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Lacan's War Games: Cybernetics, Sovereignty and War in Seminar II

What is the image in the mirror? The rays which return on to the mirror make us locate in an imaginary space the object which moreover is somewhere in reality. The real object isn't the object that you see in the mirror. So here there's a phenomenon of consciousness [phénomène de conscience], as such. That at any rate is what I would like you to accept, so that I can tell you a little apologue to aid your reflection.

Suppose all men have disappeared from the world. I say *men* on account of the high value which you attribute to consciousness. That is already enough to raise the question – *What is left in the mirror* [*qu'est-ce qu'il va rester dans le miroir*]? But let us take it to the point of supposing that all living beings have disappeared. There are only waterfalls and springs left – lightning and thunder too. The image in the mirror, the image in the lake – do they still exist?

It is quite obvious that they still exist. For one very simple reason – at the high point of civilization we have attained, which far surpasses our illusions about consciousness, we have manufactured instruments which, without in any way being audacious, we can imagine to be sufficiently complicated to develop films themselves, put them away into little boxes, and store them in the fridge. Despite all living beings having disappeared, the camera can nonetheless record the image of the mountain in the lake, or that of the Café de Flore crumbling away in total solitude.²

In a world where all human beings have mysteriously disappeared, an automatic camera takes pictures no-one will ever see of a mountain reflected in a

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Jacques Lacan, Seminar II: The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-5, edited by Jacques-Alain Miller and translated by Sylvana Tomaselli, Cambridge University Press, Cambridge 1988, p. 46; hereafter referred to as Seminar II.

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lake. To recall Jacques Lacan's remarkable thought experiment in Seminar II, The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-5, what is taking place in this uncanny posthuman tableau of camera, sky, mountain and lake is nothing less than a new "materialist" phenomenon of consciousness. It may well have seemed to his seminar participants, of course, that there was something crucial missing from this alleged representation of "consciousness" at work, namely, the "I", ego cogito or self-conscious being who, post-Cartesian philosophy repeatedly insists, must accompany every act of thought. As Lacan makes clear from the very first session, however, his omission of the ego from this schema is precisely the point: Seminar II takes as i ts immediate point of departure – and principal target – Heinz Hartmann's Ego Psychology.³ If Ego Psychology seeks to re-assert the primacy of the autonomous or substantial ego, which is taken to be the subject of all consciousness, Lacan proposes that the ego is in fact only an *object* that exists at the level of the imaginary – and so consciousness can actually take place quite independently of any self-reflexive Cartesian ego cogito.4 In Lacan's words, what is at stake in Seminar II is quite simply how to "free our notion of consciousness of any mortgage [toute espèce d'hypothèque] as regards the subject's apprehension of itself [cette saisie essentielle du sujet par lui-même]".5 What, though, might a materialist theory of consciousness look like?

To illustrate this theory, Lacan constructs his provocative hypothesis for his audience: a camera can be said to be "conscious" of the image in its viewfinder in the same way that the human brain is conscious of the image of a real object in a mirror. For Lacan, this machine fulfils all the necessary criteria of consciousness – real, imaginary and symbolic – without any need for a "ghost in the machine" because it can just as easily represent an image on a reflective surface as any ego. If "[s]o-called Man, distinguished by his so-called consciousness, is unnecessary for this process", glosses Friedrich Kittler, it is "because nature's mirrors can accommodate these types of representation just as well as the visual centre in the occipital lobe of the brain". 6 In Lacan's materialist theory, what we

³ Lacan, Seminar II, p. 11.

⁴ *Ibid.*, pp. 49–50.

⁵ *Ibid.*, p. 57.

Friedrich Kittler, "The World of the Symbolic – A World of the Machine," in: *Literature, Media, Information Systems*, edited and introduced by John Johnston, OPA, Amsterdam 1997, p. 131.

call "consciousness" can thus actually occur on *any* material surface – a lake, a mirror, a camera lens, the occipital lobe – that is capable of reflecting an image: "this is what I want you to consider as being essentially a phenomenon of consciousness, which won't have been perceived by any ego [*moi*], which won't have been reflected upon in any ego-like [*moique*] experience – any kind of ego and of consciousness of ego being absent at the time".8

If Lacan's curious thought experiment clearly still belongs to the genre of the Cartesian or Husserlian meditation, it is thus paradoxically a phenomenological reduction that is not performed by any ego cogito. It might even be possible to read it as an ironic riposte to Husserl's famous claim in his *Cartesian Meditations* that the transcendental *cogito* would survive even a plague that wiped out the whole of humanity.9 As the French psychoanalyst proposes, Husserl is quite right to say that there is something essentially "inhuman" about consciousness which means that it can carry on quasi-automatically without us – but for the wrong reason: consciousness is material, not transcendental, which means that it survives even the extinction of the *cogito*. For Lacan, what is at stake in this materialist definition of consciousness is not whether machines can be as conscious as human beings - indeed the whole field of what will later be called "artificial intelligence" is one to which he is supremely indifferent – but rather whether our so-called "human" consciousness is itself a kind of machine: "The machine is simply the succession of little os and 1s, so that the question of whether it is human or not is obviously entirely settled – it isn't. Except, there's also the question of knowing whether the human, in the sense in which you understand it, is as human as all that [si humain que ça]".10 In the inhuman mirror of the camera lens, Lacan implies, we must learn to recognize ourselves anew: we human beings never actually disappeared from the world at all, but only because we were never really there in the first place, because human consciousness is itself a species of automatic photography, because we are the camera.

In this essay, though, I would like to propose that Lacan's materialist theory of consciousness – of a consciousness that seems to run all by itself in the absence

⁷ Lacan, Seminar II, p. 49.

⁸ *Ibid.*, p. 47.

⁹ Edmund Husserl, Cartesian Meditations: An Introduction to Phenomenology, M. Nijhoff, The Hague 1960, pp. 92–3.

¹⁰ Lacan, Seminar II, p. 319.

of any human sovereign ego – may also be a materialist theory of politics or even a peculiar kind of "war game": "Yes, war itself, considered in its aspect as game, detached from anything which might be real". 11 It is my aim in what follows to read his thought experiment not simply as a modern Cartesian meditation, in other words, but as a belated contribution to that other distinguished early modern speculative genre: the political fiction of origins and ends. After all, his bucolic *mis-en-scene* – sky, lake, mountains – is as reminiscent of Rousseau's Alps as Descartes' Paris and his thought experiment performs the same heuristic anthropological function as the latter's celebrated fiction of the state of nature in the Second Discourse: we are invited to recognize ourselves in Lacan's camera obscura in the same way as we are in Rousseau's beau savage. To quickly outline my argument, I will contend that Lacan's thought experiment about the relation between the allegedly "sovereign" human subject and the self-moving machine both emerges out of, and feeds back into, a set of contemporaneous political debates about the relationship between sovereignty and governmentality, decision and norm, exception and rule and, ultimately, war and peace. If the classic machine metaphor obviously has a long and distinguished history in philosophical anthropology – which uses it to solve the problems of consciousness, free will, the difference between humans and animals and so on – I shall propose that it is also a *political* trope that is variously deployed to describe the birth of modern science, the rise of political liberalism and the end of history.¹² In what follows, I thus seek to politically "reverse engineer" Lacan's thought experiment by revealing its possible origins in a set of increasingly obscure post-war philosophical debates on the meaning of what was simply known as the "machine". What, then, are the political implications of Lacan's materialist theory of consciousness?

92 Cybernetics

In Seminar II, Lacan famously explores the entirely new science of cybernetics. It has been shown by Christopher Johnson, amongst others, that the cybernetic revolution in the post-war USA led, in turn, to the emergence of a peculiar

¹¹ *Ibid.*, p. 300.

Arthur Bradley, In the Sovereign Machine: Sovereignty, Governmentality, Automaticity. *Journal for Cultural Research*, 22 (3/2018), pp. 209–223.

genre of "French Cybernetics" in the late 1940s and 50s. 13 As Lydia H. Liu also observes, Lacan rarely mentions Norbert Weiner and other theorists by name in Seminar II but he would likely have become familiar with their work from a number of seminar attendees who had an interest in the field: Jean Hyppolite, who engaged with Weiner upon the latter's visit to France, and the mathematicians Georges Guilbaud and Jacques Riguet who were members of the Cercle d'Études Cybernétiques.¹⁴ To give a very schematic overview of his argument as it unfolds across this seminar, Lacan deploys a series of tropes from cybernetic theory (circuits, feedback, chance, homeostasis, entropy and so on) in a largely heuristic manner to re-describe classic themes like (1) the ego, 15 (2) the drives¹⁶ and (3) the symbolic order.¹⁷ In Lacan's public lecture of 22 June 1955 "Psychoanalysis and Cybernetics, or On the Nature of Language," which summarized the work of the seminar to date, he concludes with what Liu rightly calls a quasi-Heideggerian definition of the "cybernetic unconscious" into which the human is thrown [Geworfen]: "The human being isn't master of this primordial, primitive language," he declares, "he has been thrown into it [jeté], committed [engagé], caught up in its gears [pris dans un engrenage]".18 What, though, is the contemporary context of Lacan's turn to cybernetics?

Christopher Johnson, 'French' Cybernetics. *French Studies: A Quarterly Review*, 69 (1/2015), pp. 60–78.

Lydia H. Liu, The Cybernetic Unconscious: Rethinking Lacan, Poe, and French Theory. *Critical Inquiry*, 36 (2/2010), pp. 299–300.

Lacan, Seminar II, pp. 40-52.

¹⁶ *Ibid.*, pp. 53–63.

Ibid., pp. 77–92. For prior readings of this seminar, see Jacques-Alain Miller, "An Introduction to Seminars I and II: Lacan's Orientation Prior to 1953," in: Reading Seminars I and II: Lacan's Return to Freud, edited by Richard Feldstein, Bruce Fink and Maire Jannus, SUNY, New York 1996, pp. 3–38; Friedrich Kittler, "The World of the Symbolic – A World of the Machine," in: Literature, Media, Information Systems, edited and introduced by John Johnston, OPA, Amsterdam 1997, pp. 130–46; Mark B. N. Hansen, Embodying Technesis: Technology Beyond Writing, University of Michigan, Ann Arbor 2000; Ronan Le Roux, Psychoanalyse et cybernétique: Les Machines de Lacan. L'Evolution Psychiatrique, 72 (2/2007), pp. 346–69; John Johnson, Allure of Machinic Life: Cybernetics, Artificial Life, and the New AI, MIT Press, Cambridge, Mass., and London 2008; Liu, The Cybernetic Unconscious, 288–320; and Arthur Bradley, Originary Technicity: The Theory of Technology from Marx to Derrida, Palgrave, London 2011.

¹⁸ Lacan, Seminar II, p. 307.

To be sure, Lacan's second seminar remains a surprisingly obscure work within his corpus that has attracted little attention from scholars despite, or arguably because of, its inaugural status within the seminars as a whole. It is symptomatic here that arguably its most famous single session – the "Seminar on 'The Purloined Letter" (1956) – would first have been encountered by the vast majority of Anglophone readers retrospectively, and entirely out of context, in Jeffrey Mehlman's 1972 translation. 49 As is so often the case with "early" works, Seminar II thus tends to be read genetically – not least by the author himself – as little more than a theoretical precursor to, or antecedent of, the later, more prominent, corpus. For Jacques-Alain Miller, who offers one of the very few historical reconstructions of the seminars of the mid-1950s, they are chiefly remarkable because they mark the conceptual transition from the early "phenomenological" Lacan of the 1930s and 40s to the later "structuralist" Lacan of the 1960s and 70s: "Structuralism taught him that the Husserlian attempt to describe one's immediate intuition of the world – feeling one's own body or being in a perspective – is illusory because language is always already there".20 In this orthodox reception history, Lacan's seminar on cybernetics thus signals at best the – embryonic – beginnings of the "canonical" Lacan of structuralism.

If we return to Seminar II on its own terms – rather than as merely a precursor to the larger engagement with structuralist linguistics via Saussure and Jakobson – then we encounter a Lacan who is arguably more materialist, and less linguistic, than his later reputation implies. It is enough to recall here the work of the small number of media theorists – principally Friedrich Kittler – who have returned to Seminar II to propose exactly such a materialist counter-genealogy of the Lacanian clinic. As Kittler contentiously argues, the triple media revolutions of the late 19th century – gramophone, film, typewriter – constitute what he calls the "historical a priori" of Lacan's own tripartite theory of the psyche in terms of the real, the imaginary and the symbolic.²¹ To break out of what he sees as the linguistic or discursive straitjacket that continues to dominate critical theory of new media, science and technology up to the present, the media theorist Mark B. N. Hansen likewise advocates returning to Seminar II: Lacan's reading

John Forrester, *The Seductions of Psychoanalysis: Freud, Lacan, and Derrida*, Cambridge University Press, Cambridge 1990, p. 339; see also Liu, The Cybernetic Unconscious, p. 319.

²⁰ Miller, "An Introduction to Seminars I and II: Lacan's Orientation Prior to 1953," p. 12.

Friedrich Kittler, *Gramophone*, *Film*, *Typewriter*, translated and introduced by Geoffrey Winthrop-Young and Michael Wutz, Stanford University Press, Stanford, CA 1999, p. 16.

of the symbolic order as a kind of cybernetic loop or circuit, rather than a set of signifiers, takes an important, if only ever partial, step towards liberating technology's "radical exteriority" from language and cognition more generally.²² In a more historical vein, Lydia H. Liu's excellent reconstruction of Lacan's work in this period also criticizes the dominant structuralist and linguistic reception of the "Seminar on 'The Purloined Letter'" – which leads both supporters like Miller and critics like Derrida to fetishize it as a kind of closed, self-reproducing textual system – by arguing that Seminar II is, rather, the product of a "political decision or intuition" about what she calls the "cybernetic unconscious" of the "postwar Euro-American world order".²³

In such accounts of the Lacan of Seminar II, what we might call the question of "the political" looms large but, at the same time, it often remains frustratingly nebulous. It is very well documented that the cybernetic revolution already had its own disturbing political – and military – trajectory by the mid-1950s but the question of how far, precisely, Lacan's seminar engages with this history remains unanswered. As Kittler correctly observes, cybernetics was, empirically, "a theory of the Second World War":24 Norbert Weiner famously began to construct his celebrated "Weiner Filter" when working on automatic anti-aircraft guns whereas the game theorist John von Neumann was recruited onto the Manhattan Project. To a remarkably prescient degree, Lacan grasped this ongoing "weaponization" of cybernetics – or informationalization of war – in Seminar II: "It is not for nothing that game theory is concerned with all the functions of our economic life, the theory of coalitions, of monopolies, the theory of war", he memorably observes in "Psychoanalysis and Cybernetics," "Yes, war itself, considered in its aspect as game [dans ses ressorts de jeu essentiellement], detached from anything which might be real [détaché de quoi que ce soit qui s'y incarne de réel]".25 However, the psychoanalyst does not extrapolate upon the military-industrial politics of cybernetics – beyond one or two quasi-Heideggerian pronouncements about the dangerous becoming-symbolic of man – and this political lacuna arguably remains open in subsequent criticism of the seminar. If Kittler is able to argue that the Second World War is the origin of cybernetics,

²² Hansen, *Embodying Technesis*, p. 182.

²³ Liu, The Cybernetic Unconscious, p. 289.

²⁴ Kittler, *Gramophone*, *Film*, *Typewriter*, p. 259.

Lacan, Seminar II, p. 300.

and that cybernetics is, in turn, the "historical a priori" of Lacan's psychoanalysis, it is surprising that he never triangulates this set of insights to consider whether the Lacanian clinic might also be, so to speak, a theory of war. For Liu, Lacan's cybernetic turn is undoubtedly a "political decision or intuition," rather than a purely conceptual shift or turn, but it is probably fair to say that her essay is concerned less with the "postwar Euro-American world order" than with the internal cultural politics of "French Theory." In order to gain a more precise purchase of what is at stake politically in Lacan's seminar, I thus want to begin by reading it in the context of the political history of the machine metaphor.

Materialism

In Thomas Hobbes' *Leviathan* (1651), which was first published just over 300 years before Seminar II, we find an unlikely prototype for Lacan's thought experiment on the materiality of consciousness. To recall only Abraham Bosse's famous frontispiece to the original edition, which was apparently designed to the author's own specifications, Hobbes' political thought experiment clearly presents us with another tableau of a complex but soulless machine, running entirely by itself, in a peaceful world of mountains, sea and sky that is, once again, apparently devoid of human beings.²⁶ It is worth remembering here that Hobbes's text is also a direct reaction to, and radicalization of, Descartes' philosophical anthropology in the *Meditations* and elsewhere. After all, the French philosopher had already compared the human body to a spring-operated clockwork mechanism like a clock or watch little more than a decade before *Leviathan*.²⁷ For Hobbes, Descartes' new philosophical question – can an artificial body run all by itself independently of any animating soul? – is, however, transformed into the classic modern political question of whether an artificial

To recall just one of the many curious details in Bosse's celebrated frontispiece, the city over which the mighty Leviathan presides is apparently entirely empty of people. For only the most recent attempt to decipher the significance of Bosse's engraving, see Giorgio Agamben, "Leviathan and Behemoth," in: *Stasis: Civil War as a Political Paradigm*, translated by Nicholas Heron, Stanford University Press, Stanford, CA 2015, pp. 25–70.

²⁷ For Descartes: "I might consider the body of a man as a kind of machine equipped with and made up of, bones, nerves, muscles, veins, blood and skin in such a way that, even if there were no mind in it, it would still perform all the same movements as it now does in those cases where movement is not under the control of the will or, consequently, of the mind" (René Descartes, *Meditations on First Philosophy*, translated by John Cottingham, Cambridge University Press, Cambridge 1986, p. 58).

body politic can function entirely autonomously of its animating sovereign demon or homunculus. In the celebrated opening to *Leviathan*, the English political philosopher asks: "For seeing life is but a motion of Limbs, the beginning whereof is in some principall part within; why may we not say, that all Engines that move themselves by springs and wheeles as doth a watch) have an artificiall life?".²⁸ What if Hobbes' materialist theory of politics is one possible origin of Lacan's materialist theory of consciousness?

To pursue this (admittedly speculative) hypothesis into the mid-20th century context of Lacan's seminar, I want to consider a very different, if broadly contemporary, attempt to recuperate Hobbes' political project: Carl Schmitt's Leviathan in the State Theory of Thomas Hobbes (1938). It is rarely observed that this essay – written to mark the 300th anniversary of Descartes' Meditations – is not only a study of Hobbes as a political theological mythographer but as a modern philosopher of technology. As the German jurist argues: "Hobbes transfers...the Cartesian concept of man as a mechanism with a soul onto the 'huge man', the state, made by him into a machine animated by the sovereign representative person".29 For Schmitt, Hobbes' philosophy is thus a species of "political Cartesianism" that projects Descartes' dualist theory of man – where the human is composed of mechanical matter and immaterial mind – into a dualist theory of the state as composed of a mechanical body and sovereign personalist "soul." Yet, where Descartes argues that only the body of man is like a machine, Hobbes extends the analogy to the *soul* as well: Schmitt contends that the sovereign person at the centre of the state machine is *himself* the product of a formal process of representation. If Hobbes seeks to defend sovereign personalism, he thus ironically renders the state in its entirety a liberal *homo* artificialis: the "Leviathan" is "the first product of the age of technology, the first modern mechanism in a grand style, as a machine machinarum".30 In a curious case of philosophical feedback, (1) Hobbes' politicization of (2) Descartes' philosophical anthropology is itself later re-anthropologized by (3) Julien de la

Thomas Hobbes, *Leviathan or the Matter, Forme and Power of a Common Wealth Ecclesias-ticall and Civil*, edited by Richard Tuck, Cambridge University Press, Cambridge 1991, p. 1.

²⁹ Carl Schmitt, *The Leviathan in the State Theory of Thomas Hobbes: Meaning and Failure of a Political Symbol*, translated by George Schwab & Erna Hilfstein, Chicago University Press, Chicago, IL 2008, p. 32.

³⁰ *Ibid.*, p. 34.

Mettrie in his theory of man as a – soulless – machine:³¹ "After the body and soul of the huge man became a machine, the transfer back became possible, and even the little man could become a *homme-machine*. The mechanization of the concept of the state thus completed the mechanization of the anthropological image of man".³²

If Schmitt is correct to say that Hobbes' "Leviathan" is the original "homme machine" - because the body politic becomes totally mechanized, body and soul, for the first time in history in his work – then it follows that the classic philosophical machine metaphor was always and already a political trope from the very beginning. It is the *political* question of sovereign personalism versus liberal governmentality, in other words, that makes possible the seemingly a-political philosophical anthropological questions of consciousness versus automatism, free will versus determinism, the human versus the animal and so on. Accordingly, it is no coincidence that Schmitt's own political theology seeks to re-politicize the machine metaphor after its depoliticization at the hands of liberal modernity: what appears to be a neutral, positive mechanism is, upon his reading, the site of an obscure political polemos. To recall Schmitt's own dramatic claim from his classic earlier *Political Theology* (1922), for example, what takes place with the scientific revolution of the early modern period is not merely the "neutral" and a-political passage from Koyré's closed world of premodernity to the open universe of modernity, but a kind of political ontological coup d'état that violently overthrows the personal sovereignty of the premodern prince and replaces him with the – now fully mechanical, autonomous and automatic – juridico-political order of modernity: "The sovereign, who in the deistic view of the world, even if conceived as residing outside the world, had remained the engineer of the great machine, has been radically pushed aside," Schmitt writes, "The machine now runs by itself".33 In Schmitt's own famous or notorious political theological critique of modern liberalism, of course, what is at stake is precisely the attempt to recuperate (or perhaps retroactively invent) the figure of the concrete sovereign person or decision-maker who presides over the – allegedly autonomous and self-regulating – *machine machinarum* of laws.

³¹ See Julien de la Mettrie, *Man a Machine*, translated by G. C. Bussey, Open Court, Chicago, IL 1912.

³² Schmitt, *The Leviathan in the State Theory of Thomas Hobbes*, p. 37.

³³ Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, translated by George Schwab, Chicago University Press, Chicago, IL 1985, p. 48.

In this historical context, I want to propose that Lacan's own thought experiment may not merely dramatize the phenomenological supersession of the sovereign ego by the "machine" of consciousness but the political overthrow of the premodern sovereign person by the machine machinarum of the modern liberal juridico-political order. It is impossible to separate philosophy from political theory, philosophical anthropology from artificial intelligence, Descartes' "little man" from Hobbes' "huge man" in Lacan's thought experiment because they are all part of the same closed circuit. As we will see presently, Lacan is thoroughly immersed not only in the philosophical history of the machine metaphor Schmitt is describing from Descartes to La Mettrie, but is also familiar with the post-Schmittean political critique of liberalism as the machine that runs by itself if only, perhaps, via key interlocutors such as Koyré, Kojève and Strauss. To re-read Lacan's description of the scientific revolution in this context, we might thus begin to detect not merely a philosophical or psychoanalytic revolution but, once again, an obscure kind of *political* revolution at work: "Here man isn't master in his own house [maître chez lui]. There is something into which he integrates himself, which through its combinations already governs [et qui déjà règle par la loi de ses combinaison]".34 If Lacan's machine metaphor clearly has Freudian origins – "Everything fell into place, the cogs meshed", Freud writes in an early letter to Fleiss, "the thing really seemed to be a machine which in a moment would run of itself"35 — I thus want to hypothesize that it might also belong to a classical political tradition describing the relationship between sovereignty and governmentality that stretches from Schmitt to at least as far back as Louis Adolphe Thiers famous formula that "the king reigns but does not govern [le roi règne gouverne mais il ne gouverne pas]." In order to pursue this political reading of Lacan's thought experiment further, I now want to read it alongside a set of specific debates about the philosophical, historical and political implications of the "machine" in post-war French thought by figures such as Schuhl, Koyré and Kojève.

Lacan, Seminar II, p. 307.

Sigmund Freud, The Origins of Psychoanalysis: Letters to Wilhelm Fleiss, Drafts and Notes, 1887-1902, edited by Marie Bonaparte, Anna Freud and Ernst Kris, Basic Books, New York 1954, p. 173.

Machine

In "Freud, Hegel and the Machine," one of the early sessions in Seminar II, Lacan offers a fragmentary genealogy of the philosophy of the machine from Descartes' De Homine (1662) through Hegel's Phenomenology of Spirit (1807) up to Freud's *Beyond the Pleasure Principle* (1922). To briefly rehearse his argument here, Lacan begins by claiming that what leads Descartes to the conclusion that the human body is directly comparable to a machine is not actually a phenomenological meditation at all but the invention of a very specific machine: the clock, ³⁶ It is with the creation of the clock, he argues, that we humans encounter not only something outside ourselves that also seems to run "all by itself" but also, and more significantly, a material embodiment of our own symbolic activity. After all, the clock is something intrinsic to our human subjectivity – we all must "know the time" in order to be in the world – but which nonetheless embodies a purely symbolic system of temporal precision that operates wholly independently of humans. For Lacan, and this is arguably the closest Seminar II comes to a "thesis," what is at stake in the machine called the clock is thus a materialization of the prior symbolic order out of which human subjectivity itself is constructed: "The machine embodies the most radical symbolic activity of man [dans la machine est incarnée l'activité symbolique la plus radicale chez l'homme]".37 If the clock revealed to Descartes that human subjectivity is itself built out of symbols, so later thermodynamic machines like the steam engine likewise stand behind Freud's theory of the psyche as the site of a set of autonomous, self-regulating, energetic drives like the pleasure principle: "And later on, it dawned on people, something which was never thought of before, that living things look after themselves all on their own [les êtres vivants s'entretiennent tous seuls], in other words, they represent homeostats [qu'ils représentent

Lacan, Seminar II, p. 73.

Ibid., p. 74. If Seminar II is (at least to my knowledge) Lacan's first explicit discussion of the symbolic order in terms of the machine, he obviously returns to, and re-works, this analogy in later work such as the famous discussion of the relationship between *tuche* and *automaton* in Seminar XI: *The Four Fundamental Concepts of Psychoanalysis*. In the earlier seminar, Lacan's interest is clearly in articulating the symbolic determinism that underwrites apparent acts of chance – such as the act of tossing a coin – but the later seminar is more concerned with exposing the "chance" encounter with the real that underlies and resists the automaton that is the symbolic order (Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis*, edited by Jacques-Alain Miller and translated by Alan Sheridan. W. W. Norton and Co., New York 1978, pp. 53–66; hereafter referred to as *Seminar XI*).

des homéostats]".38 In this context, Lacan's materialist theory of consciousness merely represents the last iteration of this genealogy of the machine: what the human being recognizes in the clock, the steam engine and the automatic camera is that we are *ourselves* fundamentally machinic beings. What, again, might be the political implications of Lacan's philosophy of the machine?

To re-read Lacan's seminar within its contemporary philosophical context, we can perhaps begin to see that he is not simply engaging with such prominent figures as Heidegger but also carving out a niche for himself within a, now largely forgotten, debate about the - historical, sociological or epistemological - causality of technological evolution. It is possible to argue that his seminar emerges particularly out of a series of philosophical interventions in the immediate post-war period which seek to explain the – notoriously pervasive – use of slave labor in Ancient Greece. According to Aristotle's Politics, of course, Greek society was compelled to rely on the "living tool [ktema ti empyschon]" called the slave because of the absence of more highly evolved forms of self-moving technology.³⁹ Yet, pace Aristotle, the historian of the Ancient World Pierre-Maxim Schuhl argued that the Greek dependency on slavery was precisely what artificially delayed its technological evolution. For Schuhl, whose Machinisme et philosophie (1947) offered a new history of Ancient Greek technology, "we do not need to save manpower by resorting to machines when we have at our disposal numerous and inexpensive living machines [machines vivantes], as far removed from the free man as the animal: slaves". 40 If Schuhl offers a broadly positivist or sociological explanation of Ancient Greek technogenesis – where the existence of cheap and abundant slave labour rendered machines simply uneconomical – Alexandre Koyré rejects this account in favour of a historical epistemological position which insists that Greece lacked the kind of genuinely experimental theory of science that made modern technological innovation possible. In essays like "Les Philosophes et la machine" (1948), which is a review essay of Schuhl's book, Koyré proposes that "philosophy" – by which he means the phi-

³⁸ Lacan, Seminar II, p. 75.

Aristotle, *Politics* in *Complete Works of Aristotle: The Revised Oxford Translation*, edited by Jonathan Barnes, Princeton University Press, Princeton, NJ 1984, 1253b.

Pierre-Maxim Schuhl, Machinisme et philosophie. PUF, Paris 1947, pp. 13–14. See also Giorgio Agamben, The Use of Bodies: Homo Sacer IV, 2, translated by Adam Kotsko, Stanford University Press, Stanford, CA 2016. This is (to my knowledge) the only contemporary philosophical engagement with Schuhl's reading of slavery in Machinisme et philosophie.

losophy of science or, more strictly, theoretical physics – is what makes positive technology – or the "machine" – possible or necessary rather than *vice versa*: "Greek science could not give birth to true technology. In the absence of physics, such technology is strictly inconceivable".⁴¹

If contemporary French philosophy of technology seemed to offer a choice, crudely speaking, between sociology (Schuhl) and historical epistemology (Koyré), Lacan's psychoanalytic genealogy in Seminar II appears to navigate a kind of "middle way" that synthesizes elements of both positions. To be sure, Lacan's genealogy of the scientific revolution in "Psychoanalysis and Cybernetics" is clearly deeply indebted to Koyré's classic account of the passage from the "closed world" of premodernity to the "open universe" of modern science which he formulates in the later text of that name.⁴² It also appears to draw directly on Koyré's claim that what enabled the technological invention of objects such as the clock was the prior philosophical invention of the mathematical universe of precision. Accordingly, we find Lacan's argument that Huyghens' isochronic clock is "a hypothesis embodied [incarnée] in an instrument"43 is an almost verbatim reproduction of Koyré's earlier statement in "Du monde de l''a-peu-près' a l'univers de la précision" (1948) that the chronometric clock is "an *instrument*, that is to say, the creation of scientific thought or, better still, the conscious realization of a theory". 44 Yet, at the same time, Lacan cannot wholly embrace Koyré's theoretical idealism because he is at pains, like the more historicist Schuhl, to emphasize the extent to which the clock embodies something that necessarily both precedes and exceeds any gesture of philosophical knowledge or mastery. For Lacan, the philosopher can never be the idealist "master" of the machine because, as we will see momentarily, he is already the "slave" of the symbolic universe. In another complex feedback loop, Lacan argues that (1) the symbolic order "invents" man; (2) man, in turn, invents the machine and (3) the machine

⁴¹ Alexandre Koyré, "Les philosophes et la machine," in: *Études d'histoire de la pensée philosophique*, Gallimard, Paris 1971, p. 341.

⁴² Alexandre Koyré, *From the Closed World to the Infinite Universe*, Johns Hopkins Press, Baltimore 1957. For a comparative reading of Lacan and Koyré, see also Samo Tomšič, Mathematical Realism and the Impossible Structure of the Real. *Psychoanalytische Perspectieven*, 35 (1/2017), pp. 9–34.

⁴³ Lacan, Seminar II, p. 298.

⁴⁴ Alexandre Koyré, "Du monde de l''à-peu-près' à l'univers de la précision," in: *Études d'histoire de la pensée philosophique*, Gallimard, Paris 1971, p. 357.

retroactively embodies or materializes the originary becoming-symbolic of man: "I am explaining to you that it is in as much as he is committed to a play of symbols, to a symbolic world, that man is a decentred subject. Well, it is with this same play, this same world, that the machine is built. The most complicated machines are made only with words [ne sont faites qu'avec des paroles]". ⁴⁵

In this period, however, Lacan's single most significant political interlocutor within contemporary French philosophy of technology arguably remains Alexandre Kojève whose idiosyncratic philosophical anthropological re-reading of Hegel's master-slave dialectic had an incalculable impact on post-war French thought.⁴⁶ To re-read Lacan's constant references to the figure of the slave in Seminar II - whether it be Meno's slave in Plato's dialogue or Hegel's master-slave dialectic – we can begin to place his work within a long philosophical history of the slave, which stretches from Aristotle, through Hegel and arguably even up to Agamben, as itself the original form of technology: Kojève, in particular, famously reads Hegel's master-slave dialectic in anthropogenetic terms as the becoming-human of the animal through its transcendence of pure nature via labor or struggle. 47 It is very clear from Lacan's – otherwise impeccably Koyréan – account of the scientific revolution, for instance, that what is at stake in the birth of modern science is not simply the becoming-symbolic of the premodern universe but a more political becoming-slave of the humanist theory of sovereign man. As he narrates it in "Psychoanalysis and Cybernetics," "The order of science hangs on the following, that in officiating over nature [d'officiant à la nature], man has become its officious servant [l'homme est devenu son officieux]. He will not rule over it, except by obeying it [Il ne la gouvernera pas sinon en lui *obéissant*]. And like the slave, he tries to make the master dependent on him by serving him well [il tente de faire tomber son maître sous sa dépendance, en le servant bien]". 48 Yet, where Hegel's slave famously goes on to liberate himself from his master through his own symbolic labors, Lacan's exchange with Jean Hyppolite in Seminar II makes clear that the *Phenomenology of Spirit*'s account

Lacan, Seminar II, p. 47.

⁴⁶ See Arthur Bradley, Terrors of Theory: Critical Theory of Terror from Kojève to Žižek. *Telos* no. 189 (Spring 2020), forthcoming.

⁴⁷ Alexandre Kojève, *Introduction to the Reading of Hegel: Lectures on the Phenomenology of Spirit*, assembled by Raymond Queneau, edited by Allan Bloom and translated by James H. Nichols, Cornell University Press, Ithaca, NY 1969.

Lacan, Seminar II, p. 298.

of history's dialectical progression towards absolute knowledge is itself nothing more than an elaborate philosophical fantasy of mastery. ⁴⁹ If we re-read Lacan's materialist thought experiment on consciousness in this neo-Hegelian context, we might thus interpret its vision of the human subject as a conscious machine running on an endless circuit or feedback loop, without ever achieving the short-circuit of self-consciousness, less as some kind of Kojèvean prophecy of the "end of history" than as a kind of literal dialectic at a standstill. For Lacan, pace Kojève, this subject is not so much post-historical as *pre-historical*, frozen in a pre-dialectical state of nature, trapped in a permanent and non-speculative state of "slavery" to the symbolic order. In drawing this essay to a close, though, I want to add one more contemporary political footnote to Lacan's thought experiment: nuclear strategy.

Bomb

In the admittedly few critical discussions of Lacan's materialist theory of consciousness, I am struck that one simple question has never been satisfactorily answered: why, exactly, do all the human beings disappear? It is tempting to speculate that Lacan's own psychoanalytic machine may also be starting to run all by itself here, above and beyond its maker's original intentions, because there is no obviously no logical need to annihilate the whole of humanity simply in order to prove the redundancy of the ego cogito. As a matter of fact, his radical move even risks disproving his larger argument because it seems to imply that there is something essentially "human" about the cogito after all. To answer the question of why all human beings must disappear, Lacan declares that his *reductio ad nihilum* is really just an exorbitant provocation to the presumed Cartesianism of his seminar participants for whom "man" and "consciousness" are indeed still synonymous: "I say men on account of the high value which you attribute to consciousness". 50 If he never really explains what has happened to the human race, it is curious that a seminar that consistently addresses the revolutionary implications of technological inventions from the clock to the steam engine for philosophy does not entertain one – brutally empirical – answer to

⁴⁹ Ibid., pp. 70–2. For an excellent overview of Lacan's complex engagement with the master-slave dialectic, and with Hegel's philosophy of history more widely, see also Justin Clemens, "The Field and Function of the Slave in the Écrits," in: Lacan: The New Generation, edited by Lorenzo Chiesa, Re:press, Melbourne 2014, pp. 193–202.

⁵⁰ Lacan, Seminar II, p. 46.

this question which will be famously pursued just a few years later in the explicitly post-nuclear philosophy of Günther Anders, Karl Jaspers and, later, Maurice Blanchot.⁵¹ In the new atomic era inaugurated by the destruction of Hiroshima and Nagasaki, Lacan's thought experiment of a world in which all living things could instantly be annihilated by an arbitrary sovereign decision was no longer simply a thought experiment. What if the machine that can run all by itself in the absence of all human beings is the atom bomb?

To return to Lacan's hypothesis in this military context, we might begin to see it as neither an exercise in Cartesian philosophical anthropology nor in Rousseauean political allegory but as a new and entirely literal kind of war game: "Yes, war itself, considered in its aspect as game, detached from anything which might be real".52 It may be possible, in other words, to place Lacan's thought experiment within the long history of military "war games" that begins with chess matches in Ancient India and extends up to modern computer simulations. Yet, his materialist theory of consciousness is not quite a "theory" of war in the sense that it imitates or rehearses pre-existing "reality" in the manner of some military training exercise. For Lacan, on the contrary, this war game is rather an actualization of what we might call the becoming-real – or even becoming-war – of the symbolic itself. If the simple "adding machine" is "far more dangerous for man than the atom bomb",53 as he claims earlier in the seminar, it is because the philosophical neutralization of man by the symbolic order has already prepared the ground for the literal neutralization of the human race by a nuclear weapon. In Lacan's account, cybernetics itself, not nuclear war, is the "real" killing machine.

If cybernetics was indeed "a theory of the Second World War", as Friedrich Kittler claims,⁵⁴ it had by the mid-1950s evolved to become a theory of the – seemingly imminent – Third World War as well. To be sure, Norbert Weiner

Günther Anders, *Die Antiquiertheit des Menschen. Band I: Über die Seele im Zeitalter der zweiten industriellen Revolution*, München, C. H. Beck 1956; Karl Jaspers, *Die Atombombe und die Zukunft des Menschen*, Piper Verlag, Munich 1958; Maurice Blanchot, "The Apocalypse is Disappointing," in: *Friendship*, translated by Elizabeth Rottenberg, Stanford University Press, Stanford, CA 1997, pp. 101–108.

Lacan, Seminar II, p. 300.

⁵³ *Ibid.*, p. 88.

⁵⁴ Kittler, *Gramophone*, *Film*, *Typewriter*, p. 259.

himself became a vocal opponent of the nuclear weaponization of information theory in the post-WW II era but, once set in motion, this new informational war machine would not so easily be stopped. It is worth recalling here that Lacan would by no means be the last cybernetic theorist to create a thought experiment predicated upon the annihilation of all human beings. As many scholars have documented, John von Neumann would himself become instrumental in formulating the famous or notorious nuclear deterrence theory of Mutually Assured Destruction (MAD). In this post-nuclear context, we thus might begin to make sense of a curious embellishment at the end of Lacan's thought experiment on consciousness: "We can take things further. If the machine were more complicated, a photo-electric cell focused on the image in the lake could cause an explosion – it is always necessary, for something to seem efficacious, that an explosion takes place somewhere – and another machine could record the echo or collect the energy of this explosion".55

In a world where all human beings have been annihilated, then, machines will continue to talk to one another via a language of explosions that no-one will ever see or feel. To re-read his materialist theory of consciousness through the lens of nuclear strategy one last time, Lacan's machine – an automatic camera that carries on taking pictures even when there is no one left to operate it or to view its photographs – thus arguably even becomes a kind of perverse⁵⁶ psychoanalytic prototype for what nuclear theorists will later call a Secure Second Strike Retaliatory System (SSRS). It is an intriguing historical coincidence that Seminar II took place in the exact same period – the mid-1950s – that the USA began to implement President Eisenhower's foreign policy doctrine of "Massive Retaliation" by deploying its Strategic Air Command both domestically and in Europe as a permanent second strike capacity against the Soviet Union.⁵⁷ If a nuclear power possesses an SSRS (a system that has become automated or "fail-deadly" over time), then it always has the capacity to meet a first or "surprise" strike that destroys its command and control structures with a retaliatory second strike of its own - and so the theory of Mutually Assured Destruction becomes a technological dead certainty. What, and it is with this speculation that

⁵⁵ Lacan, Seminar II, p. 47.

⁵⁶ Boštjan Nedoh, Ontology and Perversion: Deleuze, Agamben, Lacan, Rowman and Little-field International, London 2019.

Walton S. Moody, *Building a Strategic Air Force: The Official US Air Force History of the Strategic Air Command* 1945-1953, Air Force History and Museum, Washington, DC 1996.

I will conclude, if Lacan's materialist theory of consciousness ends up performing not simply the redundancy of the human *ego cogito* but the entire symbolic theory of war which reaches its logical end in the mutually assured destruction of the human race? In a world without us, Lacan's war games continue to play on all by themselves.⁵⁸

In coming to this conclusion, of course, I do not mean to suggest that Lacan "endorses" such a political position but rather that it is one possible and legitimate – if perversely literal - "use" for the machine he has set in motion. To the contrary, Lacan is already clear in this comparatively early seminar that there is something that *resists* or prevents the total integration of the subject into the symbolic order but, intriguingly at this stage of his work, it is not the real but the imaginary: "we come upon a precious fact revealed to us by cybernetics – there is something in the symbolic function of human discourse that cannot be eliminated, and that is the role played in it by the imaginary" (Lacan, Seminar II, p. 306). If Seminar II identifies this point of resistance to the symbolic wholly with the imaginary – even to the extent of speculating that the entire sphere of the symbolic may itself be nothing more than a second-order fantasy of the imaginary (*Ibid.*, p. 307) – Seminar XI will, as we have seen above, posit that the real is what resists the pure functionality of the symbolic machine (Lacan, Seminar XI, pp. 53–66). In this context – which I do not have the time and space to explore in any detail here - we might also consider an intriguing addendum or post-script that Lacan gives to his thought experiment: the human race, having mysteriously disappeared, just as mysteriously returns to witness the photographic images the automatic camera has recorded in their absence (Lacan, Seminar II, pp. 46–7). Why must the humans return to in order to confirm their own redundancy?