The following interview took place in May 2015 in London during a meeting of Tim Jordan with Karin Wenz. In contrast to the first interview in this volume, the interview had been done in a face-to-face setting, which is reflected in its less formal style.

Tim Jordan is Head of School of Media, Film and Music at the University of Sussex in Brighton, UK. Tim has published on social movements and internet culture and is well-known for his analyses of digital cultures and hacking cultures since the 1990s. This interview focuses on his recent publication *Information Politics. Liberation and Exploitation in the Digital Society* (2015). Tim’s research is situated in the field of social sciences and digital cultures. His search for communities of practices related to recent technological developments and power relations is a red thread throughout his publications. Case studies Tim investigated are rave culture, hacking communities, gaming but also recent technological developments such as mobile technology with a focus on tablets and the use of clouds, social media and search engines.

**Karin Wenz (KW):** Tim, could you please introduce your own research in the field of digital culture and society briefly?

**Tim Jordan (TJ):** I think it was the early 1990s when I first noticed the internet. I had been working on social movements and protest, and it seemed to me that hackers were another kind of movement, of some sort, but a very interestingly technically mediated one: One that allowed us to sort out what digital cultures were. Thinking about how these people interacted with the technologies, how they made them, what kind of cultures they gave to them and what kind of cultures they then produced. And I suppose I still say that about hackers, and I have still been looking at them and the ways they developed over the years. We have recently had the rise of the maker movement. So I think I did a lot of work on digital cultures, and I try to look at specific topics: hackers, hacking and in particularly hacktivists, as well as games and communication. But I also tried to step back from that and use those specific phenomena to think about more general meanings of power and politics in these new environments and explore one of the early questions in internet studies, which is: does the internet, do these digital cultures do something different or do they replicate what is already here?
KW: This topic is also related then to your new book on information politics, where you also go back to this question in your introduction and ask what has changed and what makes it comparable to other movements historically.

TJ: Yes, and that kind of question from early internet studies – what is different and what is similar? – I still think is quite useful, but it is now much clearer that it is important to not disconnect the internet as some other’s thought early on. At the same time it is very important to see the specificities, and it is very hard to see something that would specifically be about digital politics or visual cultures, without focusing to a certain extent on abstract processes of those cultures. Otherwise you will end up replicating and constantly seeing a kind of capitalism or some other social formation somewhere, and things like capitalism or gender relations, unequal gender relations, are in these processes. But to see something that is more specifically about digital relations, one has to try and abstract those processes. I think that the book on information politics is an attempt to do that for information, to say: if we have a number of very specific political contradictions that we know about: so we can often talk about gender, class, race, sexualities, we all tend to know what these refer to, even though there is no one specific theory, we know there is a certain political nexus there. And the book is trying to say that there is also a nexus that we should call information, that there are particular sets of relation that can come through information and then try to connect that back out. That nexus is separate from other politics, but it is about saying: if you want to understand it, you have to look at it specifically and then try see whether there are connections between things.

So the book starts with a rather abstracted theory of information politics, and tries to work through first of all platforms and looks at different plans for information and power of information politics and how things are put into the world. Then it moves to looking at very specific case studies: where you can really see the intersections of many different kinds of politics. Looking at something like the iPad, you cannot avoid looking at worker relations; you cannot avoid looking at where and how these things are made, so you cannot avoid looking at issues such as capitalism and class. You also cannot really avoid, I would say, ecological and environmental issues, because the sheer numbers of these kind of devices and the kinds of things they use, mean added weight on the environment, so you need to think about them. And then you also need to think about those things that come together within information politics, so how the different uses of information allow the breaking down of various barriers between home and work that previously existed. You end up in very different divisions between leisure and home and play, which break down essentially the old settlements between capital and labour, and that also produces effects particularly around gender and the way women are working – the burden of working part-time or working at home and working in the work place. All of these are very familiar, but all have an information component, which for example the iPad and tablets feed because of the ability to be working all the time.
KW: So this has a huge effect on labour but it also has an effect on for example the materiality. You discuss this under the topic of recycling: because we deal with closed devices we cannot easily open them up and tinker. So, how would you then discuss the concrete effect materiality has for example when you look at issues as recycling or auto-repairing?

TJ: Well, I think those plug-in very directly because they are design issues. To create the kind of seamless information experience, something like a successful tablet tries to create, which is in itself very information-centred, it is about access it is about availability, you have to build them in certain ways. So Apple Inc. is being criticized quite widely by the environmental movement, for example: to create the thinness of certain devices, they had to glue some of the components, and if you glue them, you cannot recycle them. You cannot break the thing open and reuse the components. There again is a strong connection of these different kinds of politics and power, which produce certain kind of realities in our world and certain ways how we do things. I mean, if you look at the design history of the iPad one of the things that is often mentioned is called the ‘beveling,’ which is, if you hold an iPad at its end, it has a slight slope on it, a subtle design characteristic that makes people want to pick it up, that makes it tactile and therefore engages people in that larger screen. That is one of the key reasons for gluing the components, because you need that thinness, its edges, so if you take all these components that make it work, you end up with an ecological problem. Behind that is the biggest ecological problem and you have to look a bit longer than I was able to. But if you look at the early period, at the success of tablets, this has not yet led clearly to a major drop-off in number of laptops and desktops.

KW: Yes, that is a surprise actually. So you have a whole network of devices: that is also what you are discussing.

TJ: Yes, so you end up with a sheer amount of devices, so now people, and I am included in this, are carrying a smartphone, a tablet, while having perhaps a laptop or might even have a couple of desktops and laptops. The sheer amount of these connections, all of that has both ecological and class relations, but it also has an information relation because it only works if you can move your data between these devices and once you are moving your data through all kinds of clouds, the information itself becomes a particular political player, subject to particular politics. If we just stick to Apple for a moment, although I am not trying to pick them out, they built their technical ecology so that they keep people within it. And if they do they can track and follow your information flows, they can work-out what people do, they can work out enough categories of people. They are not necessarily interested in tracking individuals but they are interested in groups of people so that they can then deliver particular kinds of ads and services to individuals. We have become farmable, our social relations have become farmable, and that is a really informational process. It relies on various underlying forms of information power and politics.
**KW:** I agree, and this is also hidden. You discuss that in your chapter on the cloud as well. Here you show that already the choice of the concept ‘cloud’ as metaphor tries to highlight its immateriality but also its ‘fluffiness’. You write: “fluffy white clouds look down” on us. You call this in your book the ‘technological embrace,’ so there seems to be some embracing technology and welcoming technology – and it seems to be immaterial.

**TJ:** I think clouds are a very interesting thing to look at. I looked at the technical specifications of clouds, proposed by various industry bodies and governments and they all mention things that are familiar to us: flexibility, so you could use your data anywhere; scalability, you could suddenly need double the amount you had or less; mobility, you can do that while you are on the move. But there are other things that are also really important that are left out, and those kinds of things represent the metrical side of the cloud, that is what connects it to the iconography: the use of the cloud as a symbol for these kinds of things. Because it is a kind of immaterial, fluffy, welcoming image. It reflects the magic of clouds, because you can have your data and take it everywhere, and that is something that would have been previously difficult, but now we are not used to carrying around boxes of 3.5 inch floppy disks: it is quite different to suddenly be at the pool of data anywhere that we are. At the same time clouds are not just that: clouds involve issues of trust. You have to trust the cloud and the data to be able to use it. What they offer the user is a kind of magic, but behind that are material configurations. So the people who run the cloud, do not experience the magic, what they experience is the very materiality to make it work. If you are creating and maintaining a cloud, it is a very material thing. You are neck-deep in wires, protocols, wifi signals, so the very things that seem immaterial and magical are very material. What wifi signal is there? What kind of protocol do I use to send it across wifi? Although I could sit at the coffee table dragging my data down seemingly magically, the person right at the cloud has to make sure that my protocol on my phone or my tablet is working and it can pick up the right signal if you point in the right direction and so on.

All this kind of materiality that constitutes the storehouses of server farms offer the advantage to the cloud holders that they can process and look at that, they can take that data and try and see what they can learn from it. Apart from the fact that they can try to get us to pay for cloud services, they get an information benefit. They can use this data, they can use it recursively, they can look for answers from the data and then plug those answers back in. Those are the underlying processes we see in the clouds of, for example, social media networks. Social media networks nearly all rely on some sort of cloud, and in that cloud, that kind of data store, they are able to look at what people do, what kinds of ads they see and react to, what kinds of people talk about certain topics and post certain things. Therefore they are able to serve advertisements back, and we continue to bring in this information. Those who use the clouds do not see that added extra, we just experience it as an individual using them, but the people behind the cloud do not only have that materiality, they have an added informational benefit. They can correlate the different users and then they can
use it in their own way. The experience we all had: you might go to a site and look for something, for example a particular kind of holiday, and suddenly you find that wherever you go you will find advertisements about it. And that is because those data farms, those clouds, sitting behind all these things, whether it is a search engine or a social media application, are able to evoke certain information and then use it in various processes and re-feed it so they get this massive increase in information flowing around that they can use in various ways.

KW: It is very much a question of control in all the examples you are discussing, being it iPads, or smart technologies, or the use of clouds, it is very often the question who is in control and that is of course also a central topic in your research on hacking.

TJ: Yes.

KW: In hacking, tinkering, and making communities it is about taking over control, and I think that is a relevant discussion.

TJ: Yes, it is always wonderful to see what people can do with the kind of conditions that are given to them. I have always been attracted to seeing in social movements and in oppositional movements the creative appropriation of the things that people use. And we see a lot of that, with the hacking movement for thirty years or so now and one of the more recent kind of movements that is being called the maker-movement, which encapsulates a number of things that come from hacking, such as hardware hacking which was very big early on in computing and the emerging of networks. There is a period where hardware hacking and things like software production were almost synonymous because you had to actually physically manipulate the machines to get them to operate the way you wanted. But there has been a long period where hardware hacking has not disappeared but has been a sort of minority. With the rise of things like the Raspberry Pi or 3D printing, all of these things produce a whole new kind of interest, and people are re-appropriating the technologies and use them for the kind of things that they want to. Re-designing our technologies is, in an underlying sense, very important, because anytime that we create a technology that we start to rely on, that technology will have a particular culture and politics embedded in them. None of these technologies are neutral, simple instruments. Once we start to use them, those politics, those cultures are simply assumed and disappear into the technology’s infrastructure. There is no reason why we want to stop that, it is necessary in a highly technological and mediated society for that to happen, but it is important that we are able to integrate the infrastructure that we might want and design them in different ways.

The current key example for me is the way people have started to talk about the ‘post-digital.’ The post-digital – referring to it very broadly, considering it is a very complex and interesting debate – is the idea that things like the internet and the digital have just become like water and electricity. They have become infrastructures that we rely on and that we use all the time without thinking
about that. Yet the internet still has a very specific kind of structure to it, one that combines two opposite forms of control, or two opposite forms of hierarchies. On the one hand, it produces a very flat distributive network with peers in it; even if not necessarily all peers are connected to all peers, but lots of peers are connected. You can move information around and it is very hard to restrict the information that is going around, as long as some nodes are connected. This backs up (in technological form) many of the things that were considered revolutionary in the beginning of the internet, it was democratic and anti-hierarchical. But all of that is also dependent on protocols that control and create the internet. The protocols of the internet are very hierarchical, very binary, you are either on or you are not. And these internet-protocols and these two forms of control, are now embedded beneath the post-digital suggesting that that kind of culture and the politics of these things are now buried deep within all the things we use: so all the apps we use, dependent on internet protocols to transfer data. We then get buried underneath all these things that might be more obvious to us in a kind of particular culture and particular politics of the internet.

It is very important for people to get a hold of their technologies, to work with their technologies, to see how they work and to be able to be in positions where we collectively create the kinds of technologies that we might want. Rather than constantly relying on the great software factories that are out there to produce them. And of course, the other great feeder of that are the hackers of free software and what has been called open source. The free software hackers, people who produce very complex, huge programs that will run from Office suites to Linux which are open to people who can read codes, and they are also open in the sense that you have to give back the code you create to the kind of collective project. They produce a kind of model or ethics on information politics and how these things should progress. The maker-movement is fascinating because they extend these sorts of ideas to something more obviously material than software coding.

KW: I have the impression that they share the same approach of technology: the hacker and maker communities and the industry. They share a vision about new advanced technologies and improving them. Preserving and conserving things is not in the centre of their interest. So it is always about approaching the next advanced version of a device.

TJ: What I think is true is that there is a kind of stream in the hacker and maker movement that is as much interested in being in the future as any of the Silicon Valley or high tech companies would like us to think we should be, because they like us to buy new devices or subscribe to new services. There is a utopian element that sees in technology huge possibilities for humanity in different ways. While we need to be critical about that, we also need to hang on to that quite utopian sentiment, the vision that sees new uses of technologies, as long as these technologies can be appropriated and used by the communities who want to. At the same time the critique of the utopian technologists has to apply as well, we have to be very careful about people who think that by, you know,
giving one laptop to every child, you are going to automatically change poverty in the world. You have to be very careful that technology does not somehow stand in for certain changes in politics, and does not stand in for addressing very vicious inequalities in the world.

**KW:** I think these two different sides of it are also visible in the metaphors you use in your book, because on the one hand you speak about a positive, a rather utopian approach using the technological embrace as a metaphor, but you also speak about battlegrounds, which is rather dystopian because it is destructive and about fighting.

**TJ:** Yes, I was a little bit cautious about using the word battleground because of the militaristic connotations. I almost fully took it out at one point, but I put it back in because actually they are battlegrounds. By battlegrounds I was meaning specific case-studies in the book. The case-studies are called battlegrounds and whether you are looking at something like the hacktivist movements, which is one of the three case studies in the book, or the iPad, these are studies of the ways different kinds of politics flow and intersect. They are places where you can see a kind of information politics, so you can see the politics of anonymous breaking into sites, leaking sites, WikiLeaks and so on, you can see them in major contest not only with their natural opposites, but also participating in wider social movements. For example, the hacktivist movement has at least two major phases, but they are both associated with major phases of the alterglobalization movement. There was the phase in the 1990s, with anti-roads, dance protest, anti-WTO protests, and then in the 2000s, the Arab spring, the occupy movement, the Indignados movement in Spain, and more. Hacktivists are very much part of wider political movements and it is important to see those as conflicts. It is also important because part of the book is really about trying to dig out ideas of exploitation, ways in which we can be part of social and cultural relations where certain groups of people can benefit disproportionately by making others lose. That is a rather abstract way of putting it, but when we think about the way capitalists benefit from worker’s labour, the way men benefit from women’s invisibility or domestic labour; that is the kind of relation I mean by exploitation.

We can also look at information and see that there are information communities who benefit disproportionately, so the data that Google and Facebook collect is data that comes from all of us yet they keep and benefit from the recursions they can generate from it. However, there is no reason why that data could not be completely available to all of us at the same time. One of the great and potentially liberating aspects of information is that it can be available to all of us simultaneously to use to its full benefit. Economists tend to call this non-rival but that is conceiving information as having an inability to make rivalry, but that makes a lack out of something that is actually a major benefit of information. I think it is important to explore how all the data that Google and others store, is stored privately and kept to itself, so that it can deliver better search and better ads than other people. However, there is no reason why that information
could not be shared completely between everyone with access to the internet. It is important to start turning the argument around, so that we do not see information as problematic because it lacks rivalry but valuable because it is available for simultaneous, complete use. That is where the digital rights arguments are located against those who are opponents of digital rights. Rivalry is about making information into something that not everyone can benefit from. At the same time we need the ways in which information could be used much more widely, it could be used to connect to people, be available to people. And some of the open movements are also pushing this politics, such as open government information systems to force governments to bring information paid for by the public into the public sphere so that anyone can use it in the ways that they want it to.

KW: Sharing is of course also part of the hacker ethics and it is also an underlying idea of clouds, but used differently.

TJ: I think it is important to see that these are political choices. When I was talking about clouds earlier, that could be a very critical point, but clouds do not have to be configured to privatize all the information, they could be configured to allow everyone to have access to the information that is recursing and is produced through them. If a cloud collects all kinds of information and then is used to generate correlations that offer more information about social behaviour, then there is no reason why other people cannot have access to this data. It is a political choice to restrict and make private this information and we have alternatives in front of us, for example by looking at the way the world wide web was developed and was not privatized. The free software movement is an example where software was not only freely available to use, but it was also culturally available for everyone to play with and to use. And there are different kinds of media objects that will require different approaches. Software is something that is never really finished, it is always in development, it can always be improved, whereas you can argue that something like a particular poem, novel or song is finished in a particular state. Not that the latter could not be changed or remixed, but in that particular state it should have a certain ‘this is how it operates in this particular kind of context’ and then people can remix it. But that is not how software is developed. So we have to be careful about the sort of objects we are dealing with, because we will always have these kinds of cultural, political nuances.

KW: I would like to go back to something that you said earlier already, that is related to the complexity in the context of labour and exploitation, because many of the communities you investigate also seem to see self-exploitation positively. People have fun to work on a project and do not consider it exploitation. They invest a lot of time and energy to produce something that is then offered for free.

TJ: There is a big discussion and debate about the idea of free labour and it is a bit too easy to define free labour as something that is exploitation in a kind of classical capitalism sense. And that is at least partially true. But as you say,
it is also important to see that free labour is often seen as entertainment and pleasure, as a leisure activity. There are some really good studies on this topic – for example by John Banks and others – which has been around for a while now. One important example is of one of the train simulation games in which the players were writing new kinds of trains into the game, so new schemes and new looks of trains that could be used, and in fact the amateurs implemented steam trains first and the game owners reacted to that. The owners of the game reacted to that in an interesting way in that they reduced the size of their art department, and they started paying some of the modders. The modders then divided across the whole spectrum, from people who turned modding the train simulator into a job to people who continued to do the modding, but refused any payment for it because they saw it as leisure, they saw it as free. I think the important thing behind it is, whereas companies like Apple and Microsoft make objects and sell them, whether it is a package or an iPhone or an iWatch or whatever, they also have digital aspects, but in a strict sense they are primarily manufacturing industries. But natively digital industries have a really important component where they need this kind of free labour to progress. Google cannot operate without all of us contributing our searches, as they record what we search and they use that to refine their searches after they have already examined the structure of the world wide web and the links that everyone has made on the world wide web to use those links to structure their search results. Google thus relies on the internet community that is creating the links of the web. Their business cannot operate unless there is simultaneously a moment where people are doing something freely both as pleasure and it can be converted by a company into something like labour of some sort for the production of value.

I think one of the complexities of our world is that those things are often simultaneously true. It is often simultaneously true that one is doing something for pleasure, but someone can record what is done through digital means and then it is used to create some sort of product. The issue for me is then whether people are aware of these kinds of things. Lots of that conversion of what might be called leisure time into some kind of product is hidden from us and we do not see it. And it is important to start to uncover those moments and make that kind of contradiction visible, because otherwise we cannot get a hold on some of the main forms of value production in the digital world. We might start to ask questions about why should certain data be reserved in the way that it is? And we need to be careful, the debate is not straight-forward. It is not a simple claim that we go to Facebook and say: it is all our information that you hold, so you have to give all that back to us. Because that implies that information about us is somehow our property that they have taken, and it is not clear to me that information is a kind of individual property that we each have. It also would imply that any new information that would be created within a cloud of some sort should rightly fall to the owner of that cloud, so it means that all the things that make use of bits of our individual information by collecting them together and finding the correlations would then fall to the person who runs the cloud and I do not think that is clear. We need to think of information as something that is
potentially available to us all in different ways and how that can be something much more like a social or public good.

KW: Is that a plan for future research to go deeper into this complexity?

TJ: I must say that I am not quite sure as I put a lot of things into the book on information politics and tried deliberately to integrate as much as I could, so though I have a couple of current research questions, I am not entirely sure what I will be focusing on next. One possible area is the idea of digital industries. It is really around the idea of a question like I ask in classes that I teach: would you say that Microsoft and Apple are not digital industries and that Google and Facebook are digital industries? And what does that mean, what is the dividing line between those two? And that implies the whole discussion of free labour that we just gone over. I am not sure if a lot of those answers are already around and there a lot of other people are working on them in other areas. I think the idea of information politics, something that is more directed towards trying to find new alternatives that allow us to see information as it should be available to everyone simultaneously, to see what kind of forms that takes, is interesting. There are existing models around that perspective, but there still is some work to be done in developing those free labour cultures, they still need a certain amount of development. And I think that is where we can come back to hacker- and maker-labs, because they are little laboratories for us to produce these things and for us to manipulate the technologies so that we can implement them and also work out how we make these into socially significant forms. You know a lot of these things are things that we can just put in place and I think the lesson of hacktivism is important, especially the lesson of the hacktivists who are interested in and try to explore the internet as they want it to be, not as it is. There are search engines like DuckDuckGo that try to not track your data and I think it is in bringing people together, in maker- and hackerlabs and then connecting to other kind of hesitant users or institutions, to other problems in our society, that we might start to see some new connections: to see these in ways in which we think about the technology we need, and think about the kind of society we need and then put in place the cultural, social, technological, in fact all the different elements of that society.

“I am arguing that there are many forms of exploitation, and so also of liberation, among which we should now count ‘information’. No one form of exploitation should be expected to encompass all others, instead multiple analyses of exploitation and power are needed. […] The dynamics of information power are recursions, devices and network protocols that are formed into platforms and appear in the political struggles and conflicts of our times.”

(Jordan 2015: 215)
References
