Dark Patterns

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1. Was sind Dark Patterns?

„Dark Pattern sind User Interfaces, die mit Sorgfalt so gestaltet sind, um Nutzer zu verleiten etwas zu tun, das sie sonst nicht tun würden. …"

„A dark pattern is a user interface carefully crafted to trick users into doing things they might not otherwise do. …"

https://darkpatterns.org/

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	Gefühlter Druck (Perceived pressure)	Opertiver Zwang (Forced action)	Hindernisse (Hurdles/obstruction)	Erschleichen (Sneaking)	Irreführung (Disguise/deception)
Wirkungsweise	Nutzer fühlt sich unter **Druck** gesetzt, eine bestimmte Handlung (nicht) vorzunehmen	Keine Entscheidungs-möglichkeit oder (mindestens) eine Entscheidungs-alternative an weitere Bedingungen geknüpft	Entscheidungsmöglichkeiten werden **unterschiedlich schwierig** gestaltet	Nutzer bemerkt Konsequenzen seiner Handlung aufgrund **heimlicher Änderungen** nicht	Gestaltung, die übliche **Erwartungen enttäuscht** bzw. ihnen entgegenläuft
Beispiele	•Nagging •Confirmshaming •Countdowns •Scarcity •Social Proof •Recommendation	•Forced Enrollment •Forced Continuity •Mandated Choice	•Default/Preselection •Hidden Information •Click Fatigue •Roach Motel •Price Comparison Prevention	•Sneak into Basket •Hidden Costs •Hidden Subscription	•Trick Questions •Misdirection •Bait and Switch

2. Wirken Dark Patterns?
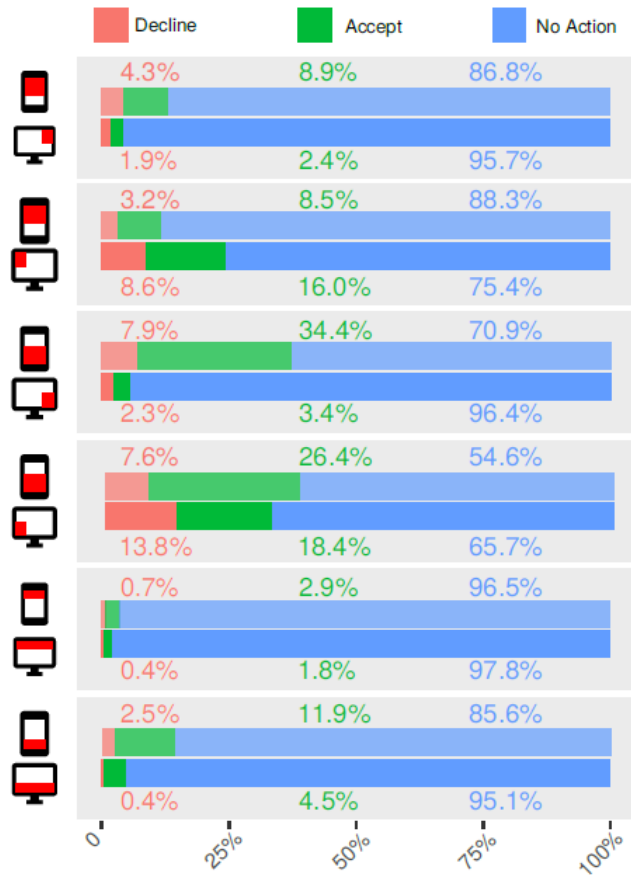
Utz et al., (Un)Informed Consent

	Control	Recommended	Default	Obstruction
Control	13.2%	15.1% $p = .46$	15.0% $p = .49$	19.5% $p = .03$
Scarcity	10.6% $p = .39$	10.8% $p = .41$	18.9% $p = .061$	17.4% $p = .19$
Confirmshaming	20.5% $p = .02$	16.4% $p = .29$	21.0% $p = .012$	20.4% $p = .03$
Social Proof	19.0% $p = .053$	21.0% $p = .01$	21.4% $p = .009$	27.9% $p < .001$
Hidden Information	30.8% $p < .001$	28.7% $p < .001$	26.7 $p < .001$	34.5% $p < .001$

Strahilevitz/Luguri, Dark Patterns: Online Manipulation of Consumers

3. Wie funktioneren Dark Patterns?

„Dark Pattern sind User Interfaces, die mit Sorgfalt so gestaltet sind, um Nutzer zu verleiten etwas zu tun, das sie sonst nicht tun würden. Sie sind <u>sorgfältig gestaltet, mit einem festen Verständnis menschlicher Psychologie</u> und sie haben nicht die Interessen des Nutzers als Ziel."

„A dark pattern is a user interface carefully crafted to trick users into doing things they might not otherwise do. They're <u>carefully crafted with a solid understanding of human psychology</u>, and they do not have the user's interests in mind."

KNOW THYSELF
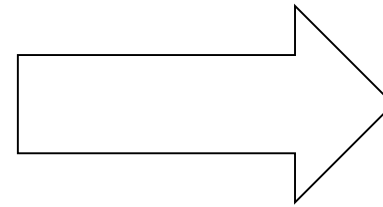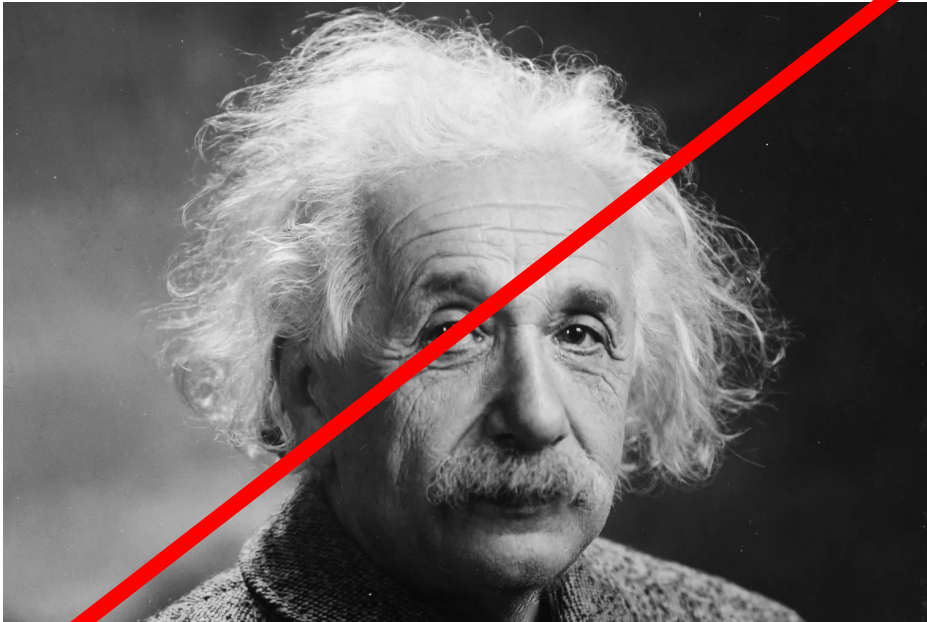
anchoring
The first thing you judge influences your judgment of all that follows.

Human minds are associative in nature, so the order in which we receive information helps determine the course of our judgments and perceptions.

Be especially mindful of this bias during financial negotiations such as houses, cars, and salaries. The initial price offered is proven to have a significant effect.

sunk cost fallacy
You irrationally cling to things that have already cost you something.

When we've invested our time, money, or emotion into something, it hurts us to let it go. This aversion to pain can distort our better judgment and cause us to make unwise investments.

To regain objectivity, ask yourself: had I not already invested something, would I still do so now? What would I counsel a friend to do if they were in the same situation?

availability heuristic
Your judgments are influenced by what springs most easily to mind.

How recent, emotionally powerful, or unusual your memories are can make them seem more relevant. This, in turn, can cause you to apply them too readily.

Try to gain different perspectives and relevant statistical information rather than relying purely on first judgments and emotive influences.

curse of knowledge
Once you understand something you presume it to be obvious to everyone.

Things make sense once they make sense, so it can be hard to remember why they didn't. We build complex networks of understanding and forget how intricate the path to our available knowledge really is.

When teaching someone something new, go slow and explain like they're ten years old (without being patronizing). Repeat key points and facilitate active practice to help embed knowledge.

confirmation bias
You favor things that confirm your existing beliefs.

We are primed to see and agree with ideas that fit our preconceptions, and to ignore and dismiss information that conflicts with them.

Think of your ideas and beliefs as software you're actively trying to find problems with rather than things to be defended.

"The first principle is that you must not fool yourself – and you are the easiest person to fool."
- Richard Feynman

dunning-kruger effect
The more you know, the less confident you're likely to be.

Because experts know just how much they don't know, they tend to underestimate their ability; but it's easy to be over-confident when you have only a simple idea of how things are.

"The whole problem with the world is that fools and fanatics are so certain of themselves, yet wiser people so full of doubts."
- Bertrand Russell

belief bias
If a conclusion supports your existing beliefs, you'll rationalize anything that supports it.

It's difficult for us to set aside our existing beliefs to consider the true merits of an argument. In practice this means that our ideas become impervious to criticism, and are perpetually reinforced.

A useful thing to ask is 'when and how did I get this belief?' We tend to automatically defend our ideas without ever really questioning them.

self-serving bias
You believe your failures are due to external factors, yet you're personally responsible for your successes.

Many of us enjoy unearned privilege, luck and advantages that others do not. It's easy to tell ourselves that we deserve these things, whilst blaming circumstance when things don't go our way.

When judging others, be mindful of how this bias interacts with the just-world hypothesis, fundamental attribution error, and the in-group bias.

backfire effect
When your core beliefs are challenged, it can cause you to believe even more strongly.

We can experience being wrong about some ideas as an attack upon our very selves, or our tribal identity. This can lead to motivated reasoning which causes us to double-down, despite disconfirming evidence.

"It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so."
- Mark Twain

barnum effect
You see personal specifics in vague statements by filling in the gaps.

Because our minds are given to making connections, it's easy for us to take nebulous statements and find ways to interpret them so that they seem specific and personal.

Psychics, astrologers and others use this bias to make it seem like they're telling you something relevant. Consider how things might be interpreted to apply to anyone, not just you.

groupthink
You let the social dynamics of a group situation override the best outcomes.

Dissent can be uncomfortable and dangerous to one's social standing, and so often the most confident or first voice will determine group decisions.

Rather than openly contradicting others, seek to facilitate objective means of evaluation and critical thinking practices as a group activity.

negativity bias
You allow negative things to disproportionately influence your thinking.

The pain of loss and hurt are felt more keenly and persistently than the fleeting gratification of pleasant things. We are primed for survival, and our aversion to pain can distort our judgment for a modern world.

Pros-and-cons lists, as well as thinking in terms of probabilities, can help you evaluate things more objectively than relying on a cognitive impression.

declinism
You remember the past as better than it was, and expect the future to be worse than it will likely be.

Despite living in the most peaceful and prosperous time in history, many people believe things are getting worse. The 24 hour news cycle, with its reporting of overly negative and violent events, may account for some of this effect.

Instead of relying on nostalgic impressions of how great things used to be, use measurable metrics such as life expectancy, levels of crime and violence, and property statistics.

framing effect
You allow yourself to be unduly influenced by context and delivery.

We all like to think that we think independently, but the truth is that all of us are, in fact, influenced by delivery, framing and subtle cues. This is why the ad industry is a thing, despite almost everyone believing they're not affected by advertising messages.

Only when we have the intellectual humility to accept the fact that we can be manipulated, can we hope to limit how much we are. Try to be mindful of how things are being put to you.

fundamental attribution error
You judge others on their character, but yourself on the situation.

If you haven't had a good night's sleep, you know why you're being a bit slow; but if you observe someone else being slow you don't have such knowledge and so might presume them to just be a slow person.

It's not only kind to view others' situations with charity, it's more objective too. Be mindful to also err on the side of taking personal responsibility rather than justifying and blaming.

halo effect
How much you like someone, or how attractive they are, influences your other judgments of them.

Our judgments are associative and automatic, and so if we want to be objective we need to consciously control for irrelevant influences. This is especially important in a professional setting.

If you notice that you're giving consistently high or low marks across the board, it's worth considering that your judgment may be suffering from the halo effect.

optimism bias
You overestimate the likelihood of positive outcomes.

There can be benefits to a positive attitude, but it's unwise to allow such an attitude to adversely affect our ability to make rational judgments (they're not mutually exclusive).

If you make rational, realistic judgments you'll have a lot more to feel positive about.

pessimism bias
You overestimate the likelihood of negative outcomes.

Pessimism is often a defense mechanism against disappointment, or it can be the result of depression and anxiety disorders.

Perhaps the worst aspect of pessimism is that even if something good happens, you'll probably feel pessimistic about it anyway.

If you make rational, realistic judgments you'll have a lot more to feel positive about.

just world hypothesis
Your preference for a just world makes you presume that it exists.

A world in which people don't always get what they deserve, hard work doesn't always pay off, and injustice happens is an uncomfortable one that threatens our preferred narrative. However, it is also the reality.

A more just world requires understanding rather than blame. Remember that everyone has their own life story, we're all fallible, and bad things happen to good people.

in-group bias
You unfairly favor those who belong to your group.

We presume that we're fair and impartial, but the truth is that we automatically favor those who are most like us, or belong to our groups.

Try to imagine yourself in the position of those in out-groups; whilst also attempting to be dispassionate when judging those who belong to your in-groups.

placebo effect
If you believe you're taking medicine it can sometimes 'work' even if it's fake.

The placebo effect can work for stuff that our mind influences (such as pain) but not so much for things like viruses or broken bones.

Homeopathy, acupuncture, and many other forms of natural 'medicine' have been proven to be no more effective than placebo. Keep a healthy body and bank balance by using evidence-based medicine from a qualified doctor.

bystander effect
You presume someone else is going to do something in an emergency situation.

When something terrible is happening in a public setting we can experience a kind of shock and mental paralysis that distracts us from a sense of personal responsibility. The problem is that everyone can experience this sense of deindividuation in a crowd.

If there's an emergency situation, presume to be the one who will help or call for help. Be the change you want to see in the world.

reactance
You'd rather do the opposite of what someone is trying to make you do.

When we feel our liberty is being constrained, our inclination is to resist; however in doing so we can over-compensate.

Be careful not to lose objectivity when someone is being coercive/manipulative, or trying to force you do something. Wisdom springs from reflection, folly from reaction.

spotlight effect
You overestimate how much people notice how you look and act.

Most people are much more concerned about themselves than they are about you. Absent overt prejudice, people generally want to like and get along with you as it gives them validation too.

Instead of worrying about how you're being judged, consider how you make others feel. They'll remember this much more, and you'll make the world a better place.

4. Was macht Dark Patterns besonders/gefährlich?
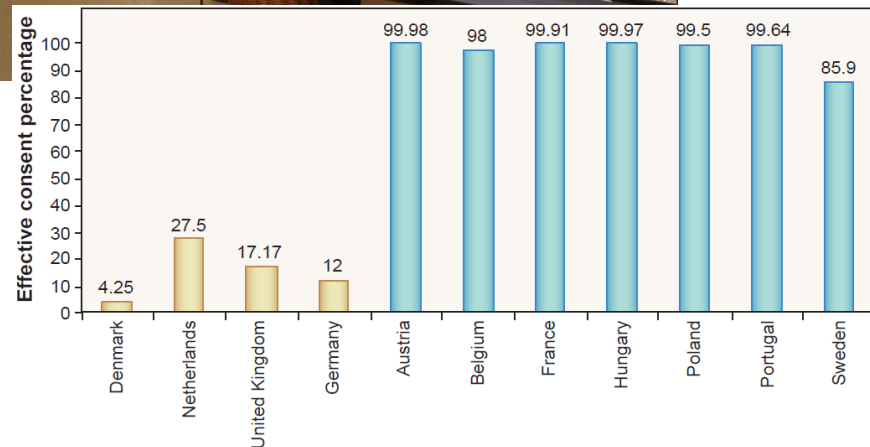
Mayer is famous for many things at Google, but the one that always sticks out – and defines her in some ways – is the "Forty Shades of Blue" episode. she ordered that 40 different shades of blue would be randomly shown to each 2.5% of visitors; Google would note which colour earned more clicks. And that was how the blue colour you see in Google Mail and on the Google page was chosen.

5. Sind wir vor Dark Patterns geschützt?

DSGVO
- **kein klares Verbot**
- jedoch:
    - Verbot von pre-ticked boxes (Erwägungsgrund 32)
    - Data protection by design and by default (Art. 25 DSGVO)
    - Fairness-Prinzip (Art. 5 DSGVO)

Information Commissioner's Office (ICO) (UK)
- Age Appropriate Design Code (2020): "Do not use nudge techniques to lead or encourage children to provide unnecessary personal data or turn off privacy protections."

Europäischer Datenschutzausschuss (EDSA) (EU)
- Guidelines on Consent (4/2019, v2): "dark patterns … are contrary to the spirit of Article 25"

1. Was sind Dark Patterns: Lenkende Design Interfaces

2. Wirken Dark Patterns: Ja

3. Wie funktionieren Dark Patterns: Nutzen Entscheidungsschwächen aus

4. Was macht Dark Patterns besonders/gefährlich: A/B-Testen

5. Sind wir vor Dark Patterns geschützt: Es könnte besser sein

Danke für Ihre Aufmerksamkeit!

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DaPDe - Dark Pattern Detection Project
- Ziele:
  • Erforschung, Aufschlüsselung und Aufklärung über Dark Patterns
  • Entwicklung von Methoden zur automatisierten Erkennung von Dark Patterns
  • Dark Patterns Detection App
  • Rechtliche Antworten auf Dark Patterns für besseren Schutz von Verbraucher:innen
- Website: https://dapde.de/de/

dapde
Dark Pattern
Detection Project

Deutsches Forschungsinstitut für öffentliche Verwaltung

ptble
Projektträger Bundesanstalt für Landwirtschaft und Ernährung

Gefördert durch:
Bundesministerium der Justiz und für Verbraucherschutz
aufgrund eines Beschlusses des Deutschen Bundestages

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