what we do we need to know as much as possible.  
And when we have to educate ourselves as fast as possible to understand  
what are the key criteria of this particular subject.  
We just started maybe the biggest project we've worked on so far.  
And we just finished a museum about watchmaking  
for the watchmaker Audemars Piguet.  
And when I sort of drove to Le Brassus in valley La-Chaux in Switzerland,  
the cradle of watchmaking five years ago, I knew nothing about watchmaking.  
And I wasn't particularly captured by original watches.  
I didn't have a watch.  
And then I meet this master watchmaker from Galicia,  
who's living in Switzerland, and  
he shows me the grand complication workshop  
where he's restoring these ancient, ultra-complicated timepieces.  
And he starts sort of telling this story about the...  
He wants to restore the bell inside the watch.  
And of course there's no real bell and there's no loudspeaker, so like,  
the cool thing you start discovering is for watchmaking,  
form and content is the same thing.  
We've become so used to the idea  
that form and content are two different things.  
It's like, the form is like an arbitrary container,  
and then the content is the software that makes it function.  
Well in watchmaking it's the same thing.  
The interlocking of the gears, the coiling of the metal to store the tension  
that gets delivered with escapement in the format that is useful.  
The anchor that swings around and harvests  
the kinetic energy of the movement.  
And then he starts making this tubular bell, and then almost like an alchemy,  
he has a sheet of paper with different colors on it.  
Shades of yellows and oranges and pinks and blues.  
And then he starts heating the metal with a little, you know?  
And then he starts matching it to this color grade.  
And each color represents the color of metal at a certain temperature.  
And when he finally has a visual match, to the color he's going for,  
he dips it into a bath, and it somehow freezes

the molecular structure of the metal in that composition.  
And then he starts fine, so it becomes this kind of  
incredible kind of material science, alchemy, a kind of process.  
And it dawns on me that maybe watchmaking and architecture  
is one of the few disciplines left  
where form and content is intrinsically entwined.  
Because it's not just about a software onto to a hardware,  
it's really about the fact that the hardware is the software.  
The form is the function.  
And then sort of slowly I began to realize,  
And then sort of slowly I began to realize, how fascinating watchmaking is.  
how fascinating watchmaking is.  
And one of the things that,  
so I've had a watch ever since we won the competition.  
I thought maybe I should practice what I preach.  
And it's this kind of openwork skeletonized  
so you can see all of the inner workings.  
And sometimes it feels like I have a little life on my wrist.  
A little mechanical life form.  
And then it dawned on me that it's not just a metaphor,  
because if you look at the living cell.  
You and I consist of I believe billions of trillions of living cells,  
each living cell consists of a lot of enzymes  
that are essentially complex proteins  
that interact with materials according to the laws of physics and chemistry.  
So each enzyme on its own is not living,  
it just follows the laws of physics and chemistry,  
but with the complex combination  
of all of those proteins they form a living cell.  
And they harvest energy from the surroundings,  
they maintain a constant state, they do a few more things.  
But when you think about it, a watch is actually a lot of gears,  
little geometries that on their own are not living.  
But the way they're combined and interacting it has the emotive property  
that they can harvest energy from their surroundings,  
in the case of me, when I move.  
And then they can maintain a constant state and tell time and other things.  
So in that sense, a watch is in some form, a mechanical life.  
A self-perpetuating, self-sustained little entity.  
So in that sense, so suddenly something that I had no interest in whatsoever,  
just because of encountering people were like, really deep in the subject,  
it starts enriching my world to become bigger.  
And of course, some of those analogies can be used in other spheres.  
So I think maybe the one thing that truly inspires me,  
long answer to a short question,  
is to visit worlds and then in a way to see

the similarities and the differences between these different worlds  
and then in a way to migrate ideas from one world to another.  
Almost like the Superkilen to migrate  
certain ideas from the world to Copenhagen,  
and in this case to migrate certain ideas from watchmaking into,  
the science of ecosystems or into, other aspects of life.  
Look. Your answer is so precious.  
I really hope that people will listen very carefully  
to what you say because you talk about passion.  
Passion of others, they inspire you,  
but also you can feel the passion that you have in that search,  
in that hunt for new ideas and inspiration.  
I always talk about the fact that  
inspiration at the end of the day comes from within. Is inside you.  
God knows how many people went on a similar trip  
to the one you made and visit this watchmakers,  
and they didn't see what you saw.  
You saw what you saw because of who you are and  
how you look at the world and your curiosity  
and your empathy and your passion.  
Everything you've been talking about today.  
And it was beautiful the way that you told that story.  
Talking about communication, you share.  
And what I really think is magic and you said it, then you found connections.  
Steve Jobs talked about connecting the dots.  
I think innovators, that's what we do.  
You see something that works and you transfer it somewhere else.  
In your story there was all of this.  
And it's really, really inspiring.  
And too many people walk in the world so blind,  
to what's going on around them, around us.  
And the reality is it would be enough to put the lens of curiosity  
to really be inspired by so many things that happen out there.  
One of the things I love the most for instance is nature.  
The mechanic of nature is unbelievable.  
And we learn so much in history from nature,  
but again so many people don't stop,  
to look at nature with that kind of curiosity.  
I have one last question that is a really personal question.  
Personal for me, it's not personal for you, but I live in New York,  
and there is one building that you made, the Via57,  
that reshaped the skyline of New York.  
All these vertical buildings and here arrived BIG, Bjarke Ingels.  
And you redesigned that skyline, creating something  
I would describe it in a very bad way, if I try.  
it's between a and the pyramid.



What was the inspiration of that?  
Can you tell us a little bit about the building that is so iconic?  
But it's kind of funny it was like ten years ago,  
It's now 2020.  
I moved to New York, first of September 2010.  
So it's exactly ten years ago.  
And let's say, shortly before that, six months before, I had...  
Actually, in 2007, I had a show  
at the Storefront for Architecture gallery in SoHo.  
And Joseph Grima was the curator.  
And he invited us to come and exhibit  
our work in New York for the first time.  
I had just met this American developer, Douglas Durst,  
who had built the first LEED Platinum-certified residential skyscraper  
and commercial skyscraper in the world, in New York.  
So he had been invited by the mayor of Copenhagen  
to speak about sustainable high-rises.  
And I was in the audience.  
And he makes this kinda passionate presentation.  
But someone with the architecture in my mind  
looks a little like it would always do.  
So he clearly had an ambition about environmental performance,  
but it felt like his architects  
were just trying to make a good looking building.  
And then afterwards I asked him,  
"How come all the buildings look like buildings?  
Like, have you ever thought that the architecture could play  
an active role in the environmental agenda that you have?"  
'Cause he was talking a lot about all the technical upgrades  
that were put into the building.  
And it maybe annoyed him enough to sort of remember, at least,  
when I invited him to come for the opening he showed up.  
And we started a little friendship but I never expected  
that he would hire us for anything.  
And he also confessed he never thought about hiring me as an architect.  
But we enjoyed each other's sort of conversations.  
And then at some point he invites me to say,  
why don't you take a look at this little building  
we have on the west side of Manhattan.  
A little building site.  
And it was like, almost an entire city block.  
And I was just thinking this is our chance to build something on Manhattan.  
Let's, like, make something really really simple.  
And also, he was, he didn't want to do a tower.  
And I thought we're finally building,  
on the bedrock that's the cradle of the skyscraper,

and we're not supposed to do a skyscraper. That's insane.  
And he said like something more midrise like  
the Eight House or the mountain that you did in Copenhagen.  
Okay, so okay. We said  
the one thing that we can't mess up is a perimeter block.  
it's all of Europe consists basically of perimeter blocks.  
You build along the sidewalk, and then you put  
a courtyard in the middle where there's some nature.  
We thought, well maybe that could be radical in a Manhattan context.  
But then of course to make the courtyard work,  
and to get the density that the site allows if you were just extruded...  
Of course, it works in five floors or eight floors like in Milan.  
Or five floors like in Copenhagen,  
but once you make it 20 floors no light comes into that courtyard.  
So then of course if you want to do the courtyard  
it has to be extremely asymmetrical.  
So we ended up making it the height of a handrail in the southwest corner,  
but then of course it became this kinda  
absurd spire of 40 floors high in the northeast corner.  
And he was saying, the thinking that got us there  
was kinda simple, rigorous, and clear.  
The final result looks like this kinda crazy gesture.  
But because we had arrived there together,  
once we arrived there, we were already, there.  
So I think if we would have come to the first meeting with the final design,  
that might have well been the end of that conversation.  
But we didn't and I, we wouldn't even have dared,  
but because we arrived there slowly together,  
when we were finally there, it was like, sort of,  
"Yeah, of course, this is what we're doing."  
And the result is a rather striking new silhouette on the Manhattan skyline.  
But the real reason it's there is so you can have this kinda mini Central Park  
in the middle of the block, that gets the sunset over the Hudson River,  
all the way into the deepest part of the block.  
So it's, in a way a lot of people see the striking gesture  
and then afterwards they might discover, "Hey, there's an oasis inside."  
The funny thing is, it's all about the oasis, and to make the oasis happen,  
we had to end up with the striking gesture.  
So it's almost the other way around than what you might think.  
That kinda blatant expressive personality  
is actually the side effect of this kind of  
very simple idea of putting an oasis in the middle of the city.  
Well, I'm gonna close with this story.  
It's beautiful, the story itself about the building,  
the genesis of the building, but it's fascinating also  
to think that one of the most iconic buildings of Manhattan

didn't come out of a competition, of a normal process.  
But it came out of two individuals that connected culturally.  
They put themselves out there.  
this kind of cultural generosity and willingness  
to connect with others without the specific goals.  
Not to get the job or just for the pleasure of sharing  
and challenging and thinking together.  
you and I know each other,  
we have common friends like Michelle Brodsky, or Stefan Sagmeister.  
We are very similar in all of this.  
Out there, talking, connecting.  
And then maybe, maybe something will come in the future.  
Maybe not. And we're gonna be fine anyway.  
And that's the beauty, I think, of many innovators.  
They put themselves out there with generosity.  
They build the kind of communication all based on  
empathy, and curiosity, passion that you talked about to us today.  
And then magic things can happen.  
Thank you so much, Bjarke.  
It was very very very very very inspiring.  
Always a pleasure, man. Always a pleasure.  
Ciao. Thank you.