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Ulysses and the Stars

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Ulysses and the Stars

I begin with a passage which stands at the very inception of European literature:

The wind lifting his spirits high, royal Odysseus spread sail – gripping the tiller, seated astern – and now the master mariner steered his craft, sleep never closing his eyes, forever scanning the stars, the Pleiades and the Plowman late to set and the Great Bear that mankind also calls the Wagon: she wheels on her axis always fixed, watching the Hunter, and she alone is denied a plunge in the Ocean's baths. Hers were the stars the lustrous goddess told him to keep hard to port as he cut across the sea.

In Book V of the *Odyssey*, Ulysses is about to leave Ogygia, Calypso's island at the end of the world, using the raft he has built to sail to Ithaca. The goddess has provided him with a favourable light wind, and Ulysses raises his sails and commences his voyage, travelling eastwards for seventeen days. On the eighteenth day, he catches sight of the shadowy mountains of the land of the Phaeacians. Poseidon, at that moment returning from his banquet with the Ethiopians, realizes that the man guilty of blinding his son Polyphemus is about to arrive home at last, and issues a raging storm upon him, at the end of which a naked, salt-encrusted, and exhausted Ulysses finally makes it to Skeria, the Phaeacians' home.

The passage I have just quoted does not overly impress us, for we have been familiar with star-guided navigation for thousands of years. But, as the first literary instance of such an undertaking, it must have struck the ancient Greeks enormously. Ulysses steers his raft by following the stars, a detail which renders Homer's narrative extremely avant-garde, both scientifically and poetically. The hero's gaze upon the heavens is neither contemplative nor aesthetic, but technical and functional: as Calypso has urged, in order to maintain his course he is to steer constantly with the Great Bear to his left.

At least four observations can be made here. Those of us who are scholars of myth will note an interesting detail. The poet of the *Odyssey* believes that Calypso, the goddess who has 'hidden away' and possessively loved Ulysses for seven years, is the daughter of Atlas, the Titan who, as the visual arts show for two and half thousand years, bears the entire cosmos on his shoulders. Calypso must then have some mysterious relationship with the physical universe. Students of literary

traditions will point out that this passage becomes a topos, leading to a series of poetic rewritings: thus Apollonius Rhodius' Argonautica, Virgil's Georgics and Aeneid, Propertius' Elegies, Ovid's Metamorphoses and Ars amandi, and Musaeus' Hero all mark its continued existence in the classical world, thereafter to be transmitted to mediaeval and modern literary culture. Finally, historians of astronomy will emphasize what the passage tells us about the sky as perceived by the ancients. They will note that the configuration of the stars was not visibly different in antiquity from the present day, but their behaviour was altered by the changing position of the celestial pole, about which the stars appear to turn. Another detail they will single out is orientation by Ursa Major. The Great Bear continued to be the guide for the Greeks, as here for Ulysses, while the Phoenicians had a less visible but more precise one in Ursa Minor. It was only with Hipparchus that the pole was located. Ursa Major – which Aristotle, quoting our passage in the *Poetics*, considers a 'metaphor' for 'everything', namely, for Draco, Ursa Minor and most of the Cepheus constellation – is, in Homer's classification, the only one that does not plunge into the sea and always remains visible.

Thus, as Ulysses looks at the stars, Homer provides a view of the ancient cosmos. While this is primarily a technical observation, we should also note that it alludes to the entire firmament. In Book XVIII of the *Iliad*, when Homer describes the shield of Achilles, the first layer of decorative engraving is in fact the entire universe, and three lines of that passage are repeated word for word in the one I have just quoted from *Odyssey* V. In other words, Homer believes stars can be used technically, as aids for navigation, but also as the sketch of a whole cosmography.

The gaze of Ulysses fixed on the night sky is a truly primeval scene: it marks the start of a profound relationship between the Greek hero and the stars, and the origin of an entire scientific, technical, and poetic tradition. I wonder in fact to what extent it is distinguishable from a more specifically contemplative and aesthetic dimension. At the end of *Iliad* VIII, Homer had used a famous simile to describe the countless fires lit by the Trojans during the night:

Hundreds strong, as stars in the night sky glittering round the moon's brilliance blaze in all their glory when the air falls to a sudden, windless calm... all the lookout peaks stand out and the jutting cliffs and the steep ravines and down from the high heavens bursts the boundless bright air and all the stars shine clear and the shepherd's heart exults – so many fires burned

between the ships and the Xanthus' whirling rapids set by the men of Troy, bright against their walls.

This comparison naturally centres on the enormous number of fires. But Homer adds two elements, the immense space which opens up below the vault, and the shepherd's joy: infinity and pleasure (the shepherd later becoming the traditional contemplator of the heavens). Thus united, these provide the spectacle with a dimension of wonder in the face of immensity, of beauty bursting forth – in short, they add proto-aesthetic contemplation and the feeling that was to be associated with the sublime.

How long does it take for this to develop into actual scientific enquiry, for Ulysses to become a scientist? The available fragments with information on the life of Thales describe a man constantly engrossed in contemplating the stars: around 600 B.C., he 'discovered' and 'fixed' the position of Ursa Minor, studied the heavenly bodies, and predicted eclipses of the sun and solstices. Plato tells us that Thales was so engrossed in his stargazing that he stumbled into a well, much to the amusement of a Thracian maid. Aristotle, on the other hand, reports that Thales was so skilled in astronomy that he was able to predict an abundant harvest of olives and thus purchase at a low price all the oil presses of Miletus and Chios, selling them later on at a huge profit, thereby demonstrating that philosophy was by no means useless, and that it was not difficult for philosophers to achieve wealth, although this may not be their real concern.

There is probably a gap of some one hundred and fifty years between Ulysses' watching Ursa Major to establish his route and Thales' observations of Ursa Minor. During this century and a half, Greece witnessed the development memorably described by Aristotle at the beginning of the *Metaphysics*, when he looked into the reasons which led human beings to 'philosophize', to love knowledge and investigate natural phenomena with philosophical-scientific goals. There, he wrote: 'It was because of wonder that men both now and originally began to philosophize. To begin with, they wondered at those puzzles that were at hand, such as about the affections of the moon and the events connected with the sun and the stars and about the origins of the universe'.

Natural philosophy – what we would call physics, astrophysics, and cosmology – is the product of early humanity's original puzzlement, and it continues to be such for every individual human being. Aristotle is picking up a concept expressed by Plato

in the *Theaetetus*, but goes well beyond his predecessor, introducing a new and extraordinary element, for he draws a parallel between the investigator of natural phenomena and the philosopher on the one hand and the lover of myths – namely, the poet – on the other: 'hence the lover of stories (*philomythos*) is, in a way, a lover of wisdom, since a story is composed of wonders'. To set poetry (and the visual arts and music, for *poietiké* means any creative art) on the same level as what Einstein later called 'heilige Neugier', holy curiosity, is no small matter: it means tracing the greatest actions of humanity to a single impulse. And perceiving poetry as possessing a dimension of truth which is generally denied to it.

The ancients, I believe, were right in pursuing the unity of knowledge, identifying common inspirations and impulses, considering philosophy, theology, science, and poetry as all deriving from the puzzlement that grips us in the face of things visible and invisible. Dante, simultaneously philosopher and poet, puts it well in the *Convivio*, developing Aristotle's idea through Thomas Aquinas' translation and commentary. 'For awe', he says, '*stupore*, is a certain bewilderment of the mind at seeing or hearing great and wonderful things, or feeling them in some way. These, in so far as they are great, make him who feels them reverent towards them: in so far as they appear wonderful, they make him who feels them desirous of knowing them'. Much later, it was Immanuel Kant who picked up the notion in his *Allgemeine Naturgeschichte und Theorie des Himmels* and in the *Kritik der praktischen Vernunft*.

I propose to look at a few instances of the conjunction between Ulysses and the stars throughout the centuries as an indication that we, the scholars of Europe, approach our respective fields with our original wonder and with deep awareness of the unity of knowledge. I also propose that we meditate on this conjunction by keeping in mind the development of history and politics.

Ulysses has, in the course of European civilization, a way of reincarnating at the crucial turns of history, when a culture reaches its apex or when it is about to be replaced by another. Often, he does not just reflect the change, but also prefigures, announces, 'prophesies' it. One of these moments occurs during the reign of Tiberius, the second Roman emperor. At one point in his life, Tiberius withdrew to Capri, where he spent his time in a wonderful villa asking his court scholars, according to Suetonius, 'what would the Sirens have sung to Ulysses'. His passion for the Greek hero was not entirely disinterested. Tiberius had been adopted by

Augustus, and had thus become a Julian, i.e., a descendant of the Trojan Aeneas, whose scion Romulus had founded Rome. By birth, however, Tiberius was a Claudian, and the Claudii claimed descent from Telegonus, the son Ulysses had begotten with Circe in the twelve months he spent with her. Tiberius, in sum, maintained he descended from the Greek Ulysses and the Trojan Aeneas. By claiming this, he made an important political statement, proclaiming his right – a right Augustus could never have claimed – to rule both the West and the East, the whole Roman empire. In order to make this absolutely clear, Tiberius had another villa of his by the sea, in Sperlonga – from where he could gaze at Mount Circeo, the mountain where his great-great-grandmother Circe had entertained Ulysses – decorated with a marble Odyssey. A wonderful cave right by the water hosted gigantic statuary representing the theft of the Palladium, Menelaus holding Patroclus' body, the blinding of Polyphemus, and the encounter with Scylla. Ulysses' head, which is one of the few fragments to have survived, is one of the most beautiful portraits of our hero we have.

Tiberius reigned between 14 and 42 AD. It was during his reign that his Prefect in Judaea Pontius Pilate had Jesus of Nazareth – Christ, as Tacitus calls him – executed. The Greek hero was soon to be taken as Christ's very prefiguration by the latter's followers, the Christians: tied to the mast before the Sirens he was thought to adumbrate Christ nailed to the cross. Tiberius' reign was, then, a pretty momentous time in history. And Ulysses was right there. With him were the stars, too, and not as mere indifferent spectators of human events. The poet Manilius may have been one of the scholars Tiberius kept asking about the Sirens. In any case he was the author of a poem on astronomy and astrology entitled *Astronomica*, where he celebrated Ulysses as the 'conqueror of nature through his triumphs on land and sea' by placing him – in a post-mortem apotheosis shared with other heroes, philosophers, and historical characters – amidst the stars of the Milky Way.

Ulysses had already become the icon of the historian, that is to say, the researcher, with Herodotus and Polybius: he was now turning into the image itself of 'philosophy', i.e., of science and thought. The canonization was effected by Plotinus and Porphyry, who thought of him as, respectively, the man who wishes to return to his heavenly Fatherland and the mystic. Much later, in the twelfth century, Eustathius, Archbishop of Thessalonica, called Ulysses a 'philosopher' referring precisely to our initial passage and to his following the stars. He connected Ulysses

with Calypso and her father Atlas, knower of sea depths and of the cosmos, and interpreted our hero, with great wealth of precise technical terms, as $\Box \pi \sigma \tau \epsilon \lambda \epsilon \sigma \mu \alpha \tau \iota \kappa \Box \varsigma \varphi \iota \lambda \Box \sigma \sigma \varphi \sigma \varsigma$, the 'astrologian philosopher', the scientist of astrology.

Many contemporaries of Eustathius in the Arabic and Persian world – the philosophers-scientists who dominate the field of astronomy in our Middle Ages, and the poets who celebrate the stars in their literature – could rightly claim that attribute for themselves. If they did not have a Ulysses, they did indeed have his middle-eastern descendant, Sinbad the sailor. Even more intriguingly, the founder himself of Islam, Muhammad, has a very close relationship with the stars from the moment he ascends through the heavens in his $mir'\bar{a}j$, and the poets who rewrite this – from Ibn 'Abbās to Ibn Battūta, from 'Attār to Ne $\bar{a}m\bar{i}$ – employ wonderful variations.

Another critical jointure is to be found in the early 14th century, when Dante invented his powerful story of Ulysses sailing forth from Circe's abode, past the Pillars of Hercules, southwest in the Atlantic. Dante's tale turns Ulysses from a centripetal to a centrifugal character, one who wants to gain 'experience' of 'human vices and human worth' as well as of the 'unpeopled world', following the sun's course, or 'behind' the sun, in the West. As Ulysses and his companions sail in the Ocean, special attention is paid to the stars, for those of the northern hemisphere gradually disappear while the southern pole becomes visible: 'tutte le stelle già de l'altro polo / vedea la notte e 'l nostro tanto basso / che non surgea fuor del marin suolo'. I have no time here to dwell at length on the beauty and tragedy of Dante's Ulysses, but I want to make four points about his story. First, there is reason to believe that in staging his enterprise and shipwreck Dante was thinking of both contemporary navigators such as the Genoese Vivaldi brothers, who in 1291 left 'ad partes Indiae per mare Oceanum' never to be heard of again, and of contemporary heterodox philosophers such as the Paris masters, and radical Averroists, Siger of Brabant and Boethius of Dacia. Second, in the Comedy's fiction Dante himself successfully reaches the island of Purgatory before which his Ulysses had foundered and which, according to the poet, lies at the antipodes of Jerusalem. From there, looking at the southern celestial pole, Dante spots 'quattro stelle / non viste mai fuor ch'a la prima gente', four beautiful stars which had never been contemplated by human beings after Adam and Eve living in that Earthly Paradise Dante placed at the top of Mount Purgatory. Third, Ulysses' tragic fate can be seen, as Hans Blumenberg

put it, as 'de[r] beginnende Zweifel der Epoche an der Endgültigkeit ihres Horizonts und seiner Enge', 'the epoch's incipient doubt about the finality of its horizon and its narrowness'. And in fact, fourth, readings of Dante's Ulysses by commentators and poets in the fifteenth and sixteenth centuries increasingly tended to interpret the 'nova terra' before which the shipwreck took place as the New World, America.

Thus, Tasso established a figural relationship between (Dante's) Ulysses and Christopher Columbus. Thus, the popularity of Ulysses suddenly spread throughout Europe in painting and poetry: 'Heureux qui comme Ulysse a fait un beau voyage', Du Bellay sang. But what is most fascinating is that the men themselves who made history as navigators and explorers thought they were following in the footsteps of Dante's Ulysses. Not Columbus, who envisaged himself as a Messiah and, in classical terms, as a new Argonaut (it was the German philosopher Ernst Bloch who turned him into an Ulysses, a 'Faust of the sea'), but, for instance, a few decades later, Pedro Sarmiento de Gamboa, the Spaniard who tried to reach the 'terra australis incognita'. In his Historia de los Incas, Pedro maintained that according to Strabo and Solinus, after founding Lisbon, Ulysses had disappeared in the Atlantic, but that in fact both the noble historian from Valencia, Pero Antón Beuter, and the famous Florentine poet, Dante, had him sail from island to island until he reached New Spain: 'Esto dice Pero Antón Beuter noble historiador valenciano, y como el mismo refiere, así lo siente el Dante Aligero, ilustre poeta florentín. Este Ulises, dando crédito a lo dicho, podemos deducir por indicios, que de isla en isla vino a dar a la tierra de Yucatán y Campeche, tierra de Nueva España, porque los desta tierra tienen el trage, tocado y vestido grecesco de la nación de Ulises, y muchos vocablos usan griegos y tenían letras griegas'. In Portugal, whose capital Lisbon had, according to legend, been founded by Ulysses ('Ulixabona'), the myth was so strong that when Camões wrote the Lusiads, he had Vasco de Gama tell the Indian king he visits the story of Ulysses (Canto V), while later (Canto X) Thetis expounds to Vasco himself the whole 'grande máquina do mundo' - the structure of the universe, the motions of planets and stars. Vasco's great enterprise, in fact, begins as he enters the Indian Ocean in an enchanted night:

Da Lua os claros raios rutilavam Pelas argênteas ondas Neptuninas, As estrelas os Céus acompanhavam, Qual campo revestido de boninas; Os furiosos ventos repousavam Pelas covas escuras peregrinas; Porém da armada a gente vigiava, Como por longo tempo costumava (I, 58).

The most interesting case, however, and one which, joining Ulysses and the stars, hits America's very roots, is that of Amerigo Vespucci, the man from whom the Old World, thanks to Martin Waldseemüller's 'felix culpa', christened the New. In a letter published in 1504 describing his first expedition of 1497, Vespucci noted that he discovered 'much terra firma and infinite islands, a great many of them inhabited'. He then immediately recalled that Dante had called the Ocean 'mare senza gente', and quoted 'chapter XXVI of the Inferno, where he feigns Ulysses' death'. The Florentine Vespucci, in fact, loves to identify with Dante's Ulysses and Dante himself. Thus, in his letter of 18 July 1500 to Lorenzo di Pierfrancesco Medici about the journey of the preceding year, he recounts having sailed southwards, beyond the mouth of the present-day Amazon River and the 'equinoctial line', until he 'held the one pole and the other at our farthest horizon' and lost sight of 'the north star': he followed, that is, the route of Dante's Ulysses as it were verbatim. Like Homer's and Dante's Ulysses, moreover, Vespucci was stargazing, with infinite wonder and the ambition to be the first to mark 'the star of the firmament of the other pole'. There he is, aboard his ship, losing sleep every night to find, with the help of his quadrant and astrolabe, the Southern lodestar, and seemingly having to give up in frustration. Losing, however, was something neither Ulysses nor Dante nor Amerigo could contemplate. The precise instant he stops looking for a single star, Vespucci remembers the passage of *Purgatorio* I where Dante, 'when he feigns rising out of this hemisphere to find himself in the other', describes 'four stars / only ever seen by the first people', four, that is, out of the many of the 'other' pole which Ulysses had already contemplated. And sure enough, Amerigo immediately spots four 'almond-shaped stars' which, he says, must be those Dante had seen and which he believes might mark the Antarctic Pole. In the *Mundus* novus, the pamphlet that gave him fame all over Europe and prompted Waldseemüller to call 'America' the New World, Amerigo/Ulysses presented himself as a true, passionate astronomer. He now contemplates, and draws, first a star group in the shape of a quadrangle, then a triangular 'canopus', then three, then six stars in a dark canopus, and finally an immense white, bright Canopus. 'Multas alias stellas pulcherrimas cognovi', he concludes, 'quarum motus diligenter annotavi et pulcherrime in quodam meo libello graphice descripsi in hac mea navigatione'.

Animated by Aristotle's and Dante's wonder, Amerigo Vespucci brings myth and poetry to bear on history and science. For him, exploration of the New World and astronomical discovery are one and the same thing. In a period dominated by astrology he shows Galileo's spirit a hundred years before Galileo. If we need evidence of the complementary movement, of someone who brings myth, poetry, science, and exploration to bear on...poetry, we have but to skip three centuries and reach London in October, 1816. The English Romantic poet John Keats spent one evening that month at his friend Cowden Clarke's house in Clerkenwell. Keats knew no Greek, and had so far, like his friend, read Homer in Pope's translation. But Clarke had just been lent a copy of Chapman's early seventeenth-century translation, and the two of them had gone to work on the 'famousest' passages until day-spring. Keats had then departed for his lodgings two miles away in Southwark, but by ten o'clock Clarke found an envelope from the poet on his breakfast table. It contained just a sonnet, 'On First Looking into Chapman's Homer'.

The two friends must have looked mainly at the *Odyssey*, or at least this is what must have most impressed Keats, because the sonnet's opening lines recount a poet's journey through fabulous lands and 'western' islands which can only be that of Homer's second poem. Thus, Keats obliquely identifies, from the beginning, with Ulysses. He adds, though, that he had often heard of a New World of poetry, an immense land mass ruled over by Homer himself. He had never breathed its fresh air and clear sky (but Keats uses 'pure serene', an expression he takes from Cary's translation of Dante) until he heard Chapman's English version of Homer. Then – well, then a miracle took place, a miracle of astounding wonder and poetry, which I am not going to spoil with my poor prose:

Much have I travell'd in the realms of gold,
And many goodly states and kingdoms seen;
Round many western islands have I been
Which bards in fealty to Apollo hold.
Oft of one wide expanse had I been told
That deep-brow'd Homer ruled as his demesne;
Yet did I never breathe its pure serene
Till I heard Chapman speak out loud and bold:
Then felt I like some watcher of the skies
When a new planet swims into his ken;
Or like stout Cortez when with eagle eyes
He star'd at the Pacific – and all his men
Look'd at each other with a wild surmise –
Silent, upon a peak in Darien.

Keats is both precise and confusing. As he read Chapman and discovered Homer, he felt like the astronomer Herschel when, on 18 March 1781, he spotted the planet Uranus for the first time ever with his telescope (the poet imagines the new celestial body as an immense cosmic whale swimming into the scientist's sight). Not content with this, he provides another historical simile, this time with Hernán Cortez staring for the first time ever at the Pacific. Here, he conflates or confuses Cortez, who contemplated, from the mountains above, the Aztech capital of Tenochtitlán, and Vasco Núñez de Balboa, the Spanish explorer and conquistador who was the first European to set eyes on the Pacific from the peaks of Darién. Still, precision and confusion do not conflict with each other. Together, they tell us that science and exploration belong to the same realm, to the kingdom of staring, wondering, surmising, and silence. Poetry, too, will be found there. Poetry – here, a mere translation! – can grasp all this in a single instant of inspiration and give it perfect, musical shape in no more than an hour of writing. Literature can evoke what should keep together *all* our ways of knowing.

I don't think I need go any further – point out how Tennyson's Ulysses, a character built on Homer and Dante together and the trusted ideal ancestor of modern explorers like Amundsen, Scott, and Shackleton, finds himself tossed by the billows 'when / Through scudding drifts the rainy Hyades / Vex[t] the dim sea' (I will only note that Ulysses was nobly translated into German by no less a scientist than Erwin Schrödinger). Nor underline that the modern *Ulysses* par excellence, James Joyce's, has a section, 'Ithaca', where Ulysses, aka Leopold Bloom, contemplates stars, galaxies, constellations, and celestial movements in a view of the Ptolemaic, Copernican, and Einsteinian models of the universe, and indeed dreams of a last voyage like that of Dante's Ulysses but guided, like Homer's, by the polestar ("located at the point of intersection of the right line from beta to alpha in Ursa Maior produced and divided externally at omega and the hypotenuse of the rightangled triangle formed by the line alpha omega so produced and the line alpha delta of Ursa Maior"), and later in the guise of a comet through interplanetary space. Nor dwell on Luigi Dallapiccola's beautiful opera, *Ulisse*, where Ulysses invokes the stars like Leopardi as he embarks on his last enterprise. Nor, finally, show you scenes from that forty-five year old masterpiece entitled 2001: A Space Odyssey where one of cinema's geniuses, Stanley Kubrick, combines music, literature, technology, and astrophysics into the greatest piece of science fiction ever in order to display before

our very eyes the whole history of man and his eventual transformation into a *puer aeternus* and an Übermensch.

There were many people all over the world who, in the twentieth century, were obsessed with Ulysses. I choose three Italians, three German writers, and one French-speaking Rumanian – Benito Mussolini, Primo Levi, and Altiero Spinelli; Franz Kafka, Elias Canetti, and Viktor Klemperer; Benjamin Fondane. Mussolini used Ulysses as a Nietschean superman. Levi, Klemperer, and Fondane were Jewish victims of the system Mussolini helped building. Spinelli, confined by Mussolini on the island of Ischia, eventually became one of the architects of the European Union. Kafka imagined that the Sirens stopped singing when Ulysses approached them, and his interpreter Walter Benjamin – another victim of European Fascism – saw in this the victory of technology (Ulysses) over poetry (the Sirens). Canetti admired the hero of metamorphosis and incoercible curiosity. History may be forgiven, not forgotten. Which of the seven will we choose? Europe, we are told and see every day, seems to have lost its way. Can we, the scholars of Europe, show our confused Continent where to go from here? Yes we can. We need only remind our fellow citizens to set sail with Ulysses under the stars.

The greatest American poet of the twentieth century, Wallace Stevens, calls Ulysses the 'symbol of the seeker' and has him cross 'the giant sea' by night, steering his boat, like Homer's Odysseus, 'under the middle stars' and claiming that 'knowledge is the only life, / The only sun of the only day, / The only access to true ease, / The deep comfort of the world and fate.' 'As I know, I am and have / the right to be', he proclaims, and creates his universe as though he were a demiurge, 'As if another sail went on / Straight forwardly through another night / And clumped stars dangled all the way'. Can we speak like Wallace Stevens? Yes we can.

Look, in conclusion, at these two works of sculpture, one by an Italian, the other by an Englishman. Both are in the New World, one in New York, the other in Chicago. The former is a statue of Ulysses by Ugo Attardi: he is flying, like Dante's Ulysses, towards America, and at the same time threatening it with his spear and war dance. His face is hidden by a terrible mask and could either be that of a Conquistador, or a Native American, or a Middle Eastern terrorist. The latter, by Henry Moore, is entitled *Man Enters the Cosmos* – a spectacular bronze sundial placed by the Adler Planetarium in 1980 to commemorate the 'revolutionary program of space exploration which was launched in the second half of the twentieth century making it

possible for man to land on the moon and send probes to Mercury, Venus, Mars, Jupiter and Saturn'. One should add, 'around the Sun', too, for in 1990 NASA launched a rocket that carried a *European*-built probe called – what else? – 'Ulysses' to have it sail, like Dante's hero, 'behind' the Sun.

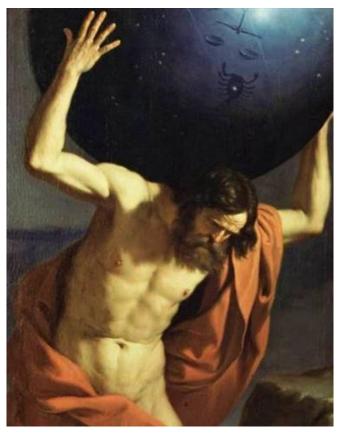
I first saw Attardi's *Ulysses* in the spring of 2000. I thought then the statue threatened all that New York stood for, in particular its proud skyscrapers, and said as much publically on two occasions. I was back a year and a half later, in September 2001. I had been right. The two Towers of the World Trade Center, behind which Ulysses stood, were gone. He, the hero of survival and endurance, was still there. Henry Moore's sundial, on the other hand, never threatened anyone. It measures time. Its four arms open up towards the sky, as if to once more fulfil the natural desire for heights which dominates homo erectus and homo sapiens. If you look at it from far away, its profile seems that of a radio telescope listening to the cosmos. Whoever contemplates it feels the irresistible temptation to pluck that bronze chord in order to hear the undoubtedly celestial music – the music of the spheres, our predecessors would have called it – which would rise from it. It is a very simple, very ancient and very modern work of art. Built out of our scientific knowledge and technical skill, it works egregiously. But, being a great artist's piece, it suggests something more than the mere measurement of time. It is a pledge, a prayer, and a thanksgiving – the mute sentinel, like the black monolith of 2001: A Space Odyssey, which signals man's entrance into the universe.



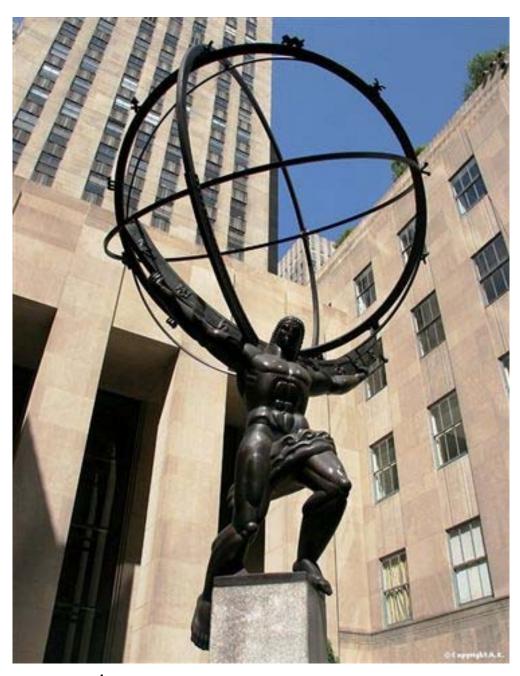
1. p. 1, 1. Atlas and Prometheus, Laconian cup, ca. 500 B.C., Musei Vaticani, Roma.jpg



2 p. 1, 2. Farnese Atlante Farnese, 2nd cent. A.D., Museo Archeologico, Napoli.jpg



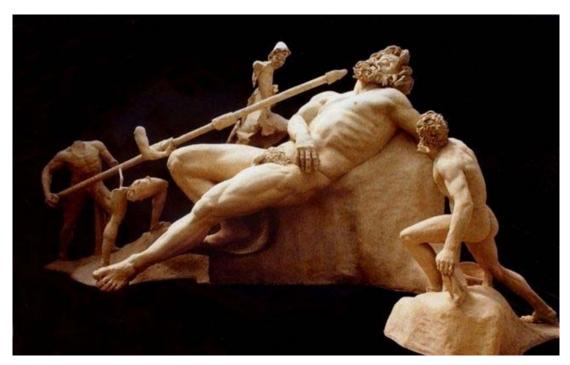
3 p. 1, 3. Guercino, Atlas, 1646, Museo Mozzi Bardini, Firenze.jpg



 $4~\mathrm{p.}$ 1, 4. Lee Lawrie, Atlas, 1937, Rockefeller Center, New York.jpg



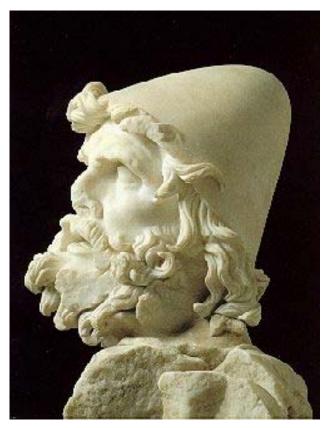
 ${\bf 5}$ pp. 4-5. The Marble Odyssey in Tiberius' Grotto, Sperlonga (reconstruction).jpg



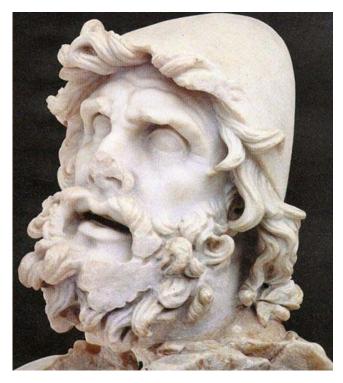
 ${\bf 6}$ pp. 4-5, L'accecamento di Polifemo, Museo di Sperlonga.jpg



7 pp. 4-5. Scilla, Museo di Sperlonga.jpg



8 pp. 4-5, Head of Ulysses, Museo di Sperlonga.jpg



 ${f 9}\,$ pp. 4-5, Head of Ulysses, Museo di Sperlonga.jpg



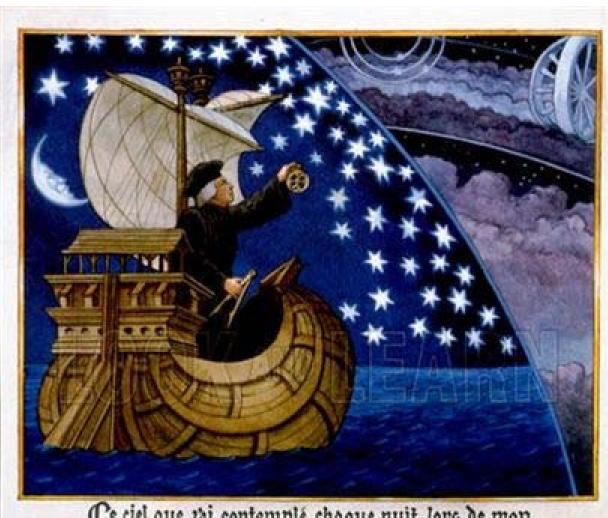
 $10\,\mathrm{p.}$ 6, Ulysses in Hades, 1st cent., Sala delle Nozze Aldobrandini, Musei Vaticani.JPG



11 pp. 6, Ulisse as pilgrim with Circe, in Boethius' Consolation, 14th cent., Bibl. Nat..JPG

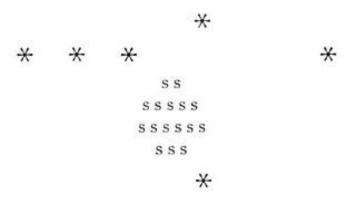


 $12\,\mathrm{p.}$ 6, Florentine MS, 14th cent., the Shipwreck of Inferno XXVI.JPG

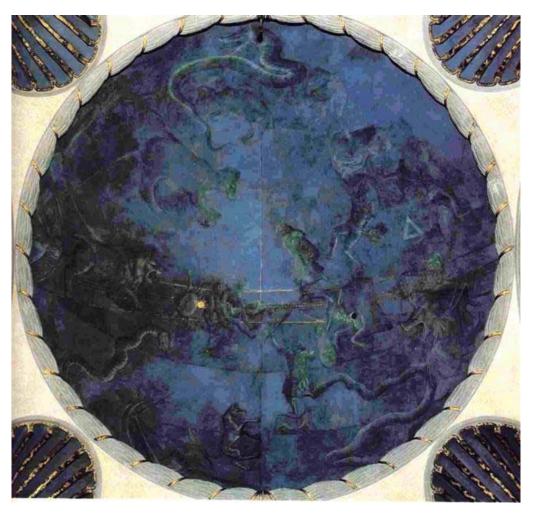


Le ciel que jai contemplé chaque nuit lors de mon troisième voyage était orné de planètes que j' ai pris soin de relever attentivement. Il est donc aujourd'hui manifeste que nous avons mesuré laquatrième partie de la voute céleste et découvert un e terre serme: il s'agit d'un continent jusqu'ici mé connu des Européens, et qui les sépare des In des contrairement aux croyances entretenues de nos jours.

13 p. 8. Amerigo Vespucci Navigating by the Stars, French School, nd, color litho, private collection.jpg



 $14\,\mathrm{p.}$ 8. Amerigo Vespucci, Mundus Novus. Black Canopus.jpg



15 p. 8. Giuliano d'Arrigo 'Pesello' (1367-1446). Dome of first chapel, Sagrestia Vecchia di San Lorenzo, Firenze.jpg



 $16\ \text{p. 8.}$ Pinturicchio, Return of Odysseus, 1508-9, National Gallery, London.JPG



 $17\ \text{p. 8.}$ Baldassarre Peruzzi, The Great Bear, ca. 1511, Villa Farnesina, Roma.jpg



 $18\ \mathsf{p.\ 8.\ Primaticcio}$, Ulysses and Penelope, ca. 1545, Museum of Art, Toledo OH.jpg



 $19\ \text{p. 8.}$ Claude Lorrain, Homecoming of Odysseus, Louvre.JPG



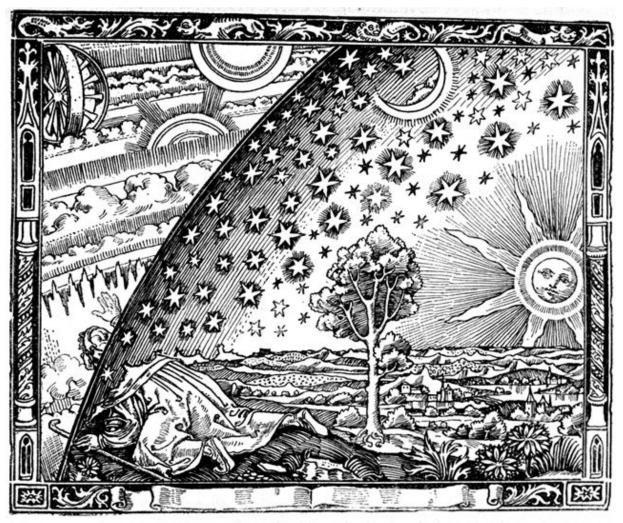
 $20\ \mathsf{p}.$ 9. Canaletto, The Eve of St. Martha, 1760, Gemäldegalerie, Berlin.jpg



 $21\,\mathrm{p.}$ 9. Adam Elsheimer, Flight into Egypt, 1609, Alte Pinakothek, München.jpg

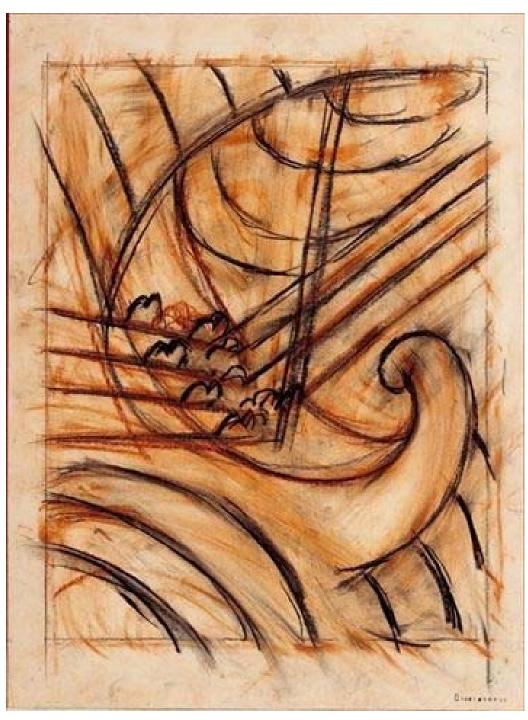


 $22\,\mathrm{p.}$ 9. J.M.W. Turner, Ulysses Deriding Polyphemus, 1829, National Gallery, London.JPG

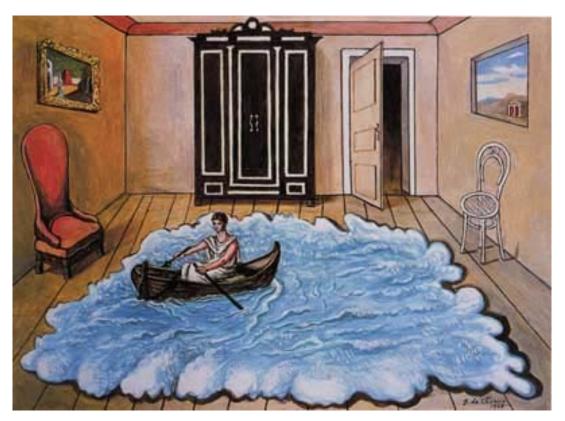


Un missionnaire du moyen âge raconte qu'il avait trouvé le point où le ciel et la Terre se touchent...

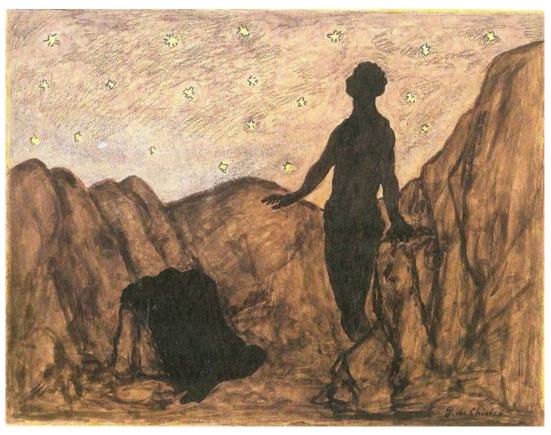
23 p. 9. Camille Flammarion, L'Atmosphere, Météorologie Populaire Paris, 1888, pp. 163-64.jpg



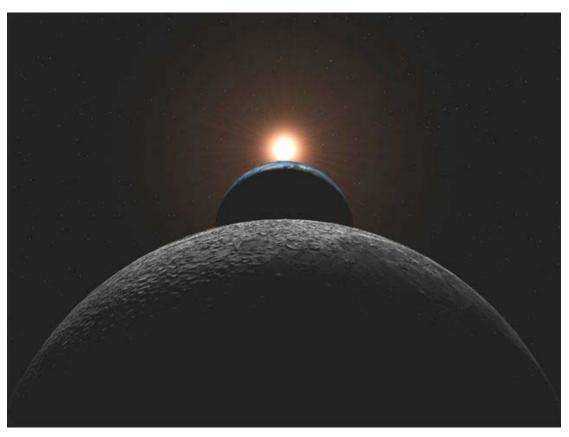
24 Matisse, Eole, illustration to Joyce's Ulysses.JPG



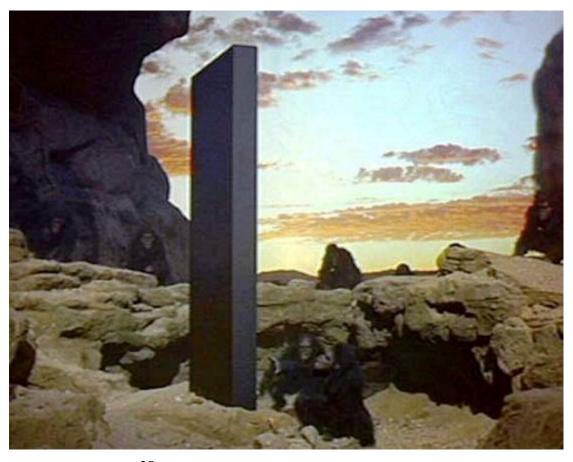
25 p. 10. Giorgio De Chirico, Il ritorno di Ulisse in Patria, 1968, Fondazione Giorgio e Isa De Chirico, Roma.jpg



 $26\,\mathrm{p.}$ 10. Giorgio De Chirico, Estasi, ca. 1968, San Polo di Reggio Emilia, private collection.jpg



 $27~\mathrm{p.}~10.$ Stanley Kubrick, 2001. A Space Odyssey.jpg



 $28\ \mathsf{p.}\ 10.$, 2001. A Space Odyssey, The Dawn of Mankind.jpg



29 p. 10, David Bowman returned to Earth.jpg



30 p. 10. David Bowman Dying in front of the Monolith.jpg



31 p. 10. The Star Child at the end of 2001. A Space Odyssey.jpg



32 p. 11. Alexander Liberman, 1988, Ulysses, Los Angeles.jpg



33 p. 11. Anselm Kiefer, Sternenfall, 1995, author's collection.jpg



34 pp. 11-12. Ugo Attardi, Ulysses, 1996, Battery Park, New York, with the Twin Towers of the World Trade Center.jpg



35 pp. 11-12. Sir Henry Moore, Man Enters the Cosmos, 1980, Adler Planetarium, Chicago.jpg