

SPEAKERS

Craig Gent
Embodied Audience
Carolina Bandinelli
Cecilia Ghidotti
Keith Bloomfield
Michael Dieter
Embodied Audience

RECORDED

4 December 2024 at 17:00

KEYWORDS

Algorithmic management
digital labour
cyberboss
hybrid space
power dynamics
logistics
productivity tracking
worker resistance

union politics
technology impact
workplace conditions
labour process
management reorganization
social factory
political phenomenology.

GUESTS

Craig Gent

00:00 CAROLINA BANDINELLI

Two, one...

00:03 KEITH BLOOMFIELD

You're live.

00:04 CAROLINA BANDINELLI

Oh we are live! Ah, finally! So, cheers everybody! Welcome to the CDI-TV, Centre for Digital Inquiry at Warwick, in collaboration with the Media Lab at the Centre for Cultural and Media Policy Studies. So this is our second episode, and the first episode, I realised that I started without introducing anything, so I didn't say who we were, I didn't say where we were, so a huge cliffhanger for our audience. So now finally there is this big name reveal! So I am Carolina Bandinelli, and here there's the gorgeous Michael Dieter, and we are the Centre for Digital Inquiry, the kids of the Centre for Digital Inquiry. Michael is the more- you are a bit the geek of this aren't you? Like Michael is the one finding new screen arts and sort of media tricks, whereas I'm more of a cultural studies person, and so yes, this is the CDI team, and then we have Keith Bloomfield in the back, so if this is happening, it's because of Keith and also Rob Batterbee and then we have Cecilia Ghidotti. I mean, there's a big team. Maybe one day there will also be you from this side of the screen. And before presenting the guest of today, let's leave a bit of suspense. Let's not reveal who you are yet. Michael told me to say that we are part of the StreamArtNetwork. So we are part of the StreamArtNetwork, and also Michael told me say that we are exploring this hybrid space together. So, just so you know, we are exploring this hybrid space together, aren't we?

02:18 MICHAEL DIETER

Yes.

02:20 CAROLINA BANDINELLI

[Laughs]

02:20 MICHAEL DIETER

So shout out to UKRAiNATV. Shout out to Konfluxus, to The Void in Amsterdam, to our friends [3022] in Lithuania. We're part of a network that spans UK, across central and eastern Europe. We're very proud to be part of that network. The premise is all space is mediated, and all mediation is real space. And we are living in hybrid conditions. And in these streams, we explore it together through hybrid togetherness. So this is the aesthetic premise of our stream initiative at CDI, and this is episode two. For our series, we've invited people in our network who are producing interesting research, who are publishing books, who are writing theory, we're a bit of the theory wing at the moment of the StreamArtNetwork, and evolving in different directions, but episode two, we have brought a friend, a colleague now as well, to join us and discuss a new book that he's just published. Introduction, Carolina?

03:44 CAROLINA BANDINELLI

Yes! Craig Gent here. Can we have some fake applause from the-

03:50 EMBODIED AUDIENCE

[Applause, cheers]

03:51 CAROLINA BANDINELLI

Woah yes, exactly!

03:55 CRAIG GENT

Who needs to fake it, baby!

03:55 CAROLINA BANDINELLI

And you know, I was thinking next time when we have the guests, the guests should come from like a red carpet or a green screen carpet. You know, we should step up eventually. One step at a time, we are exploring this hybrid space together. So Craig, you're an author, a researcher, in my perception you're also one of those, like cool people of Novara Media, those cool people publishing with Verso. And you know, I say Verso for a reason, because this is your book published by Verso, *Cyberboss: The Rise of Algorithmic Management and the New Struggle for Control at Work*. So I can see some technology, a clear political stance, a nice retro cover, and also a nice palette kind of matched with your style. So in my eyes, you are one of those kind of cutting edge, a bit political, a bit theoretical, kind of an engagé intellectual, but with a techie, geeky twist. Am I right?

05:19 CRAIG GENT

I wouldn't say I'm very techie.

05:21 CAROLINA BANDINELLI

You're not techie.

05:22 CRAIG GENT

I would say, I mean, I am about as cutting edge as, like, a Marxist Luddite can ever be, which is coming around again, right? So, yeah, I'm increasingly cutting edge, I guess. But I mean, really, I'm

interested in power. It just so happens that you can't talk about power without talking about technology right now.

05:41 CAROLINA BANDINELLI

Yeah, fair enough. And I think we'll talk about power and technology and new ways in which technologies are changing the way power is exercised. But before getting there, how are you today?

05:53 CRAIG GENT

I'm very well, I'm very happy to be in this hybrid space.

05:55 CAROLINA BANDINELLI

Are you exploring this hybridness?

05:58 CRAIG GENT

I'm exploring this hybridness.

06:00 CAROLINA BANDINELLI

How does it feel, so far?

06:04 CRAIG GENT

Celestial.

06:05 CAROLINA BANDINELLI

Celestial - yeah, that was the word I was about to say, yeah. It is a bit celestial.

06:10 CRAIG GENT

It feels celestial. Noumenous, liminal, all of these things.

06:14 CAROLINA BANDINELLI

Yeah, I feel very week 10 of the term, which means I feel like an emptied shell, but this is the nice thing that is happening to me today. So compared to my mood before this dream, I feel rather celestial, too. Michael, how are you?

06:36 MICHAEL DIETER

I'm good. I don't feel empty, I feel energised from the term being over. Excited.

06:42 CAROLINA BANDINELLI

Oh really?

06:43 MICHAEL DIETER

Yeah, my teaching's done. I'm ready. Ready to do anything other than teach right now!

06:47 CRAIG GENT

See these are like bourgeois professional preoccupations. I was just thinking to myself, I feel Christmasy.

06:52 MICHAEL DIETER

I do feel a little bit Christmasy in the season as well. We have a Christmas tree just off green screen. Craig, tell us about this book.

06:54 CRAIG GENT

What do you want to know?

07:06 MICHAEL DIETER

Give us the, you know, do they call it the elevator pitch? What is this book about? We've got the title, *Cyberboss: The Rise of Algorithmic Management and the New Struggle for Control at Work*.^[1] I feel like I sort of know what this is about. But, you know, give us the sales pitch. Tell us about your book.

07:27 CRAIG GENT

Okay, it's a long time since I worked in sales, but I did once. I'll try.

07:32 CAROLINA BANDINELLI

You can give us a bad sale pitch.

07:35 CRAIG GENT

Okay, you're gonna buy it regardless [laughs].

07:37 CAROLINA BANDINELLI

Yeah, yeah, exactly. We've already bought it. So...

07:43 CRAIG GENT

So I should say the idea of this book started before people were talking about algorithmic management in the context of work. So really where it came from was a moment in time that I don't think has really gone away, where people were feeling that, you know, like there are some problems with the idea of the future of work. Like things don't look so like optimistic, and in particular sectors we can see this kind of nexus of bad conditions, 'something to do with technology', poor working hours or contracts, low pay, kind of all coming together and contriving this really exploitative way of working. And at that time, people were doing quite good valuable work into things like precariousness, but there was quite limited work happening around the technology. And one of the jumping-off points for the book, and it's kind of a wager, I suppose, but it's one that goes back to this old labour theorist, Carter Goodrich, that I cite in the beginning, where he is referring to some some trade unionists who are speaking at a commission in around about the 1920s and he says that, you know, there is a struggle that goes beyond pounds, shillings and pence, and there's an unrest that he refers to as the "straining of man to be free."^[2] And basically what he's saying is that, you know, you can improve wages and you can maybe improve conditions, but there's still going to be something about the way this work is happening that makes us uncomfortable, and that we think is injurious to interests, or limiting of freedom. And I think that's how I feel. And so I wanted to focus squarely on the technology itself, which really means focusing on how communication, information, power, work within these workplaces. And kind of bracketing, in a way, the kind of precarity preoccupation, and

trying to focus on the actual- like what happens when you digitally mediate a set of social relations that fundamentally are as old as industrial capitalism? But what does that look like now and how does it produce political forms? How does this kind of technical reorganisation of work like produce political forms that are maybe unexpected?

10:31 CAROLINA BANDINELLI

You said before that you're interested in power and how power is exercised and mediated and digitally mediated today. Do you remember, or can you tell us the story of, how did you get interested in power?

10:54 CRAIG GENT

I think because I grew up very poor, and I think when you grow up poor in a town that- so I grew up in Barnsley in South Yorkshire, which was the centre of the miners' strike in the 80s. And even though I didn't grow up through the miners' strike, it's very hard to live in that town and be unaware of this kind of relationship between politics and history and just general social life. So it's kind of like this sort of ambient awareness. But, I mean, I got interested in, like power specifically- actually, it was through initially reading second-wave feminism. This is the real story, I'm gonna level with you, okay?

11:37 CAROLINA BANDINELLI

We want the real story, of course!

11:39 CRAIG GENT

We're on the bean bags, I'll give you the real story. Here's the real story. The real story is that when I was young, my household had a lot of domestic violence, and me, my mum and my sister, we went to domestic violence refuge, a women and children's refuge, and whilst we were in the refuge, my mum did an access course so that she could go on to do a degree (she didn't do college or anything like that). And so she got onto this access course, and it was on women's studies. And so she would bring home these videos or bring home these books, and she didn't really have anyone to talk to about it, so she would talk to me about it. And I think for her, understanding power through the lens of patriarchy helped her to understand what we'd collectively gone through. And then me, kind of, just beginning to sort of tip into adolescence at that time, it gave me a kind of framework for understanding gendered power in the world. And then not long afterwards, she got me a book that had three essays in it. One was by Marx and Engels. One was by Che Guevara, and one was by Rosa Luxemburg. And so I just like, devoured this.

12:48 CAROLINA BANDINELLI

The perfect present for teenager in South Yorkshire, yeah. A gameboy and yeah.

12:56 CRAIG GENT

And I was like, okay well the Guevara stuff seems quite exotic and then the Marx and Engels stuff at

the time seemed a bit fusty, but it's actually the Rosa Luxemburg that I really latched onto, and this kind of 'council communism', it used to be called, but this idea of reorganising social relations politically within a locality. And it just sort of took off from there. I mean, that's how I really got into it. But then, I don't know, my first job was a paper round, and I got unfairly sacked from it, and it was like a burning injustice that's motivated me ever since [laughs] and I had no representation, you know, so, yeah, I don't know. It was just there, and then it just developed at some point.

13:41 MICHAEL DIETER

I think there's a lot of interesting aspects to the book that we will get into. How you've written it, the methods that you use, the different styles of writing that you adopt, both theory and different narrative styles. But it makes sense what you're saying in terms of your background, because when you describe certain areas of the UK in your fieldwork, I think there's a real attention to detail, attention to those histories that you're talking about, for instance the miners' strikes, and you do interweave these personal stories as well. Maybe I can invite you to talk about the first warehouse job that you took up that you mentioned. I found that I could relate to that moment myself, not that I worked in a warehouse, but as a student I went through so many different hospitality jobs in all kinds of different contexts, from major global fast food chains to very local cafés to also a kind of flexi-style work, where I was sent around to different cafeterias around the city, including places like - in Australia, we would say, working with the wharfies - that got the dock workers and serving them, and just that range of experiences and the people that I would meet, and just going through these different working conditions, you know, has always stuck with me. I say to my

students, even those experiences stick with me in terms of, like, there's always going to be a week on labour in my introduction course on media. And anyway, I just invite you as well. Like, what brought you to these topics, though, it was some of those experiences as well working and what you sort of saw or encountered in those workplaces?

15:51 CRAIG GENT

Yeah, so I guess if I go back to a similar time in my life- I remember, actually, when I was a PhD student, I was probably teaching on the module that you're referring to at the time, and I sort of presented my seminar group with a list of all of the all of the ways that I'd made money by the time I was 18 on one PowerPoint slide and it just completely filled the slide with all these things. So one of those things was working for a summer in effectively a kind of a warehouse [where] goods would come from High Street stores and they would just be re-tagged with the sale tickets on and sent back out again. And your job basically was to open boxes, scan everything, re-tag everything, box it back up and send it off without stealing anything.

16:47 CAROLINA BANDINELLI

So when you started working there, you had already read Marx and Rosa Luxemburg or not?

16:53 CRAIG GENT

[Laughs] Yeah, I had.

16:56 CAROLINA BANDINELLI

Because in your book, you really thread in the personal and the theoretical. When you started working there as a young person, how old were you?

17:05 CRAIG GENT

Sixteen.

17:06 CAROLINA BANDINELLI

Sixteen? So super young, like a teenager, but a well-read teenager, we must say. Credit to your mother. Did it resonate? Like, were you there like, boxing, unboxing things, thinking, oh, you know, the Communist Manifesto, or, you know, this must be patriarchy. Like how did it resonate?

17:31 CRAIG GENT

That's a super interesting question. I think the thing that surprised me most about it was that it was the first time... I can say it now, I guess I could say it then, but the company was Next, the High Street chain Next, but I wasn't working for Next. I was working with all of their stuff, but the warehouse was run by different company, who was only temporarily in this warehouse for a little while, and they had been contracted by Next to do this thing, and I was actually employed by another third party that was nothing to do with the warehouse whatsoever. And so this is just kind of these entities within entities, within entities. And so it definitely complicated what I would have found in Marx as this sort of sense that you have the working class and the owning class. I do think there's a truth to that, but it definitely complicated the picture. I wasn't yet thinking

about the actual labour process itself, but like the work was-

18:28 CAROLINA BANDINELLI

Also you were sixteen.

18:30 CRAIG GENT

No, I know, but like it was obvious to see it. We were grouped onto lines of twelve, and then as far as you could see within the warehouse, you just have these lines that go all the way down and at the end of each one - because there wasn't a- you know, this was before broadband - like there was a supervisor for every single line who was standing at the end with the sellotape. That was their job, to stand with the sellotape for fixing things [laughs] and signing things off. And then every hour or so that person's supervisor would come around. So you begin to see this kind of operation of capital and productivity that isn't really present in the same way [when] working in a shop, for example, where we have like monthly sales targets, but if you hit them [or] you're not going to hit them, whatever, you might get a bonus or not. Whereas in this particular workplace it was really obvious, and it was my first time working with many, many workers who didn't speak much English, for example.

19:42 MICHAEL DIETER

I want to pick up the term that's in the subtitle, algorithmic management. Because what you're describing is already like the these logistical spaces, how much they are now sites of abstraction, forms of automation, new forms of

alienation. Your work in investigating these sites, it intersects and overlaps with a lot of other debates, discussions, concepts, I think of things like digital labour, platform labour, but in your work, you decide to focus on this term, algorithmic management. Why algorithmic management? Why do you zoom in on that? Where does that take you in this research? Why was it important to really be emphasising this?

20:30 CRAIG GENT

Well, it's a really good question. And I think that there's really valuable work that's done around platform labour or platform capitalism, and also around digital labour. But I think when I was starting out, I focussed on logistics in this book, and when I was starting out this sort of research strand, really for the reason that it kind of offered a clarity about these technologies, and there's a clear political will around them as well. Whereas, when you see now algorithmic management adopted in offices and things like that, often a lot of the managers who are bringing them in don't really know what they are getting themselves in for and don't necessarily understand the technologies themselves super well. And there's something about logistics that spoke to this sense that they're at the apex of something. But why I focus on algorithmic management rather than- It's fine.

21:28 CAROLINA BANDINELLI

Michael is still listening, he's just disappeared. You ask questions and then you disappear.

21:35 EMBODIED AUDIENCE

[Laughs]

21:35 CRAIG GENT

[Laughs] I should just speak as if you're still there.

21:39 CAROLINA BANDINELLI

Well this is part of exploring hybrid space together.

21:42 CRAIG GENT

It's hybrid hosting! [Laughs]

21:44 CAROLINA BANDINELLI

[Laughs] It's hybrid hosting.

21:45 MICHAEL DIETER

The glitchiness is part of the experience!

21:47 CAROLINA BANDINELLI

Exactly, it is the presence and absence...

21:50 CRAIG GENT

Yeah, yeah.

21:50 CAROLINA BANDINELLI

Exactly!

21:52 CRAIG GENT

Anyway. So, I think, when I was starting this out, 'digital labour'- it just seems like that term almost really speaks to a moment in history that I think we're probably just beyond now.

22:10 MICHAEL DIETER

Yeah.

22:10 CRAIG GENT

Like I struggle to think of any labour that couldn't be described as digital in some way, or wouldn't have a digital-

22:10 CAROLINA BANDINELLI

Like it's too general a term.

22:15 CRAIG GENT

Yeah, it's very diffuse, and what I would see around that literature would be more and more typographies of trying to break down different types of digital labour and that kind of stuff. And I'm just not sure how useful that category is now. Because fundamentally, it's about labour. Like that's the point of trying to describe it, to say something about labour. So why not just say something about labour? I don't mean that to sound facetious, but like it just seemed kind of-

22:49 MICHAEL DIETER

No, that makes sense. But platform labour, I mean, that takes you in maybe a different direction but yours is interesting - I'll just add to this, I think - because when I read the book, I got the sense - I'm not sure whether you say it so explicitly, you possibly do at some point - but you look at these spaces like Amazon warehouses and other logistical, highly automated warehousing contexts and shop floors, but there's this sense that the kind of work going on there is coming for all of us, in a way, and this is why those sites with the intensification of those processes are really important to be paying attention to. And there's also this sense as well, when I read it, that the internet really has become this global logistics system. And also, then, therefore, it makes sense to focus on these sites. You know, what is behind the interface of even our web browser is this global logistics chain. I think that comes through really strongly. But, yeah, maybe I'm answering your question, but I think still, like, why algorithmic management within those resonances that your case study has? Like, where do you go with that concept?

24:19 CRAIG GENT

I'm going to backtrack a little bit and say the reason I didn't settle on platform labour, so to speak, is because I think that, particularly when you're speaking about actually existing workplaces, [it] gets so quickly tied to the gig economy. And it became really clear to me that this is not just a gig economy kind of issue.

24:41 MICHAEL DIETER

You look at that as well [inaudible]

24:42 CRAIG GENT

I look at that as well, yeah, because it's important to do so, but I try to expand that out-

24:47 CAROLINA BANDINELLI

Sorry to interrupt you but my week 10 brain probably, but I'm not the only one who's tired in this room or in the world of our global audience. So what kind of work environments are you considering in the book specifically, just to put first things first.

25:09 CRAIG GENT

Yeah. So I look at e-commerce warehouses, I look at a sort of logistical hub that sort of sits behind a High Street supermarket, there's online shopping departments. So these are the people who like fulfill your order if you buy groceries online, they go around and pick it for you. There's a food delivery platform in there, there's Amazon warehouse in there, there's some delivery drivers [of] different types as well. And so I tried to sort of capture a part of the logistical supply-

25:39 CAROLINA BANDINELLI

So it's mostly logistics.

25:49 CRAIG GENT

Yes.

25:50 CAROLINA BANDINELLI

So this was your criteria of inclusion, so to speak, you wanted to look at the logistics, and how would the logistics work, or what is sort of behind the apparently immaterial, smooth surface onto which we click when we buy something.

26:12 CRAIG GENT

Yeah, sure, yeah.

26:13 CAROLINA BANDINELLI

Like, there's a world of workers that we sort of tend to forget. Okay. And then we're saying we are talking about algorithmic management. So it's not really platform labour, it's not digital labour, it's algorithmic management. And so to go back to Michael's question-

26:32 MICHAEL DIETER

Well maybe another one here, just to make it clear, what is management?

26:36 CAROLINA BANDINELLI

Yeah.

26:36 MICHAEL DIETER

People mention to me like, 'Oh, this is a decision from management.' Or, you know-

26:41 CAROLINA BANDINELLI

We need three microphones [inaudible]

26:42 MICHAEL DIETER

Yeah [laughs]. People will, you know, they'll say to me, 'Oh, this is coming from management.' Or 'This is...' but, like, what is management? Like why do we need to pay attention to that? Maybe that's the first step. Like, what for you is management all about?

26:55 CRAIG GENT

Well, I think, fundamentally, what I think management is about is... So labour is a commodity, but it's a commodity unlike other commodities, in that when it's purchased in the world, you hire someone, you're hiring their potential for work, not the actual product of their work, yet. So in the process of working, you have to actualize labour power. You have to actualize the potential.

27:23 CAROLINA BANDINELLI

So you see the Marxist in you here.

27:27 CRAIG GENT

But it's a useful language, you know.

27:30 CAROLINA BANDINELLI

Of course.

27:30 CRAIG GENT

So I think fundamentally what management is about is ensuring that your work has an output, and that when you're paid wages, that something is coming from that. And so, yeah, fundamentally, I think that's what the point of management is. I mean, I trace a bit of a history that sort of underlies algorithmic management, specifically in this [book], because I take your point about the internet and stuff, but it's important for me to locate the origins of algorithmic management, if we want to put it like that, not with the computer revolution of the 70s, but more like the bureaucratic revolution within work in the 1910s, 1920s. So I start off with [Frederick Winslow] Taylor, because I do think that we're in a fundamentally Taylorist paradigm here. And Taylor's big insight - he's often associated with piece work and stuff like that, and wages for piece work breaking down the labour process in this way - but his real insight was to do with power and communication. His observation, and this was a man who really hated organized agitators, as he called them, but his real observation was that owners of factories would hire workers in to do a job. And the workers, it's not that they would kind of go slow or sabotage or anything like that, but they wouldn't work to their full potential because they knew they didn't have to, because, fundamentally, they knew more about the work process than the manager did. The manager was there to to pay them, and then to get the product and not to really interfere with the actual happening of work. And so his idea was to separate the conception and execution of work. I would say that's the fundamental development, and that becomes central to so much of management thinking subsequently throughout

the 20th century, and it happens in different ways. And through the book, I talk about humanistic forms that this takes and trying to harness the social aspects of the workplace. And I also talk about Japanese management thinking, where these ideas, in some sense, are coming together. But I think that there's a sort of cybernetic turn that happens in the 20th century, where feedback loops can be built into the work process itself, and also then with computerization subsequently, management, productivity-thinking no longer has to necessarily detour through representation and can instead focus on these systems of sped up or automatic calculation. And where I try and get to it is that I think one of the things that's novel about algorithmic management is that- and we should probably say what it is, but it's basically a system where workers can be instructed, tracked, monitored, guided, assessed, allocated within their work by an algorithmic system without necessarily having human managerial input, and it will happen on a real time basis-

31:12 CAROLINA BANDINELLI

Can you give some examples, like, I think one classic example is the bracelet of Amazon workers that calculates the time they spend in the toilet. It has become almost common sense, at least in my bubble, that - I don't know how representative it is - but can you tell us some telling examples of how these, or how the algorithm, works as a manager?

31:45 CRAIG GENT

Yeah, okay. So the one of the first examples I give in the book is a worker called Lorenzo. Lorenzo works at a logistics hub that services a major

airport, services Heathrow, that kind of Heathrow industrial corridor, and he's in the back-end hub that is going to organize produce for going out to supermarkets and stores all across London. And he starts his work day by entering the workplace and gets given a handheld scanner, and he scans it, and it's then assigned to him for the day. There's an interface on the scanner, and he calls it a wristwatch, but it's basically like a big thing strapped to his forearm. It weighs about 450 grams, so it's quite heavy. It's like a small tablet, almost, but with buttons on his forearm, and then it has a wire that goes down to his finger, where there's a ring scanner, so it clips onto the end of his finger-

32:52 MICHAEL DIETER

It's a Motorola device, right?

32:53 CRAIG GENT

The Motorola WT4000.

32:52 MICHAEL DIETER

It's somehow a bit iconic. I did some Googling and it's, it seems to have-

32:56 CRAIG GENT

It became iconic, yeah, actually I should say after my research, but it became iconic because Banksy put it in the Dismaland exhibition. But there are others, the Motorola MC3000 if you really want to go down it. I mean, really, we should have hired one or something for the stream and played

around with it. But, yeah, so like, he gets one of these, and it tells him where to go, what to do, what to pick. It doesn't actually tell him his productivity. In some places like Amazon, it'll tell you your productivity, [it] might give you a countdown timer, so it might give you 12 seconds to locate and pick the next item. And so you're working in these micro-loops of productivity. But in his case, it tells him where to go and what to do, but it tracks him as well. If he goes to the bathroom, that's 'time-off-task', and so it brings his productivity down. At the end of the day, he kind of hangs up his scanner and he leaves, but then in the morning the next day, he wakes up to a text message that's automated from the productivity system that tells him whether his shift for that day is confirmed or cancelled based on his performance the previous day. And confirmed or cancelled is whether he's above or below, I think it's 92%. 92% of what, he doesn't know. But he's either above or below 92% of the desired performance. And his shift can be punitively cancelled at moment's notice because he's an agency worker on a zero-hours contract. Now, interestingly, he doesn't have to be on a zero-hours contract, but because he's an agency worker, and that's very normal in that sector, the union branch at that workplace doesn't want to know him, essentially, because agency workers - because they're temporary - don't count towards the calculation for recognition agreements, and so fundamentally, he doesn't have any actual representation in his work either.

You've already touched on something else I wanted to ask in this response, which is about your methods. So I think we have a good idea of the topics and the issues and questions that you're interested in the book and research project, but maybe you could just tell us a little bit [about] how you went about researching this. You mentioned Lorenzo. There's some field work, but I think that I just invite you, as well, as you're talking through that, to reflect on if you're researching these conditions, what are the methodological challenges? Why did you do it the way that you did? And what are the maybe bigger political questions as well that are raised around methodology for this kind of research?

35:56 CAROLINA BANDINELLI

Before you answer this articulated question, I have an easier one.

36:03 MICHAEL DIETER

[Laughs]

36:04 CAROLINA BANDINELLI

I'm like the lay-woman today, Michael is admittedly more prepared than me. I'm also concerned that maybe these jeans are too short. But anyhow, so what you told about Lorenzo and the algorithm, it's quite brutal. It's quite violent, right? Because you have, like, an object judging you, and you don't know what kind of criteria this object works with or this subject works with. So at least when other humans are involved, you can say, 'Okay, I have to be at least as good as Chris or at least as good as Cecilia. Okay, I can live with that.' But you are 92% of what and how would Lorenzo or other participants in your study, react to it? Were they angry at the algorithm, were they subdued? How do you react; what kind of affective relationship you have with the cyberboss?

37:17 CRAIG GENT

Yeah, okay.

37:22 CAROLINA BANDINELLI

Sorry, I stole your question. But then we talk about methods. I was very curious.

37:26 CRAIG GENT

Yeah, I'll try to get into them both. One of the big methodological problems, a really obvious one, is just access to these workplaces. Not least if you want to access them literally through the companies, it's just probably not going to happen unless there's something really in it for them. And accessing the workers is hard because a lot of the jobs are very high turnover, or people feel at-risk and so on. I would say that there's also methodological challenges, if you really wanted to get into like, okay, but what is the data? How is it calculated? How do we think about these types of data? Because the data isn't just the productivity of scanning, increasingly, it's the monitoring of movement, for example, or in some workplaces even experiments with affective algorithmic management and so on. There is, I think, a bit of a movement around 'explainability' and opening black boxes and things like that. And I maintain that I don't really think that you could hope to isolate any particular algorithmic function or line of code that would yield the explanatory power to explain the new politics of the workplace. And so I'm okay with speaking to the workers and getting a sense of what they understand by the algorithm,

how they interact with it day-to-day, which is also not what you would get from a patent or something, even though those things can be - you know, patents for these actual wearables - can be instructive, because they can sort of teach you about some of the affordances or the desires that underlie them, for example. And I did a bit of that as well. But what was the second question?

39:30 CAROLINA BANDINELLI

How Lorenzo feels...

39:31 CRAIG GENT

Oh, yeah. I really wanted to get into the subjective experience of working with these things, or what Mark Fisher calls the political phenomenology. I wanted to get into the political phenomenology of the workplace. And I found that algorithmic management has a number of effects. Obviously effects on things like labor allocation, as I just mentioned, but in some workplaces it has an effect on people's conception of time. If you have 12 seconds to pick something and that just repeats and that is your day - 12 seconds, 12 seconds, 12 seconds - it's almost like a state of flow, but a flow that is harnessed for the productivity machine, and for the ends of the employer, fundamentally. So yeah, disrupting people's sense of time, disrupting people's sense of space - particularly in a warehouse context, people are working within very high stacks. If you imagine the biggest library that you've been in, very high stacks. So you can only see in two directions at any given time, and the organization of workers by the algorithm should be such that workers are not actually

encountering each other. It's like, Pac Man, right? You shouldn't be going down your aisle and [finding that] someone's coming back the other way, because the aisles are narrow, and that's going to create congestion. So, instead, you're being sent in the same direction, or you're far away from each other. You're picking items that are continually near. I know that in the BBC [documentaries] people have talked about having to run for items and stuff. But really people should be moving relatively little [distance] to get to the next item. And to facilitate this, Amazon has a random stow system where a shelf will have a CD and a toilet brush and a Christmas tree all on one shelf. Because it's much easier to pick out a CD from a shelf [containing] a Christmas tree and a toilet brush and a sofa cushion than it is to pick out a CD from a shelf of CDs. They don't want workers doing that. So they stow the items randomly to facilitate this. And so, within that, people would say, 'I'm aware that I'm in a very big workplace with 200 people working at any given time, but I don't actually see anybody. I might see a worker somewhere in the distance, cut[ting] across the aisle somewhere, but I'm not actually interacting with anyone. And so also - this is not just Amazon, but many other places - there's a real reduction in the sociality of a workplace, and an emphasis on redirecting communication that we might happen between people, but redirecting it through the device instead. Now obviously things like being told not to talk at work is not novel to Amazon, but I think it was striking that it came up time and again; people said that they had never had a job where they talk less. And it's worth saying that all of these things, the ability to be in physical space with your co-workers, the ability to have some

degree of time to have a conversation, and the ability to actually converse are all prerequisites for organizing politically. [Ask] anyone who's ever done any kind of Organizer Training 101, the first thing is speak to your colleagues, find out where your colleagues are in your workplace. All of these things, they're actually borderline impossible within the workplace in these places.

43:18 MICHAEL DIETER

I want to ask about something else that I found interesting. I think it's part of a broader conversation about the impact that the algorithms have on organizations. But algorithms also change management, right?

43:31 CRAIG GENT

Yeah.

43:32 MICHAEL DIETER

And that's one of the discussions, I think, that's really interesting in your book. So can you talk a little bit about, like, what happens to management with this kind of the rise of the algorithm?

43:45 CRAIG GENT

Yeah, so you see this - I describe it as like a reorganization of authority within the workplace - where the algorithm itself, or the idea of the algorithm, or sometimes just 'the system', is elevated and bestowed with its own power, both perceived and in a sense, a real power, like a protocol power. It's constantly updating and its nature demands that people have to work to it in

certain ways, and with it in certain ways. But this is interesting because it complicates this maybe traditional sense that we might have where workers are taking instruction from managers or from supervisors. And I say in the book that supervisors in particular, it's interesting what happens to them, because the traditional epistemological function of supervisors - of having this oversight and knowing more than other people - is completely hollowed out. And were it not for the fact that they do mainly still reserve some basic disciplinary functions, you know, they get to shout at people or whatever, and that's fine. They have a monopoly on - what's the Hannah Arendt thing? Monopoly on state violence - they have a monopoly on shouting at people in the workplace, yeah, disciplinary power, you know. But were it not for that, they might be described as kind of like subvisors, because they are observing and seeing the workings of the algorithm almost from the same point of view as workers. And their role changes to be almost like a kind of pastoral role to help people to work with the algorithm better, rather than-

45 : 42 CAROLINA BANDINELLI

Like coaches, in a way.

45 : 43 CRAIG GENT

Yeah, rather than to discipline them based on the algorithm always. In one workplace, it was an Amazon warehouse, the person I spoke to was a packer, and he said, 'Look, does anybody hit the target?' He spoke to all of the co-workers that he could around him. He was in the rare position that

he's stationary every day, so that he can shout across to the next person. 'Does anybody hit this target? Because I'm not hitting the target. Nobody hits the target.' So he came to the conclusion [that] the target that we have for our work must not be the target that Amazon has for its actual fulfillment of orders, because Amazon does fulfill its orders - we've experienced it, it's very effective as a logistical process. But they're just giving us this target to discipline us. So he spoke to the supervisor and said, 'Look, this target business, where do I stand with it?' And he said, 'Well, you know, the supervisor just gives me some tips for how best to pack a box or how best to optimize myself towards the algorithm.' And that this is fundamentally what his main interactions with the supervisors are, like the giving of tips and so on. But I also think that it reorganizes management in ways that are more politically interesting still. I talk about managerial distantiating in the book. The algorithmic system and the use of devices and interfaces both allows the possibility of a physical distance from the shop floor for managers, in that they can not be present because the workers are being supervised by the interface. That's [the workers'] first line of management. And so there are few [managers] actually present, but also in terms of the labor process, they're less involved with the actual giving out of instructions. And so this does a couple of things. It means that actually, managers don't always know what is happening, or what's being allocated where is being decided by the system. But it also gives them a kind of plausible deniability, and that if something is going wrong, it's not the manager to blame. It's the system. And actually the system knows best, because it's an authority in itself. And so this

mantra came up in a lot of different workplaces of 'just trust the system'.

48:22 CAROLINA BANDINELLI

Yeah. So I want to know if there's some questions from the audience, whether online, offline, half and half. Of course, you've been talking about, it's a slightly depressing picture.

48:48 CRAIG GENT

[Laughs]

48:49 CAROLINA BANDINELLI

I'm sure there is also the part on tactics of resistance. I'm sort of a Foucauldian, so wherever there's power, there must be also some patterns of resistance. And I know that in the book, you talk about it. So if you want to know how to resist the algorithm, buy the book, read the book. But, you know, when we talk about work, we really talk about the wellbeing of people, the relationship with power, the relationship of solidarity with colleagues, the opportunity, the kind of social and personal relationships that one establishes, as well as how control is exercised. And I think that this idea of 'the system' is quite interesting, because this is very disembodied power. I mean, the power has always been kind of systemic, right? I mean, it has never been, at least in modern times, fully embodied in one individual. But I think this is even more evident now. And of course it poses the question of how to resist this kind of power. And it's interesting how it is, in a way, the risks of stabilizing for individuals, so that supervisor or human managers become almost like your pulse, like, 'Okay, I coach you into coping with the algorithm.' So that was me feeling the time so that people can gather their ideas. Do we have some questions online view? It's very difficult for me. You were right.

50:34 CRAIG GENT

Come in, come in.

50:34 CAROLINA BANDINELLI

I'm now in the screen. No, I'm not in the streaming anyway. So Matías from Hull. I just need to go here anyway. Okay, stealing the front of the scene. Hi.

50:49 CRAIG GENT

Hi.

50:50 CECILIA GHIDOTTI

So Matías from home is asking, if, beyond this expansion of algorithmic management from logistics to society, such in the social factory, are there inverse movements too? And I asked if was about movements of resistance, because this is the way I intended. But actually I think I misunderstood, because the second part of the question, as you can see here, is thinking about platforms that copy features of leisure or non-work platforms to analyse and monitor productivity of weird variables within work environments.

51:26 CAROLINA BANDINELLI

What an audience we have!

51:28 CECILIA GHIDOTTI

I mean, yeah, this is why.

51:34 CRAIG GENT

This is a super interesting question, and not one that I tackle head-on, but there is a relationship. I would point you to the work of someone like Phoebe Moore, where there's a relationship between the use of these management-of-the-self technologies, like Fitbits and like the Quantified Self, and like health tracking apps, sleep tracking apps, and this relationship between that whole industry of health tracking - and some people see it as social tracking, Strava for your runs, and things like that - and work technologies. That's a real kind of bleed that's happening. I don't know if it's relevant to the question or not, but it's also the case that, particularly with some app-driven algorithmic management, there are ostensibly non-work functions sometimes built into them, like playful functions or gamified functions that are there to encourage some social investment, whether it's leaderboards or being able to compare statistics and things like that with your co-workers. I spoke to some people for who worked for a food delivery platform, and once they had decided they were going to finish [their shift], they would actually cycle out of their way to go and meet with other riders to compare their stats as a fun thing to do and compete with each other, you know, in this slightly sort of machismo kind of way, sort of see who could outperform each other, which is very much like people comparing their personal bests with Strava or CrossFit or something like that, but they were comparing their personal bests with Deliveroo.

53:32 MICHAEL DIETER

I'll just pass the microphone. Question from the audience.

53:35 CRAIG GENT

We should say, by the way, we've had playing in the background this game - because I just saw 'insurrection' flash up behind us - To Build a Better Mousetrap. It's this kind of abstract management game that has a lot to do with algorithmic management. We should say props to Timothy [Gawayá], who was like, playing in the background.

53:58 MICHAEL DIETER

If I keep looking off screen as well...

54:01 EMBODIED AUDIENCE

It was just a follow up thing. It didn't deserve, I think, even the microphone. But given that you were talking about races to compare [at] the end of the day results, more than the Fitbit thing, it reminds me more of that Burawoy research that they did around the piece work, and how that was concealing somehow the control, no?

54:32 CRAIG GENT

Mm, yeah.

54:32 EMBODIED AUDIENCE

It's so interiorized somehow, that level of control that, yeah, they want to show off how well they did. That's the job done. You don't even need the apps anymore.

54:44 CRAIG GENT

Yeah, completely.

54:45 EMBODIED AUDIENCE

Well, you do them to just continue that game-like type of ambient and environment. But yeah. And my question has always been, I wonder, you know, how actually skilled the designers of those devices and control mechanisms, digital algorithms, were in thinking back to piece work and thinking back to the game attraction, the game element of it. I find quite scary.

55:19 CRAIG GENT

I mean, I completely agree. There's a bit in the book where I take some inspiration from Natasha Dow Schüll, who researched on the design of casinos and slot machines and things like that. And this sort of, well, Addiction By Design is name of the book. But this almost psychological hacking happens [in order] to get the job done, as you say. And to go back to the other question of management, these technologies are really about achieving a certainty of result. That's the idea. Workers can be many things. They can be really productive. They can also be lazy. They can have good days and bad days. They can chat to each other, they can have fun. They can be serious. They can be too depressed to work. They can be all sorts of things. And so [many] of these

technologies, they're trying to conceal all that and trying to just get a uniform output that is measurable and trackable. And, it doesn't have to look the same every day, but as long as you can track it and model it and predict it, then that is the job done.

56:17 MICHAEL DIETER

I think there's so many other things that we could talk about with your reading of algorithmic management. I think there's also interesting observations about how it, in a way, reorganizes ignorance as well, and how it really privileges performance. But I think to move things more towards a conclusion and to pick up the question that Carolina asked about tactics, I think we can go a little bit over time, given that we started late. But to wrap things up, let's talk a little bit about where you see the potential for political intervention in this whole situation. When I read it, I was really quite struck by, in your book, your knowledge and reflections on the role of unions when it comes to interventions in this area, and also your historical accounts of why unions have maybe struggled to think about technology, or to really consider that within their modes of intervention. I was hoping you could talk a little bit about that, and then, because - this is how I read the book - this is part of your intervention, to look at that broad landscape and the things that you're emphasizing, like this lived experience on the work floor, the importance of technology, the effects it has, thinking of technology also as a system that's reorganizing labor and so on, I see it as you're you're making a contribution to this. Like, what are the possibilities here? I'm making a bit of a statement now, rather than a question. But can you expand a little bit on how you see the role of unions when it comes to this situation, how you see the kind of contribution you're wanting to make in this book, for how people that are

involved in labour politics might think differently about what's going on here?

58:50 CRAIG GENT

Yeah. So I remember actually having this minor tussle with my editor, John Merrick, who I'm grateful for. He gave so much to the book, so if you're watching, John, I appreciate you. But he won't mind me saying that we had a small back and forth about [a passage where] I said that in the society where we have to work in order to live, unions are 'basically a good thing'. And he crossed out 'basically' and said they're a good thing. And I said, 'No, I mean to be slightly equivocal there.' Because anyone who's ever spent time in trade union politics knows how imperfect that can be. And even in good unions, there can be good and bad ideas, and good and bad strategies, and people who are a fucking nightmare. It just happens. And there are also good and bad unions as well. Like, I will happily say that I think Usdaw are a bad union. Usdaw is the union that represents mainly shop workers in this country, and they, certainly in the supermarket sector, are one of the biggest unions there. And, you know, we just had a massive pandemic where public opinion of supermarket workers and public sympathy for supermarket workers was never higher, and people really felt that they were essential workers, almost on a par with nurses and doctors. And their members were coming down with Covid, left, right and centre, taking it to their families and all sorts, and they managed to win nothing. They won nothing throughout that whole time, like there was the perfect opportunity to win anything, and they didn't win anything! And I think that's bewildering.

And it's interesting that when I have this conversation about the book, particularly among people [who are] thinking about tech and digital media, digital mediation and stuff, it's always surprising to me [that] people will talk about informational capitalism and stuff like that, but actually unions don't figure much at all in the conversation. Like, actual unions don't really figure as the actual political vehicles that we might think of for making change happen. When you speak to people who think about management and the organization of work, unions come up a lot more, but I think there's a reluctance to be critical often, because people who think about unions are acutely aware that they have been under attack for 40 years or more. I'm making no concession to that whatsoever. But as someone who has been in this world, and organized both within and without of unions, and has this kind of 'one foot in, one foot out' politics, an autonomist politics around labor, I do think there is room for improvement. And I am sympathetic to the idea that, well, we have to organize in unions because it's what we have - they are something that we have, I think it's important to say that, and I'm not misty-eyed about them, or nostalgic particularly. I know I said the stuff about the miners strike and that, but I'm more interested in the future. But trade unions are really bad when it comes to technology. They're really bad. They don't want to be seen as anti-technology by any stretch because they think it just consigns them to the historical dust bin. So they're really reluctant to just be anti-technology. They often buy into this narrative, which is a management narrative, of like, we can all share the benefit of the technology. I'm doing a paper at the European Trade Union Institute next year, I just

found out, and it's called 'Stop trying to make sharing the benefit happen: why getting real with technology means getting real with management'. So that will go down like a sick sandwich. We'll see. But I just feel like it needs to be said, like someone needs to say it, someone who's on side needs to say it. And so, in the book, to go back to resistance question. I completely agree with you, Carolina, where there is power, there's resistance. In actual fact, I think that algorithmic management comes about because of the power of workers and in response to them, and I identify ways that workers, quite of their own accord, are resisting these technologies through things like slow downs or through intentional mistakes, what one participant called 'fuckery', or snooping or skiving, and finding ways that they can do this in such a way that's often undetected and actually invokes some of the strategies that someone like James C Scott talks about in relation to nascent anti-colonial struggles, because it's like a high risk environment and the consequences are severe. So how do you organize in that context? And I think some people have read it as a fetishization of micro-resistance, which I don't think is fair, but I do think there's a case for broadening the activist or organizing repertoire, and I think it probably needs to both be prepared to take on questions of technology and management, and probably stop recognizing the right to manage which gets put into every recognition agreement, boilerplate, as if it's a natural law that the employer has the right to manage, [when in fact] that's a massive concession. And I think a lot of unions who do want to do good work on technology, increasingly, because they are changing on it, and I should recognize that, but they will still try to hang their

concerns on health and safety or data rights and these quite narrow ledges, rather than actually tackling the problem of, look, this is injurious to workers. It's making work undignified. This is what actual workers are saying about these technologies. We could do something about it. It demands a political response, and that's not currently forthcoming.

1:05:09 MICHAEL DIETER

I think this is a good actually point to wrap up on. There's so many other things that I would have loved to talk to you about, and with you about, and I'm sure that we'll have that occasion, just not on stream.

1:05:20 CRAIG GENT

If CDI-TV ever wants to do a Cyberboss series in the future...

1:05:25 MICHAEL DIETER

You know, the things that you're talking about remind me of [for example] the history of participatory design in Scandinavia, I think, is a good point to go with what you're saying about how do we think about the design of technology from the ground up, with workers, as co-participants really not subject to management in advance. And I would love an opportunity to push you a bit further too on where these micropolitical practices go when you scale them up, and what barriers do they hit? But I think we're going to leave it there.

1:06:12 CRAIG GENT

I mean, I do explain that in the book so people can... we don't want to spoil everything, right?

1:06:18 MICHAEL DIETER

We spoiled quite a bit, yeah, but...

1:06:25 CAROLINA BANDINELLI

[Inaudible] page 180 and then just like that [inaudible]

1:06:34 MICHAEL DIETER

Another way into the book is to read the Epilogue, the three-page Epilogue on AI, I think is a good starting point for the book.

1:06:44 CRAIG GENT

Interesting. See it circulates like a feedback loop.

1:06:48 MICHAEL DIETER

Yeah, well, I think that's it's a good intervention there as well that hopefully in another stream we get a chance to get into the challenges around AI and creative labor. But thank you, Craig, for talking about your book.

1:07:04 CRAIG GENT

Thank you for having me.

1:07:05 MICHAEL DIETER

I thoroughly enjoyed reading it. I didn't get an opportunity to just say it's wonderfully written.

1:07:05 CRAIG GENT

Thank you.

1:07:07 MICHAEL DIETER

So I say it now, and I love the different styles. There's some deep theoretical engagement. There's some nice narratives around your- I guess you would call them, the people that you're speaking with, your co-investigators in the workers inquiry. Yeah, there's some great stories there about their experiences as well. So yep, check out the book. Get a copy of it one way or another.

1:07:47 CAROLINA BANDINELLI

We should have said all these flattering things to you before starting right? This is another lesson that I'll take home for the next stream.

1:07:59 CRAIG GENT

I like that you kept it till the end. It meant I didn't know where I stood all the way through it.

1:08:04 CAROLINA BANDINELLI

[Laughs]

1:08:04 CRAIG GENT

It probably made me better for it. It meant I couldn't get complacent, you know.

1:08:09 CAROLINA BANDINELLI

This is a very nice book, very nice cover also. So if you don't want to read it, you can kind of display it, and it's still work. No, jokes apart, Cyberboss, Craig Gent, thank you very much for being here, and stay tuned with CDI-TV, because we have more episodes to come. And thank you very much. Now I'm going to collapse somewhere, so maybe I can just collapse here. Bye bye.

1:08:40 EMBODIED AUDIENCE

[Claps, cheer]

FOOTNOTES

1. Craig Gent, *Cyberboss: The Rise of Algorithmic Management and the New Struggle for Control at Work*, London: Verso, 2014. ↑
2. Carter L. Goodrich, *The Frontier of Control: A Study in British Workshop Politics*, London: Pluto, 1975, p. 3 ↑