Nietzsche pledges allegiance to the arts and natural sciences, his interest in which extends beyond the mere analysis of artistic practices and scientific claims. Both commitments are highly complex and they belong to the very core of Nietzsche’s thought. To ask what view Nietzsche takes of the significance of art and science is, consequently, to broach the question of what fundamentally defines his philosophical project. It is also to set Nietzsche in a particular historical context. Nietzsche’s recasting of the relation of art and science recalls the ambition of classical German philosophy, largely abandoned in the course of the nineteenth century yet still to the fore in Schopenhauer, of binding art and natural science together on a unitary basis. Nietzsche however abjures the metaphysical strategies that his predecessors had used to achieve that result. Determining what Nietzsche offers in their place poses a considerable challenge.

Without attempting to give an account of the rich substance of Nietzsche’s discussions of particular artists, artworks and scientific ideas, I will concentrate on the question of what in general terms Nietzsche wants from art and science – their role for him as resources for philosophical reflection. In the first section I outline, with reference to the textual loci classici, Nietzsche’s accounts of the virtues of the artistic and naturwissenschaftlich orientations. Two main systematic questions are raised by Nietzsche’s investments. One concerns their consistency. In the second section I argue that, if Nietzsche’s attitude to science is understood in the right way, then it can also be understood how it may join forces with art. The other question, which is harder to resolve, concerns the nature of the unity that art and science are supposed to form with philosophy. In the third section I sketch a limited view of this unity.
AESTHETICISM IN *THE BIRTH OF TRAGEDY* AND THE TURN TO SCIENCE IN *HUMAN, ALL TOO HUMAN*

As regards their relations to artistic and scientific themes – and indeed more generally – Nietzsche’s texts invite division into three periods. The first, dominated by art, centres on *The Birth of Tragedy* (1872) and extends to the last of his *Untimely Meditations* (1876). The second, sometimes called Nietzsche’s positivist phase and defined by *Human, All Too Human* (1st edition, 1878) and *Daybreak* (1881), raises dramatically the profile of the natural sciences. The third, which includes all works from *The Gay Science* (1882) up until the end of his philosophical career, encompasses his fully elaborated assault on the moral world-view and exploration of alternatives to it.

The sequence has been read as showing Nietzsche initially exploring what he discovers to be a blind alley, then in recognition of his errors transferring his loyalties from art to natural science, leaving him free in the works of his full maturity to develop his critique of morality under the aegis of science, albeit with trailing remnants of his youthful aestheticism. I will propose a different picture, according to which the commitment of the first phase is abandoned only in the limited sense that Nietzsche, whilst retaining art as a normative model, ceases to regard it as diagnostically or therapeutically adequate, and the second phase shows his intention to keep the perspectives of art and science simultaneously in play without subordinating either to the other, a stance which he maintains without fundamental alteration throughout his final period.

*The Birth of Tragedy* elevates art in a manner virtually unprecedented in the history of philosophy. Nietzsche declares that ‘only as an aesthetic phenomenon is existence and the world eternally justified’.¹ The difficulties posed by this cryptic assertion begin with the absence from BT of a systematic aesthetics of the traditional sort. The formula that it yields, according to which art in general owes its existence to two primordially distinct forces, the Apollonian and the Dionysian, is reached by concentration on a specific set of problems
posed by Greek tragedy: How did it evolve, what defines its aesthetic effect, and what is its existential meaning?

Nietzsche’s answer begins with the natural human capacities for dream and ecstasy, which he supposes can be worked up into two species, forms or modes, of art. These are then paired with a metaphysical opposition borrowed (with modification) from Schopenhauer: the contemplative Apollonian art-impulse delights in the individuated ‘world as representation’ offered to our senses; the ecstatic Dionysian reaches across this veil of illusion to the underlying undifferentiated ‘world as will’ – which Nietzsche conceives, contra Schopenhauer, in terms of the joyous creative activity of a divine world-artist. Internalization of each art-mode determines a different experience of the world and form of life.

This aesthetico-metaphysical duality provides Nietzsche with the materials for a historical narrative. Homeric culture, having perfected the Apollonian, found itself abruptly confronted with the Asiatic cult of Dionysus, which challenged its illusionism by exposing the imponderable existential depths that Apollonian culture had sought to conceal. From this opposition came the creative breakthrough: Apollonianism saved itself by entering into fusion with the Dionysian, giving rise to tragedy as found in Aeschylus and Sophocles, in which, as Nietzsche puts it, Dionysus and Apollo each speak the language of the other: the annihilating force of the musical sublime is mediated – focused and held fast, but not neutralized – in the beautiful form of drama, informed by mythic ideation. The supreme goal of all art is thereby attained.  

Nietzsche stakes a strong claim for the contemporary significance of what he has unearthed. Modernity, he asserts, has exhausted its own possibilities, for its defining pursuit of systematic knowledge has been developed to a point where it flatly contradicts the Socratic optimism which originally motivated it. Proof of the incapacity of Wissenschaft to demonstrate the rationality of the real has been furnished by Kant and Schopenhauer. And once their ‘victory over the
optimism which lies hidden in the nature of logic’ is acknowledged,\(^3\) it will be seen that we moderns can advance only by recuperating – in an appropriately post-Socratic form\(^4\) – the culture and sensibility of tragic, i.e., post-Homeric but pre-Socratic, Greek culture, to which Wagner now gives us access.

The labyrinthine course of the text gives scope for different reconstructions of Nietzsche’s aesthetic turn. A very plain understanding of ‘aesthetic justification’ would take it as an instruction to cultivate an apprehension of the world as having beauty and whatever other aesthetic properties might make it desirable. While this matches some of what Nietzsche later recommends in *The Gay Science*,\(^5\) it cannot be what BT has in mind, for there Nietzsche consigns the naive practice of merely reshaping surfaces to the pre-tragic era.

Nietzsche’s denigration of *Wissenschaft* in BT, and the art-orientation of its revised Schopenhauerian metaphysics, along with its proximity to the radically sceptical ‘On Truth and Lies’ essay of 1873, combine to encourage the notion that Nietzsche envisages art as possessing para-cognitive, world-creative powers. On this account art is the consummate metaphor, metaphoricity being all that truth can amount to. Unpublished writings of the period testify to the continuity for Nietzsche of art with epistemological themes,\(^6\) and many of Nietzsche’s pronouncements at this stage recall Schiller’s conception of art as a species of *Schein* in which a certain vital truth, not otherwise accessible, is contained.

Against such a reading must be set the fact that BT nowhere suggests that art can, as it were, rewrite empirical truth – and more importantly, that it appears firmly committed to the ultimacy of nature as a realm of inexorable necessity, whence the suffering that makes aesthetic justification necessary in the first place. The character of nature, though presumably inherently valuable for the divine world-artist, is for us an independent domain of sheer facticity.

A more plausible interpretation is that aesthetic justification is what we achieve when our stance towards existence mirrors the
expressive activity of the [tragic] artist, and evinces the attitude to existence expressed in tragic works – the ‘aesthetic state’, as Nietzsche later often refers to it. This is to make aesthetic justifica-
tion a species of self-relation. The theme of self-spectating recurs in BT, which talks of apprehending ourselves as emanations of the Dionysian world-artist and as the Olympian gods apprehend us, a reflexive structure which tragedy incorporates by means of the chorus.⁷ As regards what exactly defines this stance, Nietzsche has no single formula, but the implication of what he says in various places is that its core consists in the transformation of internal psychological forces into aesthetically forceful, value-invested appearances of the self and its world, images which restimate the underlying forces which generate them. What defines the aesthetic state is therefore a dynamic unity of phenomenal presentation, Apollonian dream, and the drive or energy manifest in Dionysian Rausch. The process is one in which, as in artistic creation, conscious and unconscious factors harmonize productively. The upshot is that the subject enjoys a relative substantiality, akin to that of an artwork: the aesthetic state is self-supporting, and the principle of the subject’s unity, again like that of an artwork, cannot be articulated discursively or reduced to psychological law.⁸

References to art as the only remedy for our distinctively modern pathologies – our listlessness, neurasthenia, burdensome historical consciousness, etc. – recur in Nietzsche’s writings of the 1870s,⁹ but by 1876 there are strong indications that, though still utterly committed to the absolute value of musical experience in general and Wagner’s artistic achievement in particular, Nietzsche has grave doubts about art’s power of cultural regeneration.¹⁰ Nothing in this, however, gives notice of the radical change of key that comes two years later.

The opening chapter of Human, All Too Human, ‘Of First and Last Things’, contains Nietzsche’s first statement of what may be called his scientific turn. To which, or what kind of, science is Nietzsche turning? Most often Nietzsche talks simply of Wissenschaft, which
has the broader meaning of systematic knowledge, but which he consistently treats as consummated, logically as well as historically, in natural science. At a very rough approximation, Nietzsche can be said to accept the familiar nineteenth-century Helmholtzian conception in which physics and physiology are fundamental, and from which the enchantments of Goethe’s Naturphilosophie – which asserts nature’s kinship with our highest spiritual aims – have been expunged. What complicates the picture is the methodological variety Nietzsche allows Wissenschaft to embrace. Nietzsche is aware of the contrast between, on the one hand, hermeneutical meaning-seeking, and on the other, mathematicisation and the postulation of mechanism, but he does not develop it in Dilthey’s fashion into a principled distinction of Natur- from Geisteswissenschaften. Thus HH begins with Nietzsche’s declaration of his commitment to a new philosophical method, which he describes as inseparable from natural science, which he calls ‘historical philosophy’ or ‘historical philosophizing’, and which appears to embrace all enquiry into origins and causal ancestry.\textsuperscript{11} As such it would include his earlier treatment of tragedy. But Nietzsche now tells us – redrawing the map, and to all appearances switching sides – that the most important opposition for purposes of philosophical reflection is between science and metaphysics, and that his identification is now unequivocally with the former, and that art must be consigned, along with religion and morality, to the same sphere of mere ‘ideation’ as metaphysics.

Why the realignment? The newly discovered value of natural science is multi-faceted, and, astonishingly, has virtually nothing to do with seeing the world aright\textit{ as such} – nor even with avoiding error for its\textit{ own sake}. In place of pure epistemological motives, Nietzsche refers in HH to (1) science’s promotion of a new set of qualities, attitudes, affects, forces, virtues and so on, characteristic of the new type of subjectivity that Nietzsche calls ‘the free spirit’;\textsuperscript{12} (2) its revision of our aesthetic sensibilities, and revelation of beauty in what had been perceived as ugly;\textsuperscript{13} and of course (3) its undermining of moral and religious commitments (which is valuable not because of their
falsity, but because of the defectiveness of the forms of life which they support). Nietzsche even entertains (4) the possibility that science, in addition to overhauling culture, might motivate new forms of it. The downgrading of art is presented by Nietzsche in a later chapter of HH – ironically titled ‘From the Souls of Artists and Writers’ – as a more or less direct concomitant of this valorisation of science: art is merely religion by other means, metaphysics without concepts, which gives us the illusion of getting to the truth of things but in fact blinds us and serves as a narcotic.

When we look back at HH from the standpoint of Nietzsche’s later development, two things stand out, and it becomes clear that Nietzsche’s abrupt turn from art to science in HH is only the beginning of a hugely complicated story.

The first is that, when Nietzsche in HH withdraws his identification of the Good with aesthetic justification, and asserts art’s negative value in fundamental regards, this does not preclude its continuing to have, or its acquiring, value in some other way. And this is exactly what ensues a few years later in The Gay Science, which re-presents art, de-metaphysicalised, as ‘the good will to appearance’. In the 1886 Preface added to the second edition of GS, Nietzsche reasserts our need of art, saying that we have lost our taste for science, which now seems too superficial. The kind of art which Nietzsche approves in GS has absorbed features from scientific sensibility, and is no longer centred on tragedy, but the upshot is that the aesthetic has been restored as a philosophical resource.

The second point is that Nietzsche in HH does not merely set aside epistemology as a measure of the relative worth of art and science: he also gives an account of the grounds and origin of science which seems on the face of it to undercut all naive realism, perhaps any realism, regarding its truth-claims. This theme will run and run in his subsequent works. The story as told in the first chapter of HH – an instance of ‘historical philosophizing’, but with heavy Humean overtones – is that science is the product of a long process of evolution, which originates in two errors. (1) The acquisition of language.
Language is itself ‘putative science’, for in the very act of fashioning it man supposed that ‘with words he was expressing supreme knowledge of things’: language is ‘the belief that the truth has been found out’. Logic in general, inclusive of all concepts of unity and identity, stands on the same foundation of error.  

Dream-thinking. Dream consists in ‘the seeking and positing of the causes of’ excitements generated by physiological processes, resulting in the dreamer’s belief that he experiences directly the [in fact merely confabulated] cause of the sensation. Our later and more rigorous logical thinking – scientific knowledge of cause and effect – is an extension of this same imaginary ‘logic’ of dreaming. The two errors are irrevocable, and have jointly facilitated the laborious process of science, which is now capable of ‘detaching us from this ideational world’, but ‘only to a limited extent’. [To which Nietzsche adds: ‘– and more is certainly not to be desired’.]  

The peculiarly complicated character of Nietzsche’s attitude towards science is already clear. It comes to the fore in his treatment of Darwin, a topic which has recently received extended attention. Given the extraordinary importance of Darwin for late nineteenth-century thought – and the widespread perception of the theory of natural selection as philosophically decisive in the case for man’s naturalization, as demonstrating the sufficiency of science for enquiry into human nature – Nietzsche might have been expected to subscribe to it with enthusiasm. Yet Nietzsche is highly critical of Darwin, and his disagreement is not just with the ways in which Darwin has been appropriated: the problem lies with Darwin’s central idea of a struggle for existence, against which Nietzsche sets his own thesis of will to power. Darwin’s assumption that mere survival is what is at issue, Nietzsche asserts many times, stands in line with a providential, i.e., moral, view of existence.  

Even when allowance is made for the fact that Darwin’s theory had not yet received full empirical consolidation, and that it continued throughout the late nineteenth century to seem open to philosophical interpretation, Nietzsche’s stance is extremely puzzling. Nietzsche
contests certain relatively minor points concerning the mechanism of
natural selection, but his rejection of Darwin, we have seen, does not
have fundamentally the character of an empirical disagreement (nor is
it a strictly conceptual objection). The question is, of course, what else
it could be. Nietzsche is aware that Darwin’s theory is not advanced as
a vindication of natural teleology, and that the ‘striving’ of a species to
maintain itself does not have the metaphysical significance of
Schopenhauer’s Wille zum Leben. But he proceeds as if the issue were
one of competing insights into the essence of life – as if the question
were, What interpretation of nature yields comprehensive philosophi-
cal satisfaction?, rather than, What mechanism is adequate to the
empirical data? In the following section I will offer a general view of
Nietzsche’s view of science which helps to make some sense of what
seems an intrusion of non-scientific considerations into biological
science.

One final point deserving brief comment concerns the particular
science of psychology. Although Nietzsche’s allegiance embraces offi-
cially all of the sciences, it is arguable that psychology is the one that
truly matters for him, and in some passages this is just what he says:
BGE describes it as ‘the queen of the sciences’, for which the other
Wissenschaften merely prepare.26 But even if Nietzsche’s philosophy as
a whole is regarded as centred on psychology,27 the question of the basis
of his allegiances to art and science is not thereby overtaken. Psycholog-
ical analysis, as Nietzsche practices it, is an amalgam of
depth hermeneutics, quasi-aesthetic phenomenological characteriza-
tion of experiential ‘worlds’, Schillerian drive-theory, and sub-personal
or physiological speculation. What Nietzsche means by psychology is
therefore not the empirical explanatory practice that we ordinarily take
it to be, or that defined the work of predecessors and contemporaries of
his such as Helmholtz, Fechner and Wundt, for whom quantification,
the potential for mathematical exactitude, represents a touchstone of
empirical truth. Nietzsche’s enthroning of psychology therefore pre-
supposes, rather than explains, the broader commitments to art and
science we have been looking at, and which we now need to make more sense of.

**ART AND/OR SCIENCE?**

The difficulties we face in interpreting Nietzsche’s view of art and science begin with the fact that, as we have seen, in many places Nietzsche appears to accept as given the authority of the natural sciences, in line with several schools with which he was well acquainted, including the neo-Kantian, while elsewhere he seems to regard aesthetic experience as a source, paradigm, and guarantor of normativity, in continuity with the aesthetic tradition of classical German philosophy. This contrast of historical affinities is perhaps not itself a problem, but Nietzsche also asserts the deep heterogeneity, and mutual antagonism of art and science. They share an aspect of amorality, or potential for being set in opposition to morality, which is of vital importance for Nietzsche, but he does not suppose they can be melded into a single world-vision; and yet he gives no principle for dividing their labour, with the result that they appear to compete for the same determining role.

The first question therefore is whether Nietzsche can sustain both commitments. A sharp parting of ways – between aestheticist and scientistic readings, as I will call them – is characteristic of Nietzsche interpretations at this point.\(^{28}\) I will suggest, however, that the question can be answered in the affirmative, on the condition that we do not try to lend Nietzsche’s position more determinacy than his texts (in all of their apparent contradictoriness) warrant or his purposes (as we may understand them) require.

Clearly, if it is demanded of an interpretation of Nietzsche that it should issue in a unitary systematic account of the True and the Good, then the only way of rationalising his double commitment to art and science will involve subordinating the one, and understanding it in the terms of the other, and this is most straightforwardly achieved, for analytic readers of Nietzsche at any rate, by having him make natural science sovereign. This allows empirically grounded knowledge of the
forces governing (human) nature to explain the particular efficacy of art and to provide the basis for a critical account of its value – a notion which Nietzsche explicitly entertains. The opposite path that interpretation might in principle take – viz., asserting the supremacy of art or the aesthetic – has a prima facie much weaker exegetical claim, in so far as Nietzsche says little (even at the height of his aesthetic commitment) that may be taken to suggest a general analysis of the True in terms of the Good or the Beautiful.

Yet Nietzsche’s texts offer considerable resistance to the scientistic construal. This begins with their characteristic oscillation between scientific and aesthetic perspectives, and the accompanying (but distinct) alternation between consideration of topics in either an axiological, or a purely theoretical, value-indifferent light. Aesthetic and scientific characterizations are sometimes interfoliated – nature is viewed in both lights at once – and are sometimes opposed, allowing the one standpoint to provide a sideways-on view of the other: science is appraised aesthetically, aesthetic experience is explained scientifically. The aspect-changes remain unrationalized in the sense that Nietzsche does not tell us why, at specific points, we switch from the one to the other.

In addition to fostering this twofold binary vision, Nietzsche’s texts are marked by a notable absence of exemplifications of convincing, bona fide scientific reasoning. Scientific thought is characterized by Nietzsche as involving caution, modesty and dispassionate adjudication, but his writing does not conform to this practice, nor does he evince the scientist’s interest in the explanation of natural phenomena for its own sake. In addition to the case of Darwin referred to earlier, comparison with Freud makes the point. Both postulate drives and interpolate unconscious motives and meanings, but Freud insists on his observance of scientific protocol – confronting hypotheses with evidence and counter-hypotheses, rehearsing the cumulative narrative of his theory construction, etc. – in a way that we simply do not find in Nietzsche. This is not to say that Freud is closer to psychological truth, or to genuine scientificity, only that, even when
what Nietzsche is saying is arguably of a scientific nature, it is not said in the voice of a scientist. The manner in which Nietzsche’s texts refuse to stake themselves on empirically decidable matters – instead positing themselves as integral wholes, recessed from first-order science, albeit in some way that is hard to grasp – cannot plausibly be regarded as a mere device of presentation, and any account which succeeds in doing justice to the intricately layered authorial stance which his texts communicate, is certain to introduce elements unrecognized on the scientistic interpretation. The scientistic construal comes, therefore, at the heavy cost of discounting the textual substance of Nietzsche’s writings.

Comparison of Nietzsche’s handling of scientific explanation with that of his predecessors and contemporaries suggests, in any case, that it puts the accent in the wrong place. The bulk of the naturalised epistemology commonly attributed to Nietzsche, along with its potential sceptical or anti-realist implications, had already, as regards its main elements, been worked out by Schopenhauer, Alfred Lange, and others whom Nietzsche read in the 1860s and -70s. That the physiological organisation of our sensory apparatus, and other subjective dispositions, including our conceptual organization, radically mediate our knowledge of the world was hardly a new thought at that period, nor were the accompanying positivist notions, on which Nietzsche also insists, that aprioricity is to be rejected and metaphysical necessity eliminated from mechanism and scientific explanation in general. The general notion that experience is conditioned throughout by factors which could not be reckoned as necessary by any standard of reason, and that our cognitions separate us from the Real to an extent that makes experience in a fundamental sense illusory, cannot be counted a discovery of Nietzsche’s, nor can he be said to have developed the idea that immediate cognition is remote from reality in a way that competes in systematicity – rhetorical flair is another matter – with contemporaries such as Julius Bahnsen, Afrikan Spir, Eduard von Hartmann, Eugen Dühring, and Hans Vaihinger. More pointedly, Nietzsche often seems to veer towards the paradoxical assertion that
our knowledge depends on natural processes to which it must in the same breath deny reality.

Attempts to refine Nietzsche’s loosely non-realist, sceptical outlook into a more definite epistemological position divert attention from what is most original in his treatment of science. Nietzsche’s dominant occupation is clearly not with the logic of science, its defining method or epistemology – the question of how science latches onto things, its referential power, is barely raised – but with the difference that it makes to us. His concern is not for the greater part with any of the particular results of scientific enquiry, but with the wholly general kind of thing that it shows the world to be, or not to be, and what is crucial, I suggest, is that Nietzsche does not regard this as a settled matter; even though, for reasons I will try to explain, it is not easily said in what exact way he thinks the meaning or upshot of science remains undetermined.

Nietzsche’s outlook combines an affirmation that natural science is what fixes the truth of our beliefs with a denial that the scientific image of the world determines its own reception. Nietzsche’s reasons for crediting science with truth, to the extent that he sees need to articulate them, are most often simply rehearsals of Enlightenment anti-supernaturalism and empiricist conventional wisdom. His basis for denying that science fills out the space of reason, by contrast, is profoundly original. According to Nietzsche, the same sceptical forces as dispose of dogmatic metaphysics, thereby clearing the way for modern natural science, can and must be redirected at science itself, as we saw in HH. What emerges from its self-critique, among other things, is that the type of fact to which science accedes is fundamentally different from the species of knowledge at which metaphysics aims32 – science delivers, as Nietzsche sometimes puts it, truths of ‘becoming’ rather than ‘being’.33 The platonic conception ousted by science is, however, no doctrinal accident, confined to the history of philosophy, but a mode of ideation profoundly bound up with all facets of our existence, and most distinctly manifest in our sense and conception of value.34 Because modern science cannot,
therefore, pretend to take the place of value as we understand it, it must necessarily appear to us a circumscribed, limited enterprise.

Examination of science consequently leaves us in a puzzling situation. In the first place, though we cannot rightly speak of truths that transcend science, the fact is that we find ourselves outside or beyond scientific truth in a sense that science itself cannot grasp: from which it follows that what science leaves undetermined, whatever it may amount to, cannot be described as merely the business of legislating values – with the implication that, whether or not our values could in principle be determined by scientific knowledge, it can at least be understood in scientific terms what value and its legislation really consist in. In the same way, even though no positive reality – or, for that matter, plain fictionality – can be attributed to what science fails to encompass, this excess cannot be regarded as a merely ‘psychological’ matter – as if, once again, there could not be anything more to it than can in principle be made intelligible by scientific means.35

The anti-metaphysical understanding of science advocated by Nietzsche consequently creates ambiguity on two fronts. On the one hand, it demotes science: to the extent that its entities fail to measure up to platonic standards, they share in the irreality of pre-scientific cognition. Alternatively, and with no less justification, it can be regarded as a deflationary clarification of knowledge and its objects: by banishing platonic phantasms, science is released from the suspicion of radical defectiveness. This ambiguity repeats itself regarding value: which modern science may be perceived either as having destroyed the very possibility of, or only as having disenchanted and, by exposing its illusory forms, shown us how value is correctly conceived. We find accordingly in Nietzsche quite different images of the impact of natural science, which is sometimes pictured, in ways that recall Rousseau, as revealing nature in all its redeeming innocence,36 on other occasions as a simple coming to our senses or waking from nightmare, in standard Enlightenment idiom,37 and again, when Nietzsche is drawing a tight connection with the advent of nihilism, it is made to seem a vertiginous devastation.38
The question, then, is (again) where we find ourselves, according to Nietzsche, once all these ways of experiencing scientific truth have been worked through. One consideration which has led many commentators, even if they do not accept the full scientistic interpretation, to view Nietzsche as coming down on the side of the deflationary construal of empirical truth, is the need to distance him from the absurdity of repudiating plain everyday truth or of delegitimating the scientific knowledge by which he sets such store. This is however to put a great deal more weight on the requirements of justified belief, and much less on the issue of metaphysicality, than Nietzsche’s texts warrant. Again and again Nietzsche returns to the idea that mere science cannot support itself – as if his view were that metaphysical aspiration is constitutive of cognition per se and that truth cannot be separated from our epistemic desires, with the consequence that scientific truth is unable to fully redeem its claim to the title.

Nietzsche’s notion that science cannot shake off the shadow of failure sounds strange to our ears, habituated as we are to the idea that a soft landing is available after the end of metaphysics, but the basic thought that there is an intensity of investment in the very nature of cognition which leads it to overreach the world as lived, is of undeniable importance to Nietzsche, and it is far from obvious that, if this is his view, it lands him with empirical relativism, or involves a confusion of epistemology with psychology, or of fact with value, or that it betrays a dogmatic Platonistic or Kantian assumption that genuine knowledge must concern the supersensible. Nietzsche is under no obligation to accept that the distinctions here deployed are capable of elucidating what goes on at the level with which he is concerned. It is highly plausible, furthermore, that Nietzsche’s position is that we are unable to say what it is that we ultimately desire from knowing. All we can do is point to some of its exemplifications, in Plato and others whose ideas are no longer credible, while adding that the disenchanted world of science is a negative image of that which, we inchoately imagine, would afford us the satisfaction we seek from grasping the truth of things. Hence his comparison of the
will to truth with erotic love, which is similarly incapable of saying what it really wants.\footnote{40}

If this is right, then the recalibration of truth and knowledge recommended by the deflationary construal does not accord with Nietzsche’s intentions, for in addition to not being needed in order to underwrite science, it disavows our abiding commitment to metaphysicality, evidenced by our need to be assured that our theoretical impulse hits its target. Such certitude goes firmly against the grain of Nietzsche’s continued insistence on the phantasmagorical character, the pervasion by fiction and fantasy of all experience, including its truth-related elements – encapsulated in his formula that cognition exercises our ability to dream on after waking.\footnote{41}

When Nietzsche affirms the need to ‘translate man back into nature’, to ‘naturalize humanity’,\footnote{42} the task he envisages is therefore not one that science could fulfil; science is a \textit{terminus a quo}, but naturalisation represents a \textit{terminus ad quem}.

This allows us to sketch finally the link of natural science with art for Nietzsche. What art provides is a surrogate Archimedean point, a place within the manifest image through which the scientific image can be mediated, and values revalued, without capitulation to the moral interpretation of existence. To say that our uptake and incorporation of science cannot proceed without taking its bearings from art is not to endorse the aestheticist interpretation of Nietzsche described earlier, since it does not make aesthetic value the measure of scientific truth or accord it the foundational role entertained in \textit{BT}.\footnote{43}

The ‘Attempt at Self-Criticism’ which Nietzsche added to the 1886 edition of \textit{The Birth of Tragedy} bears out this reading. What his engagement with the problem of the Greeks led him to, Nietzsche tells us, was ‘the problem of science itself’, ‘science grasped for the first time as something problematic and questionable’: the task of \textit{BT} was ‘to look at science through the prism of the artist’, since the problem of science cannot be recognized within its own territory.\footnote{44} What Nietzsche now, in his final phase, considers awry in \textit{BT} is its
acquiescence in metaphysical idioms and the scope thereby given to romanticism in its search for ‘metaphysical comfort’. This was a mistake, but Nietzsche continues to think that the results themselves were sound: the perspective of art facilitated his discovery of the Dionysian, his turn against morality and Christianity, and his crucial insight that science’s ‘logicising’ is motivated by optimism and thus continuous with moral and religious interpretations of the world. In this sense Nietzsche’s philosophy after BT has art as its presupposition, and the aesthetic state, which is what remains of art when metaphysics is subtracted, has been absorbed into Nietzsche’s philosophical practice. Whether Nietzsche might in principle have arrived at his critique of the will to truth, and unearthed the moral quality of science’s motivation without reliance on the standpoint of art, is a different question, which concerns instead how his conclusions might be rationally reconstructed.

To return to Nietzsche’s anti-Darwinism. The problem was to understand how Nietzsche could dispute Darwin’s theory on seemingly non-empirical grounds. The answer is that on Nietzsche’s account Darwin has a poor apprehension of the meaning of the ‘total-aspect of life’, and that, as such, the question is not one of metaphysics, since it does not involve the postulation of anything independent of the Darwinian conception of nature’s mechanism of species formation, but nor is it simply a matter of how the facts fit with Darwin’s theory. Nietzsche’s disagreement with Darwin, concerning as it does the axiologically informed uptake of science, may not be strictly aesthetic, but it lies in its vicinity.

One final observation regarding the interrelation of the standpoints of art and science for Nietzsche. Earlier I suggested that Nietzsche conceives the aesthetic state as a type of self-relation which, by virtue of its internal dynamic, tends towards plenitude. The standpoint of science is the exact opposite: it too is understood by Nietzsche as a self-relation, but one which – whatever its necessity, and whatever advances it allows us to make – tends towards emptiness. Hence the overwhelmingly negative character of Nietzsche’s
invocation of the results of scientific knowledge, to the point where it seems to amount to nothing in itself, as if its entire meaning lay in dismantling what preceded it: as science expands to take in all things, it hollows itself out, stealing reality from metaphysics but then displaying empty hands. In a late note, Nietzsche describes it as ‘nihilistic’: it ‘results in its own disintegration, a turn against itself’ – science results in ‘anti-scientism’!\textsuperscript{46} This reveals a further sense in which science presupposes the standpoint of art, for Nietzsche: if we could resolve ourselves into scientific cognition alone, then nothing would be left of us.

THE PROBLEMATIC UNITY OF NIETZSCHE’S PHILOSOPHICAL STANDPOINT

To show how Nietzsche may consistently subscribe to the standpoints of both art and science is not yet to fully make sense of those commitments, for it must also be explained how they are related to philosophy itself, and it is clear that, whatever the limitations of philosophical reflection for Nietzsche, it must amount to something in its own right. This is implied by the complex stance that he adopts towards science, explored above, and it is in any case implied by his double commitment to art and science: to the extent that philosophy identifies itself with just one of the two, as in BT and briefly (perhaps) in HH, it may be cast in the role of exponent or under-labourer; but if the identification is disjunctive – if in making each identification it grasps itself as also having access to the other, as in the bulk of Nietzsche’s work – then the self-assimilation cannot be complete.

The problem, stated more exactly, is as follows. Nietzsche on the one hand appears to conceive philosophical reflection as non-autonomous, lacking adequate resources of its own and standing in need of direction from without, whence its self-attachment to art and science. The attachment is in both cases unmediated in the sense that, although Nietzsche says much about their value, his texts present the commitments as \textit{faits accomplis}; we are not lead \textit{into} them by way of argument from independent premises. Yet at the same time,
Nietzsche’s attitude seems rigorously instrumental: he appears to accord art and science only derivative authority in relation to an overarching philosophical project, which they are to serve strategically. If this is so, then it should be possible to say what this project is, but here we encounter the difficulty that Nietzsche does not tell us, plainly and squarely, what ends define the task of philosophy, and if we strip out of his writings everything that draws in one way or another on art or science, nothing with a very distinct outline remains. There remain of course Nietzsche’s historical studies – above all, GM – but the difficulty then lies in seeing what makes them historical critique: to what do they owe their critical import?

If we are to grasp Nietzsche’s conception of the task of philosophy in a way that helps to make intelligible the immediacy of his commitments, while allowing philosophical reflection to also constitute something in its own right, then two things seem likely. The first is that Nietzsche’s conception of the task of philosophy will need to be understood as in some sense fundamentally practical. The other is that we will need to interpolate steps in the background to Nietzsche’s thought in order to reconstruct its motivation.

With regard to the first: One strong candidate for Nietzsche’s conception of the task of philosophy is that it consists in the deployment of our reflective capacities, in the most encompassing way that we can manage, to the end of life-affirmation. What I described earlier as Nietzsche’s conception of the aesthetic state is an approximation to this condition, but no more, and in any case, knowing what the aesthetic state comprises does not tell us how to realize it, while life-affirmation is not conceived by Nietzsche as an end that can be grasped directly and determinately, in a way that would allow it to serve as a substantive principle of philosophical judgement or method. His position would seem to be instead that the very first task is to determine what life-affirmation demands in our particular cultural circumstances, and that this means extrapolating a conception of health from our knowledge of our present pathology.
Now if it is true that Nietzsche’s project is based on a primitive insight into the sheer necessity of the Good \(\textit{qua}\) life-affirmation – in combination with a preponderance of negatives over positives in his estimate of our actual condition, and a high level of suspicion regarding the veracity of reflection – then we can begin to understand how his art-and-science commitment can be immediate in the sense explained above: philosophical reflection can begin only \textit{in media res}, by identifying itself with what it takes to express the requirements of life-affirmation in its particular historical locality.

To say this is to regard Nietzsche’s philosophical standpoint as an attempt to image the world in a way that makes the indefinitely conceived Good of life-affirmation practically accessible: as having the mixed character of an artistic construction and an experiment with an indefinite practical end in view.

This is of some help, but it does not fully resolve the problem described above. If the Good is determined by way of art and science yet these supply no definite content – since it is only in light of the Good that a given artistic vision or scientific world-image can be endorsed – then there seems to be a lack of fixity in Nietzsche’s standpoint. Of course, appeal may be made to coherence, but it is of a worryingly fluid kind. This takes us on to the second point. If the preceding characterization of Nietzsche’s position is accurate, how does he arrive at it?

Kant’s \textit{Critique of the Power of Judgement} stands at the fountainhead of classical German attempt to unify art and science referred to at the outset, and has particular relevance to Nietzsche, who in the early days of his move from philology to philosophy planned a critical study of its second half, which contains Kant’s theory of teleological judgement. In this work Kant proposes an integration of aesthetics with teleology, with a view to unifying systematically what he regards as the two unimpeachable centrepieces of our cognition, viz. natural science and moral knowledge. In contrast with his idealist successors, for whom the third \textit{Critique} provided a template for bold speculation, Kant did not suppose that the new, richer image of the world that we
get from philosophical reflection on beauty, art, and organic nature, can be sustained independently and employed as a basis for metaphysical extrapolation, in the way that, for example, Schopenhauer uses art and natural teleology to add a layer to his ontology. What, according to Kant, aesthetic experience and organic forms in nature jointly intimate is simply that there is an immanent coherence to agency and experience, awaiting determinate articulation. The principles which give more definite expression to this assumption – e.g., the principle that our social development as natural beings is purposive for our moral development – have mere ‘regulative’ validity, but crucially they allow us, Kant argues, to make transitions between the theoretical and practical spheres, which otherwise threaten to collide, paralysing the human will. At a very early point, Lange’s revised version of Kant’s strategy appealed to Nietzsche.\(^47\)

A quite different way of connecting art with ideas about nature is provided by the category of myth, which loomed large on Nietzsche’s horizon. It is a commonplace of intellectual history that a re-evaluation of myth belongs to the romantic reaction against the ravages of Enlightenment. Nietzsche did not share the hyper-romantic view of myth as a means of restoring the world’s enchantment, or of achieving higher metaphysical knowledge, but he had absorbed the conception which emerged from the studies conducted by Creuzer and others earlier in the century, of myth as a comprehensive world-representation which is generated without the intention of answering to truth, yet capable of shaping consciousness from behind its back; whereby it is shielded from critical interrogation and able to act as a sustaining cultural force.\(^48\) Nietzsche clearly participates in this movement of thought in BT, which fuses tragic art with mythic thought and underwrites Wagner’s musical myth-making, and again, with qualification and refinement, in *Philosophy in the Tragic Age of the Greeks* (1873). In writings of the 1880s, Nietzsche offers *Zarathustra* as a symbolic construction, while the cosmological concepts of eternal recurrence and the world as will to power which he then explores – along with his invocations of Spinozism and the Dionysian – have an unmistakeable aesthetico-visionary force,
seeming to call for a type of assent that no mere scientific hypothesis could command. It is of course also relevant that Nietzsche employs throughout the entirety of his writings a method of compelling depiction, whereby he seeks to determine intellectual assent through an aesthetically charged experiential characterization of ideas. Genealogy provides occasion for this practice.

Either strategy, the Kantian or the mythopoeic, provides a way of integrating philosophy with art, natural science and the Good. If we then ask why Nietzsche does not either avow a neo-Kantian standpoint or embrace myth, the answer is surely that he regarded those avenues as exhausted and insufficiently radical. Nietzsche quickly came to see the limits, by his own measure, of what could be delivered by reworking the theory of regulative thinking and other Kantian resources, and though his references to a philosophy of the future may hint at a transcendence of the modern predicament, there is no sign of his thinking that critical reflection as such – with its imperative of unconditional truthfulness – can be sublated in mythic vision. Thus every proto-mythic passage in the published works of the 1880s is flanked by others that suspend its doctrinal force.

The emerging suggestion is that understanding the vector of his development involves plotting Nietzsche’s negative perceptions of the possibilities open to philosophical reflection. Schopenhauer is of course preeminent in setting the original boundaries, in so far as Nietzsche takes over his negative conclusions concerning metaphysical optimism, while also thinking that Schopenhauer’s attempt to convert these into a new salvatory system comes to nothing. Nietzsche’s early critiques of Strauss, Hartmann and other historically proximate figures show him narrowing down further the philosophical space, while his awareness of the need to locate firm ground heightens, a process which intensifies as his diagnosis deepens in the 1880s.

To extrapolate the logic of Nietzsche’s position in this negative way provides, again, no direct conceptual solution to the metaphilosophical problems which his writings present, and it sets a limit to what
positive theses we can expect to extract from them, but it may allow better sense to be made of Nietzsche as a historical figure than attempts at systematic reconstruction can provide.

It may also lead us to raise new questions: in particular, whether the failure of the constructive dimension of Nietzsche’s project to keep pace with its critical dimension rebounds on the latter, by putting a question-mark over the accuracy of Nietzsche’s diagnoses. If so little room for manoeuvre remains at the end of the day, then there is reason to re-examine the steps that lead Nietzsche to his assessment of our present condition. The chief resources available to us in attempting to fathom the source of our dissatisfaction with modern ethical life, Nietzsche plausibly supposes, are scientific theory on the one hand and aesthetic experience on the other – the former because its claim to truth, whatever its metaphysical limitations, has no rival, and the latter because it gives purchase to reflection that finds itself, in a manner that we cannot readily grasp, outside science. The key question concerns Nietzsche’s severely contracted view, reflected in his assessment of his predecessors and contemporaries, of what philosophical reflection is able to do with these resources.

NOTES

* I am indebted to Tom Stern for extremely helpful comments on an earlier version of this chapter.

1. BT 5 (p. 33). Quotations of Nietzsche’s texts are from the following:
   BGE = Nietzsche ([1886]2002)
   BT = Nietzsche ([1872]1999)
   D = Nietzsche ([1881]1997)
   GS = Nietzsche ([1882]2001)
   HH = Nietzsche ([1878]1996)
   TI = Nietzsche ([1889]2005)

2. BT 21.

3. BT 18 (p. 87).

4. BT 14 projects a Socrates who grasps that art is ‘a necessary correlative and supplement of science’ (p. 71).

5. GS 276.
7. BT 3, 4, 8. See also AOM 189, and GS 78, 107, 301, 337.
8. BT 5; KSA 12: 9[012], p. 393; TI, ‘Skirmishes’, 8–9.
9. e.g. HL 7.
10. RWB 8.
11. HH 1–2 (pp. 12–13). See also D 95, 551.
12. HH P 4; HH 34, 114. See also AOM 206; WS 126; D 547; GS 293; BGE 207.
13. HH 3, 23. See also D 427, 433, 450, 468, 547, 550.
14. HH 22, 23, 25, 27. See also D 453.
17. GS 107 [p. 104].
18. GS P 2.4.
20. HH 11 [p. 16]. Innumerable later passages repeat the claim: e.g., GS 111.
21. HH 13 [p. 17].
22. HH 17 [p. 20].
23. For a fine-grained exposition, see Poellner (1995).
26. BGE 23. Psychology is, however, only ‘the path to the fundamental problems’ [p. 24]. See also HH P 8 and HH II.
27. See Pippin (2010).
28. Broadly representative of aestheticism and scientism respectively [but not immediately under discussion in what follows] are Nehamas (1985), and Leiter (2015).
29. As suggested by, e.g., HH 23; CW Epilogue; KSA 13: 14[105], pp. 282–3.
30. SE 7; HH 3; GS 293.
31. These and other influences are charted in Brobjer (2008).
32. HH 131.
33. TI, ‘Reason’. This is at any rate true of science when it does not allow itself to be co-opted by metaphysical need.
34. D 7.
35. Thus Nietzsche makes it an objection to science that it regards suffering as only ‘something improper and incomprehensible, thus at best only one more problem’, SE 6 (p. 169).
36. HH 34.
38. ‘On the Pathos of Truth’ (1872); HL 10, regarding ‘the concept-quake caused by science’ (p. 120); and most famously GM III:24–8.
40. The theme is emphasized in Pippin (2010). See GS II and 249 regarding the passion for knowledge and the opaque object of our love of reality.
41. BT 4; GS 59.
42. BGE 230 (p. 123), where Nietzsche equates the ‘[insane!]’ task of naturalisation with the question, ‘Why knowledge at all?’, and GS 109 (p. 110), which tells us that we do not yet know how to naturalise.
43. See Pippin (2010) pp. 38–9, regarding the ‘Einverleibung’ of truth in GS 1, 11, 110.
44. BT Attempt 2 (pp. 4–5).
45. TI Skirmishes 14, ‘Anti-Darwin’: ‘Gesammt-Aspekt des Lebens’, KSA 6, p. 120.
46. KSA 12: 2[127], pp. 125–6 [translated in Nietzsche (2003: 84)]. See also KSA 12: 5[14], p. 189: science ‘prepares the way for a sovereign ignorance . . . we don’t have left the least concept that would let us even consider “knowing” to be a possibility’ [Nietzsche (2003: 108)]. And GS 112: ‘And how could we explain! . . . How is explanation to be possible when we first turn everything into a picture – our picture!’ (p. 113).
47. Letter to Carl von Gersdorff, end of August 1866, KSB 2.159. Lange espoused a ‘Standpoint of the Ideal’ to compensate for our epistemological limitations.
49. e.g. KSA 11: 38[12], p. 610.
50. For Nietzsche, ideas are by nature experiential: GS 289.
51. Genealogy allows Nietzsche to construct what may be called ‘critical myths’ – tales of origin that help us to disbelieve.
52. In the late notebooks, Lange is criticised for affirming our Platonistic needs: KSA 11: 25[318], p. 94 and 12: 7[3], pp. 254–5.