

FRANK RAUSCH

49

Interface Design



FRANK RAUSCH

DESIGN FRIENDS



Cover: Fonts in Apps / Schrift, Interface, Identität
Year: 2016
Client: Monotype GmbH, Berlin
Written by Frank Rausch, supported by Jürgen Siebert of Monotype

Interview with Frank Rausch

by Afsaneh A. Rafii

Frank Rausch could just come across as a perfectionist, in reality, it is his devotion to craftsmanship that makes him tweak all these details you will probably never even notice, but which will inevitably make your digital reader experience so much better. Welcome to the world of user interface design.

Can you talk a little bit about your background and how you chose your current path? You have talked about a passion for creativity, one that is rooted in a desire for problem-solving.

I studied interface design in Potsdam, it was the very first year actually that the school had this programme.

I am interested in how you developed your sensibility for this topic, was it sort of accidental – something you discovered along the way, or was it something you were always interested in?

It was not obvious at all to me, like most things in life you only realize that it was meant to become this way when it has already happened. So, when I started out, at age 13 or 14, I was really interested in computers

and I started programming with old books and manuals with the old PC. I started typing commands in Basic and I thought I was going to be a computer scientist because that was really the only profession that I, and everyone else around me, knew of at the time that were connected to computers. As I improved my programming skills I didn't have anyone to really mentor me back then, so I had to keep buying programming books and try to learn from them. I realized when I got more into this stuff that the fascinating part was actually making the user interfaces and thinking about the interactions, making a nice product. I made floppy disks and gave them to my friends and had them install my crappy apps and games. Though we didn't call them apps back then. I literally walked to school and

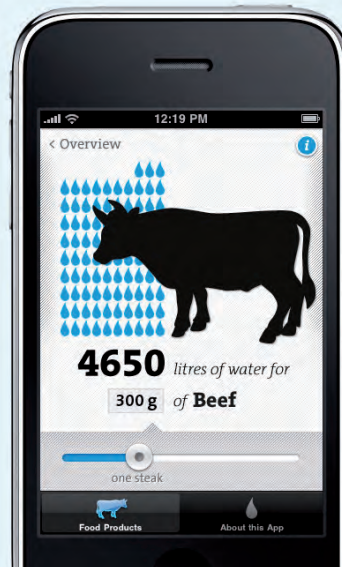
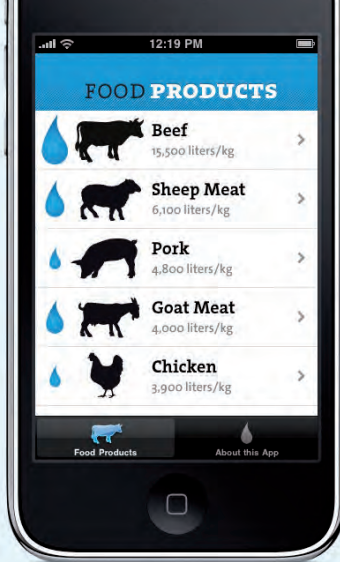
handed these disks to those few friends who had computers.

I really wanted to make digital products but the connection came much later. I got interested in design because I actually thought industrial design was my thing. I was thinking about ergonomics and interacting with things. I had no idea at the time, in the late 90s, that there was a profession called user interface design.

I applied to the Industrial Design programme at a design school and they rejected me, which was fine because just a year later they started this Interface Design programme, which was exactly what I had always wanted to do: design + interaction + technology.

Title: Virtual Water App
Year: 2010
Poster design: Timm Kekeritz
App design: Frank Rausch,
Timm Kekeritz
App implementation:
Frank Rausch

The interactive version of a popular poster designed by Timm Kekeritz in 2007. Our attempt to make the iconic design interactive, more affordable, and more portable than the poster version. This was the first app published by Raureif on the iOS App Store.



It is such a privilege to know at
such a young age with conviction
what it is that you want to do,
and then finding the path that
leads you to it.

Yes. It was also a little weird because at age 14 I was sitting at my computer instead of meeting friends. I was one of the not so nerdy nerds, but still it was not very common among my friends to have this obsession. Most would play games. I was more interested in building stuff.

But I left out an important piece, I studied at FH-Potsdam. Lucas de Groot, who was a professor there, inspired me to do type design and I got hooked on type design. I think I visited his class almost every semester even though I didn't get any credits for the fifth and sixth time I attended. I was obsessed with the type

world too suddenly. Nobody thought it would be a good match for the user interface part, but I kind of had a hunch about that, and it turned into a thing. I am grateful for this sort of weird combination which turned out to be useful.

Why do you think you were
obsessed with type design
at the time?

I liked the obscurity of it. People aren't for the most part even aware that type is designed. Suddenly, you learn how to do it and you learn to appreciate how difficult it is and how much goes into type design. It's a foundation for any kind of graphic design. It is a beautiful combination of simplicity and complexity. You have this black and white simplicity, you are within a grid and you are within lots of

restrictions like: space, systems, cultural perception but within these limitations you learn that there are still thousands of variations of how you can solve a problem or how you can design something within this framework. Craftsmanship is the other aspect that I appreciate about it: making nice harmonious curves, contrasts that work.

In type design you become trained at recognizing whether something works visually. Just looking at black and white shapes and judging whether they are good or not, right or wrong. There is no formula but you learn to see stuff.

I think a lot of people take this work for granted, that in fact there is a sort of craft behind it.

Absolutely, and I think this sort of thinking in silos that we have seen in the industry for so many years, “this is designer work” and “this is developer work”, I think this is going to merge.

There is no way we can prevent this from happening, and

I think that’s a good thing.

I see more and more students of mine becoming developer designers or designer developers, however you want to call it, with an interest in typography. I am trying to encourage these guys to do what they want to do, without someone else telling them that it is not possible. I experienced it in the first couple of years of my work. I did lots of client projects just on the design side, without any development, so I have seen

how frustrating it is as a designer to be told by developers over and over again: “no, you can’t do this, the infrastructure does not allow this.” I find that really empowering and I appreciate that people are now interested in this topic.

Within type design you have mentioned the idea of problem-solving again. I feel like that is something you go back to a lot.

Where do you think that comes from?

I come from a family of engineers, my father is an engineer, my grandfather was an engineer, so maybe that can be chalked up to my German engineer-family upbringing. But I also think I emancipated from that.

I think problem-solving is really important in design but if you are missing the non measurable part, you are missing out on

a lot. I am always frustrated in the industry, because process is very important while craftsmanship is kind of lost. Everyone has their own design thinking and method, etc. which is part of the process but you rarely see people talking about craftsmanship and the actual act of implementing something well. I have a feeling that will change. I don’t really believe in process except for selling stuff to clients. Process is also more important when you are part of a bigger team.

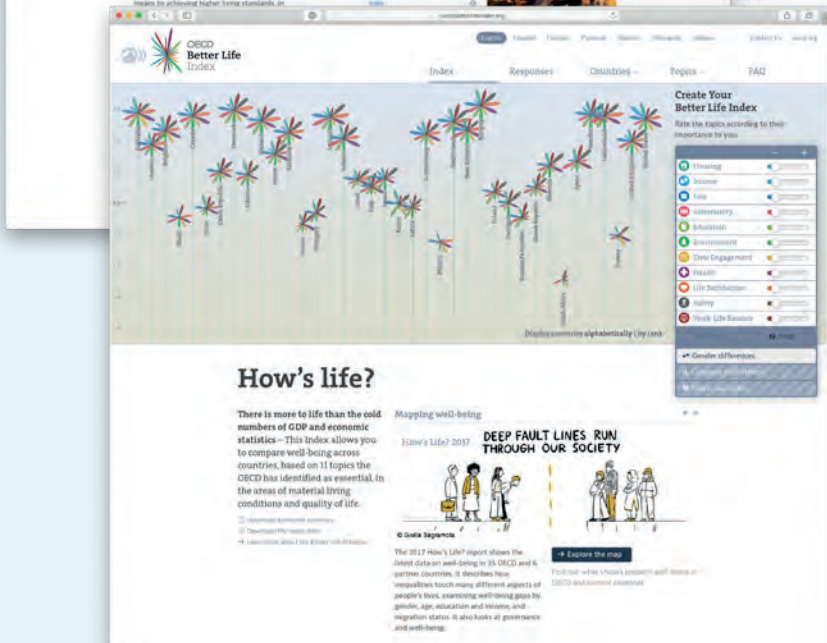
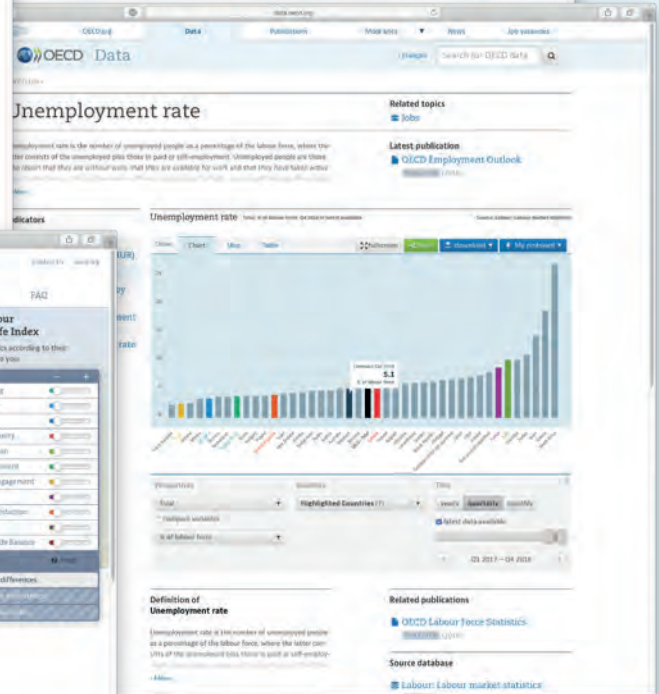
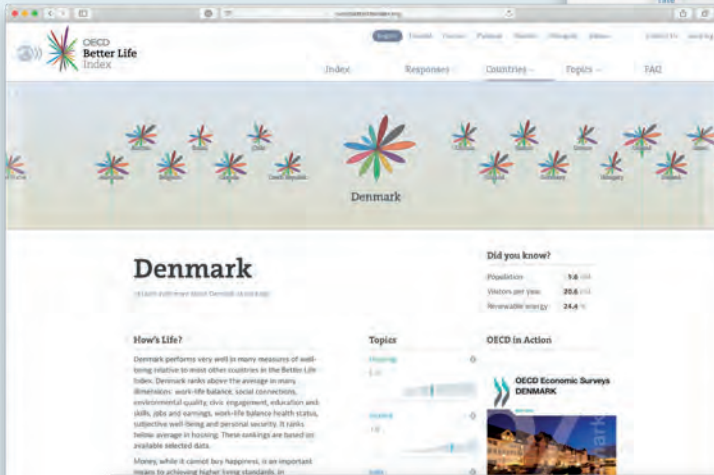
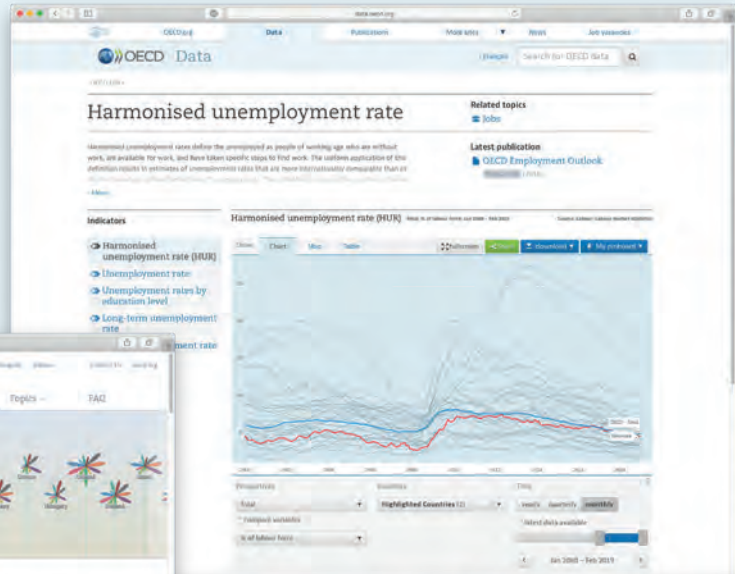
Title: MoneyMoney macOS App
Years: 2010–2013 (as product owner),
2013–now (after sale as external consultant)
Designers: Frank Rausch, Timm Kekeritz

*A banking application
to manage personal finances.*



Title: OECD Better Life Index, OECD Data Portal
 Years: 2011–2014
 Design: Timm Kekeritz, Frank Rausch,
 Moritz Stefaner (Information Visualization)

My agency Raureif has created both the Better Life Index website and the OECD Data portal at data.oecd.org.



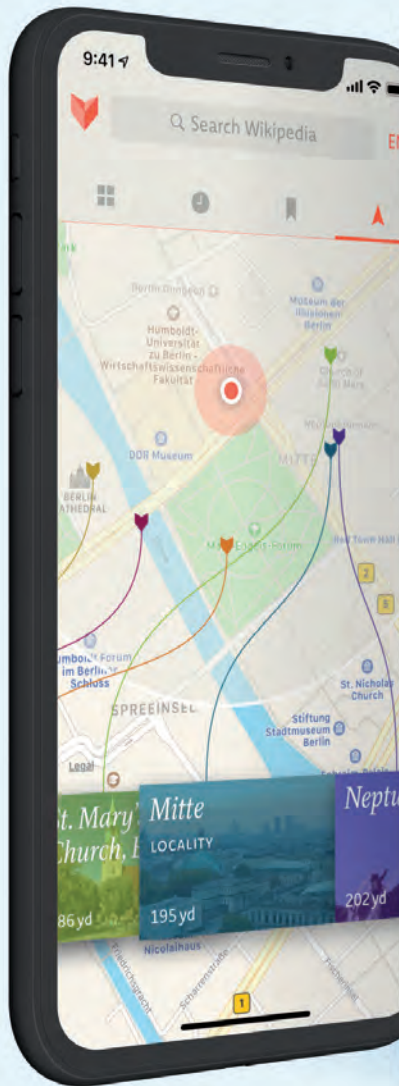
You used to be part of an agency, what made you pursue your solo projects and what are the challenges and victories you have faced, since choosing this path?

It took a couple of approaches to take that step actually, because for a while I thought that in order to navigate this industry you would have to be a part of the agency model. I took this for granted, and I had to rid myself of this notion. I mean, it was my own company, it's not like I was living inside the hell of someone else's agency. It was always clear to me that I wanted to build products, which we also did within the agency. Some were not successful, some were moderately successful, others were doing well but we never actually managed to come up with something that would sustain us, we did weather apps, scanner apps... Eventually,

I decided to put my passion behind solo projects and I started working on this V for Wiki app, which was the second Wikipedia app that I made. The main goal was to make a showcase for my work and really illustrate what it is that I am talking about, when I am teaching or speaking at conferences, but luckily it also became commercially successful and allowed me to make a living with it. You can talk a lot about how typography sucks digitally but if you don't have a way to show how to make it better, then it's not really credible.

Why were you so passionate about the Wikipedia experience (you devoted two years to creating it from scratch), and not any other website that you were a frequent visitor of? What did this particular app offer you in terms of breath of implementation?

There are several reasons for that, the most obvious one being that I used Wikipedia a lot and I think many people do. The fact that Wikipedia's data is open and accessible made it easier to use. If I had wanted to improve the user experience of Spiegel online for example, I would have had legal problems from the start – the difference is in the license model of the data. The problem I faced, of course, was that people said you can't resell the Wikipedia data since it is free. But I don't resell Wikipedia content, what I sell is basically a pair of glasses to see Wikipedia in a nicer way. I am also giving back to the community because I open source most of the code that I use to extract data from Wikipedia.





Title: V for Wiki
 Designer: Frank Rausch
 Years: 2016–now (constantly changing and improving stuff)

*A reader app for Wikipedia with obsessive attention to (typographic) detail.
 Winner of the German Design Award 2017.*

In talking about the shift from paper to digital you have said that simulation is never as good as the real thing, so there is no point in trying to simulate paper when creating digital content. Do you, however, think that it was a necessary transition? Would people have been able to make the leap without having been able to compare it to the medium they had known best until then?

Absolutely, it's kind of like having training wheels on your bike. Metaphors and simulations in the digital realm are of course guides, and they help you out quicker than if it were totally abstract. You have to give digital stuff some shape so why not rely on things that people bring from outside the digital realm. The digital world has been around for about 40 years now, the graphic user interfaces were created in

the 70s, so of course back then it was even more important to simulate stuff. But now that people are growing up with digital first, we can let go of some of these simulations. If you think about reading apps, the first iterations were flipping pages with animations, there was simulated paper texture behind glass. They got rid of all this stuff. People kind of have accepted that it is not paper. Now most apps are scrolling and not page flipping. So, simulation was great as a transition but it is not a viable model going forward. You see this with the phone icon now. The phone as an object doesn't exist anymore.

How can storytelling become a part of user interface design? And can the storytelling only be a reflection of the time your user is in because you have to reference their visual vernacular, more so than being a reflection of the designer-the phone which you mentioned is a perfect example?

You absolutely have to consider the user's context, it's the same in movies for example, even science fiction, which is supposed to show the future, has elements from the time it was created in. This applies to culture in general and user interfaces are part of culture and should be treated as such, just like books, movies or anything else.

Title: V for Mac (Mockup)

Year: 2019

Designer: Frank Rausch

I was (and still am) playing with the idea of making a Mac version of my popular Wikipedia reader app. This is the design concept for it.



Title: Fonts in Apps /
Schrift, Interface, Identität
Year: 2016
Client: Monotype GmbH, Berlin
Written by Frank Rausch,
supported by Jürgen Siebert
of Monotype



Schrift · Interface · Typo

Fonts in Apps

Monotype

Dieses E-Booklet ist optimiert für Tablets

Mobiles Leb



Leuchtende Buchstaben



Die Entwickler von Leitsystemen haben es zuerst entdeckt: Hinweise auf selbstleuchtenden Displays erfordern eine andere Strichstärke als jene auf Schildern mit Auflicht. Das gleiche gilt für die Kombination von Weiß-auf-schwarz-Beschriftung mit einer Schwarz-auf-weiß-Beschriftung. Die helleren Flächen überstrahlen die dunklen, was zu einem fetteren bzw. leichteren Schriftbild führt. Falls dieser Effekt nicht durch einen Schriftwechsel kompensiert wird, entsteht bei der Wegeleitung eine ungewünschte Priorisierung.

Auch bei Mobilgeräten sind unbeleuchtete (E-Book-Reader) und hinterleuchtete Bildschirme (Smartphones) in Gebrauch. Ein geübtes Auge erkennt, welche Auswirkungen die Lichtsituation auf den Lesekomfort hat. Schriftfamilien mit vielen Strichstärken helfen beim Kompensieren negativer Effekte.

Monotype

11

Besser lesbar

Hamburgermenü

Offene Formen lesen sich besser und
zeichnen den Buchstaben.

Der Raum zwischen den Buchstaben
ist für die Lesbarkeit genauso wichtig
wie die Buchstaben selbst



Prägnante Buchstabenformen in einer
Schrift helfen dabei, Wörter schneller
zu erfassen.

formen

Auch wenn Apps wie eine neue Erfindung gehalten werden, sie sind es eigentlich nicht. Früher hießen sie »Programme« und liefen auf klobigen Kisten mit flackernden Bildschirmen.

Was sich geändert hat, ist unser Verhältnis zu diesen Anwendungsprogrammen. Weil sie auf mobilen Geräten laufen, haben wir Apps jederzeit griffbereit in der Tasche. Oder am Handgelenk. Wie selbstverständlich nutzen wir mit ihrer Hilfe praktische Dienste, meist viele Male am Tag. Dabei geschieht vor allem eins: Wir lesen. Erinnerungen, Nachrichten, Mitteilungen, Playlists, aber auch Menüs und Buttons. Wir lesen mehr denn je.



Monotype

Smartphone-Mixgeläut
 FF Franziska™ Jakob Runge · FontFont

Smartphone-Mixgefäßrückwand
 Sirba Nicolien van der Keur · TypeTogether



FF Dingbats 2.0™ UI Johannes Erler, Henning Skibbe · FontFont

31

Robust, vielseitig, platzsparend
 enthält griechische und kyrillische Zeichen

Icon-Font mit den wichtigsten Symbolen für Apps und Web, Teil des Pakets FF UI Icons

Monotype

Contrastprogramm



Der Unterschied zwischen Hell und Dunkel ist fürs angenehme Lesen essenziell, denn ohne einen Kontrast zwischen den Buchstaben und der Fläche dahinter gäbe es nichts zu lesen.

Allerdings weisen hinterleuchtete Displays einen sehr hohen Kontrast auf, der bei längerem Lesen die Augen ermüdet.

- Besser ist daher dunkelgrauer Text vor weißem oder leicht getöntem Grund.
- Nur bei starkem Sonnenlicht ist es ratsam, den maximalen Kontrast auszureizen.
- Bei dunkler Umgebung funktioniert negative Schrift sehr gut (heller Text vor dunklem Grund), weil gleichzeitig die Gesamthelligkeit sinkt.

Monotype

Glattmacher

Rendering
 Rendering
 Rendering
 Rendering

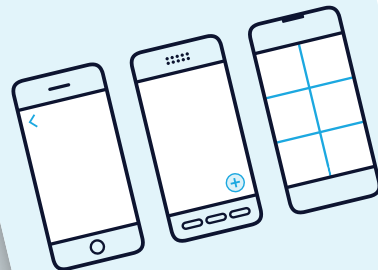
Grob aufgelöst kann ein und dieselbe Schrift sehr unterschiedlich dargestellt werden – je nach Rendering-Software und Betriebssystem.

18

Jedes Betriebssystem nutzt eine eigene Methode um die skalierbaren Buchstabenkonturen eines Textes mit Pixeln zu füllen und Treppchen zu glätten (»Rendering«).

Falls ein App-Entwickler die volle Kontrolle über die Schriftqualität wünscht, zum Beispiel für eine Lese-App, kommen eigenständige Rendering-Engines als fertiges Software-Modul zum Einsatz. Ein Beispiel ist iType von Monotype, iType lässt sich unter iOS oder Android einbinden und bietet eine Vielzahl an Einstellungsmöglichkeiten für die Optimierung mehrerer Schriftsysteme.

Normplusultra



Gute Apps haben ein Leitlinien-System, um die Leitlinien ihrer Plattform zu erfinden.

Der Zurück-Button, der Hinzufügen-Button, rechts im Kreis. Wie ein Kachelprinzip. So fühlen wir uns zugehörig. Obwohl iOS anders ist.

Design-Konventionen und dieselben Regeln verknüpfen die über Systeme hinweg.

Persönlichkeit



Schriften sollten einerseits die besonderen Eigenschaften einer App bekräftigen, aber auch bei der Bedienung zuverlässig Dienst leisten. Mischen ist möglich: Ein geschickter Schriftmix hält die Balance zwischen Emotion und bester Lesbarkeit. Klein gesetzte Inhalte können ausgefallen und generischer wirken. Klein gesetzte Inhalte können ausgefallen und generischer wirken.

17

The advice you have given to young designers seeking a start in your field, was to really train their eyes, and give themselves a lot of practice in order to hone their craft. I found this particularly interesting because I noticed that in examples of corrections that you have brought to existing digital designs, like Wikipedia pages for instance, you often qualified something as not looking good, whereas to my layman's eye, it seemed ok. So, my question is how do you know that every tweak or correction you bring actually improves the user experience and is not just the implementation of an obsession for perfection on your part?

It is definitely both. It's a valid question and I don't think that most people would appreciate that I made one specific correction, in one specific context which they

don't see, but the general feedback I get is that people think the product is better, they just can't quite put their finger on why they think it is better. I think that in the end a good product is the sum of its details, all the little improvements add up, even if it is made up of things people do not directly perceive. That's also part of craftsmanship, you do things that you know are supposed to be that way because it makes it better. You could be done at 95% and are really putting in the last 5% for yourself or anyone else who shares an obsession for details, but I also think that's totally acceptable. This really applies to any craft, even when you buy a sofa, real effort is in the details, like the legs that you don't see being polished. That's the type of thing you do for yourself, when nobody sees the detail, but you know you did the best you could.

Most design work is a very subjective application of a maker's vision, do you feel like there is a notion of objectivity to designing typography for user interfaces, because it underlines the ease of interaction with a device? (making text easy to process for the eyes and the brain?)

There is an approach to it, but there is really no way to measure it. There are processes you follow of course, like the four parameters for typography (setting the size, adjusting the horizontal rhythm, line length, and vertical spacing) but in the end it is only experience that can show you if things work or not. The more you know, the easier it is to make decisions. If you don't know anything, then it is difficult to even start tackling the problems. You can extrapolate that to anything. If you don't know the rules or traditions, you don't know how to break the rules.

Name: Typefacts
 Year: 2017
 Designers: Frank Rausch,
 based on the established branding
 by Christoph Koeberlin
 Implementation: Frank Rausch

*Typefacts was started in 2008
 and I joined the team in late 2017
 for a complete redesign
 and reimplemention of the site.*





Title: Partly Cloudy Weather App

Year: 2012

Designers: Jana Kühl, Timm Kekeritz, Frank Rausch

Partly Cloudy visualizes weather conditions on a rotary dial.

You made the V for Wiki App, which is a Wikipedia reader and offers a much improved user experience. In one of the talks you gave, you mentioned that you had met part of the actual Wikipedia team and were aware that they have to work under a lot of design constraints, and face resistance from the users in bringing changes. Why is that? Why, if making design improvements to existing platforms creates a better reading experience, there is still resistance to change?

It's just because people don't like change. I don't appreciate change in small things either. Someone once said that if you change a website that people use a lot overnight, it will feel like you have rearranged their living room. If you change stuff, it makes a lot of people mad. It might even

only make 10% of the people mad, but they are very vocal about it. That's a big problem in design by committee or community. If you have too many opinions and try to mangle them into one design, then usually it shows: it feels like a compromise, and it looks like one too. If you want a good experience, then sometimes you have to make decisions that are not very popular.

What would be the project of your dreams going forward? Which wheel would you like to reinvent?

I would like to set as a career goal digital typesetting that is so good that it is indistinguishable from high quality manual typeset books, because we still have lots of problems in digital. We are still missing this manual line breaking. If you have a book that is layouted by one of the

great typographers of the past 100 years, you will still see that the quality of the line breaks is much better. In digital, there is no one who actually makes these decisions. We could try and put all of this into algorithms but I don't think that's a good idea, so I have high hopes for machine learning. I think machine learning and AI will make typesetting much better, because you can just train them with high quality stuff from the past 100 years.



PUBLICATIONS

01	CHRISTOPH NIEMANN	Illustration Design	2009	18	MURAT GÜNAK	Automotive Design	2013	35	KIKI VAN EIJK	Product Design	2016
02	MICHEL MALLARD	Creative Direction	2009	19	NICOLAS BOURQUIN	Editorial Design	2013	36	JEAN-PAUL LESPAGNARD	Fashion Design	2017
03	FUN FACTORY	Product Design	2009	20	SISSEL TOLAAS	Scent Design	2013	37	PE'L SCHLECHTER	Graphic Design	2017
04	ANDREAS UEBELE	Signage Design	2010	21	CHRISTOPHE PILLET	Product Design	2013	38	TIM JOHN & MARTIN SCHMITZ	Scenography Design	2017
05	HARRI PECCINOTTI	Photography	2010	22	MIRKO BORSCHÉ	Editorial Design	2014	39	BROSMIND	Illustration Design	2017
06	KUSTAA SAKSI	Illustration Design	2010	23	PAUL PRIESTMAN	Transportation Design	2014	40	ARMANDO MILANI	Graphic Design	2017
07	5.5 DESIGNERS	Product Design	2011	24	BRUCE DUCKWORTH	Packaging Design	2014	41	LAURA STRABER	Product Design	2017
08	NIKLAUS TROXLER	Graphic Design	2011	25	ERIK SPIEKERMANN	Graphic Design	2014	42	PHOENIX DESIGN	Industrial Design	2018
09	JOACHIM SAUTER	Media Design	2011	26	KLAUS-PETER SIEMSEN	Light Design	2014	43	UWE R. BRÜCKNER	Scenography Design	2018
10	MICHAEL JOHNSON	Graphic Design	2011	27	EDUARDO AIRES	Corporate Design	2015	44	BROUSSE & RUDDIGKEIT	Design Code	2018
11	ELVIS POMPILIO	Fashion Design	2011	28	PHILIPPE APELOIG	Graphic Design	2015	45	ISABELLE CHAPUIS	Photography Design	2018
12	STEFAN DIEZ	Industrial Design	2012	29	ALEXANDRA MURRAY-LESLIE	High Techne Fashion Design	2015	46	PATRICIA URQUIOLA	Product Design	2018
13	CHRISTIAN SCHNEIDER	Sound Design	2012	30	PLEIX	Video & Installation Design	2016	47	SARAH-GRACE MANKARIOUS	Graphic Design	2018
14	MARIO LOMBARDO	Editorial Design	2012	31	LA FILLE D'O	Fashion Design	2016	48	STUDIO FEIXEN	Visual Concepts	2019
15	SAM HECHT	Industrial Design	2012	32	RUEDI BAUR	Graphic Design	2016				
16	SONJA STUMMERER & MARTIN HABLESREITER	Food Design	2012	33	ROMAIN URHAUSEN	Product Design	2016				
17	LEARNERT & SANDER	Art & Design	2013	34	MR BINGO	Illustration Design	2016				

COLOPHON

PUBLISHER Design Friends
COORDINATION Guido Kröger
LAYOUT Guido Kröger
INTERVIEW Afsaneh A. Rafii
PRINT Imprimerie Schlimé
PRINT RUN 250 (Limited edition)

ISBN 978-2-9199551-1-4
PRICE 5 €

DESIGN FRIENDS
 Association sans but lucratif (Luxembourg)

BOARDMEMBERS

Nadine Clemens (President)
 Mike Koedinger (Vice-president)
 Anabel Witry (Secretary)
 Guido Kröger (Treasurer)

COUNSELORS

Heike Fries, Silvano Vidale

WWW.DESIGNFRIENDS.LU
WWW.FRANKRAUSCH.COM

PUBLISHED WITH THE SUPPORT OF



LE GOUVERNEMENT
 DU GRAND-DUCHÉ DE LUXEMBOURG
 Ministère de la Culture

This catalogue is published for
 Frank Rausch's lecture
 at Mudam Luxembourg
 on May 8th, 2019,
 organized by Design Friends.

Design Friends would like to thank all their members and partners for their support.

Support Design Friends, become a member.
More informations on www.designfriends.lu

In collaboration with



Partners



Service Partners



Supporters



WWW.DESIGNFRIENDS.LU

