

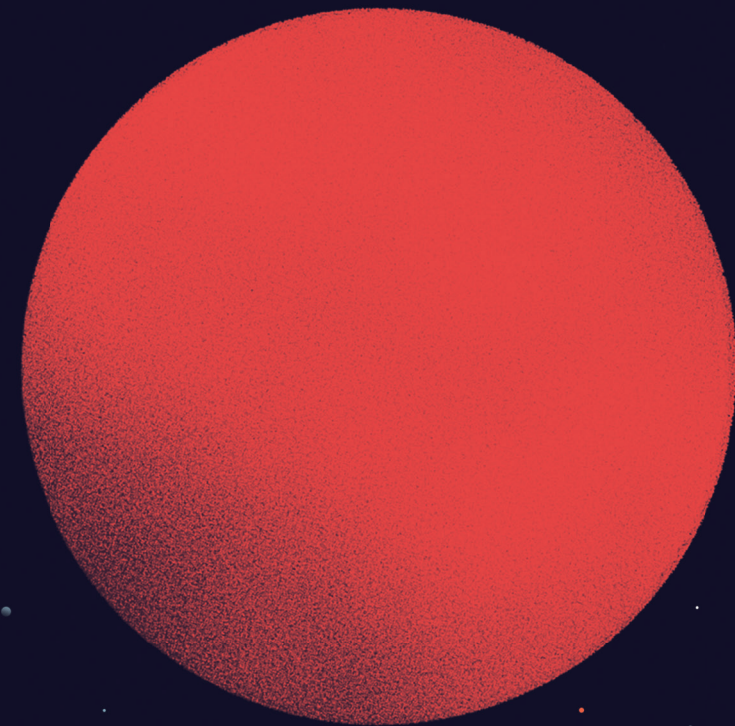


Anyone can design even a kitten



Anyone can design

even a kitten



A book about space travel, kittens,
and things that can make you a **designer**.



Amid Moradganjeh

Foreword by Danny Stillion

Partner and Executive Design Director at IDEO

© 2017 Amid Moradganjeh

If you'd like to reproduce any part of this book that's cool with us. Just email us for permission first.

Edited by: Ivan Marinkovic

Illustrations by: Giovanna Giuliano

Book design and cover by: Amid Moradganjeh

A project by: Amid Moradganjeh, Janno Siimar, and Fliss the kitten.

ISBN 978-9949-88-030-0

Published by: Square Mountains OÜ

First edition (Fall 2017)

Printed in Estonia

www.anyonecan.design

Anyone can design **even a kitten**

A book about space travel, kittens,
and things that can make you a designer.

For free thinking humans everywhere.

16+

This isn't a children's book. It's for adults and uses adult ~~language~~ language from this page onwards.

← Give it back to your mom

Let's get ~~language~~ started →

In this book

11	Foreword
14	Why read this book?
24	Rethinking design
38	Fliss the kitten
	Becoming a designer:
42	WTF?
56	Confusion
64	Humans
82	Ideas
94	Attitudes
106	Decisions
128	Stop
	Design something in 86 mins:
132	Journey
166	Planet Mars

Contributors:

Inspiration for this book came from interviewing these great people:

Dave Thomsen - [Facebook](#), [IDEO](#)

Daniel Goodwin - [MIT Media Lab](#), [IDEO](#)

Don Barnett - [Google](#), [Microsoft](#)

Jennifer Sarich-Harvey - [IDEO](#)

Silvia Vergani - [IDEO](#)

Alex Freeman - [Dropbox](#), [IDEO](#)

Raphaël Guilleminot - [Facebook](#)

Tim Wantland - [Google](#), [Microsoft](#)

Lauren Javor - [Microsoft](#)

Alastair Warren - [IDEO](#)

Jess Myra - [Google](#), [Twitter](#), [R/GA](#), [IDEO](#)

Alberto Moro - [IDEO](#), [Canon](#), [Frog design](#)

Joachim Falck-Hansen - [BBC](#), [IDEO](#)

Hugo Ahlberg - [Airbnb](#), [IDEO](#)

Benjamin Lopez - [Phillips](#)

Seisho Sumida - [Frog design](#), [IDEO](#)

Foreword

The world needs more designers. Designers like those described in this book. Humble problem-solvers dedicated to creating new possibilities and opportunities for others by designing with others. This book, written by one such designer, provides a delightful and much needed invitation to the world of design.

It is a timely invitation. One that more of us must accept to make the most of applying our optimism, curiosity and skill toward learning and building together. The notions, approaches and exercises put forward highlight what it takes to think and take action as designers, regardless of craft. Getting out into the world to explore what is meaningful to people, prototyping the way forward together and being inclusive of a variety of perspectives. All of these activities are essential to creating meaningful and sustainable solutions. And readers, along with Fliss the kitten, will learn that doing these things is often fun.

While the mastery of one's craft is essential, accepting this inclusive invitation to think like a designer in a broader, human-centric way is essential to solving the complex problems we face together on a global scale. The rate of cultural and technological change dictates that we leverage a designer's mindset to remain nimble and move together towards a preferable future. This book's content is key to bringing interdisciplinary teams together and is an invitation to all to enhance our lives in the 21st century through design.

Danny Stillion

Partner and Executive Design Director at IDEO

Why read this book?

“Anyone who isn’t afraid to design things can be a designer.”

— Someone very smart.

You’ve probably heard yourself saying this before:

“I’m not creative.” Or, “I can’t design.” Or, “I’m not talented.” Or, “I didn’t study design.” And you probably finished off that conversation with “Fuck this, I give up.”

But are the ones we call designers really that talented? Are they born creative? Do they always have good ideas? Or is this just a myth?

It was during my time at IDEO that I started to find answers to these questions. The more I was approached by “non-designers” looking for innovative ideas, the more I realised that they themselves were the ones with the most innovative ideas. Later, as I was helping people from different disciplines learn about design and creativity, it became clear that the only thing that made designers different was their view of life and other people. It’s the personality and not the skills that makes one a designer.

Designers have made up complicated, often nonsensical, terms to explain design to others. Some even say that design is a science and requires complex models and fucking massive spreadsheets. The way that design gets introduced by them stops others from developing the confidence to design things.

People in advertising — aka the propaganda industry — say that their work represents true creativity. The aesthetic aspect of design has dominated its perception. It's become all about making beautiful things.

This is a distorted image of design and it scares people away. We need a simpler, more human way to talk about design and how to apply it.

That's why this book exists.

Who is this book for?

Anyone.

Anyone who's willing or interested in designing things.

The main focus of this book is the approach and the attitudes of designers. That same approach can be embraced by:

Interaction designers, Fashion designers, Architects, Service designers, Business designers, Strategic designers, Furniture designers, Environmental designers, Industrial designers, Textile designers, Graphic designers, Entrepreneurs and others who may not have a 'designer' in their job title but create value through their ideas.

It can also be a source of inspiration for anyone who:

Needs to design something.

Wants to come up with a new idea.

Has to solve a problem.

Why bother reading this book?

You really don't have to.

But it's probably a better use of your time than watching TV or scrolling through cat videos on Facebook.

This book may help you:

Learn to think like a designer.

Realise that you too can have good ideas.

Gain the confidence to be a designer.

There are many books about design. Some have tips on how to use design tools, others are about methodology and process. This book is about the mindset of a designer.

So will this make me a designer?

Bad news.

Reading one book won't make you a designer — the only way to learn design is by doing it. No, you can't get a refund.

This book will introduce you to design, but you'll still need to learn the tools. And if you're looking for rules and formulas for design and expect them to turn you into a designer overnight, then this book isn't going to do it for you. If you believe that thinking is the foundation of design then you may enjoy reading this book until the end.

In other words, this book will help you learn how to apply design in everything you do. Not just get a fancy job title.



Rethinking design

“Design is too important to be left to a bunch of designers.”

— Another very smart person.

Life’s too short to spend it doing what others have decided for us, and no one knows what happens once we die. So it’d be a shame to waste our little time on this planet doing things in ways that we know deep down could be improved.

Yet it’s easier than ever to be complacent. Modern life’s made things so comfy for us that we’ve lost our courage to think originally about problems. Even though everyone’s capable of having good ideas.

We’re lucky to live in this exciting era where we can still be more creative than the artificial intelligentsia that we’re developing for ourselves. We need more people to be ‘designers’, or at least think like designers.

What design does.

Design creates options. Those options can solve problems or improve the lives of people, and the society that they live in. For every challenge or problem, there are always ideas or solutions out there. Design is one way to solve challenges that our existing options can't address anymore.

We live in a time where technology is rapidly advancing, so our existing options are becoming obsolete faster than ever. Our grandparents never felt this constant need to create new options in the way that we do now. The good news is that those same technological advancements now let us create options for ourselves.

The eventual goal of design is to help improve the world we live in. Or, in other words, to stop the world getting even more fucked up.

The misperception.

As systems and tools become more sophisticated, we need more specialized skills to design things. It's this, combined with a culture of consumerism, which has led to a demand for expertise in design that's never existed before.

The division of design into specialized fields has made designers focus more on learning the tools and less on developing their thinking. People who are good at 3D modeling get to design our cars. The ones who are good at graphics get to design our digital products. And anyone who can sketch gets to design our furniture.

Today, the true meaning of creativity and problem solving is misunderstood. Instead, the design world is full of bullshit and buzzwords that stop us involving more people in the process. We've forgotten that everything we see around us is designed and that we've always been designers.

Trust in the approach.

It seems crazy to trust the design approach. It embraces ambiguity, uncertainty, and failure. Even crazier to go with an approach in which you choose a solution before it's all figured out. And totally insane to trust an approach that asks you to dream about ideas. But once taken to heart, the design approach can give you the confidence that if you don't give up, you'll always have an answer.

Design is optimistic.

This is something that free-thinkers throughout the years have always embraced. Design means being comfortable not knowing where you're going. And to be wrong a lot before you're right. It takes a huge amount of self-confidence to stay the course, but being optimistic can get us there.

Attitude and culture.

Design, more than being a methodology or a process, is the attitude you have when doing things.

Maintaining this attitude is much more important than religiously following someone else's idea of best-practice. Every design journey is a learning experience. Instead of following a fixed plan from start to finish, designers constantly rethink their approach as they progress on their design journey.

Like all cultures, design culture has its own values and principles. It's what underpins a designer's work. It takes time and practice to find and apply your design culture's values and principles. But once you've cracked it, you can take design to the wider world and apply it wherever you want.

Education and intelligence.

If you get good grades in school you're thought to be intelligent. You'll probably get a well-paid job after you graduate and be seen as someone living a successful, fulfilling life. But there's another kind of intelligence that our education systems don't often allow to blossom, and that's the intelligence of thinking freely and independently.

Most of what's taught in schools today will be irrelevant by the time the students have grown up. Some subjects have been taught in the same way for hundreds of years. Children are made to study poetry written by people who could've never imagined the world as it is today.

This system trains people who, despite their intelligence, lack the courage to take risks, fail, and move on. Instead, they're trained to learn and memorize. All humans are born with the ability to think freely. And we can regain the courage to think for ourselves — we just have to want it.

Creative vs critical.

Creative thinkers are doers. And it's by doing things that they work out what to do next. Critical thinkers look for quantitative patterns that they can use as evidence to justify their actions. Because they base their ideas on evidence, critical thinkers feel more certain about the results of their decisions. On the other hand, creative thinkers can only remain hopeful that their decisions might be valuable. And while a critical thinker sees ideas as immutable and unchanging, creative thinkers see ideas as things that continually evolve.

Design is about feeling and emotions. It's impossible to approach design with absolute certainty, unlike science. Creative thinkers are relentlessly curious, they set aside assumptions and strive to view the world with childlike wonder. But both approaches are useful, and being able to switch between the two at the right time is a skill that anyone can develop by practice.

Productive procrastination.

From the outside looking in, the creative process looks like a waste of time. Most of what's created, developed, or prototyped during a design journey changes or gets thrown out completely. And designer will spend a large chunk of their time just being confused, lost, and not making any measurable progress. So it's almost impossible to engineer a plan for designing things.

But that's not a bad thing. Creativity takes a hit when we try to be constantly productive. Our minds can think more freely and come up with bolder ideas when we're not 'busy', or tied to schedules and processes. Procrastination is productive.

When we design, we need to do things differently to be efficient. We need to forgive ourselves when we're wrong. Sometimes we need to throw out everything and start from scratch. Other times, we may be taking time off and doing nothing — and that's OK too. It took billions of years for humans to evolve, we need to give ourselves some time to get our creations right too.

Design transformation.

It takes time and practice to see and solve problems like a 'designer'. And it involves a slow, gradual transformation of our world view. Creativity exists in every one of us, but we can't just become creative overnight. It takes time and determination.

The goal of our transformation is to gain the confidence to think independently, to not be afraid of others' judgement, and to detach our egos from our ideas.

The development of a design mindset starts when we first try to design something and fuck it up. Which sounds very pessimistic, but really it's quite the opposite; failure is an innate part of this process. People who go out and fail the most are also the ones who try the most, so they develop faster.

As you develop as a designer, you'll find yourself becoming more chilled, positive and confident. Design teaches us not to act like a jerk to others, as well as ourselves.

Design for everything?

At this point, you may be saying something like: “Wow, design sounds like it’s the coolest thing ever. Should we put designers in charge of everything?”

So the answer is both yes and no. Yes, because design should be given a chance to solve problems out there, in a broad range of contexts. But no, because design isn’t always going to give you the best solution — it depends on the problem to be solved.

Design always comes with a disclaimer — maybe it’ll work, maybe it’ll be valuable, maybe it’ll solve the problem. But there are many situations in the real world where we can’t rely on ‘maybe’. Sometimes we have no choice but to trust carefully considered plans and processes. Think of the pharmaceutical industry, for instance. You can’t throw a load of designers at developing the next great painkiller — that’s a question of science. But there are still ways that the design process, when applied thoughtfully and within a framework, could solve problems in that same industry. It all comes back to ‘maybe’.

Designing life?

Every day we make thousands of decisions, a few of which can potentially change the rest of our lives. By applying design to our decision-making processes, we can end up with better, more thoughtful life choices.

Sadly, that doesn’t mean we can plot how our lives will turn out. Instead, applying design to our lives can simply mean considering a broader range of options than we’d usually, or questioning norms more. We can also apply design to bigger, hairier, more philosophical questions — like working out what we stand for, or finding a calling in life.

Design alone isn’t enough to solve every problem that life throws at us. But we can use it as a way to keep learning, growing, and developing.



Fliss the kitten

Meet Fliss the kitten!

Unlike other kittens, Fliss' life goal is to travel to planet Mars. Fliss convinced her owner to come along too. Together, they're on a mission to design their way to Mars.

Next, we'll see how Fliss' mission to Mars went, and hear what she learnt along the way. But be warned, Fliss gets swearsy.



WTF?

Design is just a **mindset**.

Design isn't anything special. It's just a way of seeing, doing, and thinking about things. Anyone can apply design to pretty much anything. You can use design to solve day-to-day problems, or create new possibilities for humanity. And while Fliss is on a journey to Mars, design can help us make Earth a less fucked up place.

Fliss the kitten will introduce us to the design mindset.



Design doesn't just belong to those who call themselves 'Designers'.

Everything around us is designed, and we're all designers. Even if we don't believe it ourselves. Design isn't about making beautiful things that you can flog, it's far more meaningful. Nor should design be owned by those who call themselves 'designers'. It's for everyone. The real designers are humble problem-solvers, who want to create new possibilities and opportunities for other people.



We all need to be **designers** whenever needed.

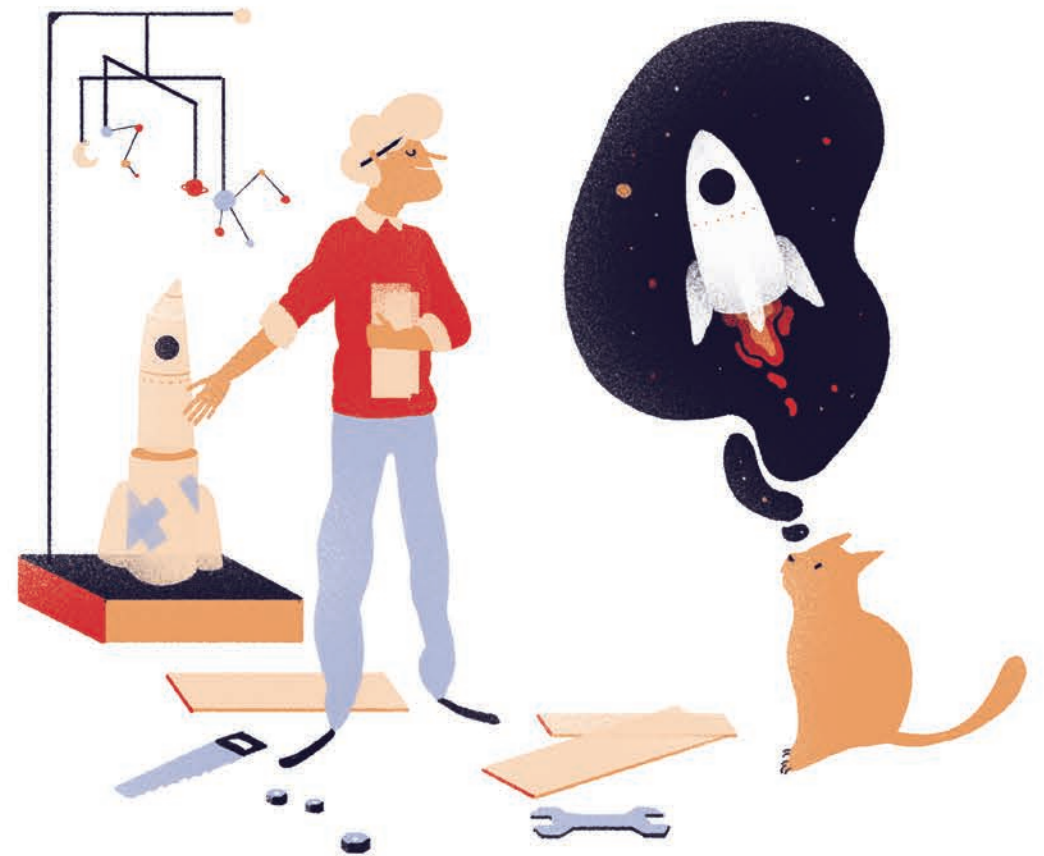
In today's world, we're constantly facing new challenges that our grandparents never had to deal with. Most of the solutions our grandparents have left for us are already absurd and we need to create new options for ourselves. It's an exciting time to be creative, we can be the ones who come up with innovative solutions for our own problems. We need more people to help shape the world, more than just the few who have the word 'designer' in their job title. We can all have great ideas.



Let's not confuse design skills with the **thinking**.

Being good at drawing, or having the time to learn Photoshop, isn't enough to make you a great designer.

Learning skills is just a matter of practice — anyone can do it. Acquiring skills is important, but using skills without thinking is like driving a sports car at 180 km/h without looking at the road — you're probably going to hit a wall pretty quickly. Learn to think like a designer first, and if you find you need to swot up on a certain skill, just take some time to do it.



Creativity is a **skill** anyone can learn.

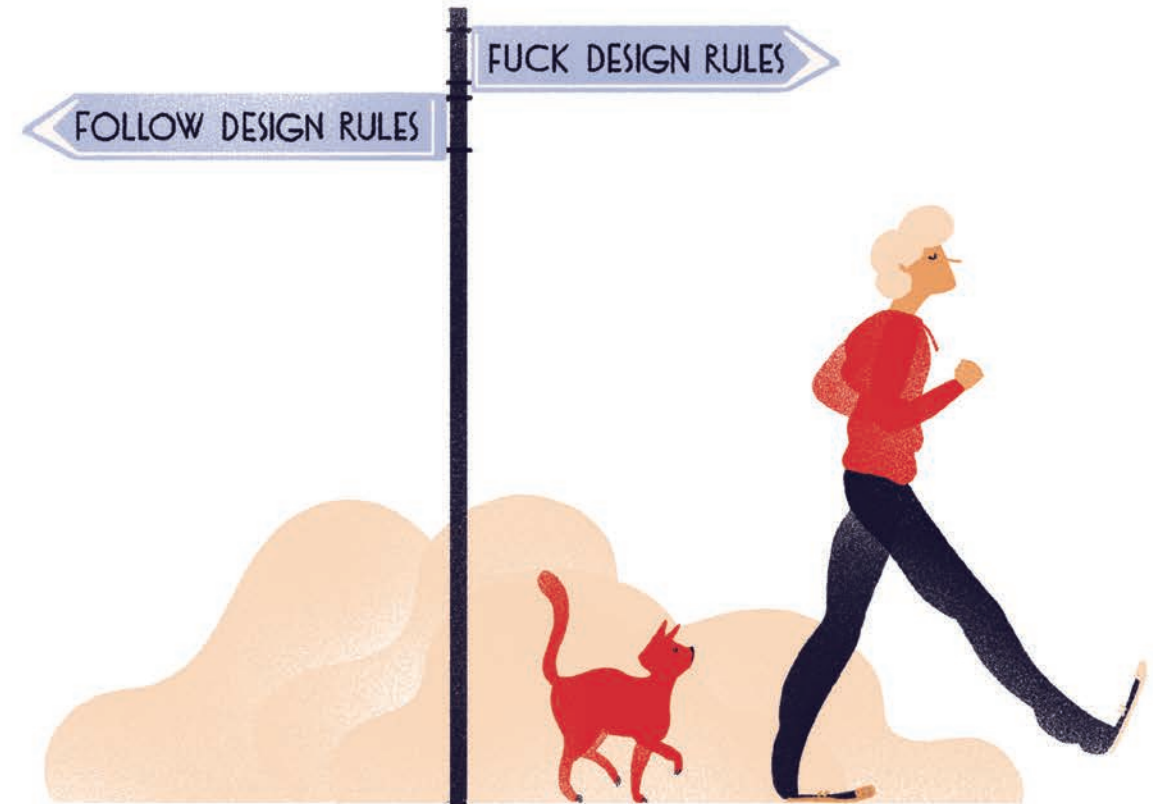
Forget what your third-grade art teacher told you when you showed them that bad drawing. You're fine. You can have good ideas. Creativity is not a talent you're born with, some people just happen to have childhoods which encourage them to be creative. But all it takes to be creative is practice. With practice comes confidence. We can all train ourselves to think freely and creatively when we need to be.



Design has absolutely **no rules**.

Design rules are like flying unicorns — they don't exist. Don't follow any rules for designing things, and never listen to anyone trying to dictate how you should design.

Instead, learn to see the world as it is, and go to the places you wouldn't usually. Rules are there to stop you thinking — so once you stop following rules you start thinking. Design isn't like science or maths. It's lawless, emotional, and impulsive. So if you want to do something, do it. And if you see any flying unicorns, well, it's time to lay off the drugs.



Confusion

Start by asking 'why' not 'how'.

The moment you start thinking about 'how' to design something, you've already eliminated a wide range of possibilities without realizing it. Don't jump into figuring out how to design things, pause for a moment and ask yourself 'Why the fuck am I even doing this?'. Get philosophical and think deeply. Keep asking yourself 'why'. And keep re-framing your goal until you feel good about the impact you want to have with your design.



Take a step **backward** before you go forward.

Sometimes you need to take a step back to see the bigger picture. Maybe there are bigger opportunities elsewhere, or the problems aren't what you think they are. Try to understand how your problems fit into broader systems — because whatever you're designing is part of something bigger. Accept that you won't always know the answers straight away, but be confident that you'll get there.



It's OK to **not know** what you're doing.

You don't have to know what you're designing until your design's finished. In fact, you'll spend a large part of your journey totally confused and lost. Just be comfortable with it. You don't need to impress people by trying to talk authoritatively about the problem, and you don't need to pretend that you know what you're talking about. Instead, stay on an abstract level. And do things that put you in situations where you feel totally lost. Trust in the approach, the fog will lift eventually.



Humans

Start with **humans** not technology.

We design things for humans, so we need to be informed and inspired by them. Just because you have some technology, doesn't mean it solves a real human problem. Find out what people value first before choosing the technology to make it happen. Stay clear of numbers, data, and surveys about demographics. Instead, go out, meet people and talk to them. Don't be afraid, they won't bite. Build an emotional connection with people and let them inspire you.



Your personal opinion is worthless.

You're not all people, you're just designing for them. You're pretty irrelevant in the grand scheme of things. So don't let your personal experience influence your thinking. Humans are all very different, and you're only one of them. It doesn't really matter what you think is personally good or bad for others — nobody cares. Just accept people as they are and cool it with the criticism.



Design isn't art. Art isn't design.

Art and design both involve humans and their emotions. Art is mainly an expression of an artist's feelings solely for the sake of expression. Design focuses on making things that solve problems while serving to enhance the feelings of others. Art's cool, and designers can be friends with artists, there's lots to learn from each other. If you have your artistic side switched on, then there's a good chance that you'll be a good designer, too. As long as you practice being inspired by others, you'll be able to invoke the feelings that you intend to through your design.



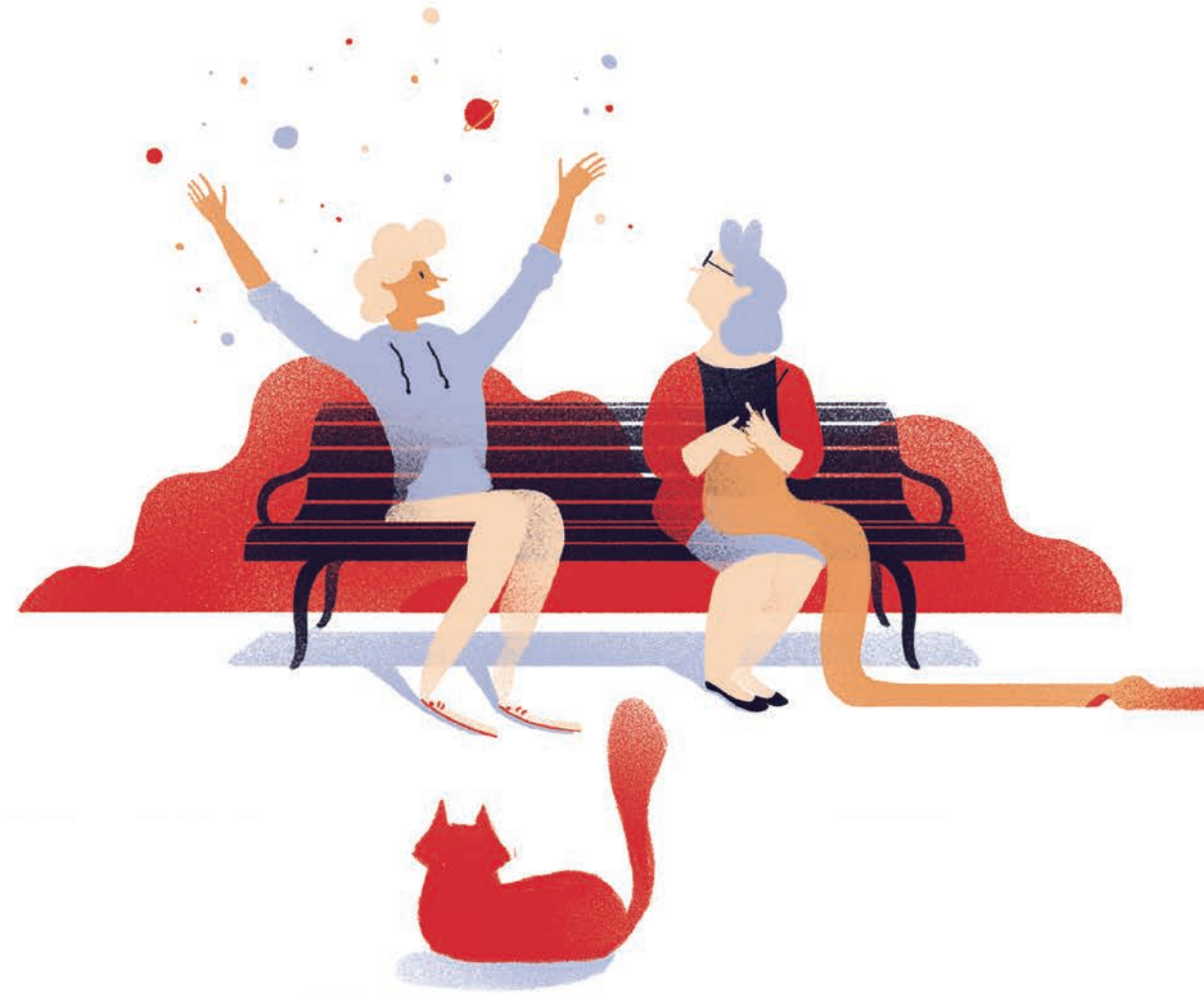
Uncover human **values**, not needs.

Don't take people seriously when they tell you what they like, dislike, want, need or wish to have. You don't just design what they exactly ask for. Get beneath the surface of what they're saying, and understand what they really value instead. People may express their needs clearly, but they usually don't verbalize what they truly appreciate. It's your job to realize human values and transform them into design values. If your design is guided by human values, it'll probably get some love from people.



Get inspiration from **extremes**, not the ordinary.

Go out and meet a handful of interestingly extreme users instead of talking to 70 random ones. Even though you're not designing for them, you can still learn a lot from extreme users in a shorter amount of time because they emphasize human desires and values. The users you talk with can both be extremely for or against the thing you're designing. For example, if you're designing a spaceship go talk to someone who knows nothing about space travel — like someone out buying groceries, and then someone who knows loads, like an astronaut. They're both much more helpful than your uncle.



Have a **conversation**, not an interview.

Surveys and questionnaires are useless. So why not meet people out and about, and have a friendly chat with them instead? If you prepare your questions in advance, you'll lead people to a certain outcome, even if you don't mean to. Let people inspire you. The more you talk, relax, and get to know each other, the more you learn someone's true values. So give people a genuine smile and say "What's up?" then just shut up and listen. You can always guide the conversation if it goes off track but don't influence it, just let people talk.



Talking to people isn't enough, you have to emotionally **connect** with them.

To begin to understand people, you need to build empathy with them. Actually, you don't really need to understand them as long as you can empathize with them. So go out and spend time with people in the real world. Observe them. Put yourself in their shoes. And look at how they express themselves non-verbally. If you can build an emotional connection with people, any design decision that feels right to you is probably a good decision for them too.



Let **stories** guide you, not opinions.

People don't know what they want. So they can't flat out tell you what to design — though they'll certainly try and specify a solution. Instead, give people the chance to tell you their stories. It can be a source of inspiration for you and help you come up with new design solutions. Give up on that spreadsheet full of user research data, and pull out some memorable stories that tell you what people value. Don't try and analyse people — let their stories act as a catalyst for your thinking. As long as you know what they value, you'll be fine.



Ideas

Come up with **lots of ideas**, before choosing one.

You can't just go ahead and choose an idea if you've nothing to pick from. So create choices first. The more options you have, the better the chances are that you'll be left with good ideas. This all sounds simple, right? Great. So stop being a smartass, and start coming up with some ideas. They can be good, bad, big, small, messy, tidy, stupid, clever, or even completely normal ideas — it doesn't matter. Keep doing this until your brain's drained of all its creative juices, and then maybe come up with one more for good luck.



Start with **wild, messy, and crazy** ideas.

Stupid ideas pave the way for innovative ones. In design, we don't need to be boring and rational all the time. Nor do we need to back up our ideas with tonnes of evidence. It may feel childish at first to generate, explore and play around with stupid ideas, but it's the most valuable part of the ideation process. Wild ideas become even more potent when paired with normal ideas. So be stupid, think fast, generate messy ideas and never be afraid to express them.



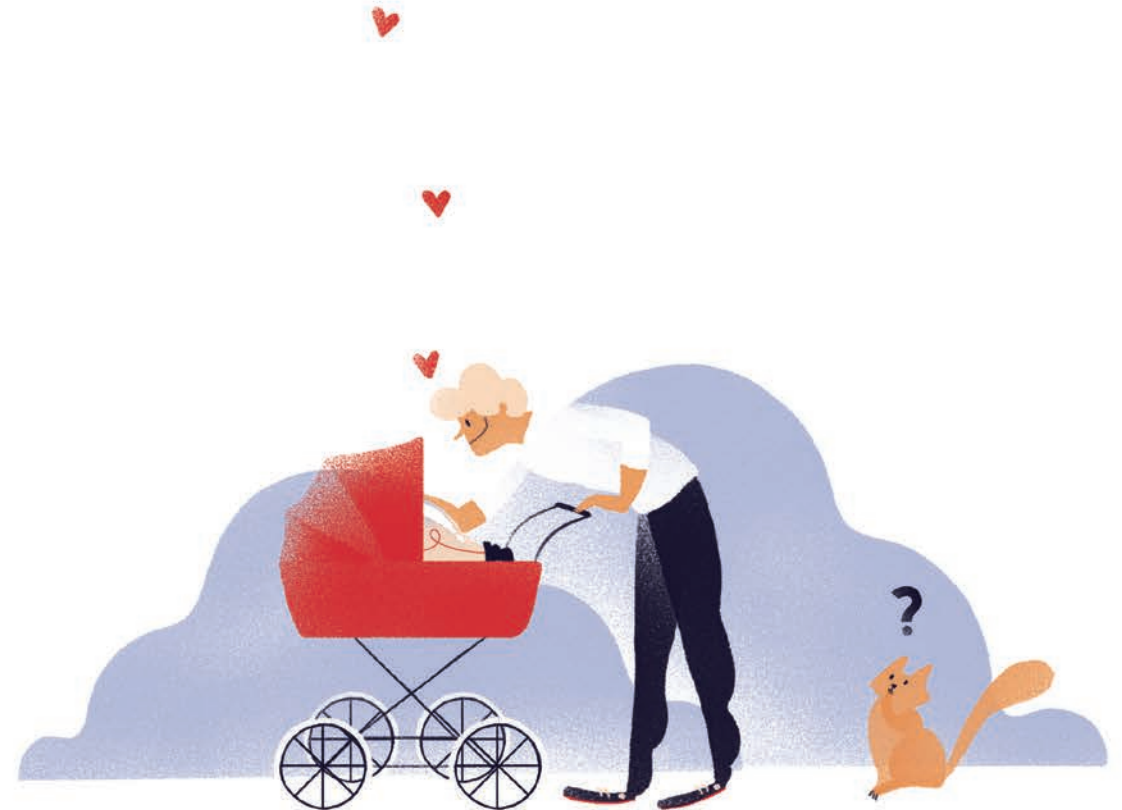
Brainstorm to discover **possibilities**, not perfectly formed ideas.

Use brainstorming to find as many options as possible. Don't expect the final idea to suddenly float into your head during brainstorming. Set your brain free, remove all the restrictions and bullshit that stops you from thinking freely and let your ideas come out. All of them. Basic, simple ideas are as good as new, innovative ones. The goal of brainstorming isn't to find good ideas, but to identify patterns of thought, and prepare for a focused ideation session.



Your ideas are not your babies.

Don't fall in love with your ideas. In design, there's no need to be loyal. You can try out as many ideas as you want before settling down. And you don't have to commit to anything long-term either. If it's not working, move on! Because the moment you fall in love with an idea, you start missing out on other opportunities. Let ideas come and go. If they're worth trying, they'll come back to you anyway.



No one can **own** an idea in design.

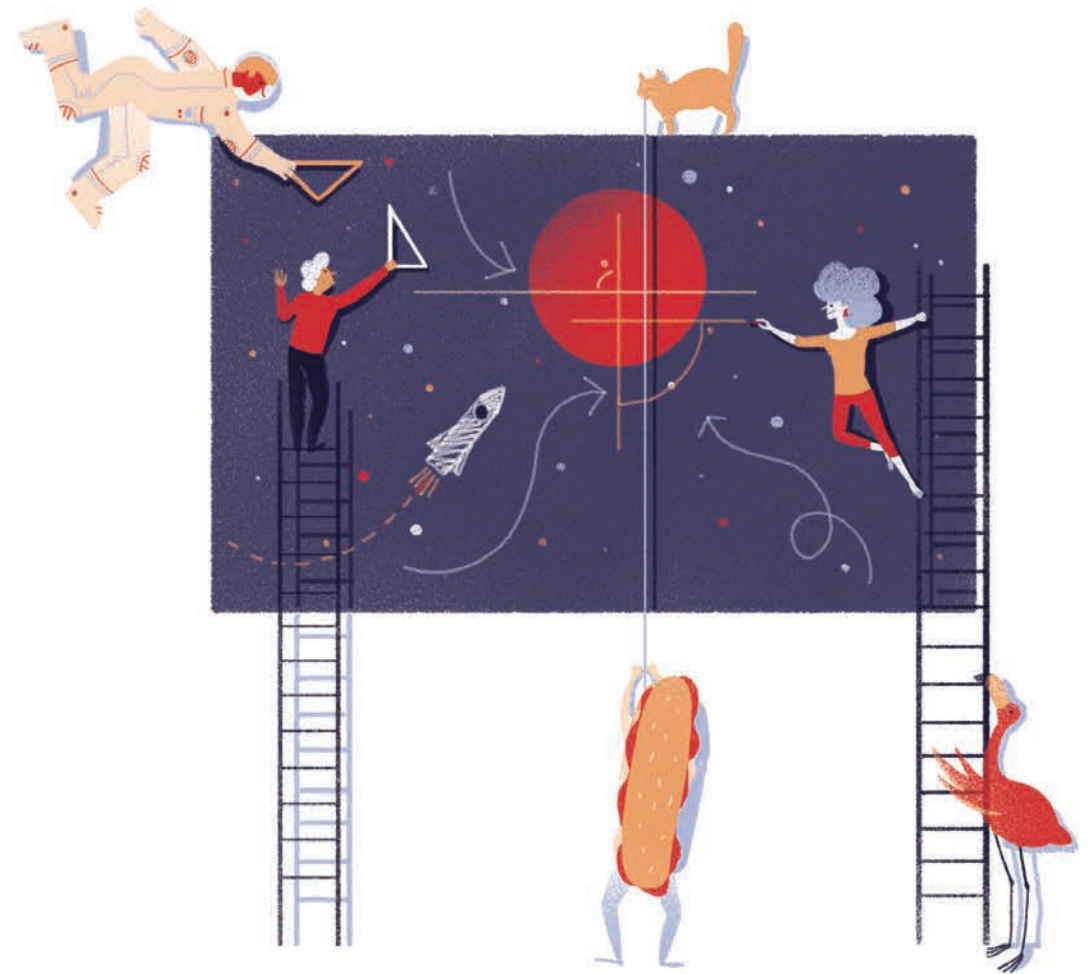
Stop saying 'my idea' or 'your idea'. Not even 'our idea'. There's only one thing and that's 'the idea'. If you act as if you own an idea, you'll discount reality to protect it. There's no way you can prove you're definitely the first special person ever to come up with an idea. Because someone, somewhere could have (and likely has) come up with that same idea. So stay cool. Don't hide your ideas, instead, share them freely with whoever you want. An idea in the minds of many makes magic.



Attitude

Design **with others**, not by yourself.

Design is like making babies — it gets messy if you try and do it alone. Build a team and get together as many brains as possible. Winners use the minds of others, losers limit themselves to their own minds. If you think you're the smartest human that's ever existed on Earth, then you've failed to realise that your brain is always trapped in its own little world. Collaboration is the key to innovative problem-solving. Think with others, make decisions with other and also make babies with others.



Let's not talk **shit** about other's ideas.

Stop judging other's ideas or even your own ideas, it is just not going to help you get anywhere. If you really think an idea is useless then try saying: "That's an interesting idea" first, then try to come up with something that makes it a bit better. If this is hard for you to do then just keep your mouth shut. Never ever criticise, evaluate or analyse someone else's thoughts, because you simply don't know when a stupid idea is going to lead you to the next great one.



Team up with people who are **different** to you.

Collaboration is more effective when it's with people from different backgrounds. Working with like-minded people is more comfortable but definitely less rewarding. Build a multidisciplinary team of people with diverse backgrounds and life experiences. Trust their input even if they don't know as much as you do about the topic. Make friends with people who you don't agree with on everything. Diversity radically enriches how you see the world, and brings new ideas to the table.



Equality always rocks, especially in design.

It doesn't matter if you've got 23 years of work experience, a million PhDs and you're a 'C-something-O'. That doesn't mean your ideas are inherently better than that of some guy off the street. Hierarchy fucking tramples all over creativity in even the most free-thinking of people. So let's give everyone an equal opportunity to express their ideas. No one can claim that an idea is great, because no one can say if an idea will work until it's been tried out.



Have **fun**, lots of **fun**, always.

If you don't let your inner child out, you can't be creative. Don't think and act seriously, even if the topic you're designing for seems serious. Having fun helps us overcome the social pressure that comes with expressing out of the box ideas. It's easier to share and bounce around ideas when everyone's having fun. In a chilled environment, making mistakes is forgiven and doing cool shit is encouraged. So don't be so damn serious. Have a laugh and see where it takes you!



Decisions

Let your **hands** be your brain.

There's a limit to how much our little brains can handle. So stop trying to imagine how your ideas will pan out in your head — find a quick way to make them tangible so you can see and feel them instead. If you're spending too much time thinking about an idea, that's a sign your idea needs to be prototyped. Building quick mock-ups not only opens up your mind, it also makes it easier to talk about your ideas and get feedback on them. So don't waste your brain cells, use both your left and right hands instead.



Try your ideas **fast**, very **fast**.

Building prototypes is an effective way to think. And the faster you make things, the sooner you realise what works and what doesn't. Prototyping can also help you come up with new ideas that you could have never thought of otherwise. Use simple and cheap tools to make basic and rough prototypes of your ideas. It's all about speed. You're not making samples, you're just turning your thoughts into something more tangible. So don't spend too much time on building prototypes, instead use prototyping to work out what to build next.



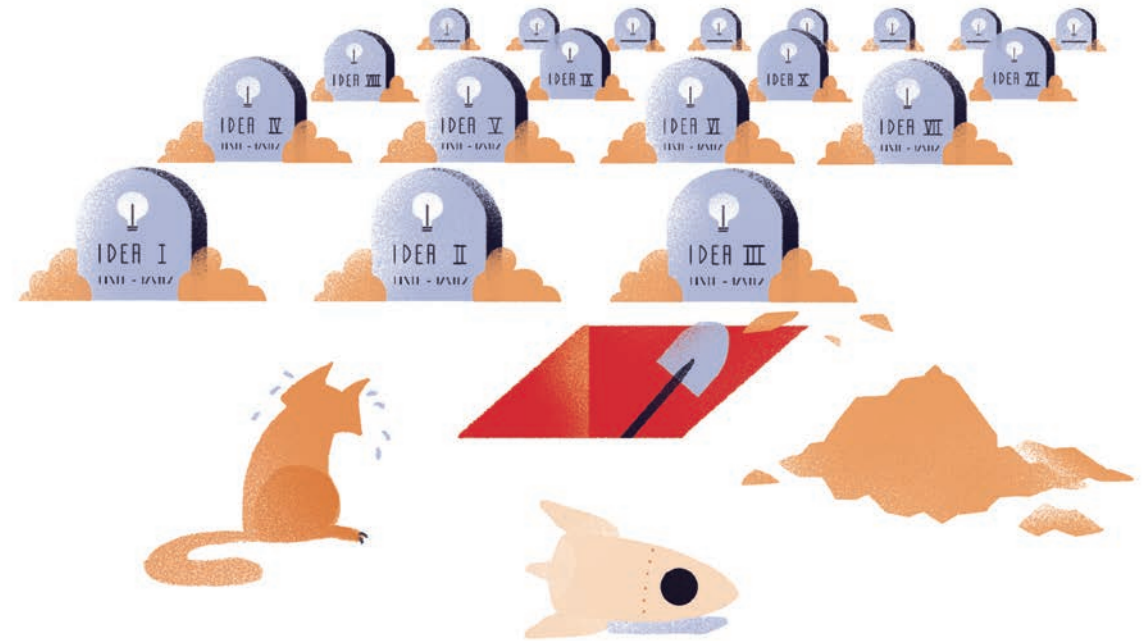
Share your ideas when they're rough.

It's important to share ideas with others. But people can easily lose sight of what to actually give feedback on. So if you share your ideas when they're rough and messy, you can test the values behind the design, not the shallow details. You don't need to impress people with your design skills — instead, you need to find out if your idea sucks and if you need to start over. You'll find most of the time that people will point out both strengths and weaknesses in an idea. And other times they'll suggest things you couldn't have even dreamed of.



Have the courage to **kill ideas** instead of choosing them.

Don't choose the ideas you want to choose, kill the ones you don't want till you're left with nothing but the best ones. That's what decision making's all about. Don't worry that you may throw away a good idea. If an idea's worth considering, it'll come back to you in some other form in the future — and by then it'll likely be better and bolder. You're not going to reach Mars with all these old ideas weighing you down. Don't wait for them to slowly shrivel up — get rid of them. So you can keep moving onwards and upwards!



Learn to love **chaos** and the **uncertainty** of designing.

If you're always certain of where you're heading, you're one of two things: either you're the one person in history who's never been wrong about anything. Or you're lost already and just don't know it yet. Being always certain is a sign that you haven't thought enough about what you're designing. Learn to appreciate ambiguity and messiness and don't blame yourself when you feel the answers are unclear. Being confused is a sign that you're learning something new. Being overly certain can simply mean you're going to fuck things up later.



Don't rationalize your choices, follow your **heart** instead.

You don't need any evidence for the choices you make, just do whatever feels right. You won't be able to find definite reasons to back up your decisions anyway, so trust your heart and go with it! Deep down, you'll always know what's the right choice. And that feeling turns out to be right a lot of the time. In design, irrational decisions are as valuable as rational ones. If you're working in a team, you can avoid arguing about decisions by having a voting system instead.





Be ready to go back and **start**
all over again.

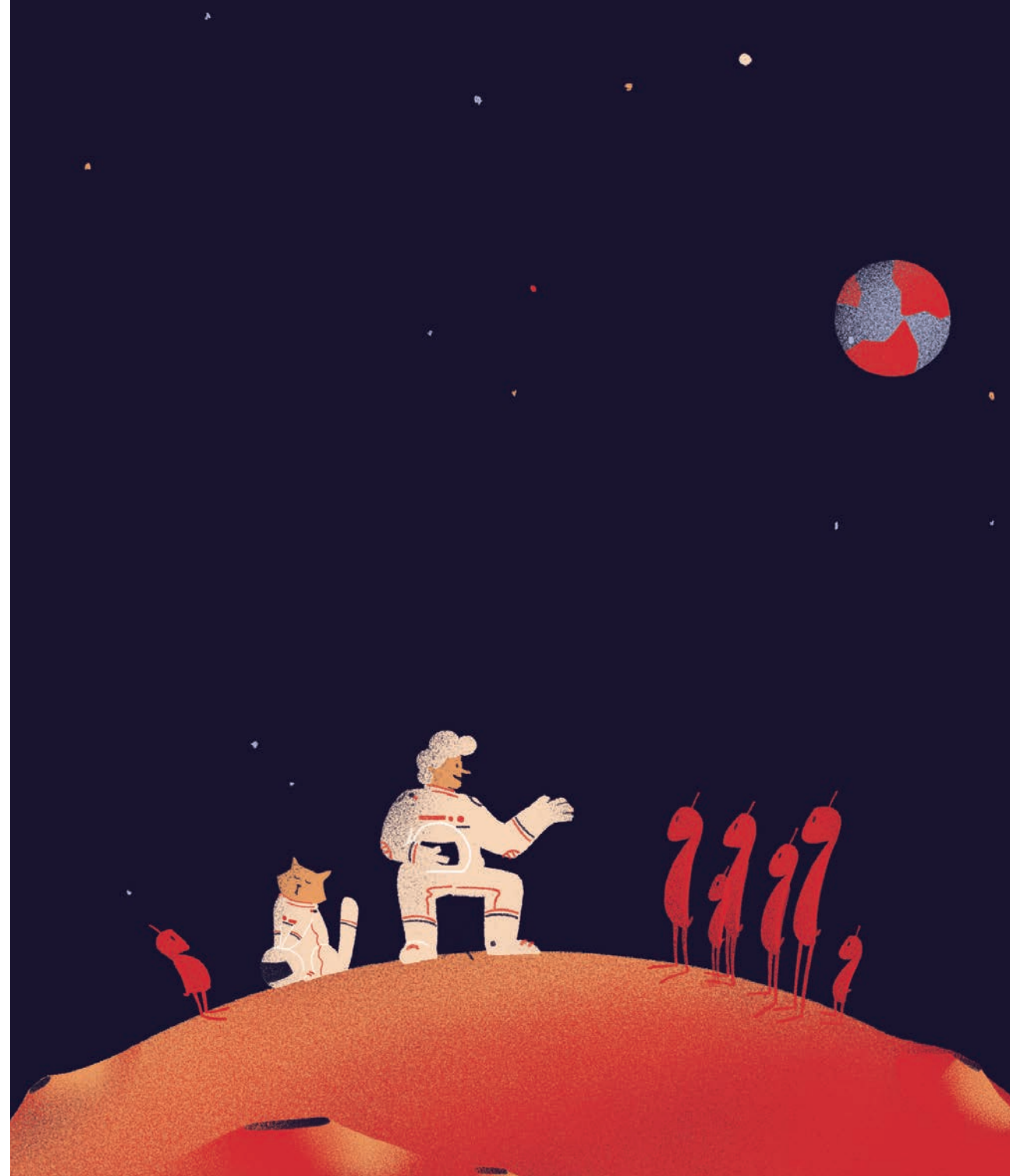
As much as you need to detach yourself from reality to be creative, you also need to get back to reality before you can put your design out into the world. There'll be a time when you need to ask how your idea's going to function, how people will engage with it, and what value it will give others. Do a reality check before making the final call to go ahead with an idea, and be prepared to go back and start again from the beginning. The best stuff usually happens through iteration.





Tell a **story** about your idea and its values.

You may have just come up with the best idea in the history of mankind. But it doesn't matter if you can't communicate its value to others. People remember stories, so tell a story about how your idea brings value to their lives. And use whatever tools you have at your disposal to inspire and intrigue people — visual scenarios, videos, live performances, for example. Storytelling is a way for you to test your idea and see how it resonates with people.





Stop!

Put down this book. Go out and **make something happen!**

Everything you've read so far in this book is useless unless you put it in practice. Thinking about an idea or having a good idea isn't really going to solve a problem and it definitely won't make life better for anybody. No one can be certain whether an idea will work or not, just make it happen and be ready to find out that you fucked it up again. As long as you learn something new and you're not too harsh on yourself, you'll be fine. Design is about thinking, doing and, ultimately, persisting.

Having said that, please don't stop reading. There's still 42 pages to go.



Journey

The “Design Process” is largely **bullshit**, but...

There’s no such thing as a magical design process that always leads to magical solutions. Every challenge is unique, which means you need a unique approach too. Following the same procedures over and over, with no original thinking, doesn’t guarantee success. Sometimes quite the opposite.

The following 86-minute-long design journey is only for reference. You can use it as inspiration for developing your own design journey.

Design something in 86 minutes:

So please, try this at home. It doesn't matter if you're:

A **shop owner** who needs a fresh brand for her store.

A **dude** who's bored and needs a change in life.

A **founder** of a failing start-up needing new ideas.

A **prisoner** who's planning their escape from prison.

A **policy maker** who's trying to change a government's stance on an issue.

A **random guy** who wants to design a chair.

A **CEO** of a corporation that needs innovative ideas.

A **chef** who wants to create new recipes.

A **high school student** who wants to solve world hunger.

An **engineer** who's facing challenges designing a front-end loader.

A **producer** who's planning to make a new feature movie.

A **loser** who wants to make a rock opera.

A **student** who works in a coffee shop and want to make people happy.

A **surgeon** who needs to figure out a new method to perform a complicated surgery.

A **nation** that wants to stop a war.

This is for anyone who wants to create something! There's no prep work necessary. Just be positive for the next 86 minutes!

Re-framing goals

**The goal of a design journey is to find out what to design
— not how to design the thing we already want to design.**

So the first step on a design journey is to let go of everything. Let's clear our minds and get ready to go on a journey that can take us anywhere, everywhere, or nowhere. Ask yourself why you're doing this. Actually, ask yourself this so many times that you're confused. You have a greater chance of making new discoveries by getting totally lost.

As you question things, you'll start to think deeper and develop a more philosophical point of view on the topic you are designing for. Your initial "brief" can always be re-framed to address the topic on a deeper level too. It's OK if your brief becomes more ambitious — that will help you

see more opportunities.

Put together a short statement that describes your goal. The more abstract your goal at the beginning, the more valuable it becomes towards the end of the journey.

5 min

Here's an example of re-framing a goal:

Initial goal:

I want to design a bicycle.

Why?

I want people to be able to move freely on two wheels.

Why?

So that more people can enjoy free movement at a more affordable price.

Why?

It helps keep our cities cleaner and our people healthier.

Why?

People will be happier and so will our society.

Re-framed Design Brief:

"Make affordable and sustainable movement available to more people."

With this new design brief, we allow ourselves to think of ideas and solutions beyond bicycles.

Talking to people

It's when we realise how others can feel and think differently to ourselves, that we can start to empathize with them.

Who? If you talk to someone — anyone — that's already way more useful than talking to no one. If you can pick, then it's better to talk to people who have interesting connections to the topic you're designing for.

How many? Talk to more than one person, but not too many that it's overwhelming. Having one deep conversation with an interesting person is more valuable than lots of little ones. If you talk to a large number of people you'll automatically start thinking about quantitative insights and trends. This is risky. It could mean that you won't strongly understand the issue on an emotional level.

How? You don't need to prepare any

questions, go and talk to people the way normal humans talk to each other. Just make sure you steer the conversation, so it stays on the topic. Sometimes it can be useful to throw in some irrelevant topics too, but only in moderation. Conversations tend to be shallow at the beginning, but when continued they become deeper and more meaningful. Let's not forget that we talk to people to get inspiration, not to find golden answers.

12 min

Let's say we're designing a mobile payment service.

Who do you talk to?

1. Someone who does all her transactions on mobile.
2. Someone who only uses cash and doesn't want to get a smartphone.

Start casually:

'Hi, how are you? How was your day?'

Steer the conversation:

'Did you buy anything at the shops today?'

Get deep:

'Really? Can you tell me more about how that felt?'

Encourage elaboration:

'Hmmm, interesting! But why do you think so?'

Stay focused:

'Cool, but actually going back to what you were saying about...'

Listing values

When we design for human values, these values become self-evident to the people using the solutions we design.

You don't need to obsessively analyze what you see or hear from people — too much analysis can lead you astray. Instead, allow yourself to build empathy with people. Capture the quotes and stories you hear. People rarely express what they truly value in casual conversations, but it's our job as designers to pay extra attention to stories and uncover the values underpinning them. If a story is strong enough to have inspired you then it's probably connected to a certain human value.

Write down all the stories and quotes you remember on post-its and put them up on a wall. Go through all of them and try to discover patterns. This will help you uncover the values that weren't mentioned clearly in

conversations.

Values can be phrases that address your topic at a high-level: fun, comfort, beauty, freedom, security, transparency, efficiency, sustainability, ease of use, trust, affordability, excitement, etc.

Values are quite common and known to everyone, the challenge is to prioritize them. So choose the top two or three values that you believe will best serve the humans you're designing for.

6 min

From stories to values:

"I need a big car."

I value **comfort**. I don't care if the car is big or small as long as it is comfy — design something **comfortable** for me!

"I don't mind having to log in every time I need to submit a new invoice."

I value **security** more than comfort, design something **secure** for me!

"I want a bag that reflects who I am as a person!"

I value **style**. Design something **stylish** for me!

"I wish I didn't have to fill in this long form for my application."

I value **fun**. Design something **fun** for me!

"I was really embarrassed when the shopkeeper told me my card didn't have enough money on it."

I value **transparency**. Design something **transparent** for me!

Ideation for values

The more options we have to choose from, the better our decision-making can be.

Brainstorming helps us discover new options and gives us a larger pool of ideas to work with. Brainstorm by asking this simple question for each value:

How can we create this value?

Brainstorm with at least two other people and generate as many ideas as you can — it's all about the speed. Express your thoughts as they come to you. Don't spend more than 3 seconds on each idea and avoid going into detail. Don't question, criticize or judge any idea — even your own ones. Use post-its so you can move your ideas around later. Use a marker pen so that the small size of the post-it forces you to keep your ideas short and rough. Don't

hesitate to share your craziest ideas, crazy ideas can turn into practical solutions later. Draw your ideas on post-its quickly and roughly, avoid using sentences or complex sketches. Don't forget to capture the obvious answers too, they're as valuable as your new ideas.

If you feel you're stuck, don't give up. Steal someone else's idea, change it up a bit, and share it with the group.

10 min

Different kinds of brainstorming ideas:

Fun ideas for serious topics:

How can we make education more accessible to everyone?

Let's all be illiterate so we don't need schools anymore.

Impossible ideas:

How can we learn a new language faster?

Take language pills.

Harsh ideas:

How do we make society healthier?

Make pizza illegal everywhere!

Obvious ideas:

How can we make travelling on trains more comfortable?

With more comfortable seats.

Very stupid ideas:

How can we assure customers that their online payment is done?

Send a drone to their home with a sign saying: 'Payment done!'.

Discovering patterns

The goal of brainstorming is to discover our thought patterns and prepare for more focused ideation sessions.

But now we're drowning in a sea of post-its. Great. What next?

With so many random ideas in our head, things can feel chaotic. But let's not panic, and definitely don't give up. The randomness we've created is going to help us recognize our thought patterns. It gets easier to find our focus once we've recognized these patterns. So start to group your ideas into clusters. Look for the themes that emerge and give each cluster a name. Move the post-its around so that each cluster is visibly distinct, and then vote on the ones to explore further.

Vote as quickly as possible without trying to rationalize your choices. By now we've spent enough time on this

journey to intuitively know what's the right thing to focus on. We need to trust our instincts.

Also, by placing similar ideas next to each other, it's easy to see which are the strongest. Later, we'll use these clusters to develop our first round of mini-concepts.

6 min

Here is an example of how to cluster eight ideas.

How can we make it easier to drink coffee on the go?

Idea 1: A coffee bag attached to the jacket and a straw to drink from it.

Idea 2: Carry coffee in a bottle.

Idea 3: Tiny cups served everywhere so we don't need to carry coffee.

Idea 4: Small, squeezable coffee containers that fit in a pocket.

Idea 5: Take coffee pills instead!

Idea 6: A phone cover that can keep coffee in it for drinking on the go.

Idea 7: A hollow bracelet that you can fill up with coffee.

Idea 8: Backpack cafe!

Theme one: Embedded containers (idea 1, 6, and 8)

Theme two: Free form containers (idea 2, 4, and 7)

Theme three: Solid caffeine (idea 5)

Sometimes an idea itself can represent a theme (idea 5) and sometimes an idea may end up not being part of any theme (idea 3).

For larger numbers of ideas, we may need to do multiple rounds of clustering to find themes.

Developing stories

To better realise your ideas, you need to turn them into stories that involve people and context.

So continue the ideation for your chosen theme, but instead of post-its and marker pen, use pen and paper to develop more fleshed out mini-concepts. Up until this point, the focus has been on generating ideas and discovering themes. Now we're thinking about how our ideas may or may not work in practice.

Sketch out as many scenarios as possible, being as visual as you can be. These stories will help you think through various settings, so you can figure out how to develop the concept further. There are two types of scenarios to consider: core scenarios and the uncommon scenarios. Core scenarios represent the most obvious use cases, and they can help define the main components

of a solution. Uncommon scenarios are cases that are quite rare but still could happen. We need to consider these in order to have well thought out concepts.

Remember, we're doing this to appeal to human values. So make sure you keep them in mind as you develop stories.

7 min

Examples of core and uncommon scenarios:

When designing an art gallery:

Core Scenario: A group of 20 students are scheduled to visit the gallery today, they'll be here at 9 am.

Uncommon scenario: There are a few senior citizens attending the opening of an exhibition, they need special assistance.

When designing a mobile app for ordering taxis:

Core Scenario: Someone needs to book a taxi for tomorrow.

Uncommon scenarios: Two clients order two taxis at the same time and in the same location, one of them gets in the wrong taxi.

When designing a fridge:

Core Scenario: A family of 6 needs a lot of ice cubes in the summer.

Uncommon scenarios: A pack of expired milk explodes inside the fridge.

Making it tangible

It's hard to fully understand an idea if it's locked in our head. Prototyping lets us free our ideas and puts our hands to good use.

Prototypes let us gauge how people immediately react to ideas. These reactions tend to be more honest and sincere, so observing reactions tends to be more useful than asking people to put their emotions in words. Another benefit of prototyping is that it facilitates collective thinking, because it encourages others to get involved and contribute.

Set a timer for every prototype you build. If the prototype you're making needs more time than making a cup of coffee, you probably need to change your approach. Tangible thinking is all about using simple and cheap tools to quickly make rough and almost always fake prototypes. The goal with prototyping is to fail as many times as possible. The sooner

you move onto the next concept, the sooner you succeed.

A concept can be made tangible on two levels: the general idea behind it and the critical elements of it. Prototyping the general idea allows us to test the values. Prototyping the critical elements helps us to improve the experience.

12 min

Ideas can be made tangible in several different ways:

Paper, pen and marker can be used to mock up pretty much anything.

Cardboard can be used to prototype environments and products — like the interior of a bus, or an ATM machine.

Foam board is a fast and cheap way to prototype physical products — anything from kitchen utensils to earphones.

Acting and role playing are powerful ways to experience services and products. Role playing, in particular, lets us feel more emotionally engaged in the experience.

Videos can be used to prototype scenarios that are difficult to act out in real life, but can be faked on film.

Storytelling is a compelling way to prototype concepts, as long as the story being told evokes the feelings that need to be experienced.

We can prototype with anything that feels right. As long it helps us see the values and feelings behind the idea.

**Things you should do to your ideas
because they aren't your babies. ♥**

**Make them quickly, cheaply, and don't care about
how they look.**

It's OK because your ideas aren't your babies.

**Let strangers play with them, break them ...and
collect feedback.**

And that's still OK because they aren't your babies.

**If they are yours, great. And if not, that's fine too.
You don't own them.**

But you're responsible for them.

**Don't love them. Loving ideas makes you blind to
better ones.**

When it comes to your babies, please do the exact opposite.

**Have as many as you can, and then kill almost all of
them.**

Relax, they're just ideas — so enjoy it!

Defining principles

Design principles guide our journey and make sure our design decisions are in line with human values.

Design is a messy process and we may often get lost during the journey. To avoid constant confusion towards the end of your journey, we need to have a framework that helps us stay focused. At this point, we need to stay away from random ideas that do not serve our design values.

Generate short statements that become guidelines for your design. Think of them as ways to stay both creative and focused. Simply put, design principles are just elaborate versions of design values in a more practical format. They need to be written in a way that can guide us to make design decisions, both big

and small.

Principles can be derived directly from human values or be the conclusions we make from the patterns we discover. Regardless, it's important to keep in mind that design principles can evolve or even change as we move forward, they are not meant to be set in stone.

But wasn't design all about free thinking and not following rules? Yes, yes, and yes! Principles are not rules and are not meant to be fixed either. They are guidelines that stay valid as long as we feel good about the way they influence our design journey.

4 min

Design principles in the form of statements:

People appreciate fewer choices!

It's all about community.

More information means more transparency.

It's ok if it's ugly but still functional.

Parents are the priority.

Design principles in the form of guidelines:

Give people the chance to personalize things.

Make users feel they are in charge.

Don't sacrifice the quality for the sake of simplicity.

Make it possible to access everything from everywhere.

Bring desirability into it through the details.

NOT design principles:

Make it cool.

Large buttons in the interface.

Use red as an ambient color in the environment.

The softer the handles, the better.

It should be easy to use!

Iteration

Good ideas come from iteration. Better ones come from more iteration. And the best ones come from lots and lots of iteration.

Ideas evolve over time. It may be impossible to make ideas perfect, but it's possible to get close to ideals. We need to take some time for iteration, even if we think our ideas are already at their best. Let your ideas evolve, and be confident that they'll get better — because they will!

Iteration isn't only about making little improvements, it can also be about changing directions. If small iterations repeatedly fail to improve an idea, it probably needs a dramatic change. As long as we check our decisions against our design principles, any change we apply to our design will be for the better.

As we're going through iterations, we can involve people for feedback and ideation too. But let's keep in mind that we're the ones making the important decisions, not the people interacting with our design. Our experience with the topic, people, and ideas is such that we've developed a good sense of what's best to do.

Design principles guide the way we do iterations. Sometimes we do an iteration despite being against the principles. But if that iteration creates positive impact then we need to update our design principles.

24 min

Iteration is done on two levels:

Details: Adjustments to characteristics and behaviours:

A poster: changing its color theme or typefaces.

A car: adjusting the intensity of its headlamps and the way they turn on and off.

An insurance service: changes to the language used to introduce policies to customers.

Main components: Changes to the main components and the way they work together in a system:

A poster: adjusting the size of the poster or re-layering its content.

A car: playing around with headlamps' positions.

An insurance service: combining policies or deriving new policies based on the existing ones.

Hold on!

A design journey never ends by itself, you need to hit the brakes whenever it feels right to do so.

If we don't put an end to a design journey, it may go on forever. Let's stop and put our design out into the world. Who knows, maybe it'll fail and we'll have to start all over again. Or maybe it will work and we'll never have to change it again.

The core components.

The time spent on a design journey depends on the problem we're trying to solve with design.

We may only need 86 seconds to design a bathroom sign or 8600000 hours to solve a social issue.

The 86-minute-long journey in this book is only an example. In the 'real world', we often need hundreds if not thousands of hours to design something.

The approaches we take also vary. We may choose to follow only a few steps of our design journey, or add extra phases to it. So long as we address the core components of a design approach, there's a good chance that we'll generate a solution that humans value. These core components are: **human values, story scenarios, and design principles.**

Values

Scenarios

Principles

26 min

Here's an example of how you could apply the core components of design:

Design Challenge: Create a tool to help people better manage their time on the go. (Design what is known as a calendar app)

Human values:

Not distracting: "I don't want to disengage from the world to use it"

Skimmable: "I always use it on the go"

Relevant: "I don't want to see what I don't need"

Story scenarios:

- I'm just taking a quick look to see what my week looks like.
- I just need to remember to pay my water bill by Wednesday.
- This event is cancelled so I can move my meeting to an earlier time.
- What do I need to do now? Let me check...
- "What are you doing next Monday?" a friend asks. "Let me check" I reply.

Design principles:

1. Only show people the details they need, avoid giving them too much!
2. Focus on the content, make navigation quieter and more ambient.
3. Make interactions natural and playful — managing life can be fun.

26 min

And here's how you could apply the core components of design to a service:

Design Challenge: Design a cafe in a hipster suburb.

Human values:

Healthy: "I hate sugar"

Cultural: "We prefer cafes that have character"

Community: "I always check who's in the cafe before going inside"

Story scenarios:

- Someone comes into the café with a book and spends 3 hours there.
- Two friends walk in, they want to know where we get our coffee from.
- A mom with a baby is in the café, the baby's alive (because it's not an idea) and crying loudly.
- It's a Sunday morning and there is no room left to sit in the cafe.
- A customer asks if the music can be changed.

Design principles:

1. Make coffee the last reason for people to come to our cafe.
2. Have a story for everything we serve.
3. Don't serve everyone, let the experience choose the audience.

Reality check.

In design, an idea without thoughtful craft and implementation is worthless. It's when we try to figure out the details that we realise whether an idea can be implemented or not. Often reality hits us hard, and that's just a part of the journey. Two realities that constrain design are Business and Technology. They're both valuable and crucial for designing things. And we can openly embrace the constraints they impose on design as a way to think more creatively. We only need to make sure that what we create aligns with what humans desire — not what a business wants, or a technology allows.

It's perfectly OK to spend time on an idea that we can't bring to life. These ideas can inspire even greater ones down the road. And at the least they're great lessons on how to avoid future fuck ups.

Doing whatever works.

If you followed this 86-minute journey without thinking it could be made better, then you just wasted 86 minutes of your life.

There are, of course, other approaches that have proved to create equally valuable results. Approaches which are backed by very different principles to the design approach. "Designers" can't claim that their way of doing things always works, but they certainly have good reasons to be hopeful.

An independent mind must always anticipate change, and let their approach develop and adapt to the world around them. So embrace new things, changing direction, and different points of view — it's how we grow as designers.



Planet Mars

We don't all want to go to Mars. But we do face challenges and opportunities in our everyday life. And it can be handy to know a designer's way of approaching a problem. Whether it's questioning conventional wisdom, or making quick prototypes to try out wild ideas, applying design can help us shape our lives and positively impact society.

At the end of the day, we can never say for sure what's the right approach. The same goes for what you've just read in this book. We're born thinking freely, and meant to be given an equal chance to see, learn and develop. Having the drive to try things and develop our own points of view is one way to make sense of life.

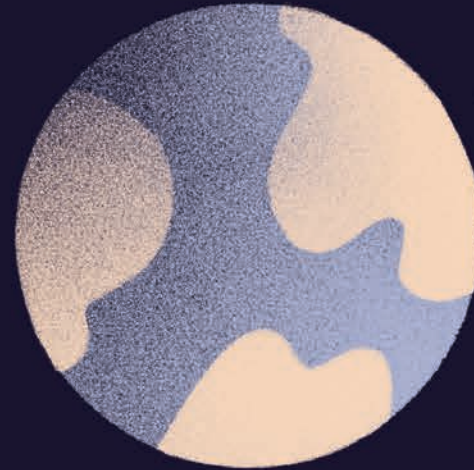
If this book inspired you to approach problems slightly differently next time, then that's what matters. Who gives a shit about Mars.



So, what happened to you, Fliss?

Who gives a fuck! Did you even read the book? Can't you see that I got to Mars? But it doesn't matter — because that's not the point of the book. It's about learning how to apply design and fixing Earth. You need to fix Earth so I can come back again. I just spent at least three of my nine lives getting to Mars, so hurry up and design something already.

— Fliss, Olympus Mons, Mars.



Who did this?

Amid Moradganjeh is a “designer” who’s primarily interested in exploring ways to apply design to a broader range of disciplines. Previously at IDEO, Google, and Microsoft, Amid is currently an Associate Professor of design at the Estonian Academy of Art and co-founder of Velvet Academy.

www.amidm.com

Twitter: @amidm

A project by: Amid Moradganjeh, Janno Siimar, and Fliss the kitten.

Thank you!

Thanks for your support, feedback and contributions:

Jono Chatterton, Eglè Plytnikaitė, Kaarel Vahtramäe, Magnus Haravee, Kristian Kirsfeldt, Ksenia Viksne, Pärtel Raik, Nastia Piven, George Maisuradze, Sandijs Ruluks, Dávid Pásztor, Maris Lukk.

Velvet Team: www.velvet.ee

Velvet Academy members: www.velvetacademy.com

EKA’s Interaction Design Program students: www.ixd.ma

and that random guy on the train who inspired me with his story.

Find us on the interweb:

www.anyonecan.design

[#anyonecandesign](https://twitter.com/anyonecandesign)

