

Hello and welcome to the first episode of Entanglements. This podcast is all about exploring the connections between humankind and nature, and crucially, how different disciplines have understood this connection. Over the coming episodes, I speak to a number of really interesting people all about how we as humankind connect to, understand and interact with nature and the natural world. In this first episode, however, it's just me, as I try to wrestle with what exactly "nature" means. So, here I am, sitting here, excited about launching this new podcast. However, I'm at a bit of a loss.

I figure the best place to start to understand the human-nature connection is to understand what we mean by "human" and "nature". Well, I figure "human" is fairly obvious. However, as I found, what is meant by "nature" really isn't. For instance, I'm recording this on the top floor of the Jesus College Library. I've gone around the shelves and pulled off a handful of dictionaries to try and get to the bottom of what nature really means. The first one I pulled down was the *Oxford English Dictionary*, but when I opened it up to the noun "nature", I found 34 meanings listed, even though 12 of these are labelled as obsolete. That's still 24 separate and distinct ideas that the word nature, which we use in everyday life and so rarely have to define, is a placeholder for.

The next dictionary I pulled out is a philosophical dictionary, hoping that maybe in this one I'll find a more conceptual definition of nature. However, in this one I don't even find a definition of nature.

Next, I take down *Blackwell's Concise Encyclopedia of Ecology*. Surely in this one I'll have some chance, but nope, once again I find no definition of nature. There's "natural", but what's "natural" is defined as "of nature". When I do find a more concise definition, this is how it reads: "Nature, noun [life]. All the animals and plants in the world and all the features, forces and processes that exist or happen independently of people, such as the weather, the sea, mountains, reproduction and growth". However, I still don't feel I've got to the bottom of what nature really is.

For instance, this division between nature and humankind. To what extent can I really consider myself independent of the natural world? I start to ask myself, am I part of nature? Are my friends and family part of nature? What about the pets I have? At what point does my cat become non-nature, and at what point is she part of nature? Is it that she's simultaneously both?

I'm left with lots of questions. Is nature to be understood physically, spatially? Is it simply a theoretical idea that we've used to conceptualise other things? Or indeed, is it something we've used to conceptualise ourselves? And, if so, are nature and humankind always mutually exclusive? These are all questions that I continue to wrestle with throughout the rest of this podcast.

However, I figure that a good place to start is with etymology. After doing some digging, I found that our modern word "nature" is borrowed from the Latin "natura" meaning birth or initial character. Something pretty different to how our modern word "nature" is used in

everyday language. However the roots of our modern word go even deeper than this. The Latin word “natura” was only used by philosophers such as Cicero in the 1st century BCE to translate another word, the Greek word φύσις (and apologies for my pronunciation). This word is based on the verbal root φύειν, which, interestingly, while also meaning growing and producing, is derived from the Indo-European root βου, ancestor of the English verb “to be”.

However, the connection between the modern word “nature” and the verb “to be”, which is integral to our self-understanding, confuse me. How can these be mutually exclusive terms? Indeed, what's confused me further is that while the word “physis” was used as early as the 6th century BCE by figures such as Heraclitus, 200 years later it started to acquire what we might recognise as its modern meaning and indeed, its ambiguity. For instance, in *The Physics*, the word “physics” deriving itself from “physis”, Aristotle defines “physis” as the essence of things. However, in *The Metaphysics*, he goes on to admit that the word is actually used in many different ways, each with different meanings.

Thus, even 2,400 years ago, a defining feature of “physis”, the word which would become “nature”, was its ambiguity. This ambiguity remains today. Indeed, it seems, how we understand nature as an operating concept is far more thematic than anything else. Indeed, as the ecologist and philosopher Professor Timothy Morton describes it, nature is a transcendental term in a material mask, which stands at the end of a potentially infinite series of other terms that all collapse into it.

Nature effectively works, in our language, as an empty placeholder for a host of other concepts. Sometimes it's animals, streams, forests. Sometimes it's leaves, roots, twigs. Sometimes it's trees and birds. Sometimes it's the trees on the mountain, but not the trees in the streets. Sometimes it's entire ecosystems, and it's the weeds which emerge from concrete pavements.

This episode is about charting the fluctuations and ambiguity of the word nature, and explore what this reflects about how we, and particularly Western societies, have understood our very selves.

So back to a deeper dive into etymology. Often when we think of nature, as we'll see, we tend towards thinking that which is primordial, non-human, or in some way base. However, it's interesting to note that the Greek and Latin predecessors for our word “nature” only seems to have properly emerged once these languages had reached linguistic and philosophical maturity. Might this suggest that words like “physis”, or the very idea of nature, ambiguous as it is, is not necessarily a basic human concept? Indeed, “physis” was a more technical and abstract philosophical word that seems to have been mainly used by urban scholars rather than people working in the fields, living in the countryside, or appearing in contexts in which we might expect it to, in the rural world or what we now call nature poetry.

Indeed, in Aristotle, the word itself rarely appears within his own work on animals, plants and ecosystems, even if the name of the physics derives from the word “physis”. Further, the interesting thing is that unlike the dictionary in front of me, which explicitly separates humankind and nature, most Greek definitions of “physis” don't exclude humankind. Rather it seems to be a dynamic term, a more spontaneous ordering of the world in which humans are a part. The antithesis of nature was understood to be chaos, and thus for figures like Aristotle, civilization itself could be thought as natural insofar as it entailed order. After time, later movements, such as the Epicureans and the Stoics, went on to add a more moral vision of nature, of an ordered and dynamic process. Indeed, we still have echoes of this in our language even to today. For instance, when we accuse people of acting unnaturally, we accuse them of acting against the order and acting in an immoral way.

The interesting thing is that once the Romans started to use the word, this seems to have started to change. For instance, the Greek idea of physis is strikingly different from the more classical opposition between nature and culture that figures like Cicero introduced in the 1st century BCE. For Cicero, nature was an initial state devoid of human influence, while culture was what emerged when humans began to order themselves. Thus, nature was seen as somehow the opposite of order, and so the Greek idea of physis, to which the idea of order was fundamental, was reversed when it was translated into Latin. It was at this point that words like unordered or wild became synonyms for the word which would become nature. Nevertheless, the Romans could still be understood as having a generally favourable conception of nature. They often identified cities as places of filth and sin, even if they were superficially places of culture, while for them the good life was to be found in bucolic countryside villas. This of course was only available to a small section of society. However, at the very least, it reflects a Romantic vision, which we will return to throughout this series.

This vision was supported by the Christianisation of the Roman Empire, which, in the early stages, saw nature as a place of encounter with God. However, as Christianity developed, the conceptualisation of nature shifted away from being a changing and dynamic process, and rather became understood as an attribute, or more simply only as a tool for an immutable God.

While for the Greeks and the Romans, even gods were part of nature, for mainstream Christianity, God transcends nature, and because humankind was supposedly created in the image of God, Christianity has tended to see us human beings as also transcending nature. Influenced by Christianity's broad adoption of platonic dualism, which, simply put, sees spirit as superior to matter, the Christian hierarchies developed something of a disdain for nature, as God was no longer to be found in it, but beyond it. This increasingly resulted in a dualistic and mechanistic vision of nature, and in Europe, nature progressively lost its divine quality and moral value, leaving the natural world increasingly open to exploitation. Thus, by the 18th century and the emergence of what can be called Protestant capitalism, conceptualisations of nature had even lost their dynamism, and in many influential circles,

nature became seen simply as an initial state, with the only force of change and force of history being humankind under the supposed grace of God.

By the beginning of modern capitalism and the Enlightenment, humankind and society firmly understood itself as needing to become, as Descartes put it, “the masters and possessors of nature”. This, of course, is an oversimplified account of the history of the concept. And obviously, movements like Romanticism challenge this construction of nature. But, oversimplified as it may be, I hope I’ve effectively charted how, while our modern concept of nature started with the Greek idea of *physis*, ambiguous as it was, in which nature was an all-inclusive and dynamic process, characterised by order, it mutated into a prominent view in which nature was seen as being fundamentally unordered and undynamic, which explicitly excluded humans from its definition. And so it seems that from the beginning, a core operational problem with the concept of nature is that there just isn't any historical, or indeed contemporary, agreement on what exactly “nature” is. This is actually quite a big problem when we consider just how large and important the concept of nature seems to be, especially when we consider how best to survive the series of ecological crises in which we find ourselves.

However, this problem has been noted throughout history. Indeed, a number of thinkers have made attempts to combat this and explicitly state their definition of nature. For instance, for Descartes, nature was simply matter itself, while for Darwin nature was, “only the aggregate action and product of many sequences of events, as ascertained by us”. We can note the interesting tension in these two views. For Descartes, who emphasised a mind-body dualism, nature is simply matter itself. Human beings, or at least non-material human creativity, hold no place in nature or in its definition. On the other hand, Darwin is much more tentative, acknowledging the inevitability of our own human subjectivity. This tension between these two ideas of nature remains to today, and so does the semantic ambiguity. Nature is still undefined in most educational and academic contexts. As we experienced at the start of this episode, even specialised encyclopaedic dictionaries of environmental sciences often avoid any explanation of the concept of nature.

This is a widespread problem. Indeed, three years ago a paper was published by Frédéric Ducarme and Denis Couvet which found that 7,291 scientific papers included nature in their titles between 1990 and 2015. But not a single one of these papers provided a definition of the word or even indicated what was understood by the term.

So, Ducarme and Couvet went on a similar mission to me, hoping to understand what exactly the word nature means. Going through dictionaries in a much more systematic way than I have done, they isolated three different theoretical concepts of nature. The first: nature as the whole of material reality, considered as independent of human activity and history. A definition aligned especially with post-Romantic philosophy, and presenting concepts of culture and rational intention as opposing ideas. Definition 2: the whole universe as it is the place, the source, and the result of material phenomena, including humans, or at least the human body. This is the concept originally formulated by Aristotle and the one which we find in Descartes' definition of nature as matter itself, and the

opposing concepts are those of the supernatural or the unreal. The third definition of nature: the specific force at the core of life and change. This is the way nature was seen by figures such as Heraclitus, Nietzsche, and Darwin, and the opposing concepts are those of inertia, fixedness, entropy. As we can see, there are three changing variables across these definitions. The first being whether it includes or excludes humankind, the second whether it is a dynamic or a static state, and the third whether it includes the whole of reality or just only some of its constituents.

So, as we journey through exploring what nature is throughout this series, one thing I want to keep in mind is the ambiguity of the term “nature” itself. It would be too cumbersome to try and redefine nature with every person I talk to or every time I use it. Instead, I want you, when you listen to this podcast, and indeed, whenever you think about nature, you hear nature, you see something and in your head you go, “this is nature”. Think about how we're defining nature and those three crucial aspects. Does it include humankind? Is it dynamic? And does it include the whole of reality?

I'm not necessarily going to put forth an answer of how exactly I think nature should be defined. However, especially as it is imperative that we increase our ecological consciousness, I think we should try and wrestle ourselves out of the strange limbo where the word “nature” can be used at cross purposes and cause confusion because of deeper differences in what nature means and how it is understood. However, for the sake of this podcast, I'd also like to recognise that there is something effective about the ambiguity of the word nature. And so we're going to interact with the concept thematically.

However, I do hope that we will challenge ideas that humankind is in some way absolutely separate from nature and explore what it might look like and crucially, how it might feel, to take what could be thought of as a more Aristotelian position, in which we conceptualise nature as a dynamic and powerful process, rather than a static or inert system. A process in which we, crucially, are not only interdependent with, but dependent upon for our very survival. And I hope we come to recognise that we are in some way part of nature. I'm really looking forward to exploring this throughout the podcast, and I'm very happy that you're joining me.

Credits: Written, produced, presented and edited by me, Noah Rouse, on behalf of the Jesus College Intellectual Forum. Original music by Xanthe Evans.