AI in prison and restorative justice. The 'Cognify' challenge

by *Niccolò Faccini*[*]

The evolution of cognitive neuroscience has opened up unprecedented scenarios. The latest AI frontier is the proposal to provide prisoners with a "fast-track" rehabilitation through the implantation of customized synthetic memories that would quickly trigger feelings of guilt and remorse. This paper explores in a philosophical key the appropriateness of a similar approach, assessing its potential compatibility with the key elements of restorative justice.

Keywords: cognitive neuroscience; AI; autonomy; prisons; digital re-education; restorative justice.

IA in carcere e giustizia riparativa. La sfida di 'Cognify'

L'evoluzione delle neuroscienze cognitive ha spalancato scenari inediti. L'ultima proposta dell'IA è fornire ai detenuti una "corsia preferenziale" di riabilitazione tramite l'impianto di memorie sintetiche personalizzate che inneschino in breve tempo sentimenti di colpa e rimorso. Il presente lavoro esplora in chiave filosofica l'opportunità di un simile approccio, vagliandone la potenziale compatibilità con gli elementi chiave della giustizia riparativa.

Parole chiave: neuroscienze cognitive; IA; autonomia; carceri; rieducazione digitale; giustizia riparativa.

Introduction

When Schwab spoke of a "fourth revolution"[1], he was referring to the raging of intelligent technologies that combine the physical, digital and biological spheres and thus question the meaning of human nature (Schwab, 2017). In addition, in his book "*21 Lessons for the 21st Century*", Harari foreshadows an ominous future in which biometric data are used to assess the likelihood of human behavior by means of algorithms (Harari, 2018). That the purely technical solution is to be pursued at any cost is a limiting idea with respect to the dimensional pluralism of human experience. The

DOI: 10.5281/zenodo.18436079

[*] LUISS Guido Carli (Rome). nfaccini@luiss.it.

[1] After steam engine and locomotive; electricity and internal combustion engine; electronics, aerospace and information technology.

thesis that AI is ethically neutral seems untenable, as AIs are programmed to make choices in morally challenging situations (Zuboff, 2019)[2]. We observe an anthropomorphizing ideology of the machinic: an interpretative process *per relationem* that commits the epistemological error of highlighting the differences between intelligent machines and human beings by extolling the virtues of the former and the faults of the latter. This is a reductionist ideology, since confusing the statistical correlations of big data with causality encourages to attribute certainty to projections that in reality only have a relevance to what is being investigated (Mayer-Schonberger, Cukier, 2013). Moreover, the inductive reasoning underlying the algorithms may be marred by fallacies of undue generalization, when the data sample on which AI is trained would not be sufficient to make an estimate. Kirchschlaeger recently spoke of the «myth of intelligence», proposing to replace the AI lemma with «data-based systems», which would more faithfully recall the crucial junction of AI, i.e. the process of generating, collecting and evaluating massive amounts of data (2021: 103).

A more interesting dilemma concerns the notion of "autonomy", which mainly affects the concept of "artificiality" rather than the one of intelligence (Chalmers, 2022). Until recently, every technical artifice was merely the applicative translation of a totally human *a priori* knowledge of means, and thus lacked epistemic capacity insofar as it was wholly hetero-determined by man and thus perfectly qualifiable as an *instrument*. But when this intelligence presents itself united with the character of autonomy, we face the overcoming of the very idea of instrumentality: the artifice becomes a productive entity of an *a posteriori* rationality of ends: new algorithms would show themselves capable of determining the rule of knowledge in "autonomy" (Ercole, 2024) and the digital would come to constitute a form by which we understand the world and build a new one (Garapon, Lasségue, 2018).

Any current AI demonization would be anachronistic. But in this renewed scenario, there is an urgent need to avoid yielding to the false seduction that the machine expresses a neutral all-encompassing objectivity that does not need critical validation, and to be aware that the most edgy AI issues do not concern technical aspects, but its social role[3]. With a strong polemic intent,

[2] In fact, the media debate on ethical issues is presented in a polarized form between two antithetical positions: for bio-conservatives, technology should be used to preserve a pre-existing natural order, while transhumanists are fanatically projected towards the most extreme technological use regardless of the related ethical implications (Llano Alonso, 2018; Testart, Rousseaux, 2018; Salardi, 2023).

[3] Today employers get automated HR software to tell them who to hire or promote; AI recommender systems tell what news articles to read, and what entertainment to enjoy; AI Apps

Benasayag warned of the risk that in the era of «*algorithmic governmentality*» (Benasayag, 2019: 10) machines will end up colonizing humans, reducing them – through insistent hybridization – to functioning without really existing (Benasayag, 2009): artificial life produces a desacralization of the social, and the augmented brain coincides with a "*simplification of humans"*, destined to lose their depth (Gouyon, 2011; Besnier, 2012). Even bodies would be limited to functioning, but at the cost of existing less and less (Benasayag, 2022).

For our purposes, the gradual but resounding impact AI is having on the detention systems deserves a closer look[4].

1. The latest AI frontier: Cognify

Assessing the potential compatibility of AI with penalties would inaugurate a mammoth debate, because before reflecting on the appropriateness of adopting the technology in prisons one would have to admit that criminal law is not even a science, but a non-exhaustive intervention project on criminal behavior.

That said, one cannot overlook that today the use of "non-human" instruments can ensure significant advantages in guaranteeing respect for the principle of punishment humanization. Technological advancement has made it possible to combine *hard* control devices (bars, handcuffs, locks) with *soft* ones such as electronic bracelets and video surveillance[5]. In just a few decades, automated systems and CCTV cameras have enabled non-intrusive real-time monitoring, halving the workload of operators and allowing for more timely interventions. Today it is hard to deny that AI can perform powerful tasks for the internal administration of detention facilities, inmates control and recidivism prevention[6]. Machine learning systems based on behav-

find romantic partners or create tailor-made ones; AI tools diagnose cancers, evaluate and rank job applicants, assess loan risk, identify financial fraud, make art and write texts, debug code, pilot autonomous vehicles and weapons (Vallor, 2025: 3-15).

[4] Many countries are looking for alternatives to ordinary imprisonment, because of overcrowded prisons or budget cuts.

[5] The French philosopher Paul Virilio spoke of the militarization of science, which gets bogged down in adventures that distort it and risk extinguishing all sciences (Virilio, 1998). Audiovisual representation generates a world without an apparent horizon, in which the frame of the screen replaces the distant horizon line. The accusation against scientific totalitarianism is that it has brought about a decline of words (Virilio, 2002).

[6] See: Rodrigues, Fidalgo, 2024.

ioral recognition algorithms identify abnormal situations in order to foil accidents, fights, acts of self-harm or suicide attempts[7]. Predictive tools are being adopted overseas to assess the risk of reoffending and support decisions on parole or bail[8]. Moreover, new-generation digital capabilities are designed to optimize the logistical management of resources (from space planning to personnel management and shifts). Italy has found that non-invasive AI-based technologies can have a significant impact on prisoners' well-being and enhance their relational and affective life. The last step is the recent Constitutional Court ruling No. 10 /2024, which states that intimate talks constitute a legitimate expression of the right to affectivity and are part of a subjective right of the prisoner. In order to avoid ratifying the tendency to make prisons infantilization places, the public debate begins to speak of a *right to meaningful time*, which is not just a container to be filled with a series of "entertainment" activities. The latest frontier is represented by the *emotional AI-based technologies*: virtual assistants (Siri, Alexa), social robots and chatboxes could prove to be decisive psychological support tools – even or especially in the presence of language barriers – to alleviate the tension of prisoners in solitary confinement. Any aprioristic rejection of these technologies should be discarded, but a recent proposal is bound to divide and alarm the scientific community.

The evolution of cognitive neuroscience has opened up new scenarios, including the option of modifying or implanting memories via neural interfaces. Based on an idea of the molecular biologist and science popularizer Hashem Al-Ghaili, the project *Prison of the Future* was born in Dubai. It consists of triggering emotional states in criminals' brains to speed up their rehabilitation and facilitate an early reintegration into society. The system manipulates neurotransmitters and hormones in real time, using customized synthetic memories whose content and density are parameterized according to the crime committed, the severity of the sentence and the offender's psychological profile[9].

[7] Experiments with AI-monitored cameras in Liverpool prison have made it possible to prevent phone and drug smuggling and detect suspicious behavior (McGoogan, 2016).

[8] This raises the age-old issue of the lack of transparency and accessibility of the algorithm, which is likely to limit the right of defense of suspects and defendants. Among the potential censurable profiles, the risk of undermining the principle of reasonable foreseeability (Art. 7 ECHR), which requires legal systems to allow citizens to know in advance the criminal consequences of their actions.

[9] It is self-evident to recognize an influence in Stanley Kubrick's well-known film, *A Clockwork Orange*, in which the protagonist Alex agrees to suffer a treatment based on the projection of images or films of violence and rape in exchange for release from prison. Eyelid clamps

It starts by mapping the brain using a high-resolution scan. By identifying specific areas that contribute to criminal behavior, the implant would induce in a few minutes feelings of guilt and remorse in the inmate that would take decades to mature in traditional incarceration: the idea of this futuristic method is to change the subjective perception of past episodes and make the offender experience the consequences of the crime committed so that he can empathize with the suffering inflicted (Bublitz, Merkel, 2014). Prisoners are given a choice: serve a traditional prison sentence or opt for AI Prison treatment. These groundbreaking technologies directly interface with neural pathways to modify cognitive functions. For instance, brain implants can stimulate regions like the prefrontal cortex, enhancing decision-making and emotional regulation (Sidhoum, 2024).

Apart from the non-marginal concerns about misuses, privacy issues and biases in algorithms that risk perpetuating inequalities[10], a form of mind control incompatible with the principle of self-determination could take shape, coming dangerously close to the concept of "forced reeducation" (Russell, 2019; Winner, 1977)[11]. One could at most speculate in the abstract about a noncoercive use of artificial memories as immersive educational tools, similar to a mental augmented reality, always considering that traditional approaches primarily rely on personal participation through counseling, therapy sessions and educational programs designed to encourage self-reflection.

are applied to him, forcing him to watch. The film director denounces the institutional violence typical of the prison system and opposes the idea that deviance is solely a scourge that must be eradicated. The prisoner is limited to passively undergoing an input aimed at eliminating his tendency towards violence. This idea of treatment is based, in turn, on Greek tragedy. Watching theatrical representations of catastrophic events had psychotherapeutic effects and exorcised the dramatic events experienced by the audience in their daily lives: after all, this was Aristotle's teaching in his theory of "*catharsis*". The spectator's emotional attachment to the hero's misfortunes induced a combination of pity and fear and thus served as a tool for sentimental education, for pedagogical purposes and for the improvement of citizens. But the educational purpose never disregarded the individual's freedom of choice. If the Greek man remained free to react in an intimate and personal way to the gruesome scene, in contrast, Alex is bound in a kind of straitjacket, with no possibility of expressing his own will. In the perverse model of re-education depicted by the film, his resocialization would be achieved by force, but coercion makes it impossible to understand and internalize the re-educational method.

[10] Hagendorff (2021) highlighted that prisoners may feel pressured to participate or lack a full understanding of how their data will be used, with a potential infringement on personal autonomy; Kutz (2024) fears permanent trauma and calls for rigorous testing to adequately take into account the long-term effects on individuals.

[11] The line between cognitive enhancement and manipulation remains thin. In legal terms, this would raise questions about compliance with Art. 3 ECHR (prohibition of torture and inhuman or degrading treatment), as well as fundamental constitutional principles (e.g., Art.13 and 32 of the Italian Constitution).

Here comes the question of compatibility between 'Cognify' and the new *restorative justice* paradigm[12], which cannot be postponed any further.

2. AI and Restorative Justice: a complex compatibility

In relegating the internal forum of persons to the margins, Cognify seems to inscribe itself in the groove of the atavistic aversion of jurists to acknowledge the emotional component of normative judgments[13]. Law is wont to dilute the pathos of the human tragedy in which the criminal act is embedded: the impersonal simplifications of justice aim to contain «the exceeding otherness of the real» (Recalcati, 2021: 8) by solemnizing the dispute and depersonalizing the conflict. The legal order has nothing to ask from the perpetrator other than an idle and exclusionary passivity, which prevents him from expressing a distance from the anti-legal fact[14].

In an attempt to move beyond the sole view of the criminal offense as an aggression against the abstract entity of the *legal good*, even the Italian lawmaker has shown itself aware of how crime is a molecular and interpersonal dimensioned occurrence and introduced an organic discipline of RJ[15], which allows victim and offender – even in prison – to meet to undertake paths of reparation and mutual recognition and even rebuild the broken relationship. Programs such as *victim-offender dialogues* and *circles of support and accountability* are gradually finding space in Italy as well, thanks to initiatives promoted by third-sector entities.

The application of RJ in the prison setting takes on a specific value because it allows prisoners itineraries for deep reflection on the harm caused and to make concrete gestures of symbolic reparation. Conversely, the above mentioned processes of forced or simulated internalization distort the inner freedom of the transformative path and reduce authentic reparation (which should involve the individual in his ability to choose, recognize, dialogue and change) from a deliberate choice to a neurological performance. RJ, as a «justice that promotes healing» (Van Ness, 1997: 32), is a process that can only be co-produced by the protagonists in the flesh: the critical revisiting of

[12] From now on: RJ.

[13] Where feeling is eclipsed, «overwhelmed by the technicality of the evaluative apparatus» (Cordero, 1967: 6).

[14] A juridical system that claims to be monopolized by the deployment of a coherent and impersonal reason fits like a glove with a *pain-free* and *post-narrative* society that has unlearned that the only way to alleviate pain is to make it language and ferry it into a shared narrative (Han, 2021).

[15] Legislative Decree No. 150/2022.

the criminal act cannot take place in isolation, since the "natural interconnectedness" hindered by the antisocial behavior can only be restored if victim and offender manage to overcome the mutual stereotypes (Johnstone, Van Ness, 2007). Alone, the offender often tends to mitigate guilt by adopting *neutralization strategies* ranging from seeking external justification to discrediting the victim (Sykes, Matza, 1957). It is no accident that offenders who have been in jail often say it is a easier to go to prison than to face their victims (Zehr, 2023: 20). If by his action our offender has violated another person and also the *relationships of trust within the community*, for 2024 Balzan Prize winner John Braithwaite (Braithwaite, 1989; Graef, 2001) he can overcome the paralyzing alienation and impossibility of initiative aimed at self-transformation and achieve a *restorative catharsis* only through experiencing the feeling of *reintegrative shaming*, which arises from direct confrontation with the victim and the community. This is only through a language of trust, capable of unlocking the parties from absolute identification in roles and their irreducible opposition.

To simplify, restorative principles seem diametrically opposed to those of algorithmic standardization in several respects. First and foremost, storytelling is a quintessential feature of the restorative process, whose purpose is precisely *re-storying*: accredited studies show that being able to tell the victim his story is for the offender a crucial part of the path to regaining power over himself (Pranis, 2002). Second, the digital tool lacks voice, which is rendered evanescent. As deepened by Arendt, the contact made fostered by dialogic interaction is essential for the purposes of the emergence of a real awareness of the evil done (Arendt, 1963). Moreover, only from the encounter with the interlocutor (direct, indirect, surrogate victim, community members) can the prisoner draw that resonance which has value as a confirmation of the «non-irrelevance of one's existence» and is often the first step to rebuild a healthy self-image (Rosa, 2016: 146). Digital technology lacks the corporeality of the gaze, that (being an 'appeal' and 'commandment') made Lévinas argue that ethics was "an optics" (Lévinas, 1972). The most recent criminological acquisitions testify that the offender could hardly recover a non-illusory freedom without the encounter with the repressive and restless gaze of the victim, who bears on eyes the claim of the broken law. In fact, the essence of all programs lies in the variation of relational space between participants, a space that is clearly precluded in isolation, which lacks the social dimension of suffering. Indeed, the fifth point is listening, a resource with radical critical potential (See Bellet, 1989; Herder, 1967). RJ strives to ensure that stories are «not just heard but listened to» (Kashyap, 2009: 456), that is an act requiring active engagement which can lead to the possible conversion of «stories of humiliation into stories of dignity and courage»

(Zehr, 2011: 25). Furthermore, if modern science makes truth coincide with exactness (which gives truth an authoritative character), such paths accord the possibility of accessing an existential truth that goes beyond the realm of fact-finding (the correspondence between normative models and concrete facts) to that of interpreting the *meaning* of events[16]: the search for truth (in sciences, philosophies, theologies, arts, actions) is never realized in one-dimensional feeling, but only in dialogue, which alone allows for self-reflection (Jaspers, 1958). Hence we trace the most pronounced difference between the restorative encounter and the Cognify method: the mirage of being able to dispense with time and the processual structure of encounters. The mental activity of the individual subject pours into the solitary timelessness of the ego (Jankélévitch, 1957), imprisoned in a solipsism without communication. Ricoeur and Lévinas teach that solitude is timelessness precisely because there is genuine communication only when there are words capable of creating a bridge between the subjectivity of the speaker and that of the listener (Ricoeur, 1990; Lévinas, 1987). The time of detention (and ordinary process) is *Κρόνος* (inexorable, sequential, indifferent to the value of inner time or memory), while the time of restorative encounters is circular, marked by listening and caring, *καιρός* (Mannozzi, 2017).

On the other hand, memory manipulation intervenes in the self-narrative, disabling the offender to authentically tell his story to victim and community, altering the genuineness of the feelings he expresses. There is thus a split between personal identity and moral responsibility: the offender is merely the object of external intervention, no longer the author of his own repentance. This knocks out the two resources on paper most relevant to *restorative capital* (Braithwaite, 2022): the active empowerment of the offender and the faculty of mutual recognition (Ricoeur, 2005). Only direct encounters between prisoner and victim makes it possible to convey each person's sense of injustice in a spatio-temporal pattern of processing the past. There is no longer any talk of a responsibility *of something* and *for something* but of a higher responsibility *toward* the Other, the result of a relational path. This is the real RJ challenge.

Concluding remarks

At this point it is urgent to clear the air of misunderstandings. The idea of providing inmates (even by means of VR sessions) with experiences that can

[16] Bear in mind that Arendt (1970) admitted that truth cannot exist unless it is humanized by discourse.

instill them with a critical consciousness of the behaviors they put in place is a laudable initiative, as long as it is not motivated solely by the need to lower the costs associated with traditional prisons. If used with rigorous criteria and in a voluntary context, technological tools geared toward conscious maturation could find a marginal and complementary place in the re-educational journey. Once all potential dangers are carefully assessed, some Cognify programs could also psychologically prepare inmates for RJ pathways by providing them with tools to deal with their own cognitive distortions.

However, the anthropological view taken here envisages reparation as a typically human and constitutively relational process and therefore insusceptible to complete automation. If reasons have been briefly touched upon, an essential footnote should be added. The strength of restorative processes – which are beginning to proliferate in Europe as well – is their *unpredictable* component. While it is true that originally a positive restorative outcome is always uncertain and that any path can always be interrupted (even by the will of only one of the parties), it is equally plausible that surprising results can arise from seemingly unproductive itineraries. This is a *quid proprium* of the dialogical relationship, which cannot be produced and consummated according to a program, because «the meaning that is discussed is not programmable» (Romano, 2011: 105). For this reason, early experiments on AI tools that could enable judges and mediators to predict in advance the possible outcomes of restorative pathways and the appropriateness of undertaking them arouse enormous perplexity.

In this regard, the fresh testimony of Agnese Moro[17] is valuable. «RJ is justice of return, a place of surprises. The irreparable can only be looked into the eyes, but its radioactive wastes can be disarmed. They feed on heinous pains that, abandoned to isolation, become ghosts[18]. We re-educate ourselves in order to return, and they cannot return without me, nor I without them. No one can return unless he is welcomed».

References

Arendt H. (1963). *Eichmann in Jerusalem. A report on the banality of evil*. New York: Viking.

Arendt H. (1970). *Men in dark times*. Boston: Mariner Books.

[17] Daughter of the politician assassinated by the Red Brigades in 1978. Italian Supreme Court of Cassation, *Crime, Punishment, Forgiveness. Dialogue on Punishment, Justice and Reconciliation* (22/11/2024).

[18] «The pain of those who have done terrible things must be preserved, as must the generosity of submitting to encounter, which is the only way to remove masks. All the justice the condemned need is to be heard severely and with respect».

Bellet M. (1989). *L'écoute*. Paris: Desclée de Brouwer.

Benasayag M. (2019). *La tyrannie des algorithmes*. Paris: Éditions Textuel.

Benasayag M. (2022). *Il cervello aumentato, l'uomo diminuito*. Trento: Il Margine.

Benasayag M., Del Rey A. (2009). *L'éloge du conflit*. Paris: La Découverte.

Besnier J.-M. (2012). *L'homme simplifié. Le syndrome de la touche étoile*. Paris: Fayard.

Braithwaite J. (1989). *Crime, shame, reintegration*. Cambridge: Cambridge University Press.

Braithwaite J. (2022). *Macrocriminology and freedom*. Canberra: Australian National University Press.

Bublitz J.C., Merkel R. (2014). Crimes against minds: On mental manipulations, harms and a human right to mental self-determination. *Criminal Law and Philosophy*, 8(1).

Chalmers D.J. (2022). *Reality+: Virtual worlds and the problems of philosophy*. New York: W.W. Norton.

Cordero F. (1967). *Gli osservanti*. Milano: Giuffrè.

Ercole L. (2024). *Contro la "giustizia predittiva"*. Torino: Giappichelli.

Garapon A., Lasségue G. (2018). *Justice digitale*. Paris: PUF.

Gouyon P.-H. e Benasayag M. (2011). *Fabriquer le vivant?* Paris: La Découverte.

Graef R. (2001). *Why restorative justice? Repairing the harm caused by crime*. London: Routledge.

Hagendorff T. (2021). Blind spots in AI ethics. *AI and Ethics*, 2. DOI: 10.1007/s43681-021-00122-8.

Han B.C. (2021). *The palliative society: Pain today*. Cambridge: Polity Press.

Harari Y.N. (2018). *21 lessons for the 21st century*. London: Jonathan Cape.

Herder J.G. (1967). Abhandlung über den Ursprung der Sprache. In: Id., *Sämtliche Werke*, vol. V. Hildesheim: Georg Olms.

Jankélévitch V. (1957). *Le je-ne-sais-quoi et le presque rien*. Paris: Seuil.

Jaspers K. (1958). *Von der Wahrheit*. München: Piper.

Johnstone G., Van Ness D. (a cura di) (2007). *Handbook of restorative justice*. London: Willan.

Kashyap R. (2009). Narrative and truth: A feminist critique of the South African Truth and Reconciliation Commission. *Contemporary Justice Review*, 12(4).

Kirchschlaeger P.G. (2021). *Digital transformation and ethics*. Baden-Baden: Nomos.

Kutz A. (2024). AI-based prison concept would complete sentences in just minutes. *NewsNation*. https://www.newsnationnow.com/business/tech/ai/ai-based-prison-concept-sentences/ (consultato il 15 settembre 2025).

Lévinas E. (1972). *Humanisme de l'autre homme*. Montpellier: Fata Morgana.

Lévinas E. (1987). *Time and the other*. Pittsburgh: Duquesne University Press.

Llano Alonso F.H. (2018). *Homo excelsior. Los límites ético-jurídicos del transhumanismo*. Valencia: Tirant Lo Blanch.

Mannozzi G. (2017). Towards a "humanism of justice" through restorative justice: A dialogue with history. *Restorative Justice. An International Journal*, 5(2).

Mayer-Schönberger V., Cukier K. (2013). *Big data: A revolution that will transform how we live, work and think*. Boston: Houghton Mifflin Harcourt.

McGoogan C. (2016). Liverpool prison using AI to stop drugs and weapons smuggling. *The Telegraph*.

Pranis K. (2002). Restorative values and confronting family violence. In: Braithwaite J. e Strang H., a cura di, *Restorative justice and family violence*. Cambridge: Cambridge University Press.

Recalcati M. (2021). *Ritorno a Jean-Paul Sartre. Esistenza, infanzia e desiderio*. Torino: Einaudi.

Ricoeur P. (1990). *Time and narrative*, vol. I. Chicago: University of Chicago Press.

Ricoeur P. (2005). *The course of recognition*. Cambridge (MA): Harvard University Press.

Rodrigues A.M., Fidalgo S. (2024). The role of AI in rehabilitation and in the reduction of the use of imprisonment. *UNIO – EU Law Journal*, 10(1).

Romano B. (2011). *Dono del senso e commercio dell'utile. Diritti dell'io e leggi dei mercanti*. Torino: Giappichelli.

Rosa H. (2016). *Resonanz. Eine Soziologie der Weltbeziehung*. Berlin: Suhrkamp.

Russell S.J. (2019). *Human compatible: Artificial intelligence and the problem of control*. New York: Viking.

Salardi S. (2023). *Intelligenza artificiale e semantica del cambiamento: una lettura critica*. Torino: Giappichelli.

Schwab K. (2017). *The fourth industrial revolution*. London: Penguin.

Sidhoum M.A. (2024). Artificial memories in prisons: A futuristic approach to rehabilitation. *International Education Research Journal*, 10(11). DOI: 10.5281/zenodo.15608381.

Sykes G.M., Matza D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22(6).

Testart J., Rousseaux A. (2018). *Au péril de l'humain*. Paris: Seuil.

Vallor S. (2025). *The AI mirror: How to reclaim our humanity in an age of machine thinking*. Oxford: Oxford University Press.

Van Ness D., Heetderks Strong K. (1997). *Restoring justice*. Cincinnati: Anderson.

Virilio P. (1998). *La bombe informatique*. Paris: Galilée.

Virilio P. (2002). *Ce qui arrive*. Paris: Galilée.

Winner L. (1977). *Autonomous technology*. Cambridge (MA): MIT Press.

Zehr H. (2011). Journey to belonging. In: Weitekamp E.G.M. e Kerner H.-J., a cura di, *Restorative justice: Theoretical foundations*. New York: Routledge.

Zehr H. (2023). *Restorative justice. Insights and stories from my journey*. Intercourse (PA): Good Books.

Zuboff S. (2019). *The age of surveillance capitalism*. London: Faber & Faber.