



<https://doi.org/10.48417/technolang.2025.03.08>

Short Communication

The Machines – Poem and Comment

Lars Gustafsson

Translation by John Irons¹ (✉)

¹ Honorary Fellow at The Department of Culture and Language in Hans Christian Andersen Studies,
University of Southern Denmark, Campusvej 55, Odense, DK-5230, Denmark

johnfrancisirons@gmail.com

Abstract

As a poet and philosopher Lars Gustafsson (1936-2016) inhabited the worlds of Swedish literature as well as analytic philosophy of language. He was professor at the University of Texas and a writer of world-renown, with translations of his novels, short stories, essays, and poems in many languages. Among his collections of poetry the one revolving around the theme of machines gained special prominence. It is anchored by „The Machines“ which occasioned also an essay by Gustafsson in which he explores the background and philosophical implications of that poem. The poem is therefore here presented right along with a new translation of that essay by John Irons who had already created one of three English translations of the poem. – When Gustafsson in 1966 took archetypical mechanical devices as a poetic cipher for human self-reflection at the intersection of technology and language, the machines of his day were conceived cybernetically: They were thought to be mechanisms with feedback that were driven and controlled by servomotoric electric power. The mecatronic fusion of the computer and the machine did not yet occupy a place of prominence in reflections about technology. This is one of the reasons why a fresh reading and new assessment of Gustafsson’s texts is called for – how do they speak to contemporary readers? This publication is therefore accompanied by three philosophical responses.

Keywords: Lars Gustafsson, Human-machine relations, Grammar, Christopher Polhem

Acknowledgment We thank John Irons for his extraordinary help in making this publication possible.

Citation: Gustafsson, L (2025). The Machines – Poem and Comment (J. Irons, Trans.) *Technology and Language*, 6(3), 114-124. <https://doi.org/10.48417/technolang.2025.03.08>



© Gustafsson, L., Irons J. (Trans.) This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)



<https://doi.org/10.48417/technolang.2025.03.08>

Краткое сообщение

Машины – Поэма и эссе

Ларс Густафссон

Перевод Джона Айронса¹ (✉)

¹ Почетный научный сотрудник факультета культуры и языка, Университет Южной Дании,
Кампусей 55, Оденсе, DK-5230, Дания

johnfrancisirons@gmail.com

Аннотация

Ларс Густафссон (1936–2016), поэт и философ, глубоко проникший в мир шведской литературы и аналитической философии языка. Он был профессором Техасского университета и всемирно известным писателем, чьи романы, рассказы, эссе и стихотворения были переведены на многие языки. Среди его поэтических сборников особое место занял сборник, посвященный теме машин. Его основой является стихотворение “Машины”, которое также послужило поводом для написания эссе Густафссона, исследующего предысторию и философский подтекст этого стихотворения. Поэтому здесь стихотворение представлено вместе с новым переводом этого эссе, выполненным Джоном Айронсом, который уже создал один из трёх английских переводов стихотворения. – Когда в 1966 году Густафссон взял архетипические механические устройства в качестве поэтического шифра для саморефлексии человека на стыке технологии и языка, машины его времени мыслились кибернетически: они представлялись механизмами с обратной связью, приводимыми в движение и управляемыми сервомоторной электроэнергией. Мекатронное слияние компьютера и машины ещё не занимало заметного места в размышлениях о технологиях. Это одна из причин, по которой требуется новое прочтение и новая оценка текстов Густафссона – как они воспринимаются современными читателями? Поэтому к данной публикации прилагаются три философских ответа.

Ключевые слова: Ларс Густафссон, человеко-машинные отношения, грамматика, Кристофер Полхем

Благодарность Мы благодарим Джона Айронса за его особенную помощь, сделавшую возможной данную публикацию.

Для цитирования: Gustafsson, L The Machines – Poem and Comment (Trans. by J. Irons) // Technology and Language. 2025. № 6(3). P. 114-124. <https://doi.org/10.48417/technolang.2025.03.08>



© Густафссон, Л., Айронс, Дж. (перевод) This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)



THE MACHINES¹

Some of them came early, others late,
and outside the time where it exists
each and every one of them is homeless.

Heron's steam ball. The Voltaic pile. The ballista.
The great pit winder in Falun. Curiosities:
Den 'pneumatic winnower'
Una macchina per riscaldare i piedi

We only perceive machines as being homeless
when they belong to a different century.
And then they become distinct, acquire a meaning.

What do they mean? Nobody knows.

The flat-rod system: a device with two raising rods
that moving in reciprocal fashion
transfer power over large distances.
What does the flat-rod system mean?

¹ The poem „Maskinerna“ by Lars Gustafsson (2015) is presented here in the translation by John Irons which was first published in a bilingual edition of Gustafsson's poetry (pp. 70-71). – The original Swedish poem (first published in 1966) was included in the first of his four volumes of *Collected Writings*: „Maskinerna“ opened a section entitled „Naturens tre riken [The three realms of nature]“ (Gustafsson 1998). In this edition, Gustafsson's provides notes to some of the expressions and references in the poem – most of these annotations found their way also into Gustafsson's comment which is included here. Another translation of the poem can be found in the appendix to an essay on Gustafsson's machine theme (Luttröpp Sandström 1972, pp. 220-221). A third translation by Robert Rovinsky also included Gustafsson's essay (Gustafsson 1974).



DIE BERGWERKE IM HARZ ANNO 1723

The picture swarms with people. Human beings,
tiny as flies, are being hoisted and lowered in barrels
and the object marked 'j' in the picture, 'La Grande Machine',
at the fresh waterfall, drives all the cables.

No one has ever combined,
which would be perfectly possible,
a flat-rod system and a steam engine,
Hero's steam ball and the Voltaic pile.
The possibility still exists.

A foreign language that no one has spoken.

And strictly speaking:
Grammar itself is a machine
that among countless sequences
selects communication's strings of words:
the 'keen instruments', 'parts of childbirth',
the 'scream', the 'smothered whispers'.

When words have passed away, grammar remains,
and it is a machine. That means what?
Nobody knows. A foreign language.
A completely foreign language.
A completely foreign language.
A completely foreign language.

The picture swarms with people. Words, tiny as flies, are being hoisted and lowered in barrels and the object ‘j’ marked in the picture, ‘La Grande Machine’, at the fresh waterfall, drives all the cables.



Figure 1. Christopher Polhem's hauling engine or hoist, the Machina Nova, at the Falu copper mine, Sweden. This hydro-powered construction dates to 1694 (cc BY-NC-ND Nordiska museet/Sverige Dalarna Falun, Photo Peter Segemark – url digitaltmuseum.se)



Figure 2. A detail from a print depicting a *Stangenkunst* (flatrod system) in the mining landscape of the Harz Mountains, Germany (Deutsches Bergbau Museum Bochum, Montanhistorisches Dokumentationszentrum CC BY-NC-SA url nat.museum-digital.de/singleimage?resourcen=1279196): „transfer[ring] power over large distances,” as such „the 18th century precursor of today’s high-voltage power lines.” Despite impressive scholarship on the transfer of Polhem’s knowledge to the Harz mountains (Höcke, 2024), it has not been possible to pinpoint the etching that is referenced and described by Gustafsson „Die Bergwerke im Harz ANNO 1723.”



THE MACHINES²

My poem 'The machines' contains an obvious paradox, one which I feel calls for a comment.

In order more easily to gain insight into what constitutes this paradox, we must begin by clearing away certain more trivial details.

Most people are well aware that 'Heron's steam ball' is an antique precursor of the steam turbine attributed to Heron, that 'the Voltaic pile' is an ancestor of the modern electric wet battery, and that 'the ballista' is a primitive form of artillery, a huge stone launcher.

That 'the great pit winder' is one of the inventions constructed by Christopher Polhem for the large copper mine in Falun is perhaps less known.

The great pit winder was a huge haulage and elevating device for ore, powered by water and almost entirely made of wood. It is one of those 18th century machines that somehow seems to be much more mechanical than any modern machine, since the transmission of power in these machines took place with the aid of cumbersome and complex systems of rods that moved back and forth. The actual winder has long since crumbled away and only a ruin of the huge machine remains. But at the Museum of Technology in Stockholm Polhem's own model of the machine can be seen. It offers an indescribable impression of its jerky, complicated, inexorable movement.

The 'pneumatic winnower' is a curiosity, taken from an old manual of physics, while 'Una macchina per riscaldare i piedi' is a memory of the time when mechanical inventions almost seemed to hang in the air and were incorporated into royal cabinets of curiosities. During the Renaissance, a machine was either a curiosity, a topic of conversation, regarded and admired by breathless visitors, or some small, ingenious device that can increase the comfort of a fine gentleman when sitting in his armchair.

One could say that mechanics had not yet been incorporated into experience and external conditions and still had a dubious independent status, more related to art or sleight of hand.

And finally 'the flat-rod system' is the type of power transmission device that must once have dominated the areas around a mine, the 18th century precursor of today's high-voltage power lines: from loom-like devices on water-wheels motion is transferred to a system of alternately forward- and backward-moving rods. Such a flat-rod system, placed

² This is a new translation by John Irons from Swedish into English of Gustafsson's 1969 commentary on his poem (1969, pp. 32-40). – The following reflections emphasize the significance of the Swedish engineer Christopher Polhem (1661-1751) who may have been the first to conceive a mechanical alphabet of machine elements. Gustafsson later dedicates another poem to Polhem. According to Luttröpp Sandström it represents a profound shift from Gustafsson's views in „The Machines“ and his commentary. „Polhem's Ore Hoist“ „appears as a study in futility and of human ingenuity ‚Ruling the world for a few short days““ (pp. 217-219, 222-223). See also Rovinsky (1978).



on quite high poles, could run for miles through the terrain, and ingenious cross-overs enabled the rods to shift at a right angle to their normal direction.

As you can see, I have avoided including in my poem's inventory any machine from my own time, and that has been done deliberately: what interests me in this poem is more *the mechanical aspect* of the machines themselves, *the machine-likeness of their appearance* than their various functions, and this indeterminate characteristic we can practically only discern in machines that in some way or other have become curious and antiquated, that have ended up outside everyday contexts and therefore, to use the poem's formulation, are 'homeless'.

That a poem deals with machines is of course nothing remarkable. At a guess, I would assume that the oldest mechanical device that has provided images for literature is the loom – or perhaps the millstone? Ever since Tennyson's age, machines have featured ever more frequently in poetry. The emotional states or experiences that they have contributed to it have been of a very disparate nature: from wide-eyed astonishment or perhaps – as with the futurists, a kind of intoxicant, to homeless despair. There are not merely one but many literary traditions that build on the expressiveness of machines.

The Romantic enthusiasm that certain poets could feel for machines in the infancy of industrialism is not our focus in this context, nor is the ecstatic attitude of the futurists or the realistic pathos of the early Soviet poets with regard to the machine.

What interests me is a completely different emotional state, one that is hard to describe and without a doubt fascinating. It is to be found in some of the drawings of Grandville's 'Un autre monde', where caricature-like renditions of machine elements, steam whistles and cast-iron details assume human form and live on in a burlesque existence which is both *petit bourgeois* in the manner of a children's tale and fantastic in the same way that surrealist artworks are. It is to be found in the strange, meticulous and excessively complex descriptions of machines that fill page after page in Raymond Roussel's strange novels, and also, this time with scary and crystal clarity in Franz Kafka's novella 'In der Strafkolonie', where precisely the account of the immoderately complex machine that is an instrument of torture forms the secret core of the story.

And one can perhaps get something of the same feeling when viewing Marcel Duchamp's glass painting 'La Mariée, mise à nu par ses célibataires mêmes', this peculiar work of art that has captivated so many changing interpreters and where the machine aspect with the strangest of names seems to be involved in some complicated and apparently meaningful, but also incomprehensible, process.

All these artworks deserve thorough explications – the differences between them are at least as great and interesting as the similarities. But let us content ourselves with stating that all of them contribute to narrowing down the special experience of the *machine-like*.

The machines of Kafka, Duchamp, Roussel as well as Grandville all convey, to various degrees, an experience of something secretive, hard-to-grasp and terrifying about



the machine. One could say that they are reactions to the *machine-likeness of the machines*.

All of us are familiar with this feeling, just as we are familiar with symbolism where the predictably repeated movements of the machine are contrasted with the unpredictability of organic life, its fertile unreliability.

We feel uneasy about the machine in the same way as we feel uneasy about a *phantom*: something which has no life and which moves nevertheless – *it simulates life*. When he contrasts the mechanical movements of the machine with the mobility of organic life it is not in order to exploit the machine as a death symbol – it is not death that it means, rather the possibility that our own lives are simulated in the same way.

There is something – call it alienation, describe it in Marx's or Kierkegaard's terms or however you like – some experience which all of us have in common – that we are actually marionettes, mechanical dolls, *homunculi*, and then to ask the question: *What difference does that make?*

La Mettrie – as far as I know – was the first person to explicitly ask the question and something during the last century has made it relevant with extraordinary force, with a suspicion also becoming widespread.

This experience has been crucial, also when my poem has come into being. The paradox of the poem is that this experience during the work has come to be combined with another one, so that it can look as if I, in a paradoxical way, was seeking security precisely in the experience, while others have only sensed a disorientation, a mystification, or nothing less than dread.

To compare language with the behaviour of machines and to affirm that grammar is a machine may seem to be a far-fetched allegory.

I believe that it would never have become of real interest to me if I had not become acquainted with various new modes of thought within linguistics, such as those concerned with the concept of 'grammatical structure' and similar concepts. It is especially the attempts of Noam Chomsky to define the grammatical sentence with the aid of a number of elementary operations that came to my mind.

With regard to the thoughts that it uses to communicate information, grammar seems to possess an almost secretive objectivity: its forms lend themselves to everything and at the same time they have an aura of something objective, extra-human independence about them.

It is not without good reason that Chomsky in his work 'Syntactic Structures' has characterised grammar as a machine. It is the machine which out of the multiplicity of theoretically possible word-combinations, jingles, sequences selects precisely those which constitute organised, comprehensible language.

Once one has familiarised oneself with this idea, it is difficult to free oneself from it: there is something mechanical about our words and our utterances – something impersonal one might almost say, as if we ourselves were not producing the thoughts but



that language was thinking within us, and we only were lending a voice to a larger and more immense linguistic structure that grows through us like the mycelium of a parasitic species of fungus penetrates its host. Or perhaps as if language was a huge, invisible mechanical process.

Practically no human being exists who has not at least as some time experienced 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.

It could also be described as an experience of mathematics: of the obstinacy of natural speech; that once they have been defined, they do not lend themselves to any purposes whatsoever, but only undergo the transformations and combinations that it is in their nature to undergo.

Their nature? Yes, more *theirs* than ours.

There is, then, an experience of an alien, impersonal, ungraspable diversity in which we are most deeply involved. It is just as reasonable to say that it which thinks with us as to claim that we think with it.

Modern cybernetics has convincingly shown that a whole series of traits which we have regarded as being exclusive for the human thought process can be simulated by mechanical devices. Memory, the capacity to reach conclusions, and to make rational choices on the basis of given suppositions. In discussions about modern mathematical machines and their analogy with human beings one sometimes hears the argument ‘that the machine is incapable of imaginativeness’. As far as I understand it, there is nothing in principle to prevent the construction of a machine where each ongoing operation is capable of giving rise to similar but not identical operations that are not grounded in logic, i.e. to associate.

Some of my readers may possibly suspect me of wanting to develop some kind of deterministic or mechanistic philosophy. That would be meaningless for my purpose.

I am only interested in collecting some cues so as to point in a certain direction.

Anyone examining a cybernetic device sees no thoughts, he only distinguishes between parts of a machine. To assign life to them would be a form of animism. Anyone looking inside a human being does not see any thoughts either.

But when a human being looks inside himself, he experiences himself as a consciousness. Is that perhaps a form of animism too?

The symbolic value of the machines lies in the fact that they remind us of the possibility that our own lives are in some way simulated in the same sense as the machine simulates life.



My poem deals with the possibility of perceiving ourselves as machines or as cybernetic devices programmed by our own language and our own logic. It is an attempt to change the perspective, to construct a new aspect of the *best-known thing of everything*:

The picture swarms with people. Human beings,
tiny as flies, are being hoisted and lowered in barrels
and the object marked 'j' in the picture, 'La Grande Machine',
at the fresh waterfall, drives all the cables.

The history of philosophy is full of arguments that seek to prove that I do not have any access – any direct access, that is – to other people's inner lives, i.e. that all humans apart from myself could very well be marionettes. There are much fewer arguments which seek to prove that I could be a marionette without ever discovering it.

If other people's mental life really was inaccessible in the sense that certain philosophers claim, it would also have considerable linguistic consequences. It would mean that each and every word of mine, e.g. 'apple' or 'red' had two meanings, a public one, accessible to everyone, and a private one, only accessible to myself.

I do not know how many aesthetic and poetical doctrines regarding the 'imperfection of language' as a linguistic wall that separates one person from another are based on such a point of view. And the question is whether or not this doctrine of 'the anti-poetical wall' is one of the most important sources of poetical purism that is one of the roots of all lyrical modernism. The idea that the words separately or in every conceivable combination hide or conceal a residue of experience that can never be 'communicated' increasingly appears to be the leftover of an untenable metaphysical approach, one that still remains to be overcome.

As far as I am concerned, everything is said by what is said, and I regard language as being completely transparent: it completely expresses our thoughts. Or, as Ludwig Wittgenstein advances in his 'Philosophische Untersuchungen': if language was such that in principle it was unintelligible to anyone else, then in principle it would also be unintelligible to me as the speaker as well.

There are no linguistic walls: every experience is present (clearly or unclearly formulated) here and now and exhaustively in the formulation I give to it. There is no inaccessible residue behind our words; there are no private meanings. Language exhausts us. It is the impersonal within us and like objective media our thoughts exist. Thinking is within us.

Such a way of looking at things must lead to a different poetic than that of classical modernism.

The poem 'The machines' can be regarded as a modest fragment of such a poetic.

My poem assumes that a form of community has been established once and for all, and that its innermost being is something impersonal. And it seeks solace in this fact.

It is, if you like, a community among marionettes that simulate life, but the condition for it would seem to be that we rub the metaphysical sleep out of our eyes and



see it. A strange community – deep within mechanics, and yet a community, confidentiality.

From this point of view, the tragic thing about humanity is not that it is shut out, that something separates it from life. nor that its words do not reach their destination.

The tragic thing about humanity, as also about machines, is that it does not have any secrets.

REFERENCES

- Gustafsson, L. (1974). The Machines (R. T. Rovinsky, Trans.). *American Review*, 21, 116-125.
- Gustafsson, L. (1998). *Valda skrifter 1: Ur bild i bild; Där alfabetet har tvåhundra bokstäver; Stenkista; Variationer över ett tema av Silfverstolpe* [Selected Writings 1: From Picture to Picture; where the Alphabet has two Hundred Letters; Stone Coffin; Variations on a Theme of Silver verse Pillar]. Natur & Kultur.
- Gustafsson, L. (2015). *Selected Poems* (J. Irons, Trans.). Bloodaxe Books.
- Höcke, S. (2024) „Sie hielten selbst diesen Mann für einen der habilesten Mechanicorum“ Christopher Polhem und der Transfer von mechanischem Wissen aus Schweden in den Harz im 18. Jahrhundert [„They even considered this man to be one of the ablest mechanics“; Christopher Polhem and the transfer of mechanical knowledge from Sweden to the Harz mountains in the 18th century]. *Der Anschnitt* 76(1), 2-22.
- Luttrupp Sandstroem, Y. (1972). The Machine Theme in Some Poems by Lars Gustafsson. *Scandinavian Studies*, 44(2), 210-223.
- Rovinsky, R. T. (1978). Translator's Introduction. In *Forays into Swedish Poetry* (pp. vii–xxii). University of Texas Press