

## Hacking Ulm

### Open data, digital literacy and coding as practices creating space in the city

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*An interview with Stefan Kaufmann, conducted by Meret Batke, Mai Anh Ha and Bastian Lange*

The ‘*Verschwörhaus*’ describes itself as an ‘experimentation platform for the world of tomorrow’ intended to accompany the city of Ulm into the future. Ideas are developed in labs and at events. Equipped with 3-D printers, open workshops, lecture rooms and ‘cyber, chaos and public disorder’, this is a place where interested (young) people come together to experiment and to learn from one another.

[www.verschwoerhaus.de](http://www.verschwoerhaus.de)

[Editorial comments and translations in square brackets]

*What is the ‘Verschwörhaus’ and what does it do?*

Stefan Kaufmann: My name is Stefan Kaufmann, I’m originally from the field of open-data activism, that’s an environment where people use particular means and technical abilities to try to tackle things and problems in the city. Not necessarily directly to solve things but at least to indicate ways that they could be dealt with. The ‘*Verschwörhaus*’ was founded out of this movement. It’s actually divided into two – one part is a project run by the city of Ulm, the ‘*Stadtlabor*’ [‘Urban Laboratory’], which provides an administrative and organisational framework. The city rents the rooms and makes them available, but the content is provided by people involved in ‘digital volunteering’ – where people give their time because of intrinsic motivation, i. e. not because they want to earn money with this but because they want to

exchange ideas and do things and make a difference and are strongly influenced by a creative idea.

*How can the project context for the city of Ulm be explained?*

Stefan Kaufmann: The context was that there had been an open-data working group in Ulm for a very long time, one that was predominantly made up of students. The group dealt with mobility and public transport issues, for example, partly because that was a major problem that affected them personally. And relatively early on this voluntary work made it clear that if you want to make something like this permanent, you need a youth section so that the issue is also taken up and continued. In 2015, after we implemented various organisational formats to create exchanges between the administration and the public and to work on these issues, the group got to know the ‘*Jugend hackt*’ [‘youth hacks’] format from the ‘Open Knowledge Foundation’ and ‘*mediale pfade*’ [‘media paths’].

We made an effort to bring this format to Ulm as a youth development programme. We wanted to bring young people together for a weekend, young people who don’t have much chance of meeting people like themselves as they come from the rural areas of southern Germany. We used the motto ‘Improving the World with Code’, and the young people could exchange ideas and work on problems about how to improve people’s everyday working lives. And this led to us saying that it would be good to have such formats not only once a year at the university, where everything has to be set up, but with a permanent space for them in the city. The model of hacker and makerspaces, which is really nothing new, also exists in other places and has already existed for twenty years.

*How did you implement the project in Ulm?*

Stefan Kaufmann: There was only a problem in Ulm if we wanted to do this under our own steam. Ulm is too small a city, there’s not much space and few vacancies and also not the physical mass of people who can support something like this and also pay for it and finance it. So there’s something like the ‘*Freiraum*’ [‘Free Room’], a very small space with two rooms, where something like this was set up with relatively close links to CCC [Chaos Computer Club – Europe-wide decentralised groups and associations of hackers], but getting

a really large space, one with exciting machines and devices too, is hardly possible to finance on our own. And then came the idea of approaching the city to create space, also against the background that it's a positive location factor if young people who like to tackle the topics have a contact person and a contact point where they can spend time. This led to a municipal council resolution in 2016, and now we will soon be in our fourth year.

*Where did the name 'Verschwörhaus' ['Conspiracy House'] come from?*

Stefan Kaufmann: The house had a range of names first, ones that changed again and again, partly because a lot of different actors wanted to join in who were primarily business-oriented and worked in the areas of design and entrepreneurship. But we as a group specifically wanted to implement a citizen-centred approach, one that comes from civil society and is also a bit rebellious and non-conformist and sometimes makes itself heard if it doesn't like something.

The name was a relatively obvious choice as the historical *Schwörhaus* (Oath House) is next door and is linked to the medieval tradition of the *Schwörbrief* [a historical document of the city of Ulm from 1397], which is (among other things) about staying true to yourself and following through. The name '*Verschwörhaus*' was also google-distinct, in contrast to '*Stadtlabor*' ['Urban Lab'] – which was the municipal title for the project and is a generic name like 'chemist' – and this meant that the name continued to be used.

*What is the relationship between hardware infrastructure and software?*

Stefan Kaufmann: We have about 500 m<sup>2</sup> of space that we can use. This includes a large lecture room, where large projections and lectures are possible. We can also record and livestream lectures. We have an electronics lab with quite extensive equipment – hardware can be developed there and wireless measurements for sensor networks, for example, can also be recorded. There are multi-purpose rooms that can be used in different ways, and two workshops, one with classic fab lab equipment, i. e. laser cutter and several 3D printers etc., and a large metal workshop with several circular saws, tools and a permanent project – a CNC metal milling machine [Computerised Numerical Control for the automatic production of parts].

*Who uses the 'Verschwörhaus'? What do you provide?*

Stefan Kaufmann: We're open mainly in the evening hours, because people do this mainly on a voluntary basis and not full-time. And there are different groups, there is an association that you can become a member of, but you don't have to, and in this association there are different specialist areas, e. g. the sensor network group, which meets every fortnight and then sometimes gives public lectures or simply works on things together, and almost everyone is organised in groups like this. Among other things, there's also a sporadic sewing cafe, which is organised by a sustainability group from the university, and *Generationentreff* [Generations Meeting] organises events on digital literacy with elderly people. And in addition, there is a programme aimed at young people, such as the *Jugend hackt* ['youth hacks'] lab, where young people come together under supervision, and individual events such as weekend *Jugend hackt* events or events with 'Wikimedia Germany' and the 'Open Knowledge Foundation'.

*What backgrounds do the users have?*

Stefan Kaufmann: We're well aware that this is predominantly used by white people with academic backgrounds, who are mostly male and not necessarily poor. We know that and this is always a problem with such places. We try to set up specific formats that counteract this, for example, together with Caritas we have a job application cafe for refugees, so that we also reach other target groups. But I think the majority of those active here are mainly people with an academic background between 16 and 36, although the bell curve continues to shift and the person who is mainly in charge of the workshop in the basement is a retired 63-year-old electrician.

*How do you deal with material and data flows?*

Stefan Kaufmann: We work with a lot of electrical and IT equipment and, self-critically, we have to say that we also order and install things from China via 'Ali Express'. We reuse a lot of IT equipment that has been taken out of service elsewhere and is then used here instead of being scrapped directly.

We see ourselves very strongly as being less on the material level and with more of a user-centred focus as opposed to profit-making. Mobility is still

one of the core issues that many people are tackling, and we always try to focus on reusability with free software, free licences, free concepts, in order to set a contrast, to show that it's possible to do something that could help the public but that thinking of everything too much in terms of profit-making puts obstacles in the way. Here the approach is one of generating maximum profit for society as a whole.

*Can you describe an example of the transport project?*

Stefan Kaufmann: One topic that has preoccupied people for a decade is open data in the area of networked mobility. The approach here is to say that transport providers should provide the data needed for the use of services as barrier-free as possible, so that any third party can use them to build information and so develop intermodal mobility that is no longer dependent on the car. There's been a lot of resistance to this in Germany, especially from the transport associations, which believe in the nonsensical comparison that data is like oil and can be monopolised. In the meantime, more transport companies and transport associations are providing data, also thanks to EU regulations. What we can do in the 'Verschwörhaus' is prototyping, in a larger context we're trying to find ways of moving beyond the pure concept stage. A concrete example is the free software 'digitransit' in Helsinki [an open-source trip-planning solution that combines several open-source components in a route-planning service]. From public transport to rented bikes, the software integrates mobility options from different sources to provide information. Because it was free software, several people here were able to port it to show how it works. At the time the city had an EU project which it fitted in with, so it was possible to appoint people as fellows who normally would not have ended up in the administration. The aim was to show what it could be like to think not of viability, but of maximising benefits.

*Where is the link to a scaling perspective?*

Stefan Kaufmann: What is important to me about people's personalities, especially if they have an IT background, is that [when it comes to the products] they are not open to economic exploitation, because this would destroy the basic principle of the common good. With a good annual salary in an IT

company, I tend to be more focused on overtly doing something good in my free time.

Another example is ‘Open Source Bike Sharing’, which could be undertaken by municipalities themselves. This looks at how something can be implemented as an operating model instead of as a business model. Profit maximisation is not the priority here, but the focus is rather a model with minimal losses, which can perhaps be made self-sustainable and shows how this could function if organised cooperatively.

*What are the interests behind such solutions, does it have something to do with the common good?*

Stefan Kaufmann: Because of the networking of voluntary actors who want to further develop the networks and find new people to continue working on them, you have to be careful about how you understand your role. What is already run by the city? Where is the space occupied by the volunteers in complete freedom, where they themselves say where we are heading? My role at the interface is rather one where I tell the stories as well as possible, so that afterwards the political decision-makers want to pursue things like this. But of course I can’t make the targets, can’t say what the guidelines are, I don’t have that leverage.

*What are your hopes and vision for the future of the ‘Verschwörhaus’ in ten years time?*

Stefan Kaufmann: I hope that in ten years I no longer have to sit here. I’ve been working to do away with my role since day one, and that has to be the target. This is a space that’s by the people for the people, it’s a basic principle to distribute the keys of the kingdom and to share them with many people. I hope that those who are active get funds from various sources so that they’re not dependent on any one place, for example on the city, something that must be seen critically. And that good cooperative ways and means can be found for the city to adopt and integrate and transfer the ideas that emerge here.

## Glossary

- CCC: Chaos Computer Club e.V., the largest European association of hackers, consisting of different decentralised local associations and groups; annual event: Chaos Computer Congress (CCC)
- CNC machines: Machines that use modern electronic control technology (Computerised Numerical Control), which enables the automatic production of parts
- Digitransit: Open-source trip planning solution that combines several open-source components to create a route planning service.
- '*mediale pfade*': Agency for media education with a focus on political education
- '*Jugend hackt*': Educational programme promoted by '*mediale pfade*' and ('Youth hacks') the NGO Open Knowledge Foundation. Very different to '*Jugend debattiert*' (Youth debates) and '*Jugend musiziert*' (Young musicians) competitions etc., as the format is deliberately non-competitive and creates networking opportunities.
- '*Schwörbrief*': Historical document of the City of Ulm from 1397 ('*großer Schwörbrief*' [large Oath Letter]), which extended the rights of the guilds and regulated legal relationships.

