



The virtual SciCon conference series | Transcript

Nadja Oertelt, Beat Glogger: New Ways of Funding Science Media: Massive Science / higgs

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Moderation: Eva Wolfangel

[Eva Wolfangel] OK, I think we can start. A very warm welcome to everybody. Welcome to SciCon. The title of this session is “New Ways of Funding Science Media” and we have two amazing people here with exciting projects and new ideas – how to make great science rather than get it even funded, which is a big question for many people.

A few housekeeping things from my side in the beginning. This meeting is being recorded so that people can watch it afterwards. If you are not comfortable with having your picture in the recording, it’s OK to turn off the camera. However, for a speaker it’s very nice to have people, to see people and to see faces and not to speak in the big, dark screen, so everybody who feels comfortable is really welcome to try the camera on and to see nice faces from all your colleagues here.

We start with two talks and after that there’s some Q&A. And I would like to ask you just to write your name in the chat, if you have a question, and I would then unmute you, or maybe you can even unmute yourself, you have to check that, to ask the question. And if you don’t want to speak yourself, you can type of course the question as well in the chat. So it’s up to you, what you prefer.

So welcome again to everybody and those who just joined. We have two speakers today. One is Nadja Oertelt and the other one is Beat Glogger. Nadja is co-founder and CEO of *Massive Science*, a science media company that aims to engage the public and scientists in new ways. She’s a former research scientist in neuroscience and she currently works as a media producer and documentary filmmaker. Previously, she worked as a senior producer at *Mashable* and was once a science producer at *BuzzFeed* and *Vice*. She worked at Harvard Labs for almost four years, producing the *Fundamentals of Neuroscience*, which is one of Harvard’s first MOOCs. Nadja graduated from MIT in 2007 in neuroscience and she worked in labs at MIT, Harvard, and Cambridge University and lived for many years in London.

She is now based in New York City and her project “*Massive Science*” launched in 2016, and it’s dedicated to helping scientists share stories about their work and lives to become better science storytellers and to make scientific research more understandable for general audiences. And I think this is something her project has in common with Beat’s project called *higgs*.

Let me quickly introduce Beat. Beat is a science journalist and an author. He has been working as a science journalist and anchor for Swiss television for many years, and he's been writing for various print titles. Since 2002, he has been running SciTec-Media, which is an agency for science communication. Beat is the author of various non-fiction books and two novels. In addition, he has been the director of studies for science journalism at the *Medienausbildungszentrum*, which is the Swiss School of Journalism, since 2005. From 2009 to 2007, he was in charge of the weekly "Wissen" pages of the computer newspaper *20 Minuten* in Switzerland. From 2016 to 18, his agency produced the "Wissen" pages in various Swiss media daily newspapers. And finally, Glogger is the founder of *higgs*, which is the topic for today. This is a web platform for science journalism that went online in 2018 and they call themselves the first independent magazine for knowledge in Switzerland. And *higgs* aims to bring knowledge to as many areas, as many social classes, as possible, especially those who are not primarily interested in science, which is, of course, really important in these days.

Now, I welcome Nadja to start with her short talk. After that, Beat will follow and after that, we will have a discussion. Everybody here wants to join. A very warm welcome, Nadja.

[Nadja Oertelt] Thank you, Eva. I'm just going to share my screen, so. I [indistinct]. Can you all see this?

[Eva Wolfangel] Yeah, it's great.

[Nadja Oertelt] OK, great. OK, so I'm going to give a kind of overview of what we do at *Massive* and kind of where we came from and what the landscape looks like in the US. I think it's, there's a lot of differences and a lot of sort of corner cases in terms of how journalism at large is funded in the US and in particular how a science publication like *Massive* kind of functions from a revenue and financial and economic perspective, that might be significantly different than in Europe and elsewhere in the world, mostly because things are just not federally funded in the same way by the US government, by the federal government. That's something that also changes. And certainly in the course of my career hasn't changed significantly, but there is the possibility that that might change. As you all know, things are in quite a bit of flux in the US at the moment. So, to put it lightly.

So just a little bit of an overview. So *Massive*, I founded *Massive* in 2016. I founded it as a venture-backed science media company. So I had come out of working in non-profit academic contexts as a science producer at Harvard University. I had also worked in a lot of digital media companies that had sort of sprung up in the, I would say, 2010 to 2015 time period as venture money really flowed into content production before they realised that there was no money to be made in that space. And in fact, the only way to make money in and around journalism was actually through platforms. So, there was a lot of money that went into companies like *Mike* or *BuzzFeed*, which is probably the most well-known variant of a venture-backed journalism outfit.

And I was kind of writing the tales of that. I had experienced that kind of underbelly of venture-backed journalism when I was laid off in a mass layoff. *Mashable*, which is

very public and included the EIC, the editor-in-chief who was formerly at *The New York Times*, being let go with, I think, twelve hours' notice alongside 70+ other people. And that was purely an event that took place for shareholders. There had been a merger and it was really, it was enlightening to me. And as a kind of one of the smaller players, I realised, well, I can actually try to utilise this in a way that's more... that attempts to be more ethical and transparent in its values. And that's kind of where *Massive* came from.

In general, there's been a kind of renaissance, I would say, a flourishing of science publications in the US in the past five or so years. And the interesting thing about that is that most of them are funded not by subscriptions necessarily. Subscriptions play a role in funding these new publications. But the idea that somehow subscriptions would save media companies hasn't really panned out, except for really large organisations that have been around for a long time, like *The New York Times*. Instead, they're funded by philanthropists, they're funded by foundations, and most interestingly, they're funded by corporations in a variety of ways that have at times pretty large implications for journalism and science and transparency. And actually, it's interesting because what... one of the ways in which *Massive* has really flourished over the past years is by sort of leveraging and using the expertise that we have grown at the organisation with our 2000+ community of scientists, writers to actually create content for other publications, some of which are non-profit publications.

So *The Broadcast* is a publication that comes out of the science studios at a cultural institution in New York City called Pioneer Works. It's run by Jan Eleven, who's a very well-known astrophysicist in the US. She's a sort of public personality and teaches at Columbia Barnard. She is building up this publication and *Massive* is behind the creation of all of the content for *The Broadcast*. So, that's one example of how we have kind of diversified the way that we grow revenue at *Massive* and tether it to other publications to kind of strengthen our place in an ecosystem of these sort of flourishing science publications. *Grow Magazine* is another publication that *Massive Science* is behind. We produce all the content for *Grow Magazine* and we have a relationship with *Grow* that means that *Massive* is bolstered in addition to helping essentially white label content for another publication, and this is interesting because *Grow Magazine* actually is funded by Gingko Bioworks, which is a synthetic biology, I would call it a sort of synthetic biology platform or incubator for synthetic biology and genetic engineering kind of startups and small companies in the US. And Gingko Bioworks was started by a very well-known genetic engineer. And they're a kind of growing entity. They have complete separation from sort of editorial at *Grow*, but it's still funded by a corporation, which is interesting. So here we have a kind of, like, two examples of the way in which we have diversified, the way that we bring revenue in. And just some kind of... just to sort of put us in context, because I think also this is important. And oftentimes this information is not really shared openly, but I think it's really important that we do share it.

You know, we grew our revenue at *Massive Science* over 200 percent in the past year and our expenses grew 20 percent. This is primarily because we don't have a lot of staff, full time staff at *Massive* and *Massive* can function in this way, in a way that might not be possible in other places because of the way that we've built out our entire editorial pipeline. So it's sort of expandable without growing a lot of

expenses. And I think this mentality, or the way that we've thought about this, was really driven by the kind of business mentality of starting *Massive* as a business, as a venture-backed company, where we were forced to think about how to grow in a lean fashion. There are implications for that, which I don't really have to go into, sort of labour implications. But I think there is a reality to the environment in which *Massive* kind of sprung in the US in terms of the feasibility of growing a large editorial news desk with a lot of full time employees. And it's that, it's really expensive and it's really not feasible at a lot of outfits. Like, you might have heard of the publication *Nautilus* that actually failed because they were unable to sustain the expenses of growing a publication with a lot of full time staff.

In the way that *Massive* works is that we have thousands of scientists who join a community that we call the Massive Science Consortium. They join that community because they want to learn how to communicate to the public. And they learn in a sort of prescribed process from our editorial team how to write. It's not an easy process. It's a process that has a high sort of friction coefficient.

But that's what we've learned, is that that's actually important for building solid writers and for growing solid writers. And just some other numbers: you know, we had a 20 percent increase in our newsletter subscribers, which is, I would say, reasonable. It's not fantastic. But given the total chaos of the past year in the US and globally, I think we did fairly well. And just to give you a sense of the scope and scale of *Massive*, we publish on average around between 500 and 700 articles a year, ranging in length from 300 words to 4,000 words. And you can see our kind of floor in 2019, which is the red versus 2020, which is the blue. We had a lot of fluctuation in the past year. We're currently at a point where we're pushing to get above around 300,000 page views a month, which is pretty small. But one of the really cool things about *Massive* it is that we've actually never bought any of our audience. It's a really common practice in digital media companies and in science media, to purchase your audience. You can do that in a variety of ways, some more or less nefarious than others. But it's, it is a common practice. And what that means is you can sort of artificially push your floor from 500,000 uniques or page views a month to a million simply by buying what I would call low-quality page views or audiences. You can do the same thing for newsletters. We've actually never done that. And so what we found is very consistent growth year over year, which hasn't necessarily been what... it hasn't necessarily been the kind of growth that a venture-backed company wants.

But we've realised that actually that's the kind of sustainable growth that grows a media company that's healthy and also, Eva please stop me, I'm just going to do about five more minutes, if that's OK. But I know that I only have 15 minutes.

[Eva Wolfangel] Yeah, that's great. I think five more is OK.

[Nadja Oertelt] OK. So yeah. So one of the, one of the things that we realised very early on at *Massive*, it was really important, especially because we exist in this sort of, I would say, a strange space in terms of how we're funded and what we're doing, is that people really cared, our audience really cared, about good storytelling. And good storytelling in science is really about sharing a kind of understanding of the subjectivity of science and the ambiguity of science. I don't have to tell many of you

this, I think this is probably something we all understand, but it's really interesting because we're working with scientists and trying to teach them about vulnerability, which is something that has really been beaten out of them over the course of many, many years, sometimes decades, of learning how to be a good scientist and an engineer. Empiricism is not something that makes a good story. And you can... there are many stories that if you're a scientist you enjoy reading because they're empirical, but if there's not really an emotional part of that story, it's not going to resonate. And certainly in a digital context, it definitely will not resonate, meaning nobody will read it and nobody cares. And so, it's a real tension between the scientific community and audiences who love science. And our role is to kind of mediate that and try to teach that. We do that a lot of really interesting ways, sometimes ways that raise people's eyebrows.

One of the things that we put out over the past couple of years was the digital space called "Our Heroes", which was about women in science. And as part of that, we created... we took that series and turned it into a women of science tarot deck, which was actually picked up by MIT Press and turned into a product that's now on sale. You can buy it. We rebuilt the whole tarot deck to be entirely focused on women who are understudied and not elevated around the world, who had done really amazing things in the natural sciences and math and physics and engineering and astronomy, etc. And people kind of raise their eyebrows at this. But it's a very classically *Massive* product or output. We are trying to tell a story about the complexity of science, the complexity of the history of science in a way that appeals not just to scientists or to empiricists or those that believe only in logic, but also people who like to tell stories themselves. And so it gives them a sort of in. And here's some more images from that, and here's some of the cards that focus on some of the women in science in the card deck. One of the things that we really, again, to sort of, like, emphasise how *Massive* has grown an organic audience and also grown trust with scientists, is that we know from a lot of places that narratives generate more attention than, like, logical scientific communication. And we really emphasise that in the way in which we engage with our audiences. We ask our audiences to come into the process of trying to understand the complexity of science with the scientists and emphasizing the writers of our pieces at *Massive*, who are all researchers or scientists or who touch science in one way or another, mostly in academic contexts.

We really emphasise their presence and I think their presence as an individual with a name and a face, a zone of expertise and a, usually an institution, which they're associated with has been a huge part of how we've built out *Massive's*, I would say, like, brand identity and how we've built, more importantly, trust with our audiences. We explicitly, as a part of our design of the website, we build in the idea that scientists are people, they are fallible, they have opinions, and they are writing from a place where they are attempting to be as objective as they are as scientists. But that attempt is not, you know, doesn't always, it doesn't always work. And all of the things that we do, you know, entertaining, educating, provoking, giving agency, advocating – we're trying to do that in an explicit way so our audiences understand and sort of build trust with us. I really highly recommend having a look in terms of funding and how funding impacts trust and transparency, at least in sort of the US kind of journalistic framework. This article written in *Undark*, it was written in 2019 by fantastic journalist named Teresa Carr. And it's a kind of an examination of the

role of the science journalist and how science, communication, science journalism and in that framework are breaking down in ways that are in some places more or less evident. We – not so often – but are often countered, our method is countered by the question of how can a scientist be a journalist or write about journalism an objective way? I think that's a great question. I don't think it's clean and easy. If everybody knew who all of the science journalists were who are writing for all of the publications that you commonly read that aren't as transparent about who their writers are, you would know that fact-checking is not a standard process anymore...

...in digital journalism. The New York Times requires its own journalists to fact-check their own work. So we have, like, I think this idea of the journalist in a kind of way that was more... the idea of a journalist, as it was two or three decades ago, has shifted. And we just have to... we have to be open about that. And I think this is just a great article for that. I just want to kind of point that out.

[Eva Wolfangel] And that's, I think, a great point for the discussion. Sorry to interrupt you. Yeah, I think that's a great point. I think literally as well. And I'm sorry I slowly have to interrupt.

[Nadja Oertelt] You I know, I just want to say, you know, in general, like, your audience really needs to trust you and your writers and the face that you put on your publication in order to grow in a way that's organic and healthy. So that's it.

[Eva Wolfangel] Thank you so much. It was amazing. I think really, really interesting points for the discussion for later. But first, Beat, the stage is yours for your talk, a very warm welcome. You are muted Beat. Ah now, it's working

[Beat Glogger] Am I muted?

[Eva Wolfangel] Not anymore. Now it's good.

[Beat Glogger] OK. OK. And, well, I have followed the main questions that I've been asked. And I start with the motivation. What is the motivation to start a project like *higgs*? And you see the, this is one sentence: we try to fight fake with facts. And that... what is happening here? OK, and you all experienced the last year and the Georg von Holtzbrinck Prize has summarised what is journalism in these days or in these months and this year.

And they say, it has been shown very clearly that – this is German, I'm sorry, but all the rest is in English – that the pandemic has clearly shown that good science journalism is important because people need information, people need orientation. And as I will show you afterwards, we also have experienced this with *higgs*, but you all have seen and read all these things. The pandemic has created an infodemic. And this guy, you know, I assume, this is Alex Jones and he says what he's doing, he runs the Infowar. And this guy I do not have to introduce, he was one of the saddest moments in the last year. And this guy, all the people coming from Germany know him. This is Ken Jebsen, one of the main fake news providers in Germany. We have those guys in Switzerland. We have those guys all over the world, I assume, and they have big, big power. They have many, many followers. Ken Jebsen with his channel Ken FM has much more audience than *higgs* has. And this is a problem.

So we said we want to fight this. We want to oppose this, you know, perhaps this evaluation done by the MIT. And this was before the pandemic. They measured the speed of news and fake news and they found out that fake news is six times faster around the world than real news. I have the sources in the slides and you can see this afterwards if you see the story again, because it's recorded. And on Facebook – this has been found out by *BuzzFeed* – the fake news generate far more interactions. These are some figures. They have evaluated some really, really well-going stories on Facebook and have seen that the daily stories reached 42 to almost 80,000 interactions and none of the stories of *Frankfurter Allgemeine*, *TAZ* or *Süddeutsche*...

...none of those stories reached as many interactions, which means clicks, likes, comments and no, not clicks: likes, comments and shares as the fake news does. And this is again an investigation of this that was done by the *Süddeutsche Zeitung* during and after the first wave of corona. And they said that the fake news generates 20 times more reactions than afterwards the debunking story of the same... the debunking of that fake news. And this is a problem and this is called infodemic. And this, again, is... was examined by, in a story by *The Guardian* that 25 percent of the climate posts in Twitter are written by robots. And this shows how big the wave of fake news is. You can employ hundreds of journalists. You can't compete with this massive attack of a robotic, robotically written stories. Nevertheless, and this is the fake news network in Germany, just to show, they are very tightly connected. They are very well interacting. And there has been an examination, a study, that has shown that anti-vaxxers are much better connected than, for example, all this vaccination information based on evidence and scientific background.

So this is a fact. And therefore we said we want to do something and we have created *higgs*. I can give you a short insight. This is live now, *higgs*, it's... this is the surface. We have three stories at least per day. We have short knowledge items here. So you see this works with mouse over. We have longer stories, shorter stories, again, the mouse-over story, that you can read in 20 seconds. We have historic things. We have here the number each day we give people a number and you can see what means that number.

We have an opinion like this. This is a video which I publish each week. And so it's an endless stream of scientific news, short stories, long stories, videos and so on. You can select here the field of interest and so on. And of course, there is a menu which helps you to navigate through *higgs*. And what is our core thing we want to debunk? And these are four stories that we have produced in the last year. This is a debunking story or a portrait about Judy Mikovits. Judy Mikovits is the lady that has failed in science and then pretended that the pandemic was planned. And she is the main character in the documentary, which is called *Plandemic*, the pandemic has been planned by evil forces and we have shown her biography. This is a story which I did. This is about a network in Switzerland of sceptical doctors. And we have shown their biography, their background, what they pretend that one of these leading actors in that network, which is called Alethia, which is the goddess of hidden truth. And we showed, for example, that there is one cardiologist in Switzerland who pretends 9/11 has been an inside job, that climate change is a hoax. He talks about the IPCC hoax. He pretends 5G causes corona. And now, of course, he says corona pandemic is a planned thing, it's a plandemic. About 5G, we

have made a big debunking, how the 5G opposition in Switzerland is organised. We have found the first worldwide “stop 5G” Twitter post and then have shown how this spread all over the world, mainly into Switzerland. And this commentary by, produced by myself, for example, was picked up by Attila Hildmann, who is a right, far-right wing cook in Germany who leads now the corona scepticists...

... the “Querdenken” movement, and I was kind of flattered after publishing this because Attila Hildmann called his followers on Telegram to make a *blitzkrieg*, remember that, a *blitzkrieg* against my commentary. And it gave me 1,800 thumbs down. But nevertheless, this shows me that we do something right.

The situation in Switzerland is sad. We have three editorial houses that run a science team. This is the NZZ, *Neue Zürcher Zeitung*, with two titles, and this is Tamedia with the *Tages-Anzeiger* and the *SonntagsZeitung*, and this is the SRG, which is the open... how you say, the “öffentlich-rechtlich”, the public broadcast company, which runs three programs in French, Italian, and German, and radio stations and so on, they have very, very good science journalists, all these three editorial houses, and the rest is desert. And in this desert we try to grow a small plant and there are a few startups. This is *higgs*, which I am presenting here. In the western part of Switzerland there is *Heidi News*, which started one year after *higgs* started. We started in January 2018, and also in January 2018, there was another project started, which is called the *Republik*, or the Republic. And they have science journalism, but mainly the digitalisation. And *Heidi News*, they have science journalists and do politics, too. And we do only science, but always in the context of politics, of society, and the everyday life of our readers. And I want to show you the interaction between *higgs* and *Heidi*. We cooperate, we exchange items each week. One big story of theirs is published, it's written in French, *Heidi*, we translate it to German and published in on *higgs* and vice versa.

They take one big story per week from us, publish it in French and they take one small story, too. They publish two stories of ours and we publish one story of theirs per week. And *higgs* is kind of a media system. We give our contents to, on the left side, to the *Tagblatt der Stadt Zürich*, and a network which is called *Swiss Regiomedica*, which is run by a rather right-wing billionaire and one of the richest persons in Switzerland. And sadly, he's right wing and not open to science. But I managed to sell those journals, our science account, and they pay for it. Before we had, as Eva mentioned in the introduction, we have delivered our science pages to many, many more newspapers. But they all finished the cooperation when – first we gave it for free, but when we said, “Well, you now have had the opportunity to taste what we produce, would you please pay?” And then they stopped the cooperation and they, these two, pay and Regiomedica run about 32 or 33 titles which are distributed in Switzerland freely. And this means, what Eva also mentioned, we want to go to people that are not primarily interested in science. Imagine this is a freely delivered weekly newspaper you find in your letterbox, physically in paper. And there we try to go to people who do not like science *a priori*, but otherwise we would be preaching to the converted. We try to preach to the not yet converted, hopefully to the convertible. And on the right side, we have started now a cooperation with French-speaking newspapers and they receive each week a whole page of science – no, each two weeks – a page of science.

And they got it for free. After one year we say, “Now, guys, you have to pay,” and we will see how they react on this.

What is your output you see here? *Higgs* produces per week one big story, one research story of about 10,000 or more characters. One to three short stories, short items like the number and like the *Gewusst*, one commentary done by myself, which is in video, and there I have an opinion on science. It was a lot of corona now, but on any other topic, too. And we produce one live talk show per month, which is recorded and transcribed and distributed as text and video. But in corona, we had to do it without all the live audience. Then we have the cooperations. I mentioned *Heidi*, and we take over content from *Horizonte Magazin*, which is run by the Swedish National Foundation for Science and from *De Facto*, which is a platform that deals with political science, *reach* and *Swissinfo*, which are other channels. And some of them just give us their content and we redistribute it. And this is content in a field that we are not very well trained like political sciences, but it gives a great appearance to *higgs* and it's good content, and *Swissinfo* pays. They take our content and they pay us and we take their content and do not pay. That's a nice deal.

And we have another model. This is Guido, Guido is the director of the Swiss Space Museum. He produces a show, “Guidos Galaxis”. He runs this show. He finances this show with his sponsors and we give him the platform. And the other guy with the blue bird, this is Atlant.

And he runs the show with his son, he's about ten years old, and this is a children's program, and he finances himself with sponsorship and foundations and so on. We have a historian who runs a weekly story and on Sunday about historical events in Switzerland. And he also finances himself. And we give them the platform to read, to distribute their content. So we have an exchange and we have partners to finance themselves.

So, now it's not working. Yeah. So, how many people are doing this? Yeah, we are – don't be astonished – we are very, very, very small. We have 600 and more stories last year published and many details: twenty six radio shows, ten live talk shows. But we do this with two editors. You can calculate: I'm 40 percent paid by *higgs*. We have one editor, senior editor and two junior editors. And this is the editorial staff, is two persons. The rest is two interns. We have a multimedia producer. You see a social media producer and somebody who puts this stuff online. And we are a very small team and we have now two... we are looking out for two persons for digital developer and for somebody who does marketing for subscriptions.

This is what we reached or we achieved last year. This is the corona bump. We had a steady but slow growth since 2018. And corona gave us an enormous jump. We had... we have three times more views than before corona and twice as many unique clients than before corona. And we have 60 percent of the traffic in Switzerland and about 35 percent in Germany and the rest all over the world.

Austria ignores us, despite the same language. Germany is... we have 35 percent of the visitors from Germany, Austria almost nothing. I do not lie.

Then we have to... financing our budget right now is half a million. We would like to have one million. I have to say, I know whom I would employ and what we would do if we had that million. And this is the aim to get that million. This year we had 218,000 Swiss francs from the Swiss Foundation for Science. And we had a crowdfunding with 125,000 Swiss francs. And the rest, if you add, is less than 500,000. The rest is by smaller 10,000, 12,000 or such amounts of help and cooperations and so on. This year we have about the same budget with somebody else. We have the *Stiftung Medienvielfalt* and we want to install a subscription system. Why? We have the donations by the clients, we have the foundations that give us money. We have paid content, we sell to universities, paid content. We have sponsoring by... one big sponsoring. The biggest is now by Johnson & Johnson. This is pure coincidence. We have them since two years on board. And now everybody says they want to sell their vaccine stories. But we started with Johnson & Johnson long before corona started. But sometimes now we have to declare some details about it. And then there is a new law in Switzerland. And I explain this law afterwards. Above *higgs*, we have installed a known and new foundation. It's called Foundation "Wissen für Alle", knowledge for all.

And this foundation supports *higgs*, meaning they collect money from specific stakeholders that should have an interest in a well-educated population. As such is the industry which needs good, well-trained people. These are other foundations. This is public and the public, like the state. And this is education and science sector – some universities give us 10,000 francs per year, something like that. And the foundation has not only to support *higgs*, they have to run other projects. Otherwise, it will be... we call it *Strohmann* in German, it will be a kind of fake foundation. They have to run other projects and then we have a school project which trains critical thinking for pupils. But this had nothing to do with me. This is by the *Stiftung Wissen für Alle*, which I have organised. I have raised the foundation, the basic financing, but now I'm not anymore in that foundation.

And the new media law is the last pillar. The new media law in Switzerland is now being formed in the parliament, and it will be, it will provide a fostering of online media in Switzerland. The state has realised that the diversity of media channels is important. And the smaller the channel is, the harder it is to survive. And they will start in 2022 with the fostering of online media. And there is, there will be applied the key: 80 percent of the revenues from the community, which is... could be the... just the donations or the subscriptions, and donations from foundations, these can be added. And then 80 percent of this can be asked from the state as help, not commercial income. If I sell paid content or I make sponsorship, there is give and take and this is commercial.

This can't be brought into account. It's only the subscriptions and the donations that can be counted. And there is a, I call it, it is a digression. The smaller the channel is, the more it can get. This 80 percent is for a channel like *higgs*. The bigger the channel is, the less it can get. But nevertheless, they are so big they will get about 55 percent of the whole bunch of money that the state has reserved for the media fostering. But anyway, if you can imagine, I showed you 500,000. And if we get to that 500,000, then another 400, I'm at my million. We will start subscriptions. We realised that giving this for free to the clients is not the business model. We have not found any investor and we have to stop giving away our content

for free. We have to build up, I call it soft paywall, which means we give each client, unique, each person, we give six or eight stories per month for free and the small items anyway for free. But the good and well-researched stories we do not give away any more for free. We want money for this, and we start at the middle of this year selling subscriptions and telling them, "Well, you can read six stories for free per month and if you want more, you have to pay." We have an idea of a subscription model, 60 francs or 120 francs or 220 francs per year. We call it students, regular or donor subscription. And these are the key figures we want this year. We want 120,000. And in '23, we want half a million and then give that in account to the state through fostering of the new media law.

And then we are almost at that million that we need. Last slide: what have I learned during my last three years of very rough and bumpy journey? And it was a really hard road you had to go. The main difference between *Heidi News* and *higgs*, between the *Republik* and *higgs*, is they had the millionaire at the beginning. *Heidi* started with somebody giving them one million and they could make a nice campaign and getting subscriptions and starting with a stable stock of subscribers. And the *Republik* has started with two millions, have then installed a nice system of promotion, have started a crowdfunding and have raised with these two millions another five millions and started then with seven millions and 28,000 subscribers. And if I have had that million, I would surely have been able to start steeper, but this was not the case and I, my recommendation for anybody who wants to start is: do not start without a millionaire. I started and it was very, very hard.

[Eva Wolfangel] But you had a quite successful crowdfunding as well, right. I'm really impressed by the numbers and what I'm so sorry I started to go to the discussion because people are already discussing in the chat, and I think it's better we do that in person. What I found really interesting is really the difference we see between the US and in that case Switzerland, but I think that counts for Europe as well with your investors, Nadja, and you said subscriptions don't work. And in Europe we still try to get, make them work.

[Nadja Oertelt] Are there any examples of subscription services working for digital media and for smaller media outlets?

[Beat Glogger] An example? The *Republik*.

The *Republik* works. The *Republik* has 28,000 subscribers that pay 240 francs.

[Eva Wolfangel] But they laid off some people as well. Right? I think they had to get smaller than it was planned as far as I know.

[Beat Glogger] Well, they exaggerated that, incredibly exaggerated and they had to send people away. But I mean, imagine you start with seven million and 20... they start with 19,000 subscribers and now they have something like 28,000. And I mean, they had two brothers giving them two millions to start and then *Heidi* had one million. And then you can build up the subscribers. But, so *Heidi* was now taken over by a foundation. And this is a case: the foundation has taken over the *Le Temps*, which is a newspaper, and they have taken over *Heidi* now. And this is pure philanthropic money. Well, I have not had the chance yet to meet the millionaire.

[Eva Wolfangel] Yeah, maybe. Maybe he's just waiting around the next corner for you and maybe the right thing...

[Beat Glogger] I've talked to a few of them. But, you know...

[Eva Wolfangel] Still convincing them. Stay optimistic! There's a discussion starting in the chat about how do you ensure qualitative journalistic and ethical standards. And this is something that I was thinking about with your project, Nadja, because it's for the journalistic mind, it's still a bit confusing to see this concept where scientists write about their own work, which is something we normally try to avoid, right? In Europe, if sometimes, the problem is that scientists want to see their quotes or the whole article before it is published and we always discuss them, we have to be independent, and we cannot do that because then you rewrite the article, if you send the whole article. It's something we don't do.

So how does that, how does it work? How can it be ethical in a journalistic idea?

[Nadja Oertelt] So the scientists are not writing about their own work, so they don't... if they do it's an opinion piece about their experience in doing whatever work they do, but they're not writing about their own research. So they write about, we ask, there's a whole process which... I've given you guys access and if you want to go in the back-end, you can kind of see what the community is like and what we asked people to do, but, the resources that we provide them. But essentially we're asking scientists to write about their field of expertise, not about their own work. I think that, I mean, I very much understand the idea that scientists cannot be objective about their own work. However, I have yet to be convinced that any journalist, especially now, really understands the scientists, the science that they're writing about. And oftentimes, I think this has been the huge point of distrust between the scientific community and media. We see this over the past year, like, the media really got COVID wrong. They continue to get it wrong and they won't stop. So you have especially in the US, you have people who are not virologists, they're not immunologists, they're not public health experts writing things and putting it out on to platforms that have actual real implications. I mean, people die. So I think... I feel very strongly that actually the ideal situation is you have scientists working with journalists to try, or you have ex-scientists who become journalists, right? That's the ideal situation.

[Eva Wolfangel] But the other way round doesn't work from your point of view?

[Nadja Oertelt] No, I mean, it doesn't because there's a reason why we have, you know, six to ten years required to gain expertise in a sort of academic research setting to understand the field.

I can see how as a journalist, if you cover one beat for your whole life, you might get to that point where you have a deeper understanding than the scientist. But I mean, especially when it comes to healthcare, when it comes to biochemistry, when it comes to genetics. It's just... it's really hard. And that's why, you know, I mean, I don't have to tell you this, but like it is... when you're diving into a new topic, like in order to actually understand it as a journalist, like, that sometimes requires years of

investigation into a specific topic. And I think the requirements of science journalism to pump out as much accurate material – and this is something that the *higgs* is also concerned with – the material has to be accurate. So I can't put something out into the world that is... I can put something on the world that's boring as hell and nobody wants to read.

[Eva Wolfangel] And that doesn't help.

[Nadja Oertelt] It doesn't help. But it's better than putting something out that's just purely entertaining and not accurate. And so I think that's the, like, sort of place that we've veered to. And you can see other outlets that have veered in the other direction and they're hugely successful, but they do a real disservice. So, yeah, I mean, I think it's a hard question, but I answered some questions in the chat about that. We have a whole...

[Eva Wolfangel] ...about transparency, right.

[Nadja Oertelt] Yeah, we have a system called peer commentary. So we try to... one of the things that's not replicated in journalism and I think is problematic in its coverage, just like historically of science, is that science is a process. There's no endpoint, there's no headline in science.

There's never been a headline. And the fact that we're forced to create a headline around scientific research is problematic because we constrain it. We say that there is some conclusion. There's never a conclusion. What we try to do with peer commentary is to open up the space that many scientists are familiar with, the lab meeting, right, where there's sometimes really vicious debate going on. Everybody in the field knows that there's some scientists who are vilified because they have really poor research practices, other ones that are just really terrible people. There's, like, a whole ecosystem of critique within the scientific world that's closed off from readers because scientists feel that that reduces their... reduces trust when in fact, it's the opposite. So if – we know this from a lot of research – that if scientists open up about the fact that they don't know something, that it's an open question, that there's three camps around that question in the field, that it actually builds trust with an audience. And so we try to do that in peer commentary, where we require writers to work, scientist-writers to partner with other scientists to give that context in the commentary that we then present back to the public. So I think there's a lot of experimental ways in which we can counter that problem.

[Eva Wolfangel] As far as I can see, there are many people in the audience who might not share your opinion about who can write about science. Yeah, but I think this is just the other approach you have, right, that your target group as writers or as journalists are scientists who want to write. Yeah, but it's an interesting discussion. Beat, maybe...

[Nadja Oertelt] I think, I don't think there's not a place for traditional science journalism in the sense that you have somebody with no expertise in the field writing about the context in which the science is done.

Where's the funding coming from? Tracing money, tracing bias, tracing the impact of that work. Scientists are not trained in doing that, kind of, in that kind of boots-to-the-ground journalism. And that's not their expertise. I don't think that there's not a place for that. I mean, there will always be a need for that. But there is a real need for a kind of translation of what is actually happening in scientific spaces for the public, and that has, I think, that really has to be done by people who have some expertise in the field. Whatever you want to call that. And that's why this *Undark* article, I think is very interesting. And you want to call that something else in the US? We call that science communication because there's, like, a whole academic field in and around that now. And they really like to separate that from science journalism. But the reality is, is your audience cannot tell the difference. And so you have to, like, figure out how to fight fire with fire there because people don't care about your vertical that you've called science communication versus, like, long-form investigative pieces. They just read it and they think it's the same thing.

[Eva Wolfangel] So but you do have this discussion as well among journalists or science communicators, right?

[Nadja Oertelt] Of course. Yeah.

[Eva Wolfangel] If you should...

[Beat Glogger] ...people, the general audience does not distinguish between science communication and science journalism, as we understand, or at least in Europe, we understand science journalism, independence, the view from outside, not the inside view and so on. The general public does not. But in corona, we have experienced a new phenomenon that all these sceptics, they are reading our articles so, so, so very detailed.

And then now they are picking out some very small detail and they are making a big fuss about everything. And only because I have studied microbiology at, or only because I have seen a university from inside, I could be a psychologist only because I have seen the university from inside, I am suspect to all these sceptics. And this is a real hard, difficult problem. And to make all our reporting accurate, we cross-check the facts. We check it with these experts and we have quite a – regarding to corona with myself and an older biologist in the team – we have, we are no doctors and no virologists, but we know what a statistical, more exponential growth is. And we never do any... in corona we did, we had no mistakes in our reporting. But, I can explain you something. We had a, we took a media release by the Swiss University at Zurich University Hospital. And in the lead of that article or of that press release, they wrote every tenth of corona, COVID patients suffer from life-threatening...

[Eva Wolfangel] Implications or symptoms?

[Beat Glogger] ...implications, yeah. And we have written, "a study published by the University Hospital of Sydney shows". And the problem was that this has been shown by a Chinese working group. And the Zurich guys have only picked up this and then added something and somebody went and wanted to, went to the *Presserat*, this is, like, an ethical...

[Eva Wolfangel] It is a committee, right?

[Beat Glogger] It is a committee who judges about journalism. There is one committee for the electronic journalism, one for the printed and online, and this is the *Presserat*. So then they went to the *Presserat* against us because I have written “the study of ... shows” and afterwards I was not condemned or sentenced.

[Eva Wolfangel] But that’s not an ethical problem, right?

[Beat Glogger] But I can show you why the *Watson* and the *Allgäuer Zeitung* were sentenced because they have just taken that media release, printed it. And I have called the researcher and asked him, how can you, how is it plausible, this ten percent? At the end, I wrote the same as *Watson* did – this is an online platform, too – I wrote the same, they were condemned, I was not because I had the intention to verify that fact. And I made an email to that researcher and this saved my ass, so to say, just because I had an ethical and journalistic approach and the others took just the media release. It is very, very difficult these days now.

[Eva Wolfangel] So time is running, time is over since 15 minutes. I’m not sure if people have time or are we allowed to go a bit longer or should we come to an end? Holger, how do you do it normally? It’s still interesting. You’re muted, sorry.

[Holger Hettwer] Maybe two questions, two more?

[Eva Wolfangel] OK, two more questions. So.

[Nadja Oertelt] I was just going to answer Georg’s question, but I’ll just answer it in the chat.

[Eva Wolfangel] No, you can answer that now here, live and in person.

[Nadja Oertelt] Yeah. I mean, I just put an example of this. So, you know, in the US the sort of equivalent, well, public radio... I also work at *Science Friday*, which is a *Massive*... it’s a radio program that’s been on public radio in the US for about 30 years, it’s very established, sort of like a science communication news program, a combination of both because scientists are brought on air to talk about issues. And so we talk a lot about... because NPR is, like, maybe the only equivalent thing to state-funded mass media, broadcast media in the US.

This tweet that I just posted, I don’t know if any of you can see the problem with this tweet. This is posted by a public, very public, supposed sort of expert news organisation. This is hugely damaging, I would say, language to use during a point at which we have, like, a lot of vaccine-adherence issues in the US. People don’t want to take the vaccine. People are frightened of the vaccine. And what does this tweet say that’s written by NPR Health News Desk, so this is all journalists: “vaccines could drive the evolution of more COVID-19 mutants”. This is incorrect. This is totally incorrect. It’s still up. The more precise way to say this is like: partial immunity generated after vaccination could drive the evolution of more COVID-19 mutants. There’s a lot of different ways to frame this. They decided to post it this way. I agree with Georg’s point of, you know, there’s a lot of other fields that are

related, in particular when we're talking about the pandemic, that are important to bring into the conversation. Those are also fields of expertise, I consider those people scientists as well, public-health experts need to come into conversation with virologists and all sorts of other people. But this is an example of why I think you need scientists around to correct things sometimes. So, yeah.

[Beat Glogger] Let me add something that not only the public-health specialists, I've talked to literature scholars, to linguists, to historians to show the behaviour of the people in 1918. How did literature deal with the pandemics in other times, how is the language formed with the pandemic, and psychologists, how are children affected? And I think it's very important to open the field much more and I contend *higgs* did.

And this gave us a huge credibility, that we don't only rely on the virologists but also on economics and law, I contend we did the whole spectrum. This is, I think, this is really, really important.

[Eva Wolfangel] Yeah, this is something I had in mind as well. And I want to ask Nadja about this idea: is it possible that scientists writing about, even if it's about their field of expertise and not about their own work, how independent they are? But I think this is just an endless discussion. But of course, you're right, there are people who make a mess with their tweets and whatever, and sometimes they get it wrong, but sometimes journalists get it right and then it's important as well. Or I think this interdisciplinary approach is really something that's totally important right now.

[Nadja Oertelt] Yeah, I think there can't be one without the other. I don't mean for it to be, like... But I do think, I mean, I do think there's a place for it, which maybe there was not a place in the past for scientists to be a part of that conversation and to not just sit sort of on the periphery of being observed by journalists. But yeah, I agree.

[Eva Wolfangel] And as you wrote, it's transparent, everything is transparent, everybody knows what, who is behind the writing and what's his and her background, and I think that's important. Another really interesting point, and then I think we have to really come to an end, was, Beat, your way to really try to reach people who are not interested in science? And I was, when you said you were getting the money of this right-wing Swiss radio media, I was a bit...

...oh, is that OK? Can you take money from right-wing people? But on the other hand, if they deliver your content to people who wouldn't read it otherwise, why not?

[Beat Glogger] This is subversive. I mean I undergo their, I *unterwandere* [*infiltrate, ed.*], I don't know the word in English.

[Eva Wolfangel] Me neither.

[Beat Glogger] I mean, they need it the most. I do not have to preach to the left liberal, healthy, organised people. They know what it is about. I have to talk to those who give nothing about all that stuff. And that's why I give this stuff to that

journalist, to the newspapers. I mean, only the millionaire or the billionaire above is right-wing. The journals are normal, very low-profile, free-delivered, but nevertheless, I think it's most important to be there. Otherwise it's preaching to the converted.

[Eva Wolfangel] Maybe as a quick last round. What is your most important advice for funding for a new project? How to, what should they think about, what do they maybe sometimes miss? And what did you learn from your experience?

[Beat Glogger] My last slide was, do not start without the million!

[Eva Wolfangel] Yeah, maybe that's, you need something more optimistic, I guess.

[Beat Glogger] OK, I'm optimistic. I'm optimistic. I am now looking for more people to get the thing off the ground. And I think without that media law, it would not work in Switzerland.

[Eva Wolfangel] That's a great thing.

[Beat Glogger] And I do not think that it would work. And because in Switzerland, we have 13,000 foundations in Switzerland. None of them apart from *Wissen für Alle* and *Stiftung Medienvielfalt* – just two – have journalism in their goals. When these foundations have been installed, nobody has thought about that...

...sometimes journalism would need money. They thought, "Journalism, these newspapers. This is a business". All these 13,000 (minus two) do not care about journalism, and this makes it very, very difficult. And the single persons, there is one millionaire who has bought now *Heidi* with the foundation he has installed, he funds millions to science and to research. But these people are so seldom, so rare in Switzerland. I mean, Switzerland is eight million inhabitants. We do not have that many philanthropists, but you need philanthropy otherwise, or the law of the state.

[Eva Wolfangel] So I guess your advice, be creative and take whatever you can get.

[Beat Glogger] Yeah.

[Eva Wolfangel] Find a way.

[Beat Glogger] Yeah. I mean, yeah, I take a sponsorship from Johnson & Johnson from Philip Morris, I wouldn't. From Philip Morris, I wouldn't. And from some weapon-producing factory either. But there are ethical borders.

[Eva Wolfangel] I think that's important.

[Beat Glogger] There are red lines and that. Yeah.

[Eva Wolfangel] And Nadja, what's your final most important advice.

[Nadja Oertelt] Yeah, I think starting small with a clear, like, differentiating factor is important. So, if you are really focused on local, something local, you know, if

you're focused on a concept or an idea, I think it's a lot easier to raise money in a variety of different ways, either from subscriptions, from audiences that are very specifically interested in that idea, from foundations, etc. I think general science publications can be hard. You know, our... the way that we have really been able to raise money and to grow is through having a community-based media organisation. So we, as we grow in numbers, it's easier for us to kind of make sure we have increasing, expanding possibilities for revenue because every person that works with us and then goes out into the world and becomes a science journalist or becomes a science communicator or works for National Science Foundation or NIH or institutions or whatever, they bring that back in with partnerships and different opportunities.

So I think keeping building that trust with a growing number of people, if that's your audience or your subscribers or the people who are participating in creating the media or the thing that you're doing, I think is really important. Because if you do that with clear values and transparent values, people will help you to keep your organisation or your publication going. And that's been important for us.

[Eva Wolfangel] Thank you so much. I think we learned a lot in this 45 minutes, which turned out to be one-and-a-half hours, but thanks everybody for their patience. I think it was really worth to go a bit over time. So, yeah, we learned a lot. Thank you so much. Thanks a lot to the audience as well. Everybody have a great day in the US, a great evening in Germany and everything in between. And see you again,

[Closing pleasantries, partly in German.]

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