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A CLOSE READING OF THE IMITATION GAME

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Abstract: This essay delves into Alan Turing's "Computing Machinery and Intelligence", examining the entrenched binary opposition between human and machine. Through deconstruction, the essay seeks to reveal and analyze the deeper insights inherent in Turing's work. Of particular significance is Turing's equivalence between language and thought, particularly in the context of the imitation game. Within the grammatological realm of Turing's text, writing and mechanism are nearly interchangeable, representing the intersection of humans and machines. By adopting a deconstructive perspective, the essay illuminates the philosophical origins of the artificial intelligence debates and their implications for our understanding of human existence.

Keywords: Turing, Imitation Game, Artificial Intelligence, Deconstruction, Derrida

TAKLİT OYUNUNUN YAKIN BİR OKUMASI

Öz: Bu çalışma, Alan Turing'in "Computing Machinery and Intelligence" başlıklı makalesinin yakın okumasını sunarak insan ve makine arasındaki ikili karşıtlığı irdeliyor. Bir dekonstrüksiyon stratejisi yürüterek, Turing'in çalışmasına içkin olan daha derin kavrayışları ortaya çıkarmaya ve analiz etmeye çalışıyor. Turing'in taklit oyunu aracılığıyla dil ve düşünce arasında tesis ettiği denklik bilhassa önemlidir. Turing'in metninin gramatolojik zemininde, yazı ve mekanizma neredeyse birbirinin yerine kullanılabilir ve insan ile makine kesişimini temsil eder. Dekonstrüktif bir bakış açısı benimseyen makale, yapay zeka tartışmalarının felsefi kökenlerini ve bunların insan varoluşunu anlayışımız üzerindeki etkilerini aydınlatıyor.

Anahtar Kelimeler: Turing, Taklit Oyunu, Yapay Zeka, Dekonstrüksiyon, Derrida

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“A deepity is a proposition that seems both important and true—and profound—but that achieves this effect by being ambiguous. On one reading it is manifestly false, but it would be earth-shaking if it were true; on the other reading it is true but trivial. The unwary listener picks up the glimmer of truth from the second reading, and the devastating importance from the first reading, and thinks, Wow!” (Dennett, 2013, 93)

1. Introduction

This essay proposes a deconstructive traversal across the intellectual topography of Alan Turing's "Computing Machinery and Intelligence," published in 1950. Our objective lies in unveiling and deconstructing deeply embedded binary oppositions, such as human versus machine and natural versus artificial. In his work titled "Deconstruction and Technology," Timothy Clark writes, "The name of Turing's test, 'the imitation game,' is one that must strike any student of deconstruction" (Clark, 238) and actually invites the reader to deconstruct this text. In this sense, this study can be understood as an answer to Clark's invitation, in its own way. Another text that deconstructs Turing's work is "It is a beautiful experiment': Queer(y)ing the work of Alan Turing" by G. S. Voss (Voss, 2013). As the title suggests, this work takes a different approach from the one we present here. However, given Turing's well-known sexual preferences, Voss's work does not go in the wrong direction at all. Of course, Turing's play designed through gender brings up the issue of gender on the level of immanence.

In Turing's text, we will illustrate how the game – imitation game – constructed by means of teleprinters creates an ideal grammatological foundation for such deconstruction. According to Derrida, the concept of writing is no longer limited to being a secondary or derivative form of communication that merely represents or reflects spoken language. Instead, writing is a constitutive element of language itself, which means that there is no pure or unmediated form of human communication (Derrida, 1997, p. 6-7). As he puts it, writing "comprehends language" in all senses of the word, indicating that writing is not a mere supplement or addition to language, but an integral part of its very structure (Derrida, 1997, p. 6-7). Therefore, in the context of imitation game, we need to interrogate the function of writing and its relationship with language more closely, in light of Derrida's insights about the constitutive role of writing in human communication: in the context of imitation game, as will be showed, communication means thinking. Our aspiration is to bring to light the implicit significations that suffuse Turing's discourse, whilst also illuminating the transformative potential of a deconstructive reading to grasp the essence of intelligence and its manifestations – that's writing itself.

2. Deconstruction as a Reading Strategy

Deconstruction should be viewed as a strategy, not a method. Not a method, because there is no predetermined set of procedures, it should always be tailored to the object under examination. Nevertheless, deconstruction is undoubtedly a strategy since we approach the text with a specific goal in mind. The mechanics of deconstruction are elaborated by Jacques Derrida in his work *Dissemination*, as he states:

Deconstruction involves an indispensable phase of reversal [i.e., first-level deconstruction]. To remain content with reversal is of course to operate within the immanence of the system to be destroyed. But to sit back . . . and take an attitude of neutralizing indifference with respect to the classical oppositions would be to give free rein to the existing forces that effectively and historically dominate the field. It would be, for not having seized the means to intervene, to confirm the established equilibrium (Derrida, 1981, 76).

An indispensable phase of reversal, which naturally arises from close reading, is to identify the binary oppositions and hierarchies present in the text, in order to reveal a deeper meaning that may be overlooked at first glance. We will show that the indispensable phase of reversal is already implicitly contained within "Computing Machinery and Intelligence.". It is worth noting that the expression of "the system to be destroyed" itself carries an aggressive connotation, and although this expression may seem harsh, the goal of deconstruction is ultimately to liberate the text. It is possible to view certain violent human gestures as expressions of love, and similarly, deconstruction is a way of loving the text by freeing it from limiting structures.

Deconstruction can be understood as an attempt to liberate the text, and sometimes, even violent gestures can be expressions of love at their core. This issue could be further explored from a psychoanalytic perspective, but for the sake of analogy, it is sufficient to note that we do not bite an apple because we hate it; we do so because we love it. Eating an apple is not a form of destruction, but rather, a way of incorporating it into ourselves. We could collect libraries filled with collections of apples, but none of them would be as personal as the one we have actually consumed. There is no one way to approach an apple; collectors might provide historically significant answers, but the truth is that someone who eats an apple simply takes it in their hand, looks at it, and intuitively knows where to bite.

It is important to acknowledge that the goal of liberation may raise questions about who or what we are seeking liberation from. One might ask, are we attempting to liberate the text from Turing? When it comes to a deconstructive strategy, this is also possible. However, in this example, our intention is not to liberate the text from Turing. Rather, we aim to use deconstruction to reveal deeper meanings within the text.

3. Imitation Game

While Turing's work is not the first work historically on the topic, it is not wrong to place it in a foundational position in the debates on artificial intelligence. Turing's work may be relatively old, it still provides a timely starting point for understanding the philosophical underpinnings of the artificial intelligence (AI) discourse because of its foundational position.

The article begins with the sentence "I propose to consider the question, 'Can machines think?'" (Turing, 1950, 433) Of course, this question invites a conceptual preparation about what a machine and thinking are, but Turing designs a model in which a philosopher can illustrate the issue instead of making a conceptual preparation. On this problematic axis, Turing manages to develop an intelligent framework that has survived to this day and even surpassed its contemporaries. The depth of his philosophical research is evident in the way he transcends the traditional boundaries of the AI discourse.

Turing introduces a game called "the imitation game", which serves as a thought experiment. This three-player game involves an interviewer, a woman, and a man, with the gender of the interviewer being irrelevant. The interviewer's job is to guess the gender of the interviewee, but the game is complicated by having each player in a separate room and corresponding via teleprinters. This creates a scenario where the interviewer must try to guess the gender of the person, they are chatting with without seeing their face. The woman and the man are free to be as misleading as they wish in their answers. Turing designs this game as a model that serves the question "Can machines think?" Turing then adapts this game as a thought experiment to apply it to machines. If a machine can successfully pass as human in this game, it becomes meaningless to say that the machine cannot think. This point is important because it implies something different than saying that the machine can think. The Turing test does not necessarily question whether the machine truly thinks; rather, Turing's article aims to challenge the concept of "real thinking" in a sense. It is in this context, Turing refers to Professor Jefferson's Lister Oration for 1949. Jefferson argued that machines cannot be considered equal to the human brain until they are capable of writing poetry or music based on emotions and thoughts, rather than chance. According to Turing, Jefferson argues that machines cannot truly experience emotions such as pleasure or pain, be influenced by flattery or mistakes, or have emotions related to sex or desires (Turing, 1950, 445). Turing responds in the following manner:

This argument appears to be a denial of the validity of our test. According to the most extreme form of this view the only way by which one could be sure that machine thinks is to be the machine and to feel oneself thinking. One could then describe these feelings to the world, but of course no one would be justified in taking any notice. Likewise according to this view the only way to know that a man thinks is to be that particular man. It is in fact the solipsist point of view. It may be the most logical view to hold but it makes communication of ideas difficult. A is liable to

believe "A thinks but B does not" whilst B believes "B thinks but A does not." instead of arguing continually over this point it is usual to have the polite convention that everyone thinks (Turing, 1950, 445).

This brief passage carries two conspicuous implications. The first, which also constitutes the core thesis of Turing's work, is that thought can be reduced to language. The second implication reminds us of Descartes' methodological skepticism and his solipsism. As a reminder, Descartes doubted everything, including himself, and based on his certain knowledge of his own existence, he posited the famous claim "I am thinking, therefore I exist." (Descartes, 2006, 28) However, he could not express the existence of anything other than himself with the same level of certainty, leading to solipsism – the absolute loneliness stuck in its own thought. Turing now argues that if we want to speak philosophically with absolute certainty, we can only be sure of ourselves thinking, but it is more reasonable – and polite – to assume that others can think as well when they speak. This polite attitude cannot be shown within Descartes' methodological doubt.

However, it may be possible to take this one step further and ask whether the subject of the proposition "I am thinking, therefore I exist" is really thinking, whatever "really" thinking means in this context. In other words, we may not be sure of whether we "really" think ourselves. Can we really be sure that we are doing more than just saying? This leads to Turing's proposal that the proposition might be in the form of "I am performing language, therefore I exist," instead of "I am thinking, therefore I exist." "At this point, it should be noted that we are considering the phenomenon of "performing language" as a literary event within the framework of Turing's imitation game. Moreover, we take Derrida's statement "In all senses of the word, writing thus comprehends language" (Derrida, 1997, 7) as a premise, which we do not need to discuss further in this context.

If one tries to approach the matter by distinguishing between thought and language, all that becomes apparent is the mere performance of language. Descartes might object to this proposal, stating that the proposition "I am performing language" could only mean "I am thinking that I am performing language." This objection implies that performing language is also an act of thinking, thereby returning to the "I am thinking, therefore I exist" proposition. Turing might respond that there cannot be a non-linguistic expression of this proposition: "Dear Descartes, even when you say 'I am thinking that I am performing language', you are doing nothing more than performing language." This cycle of objections indicates that the equivalence Turing has established between language and thought is too strong to be easily overlooked.

Metaphysically, the situation suggests that the phenomenon of language cannot be placed in an instrumental position for thinking. In every situation where we think thought exists, we have to include a linguistic element. If we tend to understand language as a tool of thought, language will always prevail. It is crucial to note that the

phenomenon of language should be understood broadly, and the discursive cannot be reduced to merely what is said.

4. Discourse of 4' 33" as a Gesture or Statement

The performance of John Cage known as 4'33" provides an intriguing case for exploring the limits of language and the discursive. In this performance, Cage tasked Pianist David Tudor with not playing his piano for precisely four minutes and thirty-three seconds. Despite the absence of any musical notes, the performance cannot be understood as a mere silence, for the random sounds that arise within the concert hall during this time fill the performance with sound. It appears that Cage's intention was not to create absolute silence, but rather to frame the random sounds of the moment that he perceives as contemporary music (Cage, 1973, 44:161). The issue at hand can be read in parallel with Derrida's treatment of the 'tension between gesture and statement' in Saussure's theory (Derrida, 1997, 29-30). In this sense, Cage's performance can be interpreted as a counter-argument against the limitations of Saussure's linguistic theory, which he conveyed through the use of phonetic and Greek alphabets (Derrida, 1997, 33).

To consider the ontological status of the silence referred to in the hypothetical noteless piece handed to Tudor, we must turn to the framework of the performance itself, which is language. In this ontology, where language is the medium of performance, the resulting performance can only be understood at the limit of language's possibilities. Silence, therefore, has meaning only within the context of language.

Cage's performance of silence can be seen as a meditation on the limits of language and the discursive. In parallel with Lacan's observation that "there is no speech without a reply, even if it is met only with silence" (Lacan, 2005, 30), Cage's performance can be interpreted as a silent response. While it does not say anything in a literal sense, it contains a certain kind of discourse by positioning itself precisely on the border of the spoken word. We must accept that what is not said in the ontology of language can also be discursive. This meaningful silence can occur, for example, in a dialogue between two people or in a moment of silence that a Buddhist monk catches in his mind during meditation.

In conclusion, the performance of 4'33" by John Cage provides a provocative case for exploring the limits of language and the discursive. It highlights the fact that language cannot be reduced to what is said, and that what is not said can also be discursive. The silence in Cage's performance is not mere absence, but a meaningful presence that resonates within the framework of language.

5. Function of Writing

If one is to accept the plausibility of Turing's equivalence between language and thought as established through the imitation game, it becomes necessary to test this hypothesis

by incorporating different aspects of thinking. All other thinking functions, even extremely concrete ones such as problem solving, reasoning, adaptation to new contexts, and memory, can already be clearly translated into language. While philosophically problematic issues such as creativity and imagination require further examination, language remains a medium through which we can identify them.

Ultimately, Turing believed that the machine could successfully play the imitation game, thereby convincing us of its human-like intelligence. The first implication of the game is that, to the extent that human thought can be written down, machines can think as well. The second implication is that entities capable of using language are also capable of thinking.

While it is important to acknowledge the question of the extent to which human thought can be put into writing, such a question cannot be answered solely by the author. Rather, it invites the inclusion of the reader and a deconstruction strategy that blurs the boundary between author and reader. In fact, such a deconstructive reading would surprisingly point to the logical priority of reading over writing.

The conclusion that “machines can think to the extent that human thought can be written down” leads us to consider the function of the text in the context of the machine-human duality. Turing's approach to this discussion can be understood as a deconstructive intervention in an anachronistic expression. The imitation game, as devised by Turing, does not merely use writing to obscure the two sides of the duality; rather, the ambiguity is its obvious purpose. Turing's success in this work lies not in his prediction that the machine can act like a human, but in his strong argument that man can already be understood as a kind of machine.

In this context, the relationship between artificial intelligence and language must be considered. Although the chat responses appearing on the screen may seem like sentences, they are actually the result of electronic processes. When we ask a question about A.I., what is the implication that the answer refers to an intangible phenomenon like language? Shouldn't the answer include electricity and semiconductor circuits? Even the banal perspective that suggests that both computers and our brains are powered by electricity cannot be ignored.

Turing discusses these questions in his article by bringing up the artificial intelligence model developed by Babbage in the 1800s, which he calls the “analytical engine”. Babbage's machine works entirely with mechanical wheels and cards, not electricity (Bromley, 1982, 198). Turing describes the design of artificial intelligence as an electric vehicle as a purely contingent phenomenon. It can be likened to mathematical analogies of function. (Turing, 1950, 439), or even a book written entirely on paper, with pages containing the memory and instructions on how to perform operations. Of course, such a book would be physically unusually thick.

6. Turing's Treatise on Human Intelligence

Let us now turn to Turing's treatment of human intelligence and consider it in light of the previous illustration. Following the introduction of his imitation game, which he designed on a grammatological ground via teleprinters, Turing begins to reflect on how to construct a machine capable of winning this game. In his own words:

Instead of trying to produce a programme to simulate the adult mind, why not rather try to produce one which simulates the child's? If this were then subjected to an appropriate course of education one would obtain the adult brain (Turing, 1950, 456).

This problem remains a central concern within the field of machine learning to this day. Turing goes on to suggest that:

Presumably the child brain is something like a notebook as one buys it from the stationer's. Rather little mechanism, and lots of blank sheets (Turing, 1950, 456).

Indeed, if we examine an empty notebook taken from a stationery store, we can think of it as possessing a single mechanism. This mechanism allows us to model a page layout structure that is a spatial structure as if it had a temporal extension. The order of the pages, I wish to emphasize, is in fact a purely spatial ordering; but when we read the notebook, we interpret this spatial ordering as a temporal ordering. For instance, we assume that the first page comes before the hundredth page, and of course we infer that the hundred and first page comes after the hundredth page. I say 'infer' because we need not read it that way. In fact, when it comes to artificial intelligence, such a method of reading will not suffice. That is to say, if the second page always comes after the first page, it means that the machine is constantly repeating itself, which is not what we would consider to be a sign of intelligence. Consequently, our inquiry into the book should occasionally lead us from the first page directly to the hundredth page and then back to the first page. Naturally, we assume that pre-made directives play a role in this sequence.

Turing's reflections culminate in a series of determinations that allow us to situate this discussion on a strictly grammatological ground, once we pair machine learning and child learning with the analogy of a blank notebook taken from a stationer's:

(Mechanism and writing are from our point of view almost synonymous.) Our hope is that there is so little mechanism in the child brain that something like it can be easily programmed. The amount of work in the education we can assume, as a first approximation, to be much the same as for the human child (Turing, 1950, 456).

Turing's words seem to echo in Derrida's statement: "No one is allowed on these premises if he is afraid of machines and if he still believes that literature, and perhaps even thought, ought to exorcise the machine, the two having nothing to do with each other" (Derrida, 1981, 589). Indeed, this is the way in which the coupling of human and

machine takes place on the grammatological ground in the Turing's text. Turing's predictions, which he had made some time ago, were in a way completely accurate, claiming that by the end of the century machines would be able to accomplish this feat (Turing, 1950, 442; 455). And, in fact, theoretically, the machine has already achieved this long time ago. However, it is still not possible to say that machine learning has been entirely successful.

If we make an analogy to genetics – in the context of machine learning – what Turing proposed was to create a genetic core that would allow the machine to generate its genetic expression. But over time, with advances in the field of genetics, we have come to see that DNA is only one aspect of our genetic existence, and epigenetic factors have come to the forefront in 1942 by Conrad H. Waddington, a British developmental biologist (Sinclair, 2019, 57). The phenomenon, which we can understand as the habitat of DNA, has been noticed. Biologists have observed that there is another component that is at least as important as DNA in the emergence of gene expressions they refer to as phenotypes. In other words, it is insufficient to consider the behavior of DNA in its relationship with the environment that reveals the phenotype only genetically. An epigenetic approach is necessary. For example, we often hear that this disease or this characteristic has arisen genetically. However, molecular biologists today know that this issue is not so simple, and that this trait or disease arises or is suppressed by a certain epigenetic mediation. In other words, DNA only creates a universe of possibilities, and epigenetic mediation determines how it will become actual, that is, with which gene expression and what kind of phenotype it will appear. Sinclair explains this issue using an analogy of the piano as DNA and its relation with the pianist as the epigenome (Sinclair, 2019, 81).

Returning to the discussion of artificial intelligence, this means that the emergence of human-level artificial intelligence cannot be possible by simply writing the right codes for the machine. It seems that machine learning will only be possible by positioning it on an ontological ground - an epigenetic habitat - that will enable it to learn at the human level. This epigenetic habitat, of course, must be some kind of virtual reality, but the question of what kind of virtual reality the machine can learn in is still being dealt with today. Of course, some may think that if we put the machine in the same reality that we are in, it will learn some things as it sticks around for a while. Unfortunately, things don't work that way. The reality that we are thrown into and learn by walking around is as much a virtual reality as the one envisioned to be put inside the machine. And, in fact, being able to identify this virtual structure that we call culture – from a structuralist perspective – is important for our understanding of what kind of machine a human is.

Designing a virtual space that I have been discussing takes precedence in studies that aim to achieve human-level intelligence. While human-level intelligence is important in dealing with human issues, OpenAI's ChatGpt, for example, has no worries about convincing that you are chatting with a human. She is referring to herself as an "artificial intelligence language model". But we are convinced that AI is human in many other

cases – texts we read, visuals we see, and even in many audio works – we think we are dealing with a human product. In a sense, we are being deceived. I will make this determination and bypass this dimension of the issue, as the ethical dimension of the issue deserves to be addressed in another framework. I would like to address the issue within the context of human existence in the following chapter.

7. Psychic Apparatus as a Machine

One might ask what we are trying to do by putting Turing's text on a grammatological ground. And what is our aim in deconstructing the dichotomy between human and machine?

At this point, I would like to return to the beginning of the article – Dennett epigraph – in order to indirectly yet genuinely answer the question. In his work titled “GPT's Very Inhuman Mind”, Reuben Cohn-Gordon offers a clever observation precisely in this context:

Once armed with the idea of a deepity, you see them everywhere in the discourse about modern AI. There is the claim that “large language models are mere stochastic parrots,” a sublime example of a deepity. The true but uninteresting meaning is that large language models (like ChatGPT) produce words as a (probabilistic) function of previous words and other data. Well of course! You could say the same about a person, just like you could describe them as a collection of atoms (Cohn-Gordon, 2023).

If Turing's deconstructively pointed assertion that the human we reference in a deconstructive reading is itself a type of machine is true, then the prime implication is that man can interfere with himself as if he were a machine – and may be even as a stochastic parrot. Cohn-Gordon discusses this issue with the distinction of Echo – with a capital letter – and echo (Cohn-Gordon, 2023). On one hand, the stochastic parrot merely creates an echo, but from an evolutionary perspective, this echo undergoes metamorphoses over thousands of years, eventually leading to the emergence of structure. This structure can be understood as symbolic order or language, from a structuralist perspective. The question here is actually about how many different mouths an echo passes through before it becomes an Echo.

Our position, taken from this perspective, can be demonstrated through Turing's notebook analogy. This is not simply a matter of opening a fresh page in the notebook you purchased at the stationery, as per Turing's analogy. Eventually, new blank pages will undoubtedly emerge, provided that we have time. However, I would never classify myself as a writer, for I am first and foremost a reader. And when I suggest you read your own notebook, I do not mean to revisit the same story you keep telling yourself.

Reconsidering the past in such a way presents an opportunity to reread it and rewrite it, in a sense. In fact, this is the most fundamental psychotherapeutic strategy. In a

psychoanalytic process, for instance, a traumatic event from the past is revisited repeatedly, and the original experience undergoes a slight transformation with each treatment. As Lacan writes in *Écrits*, 'If this event was recognized as being the cause of the symptom, it was because the putting into words of the event (in the patient's "stories") determined the lifting of the symptom' (Lacan, 2005, 35). Naturally, the client insists on confronting the same story in the same way, since that is the very structural mechanism that traumatizes a trauma. However, much of the time, this page begins to alter in these reiterated discussions; this transformation is not solely attributable to the deconstructive capacity of the therapist. Here, therapy operates with an ontological necessity, for the traumatic event can no longer persist as it occurred in the past, but is transformed into an object that has been discussed repeatedly, associated with countless other matters that appear entirely unrelated. The traumatic event is no longer merely a story we tell ourselves repeatedly in the same way; it becomes an occurrence that we narrate to someone else. The story you keep telling yourself can only maintain a certain kind of comprehension in terms of the sequence of events, pages, words, and letters. On the other hand, it is conceivable to reshape the past with a deconstructive reading strategy.

8. Conclusion

This article serves a dual purpose of not only addressing Turing's article but also presenting a methodological mediation. This duality is immanent to Turing's work, as he poses the question of the machine to human beings through the model he created with the imitation game. This article aims to genuinely point out this possible maneuver while acknowledging its limitations. Moreover, the construction dynamics of the machine called human invite philosophical, psychoanalytic, and – from an evolutionary perspective – even paleontological investigations. However, the deconstructive perspective presented here is important for understanding the philosophical origins of the artificial intelligence debates – beyond conspiracy theories – and for grasping the real implications of this issue in terms of our own human existence. It can be argued that becoming an Echo is only possible through careful handling and analysis of the echo – perhaps through a deconstruction of it, as suggested here.

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