

Posthuman Prehistory

Tim Ingold



Abstract: This article asks what part prehistory could play in establishing a posthumanist settlement, alternative to the humanism of the Enlightenment. We begin by showing how Enlightenment thinking split the concept of the human in two, into species and condition, establishing a point of origin where the history of civilization rises from its baseline in evolution. Drawing on the thinking of the thirteenth-century mystic, Ramon Llull, we present an alternative vision of human becoming according to which life carries on through a process of continuous birth, wherein even death and burial hold the promise of renewal. In prehistory, this vision is exemplified in the work of André Leroi-Gourhan, in his exploration of the relation between voice and hand, and of graphism as a precursor to writing. We conclude that the idea of graphism holds the key to a prehistory that not so much precedes as subtends the historic.

Keywords: burial, generations, graphism, *Homo sapiens*, human condition, humanism, Leroi-Gourhan, Llull



Original Humans

Human is an ancient word, but the concept of humanity is modern. No-one knows exactly where the old word comes from. Giambattista Vico, in his *New Science* of 1725, thought that its source lay in the Latin word for burying, *humando*, itself derived from *humus*, soil.¹ Humans, then, would above all be people of the soil, who bury their dead. They come from the earth and will ever return to it. Enlightenment thinkers, however, among them Vico himself, would eventually upend this logic, appealing instead to universal powers of reason or intellect destined to emancipate humankind from earthly bondage and cut all ties to the ground, to place, and to nature. The modern concept of humanity has its source in this inversion, in the establishment of a condition—the human condition—over and above the state of nature that holds all other creatures in its grip. And nature, by the same token, was no longer seen to be enriched and fortified by the labors of generations past. It was treated rather as both a platform for human endeavors and a depository for a history whose energy is spent, leaving its residues piled up in layers of sediment, each covering over its now submerged predecessors.



Thenceforth the ground, understood as a passive substrate rather than an active and energizing force in the ongoing generation of life, could be excavated with impunity. Digging up the past, once associated with the dark arts of necromancy, became a respectable antiquarian profession. With that, archaeology was born, along with the idea of the human career as an ascent from rude nature, through shades of savagery and barbarism, to the perfection of the human condition in refined civility.² Of this career, only the later phases, initiated by the onset of written records, were considered truly historic. Everything prior to this watershed was considered preparatory for civilization, much as childhood was considered preparatory for adult life. Real history is for grown-ups. The very idea of a preparation for history—or what came to be known as *prehistory*—was thus a direct precipitate of Enlightenment humanism. Yet many contemporary scholars proclaim the days of humanism to be over or at least numbered. We are entering, they say, a new era of post-humanity. What will become, then, of the idea of prehistory?

There can be no doubt that humanism has contributed massively to the common good. It has brought education, literacy, and democratic governance to more of the world's inhabitants than ever before. Commensurate with this success, what began in a handful of European nations has expanded globally through trade and colonization. This has come, however, at a cost—in two respects. First, in driving a wedge between humanity and nature, the very earth that had once offered nourishment and support for human life came to be recast as a repository of resources to be plundered. Archaeological excavation thus figured as a mere sideline to a program of extraction, on an industrial scale, that has ravaged the earth and jeopardized its capacity for renewal. Second, while the appeal to universal entitlement serves the interests of those empowered to lay claim to it, for others the forcible imposition of this claim has meant enslavement, along with loss of land, livelihood, and even life. In the history of colonialism, the flag of humanity has always been flown by the victorious, treating as less than human those who have come under its yoke. As these twin costs have inexorably risen, what began as an agenda for progressive emancipation has morphed into a vicious spiral of environmental destruction and social injustice. To break the spiral demands no less than a radical alternative to the humanist settlement. The challenge is to create a language of concepts in which to frame it. This is the challenge of post-humanism. My question is: can prehistory, as a child of the Enlightenment, play any part in it?



In this article I shall hazard an answer. It is necessary to preface my inquiry, however, with a few words about origins. For if there is one question that has exercised the minds of prehistorians, perhaps more than any other, it is this: when, and where, did prehistory begin? In his inquiry into the origins of species, Charles Darwin (1950 [1859]) had shown that living kinds emerge not through any singular act of creation but through a gradual process of modification and diversification, strung out along lines of descent. And although in *On the Origin of Species* he had rather little to say about human beings, the assumption was that humankind had evolved in the same way, through a diversification within the genus *Homo*, of which our own species, namely *sapiens*, was the only extant lineage. As a man of his time, of liberal disposition, Darwin was as convinced as anyone of the founding opposition between reason and nature that defined the Enlightenment project. He differed, however, in applying this opposition across the board, finding the rudiments of intellect in even the humblest of organisms, such as the lowly earthworm, as well as a powerful residue of instinct in even the most rational of humans. That is why he could claim that the difference between humans and animals lower in the scale, although vast, was still of degree rather than kind.³

But if there was no threshold to cross—if the story of human evolution was one of countless minute gradations—then was there any point of origin at all? In his later work *The Descent of Man* (1874), Darwin concluded that there was not. His famous and highly controversial conclusion was rather that the mechanism of natural selection, relentlessly driving up heritable powers of intelligence, had continued to operate as it had ever done, eventually raising civilized men above primitive savages in precisely the same way that savages were raised over apes.⁴ While Darwin himself was no racist, this conclusion provided a veneer of scientific legitimacy for often genocidal adventures of colonization launched at the time by white Europeans on native populations around the world. As late as the 1930s, established physical anthropologists were defending a color-coded vision of humankind, divided into races on a scale from white to black, with intermediate shades of yellow and red, locked in a xenophobic struggle in which the lighter shades would inevitably rise to the top.⁵

It took the second war in a century to break out among the supposedly civilized races of Europe, itself fueled by xenophobia, for such ideas to be finally refuted. In the wake of the Holocaust, what was self-evident to Darwin and most of his contemporaries—namely, that human populations differ in their heritable intellectual capacities on a

scale from the primitive to the civilized—was no longer acceptable. Darwin's view that the difference between the savage and the civilized man was one of brain power gave way in mainstream science to a strong moral and ethical commitment to the idea that all humans—past, present, and future—are equally endowed, at least so far as their moral and intellectual capacities were concerned. "All human beings," as Article 1 of the Universal Declaration of Human Rights states, "are endowed with reason and conscience." This was, in effect, to revert to a humanism of pre-Darwinian vintage, already propounded by Enlightenment philosophers of the eighteenth century. The argument goes that if human beings are one in their possession of reason and conscience—if, in other words, they are the kinds of beings who, according to orthodox juridical precepts, can exercise rights and responsibilities—then they must differ in kind, and not degree, from all other beings that lack such endowment. Humans are indeed exceptional!

The Species and the Condition

As if to emphasize the exclusiveness of this claim to universality, post-war scientists went on to reclassify extant human beings as members not just of the same species but of the same subspecies, designated *Homo sapiens sapiens*. This was no ordinary subspecies, however. Doubly sapient, the first attribution of wisdom, the outcome of a process of encephalization, marked it out within the world of living things. But the second, far from marking a further subdivision, registered a decisive break from that world. In what many late twentieth-century prehistorians took to calling the "human revolution," the earliest representatives of the new subspecies were alleged to have achieved a breakthrough without parallel in the history of life, setting them on the path of ever-increasing discovery and self-knowledge otherwise known as culture (Mellars and Stringer 1989). Human beings by nature, it was in the historical endeavor of reaching beyond that very nature that they progressively realized the condition of being human in which the essence of their humanity was seen to reside. Half in nature, half out, they were torn between the contrary imperatives of intelligence and instinct, reason and emotion. Indeed, the double-barreled sub-specific appellation of *Homo sapiens sapiens* perfectly epitomizes the hybrid constitution of these revolutionary creatures. Popularly known as "anatomically modern humans"—in contrast to the "archaic" variety, so-called Neanderthals, who supposedly never made it through to the



second grade of sapientization—their prototypical representatives are portrayed as archetypal hunter-gatherers for whom history has yet to begin. Biologically just like us, they are supposed to have remained culturally at the starting block, fated to enact a script perfected through millennia of adaptation under natural selection (Ingold 2000: 373–391).

At the other end of history stand the arch-representatives of high modernity, namely scientists, in whom an absolute commitment to reason has finally put paid to the promptings of innate desire. Seeing their own reason reflected in the mirror of nature, they alone pretend to read the script that natural selection has written for their hunter-gatherer antecedents. Between the hunter-gatherer and the scientist, respectively pre- and post-historic, is supposed to lie all the difference between being and knowing, between the adaptive surrender to nature and its subjugation in the light of reason. Yet paradoxically, despite having refuted—after Darwin—the very idea that for any species, there exists an essence of its kind, the one thing that science is incapable of relinquishing is its essentialist view of humanity. This is for the simple reason that the project of science depends on it. For it requires a unique capacity to remove themselves from nature for humans to imagine themselves as creatures of nature.⁶ The very appeal to nature-transcending humanity, in short, provides science with the platform of supremacy from which, with no little hubris and profound contradiction, it asserts that human beings are part and parcel of the natural world.

On which side, then, should we place the human? Does the word refer to the human being or being human, to species or condition? Or does its significance, at least within the discourses of modernity, lie precisely in its duplicity, in the fact that we cannot name the species, or subspecies, without calling forth the condition, and vice versa? Perhaps the idea of the human, in its modernist inflection, points to nothing so much as the anxiety, amounting to an existential dilemma, of a creature that can know itself, and the world of which it is a part, only by taking itself out of that world and viewing it, as it were, from the far side. It is a dilemma seemingly recapitulated in the life of every human being as it progresses from infancy, through childhood, to full maturity. Does not the infant start life, no differently from any animal, as a creature of nature? Born of man and woman, it is surely a *human being*, yet initially having no awareness of itself as existing in a world, or indeed of the world in which it exists, it still appears to fall some way short of *being human*. Are some humans, then, more human than others? Are we to think of the child as an intermediate being, halfway between nature and culture, exiting one in preparation for the other?

Writing only a quarter of a century ago, anthropologist Walter Goldschmidt could still assert, as though it were self-evident, that childhood is characterized by “the process of transformation of the infant from a purely biological being into a culture-bearing one” (Goldschmidt 1993: 351). On the way from infancy to adulthood, children are made to appear biologically complete but culturally half-baked. And the same goes for prehistoric hunter-gatherers, equally suspended in a liminal phase in the transition from a natural to a fully cultural life. If grown-ups are more human than children, then by the same token, scientists are more human than hunter-gatherers. And whether for the individual human being or for humankind as a whole, it is the intersection of the axis of biological phylogeny with the development of civility, at the moment where culture “takes off” from its baseline in hereditary endowment, that sets the point of origin. Even today, it is common to speak of “early man” (more often than “early woman”), and of the child’s “early years,” as though the antiquity of prehistoric hunter-gatherers could be judged, like the ages of pre-school children, by their proximity to their respective origins. Just as the child was deemed to be closer to its origin than the adult, so likewise, early humans were thought to be closer than later ones to that mighty moment when humanity began.

Yet if human prehistory has a point of origin, what could it mean to have been living close to that point or even at the crucial moment of transition itself? How can one conceivably distinguish those actions and events that carried forward the movement of prehistory from those that set it in motion in the first place? It is not hard to see, in the image of our hunter-gatherer ancestors looking out upon the dawn of civilization, the reflection of a decidedly modernist rhetoric. One can almost imagine the television presenter lurking in the background. “Our epic story,” recites the voiceover, “is about to begin.” Yet despite a frantic and much publicized search for the moment of emergence of anatomically modern humans, prehistorians have failed to find it. And this is for the simple reason there was no such moment. It is a fabrication of Enlightenment humanism. What, then, is to be done? Few would doubt today that humans have evolved, or that this evolution is rather recent in the wider scheme of things. Nor can we doubt that human beings are both the shapers of their own history and in turn shaped by it. How then can we close the gap between history and evolution without, as Darwin did, reducing the former to the latter? Is it even possible to restore humans to the continuum of organic life without thereby draining this life of its historical impulse?



The Humanifying Animal

The postwar reaffirmation of universal humanity took us back, as we have seen, to a pre-Darwinian Enlightenment. Now, however, that the project of the Enlightenment is itself foundering, it is perhaps timely to look even further into the past, to the thinking of premodern ages. Might older ways of thought, borne of slower and more long-lasting currents of time, offer us a better guide into an unknown future? It is not as though our self-description as humans was an invention of the eighteenth century, as some contemporary scholars seem to believe.⁷ For no less than four centuries before Vico was wondering about the etymology of “human,” the question of how to pin down the meaning of this most enigmatic of words was already troubling another thinker of great insight, Ramon Llull. Born and raised on the island of Majorca, Llull enjoyed a long and productive life during which he wrote a staggering 280 books, composed in Latin, Arabic, and his native Catalan. One of the last of these was the *Logica Nova*, written in Genoa in 1303, in his seventy-first year.⁸

In Llull’s cosmology, as set out in this work, everything is a doing, a happening, a going on. Fire, for example, is not a thing that burns; it *is* burning. And the human, by the same token, *is* humaning. To express this in Latin, Llull had to invent a new word, *homificare*—literally “to humanify.” The human, Llull declared, is a humanifying animal: *Homo est animal homificans*.⁹ Humanifying, be it noted, is not the same as humanizing. It is not about imprinting the designs of preformed humanity upon the raw material of an initially formless world. For humans to humanify is rather to forge their existence within the crucible of a common life. Their humanness is not given from the start, as an a priori condition, but emerges as a productive achievement—one moreover that they have continually to work at for as long as life goes on, without ever reaching a final conclusion. If we follow Llull, then humans are not really beings at all, but *becomings*, launched in a process of perpetual co-creation. They are ever unfinished, even as history carries on. And for what they are, at any moment in this history, they bear a collective responsibility (Ingold 2015: 115–118).

This applies to children as it does to adults. It is not that children are in a process of becoming human that adults have already completed. Rather, just like adults, they are in the process of becoming the people they are, forging their own lives in the world. In a word, they are growing, in stature, knowledge, and wisdom. Far from the half-baked hybrids of biology and culture that modernity makes them out to be, children

make their way in the world with as much facility and hindrance, as much fluency and awkwardness, as grown-ups. But the child's life does not start from a point of origin, nor is his or her "early" life closer to such a point than later life. Rather than being literally descended from ancestors, destined to write out in life hereditary endowments passed from the parental generation at the point of conception, children follow in the ways of their predecessors. That is to say, lives overlap longitudinally, rather than being played out in succession. The passage of generations, then, is more like a handover in a relay than the transmission of a legacy. This relay is tantamount to life itself. And while every particular life is of limited duration, life itself carries on, or persists, without beginning or end. People may follow where others have passed before, but none is more ancient nor any other more recent (Ingold 2012a).

Prehistoric hunter-gatherers, then, were not gifted with a road map for the future that their historic descendants were fated to follow. They have had rather to work things out, improvising a passage as they have gone along. It is indeed a constitutive quality of life—human as well as nonhuman—that it does not so much unfold from a point of origin as originate all the time. "Life is continuous birth," as one distinguished elder from among the Wemindji Cree, indigenous hunters of northern Canada, explained to the ethnographer Colin Scott (Scott 1989: 195). This is to imagine the evolution of life as the continual bringing forth of a world, from within which living beings, as they go along together, participate in creating the conditions for their own and others' future development. And history? This is but a local manifestation of the same process. Working our way downstream, evolution runs into history as a river into the ever divergent and convergent channels of its delta, without crossing any barrier or threshold. But if there is no barrier to be crossed, no intermediate zone, then what room remains for prehistory?

Let me return for a moment to the ill-fated Neanderthals, whom I mentioned in passing a moment ago. Recall that according to the postwar narrative, humans of the anatomically modern variety, *Homo sapiens sapiens*, alone made it through to the far side of nature, leaving their cousins, *Homo sapiens neanderthalensis*, stranded and destined for extinction. The story is disturbingly familiar: it tells of how a race of men, possessed of superior intelligence, inherited the earth, while subjugating, driving out or exterminating its alleged inferiors. In the nineteenth century, it was white settlers who were supposed to have wiped out the indigenous inhabitants of the island of Tasmania, at that time considered the most primitive of humans. Yet a century after the Tasmanians were finally declared extinct, a vibrant Tasmanian Aborigi-



nal community has emerged, all of whose members number Aboriginal people among their forebears.¹⁰ The story of their extinction turns out to be a racist myth. Was it any different, then, in the Palaeolithic? Though far, far fewer in number, all the evidence suggests that humans were as mixed up then as they are now. No more are humans all of one subspecies or race today than they were of distinct subspecies in the prehistoric past. Neanderthals are us!¹¹

In short, mixed-up-ness is the way we living creatures are. Carrying on our lives together, and rubbing shoulders with one another, we continually enfold into our respective constitutions the qualities of others with whom or with which we relate. In a world of life, therefore, there can be no pure kinds. Such a world, of boundless difference rather than bounded diversity, refuses to abide by the divisions and subdivisions of any taxonomy. There is more to this than the observation, now commonplace in evolutionary biology, that due to accidents of mutation and recombination, every individual of a species (unless cloned) is unique in its precise genetic endowment. For that is to suppose a world in which all difference has, as it were, already precipitated out into myriad particles of heredity that can be reassorted into a potentially infinite variety of discrete permutations and combinations. The difference of which I speak here is emergent, not precipitate, ever originating within the continuous birth that is life itself. For it is in the course of going along together, not in advance of their doing so, that living beings differentiate themselves from one another. This is the process that philosopher of science Karen Barad (2014) calls “cutting together-apart.”

The Passage of Time and Generations

Life, in this sense, is an emerging multiplicity—at once one-in-many and many-in-one—comparable, perhaps, to a plaited braid. In the braid, individual strands not only overlap but wrap around one another as they go along. Coeval lives are braided in this sense. Of course, no creature lives forever, just as in the braid, every constituent strand is of a finite length. Yet as the braid itself continues without limit, so life carries on indefinitely. With the multistranded braid as with the life of many lives, the reasons are the same. Lives, like fibers, are bundled longitudinally. In the bundle, strands overlap along their length: even as old strands begin to give out new strands are introduced. The old and the young, as they twist around one another, establish in the tension and the friction of their contact a grip even stronger than the combined

tensile strength of the strands themselves. This analogy between the plaiting of the braid and the entwining of generations, I contend, is not loose but exact. Each and every strand is equivalent to the story of a life, of its doings and undergoings: it is, in this sense, its own record. However tightly it is bound with others, it retains its own particularity. Yet through this binding every particular life contributes, in its singular way, to the record that is life itself (Ingold 2018a: 159).

When it comes to the passage of time, this binding is of the essence. It is no wonder that among peoples from around the world, plaited or knotted cords were not only among the most frequent repositories of ancestral lore; they were also commonly employed as measures of time.¹² As cords were unwound or paid out, time would elapse, and stories would be told. Recording and retelling were one and the same. This is no longer the case today, however. Even as the twisting and spinning of fibers, once a ubiquitous task of daily life, has largely become confined as a niche art for hobbyists and the purveyors of heritage, and as cord disappears from common use, so lives have ceased to be their own records—stories to tell and to follow—and have instead become objects *in* the record, each played out not in ceasing to be the generation before and becoming the generation after, but in simply being itself. And by the same token, the string of the record has been broken—and with it the duration of real time—to be replaced by a disconnected sequence of objects and events strung out in a time that is now abstract and chronological (Ingold 2013: 81–82).

Conceived as a prisoner of the present, every generation can receive nothing from the past save that which can be encapsulated, in some transmissible form, independently of its lifetime achievement. This is why modern theorists of evolution are so obsessed with the concept of inheritance, be it genetic or cultural. For them, without genetic inheritance, there could be no evolution, and without cultural inheritance, no history. However, neither evolution nor history, in the modern paradigm, can be a life process. For where evolution and history cut across generations, life is confined within them. Inheritance is diachronic, but life is lived on the plane of synchrony. It is like running on one spot. Generations, here, are imagined not as plaited like strands but as layered like sheets in a stack, such that the work of each is flattened in its own time. Herein lies the source of the stratified conception of prehistory to which I referred at the outset. It is like a deposit, the spent residue of a history that has already moved onward and upward. This residue settles in layers with the oldest furthest down. And there it stays, sinking ever deeper as time moves on. As a deposit, the prehistoric past



contains no potential for renewal. It is over. Renewal can come only from superimposition, by adding further layers to the stack.

Life, however, is not renewed through the addition of layers but rather by its opposite, the act of burial. This might be the point to recall Vico's speculation, with which I began, that humans are distinguished above all by their affinity to the soil, revealed in the habit of burying their dead. Indeed, many humans do so, and these burials have yielded rich pickings for prehistorians and archaeologists. But the burial of the past is quite different from its deposition. For it is part of a cycle of life that carries on over generations. In it lies the potential of generations past to produce those to come. Like a seed or tuber that the farmer hopes will take root and grow, the human body, in burial, harbors in itself the forces of renewal that will bring forth future life. Excavation breaks the cycle, by extracting the body from the ground rather than allowing it to regenerate. That is why it has proved so contentious, above all in the campaigns waged by archaeologists, in the wake of colonization, to unearth the pasts of the peoples native to colonized lands.

For these archaeologists, immured in the idea of history as the positive impulse of progressive humanization, the grave was a kind of double negative—the already submerged of a latterly submerged past. First, in antiquity, the people placed their dead below ground, then their ground was itself covered over by the subsequent accruals of history. Thus, in the colonial imagination, the burial comes to figure as a locus of dehumanization, of the dissolution of humanity into nature. Accordingly, archaeologists saw nothing wrong in emptying the graves they found of their bones and artifacts, and in transporting them to faraway museums for analysis and display. But for native people, the burial is an active force in a process of human growth and becoming, or of humanifying in Lull's sense. It is not just a place of death but the guarantor of future life. To unearth the burial is to render this guarantee null and void. Whether the damage can ever be repaired by repatriating the remains is moot. The cycle of life, once broken, is not easily made whole again.

André Leroi-Gourhan: Posthuman Prehistorian?

Let me return, now, to where we left prehistory, mired in a duplicitous concept of the human as both a species of nature and a condition of transcendence, caught between human being and being human. This duplicity, as we have seen, was an inevitable corollary of the

Enlightenment program. Today we are witnessing the collapse of this program, along with the powers of European-led colonization that sustained it. What becomes of prehistory then? Is there any space for prehistory in an era of posthumanism, or is it heading for oblivion? Is it possible, even in principle let alone in practice, to be a posthuman prehistorian? If so, who was the first to prove it? If ever there was a candidate for this honor, it would be the great French archaeologist and historian of technology, André Leroi-Gourhan. In his *Le Geste et la parole*, first published in 1964, Leroi-Gourhan set out a comprehensive vision of human evolution running from our earliest ancestors, which he christened Archanthropians, through past and present *Homo sapiens*, to the humans of the future.¹³ Yet in doing so, he offered two quite different, and indeed contradictory, prognoses. One takes to its ultimate conclusion the removal of humanity from nature already initiated by the philosophers of the Enlightenment, to the point at which the humans of the future will have cast aside their very existence as beings in a world. The other, however, brings humanity and nature back together, ultimately to close the gap between them, thereby restoring humans—past, present and future—to the continuum of organic life.

Ostensibly, Leroi-Gourhan's oeuvre is an account of how an ascendant humanity broke through the bounds of purely zoological existence, and of its expansion into the domains of technology, social organization and symbolic culture. The breakthrough, he contends, was anything but sudden. Rather, a growing facility in the manufacture and use of tools marked the onset of "a long transitional period during which sociology slowly took over from zoology" (1993: 90). This was the period of prehistory. From this perspective, the denizens of the period inevitably figure as zoo-sociological hybrids, with one foot in nature and the other in culture. History already beckons, yet they remain too tied to their natural instincts to take the plunge. Eventually however the dam was breached, opening the floodgates of symbolic imagination and launching humanity upon the tide of fully social and historic life. Thenceforth, in a process of what Leroi-Gourhan calls exteriorization, human bodily operations were progressively offloaded onto an extra-somatic apparatus: from bare hands to tools and machines in the domain of technics, and from the mouth to writing in the domain of language. Working upward from hand to mouth and beyond, the final exteriorization, Leroi-Gourhan predicts, will be of the brain itself, into mechanisms of artificial intelligence equipped with emotional and moral sensibilities. Once machines have been designed that can outperform human bodies not only in creative thought but also in sexual love, Leroi-Gourhan



opined, though we will have come to the end of the line as a zoological species, this will not be the end of humanity. For the machines, in which human bodily and intellectual capacities are fully exteriorized, will be us (Leroi-Gourhan 1993: 265–266, 407).

Considering that Leroi-Gourhan was writing more than half a century ago, when computing and robotics were in their infancy, his predictions were extraordinarily prescient.¹⁴ But is exteriorization the only possible trajectory for human evolution? Might there be an alternative to the bifurcation into two worlds, respectively zoological and sociological, affording a way ahead that would not have required of our ancestors to embark on the hazardous crossing from one to the other? Could the division between the bare life of the animal, held within the cycle of nature, and the life of the human devoted to breaking out of it, turn out to be an illusion? Indeed, contradicting his own thesis of exteriorization, Leroi-Gourhan proposes nothing less, and in doing so, sets off down what he calls a “third track,” along which we would perceive that the lives of both humans and nonhuman animals are, as he says, “neither instinctive nor intellectual but, to varying degrees, zoological and sociological at one and the same time.” Only by following this track, he suggests, will we be truly able to progress beyond the preoccupation with dividing the natural from the cultural that has dominated the last two centuries of scientific thought, to break down the disciplinary barrier between animal psychology and cultural anthropology, and to really understand “what is animal and what is human” (Leroi-Gourhan 1993: 220).

To do this, we need to bring humans back to life—to think of them, in the first place, not in terms of what they *are*, but in terms of what they *do*. Indeed, unlike the *Homo sapiens* of the orthodox Darwinian account of human evolution, whose essential nature appears to be specified as a legacy from its evolutionary antecedents, Leroi-Gourhan’s humans are continually up to something—whether using tools, talking, gesticulating, writing, or just walking around—and, and in doing so forging a life for themselves and those around them. They are quintessentially humanifying animals. This is nowhere more evident than in Leroi-Gourhan’s treatment—central to his overall evolutionary thesis—of the relation between hand and voice. The voice, of course, is the principal way by which humans make their presence felt in a world of others with ears to hear. It exists in its very sounding (Ingold 2000: 102–106). But so also, for Leroi-Gourhan, does the hand exist in its handling—in the countless gestural micro-movements called forth in performing the myriad tasks of everyday life. The hand, thus understood,

is not so much an anatomical organ as a compendium of gestures, as indeed is the voice. Put words into my mouth and it knows how to pronounce them; put tools into my hands and it knows how to manipulate them. As words select from the compendium of the voice the gestures of their pronunciation, so every tool selects from the compendium of the hand the gestures appropriate to its use (Ingold 2011: 58). And it is these gestures, in turn, that give rise to the forms of things.

Hands, in short, are not instruments of humanizing, of imprinting preconceived human designs on the raw material of nature, but agents of humanifying, in the co-production of emergent form. "The human hand is human," Leroi-Gourhan declares, "because of what it makes, not of what it is" (1993: 240). But hands do more than make; they also write. And writing is of particular interest to us, since it has traditionally been the criterion by which scholars have separated history from pre-history. Of course, for as long as humans have been gesturing with their hands, they have also left traces of their movements. Some, like traces of fingers in the sand, are ephemeral, but others, like incisions scratched in stone with a hard point, can last for thousands of years. To refer to the inscriptive impulse of human trace-making, Leroi-Gourhan coined the term *graphism*. Like the voice in speech or song, it is an impulse that radiates from its source within the living, breathing body. Never short of a colorful metaphor, Leroi-Gourhan compared the geometry of graphism to that of "the sea urchin or the starfish" (1993: 211). But with writing, he argues, trace-making was progressively displaced onto an extra-somatic apparatus. In a word, it was exteriorized. And with that, the radial organization of graphism gave way to "an intellectual process which letters have strung out in a needle-sharp, but also needle-thin, line" (1993: 200).

This is the line of history-as-we-know-it: that sequence of unique events, each one a "first" for humanity, by which we chart the rise of civilization. The very idea of history, in this sense, is a product of the exteriorization of the word in writing. And so too is the idea of an era before history. It may be conceivable to us, looking back upon the vistas of the past, but it would have been inconceivable to the denizens of the time. No-one could ever have imagined themselves actually *living* in prehistory. To think as they did, observes the philosopher Jacques Derrida, with acknowledgement to Leroi-Gorhan, would mean having to 'de-sediment' from our minds the deposit of four millennia of linear writing (Derrida 1974: 86). Or as Vico had already advised in his *New Science* (2020: 110), we should "reckon as if there were no books in the world." We would have, in short, to imagine a world of graphism,



organized on principles very different from those with which we are nowadays familiar.

The Reinvention of Humanism

Would a return to graphism take us back down to the level of zoological existence from which it all began? Or could it, to the contrary, take us beyond the very distinction—between the sociological and the zoological in Leroi-Gourhan’s terms, between humanity and nature in ours—that the advent of writing itself established? The distinction is equivalent to Aristotle’s separation of *bios* from *zōē*, reintroduced for our times by Hannah Arendt (1958: 96–97). For Arendt, *zōē* refers to the eternal recurrence of life in nature that knows neither beginning nor end, neither birth nor death, whereas *bios* is the “specifically human life” that can be told as story, as biography. In her manifesto for a critical posthumanism, however, Rosi Braidotti (2013: 60) suggests that an expanded concept of *zōē*, standing for the “generative vitality” of life itself, in its capacity to bring forth, could potentially displace the distinction. Might graphism, then, partake of this capacity? Instead of preceding the written word in time, might it enter constitutively into the very conditions of its production? After all the written word, in the graphic act of its performance, issues as surely from the hand of the writer as the spoken word from the voice. Words, spoken or written, are living things, animated by the gestures of their formation. We feel them as they well up in the cavity of the mouth or as they are shaped in the digital inflections of the hand (Ingold 2018b: 51). Speaking and writing, in this sense, are ways we have of forging our own presence in the world, of humanifying.

Another way, equally peculiar to our human selves, is upright bipedal walking. In walking, we continually place ourselves at risk by falling forward, tumbling ahead of ourselves into the void, only to regain our footing in a skilled adjustment of body posture to the irregularities of the ground. Could it be that all human life is suspended in this alternation, between an imagination that sets us loose to fall, and a perception that restores our grip so we can keep on going? The former opens up to what is yet to come: in the words of the philosopher José Ortega y Gasset (1961: 112–113, 201), the human is a “not-yet being” or, in short, an “aspiration.” But the latter establishes a foothold in the world, from which we can once again venture into a future unknown. Where the first is aspirational, the other is prehensile (Ingold 2015: 140–141).

Perhaps, then, the essence of humaning lies in the ever-present tension, or temporal stretch, between aspiration and prehension. It is true, of course, that if humans are humaning, so baboons are babooning, birds birding, and worms worming. These creatures, too, are what they do, and are recognizable by their particular forms of life. But the *stretch* of humaning, I would argue, makes it of a different order. For it is in the pull of aspiration on prehension, or of imagination on perception, that a space opens up for history.

Others may disagree. In his prolegomena for Actor-Network Theory, for example, philosopher Bruno Latour places his emphasis on the human penchant for recruiting objects as fixtures for lending stability to social relations. A sociology of intra-specific relations, he contends (2005: 70), may be fine for baboons, which, in their babooning, have only to deal with each other's soft and mutable bodies. But it will not work for humans who enroll a miscellany of hard, immutable entities, from landscape features to tools and artifacts, into their collective lives.¹⁵ In truth, however, humans are by no means unique in calling on stable features of the landscape to anchor their relations, while among the plethora of objects that humans do enroll into daily life—especially in a society such as ours, dedicated to mass consumption—the majority do not stabilize social relations at all (Ingold 2012b). It is not, in my view, the enrollment of objects that launches humans into history but rather the way imagination, as it overflows the bounds of conceptualization, runs ahead of sensorially grounded experience. Is this sufficient, then, to make humans exceptional in the animal kingdom? Of course humans are different; all creatures are different. But is the stretch of human imagination such as to fundamentally alter the nature and meaning of life?

Whatever we might say of humans in themselves, there is no denying that their activities have been of momentous consequence. Their numbers weigh ever more heavily on the planet. Even more so do the crops and livestock on which the vast majority feed. And especially over the past century or two of growth, in industrial capacity and military might, humans have left an indelible imprint. This has led some to declare the onset of a new epoch in the geological history of the earth, namely the Anthropocene. It is a contested term, not least because of its misplaced connotations of anthropocentrism. The desire of many self-professed posthumanists to recenter human sensibilities in the human body, yet in the name of “overcoming anthropocentrism” (Braidotti 2013: 56), is an index of the confusions that surround the idea. We cannot, in truth, hold anthropocentrism to blame for the ecological



devastation of the planet. For, on the contrary, putting our human selves at the center amounts to a recognition that for every one of us, the world of experience radiates from where we stand to embrace others of every possible complexion and to an acknowledgement of the debt we owe to these others for our existence as human beings. Decentering humanity would write off this debt.

Indeed, the anthropocentric cosmos is precisely equivalent to what Leroi-Gourhan attributed to the graphism of prehistory. Centered on the body and its gestures, it is radial rather than linear and sequential—the very opposite of the techno-scientific cosmos of today. A humanity that had fully colonized its world and encompassed its lands and waters would not be at the center but all around on the outside. In Leroi-Gourhan's terms, it would be fully exteriorized. This is not anthropocentrism so much as “anthropo-circumferentialism” (Ingold 2000: 218). If our aim, with Braidotti (2013: 60), is to restore humans to the “vital force of Life . . . coded as *zoe*,” then this requires a movement that is not centrifugal, as she thinks, but centripetal. We have to place ourselves, once again, at the beating heart of a more-than-human world, and from this emplaced center to renegotiate our relations with the earth, the *humus*, and its manifold inhabitants, on a foundation of custodianship and care.¹⁶ We have, in this spirit, to re-enter prehistory, understood not as an era that *preceded* history, but as a register of time and life that *subtends* it. Life, then, is pre-historic as is graphism pre-literate, in the same sense that—in the thinking of a philosopher like Maurice Merleau-Ponty—phenomenal experience is pre-objective. In prehistory, to borrow Merleau-Ponty's words, “we find our bodily being, our social being, and the pre-existence of the world” (Merleau-Ponty 2002: 503).

My motive for thus seeking to recenter the human is not so much to topple humanism as to reinvent it. I want to take humanism in a direction orthogonal to its opposition to anti-humanism. This is to go *beyond humanity*, not by adding another chapter to an already illustrious historical career, nor by fictionalizing its final transubstantiation into the realms of artificial intelligence, disembodied sex, and fully automated work. It is rather to shift to another axis, along which human lives unfold in parallel with those of other beings, in ever-flowing currents of time. This is an axis not of progress toward a preordained conclusion but of sustainability, measured out in the longitudinal entwinement of generations rather than their serial replacement. Where progress appeals to the hubris of rational consciousness, sustainability—as Braidotti (2013: 138) puts it—is about *endurance*, about “‘passing on’ to future generations a world that is liveable and worth living in.” But this turn to life, to *zōē*,

is also a shift from history to prehistory, in the sense not of temporal regression but of ontological primacy. There can be life without history, but there can be no history without life. It is in the doing of human life, I have argued, that history is made. I am with Lull, then, in reimagining a humanism in which “to human” is a verb. To repeat: *Homo est animal homificans*.

Acknowledgements

An earlier version of this article was presented as the Georg Foster Lecture, at the Gutenberg University of Mainz, on 20 September 2019. I am most grateful for the invitation and to the University’s Research Center of Social and Cultural Studies (SOCUM), especially the members of its Junior Research Group, for facilitating the event, which formed part of the Center’s 4th Symposium, *Posthuman? New Perspectives on Nature/Culture*.



Tim Ingold is Professor Emeritus of Social Anthropology at the University of Aberdeen. He has carried out fieldwork among Saami and Finnish people in Lapland and has written on environment, technology, and social organization in the circumpolar North, on animals in human society, and on human ecology and evolutionary theory. His more recent work explores environmental perception and skilled practice. Ingold’s current interests lie on the interface between anthropology, archaeology, art, and architecture. His recent books include *The Perception of the Environment* (2000), *Lines* (2007), *Being Alive* (2011), *Making* (2013), *The Life of Lines* (2015), *Anthropology and/as Education* (2018), *Anthropology: Why it Matters* (2018) and *Correspondences* (2020). ORCID: 0000-0001-6703-6137. E-mail: tim.ingold@abdn.ac.uk



Notes

1. This may be one of Vico’s “more fanciful etymologies,” as Jason Taylor and Robert Miner remark in a footnote to their recent translation of *The New Science*. For Vico himself, the principle of burial is represented—in the figure that serves as a frontispiece for his work, and of which he provides an elaborate explication—by the appearance of a funeral urn. The urn carries the initials D.M., which Vico spells out as “to the good souls of the buried” (Vico 2020: 12, 12n13).

2. The classic statement of the three stages of human social evolution—savagery, barbarism, and civilization—is to be found in Lewis Henry Morgan’s treatise of 1877, *Ancient Society* (Morgan 1963).



3. Darwin's most vociferous advocate, Thomas Henry Huxley, would put this more forcefully than Darwin himself perhaps dared. In an essay on "Man's place in nature," published in 1863, Huxley declared that "[t]he highest faculties of feeling and intellect begin to germinate in lower forms of life" (Huxley 1894: 152).

4. In the inevitable course of natural selection, Darwin argued, "tribes have supplanted other tribes," the victorious groups always including the larger proportion of "well-endowed men" (Darwin 1874: 197).

5. One of the most outspoken defenders of this militantly racist scenario was Sir Arthur Keith, one-time President of the Royal Anthropological Institute and one of the most eminent scientists of his day. The "war of races," Keith declared, is nature's "pruning-hook" (Keith 1931: 49).

6. In his classic work of 1843, *The Essence of Christianity*, the philosopher Ludwig Feuerbach had referred to the capacity by which individual men and women can recognize themselves as fellow members of a common human kind, as "species being" (Feuerbach 1843: 1–2). In a critical commentary on Feuerbach, Karl Marx went on distinguish species *being* from species *life*. While any animal measures out its species life in its own existence, only humans are capable of making their species life an object of their own will and consciousness. Therein lies their species being (Marx 1972: 75–76).

7. A recent book by Tobias Rees offers a glaring example. His claim that "human . . . is a recently invented concept that emerged in Europe about 250 years ago" is simply false. Rees's mistake is to treat "human" as a derivative of "humanity." Historically, the direction of derivation was the other way around: discourses on the human long preceded the eighteenth-century concept of humanity (Ingold 2019: 190; Rees 2018: chap. 2, 3).

8. For details of Llull's life and work, see Anthony Bonner (1985) and Charles Lohr (1992).

9. Here I follow Bonner's translation: "man is a manifesting animal" (Llull 1985: 609). For further discussion, see Ingold (2015: 116–117).

10. In a census of 2011, more than 19,000 Tasmanians identified as Aboriginal people. See Britannica, "Tasmanian Aboriginal people," <https://www.britannica.com/topic/Tasmanian> (accessed 7 August 2020).

11. For a comprehensive review of the Neanderthal debate in palaeoanthropology, see Graves (1991). "Most participants in the debate," as Graves notes, "cannot resist a simplistic metaphor of European colonialism and the analogies which are drawn from it. Indeed, the whole concept of displacement without admixture and the evolution of 'an entirely new species' carries with it the implication of progressive trends which we owe to 19th-century ideologies" (1991: 525).

12. For examples, see Ingold (2007: 65–68).

13. The book was later published in a superb English translation by Anna Bostock Berger, as *Gesture and Speech* (Leroi-Gourhan 1993). I have reviewed it in depth elsewhere (Ingold 1999).

14. Fifty years later, exactly as Leroi-Gourhan had foretold, Rosi Braidotti could observe that "contemporary information and communications technologies exteriorise and duplicate electronically the human nervous system" (Braidotti 2013: 90).

15. For prehistoric hunters, these would have included stone tools. In the Latourian scenario, however, while the stones were enrolled into the collective, as "non-human actants," the animals hunted with them were not (Latour 1999: 210–211). Thus for Latour, the prehistory of the collective begins in the mediations of technology, not

in the engagement with other life forms. It is curious, to say the least, that the stage on which Latour should take up arms to “fight modernism,” as he puts it (1999: 212), should be none other than one of modernism’s most potent myths of origin—that of “man the toolmaker” (Kochan 2010).

16. The case for doing so has been eloquently presented by Michel Serres (1995).

References

- Arendt, Hannah. 1957. *The Human Condition*. Chicago: University of Chicago Press.
- Barad, Karen. 2014. “Diffracting Diffraction: Cutting Together-Apart.” *Parallax* 20 (3): 168–187. <https://doi.org/10.1080/13534645.2014.927623>.
- Bonner, Anthony. 1985. “Historical Background and Life of Ramon Llull.” In *Selected Works of Ramon Llull (1232–1316)*, vol. 1, edited and translated by Anthony Bonner, 5–52. Princeton, NJ: Princeton University Press.
- Braidotti, Rosi. 2013. *The Posthuman*. Cambridge: Polity Press.
- Darwin, Charles. 1874. *The Descent of Man and Selection in Relation to Sex* (2nd edition). London: John Murray.
- Darwin, Charles. 1950. *On The Origin of Species by Means of Natural Selection, or, The Preservation of Favoured Races in the Struggle for Life*. London: Watts [reprint of first edition of 1859].
- Derrida, Jacques. 1974. *Of Grammatology* (corrected edition), trans. Gayatri Chakravorty Spivak. Baltimore, MD: Johns Hopkins University Press.
- Feuerbach, Ludwig. 1843. *The Essence of Christianity*, trans. Mary Ann Evans. London: Trübner.
- Goldschmidt, Walter. 1993. “On the Relationship between Biology and Anthropology.” *Man* (N.S.) 28 (2): 341–359. <https://doi.org/10.2307/2803417>.
- Graves, Paul. 1991. “New Models and Metaphors for the Neanderthal Debate.” *Current Anthropology* 32 (5): 513–541. <https://doi.org/10.1086/203997>.
- Huxley, Thomas Henry. 1894. *Man’s Place in Nature and Other Essays*. London: Macmillan.
- Ingold, Tim. 1999. “‘Tools for the Hand, Language for the Face’: An Appreciation of Leroi-Gourhan’s *Gesture and Speech*.” *Studies in History and Philosophy of Biological and Biomedical Sciences* 30 (4): 411–453. [https://doi.org/10.1016/S1369-8486\(99\)00022-9](https://doi.org/10.1016/S1369-8486(99)00022-9).
- Ingold, Tim. 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.
- Ingold, Tim. 2007. *Lines: A Brief History*. Abingdon: Routledge.
- Ingold, Tim. 2011. *Being Alive: Essays on Movement, Knowledge and Description*. Abingdon: Routledge.
- Ingold, Tim. 2012a. “No More Ancient, No More Human: The Future Past of Archaeology and Anthropology.” In *Archaeology and Anthropology: Past, Present and Future*, ed. David Shankland, 77–90. London: Bloomsbury.
- Ingold, Tim. 2012b. “Toward an Ecology of Materials.” *Annual Review of Anthropology* 41: 427–442. <https://doi.org/10.1146/annurev-anthro-081309-145920>.
- Ingold, Tim. 2013. *Making: Anthropology, Archaeology, Art and Architecture*. Abingdon: Routledge.
- Ingold, Tim. 2015. *The Life of Lines*. Abingdon: Routledge.



- Ingold, Tim. 2018a. "One World Anthropology." *HAU: Journal of Ethnographic Theory* 8 (1–2): 158–171. <https://doi.org/10.1086/698315>.
- Ingold, Tim. 2018b. *Anthropology and/as Education*. Abingdon: Routledge.
- Ingold, Tim. 2019. "Anthropology with Lift-Off." *HAU: Journal of Ethnographic Theory* 9 (1): 188–191. <https://doi.org/10.1086/704005>.
- Keith, Arthur. 1931. *The Place of Prejudice in Modern Civilization*. London: Williams and Norgate.
- Kochan, Jeff. 2010. "Latour's Heidegger." *Social Studies of Science* 40 (4): 579–598. <https://doi.org/10.1177/0306312709360263>.
- Latour, Bruno. 1999. *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
- Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford: Oxford University Press.
- Leroi-Gourhan, André. 1993. *Gesture and Speech*, translated by Anna Bostock Berger, introduced by Randall White. Cambridge, MA: MIT Press.
- Llull, Ramon. 1985. *Selected Works of Ramon Llull (1232–1316)*, vol. I, edited and translated by Anthony Bonner. Princeton, NJ: Princeton University Press.
- Lohr, Charles. 1992. "The New Logic of Ramon Llull." *Enrahonar* 18: 23–35.
- Marx, Karl. 1972. "Economic and Philosophic Manuscripts of 1844." In *The Marx-Engels Reader* (2nd edition), ed. Robert C. Tucker, 66–125. New York: W. W. Norton.
- Mellars, Paul, and Chris Stringer, eds. 1989. *The Human Revolution: Behavioural and Biological Perspectives on the Origins of Modern Humans*. Edinburgh: Edinburgh University Press.
- Merleau-Ponty, Maurice. 2002. *Phenomenology of Perception*, trans. Colin Smith. London: Routledge Classics.
- Morgan, Lewis Henry. 1963. *Ancient Society*, ed. Eleanor B. Leacock. Cleveland, OH: World Publishing.
- Ortega y Gasset, José. 1961. *History as a System and Other Essays: Towards a Philosophy of History*. New York: W. W. Norton.
- Rees, Tobias. 2018. *After Ethnos*. Durham, NC: Duke University Press.
- Scott, Colin. 1989. "Knowledge Construction among Cree Hunters: Metaphors and Literal Understanding." *Journal de la Société des Américanistes* 75: 193–208. <https://doi.org/10.3406/jsa.1989.1349>.
- Serres, Michel. 1995. *The Natural Contract*, trans. Elizabeth MacArthur and William Paulson. Ann Arbor: University of Michigan Press.
- Vico, Giambattista. 2020. *The New Science*, translated and edited by Jason Taylor and Robert Miner, introduced by Giuseppe Mazzotta. New Haven, CT: Yale University Press.

Copyright of Nature & Culture is the property of Berghahn Books and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.