

Building a Forum: The Ayotzinapa Case

An aerial photograph of a rural area in Mexico, overlaid with a black line representing a bus route. Numerous colorful circles in yellow, red, blue, and green are scattered across the map, indicating specific locations of interest or events related to the case. The circles vary in size and are often nested or overlapping.

Stefan Laxness
with Peter Hall

Founded in 2011, Forensic Architecture is a research agency based at Goldsmiths University in London which has pioneered architectural and media research for human rights organisations, political and environmental justice groups and international prosecutors. Its multi-modal platforms of sites of conflict have furthered a number of cases where forensic methods are used in reverse, to focus on violations of human rights and international humanitarian law, where the claims of the state are under legal scrutiny. In *The Ayotzinapa Case*, Forensic Architecture developed an online platform based on material in the public domain around the forced disappearance of 43 students of the Normal Rural School of Ayotzinapa. On the night of 26-27 September 2014, the students were traveling on buses in Iguala, Guerrero when they were attacked by local police in collusion with criminal organizations. Six people were murdered, including three students, 40 wounded, and 43 students were forcibly disappeared: Their whereabouts remains unknown. The Ayotzinapa Case platform reveals in interactive and cartographic form the events before and during the night of 26 September and the subsequent cover-up, implicating state agencies and their apparent collusion with organized crime.

The project was developed in collaboration with the Argentine Forensic Anthropology Team (EAAF) and the Miguel Agustín Pro Juárez Human Rights Center (Centro Prodh). Here, Stefan Laxness, project coordinator for Forensic Architecture, discusses the work of Forensic Architecture and the Ayotzinapa Case with Peter Hall.

Peter Hall

Could you explain how the work of Forensic Architecture work is defined in terms of the forum?

Stefan Laxness

The word forensics derives from *forensis*, Latin for ‘pertaining to the *forum*’. The Roman forum was a multi-dimensional space of politics, law and economy. This also has something to do with the act of sensing an event, and that act of sensing essentially also happens in those three places: the field, the lab and the forum. The built environment



All stills. *El Caso De Ayotzinapa*, 2017. Website and video. Courtesy of Forensic Architecture.

senses the events, as in shrapnel on a wall, for example. It happens when we are analyzing the evidence, capturing that fragment on the wall, and then it happens through the forum where that information is then presented back to an audience.

Peter Hall

That's an inspiring idea that those three parts, the digging, the analyzing and the presenting, all take place within that one word, forensics: unfortunately it's become popularized as the thing that the people with the rubber gloves do after a crime. I also like what's clear about the multi-dimensional approach of your work, that there's a suggestion that it's overcoming the disciplinary silos. So, breaking architecture out of that form-making ghetto. It's also interesting that architecture becomes a witness to events.

Stefan Laxness

It becomes an interface for aggregating information, and the interface for presenting the information. Recently we've been doing a lot of camera calibration and projection mapping, where the image or video is literally projected onto a model, either to reconstruct it or to understand how, where that image or video was taken.

Peter Hall

Is the projection mapping used to gather or to demonstrate, or both?

Stefan Laxness

It's both. We just finished an investigation on the killing of Tahir Elçi who was a prominent Kurdish human rights lawyer in Eastern Turkey. In that incident there were 40 shots fired and he died because of one of them. Every moment of four cameras recording has been calibrated and mapped onto the built environment as a way of just being able to understand the scene better and to reference back to it. It becomes a 3D storage system for this information. A live archive and a live database, but instead of being in a spreadsheet it's actually within the 3D model. It gets used during the research and investigative phase, but then also becomes really crucial for the video investigations which communicate those findings.

Peter Hall

So, jumping to the Mexico project, the Ayotzinapa Case, is there a similar model created for investigation?

Stefan Laxness

Yes. They're both real counter-forensics examples, examples in which we have to use our own methodologies and techniques and tools in order to do an investigation which was not properly done by the state. They both have to do with the fact that there are two incidents in which there was a lack of visibility, and a lack of effective justice. Their lack of visibility means that indepen-

dent groups like us need to actually start to act.

Peter Hall

So the Ayotzinapa Case began with the EAAF [Equipo Argentino de Antropología Forense] approaching you?

Stefan Laxness

The EAAF and Centro Prodh, which is a human rights organization based in Mexico City, approached us to do something about the case. Following a bit of preliminary research on our end and then a field trip to Mexico, we realized that there seemed to be a real need to hear the versions of the events from the perspective of the victims, and that the state, the prosecutor, had essentially put out their own official version, which was full of gaps, discrepancies and loose ends, but being the state they also had the loudest megaphone to promote their message. Once you start to research it a little bit, you realize that there's a lot of moving parts, people, objects, and places, and it quickly gets very confusing. The thing is, that confusion is what makes it easier to put out one version rather than actually talk about all the intricacies of what actually happened.

A third thing we realized is that if you were to read any sort of news article, whether it's a Mexican one or an international one, the main focus and the main questions were all about the missing bodies. Or, where are the students, the 43 students who disappeared? But there seemed to be less talk about the events that led up to this act of violence.

One of the challenges that we had was the lack of privileged material or primary sources. In Forensic Architecture we are not necessarily experts on Yemen or experts on Syria or experts on mass disappearance, but what we are experts on is looking at material and using that material as a way into a topic. In this case there wasn't any sound, any video and there weren't any images. A lot of that has to do with the fact that it happened at night, and the amount of repression that comes with the cartel violence, but also the state violence. A lot of material wasn't filmed. It also wasn't shared.

So the question became, where do we start? We weren't going to find where the students are, that's for sure. The task that we set ourselves was to create a tool that allows people to explore the case and make new connections from existing material. That's when we agreed that we would start our investigation by analyzing these two reports by the independent group of experts put together by the Inter-American Commission for Human Rights following the incident.

Peter Hall

Why did it get such a lot of coverage?

Stefan Laxness

It was because students were attacked, and the fact that also there were a lot of witnesses. The students' school in Ayotzinapa is traditionally left-wing, and attended by poor, mainly indigenous, farmers. They have a long history of demonstrating and protesting

against the state. Educational reform is already up there in the news, and here are seventeen to twenty-year-olds, poor, rural, indigenous farmers who are being attacked by the state.

The Mexican Government agreed to take the help from the Inter-American Commission who sent experts to assist the investigation. The group wrote one report, and finding that the state wasn't being super cooperative, decided to write another report on all the things that they thought were wrong. We chose these two documents because even though they are secondary sources, they were the most cohesive, extensive and to a certain extent trustworthy account of the events that happened that night—and where the discrepancies were. The problem with them is that they're 1,000 pages and nobody's got time to read them. But we saw, just by reading the résumé, that there were people, there were objects, there were locations that kept recurring. Immediately we saw that embedded within the report was a spatial component, that translated differently, could start to reveal certain things.

Peter Hall

The spatial dimension is interesting.

Stefan Laxness

Yes, we thought this is a good opportunity to make the thing more legible and see if we can actually set out new connections between data. That's when we started data mining the two books. We decided that we were going to break down every sentence, every idea, every thought, every concept presented in

these books, and give it a time and space tag, a location and timestamp. We also kept track of the narratives and we started devising a set of tags so we could later filter them on and off. So there's victims, security forces, other governments, suspected members of organized crime. And then there are the vehicles, weapons, and type of incident. That led us to the data mining, or 5,000 points of information. This is all set up in a spreadsheet. So there's always a little bit of negotiation between the spreadsheet and how you data mine, and how that's then meant to be reflected in the platform.

Peter Hall

At this point did you have a user interface or web design team?

Stefan Laxness

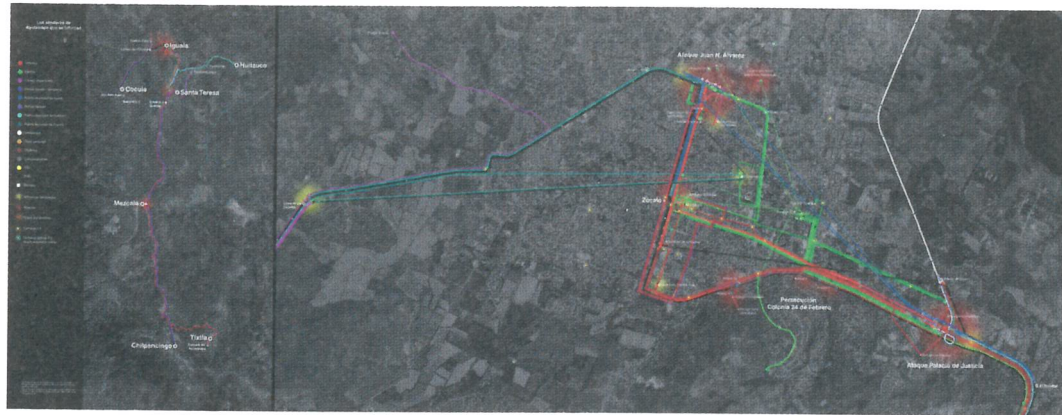
We got the user interface actually quite

late in the process. The data mining was one of the most important steps for the project. We didn't have a tool to visualize: We had to develop our own, because going into the data mining you know very little about the case. It's like reading a book for the first time. By the time you get to the middle you understand better what happened in the beginning. Same thing here. You start data mining, you know nothing. But the more you read the more you know, and suddenly the more you have to re-evaluate how you've data-mined the first bit.

That led to the problem of how we keep track of all this information, how do we keep track of our mistakes, and how do we keep track of what needs to be improved on? How do we understand the events better, and also in doing so refine that data?

So we started making decisions about how we break down these books

Data Package. El Caso De Ayotzinapa, 2017.



into larger chunks, and in themes.

Those then eventually became working drawings which allowed us to understand things better, but they also allowed us to better present the information and to draw out the main questions, the main problematics that we wanted to communicate to the audience. You can't just overload people with information because that is the same problem that you had in the first place. So the graphics then helped us to narrow down what the questions were and what we wanted to present. For example, the first ones were the most intuitive ones: There are four main events in which people are either killed or kidnapped. Let's break them down, add a timeline. Let's figure out when they start and when they end, and align our data points in time and stack them. Suddenly you can see peaks of activities and understand phases. It is no longer this freak event—as it's described in the official version. You can start to understand it as something that has structure, something that has a form or logic and is describable and quantifiable. So then there's a clarity.

One of the key parts of this project was to understand where and when all the alleged members of criminal organizations were. While the students, the victims, were really good at saying where they were; the alleged members of criminal organization would say, "I wasn't there in this event that you're describing, but so-and-so was there." They would constantly be deflecting their presence and implicating somebody else. But then you also noticed that their testimonies also just don't make much sense and the way they're describing things isn't clear. And that's the first sign that something's a little bit off.

So we couldn't place them because we have to give them a time and a location stamp, but if they're describing one event in one place but saying that they're not there but they're actually saying that they're somewhere else, the question is, how do you actually do this in the data sheet? Are they here or there?

Peter Hall

How do you visualize lies, in some cases?

Stefan Laxness

Exactly. So we came up with the system which was fairly simple, like a space-time matrix where you have time horizontally and you have space vertically. We just started plotting where they say they are at what time. So, if person A says, "I went from A to B to C," but then another person says, "I was here, here, but I saw person A in location E," you start to get the difference between person A's testimony and where other people have placed them. The independent group of experts had identified already that there were three different versions. You map all three of them and then you realize that it's a complete mess. If they had all been telling the truth, their testimonies might all start in different places but they would all end being doing the same thing, which according to them was killing and burning students in the same location. So there would be a convergence. But the lack of convergence suggests that there is confusion, suggests that there are discrepancies, and like you said, suggests that somewhere somebody's not really telling the truth. Essentially that divergence of line, that graphic cloud of narrative lines is the image, or a form of visualization of mass disappearance. It's the clouding of clarity through false positives and false negatives, which is part of the crime, in a sense, or evidence of the crime.

Once you started to overlay the cartel narrative matrix with the narrative matrix of the students and the narrative matrix of law enforcement, and also the narrative matrix of the official

version, you see that there is a very quick divergence between the version of the prosecutor from the version of the victims. So that's the first problem. The second problem is that the version of the prosecutor converges very quickly towards the versions of the alleged cartel members.

But there's one version of the events that was the one that had to do with the Cocula dump in which the students were allegedly burned. All the people that gave that testimony, there's strong evidence to suggest that they were tortured in police custody. So the official line aligns with testimony obtained under torture. That, in a sense, is quite a complex thing to explain and visualize, and the video is far more effective at actually just nailing that point and showing the process of how these things are drawn.

So, when Franc [Camps-Febrer] was coding this function, we saw immediately that where the crime scenes happen creates a triangle, which is also where all the government buildings are. If you look at the narratives and where they connect there's only one or two pieces of narrative testimony that link this part of town to the part of town where they were allegedly killed and burned. It's a projection of the narrative of violence from this part of town to a western part of town, which is allegedly based on testimony obtained through torture, and also very weak. This feature was a little bit too complicated to show.

Peter Hall

Right. It's speculative...

Stefan Laxness

For me it was fascinating that in this one small experiment you could suddenly see the projection of violence through narrative being essentially deflected to another place outside of the place where a lot of the violence happened.

Peter Hall

It's interesting how the graphic kind of plotting, tagging, arranging and visualizing of the information revealed the flimsiness of one testimony, just visually.

Stefan Laxness

Yeah. For me it was just glaringly visible. When we held our press conference in Centro Prodh, one of the more mainstream news outlets in Mexico had a journalist there who asked why we made a video of the events that did not mention the dump in Cocula where the students were allegedly burned.

The Centro Prodh member rebuked the journalist and said that the whole point is that the video is an extensive account of the known events of violence that happened that night, leading up to when the students are kidnapped. Because the thing is, once the students have been taken and put into the back of police cars, everything beyond that point is a form of speculation. And the Cocula dump had already been debunked by another expert who was at the table. So the head of Centro Prodh was saying that the dump deliberately

doesn't feature in this video because we wanted to achieve clarity on this event, not speculation.

Peter Hall

So, the motive for this kind of deflection is to draw attention away from the complicity of the state?

Stefan Laxness

I would be speculating if I were to answer that, but what's important, what is certain is that, based on the testimony of police officers, of other witnesses of police officers and the victims, that violence happened along the axis [where the Government buildings are located]. These things say a lot about the level of involvement of police vehicles and CCTV cameras that night; the use of all this infrastructure that's meant to protect citizens being used against them. They say a lot about the level of coordination that existed between security forces, either to act violently against the students or also just not act.

It also showed the coordinated nature of the violence, the fact that the actual moments in which the students are put in the back of the police trucks and taken away and disappeared, happened in two different locations. There's violence against bodies but also violence against evidence, which we're able to show through, for example, explaining how the CCTV cameras disappeared—the ones right in front of one of the crime scenes. The lack of transparency is the continuation of the act of taking the bodies, which is a violence against evidence. So, the mass disap-

pearance is a two-part act, one that is punctual and one that is continuous.

Peter Hall

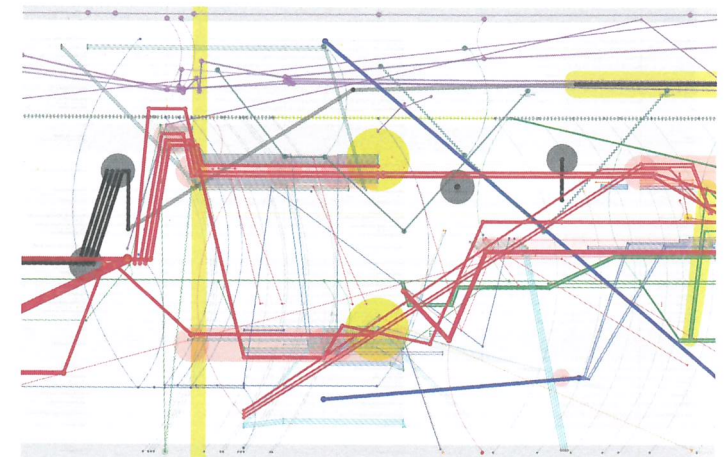
There's an interesting connection to a chapter in the Forensic Architecture book which describes an inter-relation between satellite resolution and the capabilities of drone bombing, how it's possible to cover up drone bombing by not having a satellite resolution available. It's a similar effect to what you were talking about, violence against evidence.

Stefan Laxness

Yeah. One can argue that the process goes further. One of the people that we worked with, a researcher, she showed me the photocopies that the judiciary will get in cases that they need to prosecute. These are photocopies of the evidence but the photocopies are done on really bad toner printers, and that's what they make judgments on. In a sense, the process of hiding CCTV cameras, omitting evidence, extends all the way up to doing a bad reproduction in which you can't actually see the evidence being presented.

Peter Hall

From the graphic communication perspective there are familiar challenges here, of using a visual language that suggests certainty, which I think pertains to a particular problem of how you show thematic links that are not definite



but speculative. Another issue is that you need to simplify to make accessible and understandable, but it is always at the risk of distortion.

Stefan Laxness

But not necessarily, because we did five videos for this project, and two of them are fairly dense information-wise. One of them is the summary of the events that night, which is not at all speculation. That is a list based on corroborated evidence. That's a 20-minute long video, but it is probably one of the most disseminated pieces from this investigation.

Peter Hall

It's interesting that the visualization, the mapping is important for the process of discovering and recognizing patterns, but in the process of communicating, sometimes you need a narrative to lead you through the visualization.

Stefan Laxness

Yeah, accessibility was the point of the videos. The platform in itself is com-



plicated. A lot of people are not used to multi-layer interfaces, and in some extreme cases, there are people who can't read and write who care deeply about this case. So obviously the platform may not be accessible to the people who don't have a powerful computer, don't have an internet connection, things like that. The videos were created because we needed to give people another way in. If you watch the videos, then you can better understand where to direct your energy when you're using the platform. But we had to go through a very long decision-making process, what do we choose to say in these videos?

Peter Hall

Was 3D modeling an important part of this project?

Stefan Laxness

It was important in order to quantify the amount of people and objects present at the scenes. It did, however, become important when it came to presenting. For example, when we were breaking down each of the crime scenes and aligning

all these points on the timeline we were also counting where every person is, where every car is, and we needed to lay those out. The 3D models weren't necessarily used in an operative way but for starting to represent the scene, and as a collector for quantifying things. There were 40 police cars in this scene, for example. That's a lot of police cars. The official version once again makes it sound like a rogue police officer and an odd car were involved. No, no. Here, every level of law enforcement has made an appearance. Even from other cities. That's when the scale of the event becomes apparent.

Peter Hall

What do you think the impact of this project has been?

Stefan Laxness

So, how one measures impact I think is difficult. For me the main impact of the project is that now there is a historic document out there that anybody can use in order to start their own research on this, and that can start to spread and

present the version of the events from the standpoint of the victims. They would essentially avoid, bypass doing what we did, which was spend nine months breaking everything down. The platform has been used by some journalists in Mexico. So it was a minor victory there. But the main goal of the project was to create documents that brought to the forefront an alternative version to what the state was saying. When I say alternative, it's not one that's made up. It's one that aligns more closely with that of the victims. There was a success in doing that because the documents that we put out were fairly clear and they did get a lot of circulation. And that plays a small role in shifting the debate a little bit.

On the more immediate level, the families of the victims have a document that they can easily share with people they don't know, but also their friends. They were telling me that even talking to their friends about this has been difficult because of the complexity, so these documents were also given to them on USB sticks so that they could share them back in their home states.

It also has to do with how then the project is presented and in what context. When the project was launched, we organized a joint press conference held at Centro Prodh and we invited both people from the human rights world, and some journalists and media outlets from the art and museum worlds because we were having an exhibition as well. That created a collapse of two worlds, which in Mexico, don't normally mingle. Already that is

the creation of a strange forum, right? Then on top of that, then we had our opening two days later at the MUAC, the Museum of Contemporary Art of Mexico City, which was a good demonstration of the role of the art space for disseminating this type of work. The topic of human rights in the art gallery in Mexico is not common, and people that go there are not necessarily people that would engage with this sort of work; it's not what they're looking for. But also the Museum of Contemporary Art is interesting because it's part of UNAM, one of the largest Latin American universities. It's free tuition and it brings in people from all over the continent, a lot of very different socio-economic groups. So, suddenly this art space here is also collapsing another set of worlds. There's the art goer, and this university that actually has reached far beyond the boundaries of the university, and there's a place for discussion about this topic. We trained some of the students to be able to explain the murals to people that were there.

Peter Hall

So you end up with a forum.

Stefan Laxness

Yeah, a forum. The fact that the videos were widely disseminated for me was a little bit of victory. Now, there is something that's more important, which maybe I should have started by mentioning, is that with the new government, because they've elected a new president who's from a different party, there are talks now of reopening the case.