



blitz

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Fachzeitschrift des amiv an der ETH

Steckdosenblitz



Mit Notenstatistiken

With articles in english

Editorial: Power Socket of the Edition



Dearest Readers,

welcome back to another semester of blitz! This semester we have some very interesting and also some very serious topics lined up and ready to go. This edition of the most electrically conductive¹ magazine ETH has focuses on sockets. So here are some fun facts about power sockets:

1. There are actually 15 different plug types around the world, labelled from Type A to Type O. They vary by country, and not every type is compatible with others, which is why travellers often need plug adapters.

2. Different countries use different voltage standards. For example, most of Europe uses 220-240V, while North America operates on 110-120V. Plugging a device into the wrong voltage socket without a converter can damage the appliance.

3. The power plug used in Australia and New Zealand (Type I) is unique because it is shaped like an upside-down «V». The angled pins make it easier to insert the plug and maintain better contact.

4. In Switzerland, electrical outlets are prohibited in bathrooms for safety reasons, unless they are connected to a low-voltage circuit. We take shock prevention to a whole new level.

5. In many countries, the ground (or earth) pin is longer than the live and neutral pins. This means it's the first to make contact, grounding the device before the electrical current starts flowing. This reduces the risk of electric shocks.

6. Rotating Power Outlets Some newer designs for power outlets allow the plug hole to rotate. This way, if you have a bulky adapter or multiple plugs, you can adjust the angle to fit them all into one power strip or wall outlet.



my face, when I heard the idea of a power socket based blitz

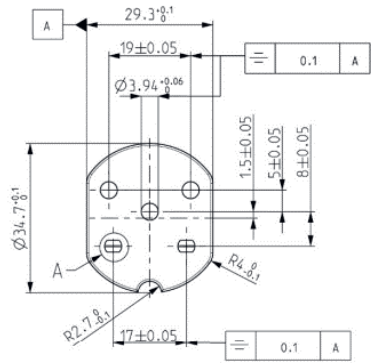
This issue's beer article performs an experiment on the conductivity and electrical useability of beer. In the context

of electrical use cases, the blitz team developed a novel testing apparatus to light energy efficient means of illumination using a variable fluid based resistor.

The book of the edition is also a very interesting read! This edition focuses on a book by George Orwell (who may be known to some of you for the book 1984).

There are also some very interesting reads about the life at ZHAW and some study and politics-based articles written by Roman.

In other news, this is the power socket of the edition, a 5 pole socket capable of 3 phase power with a neutral ground in the middle. We refer to the norm SN 441011 for credit and of course if you are interested in this socket!



1. try it out, you would be surprised

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«Steckdosen»

21 Bier in der Steckdose



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Der **blitz** ist die Fachzeitschrift des amiv an der ETH, welcher mehr als 4000 Mitglieder hat. Er erscheint jeden zweiten Dienstag, Autor:innen können ihre Artikel bis zum Redaktionsschluss über artikel@blitz.ethz.ch einreichen.



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Der amiv gehört zum **VSETH**, dem Verband der Studierenden an der ETH.

Unsere nächsten Ausgaben:

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02	Esotherik	09.10.2023	21.10.2023
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Präsidential Column

Julie Nussbaumer

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Dear amiv,

My year as amiv President has come to an end. I'm writing this column now as a regular amiv member, without a position, without infinite legi, without weekly meetings, and without the wonderful board I had the honor of leading amiv with over the past year. A lot has happened since the last volume of blitz, at the end of last semester. Many students took exams, and many passed them. You can check the grade statistics. I warmly welcome all of you to the new semester, no matter how many ECTS you passed or didn't pass.

A special welcome to all those who just started their journey at ETH a few weeks ago. I hope you were able to take advantage of amiv's offerings for first-year students and have already found great friends among your classmates. Once again, we've broken all records with our student numbers this year. On the first day, over 5200 students were listed as part of amiv¹. The first-year weekend with 150 Master's and Bachelor's students was a great success and much more stable than in previous years, thanks to our comprehensive awareness and safety concept.

On Wednesday, September 25th, we held the General Assembly, where the new board was elected. In the next issue of blitz, you'll get to know Sonja Merkle better, as she is my successor as amiv President. On Thursday, September 26th, Switzerland's biggest student party took place. The first-year festival on Höggerberg is a must for ETH students, especially the amiv bar. The outgoing board celebrated the past year and showed the new board how to have fun amiv style. With this introduction, they are now ready to guide amiv through all the highs and lows to come. Of course, I will still be involved with amiv in the future, although you'll see me more often at VSETH². I look forward to meeting many of the new faces in amiv.

See you at the next amiv event!

Julie <3

-
1. In the beginning, the students who are not continuing their studies in the next semester are still enrolled, which leads to such high numbers
 2. I'm a VSETH board member

Science in Perspective - Der Affe und der Gurkenschnitt

Roman Dautzenberg

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Wird uns in «Wissenschaft im Kontext» das Richtige beigebracht? I GESS not, darum stellen wir in dieser Serie wirklich relevante Forschung vor.

Geht es mir schlechter, wenn es anderen besser geht? Was ist Gerechtigkeit? Und wie reagiere ich angemessen auf Ungerechtigkeit? Die Affen in «Inequity responses of monkeys modified by effort»¹ geben uns klare Antworten.

Der Versuchsaufbau ist denkbar einfach: Zwei Affen, von hier an Günther und Sarah genannt, getrennt durch ein Gitter voneinander und einer Plexiglaswand nach Aussen, erhalten die gleiche Aufgabe. Sie erhalten ein Stein durch ein Loch im Plexiglas. Geben sie den Stein zurück, erhalten sie eine Belohnung. Der erste Affe, Günther, erfüllt die Aufgabe und erhält einen Gurkenschnitt und genießt diesen. Der zweite Affe, Sarah, erfüllt die Aufgabe ebenfalls und erhält die von beiden Affen bevorzugte Belohnung: eine Traube.

Günther erfüllt die Aufgabe erneut und erhält - oh schreck - schon wieder einen Gurkenschnitt! Das lässt Günther sich nicht gefallen und wirft die Belohnung der Versuchsleiterin hinterher (siehe Fig. 1), und haut mit der Hand auf den Boden und versucht den Käfig ausein-

ander zu reissen. Währenddessen erhält Sarah eine weitere Traube für das

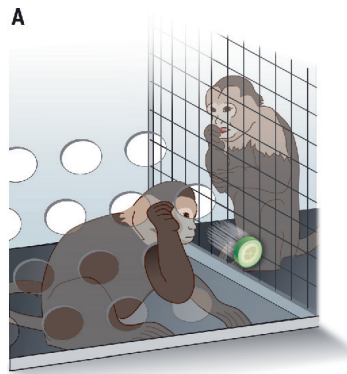


Fig. 1: Affe wirft Gurkenschnitt. (Skizze)

Erfüllen der Aufgabe.

Günther erhält nun erneut einen Stein und sucht den Fehler im System: Da er alles gleich wie Sarah macht, kann es eigentlich nur am Stein liegen - dieser wird gegen die Wand des Käfigs geschlagen, wohl auch, um Eindruck zu machen. Er gibt den Stein zurück und erhält einen dritten gottverdammten Gurkenschnitt! Wie viel Elend muss dieser Affe noch ertragen?!

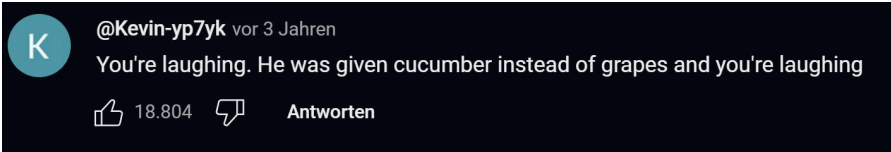
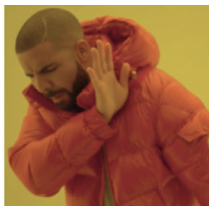


Fig. 2: Honestly, schaut einfach das Youtube-Video «Two Monkey Were Paid Unequally», ist eh besser als der Artikel hier.

Was haben wir gelernt? Wenn man die gesamte Bandbreite der Belohnungen nicht kennt, ist man mit weniger zufrieden. Erst, wenn Trauben im Spiel sind, schmeckt die Gurke nicht mehr so gut. Und manchmal ist man halt der Affe mit dem Gurkenschnitz und mal mit der Traube.

1. van Wolckenten et al., 2007

Pokémonrätsel



Deciding to ignore the random guy who thought DMAVT email is the department administration and not the whole department



Hitting reply all to insult all of the other people

Ignoring the email	
Answering the question	
Insulting the sender	
Defending the sender	
Sending memes in response	
Sending life lessons & unrelated videos	
(badly) Impersonating Maffa	

Interview with the President of VSETH



Julia und Andreas

Nic Cantieni is the new president of the Student's Union of ETH Zurich. After a few weeks in office, he took the time to join a short interview. Nic's background is in electrical engineering, so he already has very thorough experience with the topic of sockets and, of course, with electricity. We are also very proud that a blitz member is now at the head of the VSETH.

We, the former and current Chief Editors of blitz Julia (J) and Andreas (A), have formulated a few questions so that you can get to know the President (N) a little better.

A: Nic, how has your time as President been so far?

N: It's been a fun and very inspiring time, but also quite exhausting. It's difficult to prioritize and find the right tasks to work on - but together with such a motivated board and all the active members of VSETH, it's very cool to see what can be accomplished.

J: I know that as part of the amiv board, there are some perks like the infinite beer you can get. What is the coolest thing you get / get for free as the president of VSETH?

N: Hmmm... I really do miss the unlimited beverages (especially since there's an alcohol-free alternative now). I have my own small office in CAB, it comes with a couch - very comfy, that is definitely up on the list of perks.

A: Would you like to tell us a bit about the

role of the president at VSETH? What do you do on a typical day?

N: The role of VSETH president is very diverse: it consists of representing the whole of VSETH to the «outside world», e. g. the media and the public, the «inside world», e. g. the student's associations and the committees, and of course to ETH. On a typical day, I have meetings with some members of ETH - be it administration, school board or a committee on a specific topic, like the canteens, PAKETH or study fees. Further, I get a lot of emails and slack messages to crawl through - and I check in with the other members on the board regularly.

A: What are your ambitions in office this year, particularly in relation to electrical and mechanical engineering students?

N: The thing that will impact the next generation of students the most is the intro-

duction of PAKETH - the makeover of the academic calendar and exams at ETH. I am very positive that this change will influence the student's time at ETH for the better. However, it is important for amiv and VSETH to keep an eye on the changes and be a constructive partner in the development. For our departments specifically, I think it's very valuable to get the chance to do summer internships in order to get some industry contacts already in the bachelor's degree program.

J: You can be found at the CAB at almost any time. As VSETH President, do you still have time for hobbies or for studying? What are your hobbies?

N: Indeed, I am frequently in CAB - that's one perk of the job. However, to keep some balance in life, I still find some time for my hobbies. I really like to be outside - skiing or hiking, and play the cello from time to time. During this year as president, I take off from studying completely, this is part of the deal. So no exams for me in the next two sessions ;)

J: Now that someone from the blitz team has arrived at the top of VSETH; what does the future hold for Polykum?

N: Polykum will be restructured such that it will be sent by physical mail only to those students that sign up voluntarily, additionally, all first semester students will get it by mail. To still reach all students at ETH, an electronic version of Polykum will be sent out via email. This change is necessary to keep Polykum alive and financially stable. I am very happy this is happening,

and maybe we can print a «How to subscribe to Polykum»-article in blitz from now on, instead of «How to unsubscribe from Polykum» ;) By the way: If any of you want to write articles or otherwise be active in a magazine: reach out to either blitz or Polykum, it's very satisfying!

A: Somewhat related to the issue topic, sockets and electricity, it is ubiquitous. How did your electrical engineering degree prepare you for this position? Is your training as an engineer something that can be beneficial in such a stressful job?

N: I would say the position as VSETH's president is related to engineering in the sense that one needs to find compromises with the restraints that one is given. Further, it is important to communicate precisely and keep an eye on open tasks. Of course, this is more «meta-education» that one picks up during the studies, being able to solve Maxwell's equations in cylindrical coordinates is not a particularly useful skill in my position...

J: After being the president of VSETH, is there a next step you will take or does this mark the peak of your ETH career?

N: I think I should get back to studying next year, to finish my degree at some point...

J: Let's get to the most important question of them all: Which one is your favourite socket standard?

N: That's easy: T25 - three phases and 16 amps is perfect, and you can even plug a standard one phase-plug.

Fresher's Weekend Review

Master Erstis

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At the Freshers' Weekend, blitz ran a creative writing workshop stand. We wanted to see how well the new masters students did with writing for our journal. The review of the weekend from the perspective of the masters students can be seen here:

To conclude the weekend, we want to ask you a few simple questions—no ETH diploma needed, we swear:

Have you ever slept in a military bunker?

Do you think you are strong enough to hike for 6 hours?

Do you want to be woken up by someone blasting the song «Good Morning Sunshine»?

Have you ever taken a shower?

Have you ever been hit by the accumulated smell of 70 garlic breads?

Come and figure all of this out at the next Freshers' Weekend!

And of course, it is a great opportunity to meet your fellow classmates and enjoy a beer or two amidst the breathtaking scenery of the Swiss mountains.

Sudoku

7			9				1	
2	4	9						
					4	8	2	9
1								5
			6	9		3		
		4	5			2		6
3						7	5	1
	7			1			9	3
9			5			8		

Sudoku einfach

	8		5		1	6		
2							8	3
							4	
8				9			5	7
		5						
		6			3	2		
							2	8
		9	1		5	7		
		9	6					

Sudoku schwer

Book of the Edition

Animal Farm - George Orwell

Julia Holenstein

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«All animals are equal, but some are more equal than others». This might easily be one of my favourite quotes from a book. And it originates from

Every edition, I try to find a book that I can somehow connect to the topic of the issue. Sometimes it works out well, sometimes the connection is a bit of a long shot. For this edition, I gave up before even trying. Instead, I decided to write about a book that a lot of you might have already been forced to read in school. But sometimes, these books aren't actually too bad. *Animal Farm* by Orwell might be one of the biggest classics out there, but it's also always worth re-reading occasionally.

Animal Farm is one of the most famous fables and it tells the story about farm animals that start to rebel against the farmer and start to create their own society. In this society, all animals are equal. Throughout the book, some of the animals start to crystalize as the leaders of the revolution and they start to put themselves above the other animals, trying to become as human as possible. It is a satirical criticism on the Russian Revolution, communism in general, and Stalin himself. There are several political events that have been mirrored in the story of the book, as the meeting between Stalin, Churchill and Roosevelt where they planned to overthrow Germany in 1944. This meeting,

which in the book takes place between pigs and men, marks the end of the story. But let's start from the beginning.



I don't want to go into too much detail, as the fable can be easily read within two hours. But still, it is nice to generally outline the story a bit. It begins with Major, one of the oldest boars on the farm, telling the other farm animals about a dream he had. In the dream, the animals stood up against men and took over the farm themselves, describing a glorious

revolution. He died a few days after, but the idea of an animal revolution had manifested in their brain and the smarter animals began to prepare themselves, teaching themselves to read and write and how to organise farm work. These smarter animals were the pigs. In the end, banishing the farmer was easy, and he was chased of by cows which he forgot to milk. And so the Manor Farm became the Animal Farm. The pigs started to teach the other animals to read, and in the end most were even able to write their own name. Except for the horses and the donkey, none could actually read much more than that, since they were too dumb. The pigs set up the seven commandments of the animal farm, the most important of which being All animals are equal. Others included things like No animal shall drink alcohol. or No animal shall kill any other animal. At first, the well-being of the animals increased to their life before. The ratios were bigger, and they could actually keep all of their produce. Throughout the years, they worked harder and

harder and their ratios were getting smaller and smaller. Unfortunately, the farm animals were

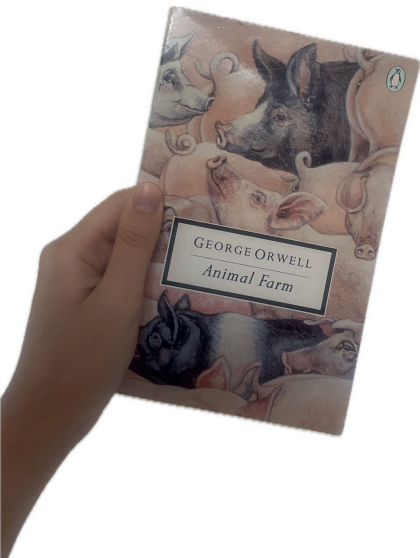
not smart enough to remember the time before. The pigs told them they were doing better than ever, their lives were happier than ever and so all the animals were contempt. Also, the commandments seemed to change. However, since no animal could actually read, no one was complaining. Only the horses and the donkey seemed to faintly remember that the commandments did not always say No animal shall drink alcohol to an excess. And in the end, even the seven commandments were abolished. Only one rule remained, which read as follows:

ALL ANIMALS ARE EQUAL

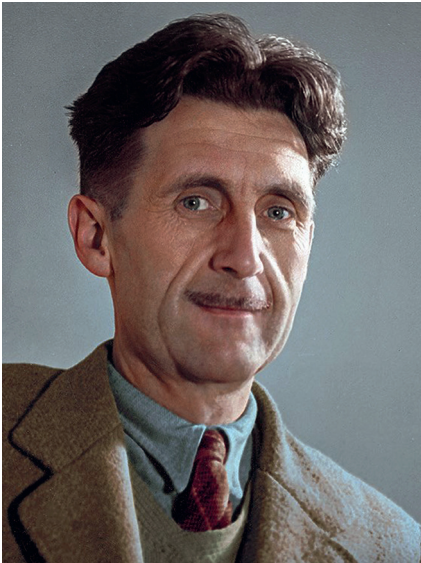
BUT SOME ANIMALS ARE MORE
EQUAL THAN OTHERS.

And so the story ends, with the pigs inviting neighbouring human farmers to show them around the farm, and the other animals not being able to tell the difference between man and pig.

So much about the story. It was published in 1945, and shortly after Orwell also published 1984, another Anti-Stalinist tale. Which is also definitely worth to read. George Orwell wrote Animal Farm in the short period of only a few months in the middle of the Second World War. When he wanted to publish it first, he was rejected multiple times, since the publishing houses feared the impact of the satirical indignation of his story.



Before giving up, Orwell found one last publisher willing to print his book and transformed George Orwell into one of the most influential British Authors. He says that this was his first time trying to 'fuse artistic and political purpose into one whole'. And it seemed to work out well. Today, 60 years later, Animal Farm has never been out of print.



Eric Arthur Blair, better know by his pen name George Orwell

Orwell now is famous for his satirical and nonchalant writing style. In Animal Farm, he tries to keep the narrator at an unopinionated point of view, allowing the reader to form their own conclusion. The animals, can communicate differently based on their level of intelligence though. Thus, the pig announced as the public speaker of the farm can tell a story of something that has happened, and by elaborating it and using some fancy words, the other animals all seem to remember the story to actually have happened. If he can tell it so vividly, it has to be true, right? This is the same writing style Orwell also used in 1984. There are actually more books written by him, but these do not relish in the same popularity as Animal Farm and 1984. 1984 was also the last book he published, as he died of tuberculosis a year after.

With that, we arrive at the end of this article. In two weeks, I will hopefully have a book ready that fits the topic of the next issue. I do also always enjoy hearing recommendations from other readers, so if you know of a book I should definitely read, I would like to hear about that.



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The Greatest Movie of all Time? - A Matter of Perspective

The new semester program of the Filmstelle

Stephen Malcom

Hello and welcome back to everyone who reads my semi-annual advertisement for the new Filmstelle program. For those of you who have no idea what I'm talking about, let me introduce it in the following article: Filmstelle, the cinema commission of the VSETH, and their new program, A Matter of Perspective.

As I hinted in the introduction, writing this series of articles has become a bit of a personal tradition for me. I've been attending Filmstelle screenings for about five years now, and for the last few, I've also written a column here in the blitz. With that much background knowledge, I'll be adding some small notes throughout this article to give you a bit of my perspective (see what I did there? Yes, you did. I promise my next comments will be more or less worthwhile) as a Filmstelle nerd. But now, without further ado:

What is Filmstelle?

As previously mentioned, the Filmstelle is the cinema commission of VSETH (not to be confused with FLIK, which is the Campus Höggerberg open-air cinema commission). If you see Filmstelle as an institution, it is actually one of the oldest cinemas in Switzerland, founded exactly a century ago. Every semester, Filmstelle chooses a theme and 12 movies that fit that theme, which they then screen for students. This year, they've chosen the

theme **A Matter of Perspective**. Three weeks ago, they started their thematic cycle with Orson Welles' *Citizen Kane*, the "Greatest Movie of All Time" (depending on your perspective). Two weeks ago, they held a small film festival where they screened three movies centered on the theme of vacations: *Aftersun* (2022), *Some Like It Hot* (1959), and *Moonrise Kingdom* (2012). And finally, last week, they hopefully screened the Chinese sword-fighting film *Hero* (2002) (I say hopefully, because I'm writing this on the 27th of September).

So, what's left to watch if they've already shown the "Greatest Movie of All Time"?

Well, this Tuesday (which means your Tuesday, October 8, if you're reading this after possibly being handed this blitz edition by one of my colleagues during a lecture break), they're showing the Iranian movie *Close-Up* (1990), where a film-loving but jobless young man tries to deceive a wealthy family by pretending to be a famous

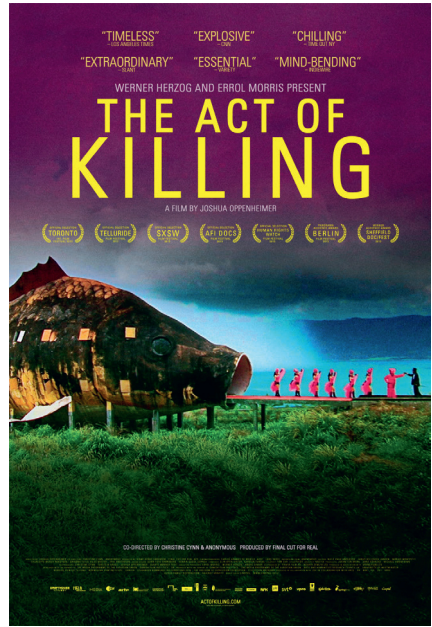
filmmaker who wants to cast them in leading roles. The scam is eventually uncovered, and he ends up before a judge..



A week later, the **great** German film *Lola Rennt* (1998) by Tom Tykwer will be shown, where the titular character must run to save her friend in the next 20 minutes after he loses 100,000 DM¹ to a gangster.

If you're a fan of analog 35mm film, there will be a screening of *Inland Empire* (2006) by legendary director David Lynch in this format on October 15.

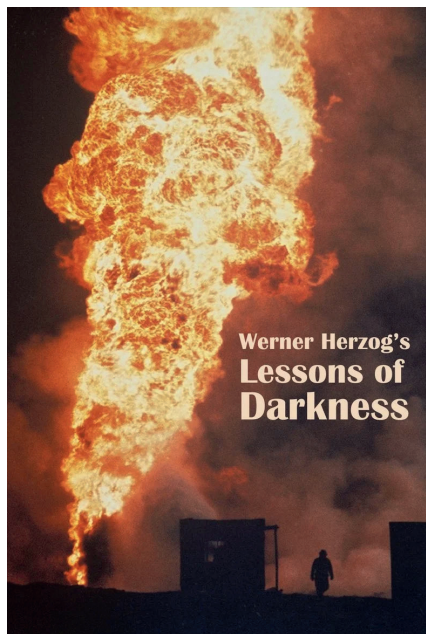
This year, there are also quite a few documentaries included in the Filmstelle cycle²:



The Act of Killing (2012) by Joshua Oppenheimer, about the organized killing of hundreds of thousands of union members and ethnic Chinese in Indonesia during the 1960s, featuring interviews with and re-enactments by members of a death squad (screened on November 5),

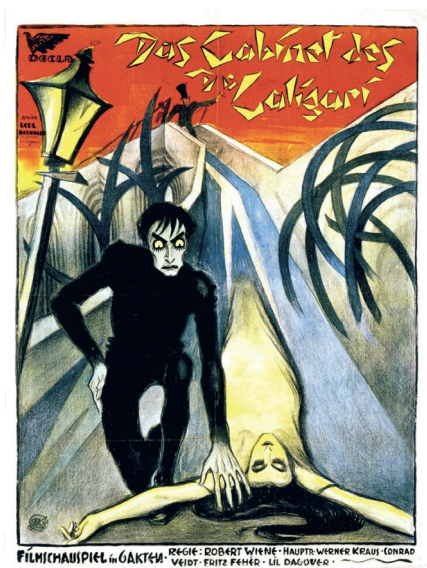
Exit Through the Gift Shop (2010) by and about the artist Banksy (screened on November 12).

Lektionen in Finsternis (1992) by Werner Herzog³ about the aftermath of the first Gulf war in 1990 with the oilfields of Kuwait burning. This movie is preceded by the short film *Plastic Bag* (2009) that follows the existential journey of one representative of its titular character looking for its Maker (Screened on the 10.12).



A week before Herzog, a foundational expressionist movie by another German regisseur is shown, *Das Cabinet des Dr. Caligari* (1920) by Robert Wiene about the titular character, that hypnotizes a young man to present him as a sleepwalker at a fair by day and lets him commit crime at night.

This cycle is than concluded on the 10th of December by someone that is often regarded as the greatest directors of All Time: Akira Kurosawa with his movie *Rashomon* (1950). The body of a brutally murdered Samurai is found deep in the woods. What follows are four perspectives of the events: By a bandit, by his wife, by himself and by the logger that found the body. But all versions differ from each other.



These are not all movies of this cycle, but I think there should be at least one movie from the ones above that should have peeked your interest.

How much do I have to pay to see one of these?

If you are a member of VSETH⁴ or VSUZH it is free for you. If you are not or have friends who are not, you just have to pay 5 francs each.

When and where do the screenings take place?

The screenings take place each Tuesday in the Stutz room of CAB (F21), with the box office in front of the VSETH secretariat opening at 19:00 and the film starting at 19:30. Please enter via the box office, so they can count the number of people attending.

Do I need to know anything else?

All films are shown in their native language, with subtitles either in English or in German.

There is also a bar in the back of the where you can buy drinks, popcorn, hotdogs, ice-cream and sometimes movie-appropriate snacks either before the movie starts or during the break. Unless the movie is very short, there is always a break after roughly two thirds of the movie lasting 10 minutes at minimum with its length dependent on the number of attendants.

If you want more information about the Filmstelle and its movies, the ones that I presented and those I didn't, visit the Filmstelle's website at www.filmstelle.ch.

I hope I could show some of you something and also that I could convince an evenly big group of people to give it a try. In that case, we will see us there!



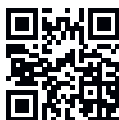
1. about 200,000 Euros today
2. Usually its one, maybe two per cycle
3. This will actually be my first Werner Herzog movie
4. If you paid the ten francs during your semester signup, it should read VSETH on the bottom of your Legi



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Bier in der Steckdose

Bitte nicht nachmachen!

AAK

bier@blitz.ethz.ch

Sehr geehrte Damen und Herren,

Wir begrüßen Sie zum Bier der Ausgabe - heute zum Thema Steckdosen mit den Stationen Strom, Widerstand sowie Elektrolyse. Wir wünschen eine angenehme Lesereise und freuen uns darauf, Sie zu Ihrem Ziel begleiten zu dürfen.

Ganz nach dem heutigen Ausgaben-thema haben wir uns überlegt, wie man Bier mit Steckdosen verbinden kann. Das Ergebnis sieht ihr hier:



Unser heutiges Bier kommt aus dem sonnigen Italien Ticino, genauer gesagt aus dem beschaulichen Ort Bioggio, buona serra birra! Zu den Klängen von Mariah Carey's All I Want For Christmas (Is Fark) entspannen wir bei vibrierenden Tischen und geniessen unser APA! namens Kurt von Bad Attitude. Der Name und das La-

bel sind angelehnt an Kurt Cobain, die bad attitude bezieht sich auf seinen Rock and Roll lifestyle². Bad Boy sagen wir!



Diesmal ohne Gurt.

Während die einen schon trinken, prostern sich die anderen noch zu. Ganz nach dem Motto: Wenn jeder an sich selber denkt, ist auch an alle gedacht. Wobei, denken wäre hier vielleicht auch zu hoch gestochen.

Jedenfalls drehen sich die Gedanken alsbald um das güldene Erzeugnis, welches Einhalt in die Gläser gefunden hat. So geniesset unseren Genuss!

Die Nase ist sehr erfreut bei diesem Bier, beim ersten Schluck kommt die Note Amarillo, ein zitrusartiger Hopfen durch, das ist aber auch schnell vorbei. Der Hopfen, der hier den Grossteil des Geschmacks ausmacht, ist sehr abgerundet und bringt einen bitter-herben Geschmack. Es hat also insgesamt einen sehr erdigen, entspannten, hefefreien Geschmack.

Dieses Bier ist einfach zu trinken, leicht und kann allen empfohlen werden, die gern Bier mit Zitrusnoten trinken, jedoch ist der Geschmack nicht wirklich speziell. Was jedoch auf jeden Fall speziell ist, ist, dass ihr dieses Bier, welches im Raum Zürich nicht einfach zu bekommen ist, ganz einfach im CAB erstehen könnt! Stellt euch dafür einfach vor den Bierautomaten, holt eure Bezahlmethode der Wahl raus, drückt auf den ersten Knopf und probiert³!

P.S. On a side note: Jonnny the Luxemburger.li likes it very much.

Bewertung [Bad Attitude - Kurt]:

Geschmack: 4.25/5



Flaschendesign: 3.5/5



Steckdosenfaktor: 3/5



Alkoholgehalt: 2.25/5



Total: 3.5/5



1. das ist so, wie IPA, nur mit ganz viel Bauch
2. Suizid
3. Falls Ihr nicht zahlen wollt, füllt mal den Automaten auf, Infra-Vorstand Joel freut sich über eure Hilfe!



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Notenstatistiken D-MAVT

Hopo MAVT

hopo-mavt@amiv.ethz.ch

Basisprüfung A MAVT [alle Studiengänge](#) [davon Repetenten](#)

	# Stud.	Ø	std. dev.	# best.	# nicht best.	bestanden
Gesamt	66 50	3.99	0.86	35 29	31 21	58.0% 63.2%
Mechanik I	70	3.79 3.71	1.25 1.29			51.4
Chemistry	62	4.34 4.31	1.04 1.06			69.4
Informatik I	63	3.83 3.82	1.15 1.19			47.6
Analysis I	61	3.96 3.92	0.95 0.98			52.5

Basisprüfung B MAVT [alle Studiengänge](#) [davon Repetenten](#)

	# Stud.	Ø	std. dev.	# best.	# nicht best.	bestanden
Gesamt	554 42	4.58	0.79	446 30	108 12	81.4 86.6%
Mechanik II	652	4.05 4.03	1.05 1.04			62.9
Maschinenkonstruktion	559	4.52 4.52	0.78 0.78			77.8
Informatik II	557	4.68 4.68	1 1			79.7
Lineare Algebra I/II	575	4.68 4.65	0.81 0.82			83.5
Analysis II	553	4.47 4.46	1.1 1.1			71.4
Physik	549	5.11 5.11	0.94 0.94			88.5

Prüfungsblock 1 (2022) MAVT [alle Studiengänge](#) [davon Repetenten](#)

	# Stud.	Ø	std. dev.	# best.	# nicht best.	bestanden
Gesamt	17 9	4.22	0.24	16 9	1 0	90% 100%
Thermodynamik I	18	3.45 3.58	0.5 0.59			33.3
Mechanics III	22	4.12 4.17	0.42 0.37			86.4
Control Systems I	16	4.46 4.53	0.49 0.48			87.5
Elektrotechnik I	26	4.31 4.3	0.5 0.47			80.8
Analysis III	15	4.89 4.78	0.65 0.63			86.7

Prüfungsblock II MAVT alle Studiengänge davon Repetenten

	# Stud.	Ø	std. dev.		# best.	# nicht best.	bestanden	
Gesamt	393 0	4.58	0.6		309	84	78.6%	
Thermodynamics II	408	4.24 4.23	0.86	0.86			69.9	
Fluid Dynamics	441	4.22 4.18	0.73	0.76			66.9	
Thermodynam- ics III	400	4.78 4.77	0.89	0.9			85.3	
Werkstoffe und Fertigung	405	4.51 4.52	0.49	0.49			93.3	
Quantum Me- chanics	456	4.38 4.37	0.77	0.79			82	
Stochastics and Machine Learning	403	4.58 4.59	0.72	0.72			84.6	

The results for the masters students will be published in the next edition

Prüfungsblock II (2010) MAVT alle Studiengänge davon Repetenten

	# Stud.	Ø	std. dev.		# best.	# nicht best.	bestanden	
Gesamt	10 8	4.28	0.3		8 8	2	90%	100%
Thermodynamik II	408	3.67 4.23	0.53	0.86			69.9	
Fluid Dynamics I	17	5.18 5.15	0.56	0.64			100	
Elektrotechnik I	26	4.28 4.3	0.51	0.47			80.8	
Physik I/Physik II	9	4 4	0.35	0.35			55.6	

Prüfungsblock III (2010) MAVT alle Studiengänge davon Repetenten

	# Stud.	Ø	std. dev.		# best.	# nicht best.	bestanden	
Gesamt	39 18	4.2	0.54		31 16	8 2	79.5%	88.9%
Fluiddynamik II	40	3.88 3.88	0.66	0.65			55	
Thermodynamics III	39	4.52 4.52	0.54	0.54			87.2	

Wahlfächer MAVT alle Studiengänge davon Repetenten

	# Stud.	Ø	std. dev.		# best.	# nicht best.	bestanden	
Introduction to Finite Element Analysis	80 116	5.31 5.41	78	2			97.5	97.4
Fertigungstechnik	15 15	5.17 5.17	15 *	0 *			100	100
Materials for Mechanical En- gineers	61 70	4.88 4.91	58	3			95.1	95.7

Mit * gekennzeichnete Einträge wurden zensiert, da sonst Rückschlüsse auf die Noten einzelner Studierenden möglich wären.

Notenstatistiken D-ITET

Hopo ITET

hopo-itet@amiv.ethz.ch

Basisprüfung Block A

nur D-ITET BSc.

	# Stud.	Ø	std. dev.	# best.	# n. best.	be- standen
Gesamt	20	4.14	0.71	14	6	70%
Digitaltechnik		4.42	0.90	19		
Lineare Algebra		4.03	1.04	11		
Netzwerke und Schaltungen I		3.60	0.93	10		
Technische Mechanik		4.32	0.65	14		

Basisprüfung Block B

nur D-ITET BSc.

	# Stud.	Ø	std. dev.	# best.	# n. best.	bestanden
Gesamt	207	4.76	0.90	176	31	85%
Analysis 1 & 2 (**)	201	4.86	0.93	174		
Informatik I	200	4.76	1.11	155		
Komplexe Analysis	207	4.62	1.12	156		
Netzwerke und Schaltungen II	212	4.90	0.96	194		
Physik I	205	4.35	1.05	142		

 Prüfungsblock 1

nur D-ITET BSc.

	# Stud.	Ø	std. dev.	# best.	# n. best.	bestanden
Gesamt	15	3.99	0.61	9	6	60%
Analysis III	15	4.43	0.62	13		
Physik II	16	3.77	0.74	9		
Signal- und Systemtheorie I	16	3.97	1.03	10		
Informatik II	16	3.86	0.83	8		

Prüfungsblock 2

nur D-ITET BSc.

	# Stud.	Ø	std. dev.	# best.	# n. best.	bestanden
Gesamt	163	4.48	0.72	132	31	81%
Halbleiter-Schaltungstechnik	163	4.31	1.09	102		
Diskrete Mathematik	161	4.63	0.75	135		
Technische Informatik	162	4.43	0.90	114		
Signal- und Systemtheorie II	163	4.57	0.77	131		

Prüfungsblock 3

nur D-TET BSc.

	# Stud.	Ø	std. dev.	# best.	# n. best.	bestanden
Gesamt	172	4.55	0.65	148	24	86%
Numerische Methoden	175	4.50	0.58	154		
Elektromagnetische Felder und Wellen	174	4.36	0.89	126		
Halbleiterbauelemente	172	4.66	0.86	141		
Wahrscheinlichkeitstheorie und Statistik	172	4.66	0.79	149		


Weitere Grundlagenfächer

nur D-TET

	# Stud.	Ø	std. dev.	# best.	# n. best.	bestanden
Computational Thinking	26	4.63	0.87	22	4	85%
High-Frequency Design Techniques	29	4.95	0.90	27	2	93%
Introduction to Electric Power Transmission: System&Tech.	22	4.66	0.79	18	4	82%

Kernfächer 3. Studienjahr

nur D-TET

	# Stud.	Ø	std. dev.	# best.	# n. best.	bestanden
Communication and Detection Theory	26	4.58	0.78	22	4	85%
Communication Electronics	23	4.25	1.08	14	9	61%
Communication Networks	115	4.73	0.65	106	9	92%
 Fundamentals of Physical Modeling and Simulations	16	5.06	1.04	*	*	*
High-Speed Signal Propagation	60	5.08	0.86	55	5	92%
Mess- und Versuchstechnik	21	4.96	0.70	*	*	*
Neural Systems	43	4.40	1.01	27	16	63%
Optics and Photonics	36	5.27	0.70	*	*	*
Power Semiconductors	19	5.05	0.57	19	0	100%

 Editors choice

Mit * gekennzeichnete Einträge wurden zensiert, da sonst Rückschlüsse auf die Noten einzelner Studierenden möglich wären.

** Alternativ zu Analysis 1 & 2 für Elektrotechniker kann Analysis I & II für Mathematiker und Physiker absolviert werden.



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Entdecke mehr zu Deinen Karrieremöglichkeiten!



Birr der Ausgabe

AAKNT

bier@blitz.ethz.ch

Alex Schumann meinte mal, dass er für den blitz gerne mal nach Birr reisen würde, weil das wie Bier klingt. Wie der Zufall es möchte, wohnt Alex Schoch's Grosi da, und, naja, dann sind wir halt da hin gefahren. Andis Sixpack macht also bewiesenermassen absolut alles für einen blöden Witz. Ich (der Autor) liebe die Tage, an denen ich mir zum Bier trinken den Wecker stellen muss.

Früh morgens gings los, und wir bewegen uns mit der Zapfanlage in Richtung HB. Dort ist schnell eine funktionierende Steckdose gefunden, und die ersten Biere wurden gezapft.



Zapfi am HB

Danach sind wir mit dem Zug nach Birr gefahren und haben währenddessen die CO2-Flasche versteckt, weil wir diese (glauben wir) nicht per Zug transportieren dürften.



Zapfen im Zug

In Birr angekommen, machten wir uns in Richtung Lupfig auf den Weg. In Birr fanden wir dann noch die Bäckerei «Lexy», die uns wegen Alex' Spitznamen dann ganz viel Gebäck schenkte.

Nach etwa zwei Stunden Spaziergang mit stark reibender Zapfi haben wir es dann nach Scherz AG geschafft. Dort haben uns Alex© Grosseltern mit sehr geilem Essen bedient.



Die Invasion in den Kanton Aargau

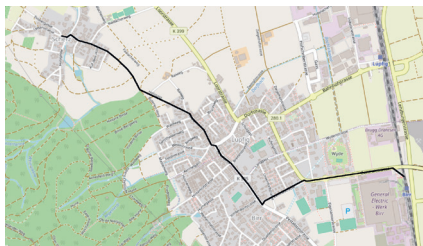


Bierli trinken in Scherz AG

Danke dafür, es war wirklich super!

Jetzt zum relevanten Teil: Bier der Ausgabe ist «Agent Orange» von der sehr bekannten Brauerei «amiv Bräu» (7/5 auf Untappd). Es hat uns während der Reise, aber auch im Garten von Béa und Walti gut begleitet und uns viel Freude gebracht. Selbstverständlich haben wir sichergestellt, dass un-

sere Gastgeber auch sicher stets ein volles Glas vor sich stehen haben.



Hier sind wir langgelaufen

amiv Bräu «Agent Orange»:

Farbe: 4/5



Geschmack: echt gut/5



Birr-Scherz-Stärkungsfaktor: 7/5



Flaschendesign: 0/5



Alkoholikerfaktor im Zug: 5/5



An Béa / Walti:
Bis bald bei der Brauko!



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Erstiweekend Comic

At the Freshers' Weekend, blitz ran the creative writing workshop stand. The aim here was to think as creatively and out of the box as possible. Bonus points were given for rhymes and backflips. There were many very good submissions, including cooking recipes, letters to the editor and poems. However, one comic convinced us the most. You can see the winners here:



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blitz an der ZHAW

Warum überhaupt an die Fachhochschule?

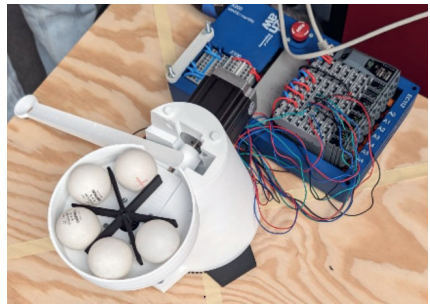
Thea Brabetz

brabethe@students.zhaw.ch

Vorlesungsräume mit Steckdosen, Stromzufluss im Übungsraum und nutzbare Lernplätze, mit Steckdosen und eigener Lampe versehen. Zum dieswöchigen Ausgabenthema passt die ZHAW noch ganz gut zu. Dies sind aber nicht die einzigen Punkte, die mich von der FH überzeugt haben.

Von der ETH an die ZHAW - warum das denn? Nicht nur das nicht bestehen der Basisprüfung sollte dich dazu anregen andere Lernmodelle kennenzulernen. Nach einem Jahr Maschinenbau in Winterthur kann ich sagen, dass das Studium hier auch Spass macht. Man sieht direkt konkrete Zusammenhänge zwischen den Fächern - die Differenzialgleichungen z.B. werden direkt in Physik angewendet und in MATLAB programmiert. Das Innoprojekt, oder wie es hier heisst, Projekt Modul, ist nicht auf ein Semester begrenzt. Im ersten Semester lernt man, wie man mit Guss umgeht und diesen anwendet und dimensioniert. In Teams wird eine Lösung zu einem Problem gesucht, Praxis erlangt man bei der Besichtigung der Giesserei (bei uns war es die Wolfensberger AG) und man wird von den Dozenten beim Lernen begleitet. Im zweiten Semester gings dann an das ran, was ihr als Innoprojekt bezeichnen würdet. Wir haben eine konkrete Aufgabe gestellt gekriegt und die Möglichkeit (gratis) zu drucken und lasercuttern. Als offizielle Aufgabe wurde ein Bierpong Roboter gebaut, die am Ende des Se-

mesters gegeneinander antreten und einige zur Nacht der Technik im Sommer ausgestellt werden. Kreativ, lustig und ein klares Ziel vor Augen.



Schon beim Besichtigungstag entdeckt man eine ETH-Seltenheit. Steckdosen in den Vorlesungsräumen. Steckdosen in dem Pausenraum. Steckdosen bei den Lernplätzen. In jedem Raum hat es mindestens eine Steckdose pro Student.





In fast jedem Gebäude findet man auch Lernplätze, abgetrennt von Gängen und zum Teil nur mit Legi erreichbar. Aber das Beste ist die Lernlandschaft in der Hochschulbibliothek. Diese wird von der ZHAW auch stark beworben. Und zu recht, unter dem Semester, bevor das gesamte Gebäude von allen Nähten platzt, ist es wahrlich eine angenehme At-

mosphäre. Sie bietet verschiedene Lernische, zwischen Einzeltische und Gruppenräume, die man reservieren kann, findet man auch einen Raum der Stille, Balkone und Sofas. Es ist aber nicht nur alles positiv, wer das Studentenleben an der ETH genießt und kennt, wird hier nicht ganz zufrieden sein. Der Alias, der ZHAW «VSETH» probiert mit neun unterschiedlich laufenden Departementen einen Ausgleich zu schaffen, grösstenteils leider nicht beim Techniker Campus. Sonst kenne ich noch ESN und Formula Student. Mit ca. 14500 Studierende, etwas wenig. Hierfür komme ich immer noch gerne an die ETH :)

Sudoku Lösung

7	3	8	9	6	2	5	1	4
2	4	9	1	8	5	3	6	7
6	5	1	3	7	4	8	2	9
1	6	3	8	2	7	9	4	5
5	2	7	6	4	9	1	3	8
8	9	4	5	3	1	2	7	6
3	8	2	4	9	6	7	5	1
4	7	5	2	1	8	6	9	3
9	1	6	7	5	3	4	8	2

Sudoku einfach

9	8	4	5	3	1	6	7	2
2	5	7	6	4	9	8	3	1
6	1	3	8	2	7	5	4	9
8	3	2	4	9	6	1	5	7
7	4	5	2	1	8	3	9	6
1	9	6	7	5	3	2	8	4
5	6	1	3	7	4	9	2	8
4	2	9	1	8	5	7	6	3
3	7	8	9	6	2	4	1	5

Sudoku schwer



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I'll try to stay neutral - Intro to Swiss Politics

Roman Dautzenberg

Whether you've just moved to Switzerland to start your Bachelor's or Master's degree or you've been born here and aren't quite sure how Swiss politics works, this semester will help you get started into understanding some of the basics. I'll try to stay neutral, but am of course aware that this is all written as my own opinion and not everything is entirely serious. Anyway, let's get started with some fundamental ideas!

The «E» in ETH

Our neighbors are all fairly typical republics¹. Switzerland however is a confederation («Eidgenossenschaft»), more similar to the USA in concept², with many competencies and decisions in the hands of the 26 cantons. In everyday life this becomes particularly visible in tax season, when trying to apply for citizenship or how trash is recycled. The confederal mindset also manages to keep «Kantönligkeit» alive, where people are often convinced that their canton is the best. The municipalities can shape politics as well through many of the same mechanisms. Over time power is moving away from municipalities and cantons towards a national level, with the Covid-19 pandemic strengthening this trend.

Roger Federer is not the President. Who is?

The executive branch is primarily the «Bundesrat», a bunch of seven people, which are elected every four years by the legislative branch. Every year,



This guy was a political heavy-weight for roughly 4 months.

one of these seven dwarfs becomes the president - but not the «Head of State»³. The limited power held by the president, together with the voters not being directly involved tends to limit personnel politics, which might be confusing if you are more familiar with other political landscapes⁴. The legislative branch is made of two chambers, the smaller «Ständerat» (46 people) and the larger «Nationalrat» (200 people). These are elected every four years by all Swiss citizens over 18 years of age. The next two issues will dive deeper into the competencies held by the Bundesrat and the two chambers of parliament.

Democracy, directly!

Roughly four times a year Swiss citizens⁵ can vote on a variety of topics directly. This makes Swiss democracy «direct» and decreases party affiliation, as people are encouraged to think about solutions and current problems instead of having to trust politicians. There are two pathways to a national vote⁶: The initiative requires 100'000 signatures to be collected⁷. In many cases this is enough for political change, as the demands are at least partially implemented by the politicians, causing the people who collected the signatures to withdraw the initiative. The second path is the referendum where instead of creating new laws, a planned or already enacted law can be opposed,

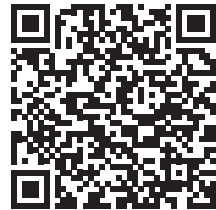
requiring only 50'000 signatures to put the topic to a vote. Certain pieces of legislation, such as changes to the constitution, require a mandatory referendum. I'm a big believer in direct democracy. Even though it is a weak system in particular in times of crisis, it allows for some truly great discussions such as when two thirds of voters didn't want an additional week of holidays in 2012, or in 2018 when all voters were confronted with the question of whether cows with horns should be subsidized.



Sometimes, a political message can be formulated quite simply.

-
1. as always, Liechtenstein is an exception
 2. and not much else
 3. The next issue will clarify this statement, it's quite weird.
 4. coughs, USA
 5. men since 1848, women since 1971, no further comment
 6. similar on cantonal and municipal level
 7. or faked, this article was written prior to the revelations around fake signatures

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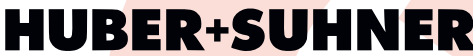




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