

Learning from the Future: Consequences of Robots

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ABSTRACT

La robotica sociale sta contribuendo a ridisegnare il panorama di alcuni concetti morali fondamentali estendendo il campo d'azione dei nostri scrupoli morali a corpi non umani che tuttavia ci coinvolgono come compagni, sostituti o surrogati. Questi incontri ci interrogano eticamente, e in questo saggio mi impegno a distinguere due vie lungo cui articolare questo impegno: una imperniata sulla riflessione circa il loro statuto morale e un'altra che guarda invece sulle conseguenze della loro presenza. Procedo dunque a proporre una distinzione ulteriore, interna alla seconda opzione, tra una lettura descrittiva e una terapeutica delle conseguenze dei robot. Per illustrare la complessità della scena, farò riferimento ad alcuni episodi della serie TV *Black Mirror* (2011-2025), in cui la salienza morale dei robot deriva dalle complesse dinamiche a cui questi partecipano, nelle reazioni imprevedibili e spesso sorprendenti con cui reagiamo ad essi nell'ambito della più generale ricerca di certezza in cui sovente si inscrivono le nostre pratiche.

Keywords

Moral philosophy; Philosophical methodology; Social robotics; Science fiction.

1. The increasing, at times overwhelming presence, in our societies, of robots of the most varied kinds invites reflection on how they have been challenging not a small portion of philosophical assumptions about our moral thinking: that is, both *how* we judge, and *what* we judge when we critically interrogate our moral conduct and practice. One of the central questions that such reflections involve concerns precisely the ability of our moral conceptions to process and qualify this kind of artifacts, physical and digital alike. This work is already fully underway, seeing the – at times uneasy – collaboration between technical-scientific and humanistic knowledge for the understanding and thus normalization of agents that are, as a matter of fact, part and parcel of the everyday reality of a substantial segment of the population, in a more-or-less direct way and increasingly so. In what follows, I shall try to put forward a working hypothesis that suggests the fruitfulness of an alternative way of morally interrogating robots to those usually proposed by the mainstream debate on AI ethics focused on their *metaphysical status*. A perspective alternatively hinged on the very *consequences* of robots on our lives. Such a shift is encouraged by the slow

yet steady acceptance that not an irrelevant portion of our *understanding of* robots comes from our *experimentation with* them, introducing them in our daily lives and letting ourselves being transformed accordingly. Tentative, grounds-up encounters, rather than established directives, would then mark the most of our life with technology, making our uses of robots largely uncertain and explorative, thus deflating those triumphal narrations according to which experts only should handle such technology over to us via top-down policies and design¹.

As an example and litmus test, after briefly presenting the very blueprint of this approach, I will refer to some recurring themes of the TV series *Black Mirror* (2011-) such as the enhancement of our attention and memory, the replicability of our personality, and the very boundaries of subjectivity as these are presented in as many episodes (respectively, *The Entire History of You* (01x03), *Be Right Back* (02x01), and *Beyond the Sea* (06x03) – although others might equally qualify, most prominently *San Junipero* (03x04), *Arkangel* (04x02), and most recently *Common People* (07x01) or *Eulogy* (07x05))². What I would like to highlight is the problematization of the *presence* of robots, that is their distinctive way of inhabiting the world, as their most salient feature from a philosophical and moral point of view. The issue, in some more detail, is the place and management of uncertainty in our lives, digital and otherwise, in the light of and after the possibilities opened by the capacity of robots to attend and oftentimes patrol our social practices.

2. The ways in which our analogical lives meet our digital ones – the perils as well as the possibilities which might open from such encounters – put pressure on several assumptions which have long been accompanying our Western modern and contemporary culture. What seems to be at issue is not only the revision of the contents of morality, that is the validity and the range of such notions as liberty, autonomy, and justice as we used to understand them, but also of its assumptions and commitments, and hence the opportunity of tracing moral distinctions and boundaries in the way we have been accustomed. The range of practices informed by such constraints seems to undergo a radical twist following the digitalization of our lives, starting from the ever-changing meaning of our bodies and their possibilities to turn out otherwise than they are. The plausibility of such encounters should not make us shy away from engaging in an organic reflection on the consequences of robots, on the very shape our living with them might take and perhaps already has.

The challenge, for sure, is not new. If, in fact, on the one hand humanity has kept challenging itself in the light of the technologies it produced to improve its life conditions, and hence turned its natural environment into the receptacle of more-or-less invasive artificial interventions, on the other our recent history witnessed at least two massive technological revolutions: the late-nineteenth century industrial one, and the biomedical one of the Sixties and Seventies, in which individuals endowed themselves with instruments which, respectively, made life easier by enhancing it and safeguarded it by mending it. Of course, this is a rather sketchy, almost deceitful, reconstruction, and yet it conveys shared memories of the conquest and radical rethinking of our nature and of its limits. Bioethics, in particular, closer to us in time and hence in its most immediate effects, has been interested in the technological-scientific renovations

¹ In all respects, the introduction of robots in our everyday dealings should be seen as an experiment in social theory trying to strike a delicate balance between confirming our expectations and rewriting them anew in often unforeseen directions. On such attempts, including their dark, uncanny sides, see Danaher 2018. On the wider stakes of our century-old introduction of, and experimentations with, digital technologies in our private and public lives, see Koopman (2019 and 2025).

² The series as a whole can be seen as a collective effort to unravel and start processing the hopes as well as the fears for a future in which our lives will be progressively taken over by immersive technologies. The anthological feature of the series invites this multifaced guess by juxtaposing episodes and narratives covering rather different outcomes and hence excavating our reactions to such encounters. No other series to date managed such burden.

brought about by medicine, understood as institution and as practice, and in its philosophical and moral outcomes³. We are perhaps now⁴ on the verge of a new chapter of this critical inquiry on our biological morality, with brand new questions and issues dictated by novel ways of addressing life. Whereas bioethics in its classical timeframe (ca. 1970-1997) put at its center the compensated and repaired body, social robotics thematized its transformation and perhaps replacement. Philosophical agendas got quickly filled with the study of the ways in which IA technologies individuate and promote values and interests tied to those intimate and relational elements of our subjectivity and sociality dislocated in bodies other than human – or at least not only.

Classical bioethics questioned those medical technologies assisting life in its most critical junctures of birth, sexuality, illness, and death, hence reflecting on the thresholds of functional and functioning bodies with their vindication of genuine interests and goals. Bioethical options have had the time to settle in our culture and the public debate, and have been experimented accordingly. IA, especially of the robotic kind, represents a genuinely novel field, and some inherited categories do not seem able to grasp the significance of the revolutionary challenges such technologies pose to the human body, extended if not merged into the digital one. The intellectual work needed to seize the new scene is both top-down, on the behalf of those currently programming and imagining such technologies, and bottom-up, on the behalf of us users who should welcome and possibly adapting such technologies to our daily transactions, and vice-versa. In such a scene it thrives the ambiguity, uneasy to untie and perhaps rightly so, which features our intellectual investments in the management of ever-evolving scenarios: that is, in reflecting on the ethical feature of robots we are tempted to extending a known morality into new contexts, but also curious of exploring a completely new one. This at least is the puzzle and task ahead of us.

3. As an overview of the various approaches to the moral profiling of robots, we might distinguish a *metaphysical question* (what *are* robots? How to *design them* and thus how to think about their regulation from a moral perspective) from one that we might call *practical* or *pragmatic* (i.e., what do robots *do*? What are their *effects* on us?). While according to the former approach the emphasis is on the design and structuring of robots whose function and role is identified by anticipating their use and by determining their suitability, in the latter robots find their value in their being present in the world, interacting with us according to dynamics that are certainly not completely random but perhaps not even decided upstream of the very practice they partake to and environment they dwell in. Where the ontological question calls for a moral answer hinging on the identification of principles and precepts of behavior that have the function of referring a chaotic or at least unknown particular back to a certain or known general, the pragmatist question invites the elaboration of ways of living capable of passing the test of practice – and thus of social feedback. An ethics of knowledge as an inquiry into the good – into its nature and grounding in general principles – as opposed to an ethics of uncertainty as a reflection on the problematic nature of experience – of what we face time and again when we engage the world. In extreme summary and attempting an alluring turn of phrase: an *ethics of robots* opposed to an *ethics with robots*. Applied the former, while practical the latter⁵.

³ The literature is virtually endless. For the revolutionary feature of bioethics as a discipline and field of problematics, see Backer (2019).

⁴ A new chapter, of course, with roots going back to the pioneering work of the Fifties on cybernetics by Turing, von Newman, Wiener *et al.*, with its promises to impact the human mind and society at-large.

⁵ A notable representative of the ethics of robots is Floridi (2023). An organic proposal for an ethics with robots is instead sketched in Dumouchel and Damiano (2017).

This distinction, admittedly crude and to be properly articulated, seems to me a promising way to look at the uneven landscape of AI ethics studies. Now, my assumption as a reader who is only beginning to ponder these issues over is that what I have called the pragmatic response admits at least two readings, two directions. Or so I will claim. For if we focus on the moral consequences of robots, thus leaving aside the question of the principles and management of the codes that move these machines, the question I have called metaphysical, we might spin this alternative in at least two ways. According to a first acceptance, the consequences of robots have to do with the many different *uses* we can make *of them*: that is, the analysis of the *effects* of our more-or-less profitable interactions with robots. Consequences here are a synonym for personal – perhaps reciprocal – transformations in the light of human interactions and uses of robots. However, we can add to this meaning a further one, according to which the consequences of robots have to do with *what we want to put* or rather *hope to find in* robots, again in the context of our relationships and exchanges with them. Consequences here have to do with the effects of what we seek to understand and modify about ourselves in the light, and because, of robots.

Please note how both options remain quite skeptical of the attempt of defining robots ahead of our interactions with them. While in the former case we extend the conceptual field and the range of moral considerations tied to it by projecting our ordinary uses in novel contexts, in the latter we return to the ordinary and interrogate it in the light of the consequences of such projections. Whereas the two options proved equally skeptical of those attempts to seize robots ahead of the interactions we are able to establish with them, what changes is the moral issue underlying such encounters – the transformative effects of the life with robots, in the first case, while the personal in-depth analysis prompted by our interactions with them, in the second – as well as the modality of moral inquiry – largely descriptive, in the first case, while exquisitely therapeutical, in the second. The two ways of articulating the pragmatist line of reply solicit different aspects of the horizontal engagement with robots I mentioned at the beginning, giving emphasis respectively to the challenge of discovering ourselves differently thanks to robots and the importance of letting them interrogate us midst such exchanges.

Embodied IA looks particularly promising in this respect, because of its vindication of presence as the most salient moral feature. Although at times immersive, social robotics craves to be seen and felt, hence thematizing the issue of its material feature, whereas its artificial nature should not be mistaken for an attempt to leave the body and its physical feature aside. Social robots question us via their very presence, reminding us of our physical bodies and the desire to overcome them. They question our very corporeality, the possibility to share a space with theirs and with other human bodies in the light of them. What we are witnessing is a radical questioning and possible transformation of the human body and its materiality, which might take the shape of its downsizing or rather the highlighting of its very centrality with regards to other aspects of our personality and sense of self. The spatiality and temporality associated with social robotics seem to hit the most intimate chords of our individuality, making us face a radically other body with which to engage, but also stimulating our sociality, the moment we are called to acknowledging the humanity of others in the light of such interactions⁶. Social robots are here to assist us and yet, by backing us up, they might alienate us or even turn us authoritarian⁷, and it is thus this tradeoff

⁶ In a sense, robots seem to solicit our private and public identity, in the direction of its decentering, similarly to how non-human animals and the environment did in the past, which inclusion in the circle of our moral categories and scruples came at the price of a number of assumptions about our unique quality and presence. At the same time, social robots seem to exceed these previous attempts to decentering us in their resembling us both externally and internally, and hence in constantly reminding us of our human bodies, their appearances, and needs.

⁷ No chance we still use the term coined by Karel Čapek, from the Czech *roboty*, literally meaning “slave”, to refer to them, and came up with no better alternative especially in the case of social robots.

of gains and losses which calls for our attention to verify our willingness to encounter them. To our demands of loyalty, reliability, and yet autonomy and authority might correspond despair, repudiation, and hence conflict. By enriching the pluralism of actors and their interactions, we might glimpse into the consequences of robots, often submerged or still underdetermined, as well as into the challenges they pose to the very participation in those human activities they seem to be excelling in.

What, then, becomes of us through robots? The question, wide-ranging as it is, I believe, is a legitimate one and more pressing by the day. And its interest and promise lie perhaps in the absence of an answer determinable before experience unfolds. To look at the consequences of robots, both in the sense of their use and in the sense of their hoped-for effects, is to open the possibility of a plurality of possible responses to robots. Which at the very least introduces the theme of the competence, authority, and autonomy of robots – which has already been referred to extensively in the literature.⁸ But, also, the issue of certainty, safety, and the *obliteration of chance*. An ethics of the consequences of robots has precisely to do with educating people to doubt and uncertainty, an ethics of trying and negotiating practices from within. It is an ethics whose purpose is not so much to normalize the role of robots as to explore it practically and allow us to be educated by it. In this sense, robots represent a challenge to certainty because, despite their promises of trustworthiness and decisiveness, they would seem to escape received moral categories, proving their inhabiting of the world to be a genuine moral experiment still very much in the making.

4. The TV series *Black Mirror* (2011-), conceived and written by Charlie Brooker, addresses a number of these issues through the exploration of futuristic scenarios more- or-less close to us in which humans have become increasingly (and perhaps helplessly) reliant on digital and robotic technologies. I would now like to move to a commentary on a few scenes taken from three episodes of the series suggesting the idea of ethics with robots as an experiment and exercise in personal transformation of an uncertain and therapeutic nature. It is not a coincidence that, given the open-ended texture of such encounters, the format chosen for its exploration is a dystopian TV series which presents itself as an interrogation of our current moral categories by reference to a not-so-distant future. Those episodes which work best are those in which the uncertainty of our own reactions is most pronounced. Uncertainty here refers to *both* our feeling toward a reality which might well subvert some entrenched assumptions about humans and their ways of interacting with each-other, *and* our expectations about such future, which at least in part make actively partaking to this technological revolution rather than simply having it imposed on us. The uncertainty regards the very promises of robots, yet still very much our human hopes.

The Entire History of You (S01E03, 2011)

Liam, a young and successful lawyer returning from a job interview joins his partner Ffion at a party where he catches her engaged in intimate conversation with one of the guests, Jonas. Where, at first, Liam lets it pass, joining if somewhat listlessly in the conversations that, among other things, revolves around the success of his business trip and the sexual life of the guests (Jonas' in particular), on the way home he presses his wife with respect to some of her seemingly ambiguous attitudes toward Jonas during the

⁸ See, e.g., Greenfield (2017); and Turkle (2019).

evening. What is in many ways a conversation that would have normally called into question an exchange of viewpoints as these are experienced by the litigants, calling to mind and negotiating partial and episodic memories of how events unfolded, without being able to *relive* or *view them anew* thanks to detailed and augmented knowledge which would have settled opinions once for all without the need to give up to trust and eventually compromise, with the other as well as with oneself, now, this conversation turned instead into a confrontation aided exactly by a device, the *grain*, that allows the reproduction of the subject's point of view on past events, recorded and stored in a cloud that can be shared with other users of the service. In fact, this device, implanted under the skin and wired into our brains, allows one to alienate oneself from the present to analyze the past and in some cases reconstruct it with a precision and detail unthinkable to finite minds grappling with a mass of complex and mutually exclusive impressions and data (e.g., even capable of reconstructing the slightest lip movement from far away or identifying some barely hinted at emotional reactions). The two begin an animated confrontation about Ffion's particular attitude towards Jonas captured "live" by Liam in only an instinctive and confusing way, watching together at the "footage" of Liam's memory, to which are then added the memories and point of view of Ffion, who, pressed by her partner, is forced to show her own memories, some of which she tries to erase from the device to defend a secret that is however slowly unraveling. The truths that come to the surface during a stormy night led Liam to reflect on the very goodness of the device, the consequences of its use, and most importantly what the two of them (and generally those using it) have become through it. The separation, the realization of an only misguided paternity, and a sea of other half-truths leave Liam lonely and stunned, at the mercy of stored memories overlapping and clashing with his perception of the analogical, brute reality into which he has plunged back (the bleak images of the bare house in which we see him helplessly wandering overlap with the happy ones of the house he lived in with his wife and the kid he thought to be his biological daughter). The episode ends with Liam violently pulling his *grain* out from behind his ear, losing much blood but, perhaps, finding himself and his life again.

A particularly interesting conversation is that between two co-invitees, Colleen and Hallam, over dinner, in which the former claims the wonders of *grain* while the latter confesses her skepticism about it, following a theft she suffered (to appropriate her unencrypted intimate memories) that caused her to revert to organic memory, which she then no longer wanted to integrate. The conversation marks the appearance of the grain, hence of its desirability and setbacks as witnessed by the experiences of the table guests:

[9:48-14:09]

JONAS

Oh come on, everyone scrolls the
Grain rifling through their
greatest hits for filth now and
then? Surely?

As Jonas says this, Jeff is clocking Hallam. She is very pretty.

HALLAM

Not me.

LUCY TOLLGATE

(slightly excited, like
she's brought a stunt
ethnic minority to the
party)
Hallam doesn't have a grain.
That's interesting.

JONAS

No shit.

He pops another bit of food in -- mister casual. Liam decides
it's time he spoke.

LIAM

Is that a political thing?

HALLAM

No, I was gouged about 12 months
ago --

General intake of breath at that -- gouging is notoriously
painful.

PAUL TOLLGATE

Wasn't it painful, I mean--?

HALLAM

Total agony -- but on the plus
side, I can't remember it that
clearly. There's a scar down here --

She indicates the back of her ear -- there is a scar -- they
ooh and grimace a bit. Jonas stands up for a closer look

JONAS

(reaching with hand)
Can I?

Hallam nods. Jonas runs his finger over it.
Perhaps a little flirtatiously. Ffion looks at this. Liam
looks at Ffion looking at this. It's a bit of a moment.

JONAS (CONT'D)

Hey, it's kind of nice. No brain
damage, clearly?

HALLAM

(she smiles)

And my sight held on fine.

PAUL TOLLGATE

So who took it?

HALLAM

Stolen to order as far as they
could tell, probably to some
millionaire Chinese perv-

PAUL TOLLGATE

Oh really, is that for real?

HALLAM

Yeah, and none of it was encrypted
so...

JEFF

(almost imagining it
himself)

They saw the lot.

HALLAM

But the thing is after the gouging
I didn't have one for a few days
and I just kind of... liked it.

JONAS

Cool. And more people are ... it's
a big thing right? Going grainless?
Like a hundred thousand people or
something?

COLLEEN

I believe it's huge with hookers.
(catches herself)

I mean I'm not - no offence... you
know, they say it just is.

HALLAM

No, sure. Well I'm pretty boring.
One man at a time.

JEFF

Boo!

FFION

A serial monogamist.

JONAS

I'm a cereal monogamist. I'm being
faithful to cornflakes right now.

The 'joke' causes a short awkward silence. Broken when Ffion
laughs, almost at the awkwardness. Liam looks at her in what
verges on naked disbelief.

LUCY TOLLGATE

I think it's an interesting choice,
going grainless.

PAUL TOLLGATE

It's a brave choice.

COLLEEN

I'm sorry. But it's -- well I
couldn't do it.
There's a tear in the social fabric.

During the prolonged argument between Liam and Ffion, when Liam wants to get to the bottom of the question of his paternity, the connection between what augmented memory allows and what it makes us turning into is brought into question. Liam asks his wife to give him proof that she used precautions during a relationship with Jonas, stored in her memory, that dates precisely to the time of his conception of his daughter Jody, whom Liam believed to be his:

[37:02-41:58]

FFION

Where did you go?

Liam walks forward into the room -- light catches his face,

making it clearer. Ffion sees the bruising and sits up, startled.

FFION (CONT'D)

What happened?

He says nothing. Just look at her.

FFION (CONT'D)

Liam what happened?

LIAM

Did you use a condom?

Ffion says nothing.

LIAM (CONT'D)

Or not? Just say.

That hangs in the air. Ffion addresses him as though he's holding a loaded gun and she needs to calm him down.

FFION

Liam, relax, okay, whatever you think has--

LIAM

(more emotional)

Am I Jody's dad?

FFION

Liam--

LIAM

Am I her dad?

FFION

Yes!

(beat)

Of course you are!

LIAM sits at the end of the bed, looking away from her. He now seems eerily calm.

LIAM

Sure about that?

FFION
Yes.

Liam turns to look at her. She looks scared.

LIAM
Well that's nice.

Liam points at the painting on the wall above her.

LIAM (CONT'D)
You like that don't you? I got you
it cos you said you liked it. I never did,
I thought it was pretentious shit.

Liam hits his remote, points it at the screen in the bedroom.

*INT. JONAS'S FLAT. *PLAYBACK*, MORNING.
Images of the fight with Jonas appear.*

END OF PLAYBACK:

FFION
Christ, what have you done Liam?

Liam's fast-forwarding, trying to find the specific moment.
Ffion goes to take the remote from him; he shoves her away.

LIAM
I'm getting to the good bit.

ON the screen:
*INT. JONAS'S FLAT. *PLAYBACK*, NIGHT.*

LIAM
*Either you wipe it all now, or I'll
fucking gouge you myself.*

JONAS
Okay! Okay!

*Jonas takes his remote. His eyes turn milky. Liam grabs him
by the scruff and shoves him toward the screen.*

LIAM

*Not in your eye, on there. On
there!*

*Jonas points the remote at the screen and clicks it:
A cover-flow of stills of Ffion come up.
There's last night's party '24 hours ago' then an indistinct
one from '18 months ago'*

*With his remote Liam pauses and zooms in on that image of the
rogue night, the one between when Ffion and Jonas went out
and the dinner party last night. In their bedroom. Ffion in
the covers. The familiar headboard. The corner of the print
visible.*

END OF PLAYBACK:

LIAM (CONT'D)

18 months ago, in here.
There's a silence.

LIAM (CONT'D)

When you suspect something, it
actually feels better when it's
true?

(MORE)

LIAM (CONT'D)

It's like I've had a bad tooth for
years and finally I'm getting to
dig my tongue in there and just
root around in all the rotten shit.

FFION

That -
(re the re-do)
looks like -- it's not what it
looks like.

LIAM

What, did Jonas come round to read
you a story?

FFION

No, it was --

LIAM

A story about fucking?

FFION

It was when the Dan time when you
freaked out... when you walked out.

LIAM

-for like ten minutes-

FFION

For five days, Liam. No word if it
was over, no calls. No nothing --

LIAM

So you fucked him after what four
days, that's restraint, that's
Romeo and Juliet stuff that is--

FFION

I was a state --

LIAM

--three days - that's admirably
faithful. But after four you're
going to be gasping, stands to
reason--

FFION

I was upset, we went for a drink

LIAM

You and him?

FFION

All of us, Paul and Lucy and-

LIAM

So everyone knew?

FFION

No! It was - it just -- it was
after -- it shouldn't have

happened, it was a blip --

LIAM

Oh a “blip”

FFION

I swear never before or after, I’m
sorry. I’m sorry. I can’t say
anything else -- I love you.

She goes to touch him -- he pushes her away.

LIAM

Did you use a condom?

Ffion looks down: this is excruciating.

FFION

Yes.

LIAM

Because there weren’t any here were
there? We were trying.

FFION

He had some.

LIAM

What, in his pocket?

FFION

In his car.

LIAM

His idea to use one, or did you
make him?

FFION

I made him.

LIAM

And he put it on?

FFION

Yes.

LIAM

And you saw him do it?

FFION

Yes.

LIAM

Then show me.

A beat. Ffion doesn't know what to say.

LIAM (CONT'D)

(indicating screen)

Show me on there.

Ffion opens her mouth but can't speak.

LIAM (CONT'D)

(tears pricking his eyes)

You have to show me Fi.

FFION

I can prove about Jody. That's just
true. She's our ...

She's reaching for her remote, just out of Liam's sight.

LIAM

Still need to see it.

FFION

I deleted it. I wanted it to go
away, I wiped the whole night.

LIAM

Did you?

FFION

Yes.

LIAM

It's a blank gap in your timeline.

FFION

Yes.

LIAM

Show me that then. The blank gap.

Ffion, tears, hands shaking, is toying with her remote.

FFION

(great distress)

Okay... yeah... I have to find
it...

Her eyes turn milky. Ffion is scrolling on her eyeball menu of times and dates, looking for something to delete. Suddenly all of Liam's attention is focused on her thumb and finger on the remote.

LIAM

No!

He jumps over the bed to stop her. She tries to evade him.

LIAM (CONT'D)

No deleting now. No fucking way.

They grapple, for a second, he's shocked to be physically tussling with his wife. He pulls her remote, hard, from her hand.

LIAM (CONT'D)

Still on there is it?

Ffion can see there's no way out of telling the truth here.
She nods.

FFION

I'm sorry.

LIAM

You've got to show me.

FFION
Why?

He can't really say why. He holds up Ffion's thumb remote.

LIAM
I need to.

FFION
Li, I love you I-

LIAM
I'd play it myself but I don't have
your thumbprint.

FFION
No.

LIAM
Show me.

He holds out the thumb remote. She shakes her head. Liam
snaps, grabs her by the neck, pushes her head against the
headboard, hard --

LIAM (CONT'D)
(shockingly loud)
Show me!

Liam's frightened himself.

LIAM (CONT'D)
What, look what you're doing to me.
This isn't me.
Fi I need to see it.
Please?
I need to see it Fi.

What I would like to emphasize through these two brief exchanges is the role of artificial technologies in the constitution and revision of our selves. These are the consequences of robots not only in the sense of their practical effect on us, but also in the sense of educating us to relate to ourselves through them. What we might discover through living with robots are aspects of our personalities and more generally of our minds that we might have wanted to externalize or augment but which then come back to us in an alienating or otherwise problematic way. In the case of this episode, much revolves around our

relationship to our memory, attention, and even more broadly, temporality. What becomes of us through the *grain*? What do we do with it, but also what does it do to and with us? What relationship are we able to establish with truth and lying? What do we make of it and what does experience become if it can be infinitely and obsessively mined, viewed, shared, removed?

In this sense, what AI stimulates us to is a work on our own functions, habits, and limitations. From a moral point of view, moral in the pragmatist sense indicated at the beginning of the essay, these digital challenges represent opportunities to explore one's subjectivity from possibilities that might radically challenge some assumptions we thought defined us and which loss we look back at with dread. The erosion of uncertainty or its management, for example, involves very different ways of what we are required to do to have a hold on the world and a place in it. Uncertainty and thus trust as a tool through which to exercise control and succeed in leaving undetermined at least some of the data by which we interact with the world and ourselves. We might find out that, scary as it is, uncertainty is however more reassuring than the prospect of an unbearable certainty, in which our personal contribution to world-making and its meaning and significance might shrink if not disappear.

Be Right Back (S02xE01, 2013)

Ash and Martha are engaged. Technology (social networks, blogging) is heavily present in Ash's life, and he is constantly sharing contributions with his contacts, while Martha is more skeptical and seems bothered by its intrusiveness in their relationship – despite working as a graphic designer using very sophisticated interfaces. Which might be a reference to the unavoidability of technological updating and progress. During a move to an old family home, Martha is reached by the police who informs her of her partner's death due to a car accident. It is not known to us whether Ash was distracted while driving because of the phone, even is likely so. At the wake, Martha is approached by a friend of hers, herself a widow, who advises her of an innovative service of reunion with the deceased, to which Martha reacts violently. After a few days we find Martha engaged in the renovation of the house. Martha, caught in an illness, discovers herself pregnant. Overwhelmed by emotions and by the prospect of raising a fatherless child, Martha decides to try out the service, giving the software total access to her fiancé's social profiles and archives. What probably took his life might make life possible once again. The system learns what is needed about Ash to imitate him through a chat service, with which Martha begins to interact. Emotions unravel, Martha's as well as well ours watching her. The exchanges evolve into voice calls, which soon give way to the arrival of a humanoid robot in Ash's exact likeness, with whom Martha begins to learn how to interact. Initial skepticism gives way to an intense and at times wild relationship that not only seems to continue their previous one but furthers it in ever new directions.

Some critical issues in this relationship soon emerge, however. The small yet significant differences of robot Ash with human Ash, and their effects on Martha, grow out of hand. Ash's presence from un hoped-for becomes cumbersome, and the conflict escalates precisely because of Ash's resistance to explore the less pleasant sides of her personality, remaining as it were in service and support, thus incompletely and therefore unsatisfactorily replacing her companion. Here is an example. The two are in bed, in the privacy of their room and slowly "waking up", but something definitely is wrong.

[40:02-43:19]

MARTHA

It doesn't work
I can tell that you're faking it.

ASH

Would you like me
to have sex with you?

MARTHA

Can you just go downstairs?

ASH

OK.

MARTHA

No! That's...
Ash would argue over that.
He wouldn't just leave
Because I'd ordered him to.

ASH

OK.

MARTHA

What? N...
Ah, f*cking hell!

ASH

Don't cry, darling.

MARTHA

Oh, don't! Just get out!
Get out!
Go on!

ASH

So you do want me to go?

MARTHA

Just get out! Get out! Get out!
Get out! Get out! Get out!

You're not enough of him!
You're nothing! You're nothing.
Fight me.

ASH
I don't do that.

MARTHA
f*cking fight me! Hit me.
Hit me. Hit me. Come on!
Why are you just standing
there taking this?
How can you take this?

ASH
Did I ever hit you?

MARTHA
N...No, of course you didn't
but you might've done if I done this.
Or this.

ASH
I don't... I don't know.

MARTHA
Maybe you would have. But you
wouldn't, would you? You wouldn't.

ASH
I could insult you.

MARTHA
What?

ASH
There's tons of invective
in the archive.
I like speaking my mind,
I could throw some of that at you.

MARTHA
Get out of this house.

Martha is mad at Ash's replica, as well as at herself. Suddenly realizing how short-sighted and perhaps dangerous her choice has been. What was she thinking in the first place? What was she expecting? How difficult, almost impossible, to engage someone or something constantly updating and elaborating to the best of their possibilities rather than exploring and risking failing and disappointing for what they are. Here's another excerpt. Martha takes Ash to the edge of the cliff where a story tells lovers unable to be together went to jump to end their miserable lives. Ash, leans out dangerously and start a line of rather forced jokes:

[44:25-46:03]

ASH

NO!

DON'T DO IT!

Seriously, don't do it.

MARTHA

I'm not going to.

ASH

OK.

MARTHA

See, he would have worked out
what was going on.

This wouldn't have ever happened,
but if it had, he would have
worked it out.

ASH

Sorry, hang on. That's a very
difficult sentence to process.

MARTHA

Jump.

ASH

What? Over there?

I never expressed suicidal thoughts
or self-harm.

MARTH

Yeah, well, you aren't you, are you?

ASH

That's another difficult one,

to be honest with you.

MARTHA

You're just a few ripples of you.
There's no history to you.
You're just a performance of stuff
that he performed without thinking,
and it's not enough.

ASH

Come on. I aim to please.

MARTHA

Aim to jump. Just do it.

ASH

OK.

If you're absolutely sure.

MARTHA:

See, Ash would've been scared.
He wouldn't have just leapt off,
he would have been crying,
he would have been...

ASH

Oh.

Oh...Oh, God, no.

Please, I don't want to do it.

Please don't make me do it.

MARTHA

No. That's not fair.

ASH:

No, I'm...I'm frightened, darling,
please...

Don't make me.

I don't want to die.

Oh, God, I don't want to die.

MARTHA

No, that's not fair.

ASH

I'm frightened, I don't want to die.
Don't...

MARTHA
NO!!!!

Cut. After a few years, we see Martha getting home with her daughter on her birthday. The cake is cut. The daughter asks her mother if she can bring a piece to Ash, who lives in the attic and can see her once a week. The attic where Ash's parents had stored photos of his deceased little brother, hiding him from view and from the life of the house. Martha renegotiated the boundaries of her own subjectivity and those of her family. A new form of life might have emerged, one perhaps more conscious of its rules, boundaries and compromises, now that those involved in it started afresh rather than pretending nothing happened in the first place. The consequences of robots are also and perhaps especially those in which we are called to reexamine who we think we are and how we might want to try to achieve that.

Beyond the Sea (S06 E03, 2023)

We're in 1969, with the race for space between the US and USSR in full blown. Two astronauts, Cliff and David, are booked into a long and consuming space mission around the Earth. Thanks to an advanced (retro-futuristic) technology, they are capable to inhabit their synthetic replica waiting for them back home. That is to say, their minds and personalities, their memories and intentions, are transferred to an artificial body temporarily replacing their real one, which in the meanwhile falls in a state of unconsciousness on the spaceship. Called back to duty on the space module when their operative presence is needed, where nonetheless they managed to organize a life full of activities – sports-like, agricultural, and of entertainment –, Cliff and David share in and through their substitutes the life on Earth with their respective families.

David lives in the city, attending popular events and at full ease with what we might call his double life, while Cliff lives in the countryside with wife and son, secluded and apparently in distress about the situation. Their popularity is however tragically interrupted by the violent destruction – I was tempted to write killing – of David's robotic substitute, by the hand of a sect of acolytes on a strike against symbiotic program, who exterminate his wife and son in front of his replica. Having lost everything, and unable to return on Earth before another four years, David falls in a depressive state. Suddenly, Cliff looks much better off, also because his choice of segregation seems to pay off at keeping the world at distance. The double life's demands could not have fulfilled without renouncing an ounce of popularity.

After more than a hesitation, moved by compassion Cliff offers David the chance of evading his own body and fate by embodying Cliff's synthetic replica, and hence interacting with his wife and son in the farm where Cliff moved in right before the starting of the mission, if only for a very short time at first. We thus see David transferring himself into Cliff's robot, flying from his grief and lunar module, became – or, perhaps, returned – his prison after the manslaughter of his family he was forced to witness via his replica. Cliff clearly is divided between compassion and anxiety: it will be David availing of his dwelling and likings

to his detriment, with all the ambiguities which this counter circuit is likely to ignite. It won't in fact take long for the events to take a dangerous turn and eventually burst apart. Cliff does not listen his wife's concerns – perhaps he is unwilling to, or incapable of, because of his self-imposed reclusion –, and soon pays the price of sharing his most precious and only beloved ones with his colleague. Cliff's wife in fact spends time with a stranger, without him being one completely. Moreover, David proves to be charming and skilled, cultivating his talents as a painter and committing to a portrait of the farm which all of a sudden includes Lana, Cliff's wife. As much as Cliff looked absent-minded and alienated, David proved to be enthusiastic and full of attentions. It did not take long to put Lara's own convictions under stress.

It follows a telling scene in which such ambiguity comes to the fore:

[51:48-55:39]

DAVID (in the likings of Cliff)
Hey. Take a look.

LANA
Is... is that... You added me?

DAVID
You don't mind, do you?

LANA
No. No, not at all. I'm flattered.
("La mer" by Charles Trenet playing)
(Lana chuckles softly, they dance intimately, and kiss)
(Lana gasps and runs off)
("La mer" continues muffled)

DAVID
Lana! (exhales) It's okay.

LANA
(exhales) I've given you the wrong idea.

DAVID
He won't know.

LANA
Stop!

DAVID
Hey. You want this.

LANA

Get away from me. You come here. You... you confuse me. You pick out gifts. You mess with my head. Work your way into my home wearing my husband like a suit. But this is not your home, and you are not my husband.

DAVID

That man is no match for you.

LANA

You are a guest in this house.

DAVID

And you want this.

LANA

You don't know me.

DAVID

I know the way you look at me.

LANA

At you? (breathes heavily) (sighs) (record static playing) (door opens)
(David walks back to the barn to discover Lana's son Henry ruining his painting).
Henry runs off to his room in the house.

LANA: Henry?

(David goes back fixing his portrait).

LANA: You should go.

(David sighs and walks off)

(device beeping)

(David breathes deeply, back into his real body)

CLIFF (real)

Everything okay?

DAVID

All fine.

Cliff's move soon follows. Eaten by suspicion and puzzled by David's sudden change of attitude and dedication to his offline activities, he finds out about some hidden drawings by David portraying Lana in intimate poses. He nervously waits for David's "return" and violently faces him in what is one of the most powerful scenes of the episode. Identity and its confines, personality and the possibility to avail of one's appearance and advantages make the confrontation all the most dramatic and intellectually thick. We are left with uncertainty, and don't know whom to sympathize with and approve. All this thanks to the

interaction with the substitutes of David and Cliff, introducing innovative and at times uncanny elements in lives already at strain by the instability of a divided existence.

It follows the exchange:

[59:50-1:04:50]

DAVID

I got an alert.
What's up?

CLIFF

You gonna explain that? (sighs)

DAVID

It's ju... It's... it's a drawing. Just a stupid... Like a fantasy.

CLIFF

Maybe I will bust your jaw. You want a busted jaw?

DAVID

I'm sorry. It's not what...

CLIFF

My wife! You fuck;ng creep! My wife. Mine!

DAVID

It's pure fantasy. I got mixed up.

CLIFF

Oh, you got mixed up?

DAVID

She's so beautiful. It's...

(Cliff busts David's jaw, and David groans) (exhales) (David groans)

DAVID

Jesus Christ. Why can't you see? I don't have anything. I've got nothing at all. You have no idea what it's like to be me. Everything I had... Gone. Just destroyed. You don't know. You have got it all, and you don't even care.

CLIFF

I care plenty.

DAVID

Your wife is a lonely woman. She's all alone there. Unappreciated. Unsatisfied.

CLIFF

You shut your mouth.

DAVID

Untouched.

CLIFF

I will put you through this goddamn wall! (Cliff breathing heavily)

DAVID

You don't know what you've got.

CLIFF

I know damn well.

DAVID

Do you?

The final confrontation between Cliff and Lana is equally telling, this way insisting on the effects of such digital technology on their human lives, and why they have been affected the way they have:

[1:04:42-1:08:42]

[CLIFF EXHALES]

[GRUNTING]

LANA

Cliff, what's wrong?

CLIFF

Tell me what's gone on.

CLIFF

You and him. What's gone on?

LANA

I don't know what you're talking about.

CLIFF

What did you do?

LANA

I told you, nothing.

CLIFF

Did you pose for him?

LANA

No, I did not pose for him.

CLIFF

Show him your body?

LANA

Of course not.

CLIFF

Did he touch you?

LANA

No.

CLIFF

Did you touch him?

LANA

No.

CLIFF

Take him to our bed?

LANA

Absolutely not.

CLIFF

Tell me what happened!

LANA

Nothing. I swear.

CLIFF

He drew you naked.

In his quarters. Up there, onboard.

LANA

I don't know what he drew.

CLIFF

He draws from memory.
From memory!

LANA

He has seen nothing.

CLIFF

Give me the truth!

LANA

I...

CLIFF

Give me the truth!

LANA

I swear on my life, on
Henry's life, nothing happened.

CLIFF

But he wanted it to.

LANA

Yes.
And you still let him come down here.

LANA

You knew I didn't want him here anymore.

CLIFF

You never said that.

LANA

I told you he hit our son,
And you did not listen to me.
You didn't listen!

CLIFF

He said that
I don't touch you.
How did he know that?

LANA

I would never say anything
like that to anyone.

CLIFF

So, then, how did he know?

LANA

I don't know.

CLIFF

He thinks that you're lonely.

LANA

All the time you're here, I'm lonely.
We came here for you!
You brought me here,
put me in this house.
Now I just walk from room to room,
and you walk from room to room,
but you're a shadow,
and I am here. I am real!
So, no, he didn't touch me,
but I wished he did. I...
For, like, a... a moment...
for a moment, it felt
like my husband was back,
and he
saw that I'm real, and I want that. I...
And I wished he did too.

[CLIFF SNIFFLES]

[BREATHING SHAKILY]

CLIFF

I'm sorry.

Notwithstanding the reconciliation between Cliff and Lara, the epilogue is however far from happy. David is unable and unwilling to renounce the acquired privileges, and in a destructive spiral he deceives Cliff with a ploy, sending him in outer space to fix a non-existent trouble to buy some time while he links back to Earth and exterminate Cliff's family with his robot. The episode closes with the two, grief-stricken and hurt, forced to share the next four years and the consequences of their actions.

The episode speaks to the effects of engaging robots and our fellow humans in the light of them. We see the point of robots through their effects on us and our relationships with others, in a loop-like movement: the consequences of robots are telling of what motivated us to seek them in the first place, which in turn gets interrogated by our reactions to what we became in the process. Our life with robots, and in this case thanks to them, is constellated by such loop-like movements of self-understanding and assessment. Like black-boxes into the unknown, and yet pretended to be transparent devices for our experience and communication, robots are the tools through which we manage to explore our exposition to uncertainty. They are the devices through which we inquiry into the gap between the anticipations we had and the outcomes we came up with, hopefully teaching us the lesson not to trust the former and never to fear the latter.

5. In closing, among the very many changes robots are and will be responsible for, in this talk I have focused on the very activity of re-negotiation of our personal and collective boundaries. An activity we might call moral in the measure in which it calls for the exercise of judgment of how we feel about the world presented to us. Key to this critical survey is the role and tricks played by uncertainty. In the end, I guess, by looking at ourselves through robots, aren't we asking ourselves what is it that we are ready to risk and love, or rather obtain or replace, about ourselves and our tentative and ever puzzling ways of world-making? What if it was uncertainty itself we were likely to love, and, together with it, our very capacity to navigate a world in constant change, with curiosity, hesitancy, and in the end humanity?⁹

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⁹ I would like to express my gratitude to Francesca Medaglia and the participants of the BIP CIVIS Summer 2023 and Winter 2024 Schools on "The Ethics of Narrative: between Old and New Media", where these ideas have first been presented.

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