The international hackerspace movement is gaining momentum and new hackerspaces are opening up every month somewhere in the world to give the curious people who like to make and break things a place to meet. Geeks and nerds are often portrayed sitting alone behind the glow of a laptop screen, but now, in many cities big and small around the world, hackers gather to solder electronics, share programming skills, teach classes, and build a community of intelligent, inquisitive, and clever people. I truly believe that groups of hackers can tackle any challenge they want to take on.

Each hackerspace is different. Some are bigger than others and some focus more on hardware than software and some take on social justice issues and politics. More and more hackers are connecting and igniting friendships at hacker conferences and camps. Getting a hackerspace started is full of challenges and setbacks, but I hope that when you read these stories of hackerspace beginnings, you'll be inspired to gather a few hackers together, find a space, and start scheming to make awesomeness happen!

It's been ages since we started working on this brief history of hackerspaces time, and we wanted it finished in only two weeks - fail, I give you that! However, the message we wanted to get across along these pages is still the same, and will hold true for another couple of years even. And that is the message of the beginning: Hackers, get started!

Whether starting up a new hackerspace, finding the right people, or gaining momentum is a task as easy as pie or a second, third and fourth dayjob all in one massively depends on surroundings, timing, people, and most above all, chance; the following examples from hackerspaces all around the world therefore shall not be misunderstood as a guideline - they are rather examples of how things could go, how challenges have been worked out, and of course, the awesomeness that will ensue.

With this brief intro and my deepest apologies I am not gonna waste you hackers' precious time any longer and send you right off to the first chapter! Also: That what he said.

ls /world/europe/germany

CCC Berlin

The Chaos Computer Club is a unique organisation in many ways. I am not going to talk about the CCC being the biggest and oldest of all hacker organisations and I also am not going to talk about how it has managed to actually address a broad part of German society and successfully fight the bad image of hackers that the media is creating.

The most remarkable part of the CCC is its unwillingness to be organized. Decentralization and a lack of hierachy might be one of the strongest forces that make the club withstand every tendency to dissolve and disintegrate. Instead, after almost thirty years of existance, the CCC is still a thriving and growing community of individuals that regularly manages to reinvent itself.

The CCC grew up in Hamburg in the Eighties. After a meeting at external locations for a while, a club room was found and populated. It was a rather tiny and dense space with a couple of small rooms that were usually filled up with all kind of devices, manuals and computer magazines. It managed to attract a few but it was more a bureau than it was an actual space to create projects in. Years went by and the CCC had to survive a couple of crisises. In the early Nineties, it was time for a change. But it did not happen in Hamburg. It happened where change had found a new home: in Berlin.

In Berlin people from east and west quickly met after the wall came down. A computer conference (CoCon) was set up even before the two Germanys united in late 1990 and the base for a new CCC was laid out: the CCC Berlin. There were many places where the weekly meeting (on every Tuesday) took place. But somehow these places retained the style of the original location in Hamburg: people gathered once a week to talk but rarely met to discuss projects of any kind outside of the weekly roundup. Things started to change when the CCC moved to its fourth location in 1998 at Marienstrasse 11 in Berlin Mitte.

The new location was a former capenter's workshop. The main room was on ground level with a door to the backyard. The initial infrastructure was not bad but still not a huge improvement over the previous locations. However, the time had come to finally provide the place with a permanent

Internet connection. It wasn't fast, but it did exist. And it made a huge difference as people flocked to use the place as their own private Internet cafe and workspace. The new CCC Berlin location suddenly flourished and managed to gather its gifted members around a big table more than just once a week.

The CCC Berlin has always been an extraordinary place to meet extraordinary people. Technical questions were rarely left unanswered and there was a strong urge to follow up on what was going on with the society and politics while following the latest trends in technology. It is this strong spirit of responsibility for society that always made the CCC so different from other technology-related groups. It's never just about the toys - it's always about what happens when the toys will be applied to society. Things are always under scrutiny, under discussion, under attack. Nothing is taken for granted and everything needs to be revisited, taken apart, looked closer at.

The new location helped to bring the group together and the growing friendship in return made the space flourish and evolve. Later on, the rooms were significantly renovated. The cellar below that so far had only served as a storage area was connected to the main room via a huge staircase. There was a completely new kitchen and a place for a server room. Tools and machines were donated and installed for everyone to use. A much better Internet connection did its part and after a while the CCC Berlin became so lively and active that it attracted lots of other CCC members and fans from all over Germany, Austria and Switzerland. People dropped by, stayed for a couple of days and left the place slightly confused but heavily inspired. For a while, the situation became totally hippiesque. The club rooms became so cozy and comfortable, serving the general geek with everything he or she needed from food to connectivity to music and comfy sofas that people started not to leave the place at all. Or rather: leaving the Club felt as if you were leaving a very good party and returning later on felt like „coming home". At one point the club never got deserted at all. It had achieved 24/7 activity. You could come whenever you wanted and there was somebody hacking away. A hacker's dream.

Of course, this lifestyle doesn't come without problems. But it is usually not really complicated to deal with it as long as you maintain a common

sense of the „commons" of your hacker space. At CCCB we still maintain the weekly meeting where anything that annoys people is brought up and usually decided upon so things won't get out of hand. But all these troubles are nothing compared to what the warmth of the space is donating to each member's life. It's a hangout, but it's also a newsroom. It's a space for relaxation but also for strong activity. The space serves both for regulars and newcomers and is also a place for doing public events or private partys. It's totally worth it and it must be maintained.

After some time, the CCC Berlin became the envy of other groups and they decided to have their own hacker space. Most notably, the C4 in Cologne and the Metalab in Vienna took their share of inspiration from the CCC Berlin - and also the c-base in Berlin that is hacker space of another kind albeit not directly CCC-related (but with lots of people being members of both clubs). The CCCB has also been a home base for the birth and rebirth of certain events of the Chaos Computer Club most notably the Chaos Communication Congress (that moved from Hamburg to Berlin in late 1998) and the open-air version of the Congress: the Chaos Communication Camp. Without the club rooms it would have been impossible to organize these supersized hacker conventions. The rooms were both a meeting and a recruiting space. Whoever looked capable of doing something was sworn in on-site and assigned to tasks he or she liked to do. The CCCB spirit eventually spilled over into Congress and Camp and made these two events some of the most important and defining events of the hacker movement.

It's worth noting that CCCB is just one of many CCC hacker spaces today. Every city adds its own genuine flavour to how the local community is shaped and acting and it's the difference in culture and ideas that cross-influences the CCC community as a whole. It is a friendly competition of cozyness and crazyness that keeps the CCC young and fresh. The hacker space idea has hugely contributed to this and strongly defines the global hacker movement in the 21st century. While the Internet has opened intercontinental communication it has actually made the the case for real physical meetings spaces where you can attach faces to e-mail addresses. While a global village has been the vision from the start it is the hacker spaces where this dream becomes reality.

c-base

In August 1995, Hardy Krause found a shard of space wreckage in central Berlin. It had the words „c-base project - be future compatible" engraved on it. Carbon dating revealed that it was over 100.000 years old. Since this discovery, c-base researchers have been working to reconstruct the crashed space station this shard was a part of and eventually lift off.

A first analysis revealed a c-shaped architecture with seven rotatable circles. The center of the station is located under today's „Alexanderplatz". The already reconstructed area of about 700 m2 provides several laboratories, research and construction areas and a culture deck. The „Fernsehturm" was part of the space station and was occupied by the GDR government. We notice that many people are astounded when they realize the amount of research that has gone into the history of the space station. Returning visitors notice the ongoing reconstruction work. The „c-base e. V." has been founded for exploring and reconstructing this space station and making it publicly available. This non-profit association has become a knowledge pool and place for ideas with a multiplicity of scientific, technical and future-oriented people.

The implemented projects are diversified: conventions, art festivals for movies and media, theater, concerts, film productions, radio, open source software releases. Regular weekly events are held in the space station and cover topics such as the construction of antennas for the wireless „Freifunk" project, the „Open Stage" for musicians, the „Go Lounge" for players of the ancient board game Go, a table for 3D engineers, and Ubuntu workshops. Tradions at the c-base include the annual participation in, „transmediale", „Chaos Communication Congress", the „World Towel Day", „World Space Week", and the Spacemeal – a Space Food Design Competition.
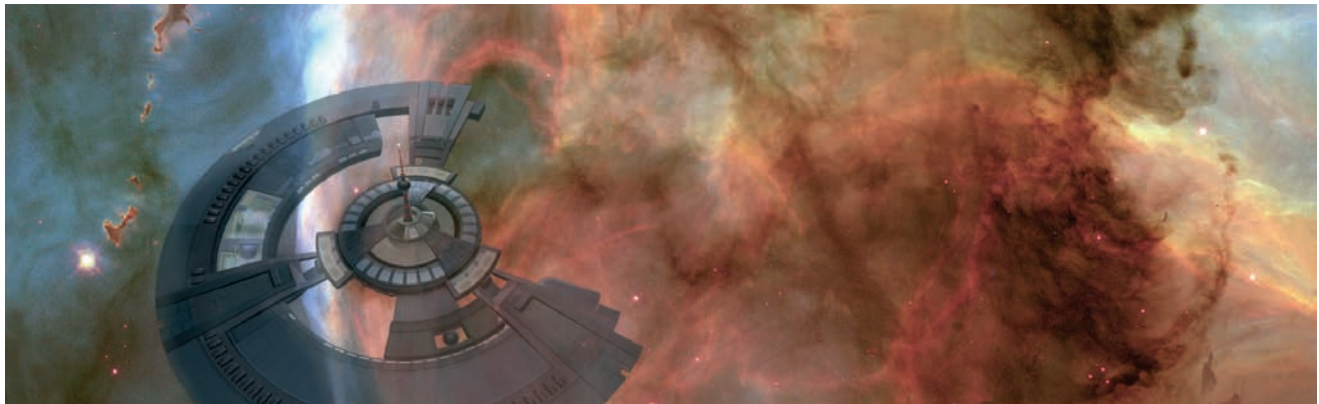
C4 Chaos Computer Club Cologne

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Location:  Cologne, Germany
Tagline:   "The Western bridgehead
           of innovative applica-
           tion of technology with
           all the features you'd
           expect in the Chaos"
Contact:   oeffentliche-anfragen@
           koeln.ccc.de
Web:       http://koeln.ccc.de
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C4 started in 1997, when the fact that the self-proclaimed 'media capitol of Germany', Cologne, didn't have a space for hackers to make things became unbearable. The name C4 is short for 'Chaos Computer Club Cologne', not the plastic explosive of the same name. After a brief odyssey through other locations, the group settled down in its current space in 1999 and expanded to the present size in 2003. The initial vision was to create a place where those who associated with the Chaos Computer Club could work together on projects, be it software, hardware, or civil rights in the digital age. This idea continues to work today.

When the C4 started, it was hard to gain momentum. Getting the critical mass of people to pay the rent turned out to be a problem though. Finding a room for the hackerspace involved scouting, good connections, and luck. As a member puts it, 'Probably every budding hackerspace will think this is harder in their city than in other cities, but it's actually the same everywhere.' The C4 is now located in the basement of the former 'Kartonagenfabrik' (cardboard packaging factory) in Cologne-Ehrenfeld, which surely doesn't help against warm air in summer at all. At a total of 111 square meters in size, the space provides ample room for a couple dozen regulars (members as well as non-members), but bigger events like their popular monthly event OpenChaos already strain the capacities.

Once a week, a members-only meeting is held to deal with administrative work. The space is open on most other days, with a public meeting on Thursdays. During school vacations, the space frequently operates 24/7. Some of these times there are scheduled talks, sometimes people work on projects, or they just hang out and talk. The C4 is a place to hack, cook, and even do your laundry.

The Cologne hackerspace can be proud of quite a few happenings: One of the first public demonstrations against internet censorship in Germany arose from the C4 - 'We actually made nerds walk the streets!'; in 1999 they put together the 'Hackschiff' (hackship) tour which cruised the river Rhine with 200 hackers and a network full of wonders; the youth project series U23 shows young talents the hacker inside them; and it is the birthplace of the famous historic document 'Hacker Space Design Patterns' any hackerspace enthusiast should've studied at least once in his life. But almost definitely, the greatest achievement is that the C4 folks have been running their hackerspace in a sustainable way for more than 10 years!

Asked for the most terrible disaster they ever experienced, a member recalls the following incident: 'We once had a fire in the server room! In early 2006 a fire emerged from wastepaper in a trashcan in our server room. The fire was detected by our neighbors and put out quickly by the local fire squad. Not much was damaged by the fire itself but the smoke residuals stuck to everything and anything so we had to refurbish the whole lab. We washed all and every surface, cleaned all objects including servers and our library of ancient hacker literature (yes, books!), repainted all walls and threw out damaged stuff.' Minor catastrophes also involved the (very brief) period of time when C4 ran out of Club-Mate and hackers ran amok. In more than 10 years of its existence though, a shortage of Club-Mate luckily only occurred once.

C3D2

When C3D2 began, the idea was familiar from places like CCCB and Netzladen because Fukami has been there and all others liked it very much. The vision was to have a place to meet and „to nerd". The first space was called „Büro" (Office) because it sounds like dusty folders and would hopefully scare off the impatient.

Founding a legal body was the first obstacle at the beginning because it was opposed by many due to disagreements of legal statements and legal bodies in general. Nevertheless, they had to do it. The second obstacle was that the first space belonged to a person's flat. That didn't go well because of personal circumstances - it is really recommend for every new hackerspace to get a place independent from a single person as soon as possible.

A lot of new people are scared by the fact that everybody just sits in front of their laptop and chatter among people is scarce. Others sometimes feel annoyed by people talking bullshit. But if people can get around the nerdish atmosphere they can have a lot of fun.

In the hackerspace, there is a soldering place and a ton of unused, half-working hardware. People smoke in the server room and there are 2 fridges with fresh Club-Mate, so every Club-Mate addict is happy. The WiFi and Ethernet networks have IPv6 and are connected to people's home networks via OpenVPN & BGP. There's also a very annoying Wii console that nobody plays with.

C3D2 meets weekly on the so-called „Chaos Tuesdays", like most other German (CCC) hackerspaces and occasionally more often.

C3D2 is not billed for electrical energy and once the landlord was shocked to discover our server farm and thought the recent rise in power usage on this floor was explained. That resulted in some stress until an artist neighbor with a kiln was discovered.

According to a member, there's way too few things happening there. They do monthly radio shows and multiple „topic evenings" a year, but that's not really connected to the space. They also organize an event once a year called „Datenspuren" (translates to something like data traces). This event is mainly dedicated to politics and technology.

If you're interested in starting your own hackerspace, they advise that you find cool geeks with time. Ideas are something a lot of people have.
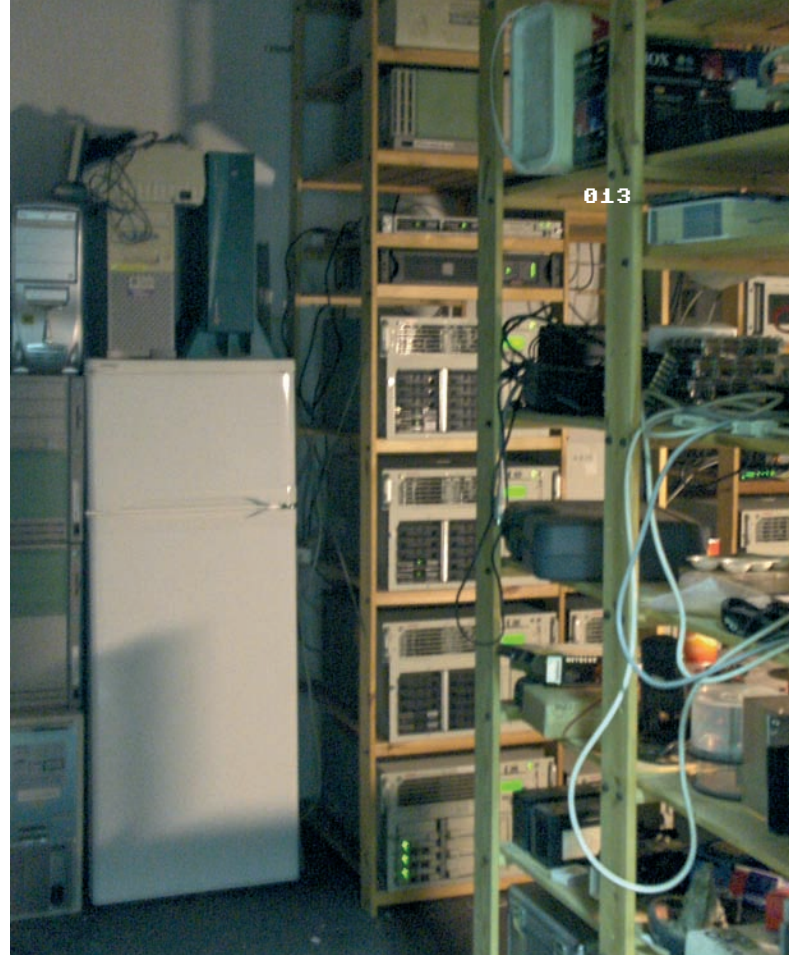
Chaos Mainz

It all started five years ago, when a few students met at the physics department of the local university. Once a week, half a dozen of people would gather to talk about technical stuff, and right from the beginning it got clear that only a room where one can meet, hack on projects and hang out could solve a number of problems. The meetings took place in a lecture room with a sterile atmosphere, and there was only one person with a key to the physics department. „If you were late you had to call the guy with the keys to get into the building because after the agreed time for the meeting he had to close the entrace to the department." Since not every visitor of the meeting was a student of physics, students had to share their internet access with them, which ended in the physics guy having to type in his own password for the WiFi of the physics department. Things were horrible, but they got worse when the physics guy left the city in order to study in another town. So they had to find another place where they could meet.

There was a small pub on campus which was run by a few students, so they settled down at the pub. With the move, they started calling their meeting „Chaostreff" to clarify the connection to the Chaos Computer Club. When their club was offically registered, it was named CCC Mainz (CCCMZ) to keep this very connection. They started to look out for dedicated rooms where they could meet, since a pub is a terrible place for talks and hands on sessions. „At least we got some experience in the TCP/IP drinking game." They found a room which they could use free of charge, once a week. It was in a local youth center, whose main goal was to give young people from social hotspots a place to meet. They had a number of bizarre situations with the young folks at the youth center: „I will probably never forget the chat with a few guys from the youth centre about

programming languages, where some guy asked us to talk in C. Not to mention the strange situations with Club-Mate." From the beginning on they had the feeling that it was not the right place to meet, and after a few weeks they had to move to another room in the center which was full of television sets. First everybody was excited about the TVs, since they had the impression they were in some evil media lair, but: „hell it was frustrating. Hacking on stuff in a storage room. Forget it."

They had the urge to change the situation and to find another place to meet. In Wiesbaden, a neighboring city of Mainz, they knew a few people who had started a alternate culture center - a place where artists, musicians and creative people could meet in order to do their stuff. It was the beginning of something new. From then on they had a place where they could meet and work in a more comfortable environment. They started with 8 regulars at that place, and nowadays they reach numbers of more than twenty. They decided to rent additional space in the building and started to transform the building into a hackerspace. Thus far, they are still a quite young hackerspace, „but once the infrastructure is in place, it'll be really great." They've randomly found a shower behind a wall in their Club-Mate cellar, which lead to much rejoicing.

Their location is a wonderful place to get in touch with other people. It was the birthplace for their own radio show and they also got in touch with people who helped them to do Lego Mindstorms courses for kids - in cooperation with the city's youth welfare office. Besides working on the infrastructure, other projects include an 1000 LED cube, an autonomous rover and a POV display project. They are also working on getting their newly acquired vending machine online and they have started a photography group which is building flash light arrays and other light toys to implement LAPP projects.

There are regular meetings on every Sunday starting 15.00 and Tuesday starting 19.00 o'clock. At these meetings, they either work on their projects or are just chatting about tech stuff and drinking Club-Mate. They also have weekend events called Braindump and Geekend which are announced on their website. Please feel most welcome to visit then.
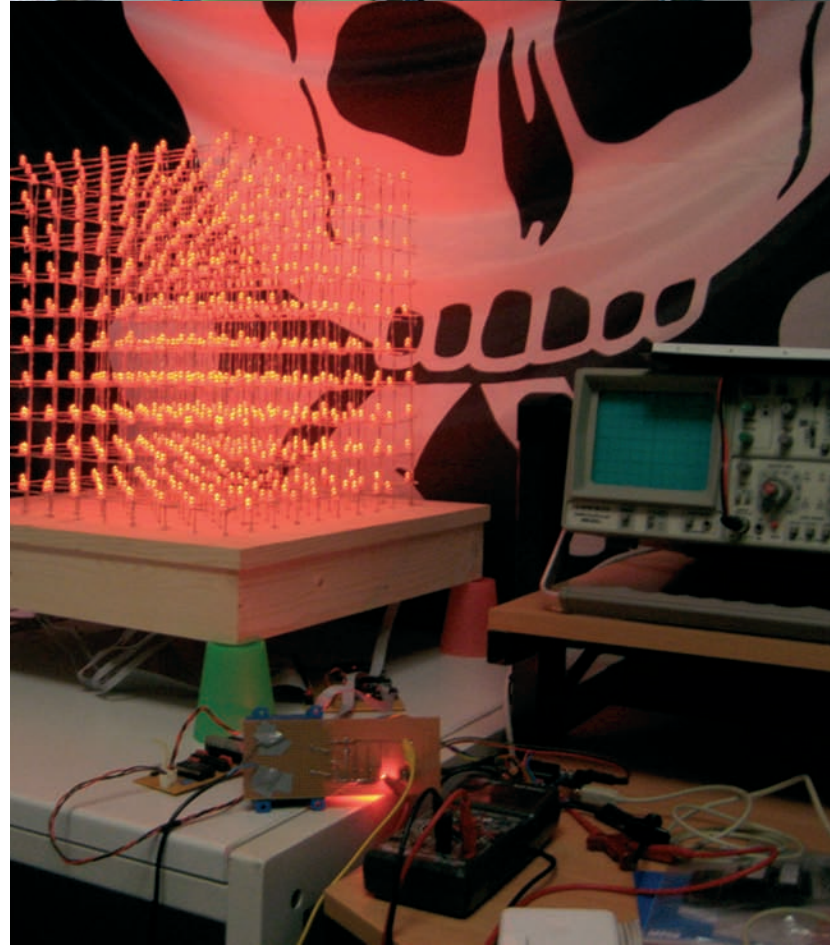
Datengarten CCCHB

We, the Chaos Computer Club Bremen, Germany, own a little place we like to call the Datengarten which roughly translates into datayard or datagarden. Well, on second thought we do not actually own it in the strictest sense, but we have certainly made it our own.

The Datengarten is an allotment with a house in a suburban area of Bremen, surrounded pretty much by other allotments, an out-of-business railroad track and untamed nature. Once upon a time, in a dark, pre-broadband time there was a war which left a good part of the town destroyed and many people without a place to live. Some of these people just went and build houses on land that had previously been allotments. The problem, however, is that this happened without construction permits. Remember this all takes place in the wonderful nation of Germany, where we hail bureaucracy and order. So after a while the city rather wanted to get rid of these disorderly squatters. Policy was to not kick people out of their houses but to wait until they moved somewhere else, leaving the place empty and therefore eligible for demolition by the city. However, in our case the dire financial situation of the town of Bremen plays to our advantage. The city doesn't know when they'll have the time and more importantly the money to tear down the place. This is why the owner and previous inhabitant has given it to us to do as we please until the bulldozers come a-rolling, for the symbolic rent of one whole euro per month (considering that won't even buy you a full liter of gas over here, that's pretty generous).

When we first visited the place it was rather run-down and, well, gross. But soon a group of volunteers began to take care of the most pressing issues under the tight regiment of Sven, the Datengarten's daddy smurf. Being a bunch of nerds, it was generally perceived that the most urgent of all these issues was of course to provide internet access for the masses pilgrimaging to the Datengarten. We installed power, internet access, tidied up both yard and the inside of the house (to a reasonable level) and formed a tight bond with the neighbors. Ok, to be frank we were off to a rather uneasy start due to the fact that these neighbors are mainly elderly people (the type that puts up lawn gnomes in their front yards) and we are mostly long haired nerdy creatures who drive their cars too fast past their allotments, light up furniture in our garden (but only that ONE time) and play loud music. We had weekly barbecues in the summer months, painted posters for protest marches, stored retro hardware, had ghost story readings and a celebration after the world didn't end back in October when CERN pressed that button. Mainly we are just our fabulous geeky selves, always having a full stock of Club Mate and Beck's beer in the fridge.

To this day, the Datengarten remains a work in progress. But we really hope the city's financial management doesn't improve anytime soon and the Datengarten will therefore live to see a couple more summers.

Netzladen

The Netzladen was founded because of the lack of places where you could meet and follow your projects and have free internet access as well. The opportunity to found the Netzladen presented itself when the anarchist union FAU needed a financial partner to further afford the rent of their domicile. The „Freie ArbeiterInnen Union" (FAU) and members of the Chaos Computer Club (CCC) together had organized a demons-tration against Internet censorship that had been a huge success. The Netzladen is now open for all kinds of projects - not only technological - that need space and Internet at the same time.

As with many other such ventures the main obstacles were to prioritize as well as to get the funding started. There were political and bureaucratic obstacles, too. Nowadays the funding is not an issue anymore and the political obstacles from the past are what makes the Netzladen so interesting today.

The Netzladen is everything for everyone as well as open for anything free and self-organized. Not only the processes of finding new projects and friends is open to all members but also the differences between every one project enriches the whole venture. The members range from political activists to intellectual literature nerds to the technological geeks and Linux wizards one might see in other hackerspaces. The Netzladen is very much about the people who meet there on a regular basis. Meetings usually range from once a month up to once a week. Fridays are open to everyone from every involved project and Saturdays and Sundays may be booked for social events like parties, birthdays or just hanging out together.

The Netzladen recently had to be renovated because the 2nd floor partially came down. Nobody was hurt, but still this woke everyone up and reminded us that it was time to fix some open architectural issues.

The Netzladen is strong in political areas like small unions and the fight against Internet censorship. The MirBSD project had its roots in the Netzladen and some Mac security exploits were discovered here, too. I think what everybody in the Netzladen can be proud of is the annual international open source conference FrOSCon that has been very successfully organized by some of the main members of the Netzladen for the past four years.

If you're going to start a hackerspace, I think it's essential to believe in the project and carry on even if others doubt you - there are always people who doubt the success of such a big venture, but you are the ones who can make it happen.

Entropia

Back in 1998, some people wanted their own Chaos Computer Club meeting in Karlsruhe, and so a Chaostreff was born. After meeting regularly for a while, people wanted to have a permanent place to meet and hack stuff. Finally in 2001, they found a neat little place in the Gewerbehof, a self-run facility providing space for several social initiatives, a community radio and businesses. The very same year - now settled down -, the now called Entropia became the official fraction of the Chaos Computer Club in Karlsruhe. In order to have a legal status, an incorporated club with no hierarchy and elected leaders was founded just for the sake of legality.
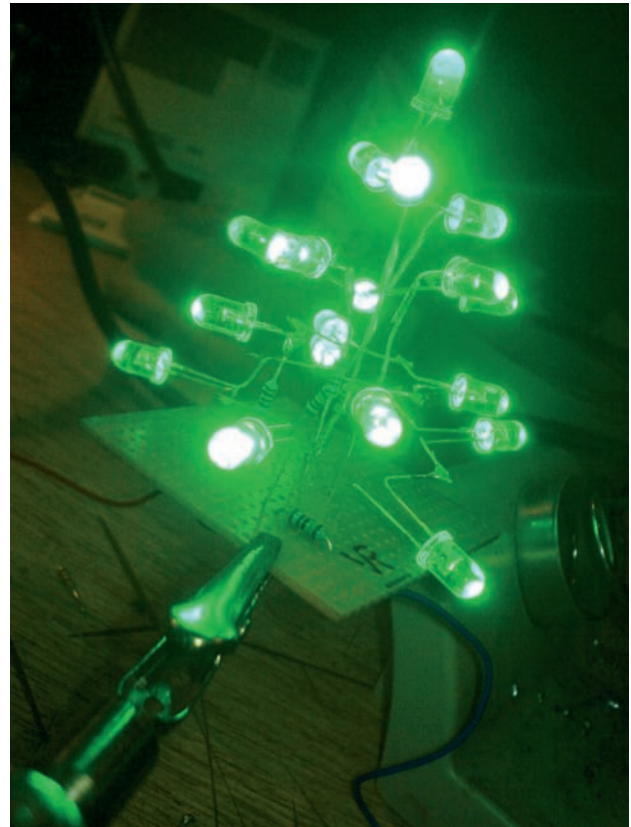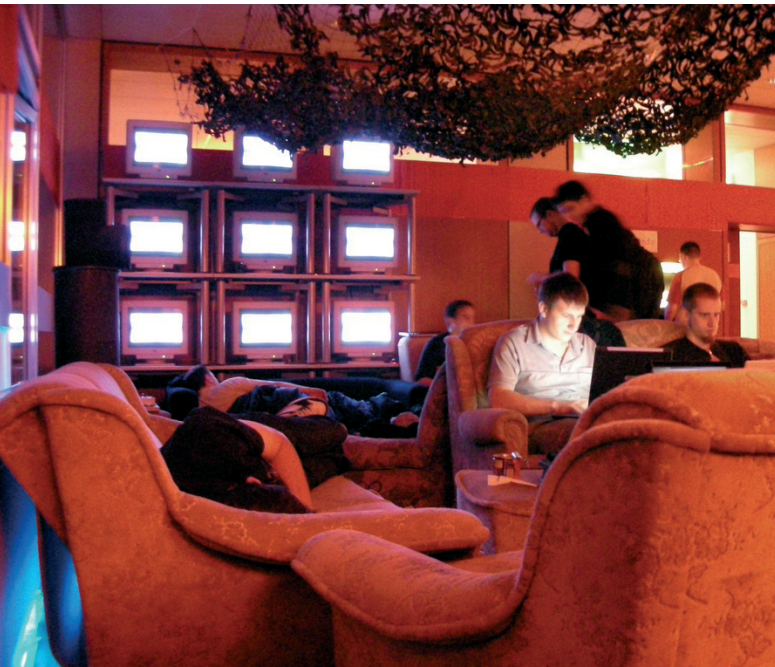
Like so many other hackerspaces, the main problem Entropia encountered in the beginning was money, so members tried to find some dot-com companies that would sponsor the institution. Also, they had to struggle with German law-of-associations bureaucracy which in the end was defeated. As of today, Entropia is able to fund itself by monthly membership fees of six to ten Euro, depending on whether a member still has student status or not.

So what do Entropianists get for their membership? Generally, the space is open 24/7 for keyholding members, whom they affectionately call

„the regulars". While they're open to visitors whenever a member is at the hackerspace, new people are traditionally encouraged to stop by on Sunday evenings; but of course everyone is also invited to come over for irregurarly held gatherings like lectures, workshops, and parties.

People at Entropia are especially proud of their annual hacker meeting „Die GulaschProgrammierNacht" (the goulash programming night), which attracts about 120 attendees each year. Additionally, lots of small projects are conducted and procrastinated at all times by groups or individual members with very diverse interests.

When not partying, members mostly engage in putting the soldering irons to use and messing with the oscilloscope to build blinking, annoying - and sometimes useful devices. What catches the immediate attention of visitors though is the huge amount of awersome [sic!] old-skool hardware lying about that has been amassed over the years. However unfortunately, it isn't functional at all... Besides that, cute party leftovers serve as decorative elements. You'd be amazed of the assembled collection of a mind-blowing spectrum of music they have at their fingertips!

Apart from creating a hackerspace with just a few lazy students and almost no budget, there surely have been other challenges Entropia had to face over time. One of these a member recalls as follows:

„Once (ok, twice) the windows were left open during an evil German storm. The Mac filled with water, and during a reconnaissance mission it switched on due to the special electrical characteristics of water. This caused the death of many a piece of innocent hardware. And the carpet was completely destroyed. Ever since, Entropians only refer to this disaster as „The Incident" and now are in the process of deploying N.E.R.D.S, an No-Incident Early Response Detection System."

Creating such a hacker space is easy, he notes, if you follow these simple rules: Gather as many people as possible, and abstain from hierarchies or leaders.

CC Itzehoe

The Computer Club Itzehoe started as a 'Linux User Group' around the year 2000. At that time, some guys got together to teach each other something about Linux and Open Source. The amount of people participating increased fast and so to accomodate this fact - alongside some financial reasons - they decided to become an 'official club', called an 'eingetragener Verein' in German. In order to acquire this status in Germany, an organization has to fulfill specific qualifications. For example, CC Itzehoe had widen their focus towards a broader range of activities

and topics. Therefore, the Linux User Group became the Computer Club Itzehoe, Itzehoe being the small town in Northern Germany they're located at. After this transformation, users of other operating systems started joining the club as well. One main goal evolved: Experiencing computers and helping others to do the same. Asked about a motto on what they call their 'technical foolings', a member points out, 'Why are we doing that? Because we can!'

While the CC Itzehoe is a respectably sized hackerspace today, one of the obstacles in the beginning lay within finding suitable premises that would fulfill its members' needs. What they learned then, was that 'when you find a space, hierarchy and rules will follow'.

The location now consists of three rooms and a bathroom: A smaller one, the 'members room', is set up as the place where all members and

guests alike can sit together in front of their computers to 'do their thing'. The second, slightly bigger room serves as a group working area with desks and couches, and is mainly used by members working on various projects side by side, or just eating pizza. Next to that, an inventory - equipped with all kinds of hardware one can possibly think of - is located; it also holds the workshop area & electronics lab, where all required tools and the space needed for soldering or repairing devices can be found. Also in this room, visitors may have a look at what members of the space enthusiastically refer to as 'the nostalgic area': a collection of computers from the past ›20 years, featuring for instance Atari and VAX. The third room acts as a training classroom for meetings.

General meetings happen once or twice a week. There is no specific schedule set for these gatherings, so everyone can do whatever they want - like working alone or in groups on projects, seeking help with problems, finding people interested in similar subjects, or just meeting nice, like-minded people to chat with. A member of CC Itzehoe comments on the community aspects of the hackerspace, 'At the moment, I'm most proud of the wide knowledge we can provide. Every guest with a question, regardless of the topic, always finds someone who can answer it. So in our town we got a reputation as a kind of group of specialists.'

To sum it all up, the Computer Club Itzehoe writes, 'I think the start of our hackerspace was some kind of luck. Some People met and got on with each other, so they started a club. For the following growth of our hackerspace in the past years, the press was a great help I think. Especially in a small town like ours, you can reach people over a local newspaper. A small article about your hackerspace or perhaps about an actual topic, every six months or so, can be very helpful.'

Das Labor

When asked about the very beginnings of their hackerspace, Jörg from Das Labor gets a little sentimental. As of the end of 2008, the space just moved over to a new, larger location: 'Many people were working to make that happen, some of them were already there in Februrary 2005, when Das Labor was founded, others joined more recently. So in effect, this is like talking about ancient history at a time when new things emerge.'

Back in January 2005, no coherent group was actively working on building a hackerspace in the region. Several small groups, some of them having monthly meetings in pubs in that area (e.g. the Linux User Group and a local offspring of the Chaos Computer Club) had loose interaction over various mailing lists. And there were highly motivated students from the newly founded faculty for IT-Security at the University Bochum. But suddenly, there was an opportunity to rent a part of a building, approx.

70 square meters, in sublease. Like an avalanche, they tried to reach as many people as possible, very much in a hurry, for there was another applicant for the room - an alternative music store. Eventually, it was a coin flip which decided in favor of Das Labor and against the music store. Jörg reminisces about that time, 'One point, which could also have turned into a major problem for us, in fact turned out to be a great strength: when we initially visited the potential hackerspace, most of us met for the very first time. But the place looked perfect for our purposes, it was an energizing meeting and we soon knew that we wanted to try it. So we had to rapidly distribute responsibility among people who hardly knew each other. Everybody was eagerly invited to participate - 'Go ahead, try it! If it works we'll do it that way' was the generally accepted approach. In only two sessions we managed to set up our tinkering place, agree on our current name and logo and legally register our club. We distributed access rights so quickly that we totally lost track about who is a key-owner to the place and who is not! The name 'Raum 5' was, for various reasons, a high ranking candidate for quite some time.'

The space itself also serves as a meeting and working place for various other independent groups, including open source user groups for example. Workshops, talks and other events are frequently announced on the front page of www.das-labor.org. Das Labor is open and frequented almost every day for tinkering or just keeping in touch and hanging around. Currently, organizational meetings, where most strategic decisions are made, are held only once a month on Thursdays; but in general, most topics - organizational as well as technical ones - are discussed on the mailing list.

Since the early days, Das Labor members are working on a lot of projects in the area of embedded systems. A CAN bus is connecting gadgets distributed all over the place, used for light and plant automation and for fun. 'Blinken-stuff', in particular some fully controllable 3-dimensional LED cubes called 'Borgs', are built using microcontrollers or FPGAs. Other topics of constant high interest among hackerspace members involve cryptography, computer and network security in general, operating system design, retro-computing and even lock-picking.

sublab

The vision, as described by members, was „to have a space for geeking out, hanging around while talking lolcat, laughing about xkcd, and finding „anonymous against" funny. Besides all that, we wanted to do some serious work for a mature information society. We stand against humans losing all control over their privacy and personal data. We want to be educating kids and teachers how free software can work and what huge society impact it can and will have on the world in the near future. All the nerds, geeks, haxen, freefunkers, drone-flyers, clandestine bastlers, media tweakers, fm and spectrum activists and society utopists can join forces in our space."

When Kloschi, one of the founding members, returned to Leipzig from 24C3 (2007), he was intent on finding people and setting up a space to geek around in a nice atmosphere. „At least I needed it, expected the other folks in Leipzig to need it, and was sure the city of Leipzig itself needed it badly."

After talking to the Freifunk people and the guys from c3le, the ages-old wish of having a hackerspace came closer to reality. All they had to do was generalize the ideas behind a hackerspace and give it a go. They decided not to have a space in the name of a specific group, but create the space as roof for all projects in and around Leipzig.

While having this vision, a floor in the former fittings factory was found and a quick call to participation among all the cities' groups and mailing lists brought up enough enthusiasm, money and manpower to give it a go. Suddenly everything happened at once, renting, renovating and setting up the non-profit association. They have 250 square meters, with a main hall and five other rooms, which will eventually evolve into workshops, teaching rooms and a lounge.

Even though most renovations were finished in 2008, the heating system is still a bit of an issue. But the only obstacles which came up in the course of the inception allegedly was them fighting their own narrow mindedness while trying to establish alternative structures.

There is a weekly „Kaffeeklatsch" open to the public on Sundays, and other groups meet once a week.

ls /world/europe/rest\ of\~

Metalab

Metalab got started after they saw some inspirational examples of hackerspaces and geek culture at CCC and c-base in Germany. Vienna didn't really have much to offer in that regard, and they dreamed of a place to meet and collaborate on projects. What they really wanted was a public living room or laboratory where people could meet and work with friends - without having to go to a cafe, pub or workplace. Their vision wasn't exactly the same as the German hackerspaces - while their spaces and focus had grown historically over decades, Vienna had nothing comparable at that point. So they just tried to gather all the cool people they could find, with skills and interests as diverse as possible, and told them they wanted to build a space together.

Their name developed from the fact that they wanted to have a „laboratory", but one for all kinds of things and projects. They aimed to create an environment encompassing a plurality of interests, professions

and genders, thus Metalab. Their logo depicts a phone booth – old school, public-access technology that has certain mythical qualities in fiction (examples include Dr. Who's TARDIS that serves as a gateway into other worlds, and Clark Kent turning into Superman in a phone booth).

Setting up Metalab turned out to be an educational task for the two founders, which at the beginning were faced with tasks that seemed overwehlming. Early on, though, they brought in more people, and with 30 to 40 backers, the decision to rent a room, which would've been very risky without such support, was taken.

The first big discussion, and one of very few that had to be resolved by a vote, was the smoking policy in the lab. Should smoking be allowed, for-bidden, or confined to a certain room? If so, what size of room? To avoid endless discussion, people all voiced their respective opinions at a meeting, and then proceeded to vote. A temporary solution ended up becoming the permanent one, and now their lounge (where the gaming consoles are, and movies are watched) is the designated smoking area.

They established the infrastructure – power outlets, the kitchen, the floor etc. – step by step, while actively using the space. This led to an endless Sokoban game, where certain rooms became unusable for many months at a time. It was unavoidable, since they did not have the financial power to fix everything at once. It took a long time until the infrastructure for membership administration and (automatic) bank collection was established. Usually, nobody wants to do these „boring" tasks, because people prefer to hack or slack. If you can, build the stuff before moving in - afterwards you'll have your hands full with work.

People who visit the hackerspace will note that it's a very creative, if somewhat disorganized space. Self-built machines, huge paintings on the walls, whiteboards where people express their thoughts. Many details of the decoration refer to the culture the inhabitants all grew up with, for example the blinking Space Invaders in the lounge. They have a small but well-equipped workshop and make room for tools, computers, and audio hardware. They also have a fully stocked kitchen, which sees lots of use. There's also the LED Matrix, a 72x48 blue LED matrix. They have a twitter-enabled fridge and a constantly-evolving RepRap. Two of the smaller

rooms have color-shifting ceiling lights, and one of them can even be set to exact RGB values.

The core/organization team (which is not clearly defined, so everyone can join and take up tasks) meets monthly to discuss matters relevant to the whole hackerspace, like current and future renovation projects and equipment purchases. There are multiple special interest groups, which meet more regularly and often spontaneously.

The lab itself is open every day, usually for 24 hours. Every regular member can get a key and people meet on a daily basis. Metalab was also the place where the commercial web startups soup.io (personal publishing), Mjam (food delivery) and art group Graffiti Research Lab Vienna were founded.

They've been lucky to be mostly free of disasters and accidents so far. The worst one was when internet access was cut off for days (weeks even!). While renovating the lounge and drilling holes in the floor, they damaged the underfloor heating, resulting in a small fountain - lucky for them the heating system operates under low pressure. Marius burned his eyebrow on the 2007 hackercamp organized by the CCC while operating their homemade potato gun. HonkHase hit a MIG fighter plane while

riding a bike because the potato gun distracted him. Besides that, a few valuable items (external harddrive, portable gaming devices) have gone missing, possibly stolen. Regarding lightning: a strike has been observed on the street directly in front of the lounge window. No disaster, though.

Asked about what they found crucial to success, they said that choosing a central location in Vienna that is easily accessible by public transportation was essential. In the outlying suburbs it's usually cheaper and the neighborhood might be less sensitive, but it is a big advantage when people can drop by easily after or before work, university, high school or during their nightlife/leisure time activities.

A geeky hackerspace doesn't have to be restricted to coders or electronics folks only. A proper inter-mixture is moar awesome. Don't underestimate the need for storage space and don't pile up junk if space is limited -- everyone has broken old hardware at home, make sure they keep it there.

If you're starting a hackerspace, they offer this advice: Don't give up if people tell you that it's not possible. Most people only believe in what they can touch. The same people (if they are geeks) will love the place once they can touch it. Illustrate your vision with visual depiction where needed. You can borrow such material from successful hackerspaces.

Don't establish too many rules. Decide issues when you need to - not beforehand or just in case. Humans are most productive when they do the things they want to do in an environment that encourages these things. A hackerspace can approximate this sphere very well if everybody at least cleans up their own dishes. Shared geeky interests can be a wonderful thing. Let folks and groups decide on their own how to promote and brand their work. It is important that the hackerspace doesn't act like a octopus that eventually captures every credit. The hackspace should be seen as basic utility but the work is done by individuals and not by the infrastructure provider, it just happened in this rooms and environment. Nobody has a problem to give credit for the latter and groups can build up or keep their individual identity.

RealRaum

There is no consensus on how the RealRaum came into existence. Already it's been years and the truth has long since been forgotten in the darkness of time. Some legends however, still remain. For instance, records suggest that at some point time travel might have been involved. The club „wirdorange" was actually created long before RealRaum. This is strange because the clubs only purpose ever was to be RealRaum's legal entity.

Nobody remembers why and how this happened, not even the people who signed the application.

According to another legend, RealRaum naturally came into existence when members of the different Graz based projects: MKL, STG, grml, mur.at and 0xFF Graz discovered their need of a common base for their activities. Magic *Poof*. Instant RealRaum. Yet another legend tells of a lone code warrior, who came to Graz with the mighty vision of a RealRaum ready in his mind and upon gathering fellow minded folk, proudly strode forward to turn idea into reality.

Likely all three contain some grain of truth. Venturing back into the harsh realms of reality, it is safe to say the idea was already lurking in their heads a long time before it was realized. As for the name itself, the idea was to have a real-life space for their projects. Thus, right from the begin-

ning „RealRaum" became the working title and later attempts at finding
a better name (ideas like „01 Graz", „Solaris", „abgestürzte Magier"
came up) never quite evoked the same acquiescence. Ever since then,
the goal has been the advancement of Tech, Love, Harmony and the
traditional Austrian coffee and tea culture. The most notably result so
far is probably anytun (www.anytun.org), a secure anycast tunneling
implementation.

The biggest obstacle they had to overcome was the room. Specifi-
cally getting enough people to pay the rent. So at first they actually had
no room, but held workshops at other locations. Later they rented an
old, small and somewhat hidden flat in the center of Graz.

They got tables, chairs, couches, many public IP addresses, native
IPv6, an USRP, a wide-screen projector, a network laboratory consisting
of 53 Cisco routers, SmartCard and RFID readers and other tools. Then
they set up their own XMPP and VoIP infrastructure and crafted their
custom made door control system. However they soon ran into pro-
blems with the landlord and also the combined costs for renovation
and the planned electronic laboratory. They solved those by moving
out. Right now they are in the process of setting up in a room at the
ESC (http://esc.mur.at/), a centrally situated building dedicated to
media art and cultural technology. The other problem they have to
deal with is that Graz is a commuting student town. Meaning, many
prospective members don't have much spare time during the seme-
ster and are not in town during lecture free times.

Currently they meet at least twice each month. Each month one
of the members holds a different presentation about anything they
like. So far this has sparked the Linguistic Weeks, presentations about
Security Incidents, Linux Networking, the creative uses of potatoes and
some really weird stuff. On top of that there are irregular social events
like cooking and gaming nights.

Finally, they found that the most important thing for a hackerspace
is to have motivated people with lots of time. The best way to get
them is to produce content, hold events and generally be visible.

/tmp/lab

/tmp/lab started when several french people (Jeremie, Florian, Philippe, Benjamin, Xavier, Xeu, ...) met at Chaos Communication Camp 2007. Everyone agreed that Paris was really lacking a hackerspace. They decided to create something when they got back to Paris and called it „lelab".

The idea was to rent something by sharing costs amongst all the hackerspace Members. Rent is quite expensive in Paris. They got an offer three months later from an artist collective to have an artist space outside of Paris, in the industrial suburb of Vitry Sur Seine. The building owner

temporarily gave them the space for no rent. The temporary nature of this, plus the space's distance from the center of Paris discouraged some people from the original group. Therefore, they gave the new space a different name, „/tmp/lab", so that when they'd find a good spot in Paris, they'd still be able to name it „Le Lab".

The little group composed of Xavier, Philippe, Sébastien, Rike, Florian and Nico took possession of the space, and after much cleaning transformed an underground workshop into an industrial-style hacker space in November and December of 2007.

However important - even vital - it may be to develop a civil space for technology creation and research, they didn't want the lab to become a new institution. The name /tmp/lab was inspired on one hand by the idea of the permatemp, the temporary that stays in place yet is still nomadic in concept, and on the hand by the Unix tradition of open systems.

The first goal was to provide infrastructure, as the respected „Hacker Space Design Patterns" presentation details, and let one thousand beautiful projects blossom in this fertile environment: open source, hardware, cultural and artistic events, activism, etc. They wanted everyone to see the /tmp/lab and say „Oh.. it's simple, lets build one with my friends in my town."

Just one year after the opening of the /tmp/lab, it has already spawned a myriad of projects. Many new people are joining the group month by month and just naturally connecting and cooperating.

They recently started to make more connections to local associations, NGOs and journalists who support the idea of getting their privacy back. Also, they are looking more actively for a new space in Paris where it will be possible to develop many more projects.

When asked about their greatest issues with the space, „In the beginning the first difficulty was to keep the space tidy, ... it still is!" was the first thing that popped to mind. But the main issue was that getting (and keeping) a space in Paris is very difficult.

Popular opinion designates the space as „looking quite industrial", not only due to the fact that it is located near a pharmaceutical company that pollutes happily. Some people also call it the „Bunker" because it's underground. Located near the railway tracks, a major highway, a fiber optic backbone and near the Seine river, this place is indeed a network junction. „Visitors might also comment on the size of our space. 250 m2 is quite rare near Paris, everything being small. You actually notice that about France as soon as you sit down in a French restaurant."

As for hackerspace layout, the star is a microscope station for chip reverse engineering, thanks to Karsten Nohl and the CCC. There's a place for /tmp/usine [making] and soldering. There's also a lounge, two beds to crash when tired and a kitchen/bathroom/shower. Also quite important is the sound system for parties etc. There's no wood workshop, but there are other artist studios around for this kind of messy work.

The biggest disaster so far has been rats; they had to get rid of them at the beginning of the lab. Ultrasonic worked well, but some people said it was a bit too much like the Mosquito anti-teenager system. Also they had their share of mosquitos, due to the underground location. A lot of the building infrastructure is obsolete, and mastered by Xavier, keeping it running. They had several issues with lighting the place properly which still aren't resolved properly.

One member comments on their progress, 'The great things that have come from the past year are great people, great contacts, good parties, fun projects such as Consumer B Gone and the Hacker Space Festival!'

And as advice they offer that, 'If you want to start a hackerspace - start it now, think later! Seriously, the thing is that a hacker space can be built anywhere and focus good energies. A tea ritual is also really good. It keeps people and hearts warm!'

moddr_

moddr_ came about in 2007, when a group of students and graduates from the Media Design MA course, at the Piet Zwart Institute in Rotterdam, decided there was room for another „new media" place in the city next to the already established and rather famous v2_lab. They wanted to create a place that was more accessible to young artists and hackers, without the need for overblown project descriptions and ridiculous budget applications.

The name „moddr_" resembles the Dutch term „modder', meaning mud, and the hackers chose this name to show that a large part of their practice involved the modification and re-creation of already existing technology. They tend to dislike the idea of contemporary media being labeled „new', and it is part of their mission to display a critical perspective on issues related to this through their artistic practice - basically, the lab consists of some very geeky fine-artists...

In terms of infrastructure, moddr_ are part of the WORM venue in Rotterdam (http://wormweb.nl), which also holds analogue film workshops, a sound studio, several online projects, and of course a good bar and stage. One of the obstacles to tackle was the integration of the hackerspace into WORM's larger structure, something which they now consider to be an ongoing process, and together with WORM, they now organize events, gigs, meetings, and exhibitions a lot.

Basically it is a small studio space which moddr_ uses as an atelier. It holds electronics, tools and equipment, networking facilities, a large meeting/eating table, a garden with BBQ and a tent for when it rains. No lazzzor...

moddr_ members work on a daily basis at the studio, however, they also travel quite a bit, so sometimes it happens that nobody is at the space for weeks. Going-on's in the space range from moderate productivity to insane parties, making plans for world domination and scheming the Singularity.

The Saga of the Whistling-Shit-Pipe; a bathroom renovation was needed to prevent our toilet from bringing forth weird crappy sound in C-Minor.

The „Pirates of the Amazon' Firefox add-on (and consequent drama), the „DADAMACHINIMA' exhibition, the „Web2.0_Suicide_Machine', and several workshops ,events and parties we did...

Don't do it man. Better get a job.
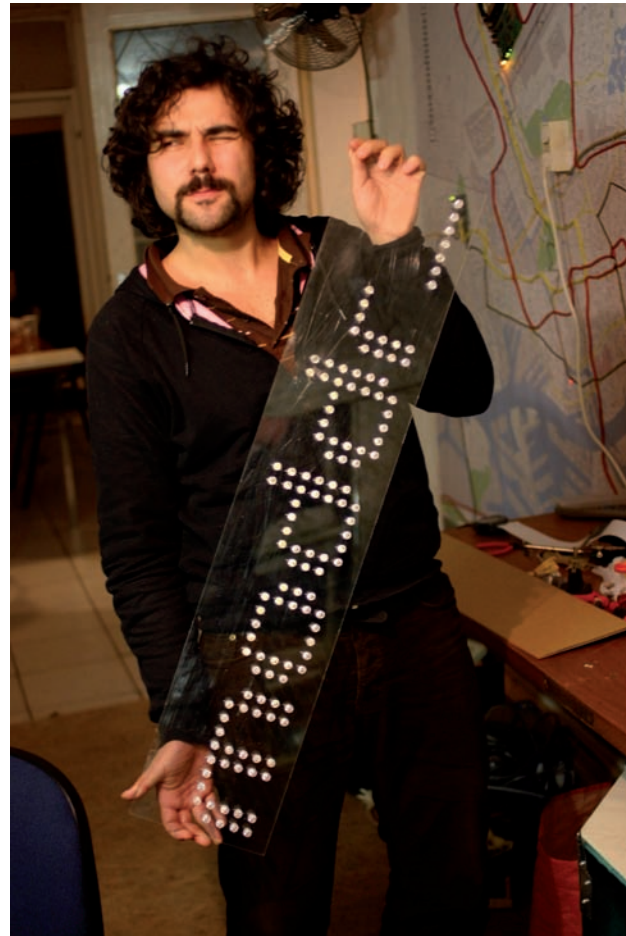
voidpointer

To quote a founding member: „I (Pieter) had a space which I'm squatting/rebuilding and been able to buy an old shop in Schaarbeek, Brussels, named it voidpointer and organized some social/art events/meetings there. Benjamin wanted to setup a Brussels hackerspace. [...] We're also involved in the local wireless mesh network, which is the main common interest for all of us for the moment. We just needed to give the whole thing a go. We set up for a bootstrap meeting [in October 2008]; since then we've been meeting monthly with unplanned meetings in between, just building things during weekends."

They operate on a completely non-funded basis and all material is either personal property, lent from local artists' organization ‚OKNO' or found somewhere.

The space is around 100 square meters. They've got a big window facing the street which makes it easy to show off the things they've done. They also have a little electronics lab (arduino, scope 50Mhz, soldering irons and a lot of junk), a library (lots of tech books, engineering computer science, science fiction). In the basement they've also got an atelier with lots of tools (steel saw, TIG welding station, wood router and saw stuff).

The idea is to use the space as coworking space during the week (so doubling it's use and get some revenue rolling in... „if all goes well") -- „though this is just an idea for the moment."

Activities range from having a coffee and talking about projects, assembling workshops to actually building stuff together. There's quite a few people involved from the creative fields, so they spend quite some time into finding creative uses for those technologies, building installation pieces etc.

There's no true manifesto of the space, other than „everything is permitted". Voidpointer only defines a location/address, but doesn't imply the activities/structure of things happening.

Hamlab

At the beginning the Hamlab was only a place where people could get online with free software, but afterwards it evolved into a Hacklab, a place where people get together to investigate with new technology and share the good news of free software. They didn't choose the name, as one day a guy came in with a ham leg and said that they weren't a Hacklab, but a Hamlab. Proggresively more hacktivists from Madrid and abroad came to join the hacklab and the space became a collective with various working groups and projects.

The main obstacle at the beginning was getting the people involved. They were only a few, but, with time, people started coming.

The hackerspace itself isn't big and has only two rooms: a big one for meetings and working together, and another one mainly for servers and as a warehouse. They also have a bathroom, and they're very proud of it. The freakiest thing that they have is an arcade machine (using MAME), all by the members.

They have two officials meetings every week: Tuesdays, for TRAS-Hware (recycling old computers) and Thursdays, for meetings, where they discuss their current projects. Every day, people are collaborating on projects and playing with wireless communication, working on the arcade machine or building websites.

The space floods occasionally. „It's nothing big, but could be a disaster someday." The worst thing is the humidity, which leads to a lot of static electricity, so people occasionally get buzzed while working.

Asking the members, their greatest personal achievement is starting the Hackademy. Basically they're lessons in free software, open for everybody, free of charge. They've done more than 20 in December, from Ubuntu installation, configuration and administration to working with Inkscape, GIMP, Cinelerra, Kino, Blender, and Drupal.

VerdeBinario

VerdeBinario is a cultural association born in December 2002 and located in southern Italy, in the town of Cosenza.

The name „verdebinario" literally means „green bits" in Italian, with their interest being focused on the relationship between environment and technology. Since its early days, the association is working on two main projects, both involving retired IT hardware retrieval and restore.

Their first project, „The Interactive museum of IT archaeology," is a permanent exhibit of historical computers, including mainframes, old PCs and video game consoles. Visitors are welcome to interact with all the working machines experiencing the feel of old systems, softwares and interfaces. The exhibit includes many machines, ranging from big VAXen to early Apple PCs, UNIX workstations, old IBM PC clones and vintage videogame consoles. The museum is actually hosted in the hackerspace, but they plan on moving it to a larger place in the future.

While looking for vintage hardware for the exhibit they immediately noticed that many people were throwing away newer hardware, mainly assembled x86 machines with no historical interest, but in good working order.

Quickly, a „Trashware" project was started. They take all the PCs they can and take them to their labs. Small hardware repairs and/or upgrades, cleaning, and open source software bring them back to life and make them ready again for use. They give all the PCs they restore to anyone who needs them at a very small fee for covering the retrieval and work costs - usually from 30 to 50 EU - and for contributing with verdebinario's activities.

They use of their own trashware, mainly for the lab and for office use. There is a small, free internet pool at their space, with 100% recycled hardware and 100% free software. Aside from their museum and trashware project, they promote cultural, educational and social events and hacker attitude.
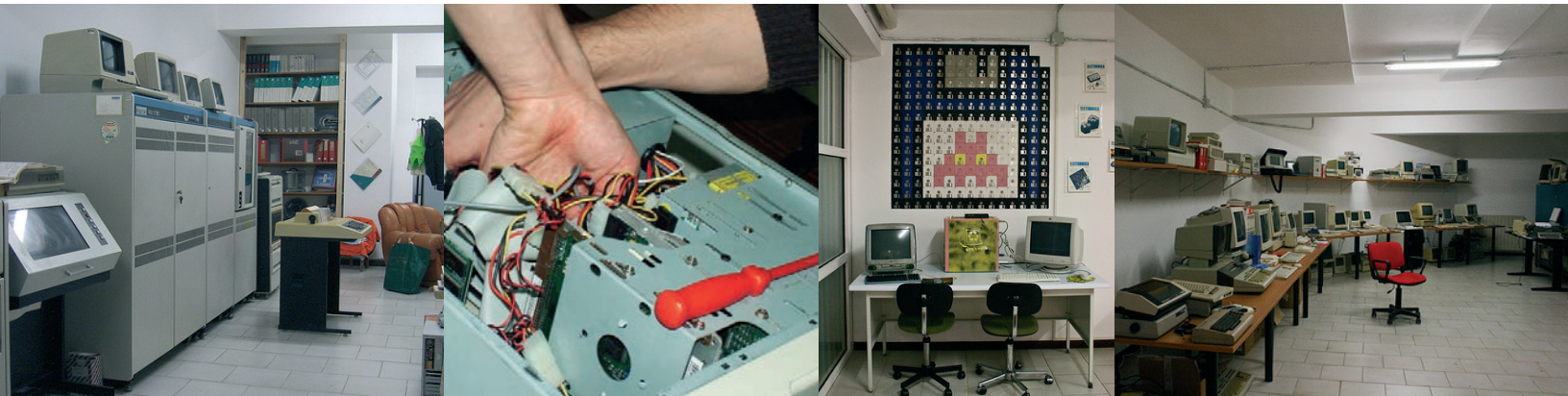
net.culture club MAMA

In Croatia, the year 2000 marked the end of a period of intense nationalism and social antagonism. There were many activist groups, including human rights and peace activists, media activists, anti-globalists, anarchists, and LGTB activists gaining access to internet. There was also a growing number of non-institutional cultural initiatives that couldn't find access to the space and infrastructure necessary for cultural production.

Intuiting that the future of political and cultural activism locally had more to gain from the ability to meet in a face-to-face networking environment than from mere deployment of new technologies, a group of people behind the non-governmental organization „Multimedia Institute" (MI2) decided to use an opportunity that they had at the time and open a public space.

When they started, the obstacles included finding, adapting, and maintaining space over years in face of financial instabilities. Space is the most scarce resource in Zagreb.

Today [2008] in Zagreb, they are still one of only two independently run venues available to local non-institutional activist groups and cultural actors. They decided to adopt an ‚open access' philosophy with their resources: the computer stations, the servers, the A/V equipment, the DJ decks and, most importantly, the screening/lecture space were made available for other initiatives and organizations to use. Since they have opened up, MAMA has been functioning as a socio-cultural center, presenting their own regular programs in new media art, media activism, film, music

and social theory, and hosting programs by other cultural organizations, human rights initiatives and LGTB groups.

Immediately after they opened, a number of young DJs and music makers started to gather regularly at MAMA. Thinking how to use that emerging creative bubble and trying to understand the wider implications of collaborative model of production without property in free software, in 2001 they started they free works publishing project EGOBOO.bits (http://www.egoboobits.net), which over time grew into a community of over 50 music, film and literary creators with a substantial catalog of free music, video and text available online. This eventually lead them to free culture/software advocacy (they localized Creative Commons licenses once they appeared) and free software development of their own, with a particular interest to draw closer activist and technologist communities.

In 2004 the interest in connecting technologists and activists then lead a smaller, and then gradually bigger and bigger, community of geeks and hackers to meet in MAMA regularly every week on Saturday, Tuesday and Thursday. Razmjena vještina (/Skill sharings/) and G33koscope continue to present day. In the form of Yet Another Hackmeeting of West and East and Nothing Will Happen. These events expanded into regular hacker camps where hackers mostly from the countries of the former Yugoslavia meet.

net.culture club MAMA has a lounge space, a screening/lecture room fitting up to 50 people, a room with internet access terminals and an office/server room. Their space is centrally located, has internet, a great

library with recent publications in theory, technology and art, cheap soda drinks and coffee from the machine, and is warm, so many people - related to things they do or not - drop by and hang at MAMA in armchairs. All makers and creators have access to their A/V and computer resources, while their skill sharers also have access to their server infrastructure.

A disaster that they had to deal with early on was an attack by skinheads in 2002 after MAMA helped organize events for the first Gay Pride Parade in Zagreb.

Some things that have come out of their hackerspace that they are most proud of are the communities including the free music collective egoboo.bits, social theorists, local and regional skill sharing hacker communities and Nothing Will Happen camps.

They are resistant to nationalists in media, to nationalist institutionalist cultural policies in Croatia, to recent gentrification, privatization of public space and neoliberalisation of public governance in the city of Zagreb.

Key to their incursions was sharing their resources and continuously searching for new unexplored forms of engagement. In addition, the key to their work with the hacker community were three things: persistence, persistence, persistence.

ls /world/united\ states

Makers Local 256

Over a dinner in July of 2005, a group of friends in Huntsville, Alabama decided it would be an interesting idea to do a guerrilla drive-in movie theater. Without the means to run one, the idea quickly fell to the wayside. A year and a newly obtained projector later, the idea was remembered and within two weeks Bring Popcorn was started. Soon a wiki was setup to catalog new ideas so they weren't forgotten like before.

The creation of TechShop in late 2006 inspired the friends to set up their own hackerspace to work on projects. On October 28th, 2006 the first meeting was held to discuss projects and finding a space. At first, work continued by meeting at someone's apartment every weekend until

major breakthrough came from everyone pledging a monetary amount they would be willing to put forward monthly. In March 2008 a location was finally found.

At 1100 square feet it isn't the biggest place in the world, but it's a start to great things. The shop came with a fair number of fold-up tables to work on, a microwave, and a few chairs. The space has since obtained a refrigerator, a mounted 8'x4' whiteboard and two peg boards were put to the walls, two shelving units for better storage were added, and the chair population was expanded to include some more comfortable ones. As a result, „this place looks a lot like my house" often comes from people new to the space and it is generally taken as a compliment. As with any growing organization, Makers Local 256 has outgrown the current space and is currently in the process of finding a new one to accommodate new membership and larger projects.

The name Makers Local 256 came from lengthy discussion before finally settling on something that described what it was, where it was (256
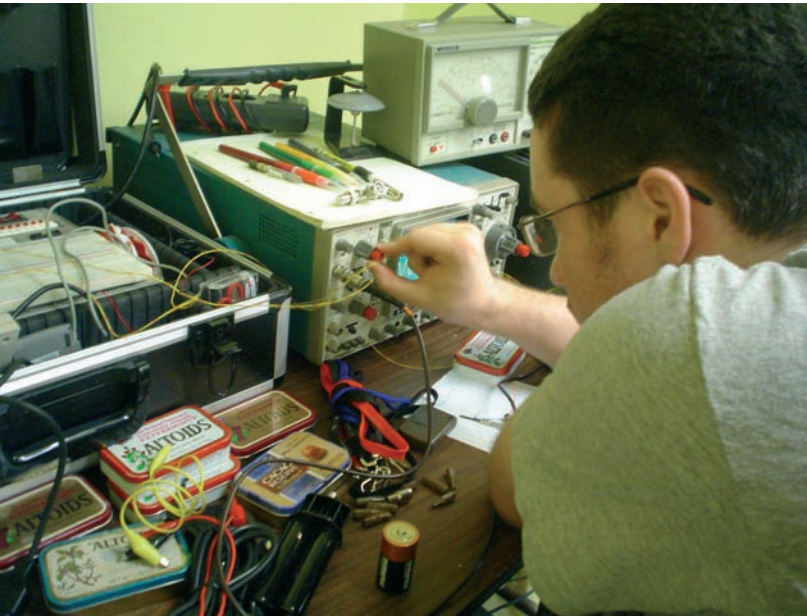
being the local area code), and had a union-like sound to it. The initial goals for the group have not changed since its inception: provide a place where like minded individuals can work in an environment that inspires creativity, ingenuity, resourcefulness and utilize the collected skill sets to get things done. Makers Local 256 is a non-profit organization in the process of becoming a 501(c)(3) because we believe in open source, pro community, and helping people do amazing things.

As a non-profit, they are required to have a board and meet once a month to discuss problems and solutions for the daily operation of the hackerspace. The board consists of the original ten members, all of whom contribute what they can monetarily towards making sure the space stays open. This non-uniform dues system is carried over to new members in an effort to not exclude anyone who wants to participate, but who may not have a lot of money. As a result members' skill sets include meteorology, robotics, micro-controllers, physics, chemistry, origami, programming, woodworking, 3-D fabrication, and much more. With advertising through varied mediums, we hold periodic open houses to alert the local commu-

nities that we exist and to bring in new members. The whole „If you build it, they will come" adage seems to be working pretty well for us.

All of the tools and resources are donated or on extended loan. One of the more notable projects is the USB-Authenticated Door Lock---a way to not have to keep up with so many metal keys for members and allow 24/7 access to the space. A video was made detailing the project and sent it to Hack-A-Day. The YouTube video had over 40,000 hits its first week, and also brought a few new faces into the shop. Other projects have included a modular/portable photobooth, multitouch coffee table, an aluminum forge, and just general playing with various electronic bits and parts. The aluminum forge v2.0 was probably the most „disastrous" occasion, in which a custom burner applied to a small (but full) propane bottle failed and leaked burning propane from the fittings---all during an open house. Disaster was averted, however, with a garden hose, plus a lesson was learned by all: Always keep your fire extinguisher charged.

The Hacktory

The Hacktory started early winter 2007, when a few folks from Make:Philly met to talk about what they wanted in a DIY/Inventor/Maker scene in Philadelphia. The named was picked in an afternoon, from a list of 5. No one at the meeting was too picky, everyone just wanted to get things rolling. The Hacktory is a homage to Andy Warhol's „The Factory", since part of the goal is to tie into the art community. The original vision was a space with toolshare, materials exchange, and some awesome classes.

The Hacktory is still sort of starting up. Obstacles so far have included classics like no money, no time, and few people willing to put in the effort to get things stable. Big benefits have been an awesome host organization called Nonprofit Technology Resources (NTR), and a few folks in a real dedicated core group.

The Hacktory is currently HQ'd on the 3rd floor of NTR. It's a small space, but it's packed to the gills with tables. equipment, and tools. There are a couple of o-scopes, some multimeters, and some solder and de-solder stations. Also the obligatory hand tools, like glue guns..

Once a month there is an Open Hack on a Saturday when anyone can drop in and work. From 2 to 12 people usually show up, hang out, swap stories, and build stuff. The Hacktory also has an organizers meeting once a month to plan the months events. It's boring, and sometimes slow, but makes sure stuff happen. Then there are randomly classes, about 1 every 3-4 weeks. If you are interested in starting a hackerspace, talk about it a lot, and be willing to drop something if you are outvoted. A lot of times, it has been better to make a very good decision quickly, rather than the best decision slowly.
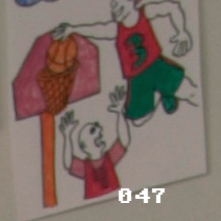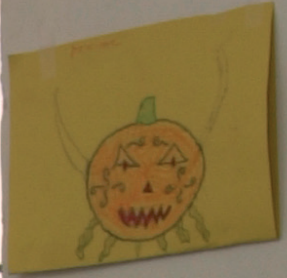
Hacker Consortium

Trevor, aka Skydog, remembers the beginnings of the Hacker Consortium, „We began when Seeblind and I met on a security incident that we were assigned to. After spending a few days around each other, we found that we had some similar ideas. At one point, Seeblind looked at me and said, 'Wouldn't it be cool if we had a big place to hang and work on stuff?' I agreed, and said that I had been thinking about it for several years. It had always been one of those 'If I won the lottery' type things, but something that I had wanted to do for some time. We talked about what we would do, what it would look like, etc. I went home that night and registered the domain name. The next day, I announced to Seeblind that I had registered the domain, and that we were gonna do it. The look on his face was priceless. We began looking at locations, deciding on what we needed and could afford. The costs were high, and the possibilities of us losing our shirts were looming."

Three different iterations of the space went by before they found their present one. The first was a 1000 sq/ft. office park space that small businesses typically get into. As with all of the spaces they were interested in, they did a floorplan and decided what would go where. Skydog recalls the process, „We would dream big, but be brought back to earth by the cost of things. The second location was 2,500 Sq/ft, but had hardly any office space, and a small wall mount airconditioner. We knew that the heat of the summer would cook us out, and the chill of winter would freeze us. Still, we designed our space, spending hours disussing every square inch. Others became interested, and started meeting with us. Mudflap got on board, and began dreaming with us too. The third interation was a 4,000 sq/ft. space that was in an R&D park in Nashville. Everyone involved came out and checked out the space, talking about what we could do with it. Everyone walked from room to room, imagining the possibilities. Our model would require that we share the space with a few companies that wanted to have our ‚mental works' group onsite. Seeblind and I got a copy of the lease, and were on the verge of signing."

Seeing themselves on the bottom line of the lease gave the founders the feeling of an awesome responsibility. With the possibility of being sued if the venture went south, and no protection from becoming a corporation, they were nervous. The two would be on the take for $92,000. That figure hovered over them as they got together to go over the numbers again and again. Finally, they had to back away from the table and find a better solution. Had the venture failed, Skydog figured that he would have had to move out of his house and into the space for the next three years. It was a depressing time for both of them, when they didn't want to talk or think about the project. On the verge of taking a hiatus, Mudflap called them and said he had something for us.

They got together and went to see the building. 2,500 sq/ft. of concrete block bunker. Nobody had been in the space in three years. The roof was degrading, no water, electricity, or heat. It was heaven to them. They started sometime in Jan of 2008, coming in on Saturdays. Someninja brought a large generator to compliment the little Honda that Mudflap appropriated from his company. Halogen lights and propane heaters allowed us to do some primary work on the space. Things came at a quick pace. Water got restored. 400 Amps of solid power from two new breaker panels. They taught themselves how to install concrete block. A coat of paint brightened the place. Hours and hours of hard work, all from a vision they all shared. When visitors walk in the door, they are amazed. From the outside it looks like a crappy block building. Inside, there are worktables, good lighting, power tools, shelves, and a server room. Exterior cameras allow them to see the outside of the space at a glance, which is recorded to a DVR in the server room. A webcam allows them to check and see

who is in the space. Over time, they added bits and pieces that have made it a great hacker space. In reality, it is the people that make it what it is, not the computers, or tools. The people that showed up and shared in the vision are what make the space what it is. Without the members, the space would be a shell of a building, filled with toys. The Hacker Consortium sports a bizarre mix of items. Shelves hold spare parts, equipment, and odds and ends. Three 4x8 workbenches are the main meeting place so far. A standard compliment of woodworking tools, from table saw to drill press sit up front, not far from the vehicle work area. An 80 pound heavy bag travels on pulleys to be stored out of the way when nobody's using it. A makeshift kitchen in the back serves to feed a hungry group, with a ‚kitty' to replenish the funds. A server room with a 10Kva battery backup supplies redundant power to three server racks, loaded with member machines and those donated by generous companies. Disco lights hang from the ceiling attached to a remote switch for instant ‚Party Mode'. XM radio, Cable TV and a 10' high gain screen with a projector provide entertainment and the ability to do classes. The area this is in is often referred to as the warehouse, while work still continues on the ‚office' side. The balance of the space is set aside for a lounge, a proper kitchen, a bathroom with shower, and a twelve seat learning lab. Week by week, the brave hackers work their way towards the front of the building, rebuilding the floor, running wiring, and cleaning/painting. Sometime after the first of the year they expect to be done with the entire building.

Meetings take place on Saturday to decide on work on the space and projects. Monday nights are reserved for the Red Team, a pentesters group that was formed in the space. Earlier in the year, Wrench, one of the members, was teaching a bunch of the others to box. Attendance depends on the project, and how early people are able to inform everyone about it. Everyone has 24/7 access to the space, and they are encouraged to spend as much time as they like there.

The most devastating event was the theft of some copper from the building. While this may not sound like a large issue, the copper stolen was what brought power from the pole to the building. Someone came round in the dead of night and climbed on top of the building. Using large insulated snips, they cut the six cables that feed power from the weatherhead to the back of our breaker panels inside. While the copper stolen would only yield about $200, it would have cost the group much much more had they not had a great relationship with their electrical guys, Vetter Electric. They came out the same day, and had the space back up and runnning in a few days. A party was planned for that weekend, which had to be postponed. „Of all of the events that have taken place, I feel that this one was the worst. The feeling of being back to square one with no power at all was hard to stomach. We took some additional measures to secure the wiring, and with the addition of two video cameras and a light on the back of the building, I feel we will not have that problem ever again", remembers Skydog. Of anything that has come out of our space, most members would say the friendships that have formed from everyone getting together is the best of all. The Hacker Consortium has a diverse group of people with many different talents. To watch people interact and work on things, collaborating and mentoring, is one of the greatest rewards to lots of hard work. People that wouldn't normally be around each other, riffing on a piece of code, or drawing out a project.

Skydog concludes, „If I were to give anyone advice on starting a space, it would have to be this. Dream. All of those thoughts about what would be cool, or what would be the ultimate use for some-thing need to be let out. Plan out your space. Close your eyes and think about what you want it to look like and make it happen. There will be stumbling blocks in your journey. Things will go awry, and people will come and go. If you hold on to that vision, the people and funds will appear. If you asked me two years ago if I thought we would be where we are now, I would have told you there would have been no way. The people sharing this vision are the fuel for the fire. Find the right people with the desire and make it happen yourself."

HacDC

My kids and I are members of the Washington, DC area hacker collective, HacDC. This may strike some as a little strange for a middle-aged guy and his 8 and 11-year-old daughters, but in fact, it has been a great opportunity to expose them to all the exciting things that are going on in our rapidly-changing science and technology world.

My kids have had a great time seeing the talks given at HacDC, and participating in hands-on demonstrations at a range of events. They've seen everything from amazing handmade, high-power lasers to unbelievable circuit-bent electronic musical instruments. More important than the fun of playing with this stuff, my girls got to actually meet the people who were building these things. This is a real change from how kids usually interact with technology.

By spending time with the hacker community, they get to see first-hand the kind of inspired craziness that leads to innovation. For those of us who are in the science and technology business, we know that the folks behind the most interesting innovations are often fascinating, hyperactive, off-kilter, curious people- not something that most schools, parents, media producers, etc., see as role models for kids. I see exactly the opposite- the only way that our kids are going to learn how to survive in a world that increasingly calls on use to be dynamic, creative and mentally agile is to show them what that looks like, and for them to see that it is something that they want to be involved in.

For this reason, hackerspaces like HacDC are a perfect means to bring the next generation together with the folks who are creating (and disrupting) this one. My experience has been nothing but positive. The folks in our local hacker community treat my girls exactly as they treat everyone else. Their questions are answered without condescension, and they are greeted with real warmth and friendliness by the community. By welcoming them into the group, the community has demonstrated to them that there is real value in participating in some of the creative, skeptical and intellectual behaviors that are the positive hallmarks of hackers worldwide.

I do not know what my kids are going to do when they get older, but I am sure that they will have benefited from the exposure to the cool projects technology and most importantly the people of HacDC, and for that we are all grateful. To all you hackerspaces out there, bring on the kids! They are the next generation of hackers waiting to happen!

Text by HacDC-member R. Mark Adams
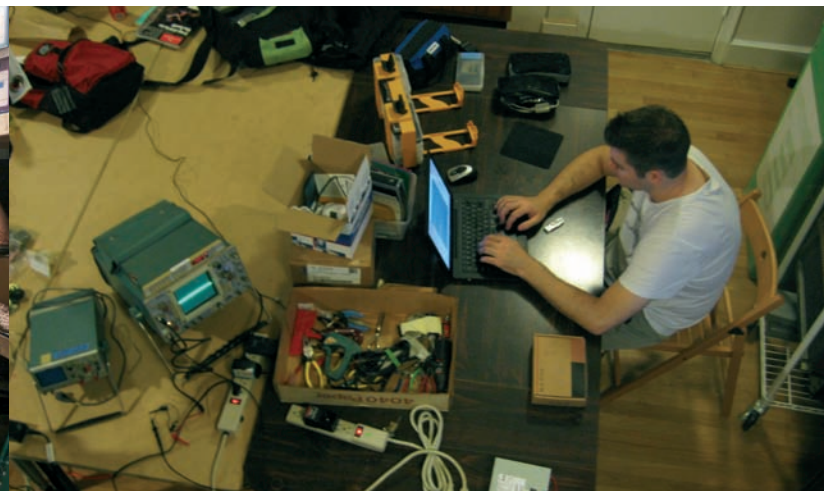
NYC Resistor

There was the hacker and the hacker was lonely. He rented an unventilated room from a college humor website. She soldered on a wooden cutting board under the kitchen fan. He survived on the gleanings of barcamps and podcamps. Then in August 2007 at Hackers on a Plane, two hackers met. George Shammash and Bre Pettis spent 8 days saying „we should get one of these hacker collective things going in NYC." They realized they lived in the same borough of New York City, and not only could they get themselves a hackerspace but they were morally obliged to do so. Four hours of brute forcing domain names later, NYCResistor was born.

Bre and George reached out to the hackers they knew in NYC. The first meeting was just six people. Many didn't come back, but Nick Bilton, he brought it. Together Bre, George, Nick and Peter, the lost founder, hat-

ched the Microcontroller Study Group (NYCR MSG). Often the MSG met at LemurPlex, thanks to Eric Singer; sometimes it was just a crowd around the back table in a cafe. For three or four hours on any given night the expanding crew would demo and build projects like a free-soldered LED cube, an LED oscilloscope or an on-the-spot 3D silicon mold. Around the projects and diner coffee of the MSG the rest of the nine founders came together: Diana Eng, Dave Clausen, Zach Hoeken Smith, Rafael Abrams, Eric Skiff and the lost founder mark II: Pat Gallagher. Skiff says the MSG was key to sustaining the hackerspace in progress: „Every week there was something new and interesting to play with, while alongside that we were working on the hard infrastucture stuff. There's a lot of slogging, so you have to mix in the fun stuff that gives you the hint of what's to come."

The first public meeting of NYC Resistor was on September 21, 2007. By January the hunt for a space was on, and at 9:33 pm on February 4, 2008 Resistor signed its lease. Each of the founders put down $1000 and signed on to the NYC Resistor LLC. Some were more sanguine than others about the money. Raf recalls „I wanted this place and I happened to have some money. Normally I don't have a thousand dollars to plunk down on something like this. The timing was good." Diana says: „We weren't in recession then, so it didn't seem like a lot of money." Dave was more hesitant. He was careful to get some concrete explanations of what was going to happen with the money. But once the vision was articulated, all the founders were of one mind. Skiff sums it up, „This needs to exist. And we are the people with the power to do it." Zach is yet more direct, „Why'd I do it? Because I believe in the do-ocracy! You gotta put something on the line. If you're not willing to put something on the line to follow your dreams, then they don't deserve to come true."

The core principles of Resistor have remained steady from the start: We learn, share and make things. Just about every Resistor teaches a class. Everybody's got some weird spectacular skills just dying to get out. Half the time in classes, half the students are other Resistors. Everything gets documented as we go. It can be Bre or Skiff with the video camera, or just a few quick snaps and a parts list plopped on the blog. Documenting Resistor lets us both share and remember. It's amazing the blur a 3:00 am fix can be by 5:00 the next day.

We are equal parts collective and hacker: everyone who joins is someone you would give your apartment keys to. None of it exists without the hacking though. We make things. Barbots, firefly skirts, RepRaps, music interfaces, spooky boxes, planetary gear cards, LED cylinders of beauty,

roller skate robots: every project idea is a good idea. They may not all pan out, and sometimes you have to pull the fire extinguisher's pin, but there's nothing that's not worth trying at Resistor. A lot of that is possible because of the fundamental trust we share, but some of it's just because we're adventuresome morons with the smarts to wear safety googles.

The last word on Resistor has to be given to our founding treasurer, Zach Hoeken Smith, who learned how to form a limited liability corporation so that we could have a hacker collective, „Resistor shouldn't be unique. This shouldn't be read as like 'Wow, look at what those guys did!' It should be like 'I'm going to do that too!' Using your brain beats the hell out of not using your brain."

NoiseBridge

It took a long time for Noisebridge to go through the community bootstrapping phase. Slowly and steadily the right people collected

together, creating a group that would work and play well as a whole. Over time, people came and went. For every four people who were attracted and excited about the idea of a hacker space in San Francisco, three would become disinterested within a few weeks. This was OK.

San Francisco is a busy city and it was important to be something beyond a gym. We desired not only a space, but a community to fill the space.

The search for a space took months. The group wasn't a cohesive whole yet, still unable to coalesce with a collective vision. Focused on legal infrastructure and other bureaucratic necessities, a lot of the meetings were boring and uninteresting, and as a result, some people started to actually do things. People talked about and improved their art projects during meetings. This was a real turning point because it signaled that the group was together collaborating on „projects" rather than just discussing „ideas". This shift started attracting many more people. It became apparent that when a space was found our community would rapidly expand.

Over our many months of community-forming, mutual respect and admiration for each other grew. This created a nice power dynamic where everyone could and often did feel like it was „their" space. But still there was no actual permanent home. However, now the group had a vision and knew what to look for. The space desires were collected onto a wiki and

when the current space was found, the group just knew it was right. It was time to move, even with some worries over financial risk, wondering how the deposit and the ongoing expensive San Francisco rent would be paid. As it happened, the group managed to raise about USD $12,000 in one twenty four hour period and in the black from the very first month. Enough people believed that the flavor of chaos was realistic and workable, despite, and because of, our unique blend of crazy ideas.

Since setting up the hacker space, new visitors continue to bring their own crazy ideas, finding a new friend or ten at the space to help realize their visions. At first new visitors question their own ability in the space, asking permission to do everything. When they really settle in, however, they all really become an embodiment of our catch phrase: „Be Excellent To Each Other." Questions about everything are asked not because of authority but because of respect for each person in the group. It makes amazing things possible and this facilitates great things into happening.

Sugar Shack

Sugar Shack started as an intentional community for artists in 2001. Close to a dozen residents live and work in the space and a handful of community artists come in daily or weekly to work it out. The hackery started with music and visual arts and moved into solar energy and storage solutions, tesla coils and various vehicular modifications for energy hackery. The wizards behind Toyshoppe Productions and Growing Energy Labs currently call Sugar home along with VJs, documentary filmmakers, therapists and writers who help us refine the work.

The community has hit a number of hurdles with the City of Los Angeles regarding zoning and space use and have finally received the green light from city inspectors to continue work without interruption. This process took many years as the old home for new uses.

Sugar Shack is a very large old victorian home in a great mixed use area in Central LA. Outside guests notice the colorful home with public murals. Sugar Shack has been written up in the LA Times for the cultural struggles it has sparked within our community. The two story warehouse includes a great machine shop and workshop, welding and basic electronics tools, full fine arts facilities and space for video and computer „renovations". Sugar Shack is a private home yet hosts up to 50 guests a week in design meetings and small events.

Members live and breathe in the space so meetings can happen at 3AM and randomly over breakfast. The community meets together weekly and makes all living decisions by consensus.

There have been shitstorms (broken pipes exploding on people), various water issues and lots of graffiti. Sugar Shack is a very lively home with lots of people, energy and ghosts of its own, there's rarely a dull moment. The space has been the location for many music videos, indie films and the reality show Monster House was cancelled halfway through renovating the community room theatre into a 60's den of peace-loving tie-dyed insanity.

Sugar Shack exhibits art around the world. A recent project is the Lightning Temple, a 45' tall interactive art installation and touring stage which incorporates electricity, sacred geometry, and ritual theatre with audio-modulated Tesla coils in the place of traditional speakers.

If you're starting a hacker space, communicate clearly with each other and talk things through. Have a regular meeting time that allows everyone to voice issues together and make sure that you have thoroughly considered the intellectual property ramifications of working in community before you go in.

Cowtown Computer Congress

The Story of CCCKC

CCCKC is a conglomeration of different user groups. From web developers and robot builders to coders and security professionals, almost every aspect of technology is represented within the CCCKC ranks. The space is used, not only for regular member meetings and project build-outs, but user group meetings as well. All organizations who are affiliated have a seat on the board of directors and have a voice in how resources can be utilized.

Kansas City has always been perceived by those outside the area as a hick town which is out of touch with the rest of the world. While there are certainly cattle drives which go through downtown and tornados during the summer, KC is also home to some of the greatest technological minds in the world. The name CCCKC pokes fun at the misconceptions of the city while reflecting the democratic structure of the organization and paying homage to the hacker groups of the Old World.

Editor's Note: Since the writing of this article, CCCKC has moved into a hackerspace deep under the earth in a mine!

Meetings are held weekly at our temporary home while we finalize lease negotiations. We cover the business side of things early in the meeting with hearty discussion of projects and research until late in the evening.

Finding a space which meets the demands of such a diverse group of hackers has been a challenge, and not without problems. Our initial location fell through after the landlords lost their funding, but this led to the discovery of a much better opportunity. Our group has a strong commitment to community service and many of our projects reflect that. Members worked together and built a robot which was a major part of a community haunted house for Halloween. The success of CCCKC demonstrates that hacker spaces can florish anywhere...not just major cities.

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Location:   Toronto, Canada
Contact:    info@hacklab.to
Web:        http://hacklab.to
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Corinne had gotten a new laptop, and it had Vista on it. She had heard that there was a possible alternative in an OS called Linux, and wanted to give it a try. That was all that was needed to form the group. After a few evenings hanging out with Corinne and some other Open Source nerds, the event formalized and was named „Unpatched Tuesdays," a weekly hacknight hosted at Paul and Leigh's tiny apartment. This event expanded over the course of several months to include upwards of a dozen people. The theory that geeks expand in numbers to fill all available seating, particularly when pizza is involved was proven beyond a doubt.

Unpatched Tuesdays was getting to be too much for the small apartment and one fateful Tuesday in June of 2008, Seth and Leigh decided to start trolling Craigslist to get a sense of what it would cost to rent a suitable commercial property in order to create a hacker space. What they did not expect was to immediately stumble on a weeks-old listing pointing to an ideal space which was still available. Three days later, after two tours in the space and some long conversations, they signed a one-year lease without even having a name picked out. Pearl, the landlord, was excited that the group moving in would be „Serious Computer People" and not flaky musicians who wanted to use the space as a live /work studio, like her previous tenants.

The name came out organically from lots of discussions which have been somewhat forgotten. It's short and sweet. It confuses people who'd never think of Toronto when they see .to; Torontonians pronounce it „tee ohh", as in Toronto, Ontario. Other Canadians just pronounce it „that big city that smells bad and is full of jerks*."

The group got started really quickly and smoothly thanks to the „Hacker Space Design Patterns" and the good luck of finding a space. The adventure started on a Tuesday in June and by the end of the week on Friday the group had signed a lease on the space.

* note: Toronto does not actually smell bad.

Those who show up at the space for the first time usually first notice that it can be a little noisy. The space is above a bar, and nearly every evening there's music playing. It's usually pretty inoffensive though. The space itself is bright and sunny in the day, and overlooks one of the coolest neighborhoods in Toronto, Kensington Market. The main space has some desks and enormous power strips. An area off to the side has couches and there's a counter that runs down the middle of the room for those who prefer to work sitting at bar height or standing. In one corner there's a server closet with a full rack containing a dozen servers units. There is still have plenty of room to grow! Opposite that corner there is a great library of books on everything from cryptography to psychology. There is also have a full kitchen with a well-stocked (with pop) fridge, and a bathroom with a washer/dryer.

The open lab nights are Tuesday, and continue to use the „Unpatched Tuesdays" name from those early evenings at Paul and Leigh's house. Meeting on Thursdays were tried but people didn't come out, so now during Tuesday meetings take a quick break from the socializing to conduct the week's business. Since this is an open night, there are often non-members present. This lets outsiders see how Hacklab.to works as a group and lets potential members know what they are getting into.

Hacklab.to haven't been around for too long, but a few disasters have been averted. A friend of Leigh's who happens to be an actuary came by and pointed out a few potential safety issues, which were fixed including dangling ropes and slippery carpets. Those were fixed, and now the biggest challenge is dealing with the scourge of the northern hackerspace: winter boots and the mess they bring.

Hacklab.to is a great group of people and is looking forward to making awesome things, code, and projects together. They have also put a lot of work into getting the legal infrastructure set up the „right way" so that they can help other Canadian hackerspaces with that part of the bootstrapping process. The group decided to do make their hackerspace happen and they organized, and acted. Ok, maybe they acted and then organized, but it is working out!

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..........................................
: Location:  Vancouver, Canada
: Tagline:   "Spilling Beer in Gear"
: Contact:   info@hackspace.ca
: Web:       vancouver.hackspace.ca
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VHS had a lot of false starts. The idea was spawned after hearing Bre's interview with Tim Pritlove from 24C3. The original vision was to have a space where hackers could hack on their own projects and have a space where people could hack without deadlines. VHS is committed having fun and learning things without having predatory sales and marketing people coming in and trying to base their next business off of it.

The main obstacle that confronted VHS when starting was the amount of money needed. VHS first started as three people who were renting out a common office in Downtown Vancouver called the vault. However, it wasn't an ideal space due to the fact that it was an actual vault,

and we were working on hardware. Because they had already kicked in good money for that failed space, they didn't have the cash on hand to really start a new hackerspace project, but after The Last HOPE, a hacker conference in NYC, we knew we had to do it. The original call for people turned up about 20 people, and about 15 regulars stayed on and VHS currently has them as paid members who regularly visit the space.

The VHS hackerspace is a common area of a larger building called Emma's Hackery, named after the famous American Anarchist Emma Goldman. They share the space with Free Geek Vancouver (http://www.freegeekvancouver.org), which is an ethical computer recycler in Vancouver, Submedia.tv (http://submedia.tv), which is an independent media video production group, and other like-minded people. The space has been pretty awesome for the hackergroup to start up in since none of the group had the money to kick down at the very beginning on startup rent, which at the time was very expensive in Vancouver due to the winter olympics. East Vancouver is one of the best places to have a hackerspace due to the fact that it is central, and the fact that East Van is awesome!

VHS is a hackerspace, therefore they meet every Tuesday! Together they decide on what happens at VHS and on where the hackerspace should go. They mess with arduino stuff and personal projects, but are looking to get a new space so they can build larger, group projects. They haven't had any accidents in our hackerspace. The worst thing that happened is that at a party homebrew beer was spilled on some protoboards, hence the tagline.

When starting a hackerspace, they feel it's essential to have community and build community. What makes VHS awesome is the support that VHS gets from the community, namely from David Repa (our landlord), Free Geek Vancouver, Spartacus Books, and others. VHS hopes to keep pulling in new people from the community into VHS and to keep it going as an awesome community space for people to grow. Also, hackerspaces have a lot in common with infoshops and other community spaces, and a lot of the same patterns work for both. When beginning a hackerspace, search these places out and form relationships with these groups!

ls /planned\/closed

syn2cat

SYN2cat started out as an idea Steve and David had over a cup of coffee at ION HQ. Inspired by a visit to the Metalab and prior visits to the C-Base, David felt that he didn't want to miss such a thing in Luxembourg if he were to live there after his studies. (And even if not). The first steps undertaken were to set up a Wiki and write an email to various acquaintances explaining in a few words what a hackerspace is and asking for some feedback about the level of interest. We wanted to get some idea whether there even was a critical mass out there to support such an undertaking. In a country as small as Luxembourg and an equally small capital, this is an important issue. [World Fact Book: *Population*: 480,222 (July 2007 Est.)]

We received a number of encouraging replies and so we decided to carry on. Most importantly, we stumbled upon the C3L, members of which replied to our e-mails promptly. We even met someone on the local funfair by wearing a shirt from 24C3!

Over the next days we became more active. We created a first press-release that even got published by some online and printed press ;) We created posters, flyers and a folder which was sent to politicians, representatives of research centres, artists and so on. An issue which consumed a lot more time than expected was dealing with the multilingual environment in Luxembourg: every document had to be written in at least three languages, English, French and German. Amusingly, producing some of the promotional material in Luxembourgish was almost the hardest task, as the written language is seldom taught in school. Fortunately, we had some help with translations.

Our hackerspace is under construction right now. We do however have a «preliminary» location in which the alpha (or beta) version is deployed to once a week. We meet together with the Chaos Computer Club Lëtzebuerg (C3L) in a club room of a local pub in Luxembourg city. Draft beer is served in our hackerspace. As stated above the hackerspace is a club room in a pub in Luxembourg city. Visitors can benefit from the pub's kitchen. We a two Mbit Internet connection (cable and wireless) and we have space for 20 people. We discuss projects, check out gadgets, discuss club and hackerspace topics and do carry out presentations.

After publishing our press-release on their website, local IT magazine ITNews asked to interview Steve and David, which we thought was awesome! We even had a photo-shoot where we had to pass two security checks in the European Court of Justice, just to troll around the building freely afterward. Around this time we had firmly associated ourselves with C3L and were attending their meetings on Mondays. Quite a few of the people we had e-mailed in the beginning started to drop in too, so that the C3L quickly expanded in those 2 months and the local pub we meet in has become awfully small. Not to be discouraged by the lack of an actual space, we initiated some projects, mostly security and surveillance related things.

Meanwhile, Steve and David continued to lobby politicians, government officials, artists and directors of cultural institutions. We had difficulties in getting our ideas across to Luxembourg-City's Management and we had a hard time figuring out if we should contact the city government directly or not.

Even though progress since the beginning in early August 2008 has been rapid, there's a number of challenges remaining. One of the founders is in Austria trying to pursue his studies. Further, recent days have seen

a lively debate on whether to make an independent NPO out of the hackerspace initiative or to integrate it into the C3L organizational structure. We're also trying to build up a local chapter of graffiti research lab and we're still looking for companies and individuals to support our idea. (Which isn't too easy in times of financial crisis.)

Another challenge is the organization of all of the administrative stuff. We're juggling several software suites at once, none of which fits our requirements exactly. We run a CRM, a separate mail archive and the Wiki with a clunky issue-tracking extension. Unfortunately pen & paper still provide the clearest structuring and layout.

Most importantly of course we're actively looking for a place. We will try applying for one with the city council, which we have been told might take 2 further years of lobbying. We're therefore also considering renting one privately. In order to allow people to get to know us we are trying to get some public appearances. For instance, we will be organizing a lasertag session on the pristine marble front of the National Museum of History and Art in early February during a vernissage.

Our advice if you want to get started with a hackerspace is to get the people together, put all problems/challenges on the table and work out solutions together.
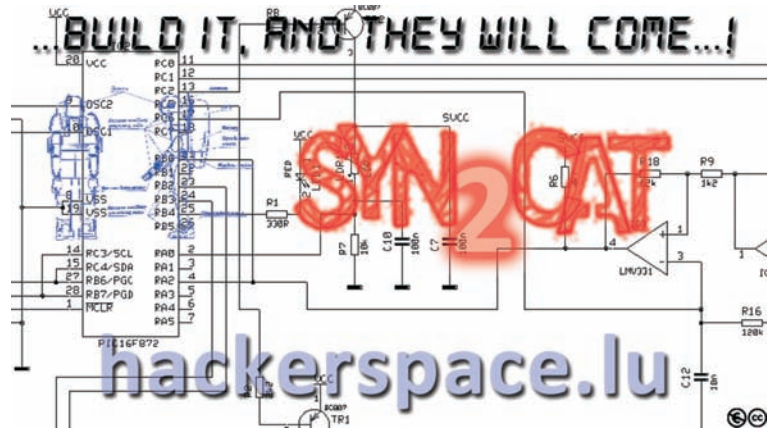
Pumping Station: One

Huddled in a cafe just off the Division Blue Line stop, the founding members of Chicago's Pumping Station: One gathered on Tuesdays to create their concept of a hackerspace. The idea had been floating around for months between friends, but it wasn't until the winter of 2008 that it started to become a reality. Fortunately, Chicago is a prime city for such a workspace, already teeming with nerds, geeks, artists, hackers, and other creatives looking for like-minded people.

The work went quickly. Within a few months, PS:One became an Illinois Not-For-Profit, wrote up some by-laws, elected a board, got insurance, and found a space in the middle of Avondale, which was immediately cleaned, sealed, and filled with various donated supplies, including a loft built in a just one weekend.

This makes it sound easy, but there were set-backs. Arguments were had, mailing lists were flamed, baked goods were banned, kitchens were dirty, and hearts were broken. The first space that looked promising turned out to be zoned improperly for any membership organization, forcing PS:One to take up residence in a smaller space. There remains a rift between the die-hard programmers and those who prefer a more diverse membership which can only be solved by a fight to the death (with ping-pong balls). There is still no consensus on whether or not Eric's shoes are ridiculous.

Thankfully, obstacles were overcome. PS:One is now (mostly) settled in, and incredible projects are built on a fairly regular basis, then shown off during weekly meetings. Members have created ping-pong ball throwies, flaming ping-pong ball launchers, a foundry, a DJ stand, minty amps, all sorts of garments, a delta robot, and the Warzone, amongst countless other things. Classes have been held on subjects ranging from LDAP and Python to home-brew beer, Arabic, and knife throwing. Events such as Geek Prom and PPPWRS (the customized Power Wheels Racing Series) have been organized. PS:One has been mentioned in Chicago-based publications, participated in the Something New roving art gallery, and shown up in MakeZine.

The space itself is currently a riot of supplies, works-in-progress, tables, chairs, and discarded pieces of electronics. One corner is taken up by PS:One's Homewreckery, which contains its sewing, screen-printing, arts, crafts, and drafting supplies. Near the door is the DJ booth, comprised of turn-tables, speakers, lights, a vast assortment of wires and plugs, and more often than not one of several resident DJs. Lodged against one wall is the Coder's Lounge, enclosed within walls made from donated cubicle parts and a roof made from a surplus drogue parachute, which houses the space's servers. In back the hulking mass of the loft rises above everything, giving members a place to relax, play guitar, nap after all-night Hackathons, and read books from the library. Under the loft is the Machine Shop, full of tools for construction work, and the Shock Shop, where people move electrons. In the center of the room is a row of work tables and a circle of chairs, continuously filled by people deeply involved with their laptops.

While many goals have been reached, many more are still in progress. PS:One is currently tasked with achieving 501(c)(3) status, building its current membership, working to bring in even more innovative projects and intriguing classes, and keeping together its constantly in-flux environment.

Ductape

In the beginning there was the void, and into the void stepped the hacker, for a void is empty and requires stuff to be built. The void was dark and the hacker stumbled and stubbed his toe, so he shouted „Let there be light" and the first LED flickered into existence. Actually he shouted something else first, but this is PG rated. The hacker saw that it was good but was annoyed that the LED lay on the floor and would not stick to anything. The hacker shouted, „Let there be Ductape" and it was so. The hacker saw that it was good for it had a light side, a dark side and could hold the universe together. With the tape, the hacker stuck a clusters of LEDs to the walls and ceiling, making the stars and constellations that would light his work area as he hacked into the night. The hacker stepped back and saw that this was good, for he had created the first hackerspace, and so he rested. Thus ended Day 0.

Although our first meeting was on 16 September 2008, the seeds were planted much earlier. I guess we always wanted to do something like a hackerspace, we just didn't know about hackerspaces at the time.

Around mid 2003 Duncan, Rodney, Edd, and others started The OpenProject, which in hindsight was meant to be a virtual hackerspace of sorts, and a home for open hardware projects. Unfortunately the project stalled, however the seeds were growing...

Rodney first heard about hackerspaces while listening to the HOPE conference recordings. He was also lucky enough to get hold of the talk „Building Hacker Spaces Everywhere: Your Excuses are Invalid". This gave him the push he needed. He posted to his blog and mentioned starting a hackerspace to some friends who chatted on-line and things started happening quickly. At some point Rodney created a Facebook group and the next thing I knew we had about 11 people interested. Duncan submitted the name Ductape with possible meanings. The group liked the

name so Edd and Ralfe kindly set up a website and mailing list. For our first meeting I was expecting maybe 6 or 7 people, but was surprised when 11 guys arrived. I think the coffee shop staff were scared: 11 caffeine deprived geeks screaming for coffee is horror film material. And thus, the first South African hackerspace was born. We are still in "plotting and scheming" stage, so don't have a place of our own yet, but are expecting to start the "building and fire extinguisher" stage early in 2009.

We meet every Tuesday, even when only a few people can make it, but I feel that it is important to keep momentum going. Meeting have mostly been held at restaurants, however lately we have semi-stabilized on meeting at the offices of some of our members. We are looking for a permanent space, but it's still early days for us. Things that concern us while looking for a space are security, location and cost. Unfortunately crime in South Africa is a real issue so we need a space with secure parking either in a reasonable neighborhood or that we can lock up securely. We also can't be in a dense residential area since I doubt the neighbors would

enjoy hearing power tools at 2am. Our members have wide ranging skills and project ideas so we ultimately need a large enough space where we could build anything.

Here is the post I made to my blog on Aug 1st, 2008
http://strangeminds.org/2008/08/01/hacker-spaces/

Hacker Spaces

Ever since I first heard of hacker spaces, I've been enthralled by the idea of a place where like minded people can come together to learn, teach and build things. We are or course talking about the true definition of hacking. The meaning that goes back to before computers were even thought about. Hackers are those who like to learn how things work. They take things apart, and put them back together and make them do new things that they were never meant to do. Hackers thirst for knowledge and crave challenges that stretch their minds.

I first heard about hacker spaces while listening to recorded talks from one of the HOPE conferences(Hackers On Planet Earth). These are basically places where hackers can get together to share information and work on projects. Lets face it, not everyone has the space or tools at home to work on some kinds of projects and no one is an expert in every field. This is where the hacker space really helps its members. It can be a shared workspace with tools that all of its member can use to work on their projects. With enough members, there will most likely be someone knowledgeable around that you can ask for help or who can teach you to use a particular tool.

Over the past few years a number of hacker spaces have popped up all over the world. At the Last Hope conference, a website dedicated to hacker spaces was advertised, http://www.hackerspaces.org/ This site aims to help people find hacker spaces in their area, to help people to start spaces where there are none and to enable hacker spaces to communicate amongst themselves to share ideas as to what works and what doesn't as far as running the space is concerned. I took a look at the site and wasn't exactly surprised to find that there were no spaces listed in Africa. If I wasn't motivated to start a space before, I am now.

Personally, my interests are generally in the region of computers, electronics and radio, though my interests cover a wide range of technologies and engineering. I would like to have a hacker space in the Durban area where one can come to work with others on cool electronic and computer based projects but also to be able to build a desk or fabricate a computer case from scratch or build a boat if they so wish. Obviously what is possible depends on space and tools available, and ones imagination. Many hands make light work too so involving others helps you get your project done quicker and you may get valuable input and ideas that you would never have thought of before. Of course when others have projects you can lend a had, ideas etc and everyone benefits from the pool of knowledge.

Ok, so here is where I ask for input from you. Would you like to participate in a Hacker Space in the Durban area? What sort of group projects would you like to see achieved? What sort of facilities would you like to see available for members to use? Would you or someone you know be interested in donating tools, materials or cash toward setting up such a space? How much would you be wiling to spend on a monthly basis toward keeping such a space going? Keep in mind guys, rent has to be paid by someone and in this case its the members. Any other ideas are most welcome.

I'll leave you now with a few links to info on hacker spaces so you can get an idea of what its about.
Happy hacking ;-)

ASCII

The idea of ASCII - Amsterdam Subversive Code for Information Interchange - was conceived in late 1998 as there was the need for a non-profit ‚internetworkspace' running on free and open source software, and spreading the word of it's necessity to enable, educate and prepare people for the upcoming internet age, on-line privacy, as well as need for people to meet and exchange ideas and information face to face.

an ‚internetworkspace' is a free and open place with free internet access, aggregating point for all people interested in hacking together, or simply hanging around or on the net while learning Free and OSS, creating and mixing chaos for all people interested in free flow of information across any new or old medium.

Early 1999, in its first incarnation cloaked as a cafe, ASCII emerged in a squatted house with big shopping windows in a ground floor on the Herengracht, in the historic center of Amsterdam. By installing Linux on few older machines and opening our door to everybody who needed free internet access, email address, general tech help, and people who just wanted to work together with other people, engage in a collective, not sit alone at home, drink fair trade coffee, cheap bio-beer and so forth.

Our main goal was to spread the word of the Free Software and Open Source ‚(F/OSS), movement, provide free and open access to the internet, and give our support to EVERYBODY who walked in offering education in everything from setting up an email address to free education in Linux and F/OSS. At that time, the internet was gaining momentum for most of the common people who had interest in it, but were unable or afraid to participate and join. Microsoft with its Windows OS were gaining momentum too, so we tried to show that there's more than just MS Windows. We tried to convince people interested in the free flow of information that using software made by the biggest multi-national corporation in the world could not be a good idea. At that time, Hotmail was popular and we tried to recommend and help set up other more private and secure mail addresses for our visitors. That was only the beginning.

In those days many people were still only just starting to grasp the importance of the internet as a medium, a meeting place and an information source. We didn't claim the internet was more important than other media, or that in order to have a successful project/campaign/activity it is necessary to rely on net mechanisms. Radio, for instance, is unsurpassed when it comes to spreading a message to even the remotest areas of the planet. However, none of the „conventional" media influenced our perception of reality like the internet did then and does even more today. That is, the boundaries of participation and observation/non-participation are clearly defined when it comes to reading the paper, watching TV etc. The internet, on the other hand, has a far-reaching interactivity. It is a soapbox, library, publishing tool and meeting place at the same time. Where else could one find detailed and extensive information on, for instance, genetic modification, join a newsgroup, put a website up, find like-minded people to organize a global campaign, or spread news about local actions within minutes of them taking place?

We felt that the Internet should be accessible to anyone and that censorship sucks. Infringement on free speech, surfers' privacy and the over-commercialization of the net were major problems already. At this rate the net was in danger of becoming one huge billboard where multinational companies could provide the world with good, clean family fun. We stood against this. We also hoped the positive subversive elements of the world would continue to infiltrate the net and create ways to keep information free. That was our vision at the end of the 20th Century.

After one year of our engagement in Amsterdam, we felt that our local involvement and teachings, could be spread to other like-minded people and also spread and applied internationally, so we organized a couple of international meetings on the subject of ‚internetworkspaces' and spread the idea within one year to more than 10 European countries and around 20 or more cities. Being aware that the situation in Amsterdam is not the same as in other cities, we tried to help other places that were inspired by our idea to adapt to the specific local environment and

circumstances. We also moved our ASCII ‚internetworkspace' around Amsterdam, changing locations and adapting our space to our demands and being a squatted place by choice, it was forced to move around sometimes. We participated on various international events providing our media-tech expertise and knowledge to help activist media centers on many occasions Europe-wide. Whether it was a big-time international hack meeting or big-scale anti-globalisation rally or a local environmentalist demonstration.

In the meantime we took our local activities one step further. We conceived (amongst the other numerous supported activities like genderchangers.org, radar.squat.net etc.) an independent city-wide wireless network that should offer free unmonitored connectivity without the need of commercial companies. The resulting Amsterdam Network Collective spanned a large part of the city and connected several independent venues and many households in the city. Also this concept in cooperation with people from Leiden and London wireless communities spread all over the continent and has inspired networks like Funkfeuer in Vienna and Freifunk in Berlin.

Then at some point in time, after almost 8 years of existence as an ‚internetworkspace,' we decided that we could close down. Internet was available all over, Linux and F/OSS were not obscure hacker's tools anymore and we had successfully propagated our ideas. They have since evolved and spread internationally.

The conclusion was, in our case, that to do cool stuff one doesn't really need permanent space. The result of which would be creation of hierarchies within the collective and a danger of becoming an institution.

Our future has to be shaped and we put on our thinking hats to conceive a method of a new state or existence in time. At the moment we are trying to find out how our ideas and purpose can exist without an actual space. We, as a collective, are spread all over the world. We meet sometimes in person and discuss and create projects, but how to put it all together in theory and practice, that is what we see as a new challenge to be further explored.

PUSCII

PUSCII - the Progressive Utrecht Subversive Centre for Information Interchange - is a small group meeting and centered around Utrecht, which is located in the center of The Netherlands. PUSCII started as a group running a public Internet workspace in 1998 from a spare space in their squat in the center of Utrecht. From its founding, the main goal was for helping activists, fellow squatters, and just random people to use all of the then new technologies of the internet, and do so freely - that is, both at no cost, and without censorship.

This served as a completely open social and public space, providing free internet access to anybody who wanted to use it, up until 2005. At this point, we had to leave the squat we had been using, and move to a new location - a new squat, directly next to the Utrecht train station. From there we continued our social function of public internet and we provided space for several hacker workshops (wireless antennae building, etc.) which we shared with equally minded people from a different social project, the „Weggeefwinkel" (Literally: Giveaway shop).

In 2007 disaster struck, and we got evicted again. Several attempts have been made to lay claim on a new building, but none lasted longer then two weeks. Luckily, this did not impede us as a group and the virtual projects as well as ad-hoc in-real-life sessions are still happening.

As our place was mostly a public workplace. The setup was centered around our Web Terminals which were immediately next to the entrance door. The machines themselves were mostly diskless Debian machines, combined with a few standalone machines and are free to use by anyone, By the backdoor to the rest of the building, we had a large bar, which served for a small donation coffee and had things like free Debian/Ubuntu/FreeBSD CD's. In the back we had a table for people wanting to make something with some basic soldering equipment as well as a big pile of

(sometimes very obscure and old) hardware, part of the recycling project and free for the taking.

Over our history we have done a lot of smaller projects, but several which have been running across the years. When we started out in 1998, the amount of people which visited us often did not have a computer, or even easy access to them, and we found back then, that we could make even very old 386 machines quite useful with a bit of creative configuration and such, so we started a Hardware Recycling plan. We asked people to donate old hardware, and we rebuilt the machines and reconfigured them to do something useful or creative!

This started all with old 386's and through the years things progressed until we could easily get Pentium3 class machines and have a nice fully free software Debian install on them which for our target groups was enough to do essentially everything including simple audio and publishing.

It is of interest to note, that our whole place, ran on all free and donated hardware Everything from our Internet work terminals to our in house server to our soldering equipment was all given free and donated! This greatly helped us in running the place, as the only costs we had, where electricity and internet.

Another sideproject initiated from the physical space of PUSCII was an open-content radio system. With several of the people involved already enthusiastic about making radio and doing Ether and Internet Radio broadcasts at events, and friendships with various pirate radios across the country that didn't manage to fill a 24/7 program, we wanted some sort of indymedia in the realm of audio. The result is still running on http://open-radio.nl and we are now venturing into providing video broadcasts for events!

We initially started webhosting small pages and email boxes for political groups on our puscii.nl domain using a very crusty old Pentium1 with faulty cache memory. Over time this has spawned off, the old Pentium1 machine (may it rest in pieces) burned down and made room for a modern server in an actual datacenter. The aim is still to provide free mail and webhosting services to friends and organizations we support. In an age of increasing

surveillance it aims to provide a safe shelter with fully encrypted harddisks, no access logs and an increasing amount of tunneling and anonymisation hacks.

L0pht Heavy Industries

The L0pht (spelled ell-zero-ph-t) was one of the original, publicly known hacker spaces started in 1992 and lasting through 2000. It started in an artist loft in the South End of Boston and was pretty much intended to be a storage space for a few Boston-area hackers to store all of their computer equipment. It quickly turned into a clubhouse for a group of local hackers who had all met on BBSes, a place for us to hang out, hack on various equipment, have parties, and to let out-of-town hackers crash there. It was a place of refuge for some of us and kept me personally off the streets and out of trouble (I was the youngest member by about 6 years, so all of these guys were really my mentors and I looked up to all of them).

The L0pht was not a space with „open" membership. It ultimately consisted of a tight-knit group of like-minded individuals who had trusted and appreciated the others' contributions. This may vary from some of the current spaces in which memberships and contributions are more loose, but the model worked well for us and we accomplished a significant

amount during the L0pht's existence. Over the years, members came and went, but we usually hovered around seven members. The space was conceived by Brian Oblivion and Count Zero and also originally included White Knight and Golgo 13. Later on at different times came Kingpin (me), Space Rogue, John Tan, Weld Pond, Stefan Von Neumann, Mudge, Dildog, and Silicosis.

Around 1996 or 1997, we relocated to an office space in a light-industrial zoned area just outside of Boston with a goal of keeping the same clubhouse/think-tank mentality, but wanting to turn our passion (hacking and computer security) into a self-sufficient venture. This was in the early days of the formal „computer security" industry that we know today and we focused our efforts on finding security flaws in various hardware and software products, most notably Microsoft Windows, and publicly releasing our research. Among the various contributions the L0pht made to the hacker community throughout the years, we were probably most (in) famous for their May 19, 1998 testimony before the United States Senate stating that they could shut down the entire Internet in 30 minutes.

Being involved with the L0pht during my formative years helped to change and shape my life like nothing else.

The obstacles we encountered were mostly personal - finding people that could get along and work well together. There were members who were kicked out of the L0pht for personal reasons or for not contributing and meeting project goals, we had trial periods for some new members that didn't work out, but all of the decisions were very tough and always voted on by the group.

We each had our own space within the office, but then also had shared areas, like the hardware lab, living room, and meeting room. Most of our equipment was scavenged out of the trash or decommissioned by local businesses and universities. We had it all - oscilloscopes, soldering irons, spectrum analyzers, satellite and microwave gear, technical book, magazines, television, distributed video, VAX 11/785, I could go on and on. Our environment was better than any of us had at a job or in school and rivaled any large technical corporation.
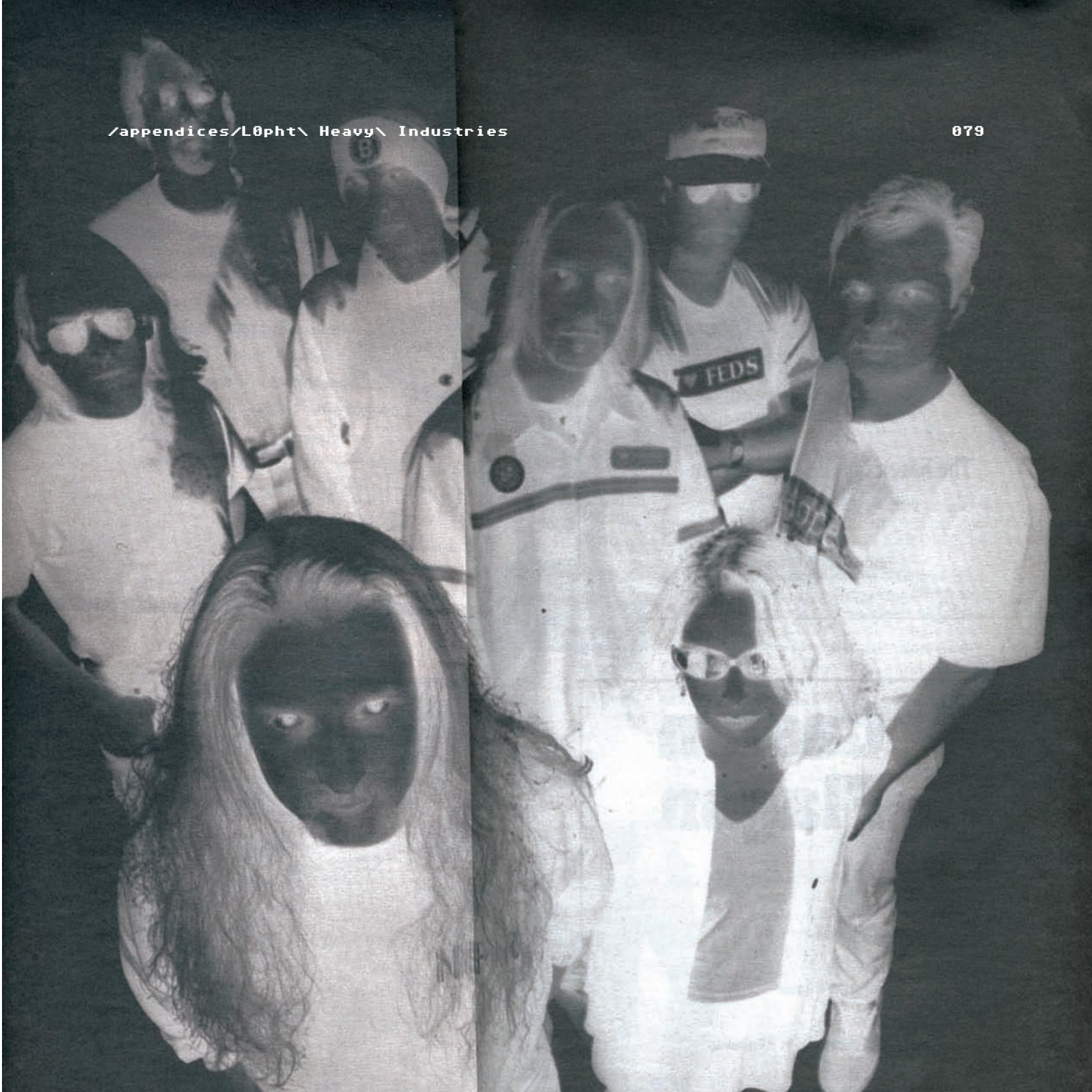
Neither of the physical buildings that we were based in were particularly thrilling, but the artistic decorations, bits and pieces of discarded and repurposed technology lines the walls of the L0pht really made it shine.

We had some structure to the L0pht, like having weekly meetings, keeping meeting minutes, and trying to manage the variety of projects we were working on. We all had to pay rent and contribute to the day-to-day operations and general up-keep of the space. But, on the other hand, it was a completely open and free environment for all of us to work on projects and dabble in things that we couldn't normally do during our day jobs or at school.

It's safe to say that we all are most proud of the waves we created in the hacker community and computer security industry. We were „no holds barred" when it came to releasing full disclosure research regarding weak security schemes in software and hardware products. We relished our description as „media whores" with a goal of spreading the hacker

message far and wide with any media opportunity we could get our hands on. We were stubborn in our ways, pledged allegiance to no one, and were determined to make a difference by brute force, because playing nice with large corporations to get them to fix their products didn't seem to do much good. And, looking back, I think it worked - the computer security landscape is heavily based on our then-controversial approach and what we stuck our necks out on the line to do.

We had so many amazing times, from monthly MIT Flea Market meetings to the infamous L0pht parties (with hackers from around the world making special trips) to dumpster diving on bicycles at three o'clock in the morning to going toe-to-toe against Microsoft and other companies. It was a great time in my life and I wouldn't have changed one thing about it.

Without a doubt, the L0pht was great because of its people. It's an extremely rare occasion to be able to grow up, hang out, get along, and work with a group of others. The L0pht was really a place where the whole was greater than the sum of its parts. Anyone can find a location for a hacker space, anyone can bring over some equipment and set up a lab, but the real challenge is finding people you can work with, rely on, and trust with your personal belongings. I've seen many hacker spaces come and go due to lazy members who won't contribute or pay rent or because the membership is loose and open to anyone who wants to join. A hacker space really is a group project where everyone needs to make a commitment to the cause, so for those people starting a hacker space, find the right people to do it with and make sure you all have the same goals before you venture down that road.

The Hacker Halfway House

The Hacker Halfway House was not a hackerspace.

We went through many iterations of the design for the space we wanted to create, each time not sure it was really what we wanted, or how we should go about figuring that out. Maybe that was our biggest mistake: not knowing what we wanted, wanting it all, not limiting the scope of our project to something that was reasonable. Or maybe it really was the crazy parties. Who knows.

We wanted a space that we could use to work on cool projects. We wanted a space where we could throw awesome parties. We wanted a cheap place to live. We even had visions of a hacker-friendly internet cafe where we lived upstairs and had our living room available for private parties.

We had different visions for what we wanted. We had differing ideas of addressing the substance vs. style issues. We had people with questionable financial situations and even more questionable trust. We went as far as coming up with a business plan and courting angel investors, finding an empty bar deep in Brooklyn and thinking of how we wanted to convert it, before we decided that starting a business was not a good idea.

We ended up finding a loft to live in. Most of our problems were based on the fact that we lived there; we found out the hard way that a geek house and a hackerspace are not particularly compatible. We ended up going down the style over substance route, whether we liked it or not. People got the idea that we were a free hacker hostel, to the point of where people were asking on Full Disclosure what it was like to stay there. The parties got out of hand and led to vandalism and general drunken douche-baggery. Our social scene heavily overlapped with NYC2600, which may have been the reason for many of our problems (interpret this as you will). It is honestly surprising there were never any arrests, serious injuries, or deaths, but that being said... it sure was a lot of fun.

We found out quickly that an environment of that sort isn't sustainable. Whether due to vandalism, member burnout, objection to having a name without producing anything, or sketchiness and not being able to pay the bills, we had a lot of problems that were tough to deal with. The electric company gave us estimated readings for a year, and then sent us a surprise five-digits-before-the-
decimal-point electric bill. Hardware burned out and the white cat was black for a week due to massive quantities of airborne toner dust (which is both explosive and a carcinogen, in addition to being conductive). Over a few years, people left, new people came in, new people left, things became more sustainable.

The Hacker Halfway House still exists, with two of its original members still living there.

ls /appendices

A short history of the CCC

In the summer of 2007, I went to the Chaos Communications Camp, a gathering of people who are at the intersection of software, hardware, hacking, and art. Around 2000 people gathered for a week of hardware and software hacking, presentations and discussion. I had arrived with 35 others on a coordinated trip called Hackers on a Plane. It was on this trip around a table in Cologne that the idea for NYCResistor, the hackerspace I helped found was born.

Camp took place in a former soviet era air force base near Finowfurt that has been converted to a flight museum. Mig jets were spread out on the lawn and spectacular light shows lit up the night. It was the perfect place to have a hacker camp for a week. Fiber optic cables had been laid down along the railroad tracks to the nearest town giving camp acceptable bandwidth.

One of the presentations that I was really excited about was led by Jens Ohlig and Nika Bertram about creating text adventure games. Having grown up on Zork, I was inspired by this presentation enough to play the text adventure game that Jens created for camp. While I was playing his game, Jens showed up at the American tent and we got into a great conversation which led to a spontaneous tutoring session and within a few hours, Jens and I had created a basic text adventure game.

After expressing my interest in developing hacker spaces in the states, Jens and I got into a great conversation about the origins and history of the Chaos Computer Club. The CCC is a group of hardware and software hackers that has been together as a group since the early days of computing. As we began chatting, I pulled out my pen and paper and started jotting down notes. It took me a year to turn those notes into this article and so if I've gotten anything wrong, or I've forgotten important details, it is my fault.

The Chaos Computer Club 1981–84

The Chaos Computer Clug began on September 12, 1981 on a Tuesday. Five people, headed by Wau Holland met with some friends to explore the issues surrounding the rise of technology and they formed the Chaos

Computer Club. With 1984 around the corner, many people thought that computers would bring about more surveillance and fascism, but this fresh group of hackers thought interesting things could be done with new technology. They gathered to talk about cryptography, bbs, amateur radio, and build computers. With a strong anti-authoritarian mindset, they felt that technology should be in the hands of the people and that everyone should be able to learn anything without hindrance.

A few years later, in 1984 things clicked. It was an auspicious year with issues of privacy and data surveillance. By that time there was widespread computer use. Wau had become a software developer but when he found that the software he worked on was being used by the U.S. military, he quit and moved to Hamburg which is where the CCC started gaining more momentum.

One of the frustrations that German computer users had in 1984 was that the German telecom had a monopoly on telecommunications and charged an arm and a leg for a modem. The members of the CCC daydreamed of importing the ultra fast 1200 bps modems from America. It became a crime to connect anything besides a telephone to the telephone network. If caught, you could go to prison for 5 years for hooking up a modem without an official seal. It was felt that having a computer answer a phone was illegal.

The CCC confronted this by asking, "Would it be ok to have a cat answer the phone?" When they got a confused, but positive answer, they built a contraption made of Lego and a Fischer-Technique model sets that would lift the phone and place it on an acoustic coupler. They called it "The Cat." The general feeling in the air was of free love, free modems, and free information transfers. Because of it's monopoly, popular opinion stood against the telecom industry.

Without imported modems, members of CCC got creative and engineered a modem you could make yourself and they published instructions. There were raids when neighbors turned people in for having a modem. The earmuffs on the home-made acoustic coupler were made out of plumbing materials, thus earning them the name of "dataloos." Today this term lives on at CCC camp where an impressive wireless network is spread across the camp in networked porta-potties!

In 1984 you could get a BTX machine that combined your telephone with a tv and keyboard to create a basic networked computer. In France these were very popular since for a small fee, you could opt out of getting a telephone directory and get one of the futuristic BTX machines. Instantly, sex chats were the most popular use of these machines.

The CCC felt that they had to be part of this system and were one of the first to display pages on this telephone/television/computer directory. Quickly, they also experienced the first case of net censorship. They would put zany news stories as public service announcements on their page. One of these public service announcements advised against masturbating with a certain brand of vacuum due to spinning blades. The vacuum company heard about it and asked the telecom company to take it off, but after some investigation, it was found that the research was legitimate and authentic and the first case of network censorship was resolved.

One of the features of the BTX machines was that you could transfer micropayments. You could pay for simple games or make donations up to 9.99 Deutsche Mark. There was a donation page for the CCC and members of the CCC deduced that the passwords for other company users could be acquired and they discovered a Hamburg bank's password. Using the banks password, they had the bank call the donation page for the CCC

donating 9.99 at a time. In the morning, following the transfer, the CCC announced the first electronic bank robbery. They gave all the money back to the bank and with this event, the word hacker came into use in Germany. There weren't any negative connotations to the word since the public knew that CCC was exposing a vulnerability in the system without harmful intent. The press heralded them as "Electronic Robin Hoods."

As 1984 came to a close, the first Chaos Communications Congress convened. It was the first hacker conference and it had less than 100 in attendance.

Paradise Lost and a Time of Flux — CCC in the late 80's

In 1986 German parliament decided to invent laws for computer crime. Before the field of computing had no laws on the books and it was an open game. In response to these laws, the Chaos Computer Club became a registered organization that worked as a lobby group around issues of telecommunications and data.

In the late 80's a petty criminal with a loose association to the CCC made contact with the KGB with a list of American computers he had hacked. Driven by his cocaine habit, he had hacked into ARPA-net (now DARPA). Although ARPA's network didn't then have the missile launch codes, it still contained interesting information about the US infrastructure. When this story hit the press there was a lot of discussions and interviews with people at the CCC. Shortly after the incident came to light, the

addict's body was found dead under dodgy circumstances. There is a adaptation of this story that was made into a movie called "23."

With this event, it was as if the CCC had been driven out of paradise. Public opinion had shifted. In the media, the word hacker had become tarnished. The term had previously not been negative and some tried to explain that the people who had committed espionage weren't hackers but criminals. Despite these attempts at defining vocabulary, the atmosphere had changed. It was at this time, shortly after this KGB scandal, that Jens joined the CCC at age 17. He remembers a general feeling of mistrust and charged emotions. Friendships were strained and the CCC went into an inactive period.

In 1989 the wall between East and West Germany came down. Behind the wall in East Germany, you had to basically be a hacker to survive and so there was a lot of innovation happening there. Technology in East Germany had been reserved for the wealthy, diplomats, and the privileged. Despite this, young pioneers in electronics had smuggled computers into East Germany. When the wall came down, all the rules were changed. Jens described a situation that a friend had been in on his motorbike in the just former East Germany. He had been driving down a one-way street the wrong way when a police officer stopped him. Jens' friend explained that the one-way road law had changed and with everything in disarray, it wasn't that much of a stretch for the officer to believe him. The officer let him pass. Everything was in flux.

This malleability made Berlin the perfect place for a hacker collective. Most CCC activities migrated from Hamburg to Berlin and CCC activities stepped up a notch. One of the things the community of German hackers worked on at this time was setting up electronic bulletin board systems, BBS, for communications in Sarajevo using diesel generators and a satellite link borrowed from CNN.

Growth, Blinking Lights and International Inclusion – the 90's to now

By 1997, the Chaos Computer Club in Berlin was growing rapidly and local groups started popping up all over Germany. In Cologne, the media center of Germany, a CCC group called C4 started. After some time, the

folks at C4 realized that many of their club members were getting old and lame. A cunning and subtle plan was hatched to involve more young people in the group. C4 developed a hacking contest called U23 for those under 23 years old which continues to this day. Each year the challenge switches between hardware and software and the young hackers develop cooperative teamworking skills alongside technical skill-building development. One year, the challenge was to make a robot to follow a line and read a barcode at the end of it and another year, teams built a chat server that tunnels over UDP. U23 has since been adopted by other teams to involve young people and keep CCC fresh.

In 1998, the Chaos Computer Club's annual meeting, called Chaos Communication Congress, moved to a beautiful building with a domed roof. There were rooms for talks and interpreter cabins but the presence of asbestos provided a minor speed bump. By this time, the Internet had entered popular culture. The dot-com boom was ramping up and CCC grew from about 250 people to 1500. There is a regional group in every city and because the first meeting of the CCC happened on a Tuesday, all the groups meet weekly on Tuesdays. While Tuesday CCC meetings are for members only, many regional branches have a public night for talk and discussion either weekly or monthly on a Thursday.

In 2001, Wau Holland, the founder of CCC died suddenly of a brain tumor. It was the 20th birthday of CCC and an exhibition and historical interpretation center had been planned. Despite the setback of losing their founder, many special things happened that year including, blinkenlights.

I met Tim Pritlove to hear about the history of Blinkenlights. Blinkenlights was an installation set up in the teacher's building in downtown Ber-

lin. It was a matrix of windows that could be lit up to create an array of 18 x 8 lights. I'll talk more about this amazing project in another article.

After the 2003 Congress, it was decided to open up the group and make it more international. The format of Congress switched to mostly English presentations and overseas speakers were invited. Hacker camping conferences in Europe were started by the Dutch early on in 1993 and they followed that four years later in 1997. The CCC got inspired and started their own camp on an alternate four-year cycle in 1999 and 2003 and 2007.

These days, the CCC continues to be a busy ambitious organization. It has grown from its small roots in Hamburg, moved it's headquarters to Berlin, and then spread with smaller and wonderful regional groups around the country.

Currently the CCC is becoming more involved in political struggles. While chatting with Jens, he reflected that it seems that every week, a CCC member is working with parliament on one or more issues that effect freedom, digital rights, and the crossroads of technology and lawmaking. For many in the CCC, fighting for your rights and hacking are inseparable. Some of the current issues facing the CCC are pointing out security problems with RFID passports, the unfairness of discriminatory visa waivers and other security problems. The CCC is generally considered by average Germans to be the last line of defense for freedom and civil rights in Germany in the digital age.

This is the last post about the history of the Chaos Computer Club, but the story doesn't end here. After returning from camp, some new friends and I started NYCResistor to have a hacker space of our own locally. A special thanks goes out to Nick Farr, the Johnny Appleseed of hacker spaces who organized the wonderful Hackers on a Plane trip. Not only did he organize a super affordable trip to go to defcon and the Chaos Communication Camp, but after camp he organized a tour and myself and a wide-eyed bunch of hackers visited C-Base, Metalab, Das Labor, C4, Entropia and Netz Laden. Each community has it's own way of cultivating community around hacking.
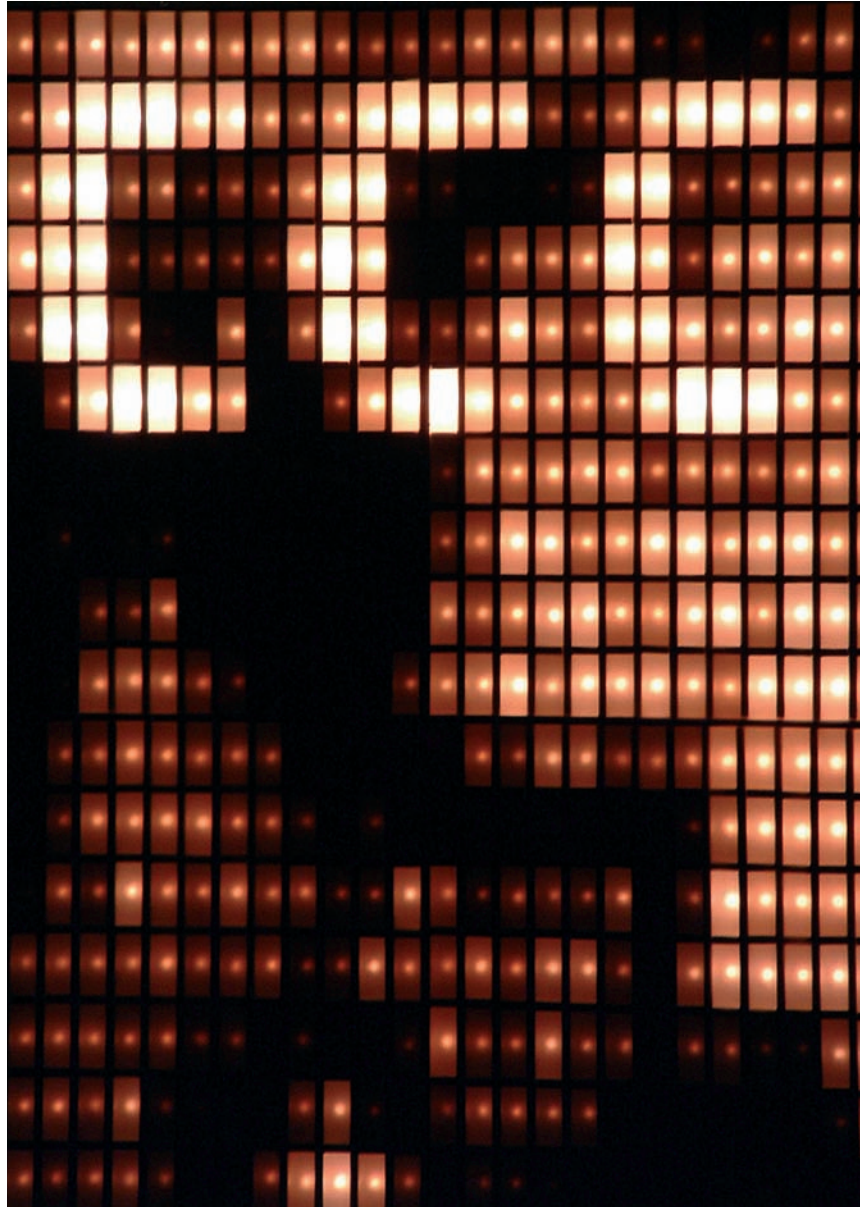
Blinkenlights

In the fall of 2008, the citizens of Toronto might have been wondering if they'd walked onto the set of Bladerunner when they looked up at the two curved towers of their city hall to find it transformed into a giant display showing user generated movies and games. They might have blinked their eyes a few times before they realize that they haven't time-traveled to a city with flying cars but are, in fact, looking at Stereoscope, the latest and most epic blinkenlights project to date. Each window of the two majestic and curved towers will become a blinking pixel wirelessly networked to create the most amazing dual monitor system ever.

Blinkenlights is the brain child of Tim Pritlove, the cunning schemer, dischordianist preacher and host of Chaosradio, the popular German podcast. With co-conspirator Thomas Fiedler, they pulled together a rockstar team for each version of blinkenlights to make buildings into much more than buildings. I heard about the project while at the Chaos Communications Camp in 2007. I met Tim to get the scoop on the history of the history of blinkenlights project.

Blinkenlights all started in 2001. The year marked the 20th anniversary of the Chaos Computer Club which was started in 1981. Wau Holland, founder of the CCC had just surprised everyone by dieing and the motivation to do something really special to mark the 20 year anniversary was high. A five-day retrospective exhibition about the history of the CCC was set to take place in the Congress building in Berlin and a nearby landmark, the teacher's building, was being remodeled and empty. Tim had the keys to the building and his initial idea was to create a giant CCC design in lights on the side of the building but when Tim quietly mentioned this idea to a few select friends, their instant reaction was that they had to play Tetris on the side of a building. Within hours a crackerjack team of 8 people were huddled around a table planning the first building-sized display screen. Was it possible? Would it work?

They kept the project secret and after a mere five weeks of hacking without much sleep, the hardware and software had been set up and it worked. 8 floors of 18 windows each for a total 144 lights needed to be controlled and nside the building a network of cables, wound around the building like a 1000 lost snakes. If you were in the building when it was running, you could hear the relays clicking on and off. The windows

were painted white to diffuse the light. After a short delay due to 9/11, the project went live and was up and running for 6 months. The components were hammered with activity and amazingly, only 30% of the lights had to be changed in that time and 50% of the relays. The team got to the point where they could tell which animation was up because of the sounds of the relays echoing through the building.

While the world was confronting the stress of the terrorist action, the team programmed the building to show a gently beating heart into the night. Shortly after launching, one blinkenlight team member, an ISDN expert, hacked together a pong game that you could play on the building with cell phones. You called a number and got connected to the display, which converted the tones from your phone to the ups and downs of the paddle controller. The whole thing was set up to be simple because it had to be.

What really sets this first project apart is the interactive component. The blinkenlights team put out a shockwave app to convert movies and a design app was released for people to create their own animations. The first animation they got from a stranger was a personal love letter animation saying simply, "I love you Julia." They played it on the building and suddenly, everyone just got it. The team set it up so that anyone could submit an animation over email and when it was approved, they would get a confirmation number. With this number you could call the building and dial your confirmation message and your animation would show on the building. Declarations of love and proposals of marriage ensued and Tim told me that the apex of the project was when he got tracked down by man who was desperate to get back together with his girlfriend. He pleaded with Tim to put his animation on the building. Desperately he claimed, "My girlfriend just left me, Blinkenlights is my last hope!"

As we chatted, Tim lit up when recounting some of the early handcrafted animations. Make sure to check them out in the above video. My personal favorite is the animation of the cat that stretches.

Because of the interactivity and public generated animations, the installation was adopted by the public as their own. Blinkenlights had turned a boring part of Berlin into something vital, interactive, and special. When

Tim began passing out party invitations for the closing of the installation, the standard reply was, "NO! You can't take it away from us! It's ours!" A circular saw dramatically severed the huge bundle of cable that networked the lights and the project went dark. The building had to be returned to regular use and the lights went black for the blinkenlights project.

But even though the installation came down, the project didn't die. A year later, in 2002, Tim was approached by the Nuit Blanche festival in France and asked to repeat Blinkenlights in Paris. Having had such a successful experience in Berlin, Tim swore that blinkenlights would only be revived if presented with a really interesting building. The French rose to the challenge by offering the Bibliothèque Nationale de France as a blinkenlights platform. The blinkenlights team stepped up their game, rewrote the software, and new hardware was installed with a dedicated linux box on every floor. The matrix was expanded to 20 floors with 26 windows on each floor with 520 windows in total. Members of the Gimp development team were brought onto the project. The blinkenlight project was upgraded to display grayscale animations and the phone interface rang off the hook. It was a glorious and short two week performance, but again the blinkenlights project was thrust into darkness where it would remain for 6 years.

Now, with Stereoscope, Blinkenlights is on the brink of being back stronger than ever. The City of Toronto asked the blinkenlights team if they would be interested in joining another Nuit Blanche (as they did in Paris in 2002). Short on time and with a lot of ambition, they decided to redesign and push the envelope on the project to make it wireless for The Toronto City Hall since there would be 960 windows split up in two towers.

I needed to know more so I asked Tim to break it on down and give up the details.

What's the story of the stereoscope project?

After having had a variety of new attempts around Europe that didn't work out (due to either financial reasons or building owners that withdrew their support in the last minute) it took six years until we could come up

with a new project (not counting two small Blinkenlights reprises at the original location). But in May 2008, the City of Toronto asked us if we would be interested in joining another Nuit Blanche (as we did in Paris in 2002) in October 2008. There was really not much time left, so we immediately started working on this baby with a few really tough deadlines to be met. Especially because we did not want to go with the same technology we used back in 2002. The Toronto City Hall was even bigger than the Bibliothèque nationale de France (960 vs. 520 windows), split up in two towers and we also wanted to push the envelope a bit. So we came up with the idea of going mostly wireless to save setup time. Although being a much bigger installation, we will probably need only half the time to set everything up - if things won't go wrong of course.

What makes the stereoscope special?

The facade of Toronto City Hall is special in many ways. First there are two separate towers: both of different height and width. Both facaces are split in two parts of unequal size because there are mechanical floors in the middle without windows. Even more important the towers have a curved structure and all the windows are faced inwards. This makes it impossible to see all the windows at the same time regardless from where you are. All our previous installations presented just one single screen very much like the screens we are used to on our computers.

Blinkenlights is not about building displays. It's about participation of people and interpretation of architecture. So we try to "speak the language of the building." To compensate for the difficult viewing angles, we promote a fluid appearance: things move slowly - what you can't see now you will see in a few moments. This all also underlines the strange spatial appearance of the facade - hence the name Stereoscope ("spatial view"). We'll see how this all turns out - we never know how are installations will feel before. It's going to be a surprise to us as it is to the casual viewer.

How hard was it to create an iphone app?

The idea to create an application for a mobile device is as old as our project. But in 2001/2 there was nothing on the horizon that could do that. The iPhone however is the device we have been waiting for.

First of all we wanted this app to be useful to everybody. So we focused on a simulator that provides a real time view of what is going on. Everyone can load the app and tune in live - wherever they want (as long they have Internet access of course). The foundation for this we had in our code for a very long time - as we have been using IP packets for frame distribution inside our installation all along it just took a copy to be streamed to individual applications that could display the data stream on some kind of visualizer.

The blinkensim program of our original toolkit did that. An intelligent proxy - the blinkenproxy - enhanced this to an on-demand model: the proxy constantly receives the data stream from a single source and re-distributes the stream to every simulator that asks for a copy. We hope our infrastructure scales well enough to handle demand. For Stereoscope we enhanced our protocol in many ways: each packet is realtime-stamped so the simulator can display the time the stream was generated - either in real time or as a playback from an archival copy. We also added support for multiple screens as Stereoscope supports the notion of individual subscreens and virtual matrixes and more.

We wanted the application to be really, really beautiful to look at. So we put together a team of gifted 3D and 2D graphic artists and two excellent iPhone/Mac-Programmers: the Coding Monkeys from Munich, known for their collaborative text editor SubEthaEdit and the useful Circulator iPhone application. They all joined forces and the result is a pretty outstanding little app that allows to view the building from any angle or predefined viewpoints while it fluidly displays the data stream coming from our central server.

Due to the strange distribution model and the long approval times of the iTunes App Store we might not be able to add more functionality. Every update usually needs a week to show up which is really bad for such a time critical piece. We have tons of more ideas on how to turn this app into a location-aware controller allowing for collaborative painting and other nice ideas. We'll see how it turns out in the end. Project Blinkenlights is always work in progress and we will keep the data stream running after we have to take down the installation itself so that we can continue to play and experiment with a virtual building for future installations.

What's broken so far? Has anyone been hurt?

Setup is going really well and we are confident to be ready in time. No casualties so far, knock on wood.

Are you going to port the old movies to the new project and are you specifically going to show a video of a woman dancing in greyscale?

We'll show a medley of old and new stuff. The new multiple-layer core of our software allows multiple movies and games to run at the same time, target different subscreens and such. There are more new features in the code than I think we can make use of in just two weeks. We'll see. Concerning the dancing woman, I was just being told the original data is locked in a computer that is wrapped in plastic standing in a cellar in a small house in the Australian outback. I guess we won't make it in time to revive that particular animation. But we want to go for new original content anyway. There is a capable set of tools available for the Mac. We have built an infrastructure to use Quartz Composer to create animations for Stereoscope and we hope experienced designers will use it to create cool stuff. There is a stand-alone 3D simulator for the Mac as well (not yet as beautiful as the iPhone version but we're working on that). There will be additional tools for Mac and Windows like a Blinkenpaint-style editor for smaller movies and an updated blinkensim simulator for Linux and BSD Unix. There are third-party tools for as well that we will list on the website.

Is there anything else people should know about the project?

All of our hardware and software will be out in the open. The wireless dimmer technology will be released under a Creative Commons license and the new code will be either BSD or GPL licensed. We are still thinking of Project Blinkenlights as an open platform and something that should evolve and grow. We'd like to see both software and hardware hackers to take up on the work we have done and come up with new ideas and extensions. We really hope we are not again running into such a long phase of inactivity and will be able to pursue a followup project sooner than later. It might be a nice idea to go ahead with a virtual representation of former installations but I guess it is the real world where it gets interesting as stuff needs to be tangible for people. Nothing beats reality.

HackerSpace Design Patterns

In 2007, a number of meek and lonely hackers from the States went on the Hackers On A Plane adventure going to Chaos Communication Camp and then traveling around Europe visiting hackerspaces. When they arrived at C4 in Cologne, Jens Ohlig and Lars Weiler gave the first presentation of the Hackerspace Design patterns. It's a document made with the wisdom of doing it wrong in so many wonderful and disastrous ways. It's not a rule book, but it's a set of guidelines that may point you in the right direction straight into chaos. Upon hearing these words, the meek and lonely hackers hearts became strong and they emerged from the safety of the miserable and became dramatically stupidly brave.

Without further ado, here are some problems addressed in the Hackerspace Design Patterns! Want answers? Either start a hackerspace or use teh internet to find them!

....

You have a chicken-and-egg-problem: What should come ,rst? Infrastructure or projects?

....

Is now really the time to start your hacker space? Shouldn't you wait? Have you really thought of all the problems?

....

How should your group communicate?

....

You want to set up a hacker space in your city alone. You fail.

....

Nothing gets done. You all want the hacker space, but it's so hard to get o, your asses.

....

You have found the perfect hacker space, but the landlord seems to be weird. Also, the neighbors are picky.

....

You need a space for meetings and as a lab, to store and work on materials for projects. In order to minimize rent or out of sympathy, you think it's great when someone lives in your space. But somehow it doesn't work, as you cannot use the lab anymore.

....

You want to chill, discuss, or work in small groups. But the main room is occupied: There are simply too many people at your space. Or you want to smoke a cigarette at the space without disturbing non-smokers.

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As a human being, you need food. As a hacker, you need ca,eine and food at odd times.

....

All work and no play makes Jack a dull boy. There must be something else in addition to workstations and electronics.

....

After long hacking sessions, you will start to smell funny. Also, guests to your space sometimes neglect personal hygiene.

....

You need to pay your rent and utilities. Larger projects need to be funded.

....

You think it's a good idea to meet at a company that likes you or at a university where most of you study anyway.

....

You want to resolve internal con,icts, exercise democratic decision making, and discuss recent issues and future plans.

....

Every weekday sucks. You will not ,nd any day when every hacker can attend a meeting. Someone always has an appointment.

....

You want to draw in new people and provide an interface to the outside world.

. . . .

Your older members graduate from college or get married. Your space needs fresh blood.

. . . .

You did everything right. You had some big events and a nice time in your shiny hacker space. But after some time the enthusiasm goes away and your projects are stagnating.

. . . .

You need to make a group decision and want to make sure no one gets left behind.

. . . .

You need to make a group decision. Discussion does not seem to lead you anywhere.

. . . .

Nobody does the dishes. Your hacker space looks crappy. No one seems to care.

. . . .

You started as a community of like-minded people, but suddenly you ,nd yourself in a dictatorship run by a single hacker.

. . . .

You volunteered for the task of running a critical piece of infrastructure, e.g. the mail server, but you feel the sudden urge to slack.

. . . .

You are in the middle of your weekly plenum. Everybody's yelling, nothing gets done.

. . . .

You suggest creating something new for your hacker space, like a bike shed. But now everybody is talking about its colour. No bike shed will be built.

. . . .

Someone causes a problem that cannot be resolved in the group.

. . . .

You can't bring in shiny new hardware, as there is no space left. Your space has become a hardware museum ,lled with junk.

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You want the hacker space accessible all the time. You don't want to call somebody else during the night to lock the hacker space when you leave.

. . . .

You need to raise funds. You want to stay up longer at night.

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These problems of developing your
own hacking community await your
curious mind!
All your excuses are invalid!
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HackerbotLabs: The Taglines

If we can't hack it, you still own it.
Prompting recalls since 2005.
Come „Don't touch that" with us!
Like prom night, for your warranty.
No ID required, we'll print one for you.
Can I borrow your phone for a minute?
Find us on OK Cupid.
Hold my beer while I take the cover off this.
Show me your bits.
Because gadget molestation is fun!
What's in your pocket?
Breaking seals since 2005.
Building better breakage.
Hackers. BDSM. LAstRiPpers. You do the math.
Solder is just another name for spit and baling wire.
Smoke is how a circuit board expresses love.
Aggression therapy for Geeks.
Good People, bad ideas.
Privacy is obsolete, for most of you.
Two legs good, two digits bad.
Warranty-voiding, swashbuckling, password-hacking hooligans.
You bought it, we broke it.
Warning Digital Hazards Next 0xFA Miles.
Bootstrapping the Robot Revolution.
Slogan removed by DMCA.
Geeks, Freaks, and Tweaks.
We know better but we do it anyways.
BYOSSL Bring Your Own Stimulants Solder and Lube.
Technology Perverts
Back-alley technologists
Putting the NS in NSFW
Do look at laser with remaining eye.
Warranties voided wholesale.

Netzladen: The 23 Golden Rules

1. Don't tinker with the mixing table at the audio setup.
2. If you tinker with the mixing table, make sure to tinker it back to the starting position.
3. Pay your drinks as you take them, you'll forget about it otherwise.
4. If you're a geek, fix the music computer.
5. No wait. The computer's broken, don't bother.
6. If you have used the terminal called „Mühsam", turn off the screen after using.
7. The leader of each group (for anarchists: your leading anarchist) should make sure that everything is left in a tidy way.
8. Toilets: Use the left one if you pee sitting down, the right one if you pee standing up.
9. Or the other way round.
10. Always dispose your bottles etc. yourself on Fridays.
11. Put back drinks in the fridge if you take something out.
12. Put the frigging CDs back in their covers.
13. Close the Afri-Cola fridge by pushing it hard.
14. When ordering pizza, it is your duty to ask others if they want to order something using the megaphone.
15. It's forbidden to hide the megaphone.
16. The terror buttons on the mixing table may only be operated by Ingo.
17. Scotty the dog always has a place on the couch in the corner.
18. Do the dishes.
19. Don't tinker with the clocking device in the fridge.
20. AT LEAST tell people when something's broken.
21. Random rule.
22. There are exactly 23 rules which are golden.
23. Don't do anything we wouldn't do if we were in your place.

NYCResistor: The Interviews

Max Whitney sent us the straight interviews she did with seven of the founders of NYCResistor - not to print them in the book, but because she was thinking listening to these people would help us, putting together this book about the many different aspects of starting a hackerspace.

However, we think these interviews are damn interesting and insightful - and so we featured them anyway. Thanks a ton to Max.

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George Shammas' story

I was a hacker on a plane. I never went to a hacker conference before. Not ToorCon, not HOPE, none of that mumbo jumbo. My friend Peter went to HOPE without me. After he went to that, we decided that if I was going to go to a hacker conference, we were going to go balls out.

We heard about Hackers on a Plane. The HOAP website looked like a scam. It was so crappy. And it was like „l337" dollars. We paid the 1,337 dollars anyway. Much to our own shame, we figured paypal would give us our money back if it was hugely scammy.

I went from Defcon, which was my first hacker conf, to Germany, throwing snakes at the superintendents. As we got to the checkpoint to get on the plane, we all had all these electronic projects in our bags. One guy had 40 DD batteries in his bag. The checkers just kept saying go-go-go-go. Nobody stopped long enough to get into the electronic stuff we were carrying.

On our second city I met Bre for the first time in a bar. It wasn't until the last two days that we figured out we were from the same city. Then we thought that we thought we had to create one of these things. We spent 4 hours picking a name. Our method: brute forcing domain names until we found one that was free. Maybe that's why Resistor's not the best name.

Like four days after I got back I called Bre and said: when are we going to do this thing. I didn't know yet that you're supposed to lose all your motivation right after a hacker conf. I thought you just kept going with all the awesomeness, so I didn't know better than to push it on.

If I had tried to do this myself I would have failed terribly, because I was this young kid (ed: last year). I really credit Bre's ability to get it to the make blog and everything else. Bre, Peter and I had about six meetings without anyone else turning up. There's an epically old picture with my hands going: „Bah!" that was taken between our first and second meeting. Peter is the invisible never existent founder.

We decided we needed public events to start getting people: thus the Microcontroller Study Group. That was at Lemurplex with Eric Singer. Eric thought we were really cool, mostly because of Bre, and he let us have our first thing there. I thought we would have 3 people, and there were like 35. There was some disappointment in that people were expecting a real study group and we were only prepared to show projects.

Justin Day and Zach Hoeken were at that first meeting. Justin was like I dunno about you guys and disappeared for a while, but he came back.

It took six months from the first Microcontroller Study Group to finding a lease. We had meetings every week at Lemurplex. There were lots of people who cycled in and out of that group. The planning and creation of the physical space was the best thing for me.

Bre went to Vienna and CCC (like he is now). As soon as he left the whole thing vanished. I underestimated how much of it was him. When he came back he was like, „Okay, now!" And within like three weeks we had all the money and most of the founding members together.

The founders were: Pat, Dave, Bre, George, Diana, Skiff, Nick, Zach, Raf.

Everyone plunked down $1k as seed money. Once there was 9K in the bank, people's motivation went through the roof to get a space. Dave Clausen is responsible for finding a space. He visited like six spaces and everyone else visited like one.

Thus ends George's story.

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Dave Clausen and Diana Eng's story

How did you find out about all this?

Diana: I saw Bre at a party and he's like come to the Microcontroller Study Group, so I went to the MSG and I was the only girl and I was like this is weird, because there were like twenty or more guys. There were neat projects and Bilton was there and Raf was there and Zach was there and they seemed pretty cool … so I stayed but only really because I didn't really talk to anyone else but them. That was at Lemurplex. I was supposed to be on the mailing list, but I wasn't on the list so I missed a bunch of meetings until Bre called me and was like „I'm worried about you." And I was like „I missed them."

Dave: I found out about it on the Make blog or some blog so I went to that. I was the only outsider. They all knew each other. I brought Pat in later. I was pushy. After one of the MSG meetings and I was like whatever I want in. You guys should let me in. And so they did.

What about the $ 1K?

Diana: Before X-mas, we had to get all the money together. We weren't in recession then, so it didn't seem like a lot of money. I could buy 2 pairs of shoes or I could do this.

Dave: I was a little more hesitant. I wanted some concrete explanation of what was going to happen with the money, so I resisted a little bit. Eventually I was satisfied that this was going to be not just fucked up and thrown away. So yeah.

How did you find the space?

Dave: We were looking for beat up spaces and decent rents. We focused on Dumbo or park slope or downtown Brooklyn. We divided up the neighborhoods. I got downtown and Raf got Park Slope. I looked at a few spots. A couple spots in Dumbo. There were a couple spots in Park Slope like 3rd ave. This space I found on Craigslist. This is one of the first spots we found.

You can see what it is. It's fucked up. It's illegal. There were other people who were trying to get the space. I kept pushing the primary lea-seholder to sign a lease with us. I finally got her to dump those other zeros and sign with us. Eventually they're going to tear the whole block down and build a park or some shit.

Diana: The first meeting in the loft was „everybody bring a chair," but I didn't bring a chair, so I had to sit on a bucket.

Dave: At first it was kinda sucked because we couldn't always get Lemurplex so sometimes we'd meet in a cafe. Pretty much when we signed a lease it all just sort of gelled. We're going to do it. And since that moment the energy really changed. Now we have the space and now we really have to make it happen. So we started with classes and getting more members. Once we got the space it was like 5 times the amount of energy and involvement.

Thus ends Dave and Diana's story.

• •

Nick Bilton's Story

How did you find the MSG?

I didn't find the Microcontroller Study Group. I was like the 2nd or 3rd person. I won the Yahoo hackday with a coworker. My coworker was like „My roommate is Bre Pettis. You should tell him about winning hackday." But so I went to Secret Science Club one night and I met Bre. He was leaving for Hackers on a Plane. I was like „Come eat lunch at the Times when you come back." He came back and ate lunch and was like „I want to start a hackerspace!"

Peter, George, Bre and me invited a bunch of people. There were 6 of us. There was this girl and her friend and some guy and us. We met at Lemurplex. The girl was a seriously real deal hacker and she got in a big argument with Bre about should we be a .com or .org and they went at it for like an hour and finally Bre was like „Ok! Enough!"
They stopped coming.

We had meetings every week and they went for like 4 hours. This guy Pat started coming, he never comes around anymore. Raf started coming.

We started doing the Microcontroller Study Group. I did a class on how to do 3D molds using silicon. Diana brought some stuff. Bre did a demo of his LED cube array and it started going from there. Then we just used to meet all the time every Tuesday night for like 3 or 4 hours, and Zach started coming. We met at 'snice in the city one night to fill out all the tax forms and now here we are today.

Why throw the 1K?

Because I was into the idea of having a space that I could be in and I could work and be with really interesting people who are building really interesting things and that I could learn from and teach. It was about having a collective of people that I could work with.

Any Disasters?

People who showed up who were really difficult and abrasive and difficult to deal with. We had an Arduino class. This guy showed up, we'll call him Dick, and he was just like very weird. He was like up in people's faces telling them what they were doing wrong. And he was like, „what are you doing using Arduino?? There are all these other chips and like what are you?!?" And we're like „What? It's an Arduino class" and he was all like complaining. I told him „If you could just work on your project it would be cool." Zach pulled me outside and was like „What do we do?" And I was like, „I dunno, what we do?" And then later someone else like pulled me out and was like „What do we do?" And I was like „I dunno, what do we do?"

Then Skiff showed up and he had his parents with him. This guy Dick starts getting up in the parents' face. So Skiff pulled us out and was like „I'm going to tell this guy he has to leave." And we were like „Yay!" So Skiff handled it.

There were terse discussions in the beginning about how we wanted to set up the space: should there be tables around the perimeter and eve-

rybody gets their own workspace or should there be tables in the middle and everybody just works where ever. We ended up with both, but that was a bit of a discussion for a while.

Advice?

The philosophy anyone starting a hacker group should know is : whoever invites people into the group is fine, but if anyone feels uncomfortable with that person then they shouldn't be allowed to be a key-holding member.

It's important that people not try to take credit for things they haven't done.

Hey, we should do the 10 commandments of a hacker space, like: Wear deodorant. You know things like that. Don't steal people's LEDs.

Thus ends Bilton's story.

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Raf Abram's story:

I met Bre at the Maker Fair in Austin. You know how that is. Everyone meets at Maker Fair. I had this rental car. Somehow we ended up lost in the rental car because we decided to use Google Maps, so I think that's why he remembered me.

Bre called me up to come to the original meetings, before we even thought about having a space, really just a meetup. Not a thing.

I think he was researching people who were coming to those meetings, secretly, to form the real group. So that's how I ended up here just by being a chatty knowledgeable person, a chatty nerd.

Microcontroller Study Group was less nerdy than they could have been but still nerdy. It was a flourescent lit room with people with maybe a handful of inspired amateur projects, then we would attempt to do some sort of communal thing. Sometimes we would pull something off,

sometimes we wouldn't, then we would go get food at the local diner. We wouldn't not pull something off because we failed just because we got talking.

It didn't take long to actually form a group. I started going to those meetings in like fall and then in February we had this space. It was really just a few months and the meetings were only like once a week or less at that point.

Why the 1k?

I wanted this place to happen and I happened to have some money. The timing was good. Normally I don't have a thousand dollars to plunk down on something like this. It was purely I just wanted a thing like this. And a thousand dollars is an incredibly low price to pay for a giant playland studio.

Disasters?

There were no disasters. It's terribly boring that it all works terribly well. To this day literally nothing has gone wrong. Living in NY is miserable enough that we don't need any more conflict, maybe that's why it worked so well.

Advice?

Don't expect anything in return for your money. Agree that your money is basically gone. It's just gone. And maybe a hackerspace will happen. Then you'll all be much happier. That 1K, I'm not going to get that back. And I don't expect anyone who comes later to match that. That's not the point of that.

Change anything?

What would I change; not a whole lot. I'd get a place with cross-ventilation. That's about it. In a prettier neighborhood. But once you step through the door it's pretty nice inside. Now most of the people here don't have my incredibly anal need for perfect air.

We couldn't have done it without Bre. He definitely has that kind of charismatic thing going on. It took a while for people to not look at him when presenting ideas for critique. It was kind of like „remember, we are all equals here." People's personalities do establish themselves after a while.

But yeah, that was good. You know what it was, he just knows everybody. You need someone with a huge social network who is able to actually cull those numbers down to people who will actually work in this thing together. But then he was willing to give up power completely almost immediately.

Thus ends Raf's story.

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Zach „Hoeken" Smith's Story:

How did you find the Microcontroller Study Group?

The internet came into my veins through my tattoos (editor's note: Zach has an Ethernet port tattooed on his inner elbow, where the needle goes) and that's how I found out about it. I came to one of the first ones and yeah that was great.

Before I heard of NYCR I was renting like the upper half of the college-humor.com studios in like this warehouse in that place, what do you call it, oh yeah, Williamsburg. It was just me, it was hot, it was out of the way. And as soon as I heard there was a community of hackers wanting to form up I just knew that like I had to be a part of it. I slowly insinuated my way in and helped get it started and now I have a really fun cool place to work and like hack and hang out and drink Club-Mate.

Were you involved with the RepRap already?

I was doing RepRap, just starting to get involved with RepRap, starting to get involved in like electronics and fumbling my way through and not really understanding a lot about it. The first NYCR MSG I went to I brought a design to a circuit board I was working on. It was my first design. I mailed it to the list before the meeting. I showed it to Raf and he helped me with

it and I eventually got it made and it's one of these boards here (points to one of the boards running the RepRap). It was awesome. Finding a group of people who were really smart but really fun and willing to share.

I know community was really important because I was trekking out 10 blocks from the subway station to work on this thing I really cared about, but no one I could really share with. There were a couple other people at that space, but no one I could show a circuit board to who would be really excited. So after that first meeting I knew I had to make it really work. And the way to do that was to really pitch in.

I wanted to be treasurer because I knew one of the easiest ways for something like this to fail was to run out of money. And I knew I could make sure that wouldn't happen. So for me that was the easiest way to make sure it didn't fail.

How was it resigning as treasurer?

Mostly I just hoped people wouldn't make fun of me. I hoped there wasn't going to be a backlash. I had taken on a lot of responsibility and needed to pass some of that. I think it went really well (passing it off). I laid out why I couldn't do it anymore, and Skiff stepped up, took it over. And yeah that's the way that stuff should work. You say why you can't do it and someone else who can do it takes it on. I think it's working really well because now there's more than one person who knows how to do the money stuff. It's spread out a little bit.

Why the 1K?

Because nobody else was going to. You gotta put your money where your mouth is. Because I believe in the do-ocracy. You gotta put something on the line to follow your dreams. If you're not willing to put something on the line to follow your dreams, then they don't deserve to come true.

What do you want this place to be doing in another year?

In another year? My hope is that we don't stray from being a nice pleasant place for people to come and work on the things they're interested in,

to learn new things and to be around like minded people. I think we really accomplished what we set out to do and if we continue in the way we have and still have a space then I think I will be very happy. Oh and I hope more Resistors quit their jobs.

Any new monster projects you want to see?

There's always RepRap. That's a lifetime project. I've come to terms with it. I've gotten involved in barbot, helping out Adam, which is going to be really fun because I'm going to be in charge of the pumping system which is just hilarious.

What do you want people to know about Resistor?

Resistor shouldn't be unique. This shouldn't be read as like „Wow look at what those guys did!" It should be like „I'm going to do that too." Using your brain beats the hell out of not using your brain.

You're the only person who hasn't talked a lot about Bre...

Bre? Definitely one of the pillars of Resistor. He's pretty much my first experience with that. I got involved probably from a blog post that Bre wrote. But like so a few weeks after that, him and Bilton came to the studio and started talking bout how we should really do this thing. So yeah.

Thus ends Zach's story.

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Eric Skiff's Story:

Bre and I met down at South-by (SXSW) a couple years ago. We just kinda got along, so when he moved to New York City, and knowing him through Social Media and South-by, Bre got hooked up with Frisbee 2.0 that I was running at the time. We just kinda clicked. So when Podcamp Philly came around we decided to all take a bus together, some Social Media folks and me and also Bre. Bre had just been on Hackers on a Plane. He was very excited. I had done some very light hardware tinkering and wanted to do more. I said „Okay! Sign me up!"

We started meeting at Lemurplex. I was doing some stuff, but then there came a crunch time when we were like, „Are we going to do this? Are we in?" Bre, Raf and I sat down over brunch and really said, „How do we pay for this?" Raf had some great ideas about teaching classes and doing things to pay for the group. To this day, I think he was pretty prescient about how many classes we could teach and how much we could bring in. That was sort of the birth of this space, that brunch.

I sorta checked out for a while, planning barcamp and I lived up in Astoria, so I wasn't really involved in finding the space. But once we had it, it was just, „Okay, this is our home."

So at that point I really dove in. For the next couple weeks I was just totally passionate about going out and buying stuff and like building the loft and being like, „Okay!" And then being okay too when Dave Clausen rebuilt it to be less deadly.

We used to meet at Bre's apt and hang out on the roof. It really existed even then. So many of us trust each other so much that we would give each other the keys to our houses, that was key to it working. That trust really led to attracting more people like that. The best practices document that Bre had from CCC (the design patterns thing), that is also an incredible map of where we've come. We can read back through that and go, „Yeah, we really did that and it really works."

Anyone staring a hackerspace should read and trust that document more than they think they should. It's not a bible. We didn't do everything, but yeah really good thinking has gone into it. Things like yeah, really maybe no one should live at the space.

What was it like when you first saw the space?

I saw an amazing blank space, and I saw that it was far larger than I thought we could get. I underestimated how much putting 20 people together could actually get. It's a good thing the floors and walls are made of solid concrete. It's a good thing this place is a little rough around the edges. It's hard for us to damage this place and that's a really good thing. The gingerbread housefires, that whole scene could really only happen here.

There are a couple reasons why I love this place so much and why it's successful and those are all people and the various things they brought. I could namedrop every single person and say this person was critical, but I think it's fair to say that without the group that came together we wouldn't have had the vibe, we wouldn't have had the projects to rally around. We cobbled together an LED oscilloscope and how to cast a 3D model and every week there was something new and interesing to play with, while alongside that we were working on the hard infrastucture stuff. There's a lot of slogging so you have to mix in the fun stuff that gives you the hint of what's to come.

Are the people the founding nine?

Not even all the orginal people, there were new infusions of awesome as we went and that kept those wheels spinning.

Why the 1K?

Once the vision was articulated there was no hesitation. This needs to exist. We are the people with the power to do it. And done! And among the various things on which I could have spent a thousand doallars this is the one about which I will be the proudest.

I think the core of the reason we're successful from the outside and also internally is that so many of us have a passion for learning and don't get to do it that much. We try, we poke around at things ourselves and we read as much as we can but until someone puts two things together and shows you how and you get that spark, yeah! There's the classes and the focus on learning, that's I think part of the reason we're so respected from the outside. We are here to share what we do, not to hold it just for ourselves. That's one of our core tenets. If you're just getting together to hack, then I think you're missing a big piece of it.

What's the next big thing you'd like to see happen?

The robotic arm that Bre and I did got me completely excited about amateur robotics. Not just building them, people have built things much cooler than I ever can, but getting regular people started. That first thing

where you take something you do in the software realm and make something move is really cool. Taking what we did with the robotic arm and trying to make it a kit would be really cool. Almost an Arduino for robotics. Keep it cheap, keep it simple, keep it extensible. Put it out there and see what people do with it.

Zach chimes in: I had the same experience when I made something move for the first time.

Eric: It's like that Neo moment. You already have control over how the computer works, but suddenly for the first time, you have control over something real.

Any disasters?

I don't think there are any disaster stories. There are important near misses. I came from a background of total openness with barcamps under my belt. I wanted everyone who wanted to make this work to be a part of it. Thankfully not everyone felt that way. Some people understood that even though everyone may want to help, some people may be better equipped to do it. We made some good choices in the group. I'm much happier with the way we've done it. I have some guilt about some of the folks who didn't get invited to be part of that core group. They're totally invited to participate but they just didn't need to be invited to be part of the barnraising.

In an alternate reality, without Resistor, what would you be doing now?

Probably I'd be trying to do yet another camp and I'm glad to not be. I think that that's a torch that should be passed. It's an enriching experience to run one as it is to participate.

Advice?

Have fun. Make it happen. It's easier than you think. As they say in the patterns document: „Resist the sudden urge to slack."

Thus ends Skiff's story.

The Conscience of a Hacker

The following was written shortly after my arrest...

\ /\ The Conscience of a Hacker /\ /
by
\ /\ The Mentor /\ /
Written on January 8, 1986

Another one got caught today, it's all over the papers. „Teenager Arrested in Computer Crime Scandal", „Hacker Arrested after Bank Tampering"...
Damn kids. They're all alike.

But did you, in your three-piece psychology and 1950's technobrain, ever take a look behind the eyes of the hacker? Did you ever wonder what made him tick, what forces shaped him, what may have molded him?
I am a hacker, enter my world...
Mine is a world that begins with school... I'm smarter than most of the other kids, this crap they teach us bores me...
Damn underachiever. They're all alike.

I'm in junior high or high school. I've listened to teachers explain for the fifteenth time how to reduce a fraction. I understand it. „No, Ms. Smith, I didn't show my work. I did it in my head..."
Damn kid. Probably copied it. They're all alike.

I made a discovery today. I found a computer. Wait a second, this is cool. It does what I want it to. If it makes a mistake, it's because I screwed it up. Not because it doesn't like me...
Or feels threatened by me...

Or thinks I'm a smart ass...
Or doesn't like teaching and shouldn't be here...
Damn kid. All he does is play games. They're all alike.

And then it happened... a door opened to a world... rushing through the phone line like heroin through an addict's veins, an electronic pulse is sent out, a refuge from the day-to-day incompetencies is sought... a board is found.
„This is it... this is where I belong..."
I know everyone here... even if I've never met them, never talked to them, may never hear from them again... I know you all...
Damn kid. Tying up the phone line again. They're all alike...

You bet your ass we're all alike... we've been spoon-fed baby food at school when we hungered for steak... the bits of meat that you did let slip through were pre-chewed and tasteless. We've been dominated by sadists, or ignored by the apathetic. The few that had something to teach found us willing pupils, but those few are like drops of water in the desert.

This is our world now... the world of the electron and the switch, the beauty of the baud. We make use of a service already existing without paying for what could be dirt-cheap if it wasn't run by profiteering gluttons, and you call us criminals. We explore... and you call us criminals. We seek after knowledge... and you call us criminals. We exist without skin color, without nationality, without religious bias... and you call us criminals. You build atomic bombs, you wage wars, you murder, cheat, and lie to us and try to make us believe it's for our own good, yet we're the criminals.

Yes, I am a criminal. My crime is that of curiosity. My crime is that of judging people by what they say and think, not what they look like. My crime is that of outsmarting you, something that you will never forgive me for.

I am a hacker, and this is my manifesto. You may stop this individual, but you can't stop us all... after all, we're all alike.

\ /\ The Mentor /\ /

Cooking with Club Mate

Delicious Club Mate drinks

All of these drinks were painstakingly developed (or perfected), proto-typed and assembled at the famous laboratories of Entropia - Club Mate Bräu art since 2001.

••

Tschunk — The hacker's cocktail

Comparable to the nice alcoholic national beverage from Brazil -- the Caipirinha -- the hacker brews his own cocktail -- by adding Club Mate.

Ingredients:

· Club Mate
· Limes, cut in little regular hexahedrons
· Brown sugar
· Crushed ice
· White rum (or some other useful alcoholic liquid)

The limes are crushed together with the sugar in a tall glass using a pastle.
Crushed ice is added.
Pitú or some other useful alcoholic liquid is added, for example Rum
Now pour the Mate
Don't forget the straw!

Fertig. The ice refreshes, the Mate keeps you awake and the alcohol adds the Gemütlichkeit.

••

The Matler

The „Matler" is a drink that was developed in our laboratories, in the aftermath of the GPN5 - fifth Gulaschprogrammiernacht. Rumour has it that comparable mixtures were conceived at other locations, and that they bear the name „Beamer" there.

Ingredients and mixing ratio:

· 1 bottle of Club Mate (0,5 l)

· 1 small bottle of Rothaus Tannenzäpfle, a famous local beer (0,33 l)

Humans first pour the beer part in a big Weizenglas (that means about 0,198795180722892 l beer in a 0,5 l buffer) and then carefully add the Mate (Be careful! Buffer overflow is imminent!). Best served cold.
Dear children: Sounds icky - but it isn't.

Known bugs:

The mixing ratio could be more flexible.
If it produces to much foam, pour slower!

Variants:

The typical bavarian „Stoiber-Matler" is mixed with the „Hackerbräu" instead of „Rothaus".

••

The 42

The „42" is a cocktail developed at the bar of Entropia.

Ingredients:

· Club Mate
· 2 cl or less 43 (a sweet Spanish liquor)
· Crushed ice

Pour the 43 over a handfull of crushed ice, add Club Mate.
Prost!

••

The Fnord Korea

We mix 3 parts of Club Mate with one part red wine and therefore get a „Fnord Korea". It is not to be confused with a „Seoul Mate" (white wine.)

Etymology:

· The mixture of Coca Cola and wine is tradionally named „Korea" in the southern German area

See also:

· Seoul Mate.

....

The Seoul Mate

The „Seoul Mate" is a mix drink made from white wine and Club Mate. It is way more popular than the „Fnord Korea". You are advised not to use a too dry white wine and to mix 1-to-1. If in doubt use more wine than Club Mate.

See also:

· Fnord Korea.

....

The Mapfelsaft

Depending on texture and taste, fill 1/3 to 1/2 of a glass with apple juice. Infuse the rest with cool and golden Club Mate. Then you have a „Mapfel-saft". A little bit of ice makes the drink perfect.

..

The Turbo Mate

The „Turbo Mate" (also known as „Power Mate") a refreshing drink that is manufactured using champagne and Club Mate. Our research shows that it is served mainly in close proximity to the ALDI equator (for our foreign readers: Germany is divided into two parts: ALDI north and ALDI south. ALDI is a huge grocery discount market.) Traditionally, it is mixed by gut feeling and according to the needs of the user. Best served with love.

....

The Mazo

The „Mazo" (pronounced „maso") is mixed from 3 parts of Club Mate and one part Ouzo. Traditionally, it is served without ice. (Also, tradionally, there is no ice in your hacker space.)
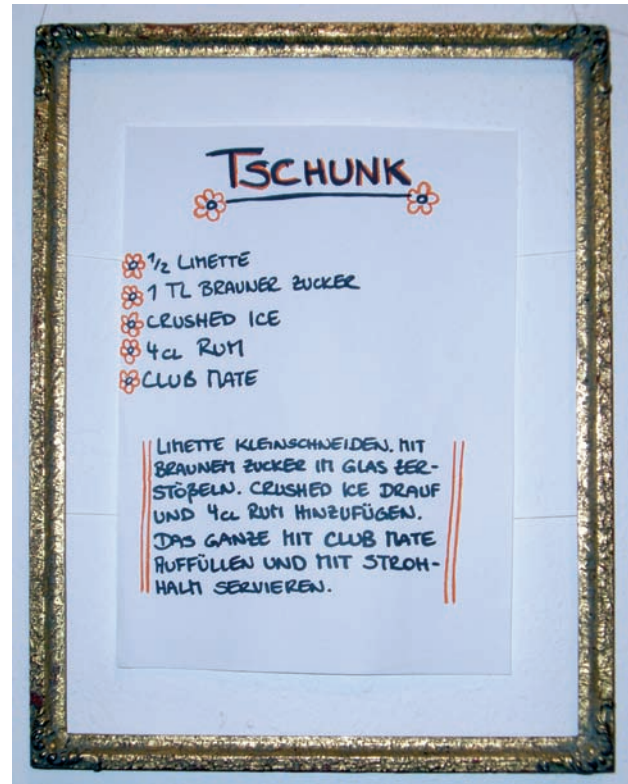
Celebrities on Club Mate

Infamous quotes by famous celebs on Club Mate, as collected throughout the past years at the Metalab

„The Metalab is a place for turning Club Mate into ideas."
Paul Erdös on Metalab

„Mate is an adornment for the fortunate, a solace for the unfortunate."
Demokrit on Club Mate

„I have nothing to declare but my genius, and these four crates of Club Mate."
Oscar Wilde on his immigration to the US

„A man can't be too careful in the choice of his drink."
Oscar Wilde on Club Mate

„Club Mate is the germ from which all growth of nobleness proceeds."
Oscar Wilde on Club Mate

„Club Mate is one thing you can't get for nothing."
Oscar Wilde on the horrifying Club Mate prices

„I can resist everything except Club Mate."
Oscar Wilde on temptation

„When I was young I thought that clubmate was the most important thing in life; now that I am old I know that it is."
Oscar Wilde on Club Mate

„It was said that the atlantians used it to manipulate the future."
Robert Anton Wilson on Club Mate

„In Soviet Russia, Mate clubs you!!!"
Soviet Russia on Club Mate

„All your Club Mate are belong to us!!!"
Cats on Club Mate

„Reality is a state that arises from a lack of Mate."
Angelo on Club Mate

„Clubmate is in reality, based on something I had invented a few years previously."
Arthur C. Clarke on Club Mate

"Mate delivery for I. C. Wiener!"
Fry on shitty jobs

„Something from out of town."
Mark Twain on Club Mate

„I have taken all Club Mate to be my province."
Francis Bacon on Club Mate

„One Drink to rule them all, One Drink to find them, One Drink to bring them all and in the darkness bind them."
hidden inscription on the first Club Mate bottle lable on side-effects

„Bruce Schneier can determine the location and the momentum of a bottle of Mate at the same time."
Werner Heisenberg on Bruce Schneier

„When Bruce Schneier sweats, that's how club mate sirup is created."
Papa Loscher on a dangerous essence

„The last real terrorist menace originated from a bottle of club mate in the hands of Bruce Schneier. This is today known as the cold war."
Nikolai Gorbatschow on menaces

„In actuality, there is only the Mate and the Void."
Demokrit on the indivisibility of atoms

Software
Other Stuff
Object Oriented Software
Hardware

Narwhale

Mountains of Drama

Commodore Pet Cemetary

Teh Pirate Bay

Mines of Abandoned Antiquated Electronics

Monument to those who lost their lives in the flame war.

The Bike Shed

Forest of Encryption

Temple of Dischordia

The Great Mother LED

Sea Plus Plus

Oregon Trail

Space Station

Serial Port

Quicksands of Consensus

Hello World Hackerspace Map

Information Superhighway

Troll Bridge

Rule 34 Lighthouse

Cat5 Peninsula

Garbage File

Sea of Win

Fountain of Club Mate

Open Source Delta

LOLcat Island

Here be a dragon
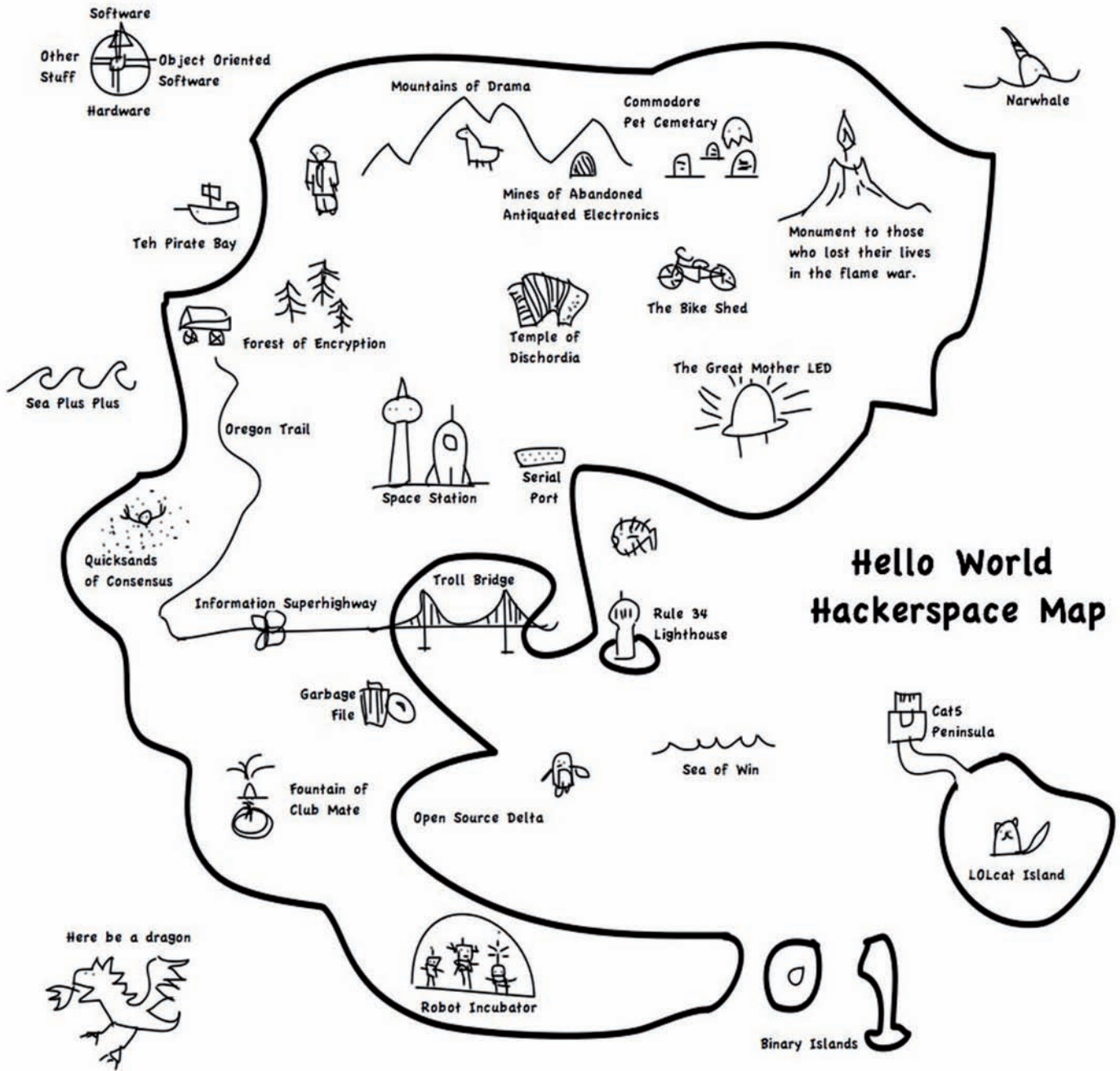
Robot Incubator

Binary Islands

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Pumping Station: One - Kamil J. Krawczyk
L0pht: Joe Grand (1st and 4th picture), John Soares (2nd picture)

A short history of the CCC: Tim Pritlove (Wau Holland in a phone booth with an acoustic coupler), Wikipedia, Max Braun (Blinkenlights CCC)
Blinkenlights: Sam Javanrouh (Stereoscope Toronto)

Thanks to everyone for the images, your contribution to the book, and being awesome in general!
In case you feel we missed your name on this page, we'd like to apologize - please get back to us so we can have your name printed in the next edition.