**Animal Behaviour and the Passage to Culture: Merleau-Ponty’s Remarks on Uexküll**

Abstract: *Merleau-Ponty’s discussion of Uexküll occurs in the second of his three Collège de France lectures on nature. The question that animates the lectures, as a whole, is the nature of the that constitutes an organism. Merleau-Ponty argues that this totality is immanent and emergent, and that, following Uexküll, it includes the relation an animal has with its ‘Umwelt’. However, despite the use Merleau-Ponty makes of Uexküll’s ‘Umwelt’ concept, there are important differences. Whereas Uexküll’s ‘natural factor’ is a transcendental, nature-subject, Merleau-Ponty conceives nature’s directing principle as a ‘theme’ that cannot be separated, metaphysically, from the immanent unfolding of the history of life. As a result, while the expressiveness of nature, for Uexküll, occurs at the transcendental level, Merleau-Ponty enquires into the natural history of expression, and symbolic, ritualistic behaviour, as it is manifest in the lives of animals. This inquiry lays the foundation for a conception of ‘inter-animality’, which extends the totality in question from a pre-established collection of species-specific environments to a ‘Lebenswelt’, unified by a shared, inter-corporeal understanding of nature’s ‘system of signs’.*

**1. Merleau-Ponty’s Second Course on Nature (1957-58)**

1.1. Background

Merleau-Ponty’s most sustained discussion of Uexküll occurs in the second of three lectures courses, which were delivered at the Collège de France in the years 1956-57, 1957-58 and 1959-60, on the theme of the “Concept of Nature”. The lecture courses, as a whole, are intended to study nature, understood as a “leaf or “layer” of Being”, as the route to a more general, ontological explication of the *vinculum* or *nexus* “Nature”-“Man”-“God”. The ultimate task, Merleau-Ponty remarks, is to see how this *nexus* holds together.[[1]](#endnote-2) In particular, for his lecture courses, he chooses to focus on the *unfolding* of the “leaf of Nature”, first, in relation to the intertwining (*Ineinander*) of life and physicochemistry, and, second, in relation to the intertwining of the human with “animality and Nature”. His intention is to “grasp humanity… as another manner of being a body” rather than merely as “animality… + reason”.[[2]](#endnote-3) Hence, the importance of the second course on animality, in which we find his remarks on Uexküll.

Aside from the overall, philosophical intent of the lecture series, there is a more specific interest that orders its general content and structure, which Merleau-Ponty refers to as the findings of the “new school of biology”.[[3]](#endnote-4) This school is commonly known as the movement of organicist biology, which flourished between the early decades of the twentieth century and the late 1950s. The organicist movement, taking the whole organism as its fundamental object of investigation, attempted to provide a third way between mechanism, on the one hand, and vitalism, on the other. Its intellectual forbears were Aristotle, but particularly Kant, Schelling, Bergson and Whitehead. The key scientists associated with or belonging to the organicist movement, aside from Uexküll, included, after von Baer and Driesch, Haldane, Russell and Waddington. So, one way to understand Merleau-Ponty’s lecture series is as offering an interrogation of the philosophical foundations of the organicist movement (1956-57) and then a detailed consideration of the scientific work being undertaken by its contemporary adherents and associates (1957-58). This orientation explains not only the content of the first course, but also the remarks on Uexküll, and those influenced by him, such as Portmann, Lorenz and E.S. Russell. Merleau-Ponty approaches Uexküll very much in the context of this community of thought.

1.2. Philosophical Interpretation of the Whole Organism

In fact, at one point in the lectures, Merleau-Ponty explicitly mentions the “organicist idea” that the totality of the organism is more than the sum of its physico-chemical parts. He proceeds to describe the question of the status of this emergent totality as the key philosophical question, which is “at the centre of this course on the idea of nature and maybe the whole of philosophy”.[[4]](#endnote-5) The key to answering the question is to avoid two pitfalls: either conceiving the organism as a “transcendent totality” or as a “totality by summation”.[[5]](#endnote-6) The latter conception is the error of mechanism, according to which the entirety of an organism’s nature is explained by the interactions of its physico-chemical, material parts. Along with the organicist movement, Merleau-Ponty believes that this way of thinking is unable to grasp adequately either embryological development or mature, whole individual behaviour. The former conception is the error of vitalism. The mistake here, apart from being “contradicted by the facts”, is the commitment to metaphysical dualism, which Merleau-Ponty takes to be unacceptable. The vitalist falls back on a “positive principle” – e.g. idea, essence, entelechy – which they assert to lie behind the observable phenomena. This is to “platonize” or “aristotelianize” and to “double the reality under our eyes without resolving the problem”.[[6]](#endnote-7) The problem, for example, of embryological development, is not resolved by vitalist principles because the postulation of a causally efficacious, immaterial, transcendent living force (‘entelechy’) mysteriously acting on matter is both empirically unverifiable and as philosophically suspect as any other form of dualism.

Merleau-Ponty outlines his own response to the question in the first part of the second lecture course (the part before the discussion of Uexküll). This occurs during a discussion of Coghill’s study of development in the axolotl (the Mexican Salamander) and Gesell and Amatruda’s work on human development. Merleau-Ponty’s provisional conclusions are that organismic totality is immanent and emergent. It is immanent in that the living being “works only with physiochemical elements”.[[7]](#endnote-8) That is, there is no immaterial, active, substantial force present in the organism; it is constituted content-wise by spatially and temporally located, physico-chemical events. However, organismic totality is *more than* the sum or aggregate of these events. The totality of an animal, such as an axolotl, is to be conceived, he remarks, as an emergent adhesion between the spatial parts of the embryo and the temporal parts of its life. This adhesion between the elements of the multiple is a “dimension” of “meaning” [[8]](#endnote-9), such that one event in the maturation process, such as the axolotl beginning to curl and buckle, cannot exist, as the event that it is, without a later event, such as the axolotl learning how to swim (by curling and twisting its body repeatedly).

Thus, *the* axolotl is not an essence (axolotl-ness) existing outside of time, hidden behind appearances, in which the individual animal participates, but a totality, a total pattern of meaningful embryological behaviour emerging across the domain of events that constitutes an axolotl’s life. Although emergent, however, this organismic totality has real causal powers: it is a “directing principle”. But it directs the developmental trajectory through a kind of “operant non-being”, in which the animal’s future potentiality is *there*, in the present stage of maturation, only as a negative “state of imbalance” or “factor of disorder”, which outlines a future re-equilibrization. In this sense, Merleau-Ponty describes organismic totality as a “hollowed-out design” of which the animal’s material organs are the “trace”.[[9]](#endnote-10)

Not only does the emergent, organismic totality have real causal powers but the overall design is also *surprising*. I take this to mean: surprising or unexpected *from within* the framework of physical or resultant causality (based on *experience* the manner of maturation of a particular animal species is generally predictable). Merleau-Ponty illustrates the point by referring to the principle of “reciprocal intertwining”, which he takes from the dynamic morphology of Gesell. Biological processes, like threads in weaving, are reciprocally intertwined in that “[…] the {overall} design must appear with a certain surprise, to the extent that it is born of the meeting of threads {i.e. biological processes} which have the air of having nothing to do with it”.[[10]](#endnote-11)

Later, when considering models for his notion of organismic development, Merleau-Ponty compares the intertwining of biological processes to the way in which films of artists show them brushing in apparently random places, only for the overall pattern to emerge during the course of construction[[11]](#endnote-12). It is not that the idea of the artwork pre-exists and guides the process of material construction, as a blueprint precedes a finished house, determining its final form. Rather, the work is realised *in* and *through* the constructive process, in such a way that one can imagine an artist standing back, when the painting is finished, and saying “So, *that’s* what I wanted to do”. Likewise, the guiding pattern of animal development emerges unexpectedly through the criss-crossing of independent, physical processes. Like the production of a work of art, the law of construction of an organism, he concludes, is of a different kind.

This is the point that Merleau-Ponty reaches in his reflections on organismic totality, before he turns to Uexküll.

**2. Merleau-Ponty’s Interpretation of Uexküll**

2.1 The Concept of Environment (*Umwelt*).

As the basis for his remarks, Merleau-Ponty uses the first edition of *Umwelt und Innenwelt der Tiere* (1909) and *Streifzüge durch die Umwelten von Tieren und Menschen* (1934). He offers a preliminary description of Uexküll’s research and then a philosophical interpretation. During the interpretation, Merleau-Ponty argues that Uexküll’s notion of an animal’s *Umwelt* is especially important. In particular, he remarks, Uexküll’s idea of the unfurling of an *Umwelt* as a “melody that is singing itself” is a “comparison full of meaning”.[[12]](#endnote-13) Indeed, “the theme of the melody […] best expresses the intuition of the animal according to Uexküll”.[[13]](#endnote-14)

Let us examine Merleau-Ponty’s remarks on the Uexküllian *Umwelt* before we turn to the significance of the melody. the *Umwelt* of the lower and the higher animals. Amoebae, paramecia, sea urchins, starfish, marine worms and jellyfish, amongst others, comprise the lower animals. Higher animals, conversely, are organisms that have a developed nervous system, and a sophisticated level of physical development, with sense organs, such as antennae, organised to give them “delicate information” about their surroundings. Many of them also possess proprioceptive capacities. In particular, the central nervous system of the higher animals establishes a counter-world (*Gegenwelt*), an alleged inner physiological landscape that formally ‘mirrors’ external spatial relationships, albeit by ‘translating’ these relationships into a unique, species-specific ‘nervous sign language’.

The details of the *Gegenwelt* need not concern us (and Uexküll largely discards it in his mature work). What is philosophically salient are the different ways in which Uexküll and Merleau-Ponty treat the higher-lower distinction. Uexküll’s approach is descriptive, for the most part. For him, the simple *Umwelt* of an urchin is as good, or perfect, as any other; there is a radically horizontal, relativist approach to the diversity of environments. Indeed, Uexküll argues that the human *Umwelt* is just another species-specific environment, produced by our nature.[[14]](#endnote-15) Merleau-Ponty, conversely, provides an *evaluative* gloss to the Uexküllian higher-lower distinction. Although he insists in his *Résumés de cours* that “one cannot conceive of the relations between species or between the species and man in terms of a hierarchy”[[15]](#endnote-16), nonetheless, one does have the impression of a *progression*, of sorts, from lower to higher.

Merleau-Ponty makes a great deal of the contrast between the *closed* environment of the lower animals and the *open* environment of the higher animals, especially regarding the relationship each type has to its respective building-plan (*Bauplan*). The movements of a sea urchin or a jellyfish, for example, are externally dictated by their building-plan. They do not form a “motor project”, which would give to the living organism a kind of practical unity, and which would constitute a “reply to the exterior world”. For such creatures, their *Umwelt* is a closure that separates them from (most) external stimuli.[[16]](#endnote-17) The lower animal “*is moved*, does not move itself, does not support its *Umwelt”*. By contrast, a higher, self-moving, animate animal:

… dominate{s} its *Umwelt* itself […] {it has} a regulation, that is {there is} an interaction with the outside and the centralised nervous system […] that is, circularity exterior-organism […] {the higher animals} are their *Bauplan*, they recreate it.[[17]](#endnote-18)

Merleau-Ponty’s thought seems to be that whereas a simple animal body (and its correlative *Umwelt*) receives its unity from the activity of the natural factor (*Naturfaktor*), ultimately responsible for its building-plan, the activity that unifies the being of a higher, self-moving animal body is to a greater degree *sui generis*, coming, as it does, in a sense, from the animal itself. We might say that with the higher animals, there is a necessary, participatory activity on the part of the organism, which mediates the exterior activity of the *Naturfaktor*. The higher animals *realise* the unity of their own functioning – they *are* their *Bauplan* – and do not simply *receive* it. Unlike the urchin, the bodily behaviour of the higher animals, Merleau-Ponty comments, is more than the mere “effect” of their *Bauplan*.[[18]](#endnote-19) This is especially true of the human body which is both the body of a higher animal, and something “different”, and which is uniquely “open, transformable”. Indeed, such is the plasticity of our body, it is the occasion of the “projection of a *Welt”.*[[19]](#endnote-20)This evaluative contrast between lower and higher animals is important in understanding Merleau-Ponty’s ontology of nature, as we shall see.

2.2. Nature’s Melody

In Merleau-Ponty’s philosophical interpretation of the notion of *Umwelt*, when he is again pondering the central issue of “organismic totality”, it is Uexküll’s idea of the unfurling of an *Umwelt* as a melody that is singing itself that takes centre stage. There are a number of reasons why he takes the idea of the melody to be importantly illustrative for understanding animality. The first is that it foregrounds the receptive aspect of animal activity. Just as the melody “sings in us much more than we sing it”, and the singer’s body is a “type of servant” for the melody, so too the organism receives its *Umwelt* (via its *Bauplan*) from nature. This is important because it distances Uexküll’s *Umwelt* theory from the naïve idea that an *Umwelt* is established by the animal itself, as some kind of clear, distinct and explicitly self-conscious goal. A second, related reason is that:

[…] we {cannot} distinguish the meaning {of the melody} apart from the meaning {of the notes} where it is expressed. As Proust says, melody is a Platonic idea that we cannot see separately. It is impossible to distinguish the means and the end, the essence and the existence in it.[[20]](#endnote-21)

Whereas the first reason focuses on the passive, receptive element of animality, the second reason brings out the expressive, participatory element. Just as the meaning of a melody is constituted by its mode of expression, by the manner and order in which the notes are played, so too nature – Uexküll’s natural factor (*Naturfaktor*) together with its building-plans – is constituted by the immanent unfolding of the biological processes and threads, and the behavioural repertoire, of those animal subjects who *realise* the plan with-which-they-conform. Nature’s idea (or essence) cannot be separated from concrete existence, as this unfolds within the natural history of life. Likewise, again drawing upon an analogy with artistic creation, the aesthetic whole (melody, painting, poem etc.) that inspires and strikes the artist, rather than being a transcendent totality, is realised *in* and *through* his or her expressive activity. Thus,

The theme of the animal melody is not outside its manifest realisation; it is a variable thematism that the animal does not seek to realize by a copy of the model, but that haunts its particular realizations, without these themes being the goal of the organism.[[21]](#endnote-22)

Merleau-Ponty’s comments indicate that he is significantly re-interpreting Uexküll’s original melody metaphor. In particular, Uexküll believes that we *can* see the melody of nature as a Platonic idea (essence) separate from its instantiation. Thus, in *Das allmächtige Leben*, he uses (neo-)Platonic vocabulary to distinguish a world of appearance from the world in itself. Within the latter, he argues, there exists the natural factor (*Naturfaktor*), i.e. the all-powerful nature-subject, as well as the ideas of distinct animal species and the archetypes of four fundamental functional circles, which predetermine the basic activities of all animals: movement, escape from enemies, search for food, reproduction. These, he writes, “in tune with Plato” are the “four basic ideas of life”.[[22]](#endnote-23) But this is precisely to “Platonize” reality in the way that Merleau-Ponty criticises. Indeed, Merleau-Ponty recognises in Uexküll a tendency towards dogmatic metaphysics, which he sees as “tak{ing} up… the intuitions of Schelling”.[[23]](#endnote-24) This tendency is manifest in Uexküll’s mature conceptualisation of the natural factor as a “nature-subject” (*Natursubjekt*), “hidden” behind the worlds it produces.[[24]](#endnote-25) Alternatively, even if we consider the constraining influence of Kant on Uexküll’s early work, in which he postulates the existence of an unknowable natural factor, for purposes of scientific inquiry, and likewise deduces the content of an animal’s *Bauplan* strictly on the basis of detailed, empirical research, this still results in an unacceptable doubling of reality, which, as we have seen, Merleau-Ponty believes the melody metaphor, when thought through, helps us avoid.[[25]](#endnote-26)

The third reason for the significance of the melody, for Merleau-Ponty, is that it offers us a different way of thinking about the causal and temporal structure of an animal’s life, a point he has already broached in the discussion of embryology. In particular, the idea that the present state of the physical universe at t1, together with the laws of nature, exhaustively determines the future state at t2 – such that the “past secretes the future ahead of it” – is “refuted by the melody”. Rather, in a melody, there is a “reciprocal influence” between the first and the last note, such that we have to say that “the first note is possible only because of the last, and vice versa”.[[26]](#endnote-27) This is not, however, to replace the framework of resultant causation with that of backwards, teleological causation. Rather, it is the overall dimension of meaning that determines the ‘before’ and the ‘after’, and their interrelations. Merleau-Ponty illustrates the point with Uexküll’s example of the tick’s response to its *Umwelt*. Just as there is a reciprocal influence between the first and the last note in a melody, so too the tick’s movements (e.g. letting-go of the branch) resolve stimulations from the outside (e.g. smell of the mammal), the execution of which in turn prepare for further tactile stimulations, and so on. Each component of the functional circle acts only as a part of the whole situation.[[27]](#endnote-28)

2.2. Methodological Commitments

Now, although Merleau-Ponty remarks that behaviour cannot be understood moment to moment, he admits, in his discussion of the tick’s activity that “(c)ertainly we still find sufficient conditions from moment to moment”.[[28]](#endnote-29) Likewise, in his later discussion of the mating behaviour of the stickleback, he admits that there is something that corresponds to the facts in Tinbergen’s description of this as a “series of events chained together”.[[29]](#endnote-30) The problem is that, if we use the framework of efficient causation to understand these phenomena, we “do not grasp the relation of meaning”, and it is this relation of meaning which is what “the expression *Umwelt* conveys”.[[30]](#endnote-31)

Naturally, we would like to know whether this dimension of meaning is taken by Merleau-Ponty to be a part of mind-independent nature or whether these meaningful patterns are simply there *for* human consciousness, as, for example, he argued in *The Structure of Behaviour*.[[31]](#endnote-32) It is, after all, our *experience* of the melody that he uses to illustrate his Uexküllian ontology of nature. Merleau-Ponty remarks that for Uexküll, in his early work, “(a)ll that happens in animals is produced by chemical and physical forces” and that it is “we who have the right to coordinate them in the unity of a constitutional plan”, with ‘we’ referring to biologists who “must discern vectors in physiochemical phenomena”.[[32]](#endnote-33) These remarks are accurate. For early Uexküll, at least, the *Bauplan* is a model constructed by the biologist, who, for complete comprehension of the organism, must grasp it *as if* it has been constructed. This model has heuristic and orientating value, for the purposes of scientific enquiry.[[33]](#endnote-34)

Although Merleau-Ponty does not take the epistemic requirements of scientific method to constitute the relations of meaning, nonetheless he does canvass a series of “models” of the idea of totality, which he takes from the “world of perception”.[[34]](#endnote-35) Bearing in mind his later remark that “(b)ehaviour can be defined only by a perceptual relation” and that “Being cannot be defined outside of perceived being”, these models are significant.[[35]](#endnote-36) We have already noted one, i.e. the creation of an artwork; another concerns the perception of animate movement, for which Merleau-Ponty draws on the experimental work of Michotte. There is a “profound relation”, he comments, between the “schema of the living thing” and the “perception of the living thing”, i.e. we see something as alive whether these are figures on a screen in one of Michotte’s experiments or a caterpillar moving across a leaf:

{We} wince […] when we find a caterpillar where we weren’t expecting it: we see […] a living matter that moves; to the right, the animal’s head, to the left, its tail. From this moment on, the future comes before the present. A field of space-time has been opened… the space in question is inhabited, animated. The perceived crawling is, in sum, the total meaning of the partial movements figured in the three phases, which make action as words make a sentence.[[36]](#endnote-37)

In the perception of animate movement, we encounter a kind of corporeal sign-language. We see a series of movements *as* crawling or swimming etc. Subsuming these events under practical concepts, we give meaning to, categorise, the individual moments. Although we cannot specify the exact, spatio-temporal movements that constitutes the perceptual schema *living thing*, when we *do* see rhythmic, animate movement, it is unmistakable. Elsewhere, Merleau-Ponty mentions the “physiognomic perception of silhouettes, gestures, faces, signatures”.[[37]](#endnote-38) The point, to which I will return, is that this corporeal sign-language – the perceptual schema living, animate thing (and its associated concepts) – *is distributed throughout a significant portion of the animal kingdom*. Animals recognise the movements of other animals, conspecifics, as well as those of other species, and respond accordingly. In other words, meaning relations are constituted within nature long before the human observer comes on the scene. As Merleau-Ponty remarks:

There is nature wherever there is a life that has meaning, but where, however, there is not thought […] Nature is what has a meaning, without this meaning being posited by thought: it is the autoproduction of a meaning.[[38]](#endnote-39)

More precisely, nature produces meaning *as* perceived nature: “The study of the appearance of animals takes on interest when we understand this appearance as a language. We must grasp the mystery of life in the way that animals show themselves to each other”.[[39]](#endnote-40) So, one might say that the point of view for which relations of meaning appear in the world is that of an animal that sees and is seen, that acts and responds to the actions of another. This intertwining (*Ineinander*), this mystery of life, is what Merleau-Ponty calls “inter-animality”.[[40]](#endnote-41)

The question is, for whom, or for what, is the emergent totality of meaning apparent? Not for the scientist, whose “myopia” and “attentive perception” (i.e. to molecular rather than molar being) Merleau-Ponty criticises.[[41]](#endnote-42) Not simply for the embodied, human subject, which, Merleau-Ponty suggests, is the methodological error of *Phenomenology of Perception*.[[42]](#endnote-43) Rather, it seems that, although the later ontology of nature still works on the assumption that “it is from ourselves that living beings […] speak to us”, nonetheless, they speak to us *insofar as* we find ourselves thrown into a shared, inter-animal lifeworld (*Lebenswelt*). Merleau-Ponty’s remarks in his *Résumés de cours* support this view. He summarises the final part of the second course as an epistemological inquiry into the conditions under which we “get at the nature of vital being”, for example, by attributing to an animal “an associated milieu” or a “symbolic life”, and concludes that:

It emerged that all zoology assumes from our side a methodological *Einfühlung* into animal behaviour, with the participation of the animal in our perceptive life and the participation of our perceptive life in animality.[[43]](#endnote-44)

Merleau-Ponty’s distance from Uexküll’s scientific epistemology is striking. It is on the methodological basis of “empathy” *(Einfühlung*) that we are able to see relations of meaning in nature, including the perception a series of physical events *as* an action. But this is not a projection *from* our consciousness *into* nature, conceived as a domain of mechanically-related, spatio-temporal objects. Rather, we are able empathetically to understand the corporeal sign-language of other animals *because* meaning is already-there, in the lifeworld (*Lebenswelt*) in which we and other animals jointly participate. In that sense, methodologically speaking, meaning is *real*, and we *discover* *it* as we learn better to interpret nature’s signs. Thus, Merleau-Ponty’s ontology is still phenomenological. But the experiential prism through which we grasp the Being of nature is that of a participant immersed in an inter-subjective, inter-corporeal lifeworld which was there long before we came on the scene.

**3. Symbolic Behaviour and the Passage to Culture**

3.1. Symbolic Behaviour

Merleau-Ponty’s understanding of natural history as progressive comes through in his discussion of another feature distinguishing the environments of lower and higher animals: symbolic behaviour. Merleau-Ponty sees the emergence of symbolic behaviour even within the *Umwelt* of the hermit crab, which he takes to represent the “beginning of culture”.[[44]](#endnote-45) He also argues for the existence of symbolic behaviour in a species of cyclades fish, herons, ducks, bees and starlings, amongst others. When this sort of behaviour has a *social* *function*, especially, then, Merleau-Ponty adds, “we can speak in a valid way of an animal culture”.[[45]](#endnote-46)

The example of the hermit crab comes from Uexküll. According to Uexküll, within the *Umwelt* of this kind of higher animal, there are additional features that he calls the “colouring” (*Färbung*) or “tone” (*Ton*) of stimuli. Depending on the mood (*Stimmung*) of the crab these can take on a feeding- or defensive- or protective-tone. In this case, the animal’s perceptual image is completed by a mood-dependent, operative image; the same anemone appears as for-feeding or for-dwelling-in etc.[[46]](#endnote-47) Merleau-Ponty sees this “architecture of symbols” as a “species of preculture” because the crab’s interpretative activity mediates its relation to the environmental stimuli. The contrast, of course, is with the lower animals which either, as with some species of jellyfish, have no interaction with their surroundings, or, like the sea urchin, are merely the effects of their *Bauplan*. They are, as Merleau-Ponty calls them, “planned animals”. Conversely, higher animals, capable of symbolic behaviour, are “animals that plan”.[[47]](#endnote-48) That is, although locked into “rails of behaviour”, higher animals enjoy the ‘freedom’ that comes with the performance of actions that emerge from their own *sui generis*, coordinated, bodily and psychological capacities.

Whereas the hermit crab responds instinctively, albeit interpretatively, to features of its environment, at the next stage of symbolic behaviour, animals are capable of undertaking a “characteristic gesticulation of the species”, which has the form of an objectless ceremonial or stereotypical activity.[[48]](#endnote-49) Merleau-Ponty refers at this point to Lorenz’s work on starlings, upon which Uexküll also draws.[[49]](#endnote-50) Although actions, such as snapping gestures or diving movements are produced “most of the time by reference to an object”, they are “something different from reference to an object” and are the “manifestation of a certain style”. The motivation for these acts is to “resolve an endogeneous tension”; indeed, they are not accomplished in view of an end but are an “activity for pleasure”. Real or irreal (‘imagined’) features of the environment may “evoke” the expression of this style, this a priori of the species, but they do not “cause” the behaviour.[[50]](#endnote-51) By ‘activity for pleasure’, we ought not to take Merleau-Ponty to mean hedonistic activities, as if animals aimed solely at their own pleasure. Rather, these characteristic gestures are ‘appropriate’ or ‘fitting’ in an Aristotelian-Stoic sense of the term. I take Merleau-Ponty to mean that *insofar as* they undertake actions that are typical in their outline and progression for members of their species, for their own sake, then these animals undergo hedonic states.

This sort of instinctive activity passes to symbolic, cultural activity proper when the “empty” or “outlined” activities become “means of communicating for the animals”. The outlined act is transformed into “seeming to do” and thus become a “signification”. Thus, in the duck, the typical behaviour of taking off in flight can become a sign for training the young; in a fish, the lateral movement of the head is a sign for moving off; suddenly stopped, in one species it comes an appeal, in another an alarm.[[51]](#endnote-52) In particular, Merleau-Ponty refers to the ritual of sexual display, taking as his examples behaviour of different species of crab in the Barnave Islands and the mating dance of the stickleback. His overall point is that sexual behaviour is not the “simple ornamentation of an essential fact”, that is, the “reconciliation of male and female cells”, because this would ignore the “richness of these manifestations”.[[52]](#endnote-53) Rather, it is an “action of presence… a ceremony in which the animals give themselves to each other”.[[53]](#endnote-54) He argues that symbolic behaviour, of this kind, cannot be exhaustively interpreted mechanically, for a number of reasons. The same behaviour can take on different significations: for one species of Cyclades fish certain movements signal inferiority, in another a threat. Sometimes there is an exchange of roles in the ritualized display, such that there is a “double variation on the same theme”, where the “effect would be the cause of what is normally its cause”. This could not be exhaustively explained by a mechanical, “gradual causality”.[[54]](#endnote-55) There is not a “spirit of the species”, he remarks, but a “dialogue”, in which roles and instincts (such as that of aggression) can be reversed.[[55]](#endnote-56) In summary, it is because symbolic behaviours have a “new value as social evocation”, and thus have no direct physiological goal, being rather “indispensable conditions for the biological act of copulation”, that we can speak of animal culture.[[56]](#endnote-57)

This line goes to the heart of the criticisms of Darwinism that one finds in Merleau-Ponty’s second lecture course, and which appear, particularly, during his discussion of Uexküll. Darwinism gives ontological priority to the actual world, conceived as existing *partes extra partes*, and thus views the animal as a collection of fortuitous elements, welded together for the purposes of survival and reproduction, as the “least bad arrangement”.[[57]](#endnote-58) Indeed, Merleau-Ponty’s key criticism of Darwinian ideology is its belief in utility as a criterion for life.[[58]](#endnote-59) The focus on survival and reproduction (along with the framework of efficient causation) for understanding nature, again, fails to understand that “sexuality, if it aims only at utility”, could “manifest itself by more economic paths”, and thus that “(w)hat the animal shows is not utility […] (i)n a certain sense, the sexual ceremony is probably useful but it is useful only because the animal is what it is”.[[59]](#endnote-60) Merleau-Ponty’s alternative picture is of an exuberant “prodigality of forms realised by life” and a “tide of natural production”, a picture to which Uexküll also subscribes, amongst others, including Nietzsche.[[60]](#endnote-61)

Uexküll, of course, criticised Darwinism throughout his career. But Merleau-Ponty’s approach, despite superficial similarities, is quite different. Above all, for Uexküll, the artistry of nature occurs at the transcendental level. The activity of the natural factor is responsible for the immaterial, timeless primal score (*Urpartitur*) or primal image (*Urbild*) of each animal species, as well as for any inter-specific meaning relations that go into the construction of each building-plan. The natural factor, as Uexküll remarks, plays its “gigantic clavier” with an “invisible hand”.[[61]](#endnote-62) But no matter how richly expressive the symphonic production at the transcendental level, at the level of natural history the behaviour of animals conforms to strictly utilitarian principles, that is, to the four archetypal functional circles. As far as I can see, there is nothing in Uexküll that matches Merleau-Ponty’s emphasis on a distinctively non-functional, expressive core of behaviour, at least in some higher animals. As such, in Uexküll’s Platonic vision, individual animals, and their inter-relations, being mere ‘signifiers’, do not *constitute* the unfolding symphony of life, in any significant sense.

By contrast, we find in Merleau-Ponty the foregrounding of the contingencies of actual, material, historical evolution.[[62]](#endnote-63) A capacity for expression is understood to develop immanently, mediated by symbolic behaviour and the emergence of culture. This perspective is particularly evident in the section of the second course in which Merleau-Ponty discusses the work of Adolf Portmann, and especially his *Animal Forms and Patterns* (1952). The lower animals, he remarks, possess merely utilitarian, functional capacities, which are transformedin the higher animals and take on:

… an expressive value, a “value of form”. If life consisted in forming coherent bands of animals, simple triggers would suffice. And so the same muscles of the face… have a utilitarian function in lower vertebrates… and in higher mammals, an expressive function.[[63]](#endnote-64)

Portmann, like Lorenz, is closely associated with Uexküll’s work; Portmann describes Uexküll as a “pioneer of the new biology” in a foreward to *A Foray into the Worlds of Animals and Humans* (1956). Indeed, it is during the discussion of Portmann, to which we now turn, that we have a clue as to Merleau-Ponty’s thoughts on the overall direction of natural history of life.

3.2. Inter-animality

Whereas the remarks on Lorenz’s research focus on symbolic behaviour, the discussion of Portmann centres on animal form, in particular, on Portmann’s study of patterns in nature. For example, the way in the marks of a frog form a figure when it assumes a certain posture (folded legs) or how the features of a bird are joined together to form a whole design. This convergence between the elements of the “design” is an “observable fact”; it is an “ensemble of marks” that contains a reference to “a possible eye”, to a “semantic ensemble”, that “allows the animal to be recognised by its fellow creatures”. Again, we have a progressive account of this phenomenon. The richness of the exterior form of a lower animal, such as a spiraled mollusk, which “gives the impression of a product of art”, is in “extension”; in the higher animals, it is “intensive”. Thus, the form of a mollusk is “mechanically engendered”, whereas:

In higher animals, on the other hand, the appearance is more sober, but the expressive capacity is greater: the body is entirely a manner of expression.[[64]](#endnote-65)

Using Uexküllian vocabulary, we might say that whereas the appearance of a mollusk is a mechanical effect of its building-plan, a plan to which it is subject, in the bodily gestures of which a higher animal is capable, the organism makes *itself* into a work of art, and thereby dictates the arrangement of its expressive form. It is of course the “open, transformable” human body, which Merleau-Ponty will see as possessing the greatest capacity for expression.

Indeed, throughout the natural history of life, the “operation of Nature”, Merleau-Ponty remarks, is “resemblance”.[[65]](#endnote-66) Whether this involves animals resembling their surroundings, or other animals, the principle of morphogenesis is not utility but the “design of expression”. Nature is a vast web of interlinked “cryptogrammatical marks”.[[66]](#endnote-67) This thought underpins his suggestion that we understand the appearances of animals as language and his claim that the mystery of life is the way animals show themselves to each other. But the key point, which also pertains to his methodological stance discussed earlier, is that “to make of resemblance an operating factor in Nature is not to see that resemblance {as having} meaning only for a human eye”.[[67]](#endnote-68)

Nature, I take Merleau-Ponty to be saying, is geared in its unfolding to the inter-corporeal communication that the emergence of symbolic, expressive behaviour facilitates. Thus, “(w)hat exists are not separated animals, but an inter-animality”, ‘inter-animality’ involving a “perceptual relation” that “gives ontological value back to the notion of species”.[[68]](#endnote-69) This concept provides Merleau-Ponty’s final answer to the question of organismic totality. As he puts it in the *Résumés de cours*, summarising his reflections on Portmann, the “notion of an interanimality” is as “necessary to the complete definition of the organism as its hormones and its “internal’ processes”.[[69]](#endnote-70) The whole, therefore, is not simply the sum of an animal’s physical elements, nor even the relation ‘animal-*Umwelt’* but rather ‘animal-animal-…’, with the latter denoting intra-specific *and* inter-specific relations. Another way of putting this point is that, for Merleau-Ponty, the ultimate end of nature is culture. But unlike Kant, who restricts culture to the second nature of human beings, for Merleau-Ponty there is no strict, qualitative division that separates us from the animals. Thus, for example, in the seventh sketch, he writes of “(t)he human body […] in a relation of intercorporeality in the biosphere with all animality”.[[70]](#endnote-71) Merleau-Ponty’s vision is of an inter-organismic understanding spreading across species-specific horizons, unified in a widely ramifying culture of life. In short, not ‘organism-*Umwelt’* but ‘organism1-organism2-(..)-*Lebenswelt’*, with the latter’s holistic structure throwing its reflected light back on the meaning of embryological development.

This vision has Uexküllian roots. In a famous example, Uexküll describes how a spider’s web is “fly-like”, in that it represents the primal image of the fly, woven into the spider’s original score.[[71]](#endnote-72)Indeed, generally, Uexküll’s theory of point and counterpoint, comprising his compositional theory of nature, seems to echo Merleau-Ponty’s concept of inter-animality. But, as we have seen, the harmonious ‘inter-’ of Uexküll’s inter-animality is timelessly pre-established by the all-powerful natural factor working invisibly behind the scenes. For Uexküll, an animal receives undifferentiated stimuli, which are processed physiologically, resulting in the outward, unconscious transcendental transposition of a series of distinctive perception and effect signs, constituting its *Umwelt*. These signs are species-specific; each animal, metaphorically, is trapped within its own “soap bubble”. Another metaphor Uexküll uses, bringing out his Leibnizian commitments, is that of drops of dew in a meadow, with each drop mirroring the world through the prism of a species-specific *Bauplan*.[[72]](#endnote-73) A species is, as it were, a monad without windows, an idea that generates the problem of ‘environmental solipsism’, ‘solved’ through the assertion of transcendental harmony.

But Merleau-Ponty’s ontology of nature, although influenced by Uexküll, develops his thoughts in a different direction. He sees inter-animality not as dogmatically pre-established but as constituted by expressive, symbolic forms of animal behaviour, especially as this behaviour emerges in the higher forms of life. Inter-animality is conceived not as imposed from the *outside*-*in* but as achieved from the *inside-out*. Rather than being harmonized by a metaphysical nature-subject, it is in the concrete modes of animal existence, as they unfold in natural history, that we are able to witness an increasingly intertwined symphony of nature. This position leaves behind Uexküll’s vision of living organisms, including ourselves, serving merely as keys on the natural factor’s clavier of life.

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1. Merleau-Ponty (2003, 204). [↑](#endnote-ref-2)
2. Merleau-Ponty (2003, 208). [↑](#endnote-ref-3)
3. Merleau-Ponty (2003, 151). [↑](#endnote-ref-4)
4. Merleau-Ponty (2003, 145). [↑](#endnote-ref-5)
5. Merleau-Ponty (2003, 153). [↑](#endnote-ref-6)
6. Merleau-Ponty (2003, 155). [↑](#endnote-ref-7)
7. Merleau-Ponty (2003, 177). [↑](#endnote-ref-8)
8. Merleau-Ponty (2003, 156). [↑](#endnote-ref-9)
9. Ibid. [↑](#endnote-ref-10)
10. Merleau-Ponty (2003, 149). [↑](#endnote-ref-11)
11. Merleau-Ponty (2003, 154). [↑](#endnote-ref-12)
12. Merleau-Ponty (2003, 174). [↑](#endnote-ref-13)
13. Merleau-Ponty (2003, 178). [↑](#endnote-ref-14)
14. Uexküll (1985, 244). [↑](#endnote-ref-15)
15. Merleau-Ponty (1970, 97). [↑](#endnote-ref-16)
16. Merleau-Ponty (2003, 170). [↑](#endnote-ref-17)
17. Merleau-Ponty (2003, 221). [↑](#endnote-ref-18)
18. Merleau-Ponty (2003, 216). [↑](#endnote-ref-19)
19. Merleau-Ponty (2003, 222). [↑](#endnote-ref-20)
20. Merleau-Ponty (2003, 174). [↑](#endnote-ref-21)
21. Merleau-Ponty (2003, 178). [↑](#endnote-ref-22)
22. Brentari (2015, 168). Uexküll refers positively to Plato throughout his career, from an early review of Chamberlain, to his final ‘Platonic dialogue’. See (2015, 56, 105, ft. 8). [↑](#endnote-ref-23)
23. There is no suggestion Schelling influenced Uexküll directly, merely that “Schelling had already developed analogous ideas”, Merleau-Ponty (2003, 177). Merleau-Ponty is referring to Schelling’s postulate of an ‘original productivity of nature’ in his early *Naturphilosophie*. [↑](#endnote-ref-24)
24. Ibid. Uexküll also refers to the nature-subject as “the One”, (2010, 135), recalling his Neoplatonist leanings. [↑](#endnote-ref-25)
25. Given his tendency to collapse Kant’s distinction between constitutive and regulative judgements, together with his repeated affirmation of the real, causal efficacy of the natural factor, abiding within the strict constraints of transcendental idealism was never going to be a viable option, for Uexküll. [↑](#endnote-ref-26)
26. Merleau-Ponty (2003, 174). [↑](#endnote-ref-27)
27. Merleau-Ponty (2003, 175). [↑](#endnote-ref-28)
28. Ibid. [↑](#endnote-ref-29)
29. Merleau-Ponty (2003, 197). [↑](#endnote-ref-30)
30. Merleau-Ponty (2003, 175). [↑](#endnote-ref-31)
31. Merleau-Ponty (1963, 49). [↑](#endnote-ref-32)
32. Merleau-Ponty (2003, 169). [↑](#endnote-ref-33)
33. Brentari (2015, 54, 60). [↑](#endnote-ref-34)
34. Merleau-Ponty (2003, 153). [↑](#endnote-ref-35)
35. Merleau-Ponty (2003, 189). [↑](#endnote-ref-36)
36. Merleau-Ponty (2003, 155). [↑](#endnote-ref-37)
37. Merleau-Ponty (2003, 225). [↑](#endnote-ref-38)
38. Merleau-Ponty (2003, 3). [↑](#endnote-ref-39)
39. Merleau-Ponty (2003, 188). [↑](#endnote-ref-40)
40. Merleau-Ponty (2003, 189). [↑](#endnote-ref-41)
41. Merleau-Ponty (2003, 155, 187). [↑](#endnote-ref-42)
42. Merleau-Ponty (1968, 200): “The problems posed in *Ph.P* are insoluble because I start there from the “consciousness”-“object” distinction”. [↑](#endnote-ref-43)
43. Merleau-Ponty (1970, 97). [↑](#endnote-ref-44)
44. Merleau-Ponty (2003,176). [↑](#endnote-ref-45)
45. Merleau-Ponty (2003, 198). [↑](#endnote-ref-46)
46. Uexküll (2010, 93). [↑](#endnote-ref-47)
47. Merleau-Ponty (2003, 176). [↑](#endnote-ref-48)
48. Merleau-Ponty (2003, 191). [↑](#endnote-ref-49)
49. Uexküll (2010, 120-1). [↑](#endnote-ref-50)
50. Merleau-Ponty (2003, 192). [↑](#endnote-ref-51)
51. Merleau-Ponty (2003, 195). [↑](#endnote-ref-52)
52. Merleau-Ponty (2003, 188). [↑](#endnote-ref-53)
53. Merleau-Ponty (2003, 196-7). [↑](#endnote-ref-54)
54. Ibid. [↑](#endnote-ref-55)
55. Merleau-Ponty (2003, 198). [↑](#endnote-ref-56)
56. Merleau-Ponty (2003, 197). [↑](#endnote-ref-57)
57. Merleau-Ponty (2003, 175). [↑](#endnote-ref-58)
58. Merleau-Ponty (2003, 186). [↑](#endnote-ref-59)
59. Merleau-Ponty (2003, 188). [↑](#endnote-ref-60)
60. Merleau-Ponty (2003, 184). [↑](#endnote-ref-61)
61. Uexküll (2010, 208). [↑](#endnote-ref-62)
62. Merleau-Ponty conceives the natural history of life as similar in its unfolding to the way various styles (archaic, Roman, etc.) emerge within the history of art. Merleau-Ponty (2003, 255, 259). The contingency involves ‘aesthetic’ or ‘subjective’ necessity rather than sheer randomness. [↑](#endnote-ref-63)
63. Merleau-Ponty (2003, 188). [↑](#endnote-ref-64)
64. Merleau-Ponty (2003, 187). [↑](#endnote-ref-65)
65. Merleau-Ponty (2003, 185). [↑](#endnote-ref-66)
66. Merleau-Ponty (2003, 184). [↑](#endnote-ref-67)
67. Merleau-Ponty (2003, 189). [↑](#endnote-ref-68)
68. Ibid. [↑](#endnote-ref-69)
69. Merleau-Ponty (1970, 94). [↑](#endnote-ref-70)
70. Merleau-Ponty (2003, 268). [↑](#endnote-ref-71)
71. Uexküll (2010, 159). [↑](#endnote-ref-72)
72. Brentari (2015, 167). [↑](#endnote-ref-73)