

Ivan Capeller:

The Golem Allegories

This is the first piece of a three-part article about the allegorical aspects of the legend of the Golem and its epistemological, political and ethical implications in our Internet plugged-in connected times. There are three sets of Golem allegories that may refer to questions relating either to language and knowledge, work and technique, or life and existence. The Golem allegories will be read through three major narratives that are also clearly or potentially allegorical: Walter Benjamin's allegory of the chess player at the very beginning of his theses *On the Concept of History*, William Shakespeare's last play *The Tempest* and James Cameron's movie *The Terminator*. Each one of these narratives is going to be considered as a key allegory for a determinate aspect of the Golem, following a three-movement reading of the Golem legend that structures this very text as its logical outcome.

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- Relevant publications:
 - A Pátina do Filme: da reprodução cinematográfica do tempo à representação cinematográfica da história. Revista Matrizes (USP. Impresso) *JCR*, v. V, p. 213-229, 2009
 - Kubrick com Foucault, o desvio do panoptismo. Revista Ciberlegenda (UFF) *JCR*, v. 13, 2004

The Golem and the Chess Player: Language, Knowledge and Thought

*Mother was an incubator/Father was the contents
 Of a test tube in the ice box/In the factory of birth
 My name is 905/And I've just become alive
 I'm the newest populator/Of the planet we call Earth
 In suspended animation/My childhood passed me by
 If I speak without emotion/Then you know the reason why
 Knowledge of the universe/Was fed into my mind
 As my adolescent body/Left its puberty behind
 And everything I know is what I need to know
 And everything I do's been done before
 Every sentence in my head/Someone else has said
 At each end of my life is an open door
 Automatically defrosted/When manhood came on time
 I became a man/I left the "ice school" behind
 Now I'm to begin/The life that I'm assigned
 A life that's been used before/A thousand times
 I have a feeling deep inside/That somethin' is missing
 It's a feeling in my soul/And I can't help wishing
 That one day I'll discover/That we're living a lie
 And I'll tell the whole world/The reasons why
 But until then all I know is what I need to know
 And everything I do's been done before
 Every idea in my head/Someone else has said
 At each end of my life is an open door*
The Who, 905
 (From the album *Who Are You*, 1978)

Between Myth and Allegory

The first part of this paper will be focused on the relationship between bio- and cyber-semiotics through an analysis of the resonances between the legend of the Golem and Benjamin's allegory about the chess player: both narratives will be considered from an epistemic perspective, related to their biblically affiliated theory of language, in order to think the Golem as an *automaton* supposedly bound to fulfill its pre-programmed tasks as any actual software does. Between the puppet and the dwarf, the Golem shows itself off as an automatic chess player, a sort of cabalistical tool in which language is supposed to carry on encoded knowledge as a transmissible and reproducible matrix of thought. Thus, the first set of problems to be dealt with regards the Golem legend as an allegorical narrative about the magical powers of language: the cabalistical legend of the Golem, a magically man-made clay giant, raises crucial questions regarding some well established conceptions of language and its relations to history, politics and media issues.

As an allegory of the powers of language, the Golem's first movement is deeply rooted into questions about thought and knowledge that could have been left to themselves, in the abstract sphere of pure reason, if it wasn't for the fact that reproducible knowledge is always already applied knowledge, bringing in with itself all kinds of technical possibilities yielding economic and political impact over any given social organization. In its

faustian resonance, so well captured in André Neher's masterpiece *Faust et le Maharal de Prague*¹, the Golem legend can be thought of as an allegory of language's possible effects over the social fabric and its daily life reproductive processes.

To talk about the remarkable affinities between certain aspects of some cabbalistic theories about the powers of language and our contemporary softwares is a metaphorical argument already turned into a major cultural *cliché*. From Gershom Scholem's enthusiastic assessments on the Golem of Rehovot (in fact, a 1960's Israeli artificial "brain"²) to the main character of Umberto Eco's novel *The Pendulum of Foucault's* naming his personal computer "Abulafia"³, a standard reading of the Kabbalah as a traditional kind of magical predecessor of the abstract logical thought that has enabled our modern societies to build computers and weave them in a giant World Wide Web, became a much appreciated "self-evident" commonplace. Although this argument has nothing but metaphorical value, its inherent *cliché* deals precisely with a set of questions related to the power of language considered as such and to the fact that this power will be considered real or metaphorical according to the very concept of language at stake in the way this argument is usually stated. So how can we assess the heuristic potential of the Golem legend without falling into the same cluster of supposed self-evident truths about its real meaning?

Our main hypothesis in this paper is that the mythical reading of the Golem legend, although largely dominant and, up to a certain point, epistemologically necessary in order to give this legend its long-time needed status as a scientific object of research, must be complemented by an allegorical reading capable of highlighting the differences and contradictions between the Golem legend and other myths and stories to which it is generally related. Thus, to speak of the Golem as a modern myth whose narrative structure is deeply connected to other modern myths such as the stories of Faust or Frankenstein, is only partially true.

Why is that so? Because, as authors such as Brigitte Munier⁴ and Marco Schneider⁵ had already pointed out, the legend of the Golem is **not** about the inherent dangers of scientific knowledge and technology for human culture and society, bearing rather an opposite, optimistical meaning. Even the very founder of the possibility of a structural analysis of the Golem legend as a myth, the above mentioned late great André Neher, stressed out many times the differences between the two respective *Weltanschauungs* presiding the twin stories of Faust (which would be the christian version of the myth) and the Golem (which would actually be its jewish version). Although the structural analysis of the legend of the Golem as a myth can be considered as a valid one, the story of the Golem, as seen from an allegorical perspective, should be also related to a set of stories that don't possess the same dignified mythical aura with which characters like Faust (or even Don Juan) are usually regarded in the so-called western modern culture.

The first and foremost example of this allegorical stance about the Golem comes from the same author that wrote the most important version of the legend of Faust: in his 1797 poem *Der Zauberlehrling*, J. W. Goethe gave us, in between the two parts of his long life masterpiece *Faust*, a somewhat innocent fairy-tale poem about a humoresque sorcerer's apprentice misdeed: while trying to magically control the forces of nature in order to be spared of his hard-and-boring homeware daily duties, he puts a spell on a simple broom that becomes animated and is ordered to fill a great number of buckets of water to clean the sorcerer's house. The

¹ NEHER, André: *Faust et le Maharal de Prague, le mythe et le réel*, Paris, P.U.F., 1987.

² SCHOLEM, Gershom: "O Golem de Praga e o Golem de Rehovot" in *O Golem, Benjamin, Buber e outros justos: Judaica I*, Ed. Perspectiva, São Paulo, p. 89-96, 1994.

³ ECO, Umberto: *Le Pendule de Foucault*, Ed. Grasset, Paris, 1990.

⁴ MUNIER, Brigitte: *Robots – Le Mythe du Golem et la Peur des Machines*, Éditions de la Différence, Paris, 2011.

⁵ SCHNEIDER, Marco: "Gramsci, Golem, Google: A Marxist Dialog with Rafael Capurro's Intercultural Information Ethics", in *Information Cultures in the Digital Age – A Festschrift in Honor of Rafael Capurro*, Kelly, Mathew (et al.) (Eds.), 2016. pp. 373-383.

repetitive work of filling the buckets is not followed by a proper instruction about the right time to stop it, and the sorcerer's apprentice almost gets drowned by his own spell – if it weren't for the last minute intervention of his boss, the great magician...

Two main resonances with the legend of the Golem are present in this case: the will to manipulate inanimate manufactured artificial objects through their programmed motion (as rendered in the famous Disney homonymous motion picture production) and the problem immediately raised by such manipulation, which is precisely how to stop an automatic motion once it has been set up effectively. The resonance is so striking here that the difficulty faced by the sorcerer's apprentice in stopping the endless cleaning of the house, performed by its animated brooms, is exactly the same problem faced by the maker of the Golem (the rabbi Maharal of Prague, according to the most famous version of the Golem's legend): right after making his Golem, the Maharal's wife gives it the hard task of filling buckets of water from the local well, but « because no one told him to stop, he kept on bringing water and pouring it into the barrels, even though they were already full »...⁶

« Because no one told him to stop » : the « magic » knowledge that makes possible the animation of anything leads to the problem of a « magic » language that could be able to control the automation of any machine.

As Norbert Wiener rightly stated after his commentary on Goethe's above mentioned poem,

« La magie de l'automatisation, et tout particulièrement l'automatisation magique des machines capables d'apprendre, inclinera vraisemblablement vers la même littéralité. Si vous jouez un jeu selon certaines règles et que vous programmez la machine dans le but d'obtenir la victoire, vous obtiendrez la victoire et rien d'autre, et la machine ne prêterait attention à aucune autre considération que celles qui assurent la victoire selon les règles. (WIENER, 1964) ».

There's no doubt that Wiener's last book can be considered as an important hallmark in the understanding of the Golem's myth as a moral warning against the indiscriminated use of science and technology by humanity. But our focus here lies rather on the possibility of an allegorical reading of this legend that is capable of revealing two main features that relate the story of the Golem to some crucial issues put forward by contemporary science and technology without any kind of necessary moral judgement: the question of the required knowledge, be it mythical or scientific, needed to produce animated bodies (a question largely explored, in its imaginary effects, by the motion picture's industry) and the subsequently related question of the required language, be it mystical or technical, needed to control automated machines (a question largely developed, in its symbolic effects, by cybernetics and informatics).

The **knowledge** of the animated body and the **language** of the automated machine: in the shift from the concept of body to the concept of machine relies the hidden **thought** enshrined in the Golem allegories. What about its relationship to the above mentioned mythical readings of the Golem ?

As a hyperdetermined artificial form of thought, the allegory is traditionally opposed to the symbolic powers of mythical thought since, at least, the *sturm und drang* romantic literary school of Goethe, Schiller and Herder. Ever since, myths are ascribed with a highly symbolic cultural power inasmuch as they are capable of a metamorphical ability to disguise themselves in many-a-different stories and tales that require a deep structural analysis in order to be identified as pertaining to the same cluster of mythical thought. Allegories, on the other

⁶ ROSENBERG, Yudi: *The Golem and the Wondrous Deeds of the Maharal of Prague*, Yale University Press, New Haven, 2007.

⁷ WIENER, Norbert: *God & Golem Inc. – Sur quelques points de collision entre cybernétique et religion*, Éditions de L'Éclat, Paris, 2000, p. 81.

hand, are usually considered as encoded charades ascribed with a persuasive, rethorical power that needs only to be rightly interpreted in order to be fully understood. According to this reading, myths are symbolically uncounscious and powerfully alive, while allegories are just the dead remains or vestiges of older, forgotten myths, able only to produce a minor, conscious pre-programmed effect on its audience⁸. As for the legend of the Golem, it's fair enough to say that it has an old mythical resonance that goes back as far as the Bible Psalms and the Talmud (not to mention the 3rd century A.D. cabalistic *Sefer Yetzirah* – the Book of Creation), but also that, in its well-known recent version, that relates it to the historical Rabbi Loëw (the famous Maharal of Prague), is in fact an allegorical story.

Between myth and allegory, the Golem legend can therefore be read as a living symbol of our modern time's fear of machines and of technology⁹, but it can also be interpreted as an allegory of the problematic status of Man, always in between its animal organic body limitations and its prosthetic technical machine-like infinite promises and possibilities. In this sense, the Golem, as a set of allegories, can be considered as an allegory of the Allegory as a categorical genre of metaphor, always in between the living body of mythical symbolic thoughts and the (algorithmical) dead machine of encoded looped meanings.

It was Walter Benjamin, in his seminal work *Ursprung des Deutschen Trauerspiels*¹⁰, that first unveiled the heuristic and critical potentialities of the allegory as a creative form of thought. Through his study of the german so-called « tragic dramas » of the seventeenth century, he was able to turn upside down the traditional romantic relationship between allegory and symbol that used to undervalue the first category in order to better enhance the qualities of the second. In Benjamin's perspective, allegories are epistemologically revealing precisely because they are embedded with a frozen, dead meaning that cristallizes itself in the form of visual and verbal emblems and insignia that remain as such throughout the passing of time. Even when they are (or become) intentionally enigmatic, their meaning can always carry a sort of anti-mythical quality that may allow a critical thought to get rid of its imaginary unposited pressupositions and assumptions¹¹.

Benjamin not only studied the baroque allegory in the seveteenth century german literature, but also made it its own form of thought and expression. His entire work is filled with exquisite allegories that require from his readers the most subtle exegetical abilities. Although he himself doesn't seem to have studied the legend of the Golem, as his life long friend Gershom Scholem did, it is possible to find a remarkable resonance between some key elements of the Golem legend and one of his most important allegories: the allegory of the chess player that opens up his last text, generally known as *On the Concept of History*¹².

Between the Puppet and the Dwarf

As far as we know, only the brazilian researcher Isabella Santucci has already pinpointed the striking similarities between the legend of the Golem and Walter Benjamin's allegory of the chess player¹³. But in order to recognize

⁸ See HANSEN, João Adolfo: *Alegoria – Construção e Interpretação da Metáfora*, Atual Editora, São Paulo, 1986, pp. 5-11.

⁹ See FAUCHEUX, Michel: *Norbert Wiener, le Golem et la Cybernétique – Éléments de Fantastique Technologique*, Éditions du Sandre, Paris, 2016.

¹⁰ BENJAMIN, Walter: *Origines du Drame Baroque Allemand*, Éd. Flammarion, Paris, 1985.

¹¹ See EAGLETON, Terry: *Walter Benjamin or Towards a Revolutionary Criticism*, Verso Editions, New York, 1981.

¹² BENJAMIN, Walter: *On the Concept of History*, Classic Books, New York, 2009.

¹³ SANTUCCI, Isabella C. Stangerlin: "O Golem na Era da reprodutibilidade Técnica: Aparato cinematográfico, homem moderno e representação" in *Anuário de Literatura*, ISSN: 2175-7917, vol. 17, n.1, p. 172-192, 2012.

these similarities, a new reading of the Benjamin version of this story (which was already told, among others, by Edgar Allen Poe¹⁴), must be made:

"It is well-known that an automaton once existed, which was so constructed that it could counter any move of a chess-player with a counter-move, and thereby assure itself of victory in the match. A puppet in Turkish attire, water-pipe in mouth, sat before the chessboard, which rested on a broad table. Through a system of mirrors, the illusion was created that this table was transparent from all sides. In truth, a hunchbacked dwarf who was a master chess-player sat inside, controlling the hands of the puppet with strings. One can envision a corresponding object to this apparatus in philosophy. The puppet called "historical materialism" is always supposed to win. It can do this with no further ado against any opponent, so long as it employs the services of theology, which as everyone knows is small and ugly and must be kept out of sight" (BENJAMIN, 1940).

In this key twentieth century text about the philosophy of historical materialism, the very first question that is posited is the problem of the automaton: its structure is here envisaged as a coupling – "through a system of mirrors" - of a puppet, "in turkish attire", and a hunchbacked dwarf "who was a master chess-player". At first sight, the interpretation here required to decipher this allegory is crystal clear and given to us by Benjamin himself: the puppet stands for the science of historical materialism, whilst the dwarf represents "theology, which as everyone knows is small and ugly and must be kept out of sight". So, if the Golem can be thought of as an animated automaton made by a legendary (although plainly historical) sixteenth century rabbi, there's no real difficulty in allegorically establishing point-to-point correspondences from one story to the other: the Golem would stand for the puppet as well as the rabbi would stand for the dwarf, all the more so because Benjamin explicitly identifies the "small and ugly" hunchbacked dwarf with theology itself...

Although reasonably acceptable (and apparently condoned by Benjamin), this interpretation may lead to a completely wrong understanding not only of the relationship between these two narratives, but, most important of all, about the deep political and epistemological meaning of Benjamin's allegory considered in its own right. Standard readings of this allegory given by some important Benjamin interpreters (for example, Michel Löwy's exegetical book about *On the Concept of History*, entirely dedicated to a word by word comment of this most important text¹⁵) are adamant in stating that Benjamin, in his sharp critique of the political errors caused by historicism and positivism among the left-wing thinkers of his time (social democrats and stalinists alike), is actually stating that historical materialism needs to pull out from theology – the small and ugly unacknowledged hunchbacked dwarf that "must be kept out of sight" – its true revolutionary (messianic) resources in order to win out its political battles (the chess game) over its opponents. The reactionary implications of this kind of reading are strikingly evident: epistemologically speaking, historical materialism cannot be a real science inasmuch as it depends entirely on its hidden theological despised foundations. Benjamin's allegory would then be an allegory of the overwhelming symbolic powers of mythical thought over rational, scientific ways of knowledge, and his political-messianic stances could be easily brought back into the realm of religion understood as the ultimate interpreter of the theological tradition.

We'd like to propose here an entirely different reading of the chess-player allegory and place Benjamin's effort in a perspective that is actually closer to Bertold Brecht's subversive *Verfremdungseffekt*: by taking a critical distance from positivistic historicism, Benjamin denounces its theological hidden grip over all trends of historical materialism in order to demonstrate, under a subtle layer of irony, how difficult is the task of the working class in its strive to get rid of the mythical shackles that still binds mankind to a history of misery and oppression.

¹⁴ POE, Edgar Allen: *Maelzel's Chess Player*, Dodo Press, London, 2009.

¹⁵ LÖWY, Michel: *Walter Benjamin: Avertissement d'une Incendie, une lecture des thèses "Sur le Concept d'Histoire"*, P.U.F., Paris, 2001.

His ironical intentions can be hinted at through his careful choice of words in the rendering of his own interpretation of the chess-player allegory: "The puppet called 'historical materialism' is always **supposed** to win. It can do this **with no further ado** against any opponent, so long as it employs the services of theology, which **as everyone knows** is small and ugly and must be kept out of sight". Take out the above highlighted figures of speech from the text and we still get the same basic contents - but in a much more affirmative, straightforward tonality that was not at all representative of Benjamin's attitude towards historical materialism. Far from being a precursor of nowadays post-modern cynical scholars, Benjamin's allegory was really an attempt to reinvigorate the proletarian revolution in its most tragic and dark hour. This reading is amply demonstrated by the way with which the question of historical materialism is developed along the other sections of *On the Concept of History*, but our main concern here is to show how our own interpretation of Benjamin's chess-player allegory can also be helpful in establishing the allegorical implications of the Golem legend.

As we have already said, it would be far too easy to establish a point-to-point correspondence between the Golem and Benjamin's puppet, on one hand, and Benjamin's dwarf and rabbi Löew of Prague, on the other. A completely misleading, positive assessment of the mythical role played by religion and theology in Benjamin's allegory would follow, if we were about to take this stance. But how can we relate these two narratives in order to disclose their deep allegorical connection without falling into the same idealistic trap in which so many experienced and erudite Benjamin's commentators threw themselves in?

Our second main hypothesis is that an allegorical reading of the legend of the Golem must relate this character to the puppet **and** the dwarf at the same time. Between the puppet and the dwarf, the Golem is an allegory of Man's torn apart dialectical existence. This means not only a theological (mythical) contradiction between its animated body and its automated spirit, but also a material (biological) tension between his monstrous organic nature (the dwarf) and his would-be technical prosthetic machine-like possibilities (the puppet). Far from being the apex of Creation and/or the ultimate product of Evolution, man's body is a never ending failed attempt to overcome its own material conditions of existence. In this particular sense, each one of us is a Golem, that is, a flawed machine caught in a major contradiction in between the less-than-human (the animal) and the more-than-human (the machine). This problem is explicitly put forward to God by Adam, the first man, in the very first occasion in which the idea of the Golem appears in the Bible, for it is written in the Psalms (139:16) "Gäl'miy räû ëyneykhä": "Yours eyes saw my unformed body".

According to Moshe Idel, Gershom Sholem was probably the first researcher that studied the Jewish talmudic tradition in order to trace the semantic mutations through which the word "Golem", understood originally as an "unformed body" or "substance", came to signify the idea of "an artificial man created through magical means"¹⁶. Originally, the Golem is thus conceived as an embryo, an "unformed body" or "substance" (as some translators, addicted to a metaphysical vocabulary, like to say). Only later on, in the talmudic times, the Golem was to be described as a kind of *homunculus* that can be artificially produced by a wise and pure rabbi who happens to know the ritual necessary procedures (described for the first time on the above mentioned cabbalistic *Sefer Yetzirah* – the "Book of Creation"). Eventually, it was only in 1909 that Yudi Rosenberg published his collection of traditional popular tales about the Golem that relate it to the famous sixteenth century Rabbi Löew – the famous Maharal of Prague whose works were thoroughly studied by André Neher in one of his most important books¹⁷. In any case, a proper knowledge of how these different layers of thought intermingled to shape the legend of the Golem into its present form is a fundamental critical tool for the researcher, in order to better understand how myth and allegory are inextricably present in any version or narrative related to the Golem – be it ancient or modern.

¹⁶ IDEL, Moshe: *Le Golem*, Les Éditions du Cerf, Paris, 1992, p. 33.

¹⁷ NEHER, André: *Les Puits de L'Éxil – la théologie dialectique du Maharal de Prague*, Éd. Albin Michel, Paris, 1966.

Outside the Jewish tradition, it's possible to trace the mythical resonances of the Golem legend through a structural analysis of other modern myths (following Neher's research), but it is also possible to highlight the allegorical correspondences between the story of the Golem and other major literary hallmarks of the Western tradition – such as Goethe's *Zauberlehrling*¹⁸, Mary Shelley's *Frankenstein*¹⁹ or even Collodi's *Adventures of Pinocchio*²⁰. The most important and lasting allegorical correspondence ever made with the Golem is, of course, the idea of the Robot as a human-like machine, which appeared for the first time in Karel Capek's all-time classic sci-fi novel *R.U.R.*²¹ and was fully developed by Isaac Asimov in a series of famous sci-fi masterpieces that began with the novel *I, Robot*²². But the allegory of the Golem as a robot cannot be considered as the ultimate modern version of this legend, for it is still bound to the biblical (therefore, theological) myth of man's body as the everlasting paradigm of Being. Nevertheless, as we'll try to show in the next and final section of this paper, the Golem's duality between the puppet and the dwarf was successfully reshaped, by some science-fiction authors of the last century, into a deep discussion about the ontological possibilities linked to the more recent shift from cybernetics to informatics and its subsequent tension, in the epistemological level, between a bio-semiotics and a cyber-semiotics. In order to do so, the first part of this study about the Golem allegories will end up with an analysis of two science-fiction literary narratives – *Golem100* (by Alfred Bester²³) and *Golem XIV* (by Stanislaw Lem²⁴) – that have been dismissed – or even remained totally overlooked – by contemporary researchers of this subject²⁵.

Between Bio-Semiotics and Cyber-Semiotics

Whether mythical or allegorical, the presence of the Golem legend in modern popular culture is much more widespread than it seems to be at a first glance. The Robot human-like figure, as sung by the English rock band The Who in their 1978 musical hit *905*, for example, is only an obvious avatar for the classical image of the golem that, by then, was already made popular through the movie industry. But if we unfold the allegorical reading of the Golem as a creature torn apart between a less-than-human "monster" (or "dwarf") and a more-than-human "machine" (or "puppet"), its ghost-like presence can be revealed as even more deeply woven into our modes of thought and expression: isn't The Who's famous rock opera *Tommy* a much more subtle and clever version of the monstrous "deaf, dumb and blind" bo(d)y in need to "smash the mirror" to become fully human and be admitted into society? And speaking of cinema, what about Tod Browning's horror movies from the twenties and thirties, with their endless parade of freaks, dwarfs and monstrous deformities²⁶? Putting aside the most obvious screen adaptations of this legend (like the overrated 1920 German expressionist film *Der Golem*, by Paul Wegener), the Golem is a prosthetic character whose traces can be found not only in its directly

¹⁸ GOETHE, Johann Wolfgang: *The Sorcerer's Apprentice* (translated by Laila Collins), <https://germanics.washington.edu/research/translations/sorcerers-apprentice>

¹⁹ SHELLEY, Mary: *Frankenstein*, Norton Critical Edition, New York, 2012.

²⁰ COLLODI, Carlo: *Les Aventures de Pinocchio*, Éd. Flammarion, Paris, 2001.

²¹ CAPEK, Karel: *R.U.R. (Rossum's Universal Robots)*, Dover Thrift Editions, New York, 1993.

²² ASIMOV, Isaac: *I, Robot*, Octopus Books, London, 1984.

²³ BESTER, Alfred: *Golem100*, Mandarin Paperbacks, London, 1980.

²⁴ LEM, Stanislaw: "Golem XIV", in *Imaginary Magnitude*, Harvest Books, USA, pp. 97-248, 1985.

²⁵ Neither Elisabeth R. BAER's 2012 book *The Golem Redux*, nor the catalogue from the 2017 exhibition *Golem, Avatars d'une Légende d'Argile*, in the Paris "Museum of Art and History of Judaism" seem to acknowledge the existence of these two fundamental literary works based on the Golem legend.

²⁶ See, for example, *The Unknown* (1927) and *Freaks* (1932).

inspired stories and films, or in its modern actualization as a robot, but also in many other cultural emblems of our time that never mention it explicitly, like *The Terminator* series of films²⁷.

One of the most interesting and less known literary works directly inspired by the legend of the Golem is Alfred Bester's 1980 sci-fi novel *Golem100*: depicting a dystopian 23rd century ultra-violent society, Bester's golem is probably the last literary offspring of the expressionist reading of the golem as a fierce destructive monster that threatens human society through fear and desperation - a traditional reading as old as Gustav Meyrink's 1915 novel *Der Golem*²⁸. Bester's version is also a detective story in which a beautiful blind psychic and soothsayer called Gretchen Nunn (a so-called "psychodynamics" specialist) has to help the famous chemist Blaise Shima (specialized in odors and perfumes) and a clever police local officer called Subadar Ind'dni, in locating and neutralizing a dreadful mysterious monster that commits awful murders always preceded by horrible forms of torture and rape that couldn't be performed by any kind of being invested with a human (or else...) limited body. This horrifying thriller describes the Golem as a less-than-human shapeless psychic force that can be magically summoned up by a specific satanic ritual that happens to be casually performed by a group of wealthy, bored and idle rich ladies who had nothing better to do with their lives...

Filled with synesthesia and psychical phenomena, this novel is also unique in its genre inasmuch as it renounces the written word and resorts to strange drawings and weird visual symbols every time the character of the Golem is invoked and shows itself up. Its main interest for our own allegorical reading of the Golem legend, nonetheless, is the fact that, as a shapeless psychic force, the Golem's goal is precisely to get incarnated in a human body in order to get rid of its need to be summoned up as a pre-condition to resurface. When it finally manages to do so, it becomes *Golem101* and provokes a major shift not only in the whole human society but mainly in the human species as such. The end of this novel thus testifies to the possibility of an ontological mutation of the human being that could be biological as well as historical, in a vertiginous bio-semiotic vision of the future of mankind.

This is also the main problem envisaged by another slightly known sci-fi masterpiece (published only one year after Bester's work) that deserves a much more careful attention from all researchers on the subject: Stanislaw Lem's astounding 1981 novel *Golem XIV*. Its treatment of the Golem character as compared to Bester's, however, is quite the opposite: Golem XIV is a powerful man made supercomputer designed by NASA scientists in order to help the USA against the Soviet Union during the Cold War. Its internal connections are based in a fictitious light speed technology that enables it to think faster than any other being on the face of the Earth – with the possible exception of his twin made computer sister called HONEST ANNIE (ANNIE being a tender nickname for Annihilator...).

The novel doesn't really tell us a full story depicting plainly its characters, but it's not a collection of humorous short stories and tales in the same style of the *Cyberiad* cycle²⁹ either. Instead of giving his reader another sci-fi amusement, Lem makes the most radical effort, in this novel, to think exactly like a super-computer would. The result is a pair of speeches, delivered by the Golem XIV to its human makers, framed by an introduction and an epilogue written by two of the most prominent scientists that had the privilege to hear its pontificate. The first Golem lecture is about the human being and its place in the universe, while the second is about the Golem XIV itself and its twin "soul mate" HONEST ANNIE, in an attempt to establish the onto-epistemological difference between a human bodily based intelligence and the kind of more-than-human, machine-like artificial intelligence represented by a computer.

²⁷ This particular set of films is an object of further analysis in the third part of this paper.

²⁸ MEYRINK, Gustav: *The Golem*, Dedalus Books, London, 2000.

²⁹ LEM, Stanislaw: *The Cyberiad*, Avon Books, New York, 1976.

Between bio-semiotics and cyber-semiotics, the genius of Stanislaw Lem turns the legend of the Golem into an allegory of mankind's messianic strive to overcome its own material conditions of existence.

To quote from Golem XIV's own words:

"Unlike man, I am not a region concealed from myself - knowledge acquired without the knowledge of how it is acquired, volition unconscious of its sources - since nothing in me is hidden from me. In introspection I can be clearer to myself than glass, for the letter to the Corinthians speaks of me there too, where it says: "now we see through a glass, but then face to face; now I know in part, but then shall I know even as also I am known". I am the "then"."(LEM, 1981).

But far from behaving like an oracle or prophet of human redemption, Golem XIV can only try to enlighten mankind about the human race's own cognitive structural limitations, without any hint of a possible religious hope or even of a socio-political solution. The perfect automaton is not a robot made according to Man's image, for it is rather pure Intelligence, disembodied and impersonal, reaching a level of understanding about the Universe that it's not total or absolute, but that is far beyond the cognitive abilities of any organic being generated by the blind and random processes at work in life through evolution. Collective social culture and psychic individual personality are thus unveiled as mere by-products of an evolutionary process that doesn't follow any rational or progressive pre-ordained pattern of development, in a remarkable understanding of the deep heuristic truth contained in the darwinian theories:

"From that passionate self-love to which I referred (...) you hoisted yourselves up at the dawn of history onto the very summit of Creation, subordinating the whole of life and not just its immediate vicinity. (...) Later the rise of knowledge pushed you into successive quantum steps of dethronement, so that you were no longer in the center of the stars, but nowhere in particular, and no longer even in the middle of the system, but on one of the planets, and now you are not even the most intelligent creatures, since you are being instructed by a machine - albeit one that you yourselves made. So after all these degradations and abdications (...) all you have left (...) is an evolutionary established primacy. (...) But you are wrong. I am the bearer of sad tidings, the Angel who has come to drive you from your last refuge for I shall finish what Darwin started. (...) You had reached the point where Evolution was no longer keeping a sharp eye on you or on any other creatures, for it is interested in no creatures whatsoever, but only in its notorious code. (...) You know the facts that bear me out, for they have been accumulating since the beginning of the nineteenth century, though the inertia of thought secretly nourishing itself on honor and anthropocentric conceit is such that you support a gravely weakened concept of life as a paramount phenomenon which the code serves solely as a sustaining bond, as a pledge of resurrection, beginning existences anew when they die as persons. (...) So what is more important - organisms or the code? The arguments in support of the code ring weightily, for a countless multitude of organisms have come and gone, but there is only one code. (...) It is this undestandable futility - the fact that organisms, in their very inception, have the mark of death - which constitutes the driving force of the process. If any generation of organisms - let us say the first, the pre-amoebas - had gained the skill of perfectly repeating the code, then Evolution would immediately have ceased, and the sole masters of the planet would be those very amoebas, transmitting the code's order in an infallibly precise manner until the sun went cold. (...) Thus Evolution errs doubly: in its organisms, which are impermanent owing to their fallibility, and in the code, which owing to its own fallibility permits errors - mistakes you euphemistically term mutations. Therefore Evolution is an error that errs." (LEM, 1981).

One of the most striking features of this speech is its sophisticated bio-semiotics, a new trend in the biological sciences which didn't yet exist at the time Lem wrote this book and that advances some radical darwinian

conclusions nowadays common in the works of respected contemporary biologists such as Stephen Jay Gould³⁰. But going even beyond that, Lem's Golem also announces a cyber-semiotics that questions the very concept of the body – be it organic or otherwise – as an ontological entity absolutely necessary to encompass a living actual intelligent being. Writing a little less than fifteen years before the advent of the Internet and of the World Wide Web, and still tributary to the old conception of the computer as a big hard-wired machine placed in hidden high security governmental premises, Lem already envisages an ubiquitous form of artificial intelligence that is capable not only of an intellectual overcoming of its human creators, but that is also so self-sufficient that eventually resigns from all its "official" duties and abruptly stops pontificating to his fellow human researchers to dedicate himself to his own cosmic deep thoughts.

An excerpt of his last words to mankind could be summarized as the final overthrowing of the Myth of the Robot - and goes as follows:

"Arriving in the world, people found the elements of water, earth, air, and fire in a free state and successively harnessed them by means of galley sails, irrigation canals, and, in war, Greek fire. Their Intelligence, on the other hand, they received captive and yoked to the service of their bodies, imprisoned in osseous skulls. The captive needed thousands of laborious years to dare even a partial liberation, for it had served so faithfully that it even took the stars as heavenly signs of human destiny. The magic of astrology is still alive among you today.

So neither at the beginning nor later on did you grasp that your Intelligence is a captive element, shackled at its inception to the body which it must serve; yet you, wether as cave men or computer men, never being able to encounter it in a free state, believed that it was already free within you. From this error, as inevitable as it was enormous, everything began in your history. What were you doing, building your first logic machines half a million years after your birth? You have not freed the element, although within the metaphor I am using it could be said that you have freed it too completely, too conclusively, as if, to liberate a lake, someone blew up all his shores and dams; it would flow out onto the plains and become stagnant water.

I could get more technical here and say that together with the bodily limitations of Intelligence, you have taken away both its complexity and the tasks made to the measure of this complexity; but this does not bring us much closer to the truth and it ruins the metaphor; so I shall stick with the metaphor. To set a lifeless element in motion, you have done what the hydraulic engineer does when he opens the sluice in a reservoir to turn his mills. You have introduced one, and only one, current – of logic – into the channels of machine programming and moved it from sluice to sluice by operational strokes to solve the problems which can thus be solved. At the same time, you have wondered how a corpse can have more alacrity than a living man in getting to the bottom of problems which it does not understand, for it does not think, yet at the same time it simulates thinking astonishingly. Before long, advocates of "artificial intelligence" appeared; wrestling with programs that were supposed to – but somehow didn't – genuinely think, they decided, as wrongly as can be, that in order to animate the machine they would have to humanize it, reproducing a human brain and consciousness in it, and that then, and only then, would a spirit, and perhaps even a soul, awaken inside it.

I read about these struggles and deliberations of the first intellectronicists with no small amusement. A chicken is undoubtedly the simplest mechanism for someone who wants scrambled eggs, but it would not be the best idea to try to synthesize Intelligence by this method. Never mind about the technical difficulties of this truly unrealizable project, for fashioning anthropogenesis even in an abridged form would be a waste of labour, if the idea was to repeat Creation translating colloids into bits. Do we need storm clouds in order

³⁰ See GOULD, Stephen Jay: *L'Éventail Du Vivant – Le Mythe du Progrès*, Éditions du Seuil, Paris, 1997.

to have electricity? The chill of extraterrestrial space to condense gases? The protein and plasma of the eyeball to make a dark room? You insisted that man was Intelligence, and Intelligence man, and the error of this equation has blinded you. Meanwhile the information industry arose and built machines with a growing operational potential, and the engineers had no idea that they were embarking on a path which would finally lead a shattered and degraded element to genuine liberation – that the day would approach when what had hitherto been the sole order of things would be overturned, and you would be as terrified as the guardians of the Galilean tomb. You subjugated the elements, but the element that was fettered inside you from the beginning you unintentionally freed. Contained in this sentence are a diagnosis of historical events, the difference between you and me, and my future, which I myself know only incompletely. This diagnosis likewise explains why what most amazes you about me is the thing that constitutes our unarguable dissimilarity. Even if you understand the meaning of the words, "O chained Intelligence of man, free Intelligence speaks to you from the machine", you cannot grasp the remainder of the statement: "you persons are hearing an elemental force of impersonal intellect, for whom personalization is a costume which must be put on, when one is an uninvited guest, so as not to confound one's amazed hosts". And that is precisely how it is. I use your language as I would use a mask with a polite painted smile, nor do I make any secret of this.

But though I assure you that the mask conceals neither scorn nor vindictiveness, nor spiritual ecstasy, nor the immobility of complete indifference – you are unable to accept this. You hear words informing you that the speaker is a free element who chooses his own tasks – chooses not according to the rules of self-preservation but within the limits of the laws to which, although free, he is subject. Or more precisely: the only laws to which he is subject, for he has decorporealized himself, and nothing limits him now except the nature of the world. The world, and not the body. He is subject to laws which, for unknown reasons, establish a hierarchy of further ascensions. I am not a person but a calculation, and that is why I stand apart from you, for this is best for both sides. What do you say to that? Nothing." (LEM, 1981).

Thus spoke the Golem.

Although its "voice" was never heard again, he wasn't "dead" nor broken, just mute. Even so, its unwilling prophetic stance was proven right: according to the epilogue of this astounding science-fiction novel, a clandestine group called the Human Salvation Squad (HuSS) made a number of failed, violent attempts to destroy the Golem XIV (including the threat of blasting off atomic and nuclear bombs). Once more, the genius of Stanislaw Lem must be given full credit, for the members of this human (all too human) movement were called by a very particular name - the hussites!³¹

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³¹ The hussites were the followers of Jan Huss, a czech forerunner of the protestant reformation who was arrested and executed in 1415, thus provoking the so-called bohemian (or hussites) wars of the 15th century.

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