

## Central/marginal processing units: race, multitasking, and representations of simultaneity in *The Intuitionist*

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### ABSTRACT

Our co-authored essay offers a rethinking of recent cultural and technological transformations through a time-oriented rereading of the postmodern racial allegory put in place in *The Intuitionist*, the science fiction debut by African American author Colson Whitehead. Published in 1998, shortly after the big “humanistic machine” (Fiormonte, Numerico, Tomasi 2015) called the internet went public, Whitehead’s novel provides a metaphorical frame to now disclose the virtual re-engineering of the human. To elucidate this transformation, we focus on the pivotal and often overlooked component of computer research in the 1960s, i.e., the development of Compatible Time-Sharing Systems (first MULTICS in 1965, then UNIX in 1969). The Time-Sharing intuition would result in a modular model capable of multitasking (distributed but simultaneous parallel algorithmic processes) typical of today’s major operating systems. Our reading of the novel’s racialization of time at the moments where the central theme of multitasking disrupts organized chronocentrism focuses on multiple levels: epistemologically (as Carassai’s reading of the intuitionist knowledge production is placed in conversation with computational procedures) and cognitively (as shown by Pessin’s analysis of the cognitive dimensions represented in how the narrator renders the simultaneity of past, present, and future events through complementing frames). The novel’s representation can be reread as prophetic, as the epistemic possibilities of Whitehead’s protagonist with regard to intuition are today virtually emulated by computational multitasking and yet, at the same time, ideologically denied by computational design. This juxtaposition between the human and computational structures of simultaneity is extended into the cognitive domain, as the human brain’s expression of the performance of multiple tasks is structured differently from machines. Instead of the hardware/software metaphor, as the load increases, both human and computational systems begin to falter. In these breakdowns, the divisions between intuitive, rational, historical, and procedural are reinscribed and interrogated, producing several different operating frames of racialized time and highlighting the difference in labor required of the Black characters to exist in their own temporal frames as well as the white timeframes imposed on them.

### Keywords

Race, cognition, computers, digital culture, time, identity

Some novels are unquestionably prophetic. Many authors have already highlighted this feature when critically discussing Colson Whitehead’s debut novel, *The Intuitionist*. For Martin Japtok, for example, this “speculative realist ‘noir’” (Japtok 2021, 302), imbued with “solutionist”<sup>1</sup> techno-utopianism, is undoubtedly ahead of its time. Despite being set in a vague American past reminiscent of the U.S. in the 1940s,<sup>2</sup> in Japtok’s view, Whitehead’s literary tale “can be

read as a parable about and critique of the internet” (301). According to Nadine M. Knight, *The Intuitionist* can even be inscribed, together with the HBO series *The Wire*, within a long-established African American prophetic tradition “spanning from the works of Nat Turner and David Walker to James Baldwin and Martin Luther King Jr” (2015, 28). Knight observes how *The Intuitionist* and *The Wire* “suggest that we must recognize the importance of prophecy and the written word in order to restore visibility and voice to the urban underclass” (2015, 28). Needless to say, the presence of a prophetic revelation as an actual element within the novel, a theme represented by the lost manuscript at the core of the plot, certainly completes the picture. Whitehead’s story includes, in fact, a sought-after theoretical volume prefiguring a new era for elevators’ machinery, a future ‘second elevation’ that can be seen as a technological Second Coming for our metropolitan cities. The novel’s prophesied second elevation is mapped metaphorically onto a kind of liberation theology that entangles elevators’ capacity and range with human freedoms into a vision of the unlimited potential for both. These freedoms are, however, complicated in the novel’s unfolding by a sustained meditation on cognitive, infrastructural, and computational multitasking. And, as the present study articulates, it is precisely multitasking, as explored in the novel, that contains a prescient critique of the insufficiency of large language models when confronted with lexical-level interpretative tasks. Under the surface of offering a dichotomy between an empirical approach to the conceptualization of time-based events and an intuition-based holistic coming into view of an instantaneous deeper sense in them, the novel can be seen as indicating a way out from some of the limitations and epistemological cul-de-sacs of our contemporary digital and algorithmic culture.

The novel tells the story of a mysterious and implausible technological failure, an elevator freefall in a huge anonymous megacity. The accident happens in the middle of an institutional and political rivalry between two factions of elevator inspectors: the Empiricists and the Intuitionists. The former base their security evaluations on careful analysis of observable facts and bits of information, whereas the Intuitionists can diagnose possible functioning problems merely by sensing the working of the vertical transportation machines. After the accident, Lila Mae Watson, the first Black female Intuitionist elevator inspector, becomes a prominent suspect. In the attempt to prove her innocence, she soon becomes a crucial pawn in a larger web of multiple plot lines involving gangsters, politicians, shady journalists, double agents, and even legends of revolutionary inventions (the notoriously rumored “black box”). Forced into the role of a detective, Lila Mae tries to discover the identity of those responsible for the Fanny Briggs elevator accident and to find the documents containing the plan for the “black box,” the perfect elevator envisioned by James Fulton, the father of Intuitionism. In her search for the scattered Fulton papers, Lila Mae will learn unsettling intel about their author, namely that Fulton was a Black man who passed as white. At the same time, Empiricists and Intuitionists

– as well as *Arbo* and *United*, the major corporations that build elevators – will try to appropriate the secret of the black box. At the end of the search, Lila Mae is the new guardian of a secret that will hopefully allow her to continue Fulton’s work and reshape its promises of future liberation, now reoriented through her individual perspective. The novel ends with Lila Mae’s plan to continue Fulton’s work by writing the third volume of *Theoretical Elevators*, an activity that explicitly points to new kinds of future scholarly practices. The analysis of what kinds of future changes such a scholarly enterprise entails, however, requires focused attention to marginal practices in human patterns and behaviors well beyond the central struggle between intuition and rationality that the novel apparently presents to the reader.

Early in the opening passages of *The Intuitionist*, two frames of narration are offered as purported mimeses of cognition. The novel presents one narrative frame where the freefall crash of the elevator car at the Fanny Briggs building is witnessed in a distant third-person perspective. The other frame uses a close third-person perspective to channel Lila Mae’s sense of the simultaneous tasks she is performing in cognition. The presence of these two frames works to establish both the theme of multitasking and its illusion of simultaneity, and they invite an analysis of cognitive and computational dynamics.

### Threaded cognition and Intuitionism

Throughout *The Intuitionist*, we can observe a methodological debate between the two factions of elevator-repair people, the Empiricists and the Intuitionists, that implicitly calls into question the very conditions of knowledge and its philosophical categories. Part of this debate is, in fact, also about how to process information and how to experience time. The Empiricists represent the *Ancien Régime* of the field, having methods proven over the *long durée* of the installation of elevators in modern cities. Their empirical methods are linear in nature and follow consistently applied checklists. The Intuitionists, on the other hand, are regarded by their colleagues as seemingly irrational or preposterous, in their characterization as “swamis, voodoo men, juju heads, witch doctors, Harry Houdinis” (57). “All terms,” as the novel explains, “belonging to the nomenclature of dark exotica, the sinister foreign. Except for Houdini, who nonetheless had something swarthy about him” (57-58). The Intuitionist methods, then, are represented by the Empiricists in the novel as contrasting with their own perspective. For every association with non-Western methods (and the non-Christian West, inclusive of Houdini) imposed on Intuitionists, the Empiricists implicitly define themselves in opposition as Western, Christian, and white. Because of this social construction in the novel, the Intuitionists are implied to be mystical and non-rational on account of their difference from the empirical approaches. Such a characterization extends into cognitive domains, as cognition orders these approaches and practitioners of Intuitionists’ methods are treated as suspect throughout the novel due to their difference in cognitive practices, which become racialized and gendered.

This is especially true given how simultaneous processing is rendered in the Intuitionists' approach as a form of threaded cognition.

As outlined by Salvucci and Taatgen (2008), threaded cognition is a theory that divides cognitive resources according to distinctions in how they are accessed by tasks, such as seeing (using the resources of the visual system), moving (using resources of the psychomotor system), and recalling (using the resources of memory). Access occurs over a duration of time so that a single sequence of accessed resources becomes itself a theory of linear time. Integral to this understanding of cognition is a structuring of phenomena into a temporal order; one resource is allocated to one task so that threaded tasks each access one resource in parallel and form a queue of tasks awaiting time to make use of resources. In this theory, when one cognitive task is accessing a resource, other tasks are limited in how they can also access the same resource. These resources include: senses such as touch, hearing, and vision; movements; and memory itself. Time is, in some of its aspects, a social construction, and so the ordering of cognition is also, in some of its aspects, socially constructed. The decision to prioritize certain tasks over others occurs within social contexts. Early in *The Intuitionist*, Lila Mae demonstrates her intuitive process for elevator repair to a building governor who is getting his elevator inspected:

Even with her eyes closed she could have done it herself, but she's trying to concentrate on the vibrations massaging her back. She can almost see them now. This elevator's vibrations are resolving themselves in her mind as an aqua-blue cone. Her pen rests in her palm and her grip loosens. It might fall. She shuts out the sound of the super's breathing, which is a low rumble lilting into a wheeze at the ultimate convexity of his exhalation. That's noise. The elevator moves. The elevator moves upward in the well, toward the grunting in the machine room, and Lila Mae turns that into a picture, too. The ascension is a red spike circling around the blue cone, which doubles in size and wobbles as the elevator starts climbing. (6)

Lila Mae's ability to concentrate on the tactility of the vibrations is the result of her efforts to redirect the allocation of cognitive resources from vision tasks by closing her eyes, from motor tasks by losing her grip on her pen, and from hearing by blocking the sound of the white governor's wheezing breath. Particularly notable is how the metaphor for focusing on seeing the internal world is tied directly to threading access to vision resources. Lila Mae's cognitive process as an Intuitionist can be seen as similar to how computers manage tasks between the CPU (Central Processing Unit) and other components. From this point of view, the novel is in part recasting John Searle's presidential address to the American Philosophical Association (1990), rejecting the question "Is the Brain a Machine?" which offers a formulation of the 'homunculus problem' in computational cognitivism. For Searle, the metaphor for computational processing borrows from cognitive studies the imposition of an imaginary homunculus that is responsible for the intentionality of outputs from running computer programs. Searle argues that this artificial figure invalidates the epistemic basis of his titular

question (1990). In other words, the mind and the brain do not truly work as structural metaphors for computers and software. The novel's cognitive psychological approaches, however, formulate this metaphor in the other direction. The computer structure offers an expository dimension to the cognitive functions represented by Lila Mae's Intuitionism, which specifically enables technological critique at the levels of race, gender, and time.

### Computers, time-sharing, and multitasking

To better understand how Whitehead's novel reconfigures the critique of technology and race into anticipating a larger critique of human cognitive changes and new knowledge capabilities in the digital age, we must first focus on a pivotal and often overlooked component of computer research in the 1960s: the development of Compatible Time-Sharing Systems (first MULTICS in 1965, then UNIX in 1969). The whole history of modern computers is characterized by a sense of the machine's unlimited possibilities in storing and manipulating large-scale information that, from its very outset, was configured in terms of increasing speed or, more precisely, time rearrangement. The first mainframe computers of the 1940s were capable of operating punch cards by running one program at a time over a duration of days, therefore generating remarkable waiting queues for researchers and other kinds of users. The advancements of the following decade came with the possibility of enqueueing multiple programs at once according to a new FIFO ('first-in, first-out') system. It is interesting to note that, while computers became indeed a little faster (time contraction), the new system would result in no real augmented efficiency in terms of the information processing (or algorithmic 'thinking') performed by the computer's Central Processing Unit (CPU). Although fed to the machine at once in one sequence, programs would still run one at a time. Most importantly for the present study, when any program got blocked in finishing one task (say, a peripheral device like the printer finishing printing the output), the CPU would become de facto idle for the whole amount of time. It is only in the 1960s that we see a significant correction to this tendency, with time rearrangement now shifting towards the augmentation of the actual CPU 'thinking' process, as it were. The new goal became to keep the CPU as busy as possible so that when a specific program was waiting on an Input/Output (I/O) task, another program could use a portion of the CPU. With this new approach, two programs could use multiple computer resources at the same time. But, again, not the same portion of the CPU at the same time. So-called multitasking was, in fact, based on time-sharing, where monitor systems would estimate an arbitrary amount of time in which, while a program would be paused in its I/O operation, another program would be given priority among the ones waiting in the queue. By using time-sharing, it was possible to increase the amount of information processed by the CPU over time, but it was still one CPU, and it was still operating one task at a time. This hidden technical feature is responsible for the virtual inconsistency of the very term multitasking, both in

information technology (IT) and as a borrowed concept in colloquial language. It would not be a stretch to say that, from the 1970s on, the history of modern computing technology has consisted in creating increasingly more efficient monitor systems called Operating Systems that would take care of managing computer resources (CPU, memory, I/O) in a way that makes sure that simultaneity does not occur. Operating Systems ensure that two different programs do not use the same memory address, that message-passing between different programs labeled with unique identifiers works, and that general race conditions (i.e., when two computer programs engage in a race while trying to access the same resource at the same time) do not cause failures in the system. The optimized functioning based on time-sharing – for the digital mechanism as much as for the neurocognitive organism – is therefore contingent on the prevention of co-temporary overlapping, be they electric polarities of digital 1s and 0s or firing and non-firing synapses. From this point of view, the novel contains an analogy to the existence of multiple and simultaneous processes in the design of computer hardware. As represented in the novel, the intuitive understanding of the Intuitionist process becomes just as virtual for elevator inspectors as the presence of multiple simultaneous processes (allegedly implied by the term multitasking) is for computer technology.

The race condition, intended as software programs competing to access the same resource at the same time, is metaphorically emulated when Intuitionists operate in their characteristic modality. As an example of the race conditions regulated by Operating Systems, we can consider the scene where Lila Mae and the white building governor are negotiating how best to repair the broken elevator in his building. In this case, Lila Mae must seize control of her cognition in order for her to prioritize tasks. To do so, some other tasks must be halted to create overall efficiency and to reduce the likelihood that tasks call on the same resource. This metaphor makes literal the substitution between cognitive and computational systems where simultaneity is simulated as a process of prioritization. This efficiency strategy is structurally similar in both threaded cognition and computational multitasking, as outlined earlier. In fact, Lila Mae must stop vision in order to see internal understandings of the vibrations, for instance, and this then reduces interference because “[i]ntuitively, it seems clear why some tasks interfere with each other, and some do not: the more overlap in cognitive constructs between tasks, the more interference” (Borst, Taatgen, and van Rijn 2010, 363). Thus, Lila Mae’s vision must be shut off by closing her eyes so that her internal vision can see more efficiently. For her intuition as a Black woman to be centered, the noise of the white building governor’s breathing must be ignored. This blocking out is also a displacement: her socially prescribed task is to diagnose the status of the elevator she’s inspecting from within a system of disenfranchisement, as she is only one of two Black people in the corps and the only Black woman, which is often remarked by Lila Mae and the other characters. The race condition (time-based task management) of accessing the resource of being heard is

heightened by the race condition (social situatedness) Lila Mae experiences as a Black woman being treated condescendingly by a white man. As a practitioner of Intuitionism, her discipline is also considered less professional despite never being wrong. In shifting attention from the governor's breathing, she is also shifting away from attending to the needs of the white person who requires her validation on his elevator but insists on determining without expertise whether her methods are valid or not. Additionally, she is conscious of the fact that many of the Black and qualified candidates for elevator inspector are not actually employed in the field despite being competent. All this history is carried into each moment of the encounter, even though much of this exposition is revealed in later passages. This is a reality that she lives as not only part of the litany of violence she is subject to in her work life and personal life but also in congruence with her experience of history. Desirée H. Melton describes her experience, as a "Black American woman," of encountering these conflicting time frames:

For those of us who, as a people, carry our own present experiences with racism and our ancestors' past experiences of racism in our bodies, the experience of living in time is warped. The lived, embodied reality leaves us subject to another kind of time altogether. Far from being neutral or indifferent, this kind of time mocks the neat boundaries we attempt to place on history, collapsing them into one another. (Melton 2021)

For Melton and, as described by the narrator, for Lila Mae, the warping of time at the level of the distribution of cognitive load calls attention to the ways that living as a Black woman implicitly means constant encounters with both historical and contemporary forms of racism. The warping of time also calls attention to the fact that this history resists the imposition of so-called empirical orders of the kind that "a minute is 60 seconds," or that slavery and racial discrimination are things that Black people should be "getting over," as Calvin Warren writes (2016, 55). The Intuitionist reallocation of cognitive resources and the idling of processes according to a hierarchy of immediacy practiced by Lila in this scene are substantiation of the way that delay changes from contextual and experiential notions of time to those that Ulfried Reichardt characterizes as waiting. Reichardt, in reference to Michael Hanchard's work, states that waiting is the "decisive factor through which African Americans' access to time had been severely limited" (2000, 475) and it is part of a series of limitations that are imposed by a racialized social order of whiteness. Reordering cognitive tasks, then, involves the selective delay of some tasks to prioritize others, in deference to the white logics of the state. This form of delay is both liberatory and evidence of the oppressive canonization of Western time. It is liberatory in the sense that Lila Mae can choose to block out her dismissive white client as an emissary of the state, but it is also oppressive as the motivation to block him out is not for self-actualization, but aimed at being of service to the state, of which the client's racism is a substitution for in this ideological configuration. Thus, in having to delay vision to complete the job, Lila Mae must assume temporary and contradictory positions that oscillate between

liberation (she is empowered to choose what to pay attention to) and domination (she must prioritize the needs of the client in deference to the power relations as dictated by her profession).

Such general mental functioning can also be considered in computational terms if we consider the description of an Intuitionist inspector as presented very early in the novel when Lila Mae inspects the elevator at 125 Walker. Lila Mae's encounter with the elevator's superintendent initially did not seem to require any I/O process. When it comes to the use of audio/visual peripheral devices in their human-to-human interaction, Lila Mae "doesn't know what to do with her eyes," just like the man "doesn't bother to look" at her badge. The superintendent's "lips arch up toward his nose" as the only signal of acknowledgment of Lila Mae's presence, and, in her own turn, she repeatedly "does not answer him." However, when the inspection begins, the tactile peripheral device is immediately activated and gets Lila Mae's mind (her metaphorical CPU) completely occupied. In Whitehead's suggestive literary prose, the diagnosis process consists only of the protagonist's leaning "against the dorsal wall of the elevator" and capturing the vibrations "idling in her back." These sensor-responsive data are merely translated into mechanical processing by her monitoring system (her mind): "an aqua-blue cone"; "a red spike circling around the blue cone," and as the elevator moves, "an orange octagon cartwheels into her mind's frame" while "cubes and parallelograms emerge." It is also interesting to notice that for the modern reader, such a description cannot but appear as strikingly resemblant to the activation of a screen saver on a modern computer monitor, often indicating that the computer processor is de facto idle. At some point, one of the visual elements is eventually selected as a meaningful indicator: "the octagon," which "ricochets into the foreground, famished for attention." From this description, the idea that we get of a mysterious intuition, as it were, is none other than a mere systemic process that operates by first shutting out peripheral devices ("she shuts out the sound of the super's breathing") and second by translating sensorial information into machine-readable data (quite tellingly, for Lila Mae it's geometrical forms, as Intuitionism "depends on how your brain works"), and lastly, by selecting the one element that "disrupt[s] the proceedings." The only surprising element, at this point, is just that the process does not seem to be iterative – that is, Lila Mae's CPU does not seem to require further double-checking for the diagnosis to be confirmed. As we read in the book, her outcome seems to be based on previously archived data: "She knows what it is" and, therefore, there is "[n]o need to continue" (1-6).

### The (in)efficiency of the human element

As referenced earlier, narrative time in the novel sometimes emulates the computer-based work of multitasking. On the one hand, the two levels of past and present seem to operate with the same logic: a monitor system (i.e., Operating System) seems to supervise the processes



that seem to need priority. On the other hand, it seems that Lila Mae's CPU-like mind needs to set aside time to perform preliminary processing before the current situation can be adequately addressed. It seems as if her mind, although fascinated and attracted by the possibilities of intuition, still works according to a rational pre-processing typical of time-sharing computer systems (virtual multitasking). The same happens even when she finally detects the presence of the joke as a paratextual element of Fulton's work. The novel suggests that the whole scholarly enterprise initiated by Fulton might be an attempt to make fun of the elevator repair intelligentsia. Mrs. Rogers, Fulton's maid, hints at that possibility in a conversation with Lila Mae. The delay in detecting and processing this bit of information on Lila Mae's part indicates the methods by which she has been prioritizing information throughout the novel. In fact, towards the end of the novel, Lila Mae feels the need to go back to Mrs. Rogers and double-check to establish it as certain: "She parks. She closes the doors of the sedan. It takes a minute for Mrs. Rogers to answer her knock. Lila Mae says to the old woman, 'He was joking, right? About Intuitionism. It was all a big joke'" (232). This realization unlocks a new thread of processes that she embarks on only after resolving the task of determining Fulton's intentions.

Virtually unable to pre-process and activate a peripheral response to parse Fulton's joke, Lila Mae is described as determined to engage in the activity of scholarly writing at the end of the book, which is only described as the ideal third volume of Fulton's project. Her final goal is to transform the world by means of her academic work. The promise of the novel is the production of a new kind of scholarship with revolutionary goals. A new technology-based (elevator-based) humanism that, standing to Lila Mae's embodiment, seems to be still operating in algorithmic CPU-driven mode. In contemporary academia, digital humanities (DH), as a welcome regeneration of humanistic studies, is promising to transform knowledge about the human as we know it, at least in terms of its scale. If the distinctive human(ist) feature is our innate gift of asking questions, then DH is offering the advent of an era in which human beings might be able to ask questions at a different scale. Many contributions in the fields of digital humanities hinge on the disciplinary promise to overcome – just like for the history of computing as outlined above – not so much human intelligence but time limitations in human life. The abstract models of distant reading, cultural analytics, or topic modeling as humanities practices are supposed to bypass the amount of time human-based reading would require for scholars to notice the same patterns' reoccurrences in such large collections of works. As Franco Moretti remarks, "a canon of two hundred novels, for instance, sounds very large for nineteenth-century Britain [...] but it is still less than one per cent of the novels that were actually published [...] and close reading won't help here" (2007, 4). Algorithm-based textual processing, in Moretti's view, would supposedly offer a magnified lens on the history of human literary artifacts. Yet, as Whitehead's novel seems to suggest, the question needs to remain ultimately focused on human nature rather than on the scale of the collections of objects of

study, as human nature would hopefully remain the focus of any kind of digital humanism we might develop. The computational, in its privileging the large-scale processing of quantity of information unimaginable for the human cognitive capabilities, ends up leaving out precisely what remains fundamentally human about human beings: the ineffable, the heuristic, the *ad absurdum* conception, and ultimately the cultural. A joke, within the large-scale quantitative analyses of big data, would be inevitably lost. Lila Mae, in using intuition as described in Whitehead's novel, still proves incapable of mastering the same non-rational processes.

As Jeffrey Allen Tucker remarks, when reporting Fulton's housekeeper's words about the content of Fulton's papers – “[Fulton] was making a joke of their entire way of life, and they couldn't see” (Whitehead 2000, 240) – the predominantly white establishment was not capable of understanding the joke. As Tucker observes, “they could not get the joke without an openness to meaning through indirection and a sensitivity to Fulton's double-voiced prose” (2010, 150). The problem of decoding Fulton's text, therefore, becomes reconfigured from a problem of ‘what to read’ (the missing papers as a metonymy for the missing part of the corpus highlighted by Moretti in the case of 19th-century British literature) into a problem of ‘how’ to read the existing materials – that is, how to engage in the reading of Fulton's *Theoretical Elevators* in the first place. Lila Mae, then, although linked to Fulton by race and fascination for Intuitionism, seems unable to read the flickering signification of the text. Such an inability is connected with her different relationship to Blackness when compared to Fulton's. Because Fulton chooses to pass as white, the original joke can retain its critical power, but since Lila Mae does not pass as white, her reception of the joke gets downplayed by the prioritization of other processes according to her Intuitionist mode of thinking as we described above. The contrast of these two race positions offers a representation of what Kali Tal highlights as the permanent historical dilemma of Black people. As she observes: “the struggles of African Americans is precisely the struggle to integrate identity and multiplicity, a perfect model of the ‘postmodern’ condition – except it predates postmodernism by hundreds of years” (Tal 1996). The difficulty of combining identity and multiplicity into a simultaneous expression at the level of racial identity is, in our reading of Whitehead's novel, replicated in the difficulty of combining intuition and hierarchical processes at the level of multitasking. The fact that she is unprepared to parse or process the joke element, however, is also significant in other ways. The missing bit of information enters the stage and does not allow for itself to be processed, let alone pre-processed. After all, a joke represents a mode in which the human mind disrupts chronocentrism, as it does not allocate prescribed chunks of time to specific tasks or subtasks/subroutines when the human mind gets to the ‘eureka’ moment typical of understanding the joke. Getting the joke follows practices for which there are specific rules defined by their very enaction. You can either get or not get a joke. And no amount of time-rearrangement efficiency will help.

## Conclusion

Whitehead in *The Intuitionist* offers cognitive and computational perspectives on Toni Morrison's problem of how to be, as a Black writer, simultaneously racially situated but not racially constrained (Morrison 2010). The problem of inhabiting an identity that is racialized but not oppressed by race is evident throughout Lila Mae's computational-cognitive journey. From the epistemological point of view, while the elevator becomes the metaphor of static/temporal vertical movement (representing a third dimension of space – height – in which human beings have only limited mobility), Lila Mae's specific operational logic becomes a reconceptualization of time rearrangement (manifesting in a fourth dimension in which humans have no reverse mobility, for example), while also emphasizing how much of this time is ordered by subjective delay. The novel's representation can be reread as prophetic from one last point of view: the epistemic possibilities of Whitehead's protagonist are today virtually emulated by computational multitasking and yet, at the same time, ideologically denied by computational culture. This stems from the fact that the moment of intuition, which is itself an approximation of simultaneity through the conceptual jump, is not one that can be readily reproduced without the associated delay that is required for cognitive tasks. Within this contradiction that emerges between the desire for novel ideas and the time and resources required to produce them, the instability in emulating computational thinking stands as a powerful subversion of an administrative history of discrimination (and racism) that in Western culture has often privileged the epistemological primacy of "reason versus tradition, science versus emotion, evidence versus intuition" (Mansfield 2000, 120) and so on. Despite the internalization of these themes, Lila Mae's second elevation may manifest the same way all the other social constructions in the novel have since her third volume in the *Theoretical Elevators* series has the same potential to be taken seriously as the first two volumes are in the novel. Digital humanities and our digital culture as a whole might find themselves in a sympathetic position, given that treatment of data is often construed as more rigorous than the ineffable dimensions of language as they have been long addressed by more traditional studies of the literary.

In "challeng[ing] us to take an extant and dull object of technology (the elevator) and completely reimagine its form and function" (Knight 2015, 30), Whitehead's novel might appear as a tale too evocatively old-fashioned for our current era of big data, supercomputing, and AI, and yet too prescient for the era of networked machines and http:// protocols of the time of its publication, a time in dire need of elaborating a digital humanism able to accompany technological changes in the humanistic reflection. Yet, as it emerges from our analysis of the convergence of cognitive and computational dynamics represented in the novel, Whitehead's book can be seen as partaking in a larger paradigmatic effort to correct the tendency of recent postmodernist, posthumanist, transhumanist, and digital studies theories to reconfigure the notion of 'humanism' in the service of machinic-oriented normative epistemological values.

## Notes

<sup>1</sup> The term “solutionism” is used by Evgeny Morozov, who discusses “technological solutionism” as the tendency to recast complex phenomena in society as problems with “definite and computable solutions” so that the fitting algorithm can be arranged for (Morozov 2013, 5).

<sup>2</sup> David Arthur Holloway, in one of the few literary studies devoted to the identification of the prophetic novel as a modern genre, offers an interesting remark for the purposes of this study: “A prophetic novel is not set ‘Nowhere’ as a utopia. It occupies a specific place on the earth. What is distorted in these novels is the time element” (Holloway 1964, 2).

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