

AMENDED Exhibit 1070

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

IN RE: SOCIAL MEDIA)
ADOLESCENT ADDICTION/)
PERSONAL INJURY PRODUCTS) MDL No. 3047
LIABILITY LITIGATION)
)
)

SUPERIOR COURT OF THE STATE OF CALIFORNIA FOR THE
COUNTY OF LOS ANGELES - SPRING STREET COURTHOUSE

COORDINATION PROCEEDING)
SPECIAL TITLE [RULE 3.400])
)
SOCIAL MEDIA CASES) Lead Case No.
-----) 22STCV21355
This Document Relates To)
)
STATE OF TENNESSEE, ex rel.)
JONATHAN SKRMETTI,)
ATTORNEY GENERAL and)
REPORTER,)
v.)
META PLATFORMS, INC., and)
INSTAGRAM, LLC.)
-----)

CONFIDENTIAL - ATTORNEYS' EYES ONLY
PURSUANT TO PROTECTIVE ORDER
VIDEO-RECORDED
DEPOSITION OF AZA RASKIN
(Pages 1 -188)

Held at Baker Botts
101 California, San Francisco, California
Monday, March 17, 2025, 9:15 a.m.

- - - -
REPORTED BY: ELAINA BULDA-JONES, CSR 11720

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1 THE REPORTER: Okay. Mr. Migliori.

2 MR. MIGLIORI: Thank you.

3 EXAMINATION

4 BY MR. MIGLIORI:

5 Q. Good morning.

6 A. Good morning, sir.

7 Q. Could you please state your full name.

8 A. Sure.

9 Aza Raskin.

10 Q. Okay. Mr. Raskin, is this the first time
11 you've given testimony in a deposition?

12 A. It is.

13 Q. Okay. Let me give you some ground rules
14 and hopefully this can move along smoothly.

15 I'm going to ask questions. Everything I
16 ask is going to be recorded by the court reporter
17 and by camera. I'm going to ask you to respond to
18 my questions if you understand them. If you don't,
19 by all means, let me know that.

20 I'm going to ask that you wait until my
21 question is finished before you answer so that the
22 record can be clean so she can get all of our
23 testimony.

24 I'm also going to ask you to keep your
25 voice up. It's a pretty big room. We've got

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1 several attorneys here. So I want to make sure
2 everyone can hear you clearly.

3 And I'm going to ask you that you actually
4 articulate your answers verbally; that is, gestures
5 or nods, sounds are hard for the court reporter to
6 document.

7 Do you have any questions before we start?

8 A. No questions.

9 Q. Okay. And if you have a question, by all
10 means, feel free to stop, ask me, or ask your
11 counsel. Okay?

12 A. Great.

13 Q. Great.

14 You're represented here by counsel,
15 correct?

16 A. Uh-huh. That I am.

17 Q. Okay. And we're at your counsel's office
18 here in San Francisco?

19 A. I believe so, yes.

20 Q. Okay.

21 Exhibit Number 1 is the notice for today's
22 deposition.

23 My name is, as I said earlier, Don
24 Migliori, and I represent the plaintiffs in this
25 litigation.

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1 We met prior to today, correct?

2 A. Yes, we did.

3 Q. We met for a couple hours a couple weeks
4 ago?

5 A. Yes.

6 Q. And just briefly this morning, correct?

7 A. That is correct.

8 Q. Prior to that, we did not have any --

9 A. No.

10 Q. -- any interactions or knowledge of each
11 other, correct?

12 A. We did not.

13 Q. You have agreed to appear here
14 voluntarily; that is, without the need for subpoena,
15 correct?

16 A. Uh-huh. I have.

17 Q. Okay. And that uh-huh is exactly what I'd
18 like to try to --

19 A. Got it.

20 Q. -- protect against. Okay.

21 And you've agreed to testify here
22 truthfully and accurately, correct?

23 A. Correct.

24 Q. And you understand that the nature of the
25 questions that I'm going to ask you about today are

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1 primarily about your personal experience in the tech
2 industry and in particular your involvement with the
3 development of a web feature that's referred to as
4 infinite scrolling.

5 Do you understand that?

6 A. I do understand.

7 Q. Okay. Could you briefly describe what
8 infinite scrolling is.

9 A. Uh-huh.

10 Infinite scroll is the feature that when
11 you reach the bottom of a website or app the content
12 stops and you would previously have to hit the next
13 button. You sort of may be familiar, when you
14 scroll down to the bottom of Google, there are
15 search results. There's a thing, a googolian to hit
16 next down there.

17 Infinite scroll was removing that; that
18 is, when you scroll to the bottom of the page, it
19 continues to load more content. And so it never
20 stops. You just keep scrolling. That's infinite
21 scroll.

22 Q. And we'll get into the details and show
23 some examples a little later on.

24 But what was your involvement with the
25 development of that feature, infinite scroll?

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1 A. I was the inventor, the creator, of that
2 feature, the infinite scroll. I created it in 2006.
3 This was in the time period, if you remember, there
4 was a map provider website called MapQuest. If you
5 remember, you would have to, like, click a button
6 to, like, move to see left or right before Google
7 Maps let you just pan around.

8 The -- a new technology had come out that
9 let you load more content at a technical level onto
10 a page without having to hit refresh or navigate.
11 And I implemented using that feature, the ability
12 for any web page to load more content, as you
13 scrolled more.

14 Q. And you implemented that feature, you
15 developed that feature in what year, did you say?

16 A. This was 2006.

17 Q. Okay. Before we get into the details of
18 what you did, let's talk a little bit about you.

19 Tell us about who you are, where you live,
20 what you do.

21 A. Yeah. So, you know, I grew up in the
22 Bay Area. I -- my mother was a nurse practitioner
23 and did hospice and palliative care. And my father
24 was very early at Apple. And he is known for having
25 been the father of the Macintosh project.

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1 Q. Okay.

2 A. And so I grew up thinking about how do you
3 articulate care through technology for people.

4 Q. And is that what you continue to do today?

5 A. Yeah, that is.

6 Q. Let's show you what I've marked as
7 Exhibit 2. This is just your LinkedIn page.

8 (Whereupon, Raskin Exhibit 1 was marked
9 for identification.)

10 (Whereupon, Raskin Exhibit 2 was marked
11 for identification.)

12 MR. MIGLIORI: Just as a way to -- do you
13 have -- you gave them all?

14 MR. WARD: Next time.

15 (Whereupon, a brief discussion off the
16 record.)

17 MR. MIGLIORI: And as I understand it, the
18 exhibits as I have them will be in the Chat box of
19 the Zoom that everyone's got.

20 Q. Okay. In front of you, there's a picture
21 of it and I've given you a hard copy of it.

22 A. Uh-huh. Yes.

23 Q. But is this a LinkedIn page you created?

24 A. Yes, although it is updated by my team.

25 Q. Okay. Tell us about your education.

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1 Where did you go to school?

2 A. I went to school at the University of
3 Chicago where I did a double major in math and
4 physics. I actually started a third degree in
5 systems biology but I had to drop that because my
6 father became sick and died my last year of college.

7 Q. Okay. And what year was -- did you
8 graduate from the University of Chicago?

9 A. I believe that was 2005.

10 Q. Okay.

11 A. I also went to Caltech to study dark
12 matter physics and then computational neural systems
13 as a Ph.D. but I left that program to do startup
14 work.

15 Q. You mentioned that -- you mentioned your
16 dad.

17 A. Yeah.

18 Q. Did you work at all with your dad before
19 he passed?

20 A. I did.

21 Q. How did you work with him?

22 A. Actually, in many ways, but, you know, he
23 wrote the book The Humane Interface where he talked
24 about the philosophy of what it was to make
25 technology that was responsive to human needs and

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1 considerate of human frailties, which is how he
2 defined humane, which was the ethos behind which the
3 Macintosh was created.

4 So I worked with him on his book. I
5 designed the cover. Helped write a whole bunch
6 of -- do thought partnership on a lot of the
7 chapters.

8 In college, we were working on extending
9 his ideas and we had created a little center called
10 the Raskin Center for Humane Interfaces. And we
11 were actually working on that up until the time that
12 he got pancreatic cancer, same as Steve Jobs had,
13 and actually a lot of early Apple people, and passed
14 away.

15 And that's how I ended up starting my
16 first company, Humanized, was to extend his work.
17 He became a professor at the University of Chicago,
18 and I ended up TA'ing for his class in a
19 graduate-level class on interface design. And it
20 was with a couple of the other students -- or other
21 students in that class that I ended up starting my
22 first company.

23 Q. Let's just do this really quickly.

24 This is Exhibit Number 3. This is an
25 article about your dad.

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1 (Whereupon, Raskin Exhibit 3 was marked
2 for identification.)

3 BY MR. MIGLIORI:

4 Q. And I just want to direct your attention
5 to the second page, which is a photograph of your
6 dad.

7 A. Yeah, which I think I took, in fact.

8 Q. Okay. Is this your father?

9 A. This is my father.

10 Q. So tell us again about what he did and his
11 role at Apple.

12 A. Yeah. So he is the inventor of the
13 Macintosh and actually a lot of the core interfaces
14 that we use like the mouse that you click and drag,
15 like, it turned out, before him, it was much more
16 complicated to use a mouse. You had to click one
17 button, move things, click another button. He
18 invented click and drag.

19 He really wanted to be able to write music
20 on computers. And so, you know, back in the day at
21 Apple, Jobs was working on a computer called The
22 Lisa and it could only do characters. He really
23 wanted the Macintosh to be able to show images on
24 his screen because he wanted to be able to write
25 music.

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1 So for him technology was about extending
2 the parts of us which are most human in the sense
3 that a cello is a technology or a paintbrush is a
4 technology. So, too, should be computers.

5 Q. And I imagine this heavily influenced your
6 decisions and education and your career, correct?

7 A. Yeah, absolutely.

8 Q. And you mentioned an organization. I
9 think you said it was Humanized?

10 A. Humanized. Yeah.

11 Q. So that's something you did with your dad
12 or in honor of your dad?

13 A. That was to extend the work of my father.
14 So in honor of.

15 Q. Going back to your LinkedIn page, on the
16 front there's sort of a summary. Maybe we can just
17 use this to sort of get a total picture.

18 After you started Humanized and went
19 forward in 2006 and on, tell us what you did.

20 A. Yeah.

21 So after inventing infinite scroll,
22 Humanized, we ended up getting acquired or really
23 acquihiired by Mozilla. And this is when Mozilla was
24 very small. Mozilla makes the Firefox web browser.
25 And I ended up helping to found Mozilla Labs.

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1 Did a lot of the original work on
2 designing mobile browsers, which Apple and other
3 companies picked up on. Did a lot of work on
4 helping the web be successful. So did things like
5 write the geolocation spec, which means how the
6 internet can access people's location.

7 Would you like me to continue after that?

8 Q. So how long were you with Mozilla?

9 A. I believe it was around three years.

10 Q. Okay. And then you said -- after that,
11 where did you go?

12 A. After that, I founded a company called
13 Massive Health, which was saying it is technology
14 companies that have demonstrated the ability to
15 shift human behavior at scale.

16 The goal for that company was to use the
17 knowledge that we had as product designers to help
18 people live healthier, to shift their eating and
19 exercise behaviors, which we were successful doing.
20 And then we were acquired by the company Jawbone
21 that made Jamboxes, the headpieces, and eventually a
22 health wearable.

23 Q. And did you work with Jawbone for a while?

24 A. And I worked with Jawbone for a while, I
25 think also two years, if my memory's -- would have

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1 to go look again.

2 Q. And then from Jawbone, where did you go?

3 A. After Jawbone, I ended up starting a small
4 company called Post Social actually, which was an
5 attempt to fix what we saw some of the fundamental
6 problems with social media. But we ended up
7 shutting down that company.

8 Q. What year was that?

9 A. That was 2016, in that era.

10 Q. Okay. When did you start that company?

11 A. I think 2015. But it's been a little bit
12 since I remember exactly the dates.

13 Q. And then from there?

14 A. From there, in 2017 and 2018, I started
15 two nonprofits. One is the Center for Humane
16 Technology. And the other is Earth Species Project.
17 One looks at how do we realign technology
18 to meet humanity's best interest. That side of
19 humane technology. How do we make technology really
20 work for humans.

21 And the other we use, that's a frontier
22 nonprofit using AI to translate animal language.

23 Q. Okay. If we go to Exhibit 2 in your
24 LinkedIn page, you talk about both in the summary.

25 The first paragraph says, "Trained as a

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1 mathematician and dark matter physicist, Aza is the
2 cofounder of the Earth Species Project (ESP) and the
3 Center for Humane Technology."

4 Those are the two nonprofits you just
5 mentioned?

6 A. Exactly.

7 Q. And you started them approximately in
8 2017?

9 A. In 2018, sort of about that cusp.

10 Q. And interesting. It says, "Through ESP's
11 work, the technology uses machine learning to decode
12 animal languages."

13 A. Yeah.

14 Q. Tell us a little bit about that.

15 A. Well, what most people don't realize is
16 there's actually already a lot known about animal
17 communication.

18 So parrot parents, for instance, spend the
19 first, you know, week and a half, two weeks of their
20 chick's life, like, leaned over their chick
21 whispering a unique name per chick that they will
22 then use for the rest of their lives.

23 And it turns out elephants, dolphins,
24 belugas also all have unique names, often that their
25 mother's teach them, that they sometimes even refer

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1 to each other in the third person.

2 The history of technology says that when
3 we invent new technology, like the telescope, we
4 point it at someplace which humanity thinks is
5 empty. And what we discover is everything. The
6 Hubble telescope I think is the perfect example.
7 You know, in 1995 astronomers pointed the Hubble
8 Telescope at an empty patch of sky, and what they
9 discovered is not emptiness, but the most galaxies
10 humanity had ever seen in one spot.

11 And that's the general principle, is we
12 invent new technology, we point it at a place that
13 seems like there's nothing, and what we discover is
14 everything.

15 And that is the technology we're working
16 on now is the frontier AI that lets us understand
17 and listen to the other cultures of Earth.

18 Q. That's fascinating.

19 A. Yeah.

20 Q. More specific to why we're here, you're
21 the cofounder of the Center for Humane Technology.

22 And it says [as read]:

23 As cofounder of the Center for Humane
24 Technology and on a quest to reimagine the digital
25 world and reduce social media harms.

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1 A. Yes.

2 Q. Tell us what that means.

3 MR. STANNER: Objection. Expert
4 testimony.

5 BY MR. MIGLIORI:

6 Q. Go ahead.

7 A. Yeah.

8 As a designer, I'm aware of the asymmetric
9 information that we as technology creators have
10 about how the human mind works versus how a user
11 knows that their mind works.

12 So as the creator of the infinite scroll,
13 I know, for example, that if you remove what is
14 known as a stopping cue, people's brains don't wake
15 up to ask whether I really want to be here.

16 So there's a classic study that has bowls
17 of soup that secretly refill from the bottom and
18 when the bowl secretly refilled, people eat a lot
19 more. I don't remember the exact number. But I
20 think it's something like 70 percent more. But it's
21 sort of obvious.

22 If you had a glass of wine that just kept
23 refilling, like, your mind would never have that
24 moment where you say, oh, I reached the bottom, do I
25 really want another or are you just going to keep

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1 sipping and keep sipping.

2 That kind of asymmetric knowledge about
3 how the human mind works is what we wanted to
4 elucidate and make sure that the world knows so that
5 technology can be used not to -- used to help us
6 versus to, like, keep us or harm us.

7 Q. And is the Center for Humane Technology
8 the nonprofit through which you have personally
9 focused your efforts to address the issues of social
10 media harms?

11 A. Yes, that's exactly right.

12 Q. Your LinkedIn page goes on to say that,
13 "He was essential to the creation of the double Emmy
14 award-winning global phenomenon The Social Dilemma
15 on Netflix."

16 And tell us what The Social Dilemma is and
17 what your role was with it.

18 MR. STANNER: Object to the form. Opinion
19 testimony.

20 I'm sorry. Don, can we have an agreement
21 that an objection for one --

22 MR. MIGLIORI: Absolutely.

23 MR. STANNER: -- is an objection for all?

24 MR. MIGLIORI: Absolutely.

25 THE WITNESS: The Social Dilemma is a

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1 documentary, came out in 2020, that really
2 highlights what the people who made social media
3 know about how it's designed to maximize engagement
4 and intention.

5 And what even the insiders knew that to do
6 so was to cause great harm to teen mental health, to
7 increase polarized society, to filter bubbles
8 towards creation of greater narcissism in our
9 society. And that these were all predictable,
10 foreseeable, known outcomes of the fundamental
11 business model of social media. And that there was
12 another way that social media can be designed where
13 we can get the benefits without the harms. That was
14 The Social Dilemma.

15 BY MR. MIGLIORI:

16 Q. What was your role in the actual
17 production?

18 A. Uh-huh. I'm both a subject of it, so I
19 was interviewed, and I did a lot of the core
20 conceptual work, so the -- if you watch the film,
21 there are scenes where you're sort of going inside
22 the computer and you get to meet the different
23 algorithms. Those are all -- that's -- that -- they
24 came directly out of my work.

25 And then I helped write, you know, chunks

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1 of the script.

2 Q. Okay. And we will go into that in a
3 little bit.

4 But was the -- was the Center for Humane
5 Technology part of that Social Dilemma effort?

6 A. Yes, they were. We were sort of the
7 central -- central characters. And my cofounder for
8 the Center for Humane Technology, Tristan Harris, is
9 sort of the main person in that documentary.

10 Q. Okay. Very briefly, before we put the
11 LinkedIn page aside, if you scroll down -- if you
12 look down to the bottom, it says that you are named
13 FastCompany's Master of Design, and to Forbes and
14 Inc. Magazine's 30-under-30.

15 What is FastCompany's Master of Design?

16 A. That was some kind of award that they gave
17 for the top designer of the year, something like
18 that.

19 Q. And do you know what in particular -- was
20 there a particular design that was --

21 A. Yeah. That was awarded to me for my work
22 at Massive Health, which was using design to try to
23 shift people's behavior but in their benefit towards
24 eating healthier and exercising more.

25 Q. Okay. We've talked about the Center for

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1 Humane Technology. And I think you said you started
2 it around 2017?

3 A. '17 or '18. I can't remember because it's
4 right on the cusp.

5 Q. All right. I want to show you a document.
6 This will be marked as Exhibit Number --
7 is that 2?

8 A. I have 2, yes.

9 Q. Exhibit Number --

10 MR. WARD: This will be 4.

11 MR. MIGLIORI: Oh. 4. Okay.

12 MR. WARD: Yeah.

13 (Whereupon, Raskin Exhibit 4 was marked
14 for identification.)

15 MR. MIGLIORI: This will be Exhibit 4.

16 Q. I'm going to represent to you that this
17 was produced to us in this litigation by Meta. And
18 the way that we can tell that is, if you look on the
19 bottom right, you will see what we refer to as Bates
20 pages.

21 Mine, of course, is out of order. Here we
22 go.

23 Do you see that?

24 A. Uh-huh, I do.

25 Q. And it should start with page ending with

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1 2631?

2 A. Yes.

3 Q. Is that right?

4 A. That is correct.

5 Q. All right. Do you recognize this
6 document?

7 A. This appears to be an early, like a 2018,
8 or something like that, funding document.

9 Q. And what do you mean by "funding
10 document"?

11 A. As in a case for support. The Center for
12 Humane Technology is funded by philanthropists and
13 by foundations. And this looks like a case for
14 support that we were giving to them for funding.

15 Q. Okay. And like I said, you didn't produce
16 this to us. This was something I'm showing you from
17 Meta's production to us, correct?

18 A. Yes.

19 Q. All right. Cover page talks about the
20 center and being "Dedicated to reversing the digital
21 attention crisis."

22 A. Uh-huh.

23 Q. "And realigning technology with humanity's
24 best interest."

25 What is that referring to, particularly

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1 "the digital attention crisis"?

2 A. The --

3 MR. STANNER: Objection. Calls for expert
4 testimony.

5 Go ahead.

6 THE WITNESS: The fundamental diagnosis
7 that the Center for Humane Technology had is that
8 all of the social media companies are -- their
9 business model is for user attention. So the
10 companies are in a competition to try to maximize
11 the amount of time a user spends with them versus
12 with a competitor.

13 And then further, a race for engagement,
14 getting reactions from people. And the predictable
15 outcome of very powerful companies with a device
16 sitting in your pocket you can use all the time
17 trying to maximize the amount of your attention is
18 going to be, you know, digital -- a digital
19 attention crisis.

20 BY MR. MIGLIORI:

21 Q. Does the infinite scroll that you
22 developed play a role in the digital attention
23 crisis?

24 A. Absolutely.

25 Q. When you invented the infinite scroll, did

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1 you invent it for social media?

2 A. I did not. I invented infinite scroll in
3 2006. And that's really before social media was a
4 thing. I invented it because as a designer I'm
5 constantly thinking about every time I ask the user
6 to make a decision they don't care about, I failed.
7 How do I make this more efficient and useful for the
8 user.

9 I wrote it originally for my own blog and
10 was thinking about it in terms of search results.
11 If you go to Amazon and you search for something and
12 you don't see it, don't make me click the next
13 button, just keep showing me more. It just makes it
14 more efficient.

15 And what I was blind to is that the rise
16 of social media was about to happen. And as that
17 happened, it became this race between companies for
18 attention. And I watched as this thing I had
19 invented and actually went around and said, like,
20 hey, this is a better interface, to all the major
21 companies, watch as that got sucked up by
22 incentive-incentives and really abused to hurt
23 people.

24 MR. STANNER: Objection. Nonresponsive.
25 Move to strike opinion testimony.

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1 BY MR. MIGLIORI:

2 Q. So just to reestablish, you are a
3 cofounder of this center, correct?

4 A. Yes.

5 Q. And part of its mission is stated here on
6 the first page of this document, correct?

7 A. Correct.

8 Q. And so in the mission that you set out to
9 address, by this point in 2017, had you already seen
10 how your infinite scroll you developed in 2006
11 evolved into this phenomenon that you just
12 described?

13 A. Yes.

14 MR. STANNER: Same objection.

15 BY MR. MIGLIORI:

16 Q. Let's turn to the next page.

17 This page says [as read]:

18 Our society is being hijacked by
19 technology. What began as a race to monetize our
20 attention is now eroding the pillars of our society.

21 And then you reference here mental health,
22 truth and democracy, social relationships, and our
23 children.

24 First of all, is this part of the focus of
25 the Center for Humane Technology?

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1 A. Yes.

2 Q. And remind me, what was the purpose of
3 this deck? What -- how was it used?

4 A. This deck was to explain to funders what
5 giving us money would help us accomplish.

6 Q. And in 2018 or so when you started the
7 Center for Humane Technology, was it understood to
8 you, personally, that technology was impacting
9 children in this race to monetize attention?

10 A. Yes.

11 MR. STANNER: Objection.

12 BY MR. MIGLIORI:

13 Q. And how did you come to understand that in
14 founding this nonprofit?

15 MR. STANNER: Same objection. Improper
16 opinion testimony.

17 THE WITNESS: We had a number of parents
18 come to us directly. And so we could see the
19 effects on children. We also started the center
20 inside of the offices of Common Sense Media. And
21 Common Sense Media, I think, is like the premier
22 nonprofit working on the effects of media, and then
23 hence technology on children. And so we could both
24 have anecdotal evidence, we could see the structure
25 ourselves, and we had data coming in from Common

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1 Sense Media.

2 BY MR. MIGLIORI:

3 Q. In 2018, did you have an appreciation that
4 this race to monetize attention had an impact on
5 mental health as depicted in the slide?

6 MR. STANNER: Same objection. Opinion
7 testimony; undisclosed.

8 THE WITNESS: Yes.

9 BY MR. MIGLIORI:

10 Q. I'm talking about your understanding.

11 A. Uh-huh.

12 Q. Yes?

13 A. Yes.

14 Q. And what was your understanding in 2018 of
15 how that race to monetize attention impacted health?

16 MR. STANNER: Same objection.

17 BY MR. MIGLIORI:

18 Q. Mental health.

19 A. The way the -- the structure of social
20 media as we saw it, and did a couple of things.
21 One, we could start to see that the -- it goes much
22 deeper than just getting people's attention.
23 Because when you optimize for getting someone's
24 attention, it turns out, instead of just getting
25 them distracted, it's much cheaper for the algorithm

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1 to essentially climb inside and get people addicted
2 to needing attention, which immediately has obvious
3 mental health issues.

4 Then if you're on a web page, and you're
5 having to -- you only get validation, likes, and
6 followers when you post, like, the highlight Reels
7 of your life, and you're aware that I only get likes
8 and attention for doing things that are not
9 representative of who I really am, that sets up a
10 break between what I think people want of me and who
11 I really am, which creates the preconditions for
12 mental health issues, because you're being perceived
13 in a way that you think you need to be, but not how
14 you actually are.

15 Q. Now, you're not a mental health
16 professional, correct?

17 A. No.

18 Q. And so when I ask you these questions, are
19 you answering these questions as a designer and
20 developer of web design?

21 A. Yes.

22 MR. STANNER: Objection.

23 THE WITNESS: Exactly.

24 BY MR. MIGLIORI:

25 Q. Is it a component part of being a designer

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1 and developer to understand the perceptions of the
2 user?

3 A. Yes, that's right.

4 Q. Why?

5 A. It is our job as designers to be able to
6 get inside the heads of our users so that we can
7 deeply understand what is the experience like to be
8 them. So that we can make products that work with
9 them.

10 Q. And when you focus on the word "humane" in
11 your nonprofit or in the work that you did with your
12 dad, humanize --

13 A. Yeah.

14 Q. -- does that have an important role in
15 what you're talking about in terms of understanding
16 the user's perception?

17 A. Yes.

18 MR. STANNER: Continuing objection.

19 BY MR. MIGLIORI:

20 Q. How and why?

21 MR. STANNER: Same objection.

22 THE WITNESS: Because to be humane is to
23 be responsive to human needs and considerate of
24 human frailties. That is my father's definition.
25 To do that you have to be very aware of human

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1 For the Witness, Aza Raskin:

2 BY: MICHAEL W. WARD, ESQ.

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5
6 Also present:

7 Darren Buchbinder, trial technician

8 Gina Veldman, trial technician (VIA ZOOM)

Tim Hunter, videographer

9 Rasheed Evelyn, Wilson Sonsini

Kathleen Lucas, Motley Rice

10 James Bilsborrow

Corin Stigall

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1 frailties, our vulnerabilities, so you can wrap
2 around and protect them.

3 So, for instance, as a designer, you know
4 that if a user stops using your platform, there is
5 actually -- there are ways of using those human
6 vulnerabilities to get them to come back.

7 An example might be, after you stop using
8 the platform, if I show you a set of pictures of
9 your friends and say all of these people miss you
10 and they want you to come back, well that's a very
11 effective way of harnessing the vulnerability or how
12 the human mind works of, essentially, social
13 reciprocity and social loss.

14 And it turns out Facebook exactly did
15 that. They sent -- they may still do -- what are
16 known as, like, come-back e-mails that include the
17 faces of all of your friends, or many of your
18 friends, that says, like, these people miss you, and
19 they name them by name, even though that's not
20 what the -- what your friends actually said.

21 So this is an example of how I, as a
22 designer, know how to design a system that, in this
23 case, is inhumane. Yes.

24 BY MR. MIGLIORI:

25 Q. Okay.

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1 saying that their -- the CEO of Netflix -- that
2 their chief competitor is sleep?

3 Like, every time that you are not looking
4 at the platform and doing something else is an
5 opportunity for a competitor to get you to use their
6 platform. And the more that you are beholden to
7 checking your phone to see did somebody like my
8 photo, has somebody commented in a way that I'm not
9 going to like, did somebody else get more likes than
10 me, that creates anxiety and stress loops.

11 BY MR. MIGLIORI:

12 Q. And does infinite scroll play into that
13 same phenomenon?

14 A. Yeah.

15 MR. STANNER: Same objection.

16 THE WITNESS: Infinite scroll is an
17 intentional removal of stopping cues so that your
18 brain doesn't wake up to catch up with impulses. So
19 it sort of -- it creates that hypnologic state where
20 you just keep scrolling. Doomscrolling would not
21 really exist without infinite scroll.

22 BY MR. MIGLIORI:

23 Q. What is the word "doomscrolling"? I have
24 seen it before. What does it mean?

25 A. It means when you are getting a feed full

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1 MR. MIGLIORI: Okay. And let's go to the
2 next one, Exhibit Number 8.

3 (Whereupon, Raskin Exhibit 8 was marked
4 for identification.)

5 MR. MIGLIORI: Exhibit Number 8 will be an
6 example of TikTok.

7 Go ahead, Gina.

8 (Video playing.)

9 BY MR. MIGLIORI:

10 Q. Does Exhibit Number 8 accurately depict
11 the technology that you developed in 2006 in the
12 TikTok format?

13 A. Yes.

14 MR. GREEN: Object to the form.

15 MR. MIGLIORI: Okay. Is that it, Gina?
16 There is one more, I think.

17 This will be Exhibit Number 9.

18 (Whereupon, Raskin Exhibit 9 was marked
19 for identification.)

20 MR. MIGLIORI: Go ahead and play it.
21 This is a YouTube example of infinite
22 scroll.

23 THE WITNESS: Uh-huh.

24 (Video playing.)

25 ///

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1 BY MR. MIGLIORI:

2 Q. Does Exhibit 9 accurately reflect the type
3 of technology that you developed in 2006 for
4 infinite scrolling?

5 A. Yes, it is.

6 MR. KEYES: Objection to form.

7 MR. MIGLIORI: And that should be it, I
8 think, right?

9 THE WITNESS: Actually, all of these are
10 very good examples of one of the other things that
11 we know as designers, which is that to maximize --
12 well, how often somebody will check back, sort of,
13 like, colloquially the addictiveness of something is
14 about -- and it's actually what every casino
15 designer knows -- is when you give somebody a
16 random, variable award, which is to say you give
17 different kinds of, like, stimuli, inputs in a sort
18 of randomish way, in a random sort of pattern, which
19 is exactly what happens every time you scroll. You
20 don't know what you're going to get. It's just like
21 pulling a slot machine. That is the thing that
22 maximizes engagement and retention.

23 MR. STANNER: Move to strike.

24 Nonresponsive. Undisclosed expert testimony.

25 ///

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1 social media?

2 A. Yes.

3 Q. How did you feel in 2012 when you started
4 to do that kind of analysis?

5 MR. STANNER: Objection.

6 THE WITNESS: It is a very hard thing to
7 realize that something that you made thinking you
8 were helping, when you get on to a bus or a train or
9 you go into a classroom or you're talking with
10 friends and you watch their thumb flicking and
11 flicking and flicking, or when I have watched my
12 friends' kids be unable to get their attention, like
13 kids not getting their parents' attention, because
14 of something like an invention that I had made that
15 is now being used for something else, it's very
16 hard. Like that is a deep, hard, sick place in the
17 pit of my stomach when I really get in touch with
18 it.

19 BY MR. MIGLIORI:

20 Q. The next paragraph says that [as read]:

21 Back in 2006, Raskin was trying to solve
22 the clunky experience of next-page button that
23 internet users continually had to click.
24 Ironically, his goal was to stop disruptions to a
25 user's train of thought. "My intention was to

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1 create something that could focus our attention and
2 control our tempo when on websites and apps."

3 Do you recall, is that something that you
4 said or would have said?

5 A. Yeah, it sounds like exactly something I
6 would say.

7 Q. And that was your state of mind in 2006
8 when you developed it?

9 A. Yeah, that's right.

10 My father had a line, which is, you know,
11 a user's train of thought is sacred. Anything we do
12 that breaks that train of thought, that takes them
13 out of their agentic doing something and into what
14 the computer wants of you, that was doing something
15 non-humane -- inhumane.

16 MR. STANNER: Move to strike as
17 nonresponsive.

18 BY MR. MIGLIORI:

19 Q. The next paragraph says [as read]:

20 Raskin didn't foresee how tech giants
21 would exploit his design principle, creating apps to
22 automatically serve more and more content without
23 your asking for it - or necessarily being able to
24 opt out. Finish watching a video on YouTube, the
25 next one loads instantly. Go on Instagram to look

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1 at a couple of pictures and you're still mindlessly
2 swiping half an hour later.

3 Is that how you first started to see your
4 technology being used in the social media context?

5 MR. STANNER: Objection to the form.
6 Opinion. Foundation of this document.

7 BY MR. MIGLIORI:

8 Q. I'm asking what you saw.

9 MR. STANNER: Same objections.

10 THE WITNESS: Yes, that is what I saw.

11 BY MR. MIGLIORI:

12 Q. Then you're quoted here [as read]:

13 Quote, I think when I look back, the thing
14 I regret most is not packaging the inventions with
15 the philosophy or paradigm in which they're supposed
16 to be used. End quote.

17 Is that something you said?

18 A. That is something I said.

19 Q. And what did you mean by that?

20 A. I meant that every time a designer or a
21 technologist invents a new piece of technology, at
22 the same time they have essentially invented a new
23 class of responsibility.

24 We didn't need the right to be forgotten
25 until the internet could remember us forever. And

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1 we didn't need the right to privacy until Kodak
2 started to produce the mass-produced camera and we
3 could be captured everywhere.

4 And in the same way, when you invent
5 something like infinite scroll, we didn't need the
6 right to have technology give us our impulse control
7 back until we started to take it away. That's what
8 I mean by packaging the philosophy of how something
9 should be used while you also make the thing itself.

10 MR. STANNER: Move to strike.

11 BY MR. MIGLIORI:

12 Q. There's a quote after that from you. It
13 says [as read]:

14 There was a kind of naive optimism about
15 thinking that my inventions would live in a vacuum,
16 and not be controlled by market forces. End quote.

17 Is that something you said?

18 A. Yes.

19 Q. And is that something that -- when did you
20 realize that that was naive optimism?

21 MR. STANNER: Object to form.

22 THE WITNESS: Sometime between, you know,
23 2012 and 2017. It was sort of a growing, gnawing
24 feeling.

25 ///

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1 BY MR. MIGLIORI:

2 Q. The final line of that page says that [as
3 read]:

4 He deeply regrets the unintended
5 consequences of his invention - hours, even
6 lifetimes - of mindless surfing and scrolling.

7 Is that consistent with the -- how you
8 felt once you saw how your technology evolved
9 through social media?

10 A. Yes.

11 MR. STANNER: Object to the form.

12 BY MR. MIGLIORI:

13 Q. Let me show you another article.

14 This will be Exhibit 11.

15 (Whereupon, Raskin Exhibit 11 was marked
16 for identification.)

17 BY MR. MIGLIORI:

18 Q. What is CNET?

19 A. CNET is a technology news website, maybe
20 magazine.

21 Q. Do you recall giving an interview with
22 CNET?

23 A. Yes.

24 Q. This is a CNET article entitled "Facebook,
25 Twitter are designed to act like 'behavioural

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1 STATE OF CALIFORNIA)

2 COUNTY OF YOLO)

3 I, ELAINA BULDA-JONES, a Certified Shorthand
4 Reporter of the State of California, duly authorized
5 to administer oaths pursuant to Section 2025 of the
6 California Code of Civil Procedure, do hereby
7 certify that

8 AZA RASKIN,
9 the witness in the foregoing deposition, was by me
10 duly sworn to testify the truth, the whole truth and
11 nothing but the truth in the within-entitled cause;
12 that said testimony of said witness was reported by
13 me, a disinterested person, and was thereafter
14 transcribed under my direction into typewriting and
15 is a true and correct transcription of said
16 proceedings.

17 I further certify that I am not of counsel or
18 attorney for either or any of the parties in the
19 foregoing deposition and caption named, nor in any
20 way interested in the outcome of the cause named in
21 said deposition dated the _____ day of
22 _____, 2025.

23
24 

25 ELAINA BULDA-JONES, CSR 11720