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Research article

Remarks on Gustafsson’s ‘The Machines’ – Hermeneutics of Machines

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Abstract

This paper offers some remarks on Lars Gustafsson’s poem ‘The Machines’ and its accompanying commentary from a critical hermeneutic point of view. Gustafsson seems to argue that machines acquire meaning only when decontextualized since they ‘stand out’, are ‘denaturalised’. Only then, they become an object of reflection and are thus in need of an interpretation. Furthermore, he seems to extend a cybernetic analogy to language, arguing that grammar is a generative machine that produces language. Through close reading, this paper reconstructs four theses from Gustafsson’s work: the acquired meaning of machines, the cybernetic human, grammar as a machine, and linguistic transparency. It then interrogates these theses through the lens of philosophical hermeneutics and argues that Gustafsson’s prioritisation of syntax offers a reductive view of both machines and language. By reintroducing the pragmatic and semantic dimensions, the paper contends that understanding a machine is not merely a syntactic operation but a hermeneutic practice similar to interpreting a text, where parts and whole inform each other given a specific context. The paper concludes that while Gustafsson’s mechanized worldview fruitfully opens ways of self-reflection, it risks an *Engführung*, a narrowing of our relation to the world and ourselves – that a thorough hermeneutic stance helps to avoid.

Keywords: Syntax; Pragmatics; Semantics; Hermeneutics; Philosophy of Technology; Cybernetics

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Научная статья

Комментарии к “Машинам” Густафссона – Герменевтика машин

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Аннотация

В данной статье представлены некоторые замечания по поводу стихотворения Ларса Густафссона “Машины” и сопровождающего его комментария с точки зрения критической герменевтики. Густафссон, по-видимому, утверждает, что машины обретают смысл только при деконтекстуализации, поскольку они “выделяются”, “денатурируются”. Только тогда они становятся объектом рефлексии и, следовательно, нуждаются в интерпретации. Более того, он, по-видимому, проводит кибернетическую аналогию с языком, утверждая, что грамматика – это порождающая машина, которая производит язык. Внимательно изучая работу, автор реконструирует четыре тезиса из работы Густафссона: приобретённый смысл машин, кибернетический человек, грамматика как машина и лингвистическая прозрачность. Затем анализ через призму философской герменевтики показывает, что приоритет синтаксиса, установленный Густафссоном, даёт редуктивный взгляд как на машины, так и на язык. Вновь вводя прагматические и семантические измерения, автор статьи утверждает, что понимание машины – это не просто синтаксическая операция, а герменевтическая практика, подобная интерпретации текста, где части и целое взаимодействуют друг с другом в определённом контексте. В статье делается вывод о том, что, хотя механизированное мировоззрение Густафссона плодотворно открывает пути для саморефлексии, оно чревато *Engführung*, сужением нашего отношения к миру и к себе, чего помогает избежать тщательная герменевтическая позиция.

Ключевые слова: Синтаксис; Прагматика; Семантика; Герменевтика; Философия техники; Кибернетика

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‘The Machines’ by Lars Gustafsson is a typical example of how mechanical construction and machines influence our understanding of the world and ourselves, as Gustafsson himself notes in his commentary on the poem (see also Kapp, 2015). In this work, he plays with associations drawn from cybernetic analogies of the human body and projects them onto language and logic. In what follows, I comment on some of the ideas expressed in both this poem and Gustafsson’s own remarks on it – without any claim of completeness or literary evaluation. Rather, I intend to point out certain conceptual ideas that may serve as starting points for further reflection. Before doing so, however, some clarification is needed. I will briefly reconstruct four core ideas from the poem and Gustafsson’s accompanying commentary, and then reflect on them. These remarks themselves can, in turn, serve as new starting points for further reflection on the topic.

The poem can be divided into two parts, separated by the emphasised line “Die Bergwerke im Harz Anno 1723.” Let me start with the first part. Gustafsson describes machines as being “homeless” if they are “outside where [they] exis[t].” By invoking various machines, he demonstrates the wide range of functions they can perform. However, whether one is able to identify a machine’s function depends on familiarity. Thus, any machine removed from its “everyday context” or which has become “curious and antiquated” is rendered homeless. A machine’s function is significant because it relates to its meaning. Two lines are central here to understand that:

“And then they become distinct, acquire meaning. / What do they mean? Nobody knows.”

At first glance, these lines appear contradictory: How can something acquire meaning, yet no one knows what that meaning is? If I understand him correctly, these lines require careful reading. Gustafsson seems to distinguish acquired meaning and ‘original’ meaning. A homeless machine only acquires meaning because it becomes distinct, it stands out. Only then do we begin to reflect on the machine and its purpose. In this way, it gains meaning for us, the observers. Present machines, on the other hand, do not stand out; they do not prompt reflection. They are seamlessly integrated into everyday life, become in some sense invisible. Therefore, acquired meaning arises only through reflection. It is attributed to the machine, in some sense. The ‘original’ meaning, in contrast, appears to be something else entirely, something we seemingly do not or cannot know. I will come back to this ‘original’ meaning later.

After sketching out acquired meaning, I can turn to the initial question: what is the connection between acquired meaning and function? In his own comments, Gustafsson notes that he is more interested in “*the machine-likeness of their appearance* than their various functions.” In other words, he is more interested in the ‘syntax’ than the ‘semantics’ of machines. Acquired meaning, then, involves attributing a function, such as entertainment or production, to a machine. But this act of attribution only happens when the machine is in some way ‘odd’.

The second part shifts attention to the machine-likeness of machines, their structure. Gustafsson describes humans as part of “La Grande Machine” which “drives all the cables.” Here, the machine becomes the subject, while humans are passively “hoisted and lowered” as its components, thereby giving primacy to the machine. The machine seems to act autonomously, almost as if alive. According to Gustafsson’s commentary, if I



understand his comment correctly, this picture evokes a particular “emotional state”: the eerie feeling that the machine is operating independently; “*it simulates life.*” This unease arises from the possibility that the simulation of life may not be limited to machines but might also apply to us humans. Put differently, our fear stems from the apparent indistinguishability between life and its simulation due to the possibility of mechanical replication.

From mechanical machines, Gustafsson turns to language, suggesting that not only our bodies but also our language and thoughts may be produced by a machine: grammar.¹ Drawing on Chomsky, he argues that grammar – or syntax – determines the structure of our language. It enables the construction of intelligible sentences and thereby making communication possible. In this sense, grammar is a kind of machine which produces meaningful language. Moreover, grammar operates autonomously: it is “thinking within us,” and we are merely the machines that articulate its output. This is because grammar and therefore language is just a linguistic structure which has many implicit implications that guide our way of using this structure:

the paradoxical independence with which words live and think in us, and how this objectivity of language links us to strange, distant and half-forgotten thought, to historical events long past, to attitudes that are alien to us.

There is, if you like, also an experience of the logical, of the mysterious in the fact that every sentence we utter has an infinite and ungraspable set of statements as a consequence, no matter whether we understand it or not, whether we wish it or not. (Gustafsson, 2025, p. 122).

This leads to Gustafsson’s conclusion that there is then “the possibility of perceiving ourselves as machines or as cybernetic devices by our own language and our own logic.” This idea is echoed in the poem’s final verse, which is a repetition of a previous verse. There, “Human beings” is replaced by “Words.” In this sense, grammar takes on “an aura of something objective, extra-human independence about them.” It persists even when the meanings of individual words are forgotten; just like a machine whose original function is forgotten.

Finally, and this is not directly expressed in the poem, Gustafsson believes that language is “transparent”: there is nothing more to be communicated than what is said. Our experiences are entirely exhausted in the language that expresses them. There is nothing ‘more’ to it. This view follows naturally from the cybernetic conception of the human and the mechanistic nature of grammar. If everything is mechanical, there is nothing that transcends the machine. Gustafsson concludes that the “tragic thing about humanity ... is that it does not have any secrets”. Everything boils down to simple

¹ Similar views on the ‘mechanisation’ of the mind can be found in Dupuy’s (2000) thoughts.



cybernetic explanations. Yet, paradoxically, this tragedy can also be seen as something unifying: a shared condition that binds us together in a community.²

What comes to the fore, then, are four ideas:

1. A machine acquires meaning only if taken out of its context and subjected to reflection. Only then the machine becomes meaningful. This acquired meaning is typically framed in terms of function. Only through decontextualizing, the machine-likeness of the machine become apparent so that its structure can be analysed.
2. Human biology can be described in cybernetic terms, raising the question of whether life is *sui generis* or merely mechanical.
3. Grammar is itself a machine, autonomously producing comprehensible language.
4. Language is transparent: it captures the entirety of human experience because of the mechanical nature of language and humanity.

I believe all four theses are related to philosophical hermeneutics. If analysed through a hermeneutic lens, they can be expanded or corrected, thereby opening new ways of seeing our relationship to machines and language.

Let me start with the first thesis. Equating meaning with function seems somewhat short-sighted. However, if we reflect on the implications of a function, we gain a broader insight into what a machine actually means. In this context, function refers to a person or object fulfilling a specific purpose. What seems straightforward at first glance turns out to involve many layers. The most immediate is the ‘why’ of a function: Why was a machine with function X needed? From here, numerous other questions arise, for example: How does the machine work? Why was it designed like this? Who worked with it? What material was used? What values are built into it? The answers to these and related questions reveal what kind of society, people and dynamics were at play when the machine was constructed and used.

A machine – just like *any* artefact, such as works of art or even philosophy – becomes homeless in a different temporal or cultural context precisely because these questions are tied to the machine’s original context. Without that context, the machine becomes a disruptive artefact that is in need of interpretation. Conversely, a machine that ‘fits’ into its environment becomes naturalised and blends in, so that the need for interpretation does not arise naturally. This does not mean that a deliberate interpretation of a current machine is impossible. On the contrary, it seems necessary to critically engage with current machines in order to uncover possible inequalities or assumptions that have become implicit in their design and function (see also, e.g., Grunwald et al., 2023). Consequently, talking about meaning involves more than just identifying a machine’s function. It also includes its *significance* both for the people of its original

² It is noteworthy, as has become apparent, that Gustafsson plays with three levels of ‘mechanisation’: mental, biological, and societal. While the first two are relatively straightforward, societal mechanization needs to be interpreted in light of his description of humans as part of “La Grande Machine” as well as his portrayal of language as a shared, objective frame of reference. This level, however, would require further explication and clarification. It is an interesting topic in its own right, with notable parallels to Heidegger’s (1962) warnings in *Die Technik und die Kehre*. Nonetheless, I will leave it at this point, as a more detailed analysis would require significantly more ‘filling in the blanks.’



time, who built, used and believed in it, and for us, who now look at it and relate ourselves to the world it reveals.

The second part of the first thesis claims that only once a machine becomes meaningful can its mechanical working be analysed in isolation. While we may not have access to the original meaning, since understanding is always a dialectical process that is bound to the hermeneutic circle, this does not mean that the machine's structure is independent from meaning. Understanding a machine's operation presupposes a range of prior knowledge. First, one must know how to use it. Even if a seemingly intact machine is placed in front of me, I cannot know that it is intact if I do not know how to operate it. But the act of using something is inseparable from understanding its meaning. Without that knowledge, I could misuse the machine and draw false conclusions about its functioning.

Second, even when this practical knowledge is available, one also requires technical knowledge, including conceptual tools to describe and understand the machine. Consider the example of an archaeologist discovering an ancient device whose operating principles are fundamentally different from any modern engineering system. In this case, understanding how it works would be nearly impossible. However, if information about its meaning in that society were available, that could serve as a starting point to understand how it might work. In other words, just like in traditional hermeneutics, the whole gives meaning to its parts and vice versa. Here, 'the whole' can be understood as the whole machine but also as the machine in its original context. To introduce the classical concepts from the philosophy of language: semantics, syntax and pragmatics are interwoven concepts and must be understood in relation to each other.

Building on this, the first thesis also implies that mechanics is a language of its own. In constructing a machine, the components such as screws, gears, plates etc. must be put together in a particular way to fulfil a function. Every part derives its meaning by its contribution to the overall function. Without the whole, each part would be meaningless.

Using the triad of syntax, semantics and pragmatics, it can be reconstructed why, from Gustafsson's point of view, the original meaning is inaccessible. We attribute meaning to the machine, but its parts do not carry meaning in the same way that words like 'red' or 'dog' do. There is either no meaning or an inaccessible meaning behind such components. The only thing the machine offers us is that it is analysable in its syntax. This is expressed with clarity towards the end of the poem: "That means what? / Nobody knows. A foreign language. / A completely foreign language." Yet, this conception of mechanical language overlooks how natural languages work. I will return to this when discussing the third thesis.

Turning to the second thesis, I do not question the thesis's truth, because it ventures deep into the territory of notoriously difficult question in the philosophy of mind such as the mind-body problem. Instead, I want to highlight the idea behind it. Gustafsson's aim seems to be to interpret the human body through a cybernetic lens, which then becomes a springboard for extending this view to language and grammar.

The third thesis holds that grammar – syntax – is a kind of machine that produces comprehensible sentences. But here, Gustafsson moves too quickly in claiming that syntactical correctness alone "constitutes organised, comprehensible language". As



Chomsky's (2002, p. 15) famous example (“Colorless green ideas sleep furiously”) shows, syntactical correctness does not guarantee meaningfulness. For an utterance to be comprehensible, it must be both syntactically and semantically correct.³

Furthermore, the clear distinction between syntax and semantics in understanding an utterance seems merely analytically possible. While it is possible in abstract or fictional scenarios to clearly separate the two, in most real-world language use they are deeply intertwined. It is not just a matter of using the correct structure, but of using the right words in the right structure. Depending on the communicative goal, syntax and semantics must be adjusted together.

Context is equally important. There can be a difference between what is said and what is meant. At a party, I might tell a friend, “Should we get some drinks?”, but we have agreed beforehand that this phrase means “Please get me out of this conversation.” Here, neither syntax nor semantics determines the actual meaning. Only in combination with context of – the pragmatic dimension of language – does it become clear (cf. Grice, 1989). Producing comprehensible language is not the reason why we use language but to communicate with others. Communication presupposes that the intended meaning is reliably conveyed. This presupposes an understanding of syntax, semantics and pragmatics. Prioritising syntax alone oversimplifies how meaning is constructed in natural language.⁴

This leads to another issue: Gustafsson's suggestion that mechanical language lacks semantics because its meanings are either absent or inaccessible. This view presupposes a rigid conception of semantics, as if words inherently possess fixed meanings regardless of context or use. As I have argued, syntax and semantics must be complemented by pragmatics. The meanings of ‘red’ or ‘dog’ are just conventions, and their meaning can change depending on context. The same applies to a ‘mechanical’ language: there are many different ways to construct a machine syntactically, but only one is actualised in a specific context. The acquired meaning is not secondary. Rather, it *is* the meaning. Just like in natural languages, the same ‘structure’ can mean different things in different contexts.

One might argue that Gustafsson's thought that mechanical language lacks semantics refers to words, which translates to gears, wheels, rods etc. in the context of machines, and this is the fundamental difference between natural languages and machine language. This is correct. A gear does not have a meaning on its own like ‘red’ or ‘dog’. Rather, it only acquires meaning in combination with other mechanical components by enabling the function of the whole. In some sense, a machine is like a text, which, depending on the complexity it, can consist of many sentences (sub-systems with

³ This might also explain why Gustafsson so readily assigns a lower importance to meaning in his reflections on machines.

⁴ One might argue that pragmatics should take primacy over syntax and semantics because, in the right context, these can appear to lose their relevance. However, this argument overlooks how pragmatics becomes relevant in the first place. For my friend to understand the hidden command, I first needed to explain it to him using a language that follows certain rules. In cases of implicature, too, the gap between what is said and what is meant can only be bridged if both parties share a common understanding of the rules and are competent language users (cf. Grice, 1989). This only underscores how existential and hermeneutic language use truly is.



different functions within the machine). To understand the meaning of a single mechanical component is to understand the ‘sentence’ it is used in, which, in turn, is to understand the whole text: the machine. Even though mechanical parts do not have meaning, at least not one paralleling words in natural languages, they acquire meaning by being put together ‘meaningfully’. In other words, what is needed is a hermeneutics of machines.

Building on this hermeneutic dimension of understanding machines and the aforementioned remarks on language, further questions arise that illustrate the deeply hermeneutic dimension of understanding machines. Without set semantics for single mechanical parts, understanding of machines relies on pragmatics and syntax. When trying to understand an unknown machine, one might only have a syntactical description: How do the different parts work together? How are they linked? How can one’s mechanical knowledge be applied to this new device? This leads to questions about the limits of syntax: To what extent can syntax alone constitute meaning? What is the relationship between syntax and pragmatics here? Can a function be described in purely syntactical terms? Underlying this is the presupposition of a ‘universal’ but “foreign” mechanical language that we try to decipher. While I do not intend to answer these questions here, they serve to highlight the deeply hermeneutic dimension of understanding machines.

The second part of the third thesis refers to how language has a life of its own; how it forces us to phrase our thoughts in specific ways, thereby limiting what we can express. This links the third thesis to the fourth: since language seems to determine the bounds of expression, meaning cannot transcend it. In Gustafsson’s terms, language is transparent.

Two points need to be problematized here. First, the fact that language operates with many unconscious or rigid rules does not mean that it is immune to critique and change. While any critique must necessarily occur within a language, it still allows for change. Debates about inclusive language provide a current example. Such debates and critiques are part of the hermeneutic project: even though understanding is always from a perspective, we are capable of critiquing that perspective, offering justifications for both our assessments of the status quo and our ideas of progress.

Second, consider the claim that language “*completely* expresses our thoughts” (emphasis added). While this may be true in some contexts, especially regarding veridical statements where we search for the right word to accurately express ourselves (cf. Gadamer, 1966; Grondin, 1994),⁵ it is clearly not universally valid. Gustafsson seems to assume that an utterance is understood in the same way by all language users. This is demonstrably false; if it were true, misunderstanding would not occur.

Moreover, people can also lack the words or expression to express what they think or feel. Imagine experiencing an emotion you never experienced before, and for which your language lacks a word. In such cases, language seems imperfect here.⁶ Consider the

⁵ One might even say that finding the truth is always the search for the right words and expressions. This presupposes that every truth is actually unambiguously and can be explicitly be stated. This seems like a very strong epistemological assumption that at least needs some further justification.

⁶ A nice expression of this fact is by Maurice Maeterlinck (1903, pp. 61–62): “How strangely do we diminish a thing as soon as we try to express it in words! We believe we have dived down to the most



German word ‘*Fernweh*’, the longing for distant places, which expresses a specific emotion for which many languages have no equivalent. Or think about cases of hermeneutic injustice (Fricker, 2007), where people lack the conceptual tools or vocabulary to name experiences of discrimination and injustice. One might object that this is not a flaw of language itself but in its use. Perhaps, given the appropriate words and concepts, everything could be expressed. I leave the strength of this objection open, as it would require a separate discussion.

To conclude, many of the ideas Gustafsson presents are not as innocent or self-evident as they may appear under closer scrutiny. However, they invite the reader to engage with them critically, thereby placing their own understanding of the world and of themselves under pressure. This hermeneutic practice is a self-reflective loop in which understanding is continually tested. Gustafsson’s poem and commentary suggest that fruitful insights can be drawn from viewing mechanics as language and grammar as machine. Gustafsson’s poetics of machines is a way of hermeneutically engaging with machines which opens up self-reflection and how we understand the world and ourselves through the lens of the machine. At the same time, the poem is also an expression of an ongoing mechanisation of the world, reducing everything to a ‘mere’ problem of management and proper functioning. A hermeneutically informed, modest stance towards such analogies is crucial to prevent an *Engführung* of our relation to the world and our understanding of ourselves.

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unfathomable depths, and when we reappear on the surface, the drop of water that glistens on our trembling finger-tips no longer resembles the sea from which it came. We believe we have discovered a grotto that is stored with bewildering treasure; we come back to the light of day, and the gems we have brought are false – mere pieces of glass – and yet does the treasure shine on, unceasingly, in the darkness!”



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