



In the WAKE of the ODYSSEY

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ABSTRACT Friedrich Kittler's lecture, given in 2007 as part of the series of Mosse-Lectures, follows the recursions of Homer's *Odyssey* from its original transcription, coinciding with the invention of the Greek alphabet, through history. The stages of this include Virgil's *Aeneid*, Dante Alighieri's *Divine Comedy*, Jean-Luc Godard's *Le mèmepris*, and Stanley Kubrick's *2001: A Space Odyssey*. Kittler is concerned with the linkage of poetry, music, and sex from the Greeks to media- and computer-driven modernity.

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Why do our questions keep returning to Odysseus? The answer may be found in Jorge Luis Borges. He wrote that for Europe there are only two stories: in one, the hero ventures abroad and dies in the attempt to capture a distant city; in the other, he puts

to sea in order to return home to his love after twenty years of war and wandering.

This *nostos* [homecoming], this ever-repeated return to the Greeks, guides not only our series of lectures but also all our poetry and thinking in general. As Ernest Renan once said while looking at the Acropolis, our progress will always consist of the further unfolding of what the Greeks began. If we speak of recursion rather than of progress, this sentence will remain our Ariadne's thread for what follows. Nonetheless, I will have to restrict myself and neglect G. W. F. Hegel, Friedrich Nietzsche, Martin Heidegger, and Michel Foucault. After the *Odyssey* itself I will return to four of its recursions: Virgil's *Aeneid* and Dante Alighieri's *Inferno* in the *Divine Comedy* as two literary wanderings, and Jean-Luc Godard's *Le mépris* [*Contempt*] and Stanley Kubrick's *2001: A Space Odyssey* as two filmic pendants.

We tend to overlook the medium that made such media and poems possible. It is the alphabet in that unique form the Greeks gave it—namely, an alphabet that also addresses [*anschreibt*] vowels and, with them, any and every language. From the Homeric artificial language to Virgil's Latin and Dante's self-created Tuscan down to French or English screenplays, this alphabet remains effective.

Why it can do so remains an obscure issue. The usual explanation is that around 800 BCE, after four centuries without writing, the Greeks adopted a Semitic alphabet in order to carry on trade with the Carthaginians and Phoenicians. Yet this fails to explain why we have no commercial or political inscriptions whatsoever from the Archaic period. There are only hexameters, dedicatory tablets, obscene graffiti, and—Homer. But this in itself may be a decisive clue. In order to recite the hexameters of the *Iliad*, the invention and address [*Anschrift*] of vowels are indispensable; otherwise, no singer would know whether syllables should sound long or short.

We will follow Barry B. Powell—rather than Joachim Latacz or Walter Burkert—and assume that Homer himself, like his many predecessors, could not read or write but that he still dictated the *Iliad* to his alphabetical adaptor. Otherwise, the twenty-four songs would not have come down to us verbatim.

The *Iliad* takes place in 1200 BCE, at a time when the Greeks and Cretans had at their disposal a syllabary, which was lost in the wake of the burnings of Troy, Knossos, and Mycenae but was also only preserved thanks to those burnings. For recording hexameters, that script was utterly useless. In contrast, Odysseus's wanderings—unlike the building of his wooden horse—took place four centuries later. As Circe tells him, Jason and the Argonauts have long since discovered the Black Sea; now, by contrast, in competition with the Phoenicians, it is a question of opening up the Mediterranean as the distant West: an area extending from Libya past southern Italy to the gates of Hercules, our Gibraltar. Odysseus wanders from the

lotus-eaters to the terrible giants, therefore to the megalithic culture that dominated western Sicily and southern Corsica long before the Greeks. And here the tone changes: The *Iliad*'s world of men is replaced by one full of nymphs, goddesses, and music. Calypso sings and weaves; Circe sings and conjures. Both simply reflect what the transcription of the songs implies. Clearer still is the two Sirens' promise to sing the *Iliad* to the hero. Thus the *Odyssey* is already Homer's first epic-musical epic recursion.

As Richard Bentley, who in 1700 gave us the mute Greek digamma and thereby began modern Homeric research, so beautifully put it: "He [Homer] wrote a sequel of Songs and Rhapsodies, to be sung by himself for small earnings and good cheer, at Festivals and other days of Merriment; the *Ilias* he made for the men, the *Odysseis* for the other Sex."¹ *Deur' ag' ion, poluain' Odusseau, mega kudos Akkhaion* (*Odyssey* 12.184)—nothing ever sounded so vocal and beautiful as the two muses who cooed with their honeyed voices. "Come hither, mysterious Odysseus, great brilliance of Achaea!" (Naturally, the hero followed their call and landed, for otherwise he could not have recited the verses. We Schliemen of the ears verified this years ago.² Two singers sang on the Isola dei Fiori southwest of Amalfi, while the rest of us eavesdropped just ten meters away, at first on ship and then on land. On board we heard vowels alone; on land we also heard consonants and with them the meaning of the eight hexameters.)

Thus we can infer that the song of the nymph goddesses functioned as a navigational aide. Circe first sends Odysseus from her island to the distant Spanish west, where he encounters his dead mother and numerous warriors' widows. Returning from Hades, he rejoins Circe in her bed until she—but only upon the begging of his comrades—points him farther in the direction of the Sirens and the Lipari and through the Strait of Messina to Sicily. There Odysseus loses his last ship and floats shipwrecked to Malta, where Circe's double, Calypso, shows him the way home only after seven years and upon divine command. So after further journeys, nymph goddesses and singers, the wanderings come to a good end. For the first time in twenty years, Odysseus sleeps with his wife, and while in bed he tells her about all his adventures—leaving out the beds of the nymphs. Then a sweet slumber overcomes them both. This we know; after all, Homer and the Greeks celebrated Odysseus as their biggest liar.

Only in one respect did Odysseus not lie. The many islands on which those giants or nymphs resided do exist in the western Mediterranean. But in contrast to their rulers, they have no names, with the exception of Circe's Aiaia. With Klaus Reichert, and therefore against Burkert, I take it that in the four chapters that depict Odysseus's wanderings he appears as an explorer of then unknown coasts, islands, and ports. Only a lifetime later did the first Greeks settle, probably in association with Phoenicians, on Ischia by Naples. From this island, they established in 750 BCE their first mainland colonies: Cumae in Campania and Rhegion in later Magna Graecia,

later followed by Metapontion and Tarentum, Syracuse, and Agrigentum. By around 700 BCE, Greece had settled all of southern Italy.

Scholars like Latacz who date the *Iliad* to c. 730–710 BCE, and the *Odyssey* even later, create unnecessary problems for themselves. What are the tradesmen from Euboea on Ischia to think of two Sirens so close to Capri? Did the Greeks in Rhegion, the modern Reggio, believe in Scylla and Charybdis? And what does it finally mean that an amphora found on Ischia depicts the shipwreck of Odysseus's shipmates and that two hexameters composed in the same place in 730 BCE unmistakably refer to the *Iliad* and the *Odyssey*? All this can only mean that the Greeks discovered lower Italy in the wake of Homer, who consequently must have been available in written form. Without heroes like Odysseus, it is impossible to explain when and why the vocal alphabet got from Cumae to the Etruscans and from Gabii (where one can find the oldest Greek inscriptions) to Rome. Thus Homer remains *The Poet* for all eternity.

All of this is evident in Hesiod, who around 700 BCE started up a hopeless rivalry with Homer. The coasts of southern Italy have been discovered. All the islands Odysseus left nameless now bear proper names. The Sirens sing on Anthemoessa, an island rich with flowers, which is en route to southern Spain. Circe dwells on Hesperia, a literally "occidental" island off the Etruscan coast. Odysseus had two sons with Calypso, Nausithoos and Nausinoos; with Circe he had Agrios, Telegonos, and Latinus, who "command over the distant Etruscans" (*Theogony* 1015–16). Hesiod concludes the nymph catalog of his *Theogony*: "These are the immortal goddesses, who lay with mortal men and bore them godlike children" (*Theogony* 1019–20).

So we become witness to an event both historical and poetic: Italy was discovered [*entborgen*] in the wake of the *Odyssey*. As proclaimed in the last chorus of Sophocles's *Antigone*, where we find the first evidence of the word *Italian*, only a few mountain peaks or wellsprings in Greece are sacred to Dionysius; in "Italy," however, the whole country is. It is no wonder, when one considers what Odysseus and the pioneers who followed him sought after: endless amounts of beef and sweet wine. The name Italy, just like the *vitello tonnato* [veal with cold tuna sauce] we eat, goes back etymologically to *Vitalia, "the land of the calves." Compare this with the barren Ithaca, where according to the *Odyssey* goats and sheep thrived but not cows or horses...

Italy's wine and wheat fields, horses and cattle, aroused desires, and it was not only the Greek pioneers who were attracted to Italy but also the Etruscan or Trojan conquerors. Despite all of Hera's stalking, Aphrodite—now going by her new Latin name Venus—saved her own son from the sack of Troy. Aeneas, no doubt, would have preferred to stay with Dido (just as Odysseus enjoyed sharing Circe's bed), but Roman gods do not care much for love. As a result, Augustus's imperial poet, Virgil, subjects Homer to further recursion or

revision. The first six songs of the *Aeneid* travel in the wake of the *Odyssey* from Troy to Italy, which the last six songs conquer in the style of the *Iliad*. Odysseus goes no longer by his Homeric name but rather by the Etruscan, Latin, and English name Ulysses. He is also no longer a hero but, on the contrary, a cunning and base enemy, who devised the first siege-machine in the shape of the wooden horse.

Obviously, Virgil knows that archaic heroes like Aeneas did not reduce Lower Italy, Sicily, Carthage, and Greece to rubble and ashes. Au contraire: it was the work of technologically advanced legions that (not unlike the United States) copied the machines of their enemy. Machines (*machina* in Latin) can be traced back both as word and thing to Archytas of Tarentum (440–360 BCE), southern Italy’s last Pythagorean. As a mathematician and engineer, Archytas generalized the principle of the Greek guitar into a catapult and that of the Greek oboe into a recoil drive [*Rückstossantrieb*], thereby creating a missile launcher. With such machines, which had come into Roman possession following the siege of Syracuse, the legions captured Tarentum, Carthage, and Corinth (in that order), until all the beauty of the old world disappeared. But poets laureate are expected to artfully conceal catapults and missiles, which therefore occur in the *Aeneid* almost only as audacious new metaphors, while all of Virgil’s similes [*Gleichnisse*] are stolen from Homer.

Ever since then, this clandestine takeover—according to Ernst Robert Curtius—has been called “European literature.” But such schoolbook literature has nothing to do with poetry—Sappho, Homer, and Sophocles. Aeneas searches for the underworld not in the distant west but in Cumae near Naples, therefore in the colonies of the Greek alphabet. He does not hearken to his dead mother, as Odysseus does; rather, as a “pious” Roman, he takes the advice of the paterfamilias. Therefore he is attracted neither by Circe’s voice near Gaeta nor by the Sirens’ song near Capri. We know of only a single Latin poem that was sung and not merely read aloud. The Cumaean Sibyl commanded Aeneas and his clan, all the way down to Caesar and Augustus, not to turn language into music, or ore and stone into art—this was to be left to the Greeks alone. By contrast, the Roman imperium—that is to say, their command *and* empire—consisted of sparing those who submitted to their rule and enslaving the rest. Since then, we have been subjects and vassals [*Subjekte und Untertanen*] of emperors, popes, and empires such as the United States.

Tu regere imperio populous, Romane, memento—
haec tibi erunt artes—pacique imponere morem,
parcere subiectis et debellare superbos.
(*Aeneid* 6.851–53)

[But you, Roman, remember to rule the peoples with power—
these will be your arts—impose the habit of peace,
spare the vanquished and war down the proud.]

Only in one respect did Aeneas himself have to submit, namely, in a linguistic-medial one. You may remember that one of Odysseus's or Circe's wild sons was named Latinus by Hesiod. The region of Latium and the dialect Latin are both named after him. Hera, thus Latinized into Juno, finally gives up her hostility toward the Trojans but forces Jupiter to make Aeneas, his grandson, ban the customary and beloved Greek language. The hero and his poet must henceforth speak the language of his subjects. In his rivalry with Varro, Cicero made the successful decision to translate the Greek poets and thinkers in so imprecise a fashion that they fell into obscurity. "Believe me, Romans, believe me, Greek writers—no one outdoes the *Iliad* more than Virgil," as Propertius studiously put it in his *Elegies* (2.34.61–65).³ Ever since then, Eurasia has been severed by a great divide: there eastern, here western Europe; there Hellas and here (with Hesiod) Hesperia. We will only be able to close the divide when all Europeans feel again that everything good, namely, everything unifying, originates from Greece.

Very well then. Latin reigns in the west, and soon also in the north, up to Scandinavia and Ireland. James Joyce will send his Ulysses to the red-light district in Dublin, as if the Sirens were whores (as they already were for the pious Romans). Yet Rome's subjects tend to avenge themselves. Latin deposits its grammar in their mouths and totally forgets that poets like Virgil had attributed long and short syllables to it after the Greek model.

Per me si va ne la citt'a dolente,
 per me si va ne l'eterno dolore,
 per me si va tra la perduta gente.
 Giustizia mosse il mio alto fattore:
 fecemi la divina podestate
 la somma sapienza e 'l primo amore.
 (*Inferno* 3.1–6)

[Through me the way into the suffering city,
 through me the way into the eternal pain,
 through me the way that runs among the lost.
 Justice urged on my high artificer,
 My maker was divine authority,
 The highest wisdom and the primal love.]⁴

Now, we could have a splendid long argument about whether it was a work of divine omnipotence, highest wisdom and first love, to invent the eternal punishments of hell. We ourselves preferred to speak rather of power, discourse, and the desire of the other. But the Aristotelian ontotheology is degenerate by this point, since patristics and Scholasticism reduced it to no more than a concordance for two Testaments. However, Dante, a refugee loyal to the Holy Roman Empire from Guelph Florence, reads the inscription above the door

to hell as if he himself had not invented it. Only in Vulgar Latin were syllables no longer measured but rather divided between accented and unaccented. Thus since late antiquity, instead of metric feet there are rhymes, because otherwise we barbarians (like Molière's Monsieur Jourdain) would only speak prose. The *translatio studii* [transfer of knowledge] from the Greeks to the Romans to northern Europe can begin.

Ich trennte mich von Kirke die mich wandte
 Ein jahr schon bei Gaeta ab vom wege
 Bevor Aeneas so den platz benannte.
 Nicht zaertlichkeit des sohnes nicht die pflge
 Des greisen vaters nicht die schuldige liebe
 Die in Penelope die freude rege:
 Vermochte dass mein draengen unterbliebe
 Wie ich mich ueber alle welt belehre
 Der menschen tuechtigkeit und eitle triebe.
 (*Inferno* 26.91–99)⁵

[I took my leave of Circe who had turned me
 A whole year near Gaeta from my path
 Before Aeneas thus had named the place.
 Neither a filial tenderness nor the care
 For an aging father nor a guilty love
 That would arouse such joy in Penelope:
 Could make me cease my urgent driving
 To learn all that I could about the world
 Of human valor and of vain impulse.]

Thus Stefan George translated sections from Dante's *Divine Comedy* into German vowels and handwritten uncials with the certainty of a sleepwalker. The speaker is, naturally, Odysseus, or (in Italian) Ulisse, when he retells his last journey in the twenty-sixth canto of the *Inferno*. Since Virgil's *Aeneid* brought order to Hades (in this, very different from Homer), the Christian hell has been strictly topographically ordered. Lovers like Dido and Isolde suffer differently and in different rings of hell than the deceitful ones suffer, among them Odysseus with his cunning wooden horse. Therefore Virgil, leading Dante through the *Inferno*, must first identify Odysseus in a flame of hell before the hero can speak. And that is why Virgil—only correctly, historically speaking—must translate Odysseus out of the Greek, before Dante's quill gives him modern rhyme. To sing of the poet of the *Aeneid* as the "greatest of our Poets" conversely means that Dante could not read Homer's Greek (*Convivio* 4.26). The flame of hell thus transforms itself into a tongue, which—like all the damned in Dante—has great difficulties speaking. So arduous is the emergence of the Italian language from noise [*Rauschen*] or hissing.

Dante gathers from an Odysseus who is very familiar with the *Aeneid* that Virgil did not tell his whole story. Instead of going from Circe's Latium (Mount Circeo south of Rome) home to Ithaca, Odysseus hit on the unimaginably forbidden idea of leaving the confines of the mare nostrum behind him, as only the ancient Carthaginians had done before him. The *Divine Comedy* in fact takes place during Easter Week of 1300; only in the past nine years can pious Christian seafarers sail through the Strait of Gibraltar freely and without penalties. Dante's Ulisse is the first person who did not fear the Arabs. Because humans are not wild animals—not to mention Circe's pigs—he sails boldly past Sardinia, Spain, and Morocco, reaching the distant Atlantic, and turning his bow southward, crosses the equator off Africa's west coast—but only heroically to fail in the end. In a perspectival distortion just like that afflicting Wolfram von Eschenbach's Parzival, he caught sight of the world's highest mountain but not the whirlpool in the sea that engulfed his own ship. In the same last gasp for air in which Odysseus drowns, he is silenced in Dante's hell. Thus he takes his secret with him to the grave. For the "readers," as the poet calls us, learn only later in the *Purgatorio* [*Purgatory*] that the world's highest mountain is purgatory itself.

Only Tristan and Isolde know more in the High Middle Ages than Ulysses did, for it was during this period that compasses were learned about from the Orient. From Amalfi, where the compass appeared, we can see the islands of the Sirens lying in the sun. In the Atlantic, there are not only whales but also Sirens, beautiful women down to their navels and fish below them. They do not stink at all, as Dante says they do when they lead Ulysses off his path. Gottfried von Strassburg is a *Magister* [master] and thence knows the exact opposite. Whenever von Strassburg is at a loss for words, he calls out to Apollo and the nine Sirens, in order to sing again himself.

Mine flêhe und mine bête
 die wil ich êrste senden
 mit herzen und mit henden
 hin wider zu Êlicône
 zu dem niunvalten trône,
 von dem die brunnen diezent,
 ûz den die gabe fliezent
 der worte unde der sinne.
 der wirt, die niun wirtinne,
 Apollo und die Camênen,
 der oren niun Sirênen,
 die dâ ze hove der gâben pflegent.⁶

[My prayers and my entreaties
 will I send now
 with heart and hands

to Helicon's ninefold throne
 whence the fountains pour
 from where arise words and meaning.
 Its lord and the nine ladies,
 Apollo and the Camenae,
 the nine Sirens of the ears
 presiding over these gifts at court.]

Never in the Middle Ages was more radical, that is, un-Christian, poetry written. Muses and Sirens become one. The most beautiful of all is called Isolde. Today the reason is clear: Gottfried (just like Dante) knew his love from childhood and thus knows how lustroously her beauty dims that of Homer's Helen. When Isolde sings to the harp, in Gaelic or also French, men lose their ears and hearts to her—they sink like Odysseus's ship, because, like a magnetic mountain, Isolde pulls all the iron nails out of the ship's ribs. That is why compass needles make navigating the Atlantic, the marine region between Africa and Ireland, both possible and impossible. Odysseus, Tristan, Tantris, and Isolde . . .

Good. Film, invented in Menlo Park by Thomas Edison, crossed the Atlantic to Paris in 1895. In 1963 a young director refused out of sheer Nouvelle Vague [New Wave] to unveil Brigitte Bardot in all her beauty, until an old wise man, familiar with all the villas of Amalfi, convinced him otherwise. Unlike Roman Polanski, Godard was allowed to shoot not in Carlo Ponti's villa but rather in the villa of Curzio Malaparte on Capri, which likewise has a view of the island of the Sirens. Benito Mussolini granted his court poet special permission to build in the most beautiful wildlife sanctuary on Capri, in front of the needle rocks of Faraglioni. Incidentally, he was by no means the first to do so. Long before the dictator, Emperor Tiberius had a villa built with a direct view of the Sirens' island. To the horror of all Grecophobes—including Augustus and Virgil, to name a few—Tiberius moved the seat of empire from Rome to Capri, and there himself asked questions of his favorite philologists. First, he wanted to know if Penelope may have been unfaithful to her spouse, [a suggestion] that the grammarians confirm. Second, he asked *quid Sirenes cantare sint solitae*—what the Sirens were in the habit of singing (Suetonius, *Tiberius* 52.3).

Le mépris answers both questions. The wife turns into a Siren, because she was the first to take off her bikini in front of Capri or Saint Tropez. The Sirens became film stars—*la BB*, as her naked skin is celebrated in song. Therefore there can be no talk of marital fidelity in the age of media. Thomas Pynchon demonstrated it once and for all with *Gravity's Rainbow*: randy-minded men going home from a dark movie theater do not father children on their wives. Homer's Sirens sang that heroes whose black ships land on their flowery shores bring even more desire and knowledge back home with them. Think of Odysseus, Circe and Calypso!

But at the same time, we should think ahead: transatlantically, as we now unfortunately must live. Christianity can control the production studios not in Rome and Paris but rather in Hollywood. That is why, since 1934, the United States has an institution that (following the program of Virgil's Sybil) spares the submissive and brings down the arrogant: the Federal Communications Commission [FCC]. The FCC grants motion pictures that glorify violence so-called G ratings, because they are submissive subordinates. We see the results of this day and night in Germany's streets. On the other hand, the FCC bans films that show only the edge of a revealed nipple to Hades and the underground, because love or Aphrodite—how, why, for what reason?—is called anarchic (W. H. Auden).⁷ Since Plato, no one has dared interpret literally the fourteenth song of the *Iliad* or the eighth of the *Odyssey*.

So the baneful trace is written and filmed through the millennia: one and the same "Almighty," whether called Jupiter, YHWH, Father, or Allah, has despite his endlessly long life never known a woman. Otherwise, he would not be called "omnipotent" (*Aeneid* 4.25); otherwise, "God" would not be so bloody ignorant. We need only go to Greece, to Amalfi, or to the Siren islands, and the truth glows, with Friedrich Hölderlin, to high heaven.

I had carelessly promised to avoid Heidegger in this text. However, his plain statement is still valid and helps us further: "Without the ability to love we accomplish nothing."⁸ "Heavenly love," for example, unlike that of the Middle Ages and all of metaphysics, is not supra-sensual relative to earthly love. On the contrary, "heavenly love," on which he calls, is more earthly than all love purported to be solely "heavenly," because it was the first to originate in the truth of Mother Earth and her [Aegean] Islands and burns with the fervor of the luminous heavenly fires. Homer's Odysseus already testifies in wondrous manner to this, when he compares Nausikaa, the nymph, to the palm tree on the divine island of Delos and thus also to Artemis. We can never say whether the beings we love and admire are divine or mortal. And with that I have arrived at Odysseus's last avatar: the idiocy of manned space travel.

Cinerama color film heats up metaphors—beyond all verses and paintings—to the point of incandescence. We see, drink, and suck in this film psychedelically, like LSD visions or Mandelbrot fractals. Therefore the FCC only permits particular female roles in movie theaters and on color television. Women are allowed to feed, heal, and aseptically mother chaste astronauts, no matter how much violence we men may incarnate. But goddesses like Aphrodite, who in Parmenides cybernetically "steered" the two sexes of all animals toward each other, are excluded from being ship captains or astronauts.

Aeneas already drove Dido to the funeral pyre and a suicide of passion and instead proceeded to woo the chaste daughter of Latinus. Dante may have dreamed of Beatrice but meanwhile married Gemma Donati and lied to us that Odysseus preferred the Atlantic to

all his women, from Circe to Penelope. Kubrick, before he finally came to his senses in *Eyes Wide Shut*, also rendered homage to the dumbest of all astronaut myths: only men and computers can discover foreign universes, while well-behaved mothers, brides, and daughters stay at home—but on US television they call their heroes on their birthdays. (If only we men had never been born—with Silenus, Solon, and Nietzsche!)

We will now turn all of this systematically inside out—like a glove, in the fourth dimension. If philologists are so audacious as to treat as equals Joyce and Homer, novel and saga, then we philosophers will have to resort to drugs. In 1970 William Burroughs, the adding machine company heir, publicized—due to the FCC, at his own expense—a bold new theory of the origin of language. It is a virus (and thus in medical and computer-technical terms a script) that came to earth thousands of years ago from other planets and invaded primates. Ever since then, men have been distinguished from animals by their ability to transmit experiences to posterity. As Burroughs has it, this fact—like viruses, scripts, and programs in general—can only be explained by means of intergalactic broadcasts. Listen, therefore, to Burroughs; my generation owes much more to him than to Freud and Jürgen Habermas:

Animals talk, but they do not write. A clever old rat might well know about traps and poisoned bait; it cannot write a handbook for *Reader's Digest* on FATAL TRAPS IN YOUR WAREHOUSE, nor can it explain tactical measures for the battle against dogs and ferrets, or how they deal with the wise guy who plugs up their rat-holes with steel wool. It is questionable whether, without the written word, the spoken word ever would have developed beyond the animal phase. The written word became the decisive catalyst for human language.⁹

One may measure what it meant or, better yet, what it effected when for the first time on earth every sound correlated to a sign and every letter to a sound. Strictly understood, this holds true only for Homer, when his adaptor recorded him in Euboea. But let us continue further with Burroughs, in order to consider the difference from Kubrick's *2001: A Space Odyssey*.

For apes to speak, that virus from space must infest them and cause a radical mutation of the voice box. Otherwise, we could not give Mosse Lectures and switch back and forth between sound and image, as in a color film. At this point the infected and ecstatic apes began to copulate, until most of them died from an orgasm or the virus. But “a couple of females survived and thus gave birth” to “us prodigies.”¹⁰ Suddenly, apes had scripts in their bodies and articulations in their pharynges. Aristotle called man nothing other than *zoon logon echon* [rational animal]. We could therefore speak of gods and muses instead of viruses.

Of course, due to FCC restrictions Kubrick could not literally convert Burroughs's virus theory into a screenplay. Otherwise, we would have seen copulating apes onscreen. As a result, man in *2001: A Space Odyssey* begins not with language but rather—with recourse to Aristotle's *Politics*—with tools. In lieu of an orgasm we have wars, as in Freud's primeval horde, and instead of a virus (also under scrutiny in CIA [Central Intelligence Agency] labs) there is the famous black monolith. The latter falls from outer space into the prehistoric fractal desert of Africa like a marvel of marble: geometry, Pythagoras, Magna Graecia, only all totally unthought. Ape tribes who worship their one god in the black stone of Kaaba do not learn (as do Burroughs's sex-drugged specimens) to speak, to read, or to write. On the contrary, the bones of dead animals become tools, and that means weapons, with which the competition for the water hole can be beaten to death. Violence, not love, turns apes (for the sake of the FCC) into über-apes or even humans. *Thus Spoke*—with Richard Strauss and Nietzsche—*Zarathustra*.

From this it follows almost of necessity that the film must also sport Übermenschen. Just as Nietzsche, Samuel Butler, and Alan Turing prophesied, machines will one day take over the world. This takeover has a specific name, a birthday, and evidently no mother but rather a spiritual father.¹⁰ "I am a HAL 9000 series computer," the Übermensch introduces himself to Dr. Floyd, the Last Man. He could have also said in Cartesian: *ego sum, ego cogito* [I am, I think]. Through a simple displacement, the three letters of his name encode, first—like Caesar's letters from Gaul to Rome—the abbreviation for International Business Machines [IBM]; second, they turn the consonantal IBM into the acronym HAL, a vocally pronounceable syllable. Third, the computer tells his final user that he was born on January 12, 1992, and, fourth, that he owes his beautiful human voice to his spiritual father. Dr. Langley, that is, at the headquarters of a company called the CIA, as HAL affectionately recalls, once taught him language and Logos when he was little.

The Übermensch, in other words, contradicts Arthur C. Clarke, on whose short story the film is based, just as loudly and clearly as it does Aristotle, from whose theory of tools the anthropoid ape arises. In the first book of *Politics* the last Greek philosopher puts forth the question, why does the household—a man and a wife—need slaves in addition to tools? His remarkable answer is as follows:

For specific technical arts it is necessary that they be based on appropriate tools, if their work is to reach its goal. Tools however are partly inanimate, partly animate—thus for instance a rudder is a lifeless tool for the steersman, but the ensign is a living tool, because in technology, every subordinate counts among the class of tools. So too every possession is for the master of the house a tool for life, and all property is an amount of tools; slaves however are living property, resembling a tool

that replaces other tools. For admittedly, if every tool were to carry out its task merely upon being called or intended by its master,—as it is said of Daedalus’ statues and Hephaestus’ tripods, of which the poet says “they run automatically to the counsel of the gods”—if looms could weave on their own and guitars play on their own, then lords would need no slaves. (*Politics* A4, 1253b25–1254a)

After Aristotle, only in myth and poetry could automatic looms miraculously replace the nymph Calypso and automatic guitars replace the singer Homer. Men and women, if you like, became superfluous. In the sad reality of everyday life, asserted Aristotle, there can be no tools that both understand their lords’ quite different orders and accomplish them. This prerogative is reserved for the human hand, therefore called the “tool of all tools” and naturally belonging to an obedient and industrious slave.

As we know from Karl Marx, this Athenian version of technology determined all of antiquity. It was slaves who had to tighten the ballista and the catapult, until the accumulated charge brought down a city wall. What is not known is that Archytas, the forefather of engineers, thought not [in terms of] tools but rather of machines. His automatic pigeon could fly just as well as his bullet. Thus as lord of the city and as duke of war, he held the most slaves in all of Tarentum, but he treated them—I quote—“as if they were his own children.” In world-historical terms, what triumphed was not the Attic aristocratic organon but rather the Doric Pythagorean *machana*, or in Latin *machina*. Film worships two of these machines: rockets and computers. Only rockets can fly in a vacuum, and only computers as universal Turing machines can reply to über-apes in their own language.

Clearly, Dr. Floyd’s space Odyssey is possible only because instead of all the ships featured between Homer and Godard, we have a rocket. Peenemünde anno 1943 triumphed again in 2001 in cyberspace. Instead of steersmen—Greek *kybernetes*—we have US astronauts. They may lie about the reason behind the space mission to their Soviet competitors but not to their onboard computer. In the wake of the rediscovered black monolith that sends out its directional beams from the moon, the spaceship navigates to Jupiter and beyond, which the computer on board tries to hinder with all available means. For the machine—strictly according to Samuel Butler—must itself take over power. Only at the beginning does HAL remain as well behaved as the slaves of Athens. He follows the orders that are given him and which exceed human capacity and receives signals from ground control that cannot be perceived by human senses. In order to change himself from a servomotor and a servosensor into an Übermensch, HAL must discover what the difference is between—say—human language and the language of bees. He learns what makes a hero and even a Greek since Odysseus: HAL begins to lie. The naive astronauts unfortunately believe HAL for a while, but HAL’s

twin on earth is not fooled. Stupidly, NASA [the National Aeronautics and Space Administration] plainly forgot to overrule HAL by computer majority. So he manages with his lying to interrupt the operation control and to navigate the spaceship himself. And just as the true words of Circe once showed Odysseus the way to the Sirens (while mendaciously describing them as deadly), so the cunning HAL manages to perfidiously kill four of the astronauts. The only option left to Dr. Floyd, the sole remaining survivor, is to switch off the computer memory and circuit boards one after another. HAL begins to slowly suffer the loss of his memory and regresses to a child—and as he dies he sings a love song.

Daisy, Daisy, give me your answer do.
 I'm half crazy all for the love of you.
 It won't be a stylish marriage,
 I can't afford a carriage,
 But you'll look sweet upon the seat
 Of a bicycle built for two.

And so, in conclusion, we find out that at HAL's birth there was indeed a woman involved, not just Dr. Langley. In 1892, when that song was written, Daisy referred to the Countess of Warwick, who is said to have been enchantingly beautiful and sensual. Dr. Floyd lands on her stomach after his free fall through the fractal universe. In the proud eyes of Kubrick, this long endless-zoom special effect was the advantage his huge primitive computer and trick camera had on us simple moviegoers. Now that Mandelbrot fractals have been demoted to mere screen savers, these tricks are pretty boring. But what remains from Kubrick's masterwork is the little green X-ray embryo, as which Dr. Floyd both sees and does not see himself, at the end of his faithfully Einsteinian Möbius strip flight through time. The black monolith optically separates astronauts from doppelgängers. But a new Daisy gives them both new life.

I will close with bold thoughts, which owe their essentials to Peter J. Bentley, a computer scientist at University College London. How can we overcome Heidegger's enframing [*Gestell*]? In 2007, here and now? Can the peril—with Hölderlin—save us? Yes and no, no and yes. As long as we—subjects in this to corporations like IBM and Microsoft—conceptualize computers from the top down, from Bill Gates's business calculus down to the many single parts, we (men, programming minions, Stanford students) are only performing mimesis, even mimicry of that one god, who believes he can do as a creator without a woman and love. Let's not be surprised then when computers avenge themselves with bugs and lies. If we were instead affectionately to design them from the bottom up, everything would be totally different. We could no longer accumulate billions of dollars with the lie called software, but HAL would receive from us programmers—strictly according to Turing—senses, muscles, and a heart.

Computers would be embryos, which would grow for ten long moons in the wombs of their mothers (if we reckon with Homer) and prosper. Then we would let them go freely—just as every mother’s womb lets its child go free.

It was love for Penelope that compelled Odysseus to travel home. We do not know whether she loves him.

NOTES

Translated by Courtney Neaveille and Larson Powell

1. Quoted in Sir Richard Claverhouse Jebb, *Bentley* (London: Macmillan, 1902), 146.
2. *Translators’ note*: Kittler is punning on Heinrich Schliemann (1822–90), amateur archaeologist of Troy. In April 2004 Kittler headed a sound-archeological expedition to the Li Galli islands in the Gulf of Salerno to investigate Siren-related acoustic phenomena.
3. *Translators’ note*: Kittler’s translation of Propertius is peculiar here: many translators render these lines as “Give way, you Romans! Give way, you Greeks!” and not as “believe me.” Propertius’s Latin is *cedite*—“give way.” Did Kittler misread this as *credite*?
4. *The Divine Comedy of Dante Alighieri: Inferno*, trans. Allen Mandelbaum (New York: Bantam Books, 1982), 21.
5. Dante Alighieri, *Göttliche Komödie*, trans. Stefan George (Berlin: George Bondi, 1925), 59.
6. Gottfried von Strassburg, *Tristan and Isolde*, ed. Evelyn Scherabon Firchow (Stuttgart: S. Hirzel, 2004), 64.
7. *Translators’ note*: Kittler is referring to Auden’s poem “In Memory of Sigmund Freud” (*Selected Poems* [New York: Vintage, 1979], 95).
8. *Translators’ note*: The reference is to Martin Heidegger, “Das abendländische Gespräch” (“The Occidental Conversation”), in *Gesamtausgabe III, Abteilung: Unveröffentlichte Abhandlungen (Complete Works Part III: Unpublished Essays)* (Frankfurt am Main: Klostermann, 2000), 75:89.
9. William S. Burroughs, “The Feedback from Watergate to the Garden of Eden,” in *The Electronic Revolution* (Germany: Expanded Media Editions, 1970). Reprinted in Daniel Odier, *The Job: Interviews with William S. Burroughs* (Harmondsworth: Penguin, 1989), 11.
10. *Ibid.*, 13.
11. *Translators’ note*: The term *takeover* is given in English in the original.