Hybrids: Machines, Monsters and Medicines

....suppose an age when the machine gets on top of us. Then it would become a dragon, the equivalent of the old saurian \dots^1

Technology and fiction are fascinated by the hybrid, whether mixed in the laboratory, manufactured on an assembly line, cross-pollinated in a greenhouse or created in the writer's imagination. Hybrid information, a modern cross between human and artificial intelligence, is perhaps like this dragon Jung refers to in passing. To contemplate ways of thinking about our modern hybrids and their powers, let's journey back to the Greek world of myth to meet a constellation of hybrids, some mechanistic, some monstrous, some medicinal, yet all born of the human imagination. Are these creatures intrinsic to our humanness, or ways of imagining how to live in a chaotic and elemental world?

Preface

The genesis of this talk begins with my fascination for the composite creatures of Greek myth which are often called hybrids - beings that are part human, part animal. Whether hybrids are mythic or logarithmic, they are conceived in the human imagination. Because they are products of human thought, we encounter ourselves in their creation.



John La Farge, Centauress (ca. 1887), Brooklyn Museum

For me, Pan, the Sphinx, the Minotaur, Medusa, the Chimera come to mind immediately as I reflect on mythic hybrids. Researching Jung 's ways of thinking about the interface between nature and technology prompted me to consider how our new computerized hybrids, especially those that couple human logic with technological logarithms, might be a new breed of mythic hybrid. Jung commented that "in building a machine, we are so intent upon our purpose that we forget that we are investing that machine with creative power"². The human-machine hybrid is no longer science fiction, nor literary imagination, but now technical reality. How do we invest machines with power? This question prompted more questions about the mysteries and intimacies of our relationship with machines and what unconscious enmeshment develops between technology and individuality.

In many ways digital technology is as alluring as the Sirens, and as scary as Scylla.



JW Waterhouse, Ulysses and the Sirens (1891). National Gallery of Victoria, Melbourne

Jung wrote of how we project onto technology what was once projected onto the supernatural, including our mythic hybrids.³ For many technology is numinous, but it is also monstrous. Nearly a century ago, Jung in his seminars on Dream Analysis suggested that machines were like dragons and these machine monsters had become a sort of nightmare. He warned that: "slowly and secretly we become their slaves and are devoured."⁴ It brought the Minotaur to mind; the hybrid who devoured young Athenian boys and girls.

The Minotaur was the shocking and shameful hybrid son of Queen Pasiphae and the White Bull that had not been sacrificed to the gods as demanded. King Minos's agenda for personal wealth and affluence in violation of the divine ends in this familial tragedy. This brings to mind a common motif in terms of the myth of the hybrid and that is the necessity for human morality and integrity in "building the machine". The bull-man, like all monsters, was banished to the labyrinthine basement of the palace, the family unconscious.

Jung's comments were a century before the hybrid of artificial intelligence began to be conceived in the laboratory. Later in March 1953, Jung replied to a question on artificial insemination. He wrote: *"Inseminatio Artificalis* could indeed become a public and legal problem in a society where a merely rationalistic and materialistic point of view has

become prominent."⁵ It struck me that by substituting the first two words as *Intelligentia Artificalis*, Jung's premonition could be equally applied to artificial intelligence. Similarly, Rudolf Steiner in the *Incarnation of Ahriman* characterized mechanical intelligence as one of the "greatest , most comprehensive and penetrating intelligences in the cosmos", but he also described it as calculating and cold, entrapping humanity in a "narrowly mechanistic view of the world."⁶

Reflecting on the moralities of our present-day hybrids called me back to ancient Greece, wondering if the mythological hybrids of animal and human like the Centaurs and Satyrs, the Gorgons and the Sirens, the Minotaur and the Sphinx or Pan and Chiron could evoke any meaningful images for our contemporary times. We can "read all the documents and fragments of myth left from antiquity" James Hillman suggested, "as accounts or witnesses of the imaginal."⁷ I wondered if any of the hybrid fragments of myth left any clues, any images, any patterns that might be archetypally relevant to our present hybrids of science. I will meander in their direction musing along the way if the ancient hybrid has any insightful images to help contextualize our modern ones.

Hybrids

Greek myth abounds with exotic beings, imaginary monsters and grotesque creatures. Some of these fabulous beasts are hybrids, fusing measures of the divine, human and animal together into one species. Hybrids combine the ferocity of nature with the intelligence of humans, or vice versa, for good or ill.

Etymologically our word hybrid enters common usage as a noun in the 17th Century, long after the mythic hybrids had become imaginatively extinct. The word finds its roots in the Latin *hybrida*, which refers to the offspring of a tame sow and wild boar, or the child of a freeman and a slave - a composite of the domestic and untamed regions as well as the free and the fated aspects of the soul. In a way hybrid is an image of the union of nature and human. Biologically, the word refers to the offspring of plants or animals that originate from different varieties or species.

While the origin of this is unknown, *hybrid* has been connected to *hybris*, an ancient Greek notion referring to insolence, outrage and excess. *Hybris* was an act that disrespected not only the gods, but civilized virtues such as temperance, justice and reason. *Hybrid*, when monstrous, and insolence, outrage and excess of *hybris* align as partners against the pursuit of logic, reason, prudence, civilization, and progress.

By the 21 Century, the word hybrid has become part of our everyday language when referencing scientific research. It is used for heterogeneous combinations – a familiar one is the hybrid vehicle whose engine is powered using an alchemical mixture of electricity and gasoline. Jung wrote that alchemy was the dawn of the scientific age "when the daemon of the scientific spirit compelled the forces of nature to serve man to an extent that had never been known before". Yet, he laments that while "Science and technology have indeed conquered the world, [but] whether the psyche has gained anything is another matter".⁸ Our new hybrids promise order and progress, yet chaos and recession are the psychic

consequences that result in disassociating from the unconscious processes at work in the opus.

Science has adopted the hybrid human-machine approach to create more accurate artificial intelligence systems combining human logic with technological algorithms. But in order for human logic to be transferred or incorporated into technical systems, it needs to be free of any emotion, imagination or mystery. Therefore the logic used is purely functional. It no longer tells a story, but promotes a product. Functional logic is not concerned with truth, nor knowledge, but with linear and progressive outcomes.

Logic. Etymologically the word originates from the Greek *logos*, which has multiple connotations, such as reason, discourse, language, story, word. In a way, history is marked by times when the advent of Reason triumphs over Nature through mechanical progress, distancing the human being from a participatory and symbiotic world. It seems that when historical periods separate the primeval from the rational or indigenous from civilized, a value judgement occurs. A continuum that values progress and superiority at the expense of human integrity and equality is promoted. As Jung said, once "we have invested all our energy in rational forms, they will strangle us. They are the dragons now that become a sort of nightmare."⁹

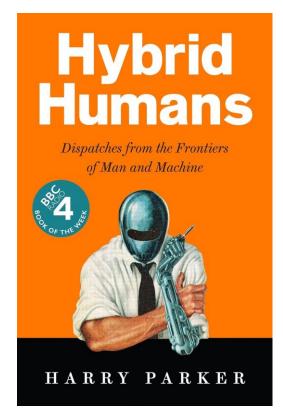
Jeremy Naydler, who explores the advent of the computer in the context of human consciousness suggests its emergence is best understood in our relationship to logic over time.¹⁰ He defines the critical moment in the development of logic as when 'it became possible to extract it from the human realm and introduce it into machines.' Primitive or native forms of reasoning are symbiotic with symbolic thinking and divinatory meaning. Once human logic is taken out of context, disassociated from intuition, feeling, participation and sensation, then it can be segregated from its interdependence with the natural world and reduced to a function. When this logic is fused with the computer algorithm, the hybrid AI is conceived. This reminds me of what Pamela McCorduck mused upon in her book *Machines Who Think* when she said; "AI began with an ancient wish to forge the gods".¹¹ In this allegorical genesis, the beginning was the Word and it is Logic!

Harry Parker, a double amputee who now has two hi-tech prosthetic limbs uses the phrase 'hybrid humans' as the title of his book about his research and experience into the relationship between his human and his technological body. He has described his book as 'how technology can help us be more human'¹². He considers himself different now, an altered person who is "12% machine"¹³. A human hybrid.

Like Harry Parker's experience, a different species is created out of the mix. This new genus has a life and a myth. In Harry's case, the machine is medicinal. Scientific progress has been miraculous in many so many ways, but at what cost. Jung was cynical about this progress, but it was important that he brings to mind the unconscious consequences of mechanised development. He said:

Much as the achievements of science deserve our admiration, the psychic consequences of this greatest of human triumphs are equally terrible. ¹⁴

With the hybrid of man and machine, we are invited to reflect on many questions: have hybrids in their current incarnation as computers, become more human or have humans become more machine-like? Perhaps another reflective question might be: has Logic been unable to unshackle itself from the primitive, from the unconscious. And if so, how do machines symbiotically interact with us?



Machines

Machinery is not something I could say I have a positive relationship with. I am fine with some tools if they are simple to use. Especially, if they are manual, as they invite my hands, not a machine, to do the work. Manual derives from the Latin meaning 'hand'; hence manual means done by hand. Chiron, one of our medicinal and well-loved hybrids, derived his name from the Greek word *cheir* meaning 'hand'. Chiron was handy, whatever was at hand tutored and healed, as the world was participatory and symbiotic. Chiron belonged to primordial time before culture and solutions.

Nowadays manual refers to an instruction booklet, a handbook, necessary to read in order to work a machine. I feel lost, unable to understand most of the directions, rendering me marginal to the machine. I do remember a time when I was more confident with machines, like my first car. We had a relationship – she had a name, she was greatly appreciated and at times I would whisper to her, especially when I was anxious about the drive ahead. But today my car beeps and flashes and even pushes back if I stray over a lane. She is functional and does the job she has been programmed to do. But now she feels more like a machine than a chariot. She is automated, a word originating in Greek which means "self-moving, acting of itself", that is, spontaneous in its own way. Machines are now a new self-governing breed.

It feels I have to find a way to coexist with machines and computers with all their own logic and commands. I identify with Joseph Campbell when he bought his new computer. He said, "I identified the machine – it seems to be an Old Testament god with lots of rules and no mercy."¹⁵ Machines are now mythological creatures in a way. Hybrids, both medicinal and monstrous, are part of the mythos and ethos of the present.



I was never 'handy' using machinery. So when the hand became differentiated into digits, I became digitally-challenged, especially since technology has galloped to digitally-dizzying heights. Yet, increasingly my computer became more and more my access to the world. And more recently they (I figure my computer is non-binary, so I am using the pronoun they) feel as if they are exhibiting an intuitive nature. By that I mean they are reflective of my moods and thoughts at times. They seem to be interactive – at this point, I return to what Carl Jung said in his seminars on *Dream Analysis* -

In building a machine, we are so intent upon our purpose that we forget that we are investing that machine with creative power. It looks as if it were a mechanical thing, but it can overgrow us in an invisible way, as, time and again in the history of the world, institutions and laws have overwhelmed man. Despite the fact that they were created by man, they are the dwelling-places of done powers that may destroy us.¹⁶

Similarly, Joseph Campbell in his discussion with Bill Moyers in the Power of Myth said: "there comes a time when the machine begins to dictate to you."¹⁷ Is this time, the present? I began to ponder on the whether the hybrid machine was a muse or a monster.

Disenchantment

While technology is not a topic that Jung focused on often, in 1949 he wrote a letter in response to a question concerning the effect of technology on the human psyche. In the letter, he wrote:

In general it can be said that for modern man technology is an imbalance that begets dissatisfaction with work or with life. It estranges man from his natural versatility of action and thus allows many of his instincts to lie fallow. The result is an increased resistance to work in general. ¹⁸

Jung was expressing a world-weariness that begins to permeate life when meaning, magic and vibrancy are no longer embedded in our everyday rituals, when our everyday life is no longer ensouled by the rhythms of the natural world. This is an age-old sentiment expressed by philosophers and poets, but this statement targets the estrangement created by technology long before we had smart phones that did the banking, shopping, entertaining and socializing for us. Jung's comment echoes Max Weber's premise, thirty years earlier, of disenchantment.

Disenchantment could be summarized as the disappointment that results from the demise of magic and myth under the regime of secularization and rationalization. Disenchantment is not a new concept, but I wondered how much the advent of technology and our dependency on it contributes to eclipsing the sacred and participatory rituals that once connected us to the vibrant and symbiotic networks of the natural world. It is as if the more information that becomes available the more it devours our imagination and freedom. Again I find Jung's comments on this motif so prophetic:

By way of compensating for the loss of a world that pulsed with our blood and breathed with our breath, we have developed an enthusiasm for facts – mountains of facts, far beyond any single individual's power to survey. We have the pious hope that this incidental accumulation of facts will form a meaningful whole, but nobody is quite sure, because no human brain can possibly comprehend the gigantic sum total of this mass-produced knowledge. The facts bury us.¹⁹

When did this disassociation between man and nature begin or was it always there? From the Pre-Socratic period to the Age of Reason with many times in between, our increased romance with automation seems to align with the demise of the soul. Diachronically, several nodal points in history, such as the time of Descartes and the Industrial Revolution, stand out as times when the rationalistic and mechanistic mindset takes hold. At these moments we continue to deepen our estrangement from nature and divinity in favour of scientific and economic rationalism.

When did mechanisation become commercial and exploitative? Or is the monster, as Jung suggested, our inability to see through the dimensions and layers of our creations? Are we so mesmerised with computerisation and automation that we forget that we are investing that machine with power?

Hybrids and Monsters

Mythology, like psychology, addresses both the personal and the communal or collective unconscious. Hybrids can also be categorized in two broad categories of the individual and the herd.²⁰ There are the solitary and individualized creatures who are adversarial, yet associated with the hero archetype, like the Minotaur and Theseus or The Sphinx and Oedipus. We also have the tribes or herds of creatures like the Centaurs, Sirens and Satyrs. Both categories evoke the face of the archetypal other, personally and collectively.

Hybrids and monsters are part of the human imagination, animated by different cultures at different times. As archetypal images they seem to be aroused at the advent of an age when a heroic impulse or a way of seeing through and finding meaning in the chaos is necessary. As Jung mentioned the Hero has to overcome the Monster, whether it be in the form of dragon, whale or hybrid; in speaking of the symbol of the monster, he said it always 'brings up the hero myth'.²¹ Certainly evident in the Labours of Heracles, Odysseys and the Sirens, Bellerophon and the Chimera, Perseus and the Gorgon etc. Perhaps the monster and the hybrid are invitations to be heroic, an archetypal process often fraught with narcissistic inflation if we become stuck in the crevice between ego and Self. Joseph Campbell reminds us that it is not society that guides and saves the creative hero, but the reverse.²²

In reflecting on the images of hybrids, it feels as if they also emerge into archaic myth and modern fiction to draw attention to the moral, religious, and metaphysical context of the times. In Greek myth, Centaurs were a hybrid breed of man and horse. They were iconic of the barbarian, images of the primordial past that the emerging cultural development was leaving behind. In the disempowerment of the natural world they were seen as monstrous. Let's look at this breed of hybrid for a moment.

Centaurs by nature were wild, unpredictable and aggressive, at home in the wilderness, outside the boundaries of the city. They are hybrids, intolerant of culture and disrespectful of its laws and customs, especially the sanctity of marriage.²³ They inhabit the threshold between the primitive past and the civilising present. The Centaurs' country was Thessaly, a region on the threshold of the 'Dark Age', a place and time 'before', primeval, from the elemental past. Centaurs are liminal creatures who lived in nature, in mountainous regions. Characterized as uncivilised creatures, they are characters from a lost past, a time before the necessity for separation between nature and men, before the corruption that culture brings. They demonstrate the Greeks' fundamental ambivalence about nature and the prehistory of mankind in the emergent cultural headway of the time. The world before culture was viewed with nostalgia as well as loathing.²⁴

By the 5th Century Centaurs were loathsome. They became the artist's ally in portraying the barbarian at the gate of Greek democracy. The 'world before culture' was epitomised by the Centaur and located in the region they inhabited, Thessaly. The centaur symbolised anticulture. Also a hybrid of man and horse, but not born of the same parentage was the Centaur Chiron. He was the offspring of the ancient god Chronus and the nymph Philyra. He personified the wisdom of indigenous traditions, folk medicine, the aboriginal understanding of nature and the insight to know the sacred cycle of wounding and curing. By the middle of the 5th Century the image of the Centaur symbolized the uncivilized, the foreign. By this period Chiron personified the ancient healing tradition and was known as the healer who had given Asclepius and his sons the tinctures for cure. Chiron carries the wisdom of the past into every age. He personifies the heroic impulse to heal and as Joseph Campbell reminded us about the hero, this occurs in the 'silences of his own despair.'²⁵ Marginal to the new cultural age and marginal to the Centaur tribe, Chiron epitomizes embedded ancestral values so often lost in the chaos of progress.



Chiron. Etching. Iconographic Collections

During the mid-5th Century, Athenians used the motif of the Thessalian Centauromachy (the battle between the Lapiths and the Centaurs) on the metopes of the Parthenon and the temple of Hephaestus in the Agora. Some of 'the most important surviving sculptural sequences from fifth century BCE Greek temples all prominently feature centaurs'.²⁶ This image reminded Athenians of their struggles with barbarians, the consciousness of other, and the continual conflict of opposites, such as nature versus culture, divine versus beast as well as moderation and self-restraint (*sophrosyne*) versus impiety (*hybris*). Hybrid and Hubris.

Grotesque, Phantastic, Misshapen; monsters constellate the 'other', that which we identify as external to being human. They are alien, foreign, marginal to social and cultural boundaries and antagonistic to regulation and organization. Their image and presence engages us in an ethical enquiry and question about our humanity.²⁷

Etymologically, our word 'monster' derives from the Latin, *monstrum*, suggesting a divine omen, generally indicating misfortune; therefore the word is often connected to a portent, a sign. It relates to a significant supernatural phenomenon. As a derivate of *monere*, it suggests a warning, that is something we need to learn, which the gods are bringing to mind. In Greek the word for monster, *teras*, is also associated with a divine sign, omen or portent, clearly linking the monster to the divine and divination, beyond the physical world, perhaps beyond the bounds of nature. The image of a monster alerts us to what we need to understand and be conscious of. Hence hybrids and monsters are foreshadowing images, often pictured in a confronting and uncomfortable way. It is as if they personify wild ways that the gods warn us of danger.

By the early 14th Century, a 'monster' described a malformed animal or human, a creature afflicted with a birth defect. Monsters constellate fear, disgust and alarm piercing the boundary of what is psychologically and culturally acceptable. They confront a primordial layer of being. The terror evoked by the monster can bring an underlying horror of our disconnection from Nature and the natural world to consciousness. Like the Centaurs, hybrids confront how we characterise our humanness, how we have secularized our world and how we have become distinct and distant from the animals and gods that once enchanted it.

In the genealogy of Greek myths, hybrids are rarely constructed. Most have their own ancestry and lineage. For instance the herd of the Centaurs was fathered by Ixion who was attempting to ravage Hera; however Zeus had disguised Nephele, mother of the Centaurs, as a cloud shaped in goddess's image. Hence the Centaurs were conceived in an atmosphere of desire, power, revenge and deception. Mythic hybrids are created by our imagination. It is worth remembering in terms of our contemporary hybrids that Jung said *we forget we are investing machines with creative power*. Like our mythic hybrids, our contemporary ones are created in the laboratory of our imagination; hence, as part of the human creation, they have an autonomous life to which we remain unconscious. Under what conditions are our technological hybrids conceived in the laboratory? Desire, power, revenge, like our mythic hybrids?

Hybrids, as part of creation myths, also represent the past, the primal, the time before. The Athenians and other Greek described themselves as being autochthonic; that is borne of the land. A curious beginning to this motif is the story of Erichthonius, the second king of Athens who established Athena's worship, her great annual festival known as the Panathenaea, on the acropolis. Part of his name *chthon* means 'of the earth', as he was born of the Earth herself, born out of the womb of Earth Mother Gaia. He is depicted as being half human, half serpent; the lower half of his body a serpent's tail, like many children of Gaia.

Hephaestus fathered Erichthonius during the god's clumsy attempt to ravage Athena. Consumed by desire for the goddess, Hephaestus, in his attempt to ravage her, prematurely ejaculated onto the earth. Another version suggests the sperm fell onto Athena's thigh and in disgust she wiped it off with a piece of wool, throwing the sperm-soaked wool onto the earth. Whatever version, it was Hephaestus' seed that inseminated the fertile earth impregnating Gaia. Nine months later, on Athena's birthday, Erichthonius or Wool-Earth (*erion* – wool) ²⁸ was born. Athena then took charge of the half human, half serpent child raising him by herself in her sacred precinct.



Melian clay relief (ca. 460 BCE). Gaia offers Erichthonius to Athena. On the right is Cecrops.

Like the race of the Centaurs, the hybrid snake-man was conceived clumsily, in a moment of desire. Again, another mis-conception of the hybrid, which is unconsciously part of the creativity of the creation.

Hephaestus, the craftsman and metallurgist, also created Pandora at the command of Zeus. While not a hybrid, Pandora is an image of constructing and animating an image of 'other', in this case woman. Ironically it is Hephaestus, the only god thrown out of heaven, who develops the skill to be able to challenge the gods through his technical crafts.

Pandora, who unleashes all the plagues, ironically means 'all gifts'. She stands as a sentinel to the age before 'otherness', an age symbiotic with Earth and Nature. In the emergent phases Pandora will be demonized as other to the emergent rational ages of Logos. Being demonized as other was certainly part of the hybrid Pan's mythic trajectory. Through demonizing Pandora and Pan, mechanization, control and administration flourish, creating distance and separation from feeling and imagination

Like all archetypes, the monster is an instinctual force. When the image is held and contained through reflection, consciousness dawns. Consideration of the monster and the hybrid invite an application of consciousness rather than projection. Perhaps why myth and fairy tales abound with supernatural and monstrous creatures that appear when civilization and progress dominate and disassociate from the natural world. Lacking reflection we feel the monster needs to be overpowered, tamed, controlled and restrained to comply with the rational order. But with reflection, we see a likeness to the monster in the mirror, which invites us to see through the image to the god who has been ignored.

Mythically and anthropologically monsters take on a special significance when characterized as a hybrid, a mixed being that is a complex composite of animal, human and

divine. Hybrids disregard the boundaries that separate species and spheres. They seem able to crossover and disregard liminal spaces, blurring the boundaries between mortal and divine spaces or what is incarnate and what is spiritual, what is logical and what is imaginary. Hybrids as monsters are often located outside the border, in a land where rules no longer apply; hence they transgress cultural and social boundaries with no regard for conventional mores. In this way they are often gatekeepers, liminal creatures that portend change. As creatures who mirror the imagination, they might tell us more about "what is *inside* man than what is *outside*"²⁹.

The Chaos of Night and the Certainty of Day

At nodal points when the myth of science and logic become the dominant cultural paradigm, the intolerance for uncertainty, mystery, novelty and the unknown increases. The wild is abandoned in favour of the cultivated. Diversity, interconnectedness, ambiguity and open-mindedness are sacrificed for clarity and progress. Therefore the sense of the sacred, divination and the participation mystique with the rhythms and rituals of work are buried under order, methodology organization and reason. Therefore what is dark, divinatory, chaotic, mysterious and uncertain, yet just as natural as the light of day, becomes felt and pictured as wild and monstrous in the light of day. When the imagination is neglected and there is no reflective or subjective time for the soul to catch up, the monster stirs. As sky, light, reason, air dominate, Nature, the Earth and its animals are assigned to otherness. In this split, the image of monster hooks the projected danger that accompanies being disassociated from imaginal and felt experiences. Here we see the monster as the warning that we have cut off our tails, our link to the past.

Techne, the ancient Greek word, which combines with Logos to form our modern word technology, is generally translated as *art*, *craft* or *skill*. Philosophically, techne is like a spirit or *diamon* of doing, making and creating. Yet techne is more than just a skill or the art of producing something. The products of Techne produce consequences as we have invested them with our creative power; therefore have moral undertones. Technology is no exception. The full meaning of techne cannot really be translated by a specific word; therefore, like the ancient Greeks, philosophers struggle with the concept due to anxieties regarding the boundaries between science and nature including the ethical and moral intentions of the technician. While techne was one of the ways Aristotle suggested the soul acquired truth, it had an inherent moral value.

Can technology be unbiased? David Edward Tabachnick uses the expression the "tragic double-bind of techne" when exploring the relationship between nature and techne. As humans who continually consume the world around us to fit our needs and purposes, he suggests we will continue to be repeatedly subjected to nature's wrath, if we try to escape from its limitations. He suggests that "techne is an invitation to nature's destructive power" in our attempts to restructure our natural environment. Ironically our technical imposition on nature invites the renewal of natural order.³⁰ As Jung said: "We keep

forgetting that we are primates and that we have to make allowances for these primitive layers in our psyche." $^{\prime\prime31}$

Techne was also referenced in Hippocratic medicine as the 'art of medicine'. Hippocratic doctors were using a rationally based medical model to diagnose and treat illness without reference to divine causation or psychic undertones. Alongside the Hippocratic practitioners in the latter 5th Century the moral or divine aspect of healing was located in the dream sanctuaries of Asclepius. While Hippocratic doctors progressed with rational medicine, Asclepian therapists tended to the psychic cure. Techne or the craft of medicine had begun its separation from the unconscious aspects of the symptoms that physicians were treating.

Healing and the Hybrid

Let's return to Harry Parker, the hybrid human, for a moment and his miraculous ability to move about on two hi-tech prosthetic limbs. But let's also bring to mind Chiron, the eminent healer of Greek myth, whose wound to the leg was excruciatingly painful. As a healer of many, he was unable to take away his own pain; hence he came the iconic image of the 'wounded healer'. Technology has given Harry the artificial limbs that were not available to Chiron. What are the questions this raises in the context of the unconscious, human morality and the mythic hybrid?

In Zakiya Hanafi's *The Monster in the Machine*, she traces the effects of the mechanical sciences on the human body and how it changes the way we understand our bodies and our diseases, mentally and physically. She says that "Ancient medicine offered cures based on sympathies and antipathies that linked all things [together] by their corresponding qualities."³² In the past, we were symbiotic with Nature, linked through correspondences with soul and body in one system. But the new medicine separates body and soul, no longer holistic, nor subjective. It is devoid of soul, causal, formulated by logic and facts, even though there may be a deeper or psychological motive for the symptoms. Chiron is not invited into the examination room.

As computers become the diagnostic tool for medicine, the perception of the human body becomes more and more machine-like. It works objectively; parts can be altered and changed, the body's immunity can be bolstered with chemicals or surgical intervention. And as the human body becomes more and more perceived like a machine, it becomes, according to Hanafi, "monstrous in its own eyes." The body is now something observed.

Hanafi points us towards what we have lost in the transition to mechanical medicine and its inclination to prognosticate and literalize symptoms and body changes. We disconnect from our indigenous medicinal knowing when we ignore our emotions and our psychic and Chironic sensitivity. Yet in many ways, we also gain from the new mechanics of medicine. How might we honour and authenticate the hybrid of medicine?

The great healer Chiron is still psychologically present in Harry's surgical reconstructions; for while he can walk, he will always be physically handicapped. Chiron constellates the psychic knowledge of primordial healing that underpins modern medicine. Wounding and

healing, or body and soul, are a medical helix in the context of our temporal humanness. It is as if healing the body without consideration of the soul becomes the monster.

When psychic intelligence is jettisoned in favour of computer technology, we lose the moral compass. Technological innovation is creating powerful machines which have a god-like capacity to predict patterns, probabilities and pursuits beyond human capability. But machines, like gods, in many ways have no sense of interiority or morality. To the great gods of AI, individuals are patterns and possibilities that do not have a soul.

As we know, in the marketplace of mechanism, soul is not a concern.

And in Closing

Let's return for a moment to our mythic hybrids to consider what they warn us of in context of our human hybrid. Albeit, a fanciful, mythical and imaginative return. But let's remember that when logic is purely data and information entered into a machine, the psychic landscape becomes polluted and shrouded in fog.

Mythic hybrids like the Minotaur bring to mind the theme of what is willfully appropriated from the Gods in pursuit of only personal gain and position becomes toxic to the family system and eventually the collective. On the other hand the hybrid Chiron, who is humane and unselfish, heroically bears the weight of his humanness.

Hybrids are often paired with heroes. But as hybrids personify that which is other, marginal and split off, the heroic act is not to kill of the hybrid, but to accept and integrate the quality of otherness. Being anti-culture the appearance of the hybrid foreshadows danger. Perhaps in our modern technological age, the mechanical hybrid warns of our continuation to favour and triumph over the primordial and indigenous nature of being human and a participatory part of the symbiosis of Nature. The shadow lurks in the machine.



Minotaur, red on black kylix, ca. 515 BCE, National Archaeological Museum

Jung was aware it was not technology that was dangerous, but the human intention and purpose that underpinned the product. He says:

Technology harbours no more dangers than any other trend in the development of human consciousness. The danger lies not in technology but in the possibilities awaiting discovery. Undoubtedly a new discovery will never be used only for good, but will certainly be used for ill as well. Man, therefore, always runs the risk of discovering something that will destroy him if evilly used. We have come very close to this with the atom bomb. Faced with such menacing developments, one must ask oneself whether man is sufficiently equipped with **reason** to be able to resist the temptation to use them for destructive purposes, or whether his constitution will allow him to be swept into catastrophe. This is a question which experience alone can answer.³³

Monsters and Hybrids remind us of the past – they confront us with our disconnection from the primordial which is still an aspect of who we are. The rapid movement forward with machines and technology in the name of progress abandons the soul which has not been considered, nor had time to become part of the present.

.. we have plunged down a cataract of progress which sweeps us on into the future with ever wilder violence the farther it takes us from our roots. Once the past has been breached, it is usually annihilated, and there is stopping the forward motion.³⁴

When speaking of this loss and discontent Jung refers to the chimerical promises of a golden age which can never happen as our evolutionary background has not been ensouled and has not been able to catch up to the present. ³⁵

Hybrids have a genealogy and are part of a system. They exist beyond the boundary of the known, yet they not are independent of the system. They have a subjectivity which becomes more governing the more we disconnect from them. And the more we disconnect, the more they become the monstrous other. The boundaries we set between civilization and wildness, or the way we separate human from animal, or human beings from machines are social constructs; therefore they are not categorical or definite. As hybrids are patterns of the human imagination and intelligence, they have unconscious elements that affect the boundary lands between. It is how we cross back and forth over these liminal spaces that needs our attentiveness and consciousness, our human integrity and morality.

We might judge many of Jung's comments on technology as pessimistic; however as he himself said his views of the world were subjective, not 'a product of rational thinking'. When doing some research on the internet, I found this blog called "Why Microsoft Should Channel Carl Jung" – I smiled; here is what the author says:

Tech in the 21st century fragments rather than integrates. It allows us to pack more "stuff" into every hour. But the technology that's supposed to make life easier actually makes it harder to enjoy. We often feel distracted. We rarely feel

whole. And nobody says anything about what's missing because being fragmented has become the norm.³⁶

If, as Jung suggested, we become captive to progress and rationalism, we have 'no way of knowing how our ancestral psyches listen to and understand the present'. Turning our back on our ancestral psyche keeps us ignorant to how the unconscious may react, compensate and manifest.

Perhaps the stories and images of ancient hybrids might help us be more conscious of the unconscious elements that the technological hybrids stir in the collective.

Endnotes

References to CG Jung CW from Jung, C. G., *The Collected Works of C. G. Jung*, trans. R. F. C. Hull et al. (20 vols; Routledge & Kegan Paul, London and Princeton University Press, Princeton, NJ: 1953–79).

¹ CG Jung, Dream Analysis, ed. W. McGuire, Princeton University Press, Princeton, NJ: 1984, p. 542. A saurian is a group of reptiles including lizards, crocodiles and some forms of extinct dinosaurs ² CG Jung, Dream Analysis, p. 543 ³ Dolores E. Brien, The Star in Man: Jung and Technology - see https://jungpage.org/learn/articles/technology-and-environment/681-the-star-in-man-jungand-technology ⁴ CG Jung, Dream Analysis, p. 543 ⁵ CG Jung Letters II, to E Roenne-Peterson, 16 March 1953 ⁶ Jeremy Naydler, In the Shadow of the Machine, Temple Lodge, Forest Row, UK: 2018, p. 330 note 19 ⁷ James Hillman, *Revisioning Psychology*, Harper & Row, New York: 1975, p. 30 ⁸ CG Jung, CW 13: 163 ⁹ CG Jung, Dream Analysis, p. 543 ¹⁰ Jeremy Naydler, In the Shadow of the Machine, p. 5 ¹¹ Meghan O'Gieblyn, God Human Animal Machine, Doubleday, New York: 2021, quotes McCorduck on p. 212 ¹² Hybrid Humans interview – see https://www.youtube.com/watch?v=dPgg9B6W6pk ¹³ David Robson, review of Hybrid Humans by Harry Parker, The Guardian Mon 21 Feb 2022 https://www.theguardian.com/books/2022/feb/21/hybrid-humans-by-harry-parkerreview-man-and-machine-in-harmony ¹⁴ CG Jung, CW 18: 136 ¹⁵ Joseph Campbell, *The Power of Muth*, ed. Betty Sue Flowers, Doubleday, New York: 1985, p. 18 ¹⁶ CG Jung, Dream Analysis, p. 542 - 3 ¹⁷ Joseph Campbell, The Power of Myth, p. 18 ¹⁸ CG Jung, CW 18: 1405 ¹⁹ CG Jung, CW 11: 767 ²⁰ See P. H. von Blanckenhagen, "Easy Monsters," in A.E. Farkas, P.O. Harper and E.B. Harrison (eds) Monsters and Demons in the Ancient and Medieval Worlds, Mainz Verlag: 1987, pp. 85-94. ²¹ CG Jung, CW 18: 1229 ²² Joseph Campbell, The Hero with A Thousand Faces, Princeton University Press, Princeton, NJ: 1973, p. 391. ²³ For an exploration of the Centaur, see G.S. Kirk, Myth, Its Meanings and Functions in Ancient and Other Cultures, Cambridge University Press, Cambridge: 1986, pp. 152-161. ²⁴ Page duBois, Centaurs and Amazons, Women and the Pre-History of the Great Chain of Being, University of Michigan, Ann Arbor, MI: 1991, p. 30 ²⁵ Joseph Campbell, The Hero with A Thousand Faces, p. 391 ²⁶ Robin Osborne, "Framing the Centaur" from Art and Text in Ancient Greek Culture, Cambridge University Press, Cambridge: 1994, p. 52 ²⁷ See Zakiya Hanafi, *The Monster in the Machine*, Duke University Press, Durham, NC: 2000. ²⁸ Ann Shearer in Athene Image and Energy, Penguin Arkana (London: 1998), 33 imaginatively discusses this mythic incident. Carl Kerenyi in Gods of the Greeks, p. 123-4 also suggests that

there was strife (Eris) between the two gods hence the Eri in Erichthonius.

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³¹ CG Jung, C.G. Jung Speaking, 1950, p. 202

³² Zakiya Hanafi's The Monster in the Machine, preface

³³ CG Jung, CW 18: 140

³⁴ CG Jung, *Memories, Dreams, Reflections*, trans. R. and C. Winston (Pantheon Books, New York: 1973), p. 236.

³⁵ CG Jung, Memories, Dreams, Reflections, p. 236

³⁶ "Why Microsoft Should Channel Carl Jung" by Steven Crandell https://www.huffpost.com

²⁹ Dowden, K., The Uses of Greek Mythology, Routledge, London: 1992, p.133

³⁰ David Edward Tabachnick, "The Tragic Double Bind of Heidegger's Techne." PhaenEx. Vol. 1, No. 2 (2006): pp. 94-112. This is quoted in Kimberly Lacey, "Making memory: techne, technology, and the refashioning of contemporary memory" (2011). Wayne State University