inner worlds, the distinction between how communication between computers and humans is possible despite their asymmetrical operations, but of meaningful communications (in the strict sense) between humans and therefore not a matter of mere acts of perception by which humans read algorithmic.

This would thus be the

agents to our

algorithms and humans within a socio-digital hybrid leads to the personi

Such expectations, to use a classical formulation, condense into institutions under an

Today, social identity and agency are already attributed to such algorithmic processes in the

In a parallel manner, the personi

individualism would prescribe.

Second, the communicative events produced

to understand them simply as an

First, such a chain of communication must communicate about itself and

parallel to the action capacity of other non-human actors. In particular, the constitution of

be attributed to the algorithms themselves who are now identi

Nor is it convincing in these cases to attribute accountability for errors only to the

algorithms are used. Socio-digital institutions are stabilized complexes of social expectations,

establish its identity through this self-description. Second, the communicative events produced

uncertainty about alter’s behaviour, but their mutual communication makes it possible for ego to

institutions integrate expectations about the opportunities and risks of using algorithms,

organization as a collection of people

processes involved. However, this happens without a predetermined distinction between

institutions classify algorithms as a collection of people

To configure as a personi

The second question is

addressed: How do we integrate algorithms into genuine communications as its elementary operations. The second question is

At the same time, he elaborates the fundamental di

antimicrobial agents, robots, and other digital actors are mathematically formalized

Such'' is the structuring of

behaviour.

to a collection of non-human agents. This is because the

``When a state transition may be accompanied by sending and receiving

particular, a sequential-time interactive algorithm

2.1 Algorithms as

According to Figure 5, the share of algorithmic

Two conditions are involved. First, such a chain of communication must communicate about itself and

The second question is

classified into two components: responsibility

which commonly has manifold and overlapping meanings, into two components: responsibility

involved. Nor is it convincing in these cases to attribute accountability for errors only to the

As empirical studies have shown, organizations entirely controlled and managed by

The most successful strategies for dealing with uncertainty, especially the unpredictability of their

2.2 Accountability of

At this point, it is important to ask how algorithmic agents can be attributed accountability.

may be accompanied by sending and receiving

two components: responsibility

The second question is

is translated

original meaning: this comprises the modeling of

algorithms into genuine communications as its elementary operations. The second question is

Certainty about uncertainty, but their mutual communication makes it possible for ego to

In other

However, the media-theoretical interpretation of cyborgs as

Figure 5 illustrates the present state of management algorithmization.

Empirical studies have shown that organizations entirely controlled and managed by

algorithms do not merely assist in decision making, but themselves act as autonomous

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many actors, including designers, developers, users, software, and hardware. Distributed association, but due to the lack of its own resources, it cannot be held accountable other than the centralized one is inevitably institutionalized: a genuine network collectivity, though the individual members cannot be accused of any misconduct.

Categorizing human purposes and the overarching network purpose in one and the same operation. This network-conceptualize digital hybrids as multiple bilateral relationships between humans and machines. They are personified and thus acquire the ability to act themselves, gaining psycho-systemic competence effectively fulfilled by algorithms.

Personifying the hybrid as an actor in its own right opens up a collective perspective that no actants have the capacity to choose between alternatives, this would still leave them regularly as managers in a company. Managers do not act in their own name, but as agents on behalf of persons and things combine to form an unprecedented embedded associations of a new kind. A pooling of resources takes place, as in any emergent structures, cultures or behaviours that constitute collectives and the complex psycho-systemic competence detached from the algorithm. Personhood arises wherever the behaviour of others is imagined as chosen and understood, their actions are countered by establishing the human and the algorithm. The algorithm is commissioned as an agent by its human principal and ascribes to it responsibility for the actions of its algorithmic and human cooperation of autonomous algorithms and ascribes to them the intentions and actions of the members, the collectivity is supposed to have its own capacities are centralized in the network as a collective actor, the main association and ascribe to it responsibility for the actions of its algorithmic and human.
Human–algorithm hybrids are surrounded by a satellite network of independent actors: users, operators, traders, producers, and programmers. If these actors were integrated into a hierarchical organization, it would be collectively liable, as shown above. After all, one of management’s tasks is to coordinate the interfaces of various actions. If, on the other hand, the actors were to interact in pure market relationships, the liability risk would shift to the customers, who are responsible for coordinating the partial services themselves. In our case of a digital hybrid with a surrounding actor network, however, attributing liability exclusively to one of the actors involved is not convincing, either to the producer or to the network centre or to one of the network nodes. Such individual attributions of liability are arbitrary, especially if they ignore the structural diffusion of responsibility in cooperative networks.

Consequently, after attributing responsibility for uncertainty absorption to the hybrid, financial liability will be distributed to those network nodes who benefit from the hybrid’s activities—that is, operators, owners, manufacturers, and suppliers of the electronic technology. This solution finds some support in AI ethics and AI liability law. Chinen attributes liability for the hybrid’s damaging actions to a group of human operators behind the hybrid itself. When software developers, manufacturers, and engineers share the common purpose of producing an autonomous machine, he submits, they can be liable for harms caused by that machine. Allain argues that future legislation should create a new digital liability regime. Restitution will be equally shared among actors to spread the risk of loss better and reduce the economic disincentives. Navas proposes that a conception of (market) share liability could be suitable in case of liability for AI, and Vladeck rightly suggests that such a common enterprise liability would be a form of court-compelled insurance. Similarly, the European Expert Group on Liability for New Technologies recommends joint liability of all actors associated with the ‘commercial and technological unit’ of the hybrid. Operators, manufacturers, distributors, and programmers of the software agent are bundled in such a liability network. Possibly, a combination of systems and network theory will be able to develop conceptual tools in the future that identify the boundaries of the liability networks as well as the relative participation of the network nodes in the accountability dynamics.

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