The Irreducible Link

by Cécile Thomé

With the frontier of automation now extending to emotional skills, Allison Pugh sheds light on the human capacity to forge connections. Irreducible to machines, these core connections give meaning to professional work and remain crucial in many sectors.

Reviewed: Allison Pugh, *The Last Human Job. The Work of Connecting in a Disconnected World,* Princeton, Princeton University Press, 2024, 365 pp.

Are smartphone apps set to replace doctors and teachers in the near future? Despite the recent proliferation of reports on how AI advances are expected to radically transform many professions, Allison Pugh, Professor of Sociology at Johns Hopkins University, instead seeks to highlight a characteristic dimension of the work carried out by humans: what she terms "connective labor." Her book is a pleasure to read, richly illustrated with empirical examples and clearly structured around eight chapters. It reveals the generally invisible work of connecting with one's interlocutor—in such a way that they feel "seen," understood and valued—and of being valued in return. This idea of a uniquely human ability to create a form of emotional understanding with others for mutual benefit is particularly crucial in certain sectors such as healthcare, education or even service professions, which, it is sometimes suggested, could be largely replaced by applications or forms of AI. Pugh argues, on the contrary, that those fields cannot be considered without this dimension of connection to others, which cannot be transferred to a machine.

The book draws on several years of research, including around 100 interviews, primarily with therapists, doctors, and teachers, as well as some of their interlocutors, and with the designers of the AI systems they may use. It is also based on 300 hours of

observation in healthcare clinics, schools, therapy sessions and a robotics laboratory. The author sets out to define and study what this connective labor consists of and the organizational forms that enable it, as well as to determine the extent to which it is threatened today by new technologies that conversely offer the promise of making life easier for professionals.

Moving beyond the utilitarian approach to human connection

Pugh first seeks to determine the nature and value of this connective labor, which entails witnessing and caring for the other, what she describes as an "emotional handshake," halfway between recognition by the familial hearth and political recognition. While the establishment of this social intimacy is generally considered only for utilitarian purposes (for example, to be valued by one's students so that they pay more attention in class), Pugh argues that it is not simply a kind of "engine grease" that helps the social machine to function more smoothly. In doing so, she draws on Arlie Russell Hochschild's studies on emotional labor[1]—which emphasized the service professions—and a reflection on the value of feeling useful, particularly in the care and education sectors. Connective labor thus brings a form of dignity to those who perform it; it represents a purpose and enables a better understanding of oneself and others. It therefore has value in itself (helping doctors, nurses or teachers to appreciate their own work), and not simply based on what it enables (treating or teaching effectively).

The risks of extending AI to interpersonal relationships

In particular, the book questions how connective labor is affected by the development of digital technologies in the professions studied. This idea of an extension of the "automation frontier" allows us to go beyond the issues that tend to arise when we focus on AI: algorithmic biases, risks of surveillance, and even job disruption. As Pugh points out, this frontier has shifted several times: it was originally drawn between manual and intellectual tasks, then realigned between routine tasks

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[1] Arlie Russell Hochschild, *The Managed Heart: Commercialization of Human Feeling,* Berkeley and Los Angeles, CA, University of California Press, 1983.

and others, before being framed around the question of emotions, with the idea that certain socio-emotional skills (leadership, cooperation, empathy, etc.) would not be reproducible (automatable) by a machine. However, as she notes, socio-emotional AI already exists (for example, applications aimed at improving mental health). The risk associated with their use, then, is that of depersonalization, particularly for the poorest, who would be the first to be targeted, while the wealthiest continue to have access to flesh-and-blood professionals. The question then arises as to the purpose of AI: what is it supposed to free humans from, and for the benefit of which activities?

Pugh draws attention to the deceptive nature of AI: it renders invisible all the human work required for it to function[2]. She distinguishes three types of rhetoric used to justify its use. First, the idea that AI is "better than nothing," that using it can help overcome a shortage, for example of staffing; second, the argument that AI is "better than humans," for example, because it can prevent one human from judging another, and free people from tedious or repetitive tasks; and finally, the logic that AI and humans are two entities that work "better together." We must therefore learn to distinguish between tasks that have human value and those that do not. However, the development of digital technologies has many unforeseen implications, including the fact that the humans "behind the apps" still find themselves having to do connective labor without reaping any rewards: for example, coaches hired by counseling apps, who are supposed to follow a script but end up having to adapt to their virtual interlocutors. Or the need to transform everything into data that feeds AI, which takes time away from humans, at the cost of connective labor.

However, Pugh maintains that connective labor—the "last human job" that gives the book its title—is fundamentally artisanal and cannot be replaced by AI without detriment to the individuals who benefit from it. Her stance is based on the fact that connective labor relies on practices that cannot be standardized or, therefore, digitized: it involves using one's body (particularly to convey nonverbal messages), knowing how to gauge and analyze emotions in others, collaborating in a dynamic of giving and receiving, demonstrating a certain spontaneity and, finally, handling any mistakes made in the interaction (apologizing can even help build relationships). And while tensions are intrinsic to such work (for example, between expertise and consideration for the other party), they too are part of human relations.

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[2] See, for example, Antonio A. Casilli, *Waiting for Robots. The Hired Hands of Automation*, Chicago, The University of Chicago Press, 2025 [2019].

Organizational forms and connective labor

To better analyze this connective labor, Pugh suggests going beyond the individual level and looking at the "social architecture" of organizations such as hospitals and schools. She distinguishes three types, each of which has an impact on how connective labor may be carried out within them. In the first, where professionals are driven by a sense of "mission," often serving people with significant needs and social disadvantages, the expected workload is very high. While this type of organization is meaningful for professionals, it also puts them at risk of overly intense connective labor, turning them into "heroes" who are likely to burn out due to a shortage of resources (an overworked country doctor, a teacher in an under-resourced school in a rough neighborhood). In the second type of organization, which is based on the corporate model, profit comes first, with priority given to productivity: there is therefore no chance of building a genuine bond with the people one sees. Connective labor is considered a service to the consumer, with care being counted, shaped, and monitored by technology. The risk of burnout results from excessive expectations placed on professionals, who are required to generate profits while managing pressure from patients or clients. Finally, the third type enables a genuine "social intimacy" to develop; however, this is limited to those able to afford the fees of professionals who can give them as much time as they need but serve only the most affluent. In this case, it is the professionals who risk losing meaning in their work. All in all, it seems difficult to find a model that works well for professionals, their clients, and society.

Pugh also emphasizes how connective labor may or may not align with scripted protocols and be subject to counting, two elements that are essential for replacement by digital technologies. In particular, she notes that a common barrier to connective labor, namely lack of time, can specifically arise from these processes of scripting, quantification, and standardization (sometimes of cases that "do not fit into the boxes"), which are added to the actual work, as everything must now be recorded electronically.

Finally, the author looks at the effects of connective labor and its evolution with regard to social inequalities, whether in one direction (with professionals who are more highly educated than their interlocutors, for example a white doctor meeting a poor black man) or the other (a black home help interacting with a rich white middle-class woman). In the first case, there is a risk that the inequality of status will prevent a genuine relationship from forming, for example because the patient would be

ashamed to talk to the professional about certain aspects of their illness; this may then cause them to avoid doctors (or schools), thus reinforcing inequalities in health (or education). In the second case, the need to provide connective labor on demand is based on the possibility of giving it meaning, and thus forming a relationship by feeling useful. The question then arises as to the authenticity of what we offer in order to establish a connection. In both cases, Pugh stresses the importance of both "seeing" the other and being "seen" by them: if one side is unable to express what they mean, things are more likely to go wrong. And while using AI avoids the risk of being judged by the other, this recognition without human *judgment* is also a recognition without human *value* (as AI is ultimately only better than a *bad* professional).

Reflecting on the social value of interpersonal connective labor

The book concludes with a more optimistic chapter, offering examples of social architecture that can preserve quality connective labor while pushing the demands of profitability and counting into the background, without relying on professionals reshaped into sacrificial heroes. Pugh identifies three pillars that must enable an organization to maintain this deep connection that is so vital to society. First, "relational design" within the organization, and in particular the existence of leaders and mentors who help build a community of practice in connective labor. Second, a "connective culture" common to the organization. And finally, a distribution of resources that gives people space, but above all time, to devote to connective labor with others. In particular, Pugh emphasizes the political choices that can hinder the development of these organizational models that enable a better connection between individuals (for example, devoting large budgets to technical developments that are ultimately useful above all to compensate for the lack of connective labor).

This in-depth study lies at the crossroads of the sociology of work, digital technology, organizations, and emotions. It offers extremely engaging theoretical developments on the nature of connective labor; above all, it is based on an empirical framework that is very useful for reflecting on the effects of AI development, given that current analyses often focus on promise rather than investigation. It should be pointed out, however, that connective labor, which Pugh views in an extremely positive light, can also serve non-altruistic purposes (think of politics or sales), a fact

that the book only mentions in passing. The book could also have drawn more explicitly on gender studies: while the author notes that connective labor, which involves a form of care, is more easily recognized and visible when performed by women, she does not explore the specificities (in terms of both methods and goals) that may exist depending on whether it is performed by women or men. Rather, the author seeks to outline avenues to explore in an effort to pursue fascinating lines of thought, including a very timely invitation to take a step back from discourse presenting AI as a necessary solution to problems that are not inevitable but rather the result of political and social choices.